

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:*

Lakeside County Water and Sewer District  
P.O. Box 300  
Lakeside, MT 59922

2. *Type of action:* Application for Beneficial Water Use Permit 76LJ 30062687

3. *Water source name:* Groundwater

4. *Location affected by project:* The place of use is generally located around Lakeside and includes significant portions of sections 7, 17, 18, 19 and 20 of Township 26 north, Range 20 west, and sections 12 and 13 of Township 26 north, Range 21 west, Flathead County, Montana

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

The applicant, Lakeside County Water and Sewer District (LCWSD or District), is requesting a supplemental appropriation of groundwater (40 GPM and 162.54 AF) to serve the southern portion of the District. The applicant proposes to provide a portion of the water required by 766 future connections, each estimated to have a domestic occupant equivalency of 2.5 persons and an average irrigation area of 0.25 acres. The proposed point of diversion is associated with provisional permit 76LJ 105373-00, which is authorized to divert water at a rate of 300 GPM up to 353.56 AF for municipal use January 1<sup>st</sup> thru December 31<sup>st</sup>. The system will eventually consist of two wells; the redundant well will be completed at a later date. Total combined flow rate for the proposed appropriation and 76LJ 105373-00 will not exceed 340 GPM and 516.1 AF. 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); Dewatered Stream Information

-Montana Department of Environmental Quality's (MT DEQ) Clean Water Act Information and PWS Drinking Water Watch databases

-U.S. Natural Resource Conservation Service (NRCS); web soil survey

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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#### **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 Applicant proposes to divert groundwater using the same point of diversion associated with water right 76LJ 105373-00. A redundant well will be drilled in the same aquifer at a later time. The production well (GWIC ID 160594) was completed in 1996 to a depth of 581 feet below ground surface into a fracture bedrock aquifer. Department hydrogeologist's James Heffner and Russell Levens in a memo dated January 10, 2011, state in the upper Flathead Valley groundwater levels in the deep alluvial aquifer are effectively controlled by the Flathead River and Flathead Lake. A new groundwater use will reduce the discharge from the aquifer to the river and lake in an amount equivalent to their consumptive use. The fractured bedrock aquifer that the production well was drilled in was found to be hydraulically connected to the deep alluvial aquifer and therefore Flathead Lake. Stoner Creek is also hydraulically connected to the fractured bedrock aquifer due to localized structural features (faults) and stratigraphy. Neither of these surface water sources are listed by MFWP as chronically dewatered. Upon analysis by the Department Stoner Creek and Flathead Lake/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 Montana Department of Environmental Quality's (MT DEQ) Clean Water Act Information Center in 2012 Flathead Lake was listed as have one or more uses impaired due to one or more of the following probable causes: mercury, nitrogen (total), phosphorous (total), polychlorinated biphenyls and sedimentation/siltation. Flathead River was categorized as having insufficient data to assess any use and Stoner Creek was not listed within their database. The proposed use will reduce the quantity of groundwater that historically discharged into Flathead Lake near the proposed point of diversion. However, 70-90% of the water used for domestic purposes and 30% of lawn and garden water will eventually return to Flathead Lake. The wastewater for Lakeside is disposed of via land application and will eventually recharge groundwater. The Department finds that the proposed project will not aggravate any of the probable causes of impairment to Flathead Lake identified by the MT DEQ.

*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.*

According to the MT DEQ's PWS Drinking Water Watch online database in 2012 the Lakeside Water System, which obtains groundwater from a fractured bed rock aquifer, was not known to be impaired by Coliform, lead or copper. To ensure safe drinking water and no contamination of groundwater the Applicant filed the necessary paperwork and followed state regulations for public water systems. The proposed project has been reviewed by the MT DEQ.

Department hydrogeologist's James Heffner and Russell Levens in a memo dated January 10, 2011, state in the upper Flathead Valley groundwater levels in the deep alluvial aquifer are effectively controlled by the Flathead River and Flathead Lake. For this application the fractured bedrock aquifer that the production well was drilled in is hydraulically connected to the deep alluvial aquifer and therefore the Flathead River /Flathead Lake. The proposed project will reduce discharge from the aquifer to the lake in an amount equivalent to their consumptive use. 31.8 AF of 106 AF of water used for lawn and garden and 39.2 - 50.4 AF of 56 AF of domestic water will return to Flathead Lake via return flows. The proposed project could reduce discharge to Stoner Creek due to localized faults and stratigraphy. However, the Department determined that an adequate volume of water exists in Stoner Creek each month to meet existing legal demands, the proposed use and future uses.

*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 completed production well was drilled by a licensed well driller (license # WWC-458) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. This well (GWIC ID 160594) was completed in 1996 to a depth of 581 feet below ground surface, has a casing diameter of 12 inches from -3 to 99 feet and 10 inches from 81.5 to 581 feet, a static water level of 217 feet, and perforations between 484-500, 520-532, and 540-546 feet. The proposed project will use this existing well and develop another well for a backup at a later date. Both wells will be capable of pumping at a rate of 340 GPM on an alternating basis. Each well will contain a Berkeley 50 HP 6T-275 pump. Water will be routed from the wells by a 4 inch riser pipe which will transition into a 6 inch water line that will deliver water to a 250,000 gallon storage tank, located 100 feet from the well. Water will be redistributed to users through a MT DEQ approved water distribution system that was developed by a licensed engineer. The proposed project shall not impact any channels, barriers, riparian areas and dams. Flow paths to surface waters and within the aquifer will be modified; however modeling done by Department hydrogeologists show that no significant negative impact will occur to existing water users and surface/groundwater resources.

*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."*

According to the US Fish and Wildlife Service, Montana Natural Heritage Program and MFWP in Township 26N, Range 20W there are no endangered plants or plant species of concern. There are no animal species of concern or endangered animals. Bull Trout are threatened in the Flathead drainage, however their specific habitat needs limit them to clean, cold waters found mostly in streams. An adequate quantity of water will still exist in Stoner Creek and Flathead Lake to maintain existing populations of Bull Trout if they exist in them. The rate, timing and location of groundwater discharged into Flathead Lake and Stoner Creek will potentially change, but Department analysis shows the proposed use will not adversely affect senior water users nor dewater either source. Therefore, pumping will not influence threatened, endangered, current or potential species of concern.

*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.*

*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, soil within the place of use consists mostly of bedrock, silt, clays and loams and are non-saline to very slightly saline (0.0 - 4.0 mmhos/cm). The proposed use shall not degrade soil quality or stability within the proposed place of use. Soil moisture may increase as population growth occurs and more acres of lawn and garden are watered.

*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.*

Soil and vegetation will be disturbed during the construction of the redundant well. There is a possibility of noxious weeds being spread and establishing themselves within the disturbed site. It is expected that the District will take an active role to reduce that risk

*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.*

The proposed project will not impact air quality.

*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 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.*

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

*Determination:* No impact.

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

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

*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.*

*Determination:* N/A, the proposed place of use and diversion do not exist on land designated as wilderness.

**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. This project will supply water to new connections within the District, which will ensure all residents have access to clean, safe, drinking water.

*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? No impact
- (b) Local and state tax base and tax revenues? No impact
- (c) Existing land uses? No significant 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: No impact.

Cumulative Impacts: This proposed use of water is expected to have no negative impact on surface water and will not impact the quantity and quality of ground water.

3. ***Describe any mitigation/stipulation measures:***

No mitigation is required. The Applicant is required to install a Department approved water use measuring device at a point approved by the Department. Water will not be diverted until the required measuring device is in place and operation. On a form provided by the Department, the Appropriator will keep a written record of the flow rate and volume of all water diverted including the period of time. Records will be submitted by November 30 of each year and upon request at other times during the year. Failure to submit reports may be cause for revocation of permit or change. The records must be sent to the water resources regional office. The Appropriator shall maintain the measuring device so it always operated properly and measures flow rate and volume accurately.

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 project is reasonable, given the growth occurring in Lakeside and the Lakeside County Water and Sewer District's long-term water/sewer management plan. The no action alternative could result in the District having to locate alternative water sources and/or limit future development. Drilling additional wells could be costly and potentially seen as wasteful, because current sources of water are available for further development by the District.

***PART III. Conclusion***

1. ***Preferred Alternative:*** To issue the permit and allow this project to continue.

2 ***Comments and Responses:*** None to report

4. ***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:*

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

*Name:* Melissa Brickl

*Title:* Hydrologist/ Water Resource Specialist

*Date:* 2/15/2013