

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

Applicant/Contact name and address: Strategic Land Company
7135 U.S. Highway 93 South Unit C
Lakeside MT 59922

1. *Type of action:* 30041572 76LJ: Application for Beneficial Water Use Permit
2. *Water source name:* Two Groundwater Wells
3. *Location affected by project:* The subject water use permit application includes the two points of diversion are located in the SESWSE and NESWSE of Sec. 30, T26N, R20W, Flathead County. The proposed place of use is to be located in portions of Sections 19, 29 and 30, R20W, Flathead County.
4. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
The application for a Beneficial Water Use Permit requests a groundwater appropriation for a maximum flowrate of 270 gallons per minute (gpm) up to 74.9 acre-feet per year (AF/YR). The period of appropriation is from January 1 through December 31, inclusive each year. The proposed beneficial use is domestic, commercial, and lawn & garden use. The two points of diversion are located within the Flathead River Basin upstream of the Flathead Indian Reservation boundary approximately 2 miles west of Flathead Lake and 2 miles south of the town of Lakeside. The proposed ground water appropriation consists of two Public Water Supply (PWS) wells. The water system is currently being developed for a total of 117 lots. This water system is proposed to serve the eastern phases of the Eagle's Crest Subdivision and designated the East Water System by the Applicant.

The DNRC shall issue a Provisional Permit if the applicant proves the criteria in 85-2-311, MCA, are met.

5. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana State Historic Preservation Office
Natural Resources Conservation Service (NRCS) Soils Data Website
Dept. of Environmental Quality Website (TMDL 303d listing)
MT Dept. of Fish, Wildlife & Parks Website (Montana Rivers Information System)
National Wetlands Inventory Website
James Heffner, Hydrogeologist; DNRC

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: Not applicable for the purposes of this assessment; this is a proposed groundwater appropriation

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: Not applicable for the purposes of this assessment; this is a proposed groundwater appropriation

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: PWS 1 and PWS 2 were completed by Marvin Sudan (license WWC-450) to a depth of 640 feet and 727 feet respectively. Both wells are cased with 8 inch steel casing to a depth of 621 feet (PWS 1) and 687 feet (PWS 2). PWS 1 is slotted from 602 to 620 feet and PWS 2 is slotted from 668 to 686 feet. The wells are located approximately 610 feet apart. The digital model developed by the Applicant for this aquifer system shows that the zone of influence extends approximately 3,297 feet in length and 9 feet in width orientated along the dominate fracture in a northwest-southeast direction from the production wells. The Applicant states that the nearest water user along the orientation of the fracture system is over three quarters of a mile from the zone of influence. The net surface water depletion of Flathead Lake is calculated by the Applicant to be 0.00038 percent of the volume and 0.00085 percent of the average yearly flow. Based on information contained within the water use permit application, no significant impact caused by the proposed project to ground water quality or adjacent surface water flows is anticipated.

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 pumps are described by the Applicant to be a 75 H.P. Grundfos Model No. 230S750-22 submersible pump set at a depth of 585 feet in PWS 1 and Grundfos 40 H.P. Model No. 150S400-22 set at 655 feet for PWS 2. Flows produced from either PWS 1 or PWS 2 will be piped via approximately 5,400 feet of 8 inch high density polyethylene (HDPE) transmission piping to a 438,000 gallon bolted steel storage tank. From the storage tank, water will be distributed to the place of use via separate zones by the use of pressure reducing valves and a

small booster pump station. The PWS was designed by a licensed Professional Engineer whose services were retained by the Applicant. The means of conveyance design has been approved under the State of Montana, Department of Environmental Quality (DEQ) regulations (EQ #07-2764). Impacts from the proposed means of diversion, construction and operation of the appropriation works of the proposed project are expected to be negligible to well construction. No impact caused by the proposed project to existing channels, barriers, riparian areas or dams is anticipated.

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: According to the information obtained from the Montana Natural Heritage Program website (<http://mtnhp.org/default.asp>), there are six records of species of concern in the vicinity of the proposed project. The species identified by the Montana Natural Heritage Program in Township 26 North, Range 20 West, Flathead County are the following:

Group	Scientific Name	Common Name
Mammals	Gulo gulo	Wolverine
Mammals	Martes pennanti	Fisher
Birds	Chlidonias niger	Black Tern
Mammals	Canis lupus	Gray Wolf
Mammals	Lynx canadensis	Canada Lynx
Birds	Haliaeetus leucocephalus	Bald Eagle

Where this application is for a new subdivision to be developed near the town of Lakeside where substantial development has already occurred, minimal impact is anticipated from the proposed project.

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 Wetlands were identified from Geospatial Information System (GIS) mapping of the proposed project utilizing USGS National Wetland Inventory (NWI) data. Therefore impacts are not expected by the proposed project.

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

Determination: No ponds or reservoirs are associated with the proposed project and therefore not applicable for the purposes of this assessment.

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: Data from the NRCS soils website indicate nine soil types within the proposed project area. Two soil types dominate by occupying 65.4% of the proposed project area. The dominate soil types are identified as Ashlelake Cobbly Ashy Silt Loam, 8-30 percent slopes and Kingspoint-Rock Outcrop-Sharrott complex, 15-50 percent slopes. Degradation of soil quality, alteration of soil stability or moisture content is expected to be minimal to non existent. Saline seepage in the area does not appear to be problematic nor does the proposed project appear to worsen any saline seepage problems.

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: There will be some ground disturbance during the construction process as proposed in the water use permit application. The construction of the wells, diversion design along with means of conveyance pumps and pipe should not have a significant impact to existing vegetative cover. However it is the applicant's responsibility to control noxious weeds on their property.

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

Determination: The proposed project is for the development of a 115 home subdivision and related amenities in an area that is heavily forested. Impacts to air quality are not anticipated due to the nature of the project being non industrial and vegetation in the project area will likely still exist in substantially the same manner.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: The construction of the proposed wells has already taken place therefore any disturbance of archeological or historical sites has already occurred. However, the Montana State Historic Preservation Office (SHPO) can be consulted at the private property owner's discretion.

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 additional impacts on other environmental resources were identified.

HUMAN ENVIRONMENT

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

Determination: There are no known environmental plans or goals in this area.

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: The project should have no significant impact on recreational or wilderness activities.

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

Determination: The development will likely have a positive impact on human health because of the design approval and regulated operation of the proposed PWS by DEQ.

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 adverse effect on private property rights is anticipated from this development.

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 significant impact.
- (b) Local and state tax base and tax revenues? Impacts to the local and state tax base will likely result in a positive gain due to changes in highest and best use and subsequent valuation of real estate located within the proposed project area.
- (c) Existing land uses? No significant impact as the proposed project appears to be consistent with other real estate development in the region.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.

(g) Industrial and commercial activity? No significant impact.

(h) Utilities? No significant impact.

(i) Transportation? No significant impact.

(j) Safety? No significant impact.

(k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts? No secondary impacts have been identified.

Cumulative Impacts? No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:* None

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 action alternative:

The applicant would not be able to develop the 115 lot subdivision as proposed and would be unable to realize any profit from their entrepreneurial effort.

Alternative 1:

Issue a Provisional Permit for Beneficial Water Use if the applicant proves the statutory criteria have been met.

PART III. Conclusion

1. *Preferred Alternative:* Alternative 1.

2. *Comments and Responses:* None

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: No significant impacts have been identified, therefore an EIS is not necessary.

Application for Beneficial Water Use Permit 30041572 76LJ by Strategic Land Co.

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

Name: Matt Miles

Title: Water Resources Specialist

Date: 03/16/2009