

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:* Spruce Meadows Homeowners Association Inc.,
800 Blaine View Lane, Kalispell MT 59901
2. *Type of action:* Application for Beneficial Water Use Permit 76LJ 30103012
3. *Water source name:* Groundwater wells
4. *Location affected by project:* Spruce Meadows subdivision located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of
Section 34, Township 29N, Range 20W, Flathead County approximately 2.8 miles north
of Creston Montana
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The
DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA
are met.

The Applicant proposes to divert water from two groundwater wells; East Well (GWIC #239590) and West Well (GWIC #239589) with depths of 260 feet below ground surface (bgs) each, from January 1 through December 31 at 140 GPM (0.31 CFS) up to 24.28 AF from points in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34, Township 29N, Range 20W for 9.75 AF of multiple domestic use (30 hook-ups) from January 1 through December 31 and 14.53 AF for domestic lawn and garden irrigation on 7.5 acres from April 15 through October 15. The place of use is Spruce Meadows subdivision located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34, Township 29N, Range 20W, Flathead County approximately 2.8 miles north of Creston Montana.

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

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

Source of supply for this application is groundwater with depletions to Flathead Lake, Flathead River and Blaine Creek. Flathead Lake and Flathead River are not listed as a chronically or periodically dewatered stream by Department of Fish, Wildlife and Parks. Upon analysis by the Department the source aquifer and Flathead River/Lake were found to have water in excess of that requested by the Applicant. During dry periods or low flow years reaches of Blaine Creek become intermittent pools and/or dry up. The dewatering is not caused by human use of the water, but rather is a natural phenomenon due to changes in weather and climate.

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.*

Source of supply for this application is groundwater with depletions to Flathead Lake, Flathead River and Blaine Creek. The Department of Environmental Quality reports no threats, but aquatic life is not fully supported for Flathead Lake. Probable sources include upstream impoundments, atmospheric deposition, unspecified urban stormwater, municipal point source discharges, silviculture harvesting, and impacts from hydrostructure flow regulation/modification. Flathead River was not assessed by DEQ at the time of this report. Blaine Creek was not listed.

Determination: DEQ to assess and regulate. 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.*

Depletions to Flathead Lake, Flathead River and Blaine Creek will occur at a year-round rate of 6.9 GPM.

Determination: Depletions have been found to be available in these sources. 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.*

Proposed means of diversion will include two groundwater wells both at depths of 260 feet bgs, 117 feet apart and constructed in 2007 by Water Well Services Inc (MT license #WWC-635). The wells are described as PWS#1 or East well (GWIC 239590) and PWS#2 or West well (GWIC #239589). At testing, static water levels were 47.6 feet bgs and 46.4 feet bgs

respectively. This public water supply system was designed by Jeff Larsen, PE of Larsen Engineering and Surveying and will be regulated by the Department of Environmental Quality (DEQ). Each well will have a Goulds Model 150L15 pump with a 15 HP motor rated to produce 163 GPM at 270 feet of total dynamic head. By design, the two wells will be pumped alternately with a flow restrictor placed on the system to limit the flow to the designed peak capacity of 140 GPM. Twelve WX-350 pressure tanks have been installed to control the pressure in the system. Once the pressure drops below 50 psi, a pump will turn on and run until the pressure in the water system reaches 70 psi. Approximately 2,600 lineal feet of 4-inch AWWA C900 PVC water main will deliver water to each lot where a ¾-inch to 1½ inch reducer is utilized and a 1½-inch polyethylene service line is provided to each house. Pump curves and system specifications were included in the application.

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 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, Hoary Bat, Canada Lynx, Little Brown Myotis, Fisher, Grizzly Bear, Golden Eagle, Great Blue Heron, Veery, Westslope Cutthroat Trout, Pygmy Whitefish, Bull Trout, Deer Indian Paintbrush, Latah Tule Pea, Beaked Spikerush, Aloina Moss, Maidenhair Spleenwort, Yellow-staining Collomia, Small Yellow Lady's-slipper, Callicladium Moss, and Amblyodon Moss. These species are found throughout this region and not necessarily at this particular spot.

Determination:

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

No functioning wetlands in subdivision place of use.

Determination: No impact.

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

Determination: No ponds. 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.*

The majority of soils in this area are Flathead very fine sandy loam and are naturally well drained with a moderately high to high capacity to transmit water. This soil has a nonsaline to very slightly saline profile.

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.*

Determination: There will be a mixture of natural and managed landscaping. No impact

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

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.*

Determination: NA-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: None

HUMAN ENVIRONMENT

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

Determination: Appears project has moved through the proper subdivision approval agencies.

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

HUMAN HEALTH - *Assess whether the proposed project impacts on 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? No
- (b) Local and state tax base and tax revenues? Increased revenues as lots develop
- (c) Existing land uses? Yes, as lots develop
- (d) Quantity and distribution of employment? None
- (e) Distribution and density of population and housing? Increase in this area
- (f) Demands for government services? None
- (g) Industrial and commercial activity? None
- (h) Utilities? Yes, to supply the subdivision
- (i) Transportation? Increase
- (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

Cumulative Impacts None

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: Project should be completed as proposed

PART III. Conclusion

1. Preferred Alternative

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: Impacts for the project will be evaluated with this permit process and through other agencies

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

Name: Kathy Olsen

Title: Kalispell Deputy Regional Manager

Date: March 16, 2016