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:

Prairie Dog Development
719 3rd St West
Whitefish, MT 59937

2. Type of action: Application for Beneficial Water Use Permit 76LJ 30148753

3. Water source name: Groundwater

4. Location affected by project: The place of use is the Benches Subdivision in the W2SE, Sec 16, Range 20W, Township 30N, Flathead County, Montana

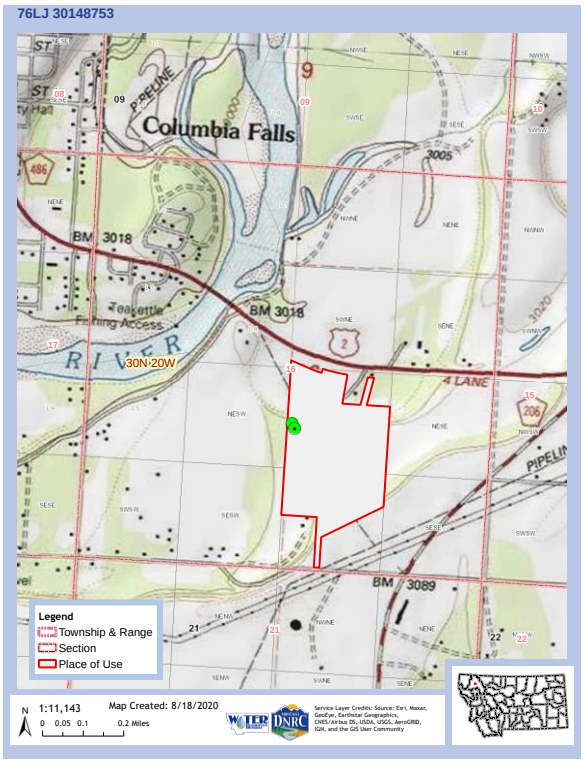

Figure 1: Map of Proposed Place of Use and Two Points of Diversion

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

The Applicant proposes to divert groundwater for multiple domestic use January 1st thru December 31st and lawn and garden irrigation April 20th thru October 10th at a rate of 300 GPM up to 82.2 AF from two wells in the SWNWSE of Section 16, Range 20W, Township 30N Flathead County, Montana. This is a subdivision; 49 lots will be developed with 50 homesites and 25.7 acres of lawn and garden will be irrigated 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 (DFWP); Dewatered Stream Information
-Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
-U.S. Natural Resource Conservation Service (NRCS); web soil survey
-Montana Historical Society

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.*

The applicant proposes to divert groundwater; depletions to the following two surface water sources could occur. Flathead River and Flathead Lake are not listed by DFWP as chronically or periodically dewatered. Upon analysis by the Department the source aquifer, Flathead River, and Flathead Lake 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 (MDEQ) Clean Water Act Information Center in 2020 the Flathead River was categorized as having insufficient data to asses any use. Flathead Lake fully supports drinking water, primary contact recreation, and agriculture. Aquatic life is not fully supported due to mercury, polychlorinated biphenyls,

nitrogen and phosphorus. The Applicant is proposing to utilize groundwater from a well that will reduce flow to the Flathead River. The wells are approximately 2,000 and 3,000 feet east of the Flathead River. The total volume of water potentially depleted from the two surface water sources is 25.4 GPM/month and is expected to have little or no effect on the water quality of these sources.

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.*

The proposed use will reduce discharge from the source aquifer to the Flathead River and Flathead Lake in an amount equivalent to their consumptive use. 40.9 AF of 82.2 AF of water that is diverted is consumed. Groundwater flow paths immediately surrounding the wells will be altered due to the proposed project. The source aquifer is hydraulically connected to the Deep Aquifer in Flathead Valley. Groundwater and surface water quality will not be negatively impacted.

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 proposed appropriation will utilize two wells PWS North (GWIC No. 304934) and PWS South (GWIC No. 305019). Both PWS North and South are 227 feet deep with a static water level of 51 feet below ground surface. Both wells are completed in a confined gravel and sand aquifer system referred to by MBMG as the Deep Aquifer. The two wells are approximately 115 feet apart. Both wells were drilled by a licensed well driller, license No. WWD-718, in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21.

The Benches Subdivision public water supply shall include two wells, pump house, pressure tanks, 3,700 feet of six-inch looping water main, and appurtenant valving and controls. Each lot shall tap into the main line with a class 160 polyethylene service line with a curb stop and valve box. Each well will house a Goulds model 320L25 submersible pump with 25-hp motor (or equivalent). Each pump will be capable of producing 300 GPM at 220 feet of total dynamic head. The well pumps are controlled by the pressure in the water system, system pressure is maintained via variable frequency drives. System pressure will operate between 60-75 psi. The pumps will alternate each demand cycle. Based on the production capacity of the two wells no storage will be required. The system is being designed by a professional engineer from A2Z Engineering and shall be approved by the Department of Environmental Quality prior to installation. The proposed project shall not impact any channels, barriers, riparian areas and dams. Groundwater flow to surface waters will be modified. 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."*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern" in Township 30N, Range 20W that could be impacted by the proposed project.

The Spaldings Catchfly (Silene spaldingii) is listed as threatened by the United States Forest Service (USFS). The English Sundew (Drosera anglica) and Latah Tule Pea (Lathyrus bijugatus) are listed as sensitive species by the USFS. The Meadow Horsetail (Equisetum pretense), Whitebark Pine (Pinus albicaulis), Deer Indian Paintbrush (Castilleja cervine), Kalm's Lobella (Lobelia kalmia) and Northern Buttercup (Ranunculus pedatifidus) are listed S2-S3 by MFWP meaning their populations are at risk because their numbers are very limited.

The Bull Trout (Salvelinus confluentus), Canada-Lyns (Lynx cadadensis) and Grizzly Bear (Ursus arctos) are listed as threatened by USFS. The Townsend's Big-eared Bat (Corynorhinus townsendii), Wolverine (Gulo gulo), Fisher (Martes pennanti), Peregrine Falcon (Falco peregrinus) and Westslope Cutthroat Trout (Oncorhynchus clarkia lewisi), are listed as sensitive species by the USFS. The Hoary Bat (Lasiurus cinereus), Little Brown Myotis (Myotis lucifugus), Pygmy Shrew (Sorex hoyi), Great Blue Heron (Ardea Herodias), Western Toad (Anaxyrus boreas) and Smoky Taildropper (Prophysaon humile) are listed S3 to S3B by MFWP meaning their populations are at risk because their numbers are very limited. An adequate quantity of water will still exist in the ground and Flathead River to maintain existing populations of both threatened and sensitive species should they exist. The proposed project will not impact any threatened or endangered fish, wildlife, plants and aquatic species or any species of special 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 gravelly loam and fine sandy loam. The soil drainage class is well drained; the capacity of the most limiting layer of soil to transmit water is moderately high to high (0.57 to 1.98 in/hour). Soils within the place of use are not susceptible to saline seep. The stability of the soil profile and moisture content will not be significantly altered with the use of groundwater within the subdivision. No degradation of soil quality shall occur.

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.*

The development of this subdivision will remove/disturb existing vegetation. Noxious weeds could be established or spread during construction. Grass yards are planned for each residence; eliminating any populations of noxious weeds that may be have been established during construction.

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.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. No air pollutants were identified as resulting from the applicants proposed use of groundwater.

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 is not located on state or federal land.

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 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. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

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.

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?* 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:*** 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 were identified in the EA.

PART III. Conclusion

1. ***Preferred Alternative:*** None identified.

2 ***Comments and Responses:*** None.

3. ***Finding:***
*Yes___ No_**x**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain <u>why</u> 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: Melissa Brickl
Title: Hydrologist/Water Resource Specialist
Date: August 31, 2020