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:

   Grass Valley Gardens LLC
   2829 Great Northern LP Suite 200
   Missoula, MT 59808

2. Type of action: Application for Beneficial Use Water Permit No. 76M 30164989

3. Water source name: Groundwater

4. Location affected by project: NESWSE of Section 20, T14N, R20W, Missoula County

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

Applicant proposes to divert groundwater at a maximum of 600 gallons per minute (GPM) up to a total diverted volume of 155.94 acre-feet (AF). Of this volume, 128.73 AF would be diverted from January 1 to December 31 for commercial (accounting for 4.39 AF) and domestic purposes (50.97 AF for singe-domestic, 73.37 AF for multi-domestic) while 21.17 AF would be diverted from April 15 to October 15 for irrigation (3.2-acre community garden) and lawn and garden purposes (11.20 acres). This application proposes two PWS wells; referred to as GVG 4 (main production well) and GVG3 (additional production well). GVG4 is a 340-foot-deep groundwater well that will be fitted with an 8-inch pump. GVG3 is a 400-foot deep well proposed to be fitted with a 6-inch pump. Both wells are in the NESWSE of Sec. 20, T14N, R20W, Missoula County. These points of diversion are in the Middle Clark Fork River Basin (76M) which is an area that is not currently subject to any water right basin closures or controlled groundwater areas. 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:
   Montana Natural Heritage Program - Species of Concern
   Montana Department of Fish, Wildlife and Parks - 2005 Dewatered Stream List, 2022 Dewatered Streams Map
   Montana Department of Environmental Quality - 303(d) list of impaired streams, Montana Impaired Waters 2020 Maps.
   USDA Natural Resources Conservation Science – Web Soil Survey
   Missoula County – What's My Zoning? Web Application and Missoula Planning Website

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 2005 Montana Department of Fish, Wildlife & Parks Dewatered Concern Areas list does not identify Lower Clark Fork River as chronically or periodically dewatered. The proposed appropriation will result in 37.37 AF of total depletions to the Clark Fork River, which will occur throughout the year at a rate of 600 GPM. The applicant is required to offset the 37.37 AF consumptive volume of depletion to the river. This will be accomplished through the applicant's purchase of 58 water shares from the Grass Valley French Ditch Company (GVFDC). The GVFDC owns water right 76M 110493 00 which authorizes the marketing for mitigation purpose (and irrigation). Each share is equivalent to 1.13 AF, for a total of 65.54 AF, which is more than the consumed/depleted volume. These shares will offset depletions to the Clark Fork River from groundwater pumping under this proposal.

Determination: No significant 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.*

The proposed appropriation is for groundwater. Water will be diverted from two PWS wells and applied to the ground through a community garden and lawn and garden purposes. Additionally, groundwater will be used for multiple domestic and commercial purposes. A community wastewater treatment facility is planned for the proposed project. Wastewater will be collected and delivered to a membrane bioreactor facility which will provide primary treatment. No source of pollution was identified, and the use of water will be controlled. The treated effluent will be discharged to a community drain field on site. The Missoula City-County Health Department and DEQ will oversee permitting of this facility. No source of pollution was identified and the treatment of effluent on site should prevent any contamination. DEQ does not currently evaluate groundwater quality in Montana. DEQ's Montana Impaired Waters 2020 Maps and 303(d) list of streams only include surface water, streams and lakes. There is no known contamination to the aquifer being diverted from.

Determination: No significant 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 means of diversion are two groundwater wells (GVG4 and GVG3). These wells are approximately 2.7 miles (14,256 feet) from the Clark Fork River which is interpreted to be the potentially affected surface water for the subject application. The wells should be fitted with backflow preventers that will not allow surface water contaminants to enter the ground water aquifer through the well casings. The groundwater aquifer was modeled by the Department and the groundwater flux through the zone of influence is equal to 3,634 AF/year. Impacts to neighboring wells was also identified and after five years of pumping, 43 wells within the zone of influence from pumping the proposed wells will experience drawdown greater than 1 foot. The water columns of these wells were modeled by the Department, and the water levels will remain reasonable with no projected adverse effects to those affected groundwater rights. Water diverted from the aquifer does result in a depletion to the Clark Fork at a constant 23.2 GPM and a total of 37.4 acre-feet. This depletion will be offset or replaced by the purchase of mitigation water shares from the Grass Valley French Ditch Co. As a result, there will be no change to the volume of water flowing in the Clark Fork River through the effected reach.

Aquifer pumping tests were conducted for both PWS wells proposed by this application. For the main production well (GVG4), recovery data was recorded for 51 hours after the pump was shut off. The water level of the GVG4 well reached 95% of the static water level after 24 minutes. The closest monitoring well to GVG4 was GVG3, and the water level in GVG3 returned to 95% of static water level in approximately 4 minutes. For the pumping of GVG3, no drawdown was observed in the observation wells during the limited pumping test (4 hours 15 minutes vs standard 8-hour pumping test for additional production wells) of GVG3.

Determination: No significant 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 applicant proposes to divert water from two wells. The main production well has an 8-inch casing, with a total depth of 340 feet deep. The secondary production well (GVG3) has an 8-inch casing and is 400 feet deep. The points of diversion and places of use are not located near any streams or riparian areas that could be impacted. The surface water depletions to the Clark Fork River will be mitigated/offset, therefore no streamflow reductions resulting in channel impacts, flow modifications or barriers to fish migration in surface water sources. Well construction will not be impacted. The effects to the local groundwater aquifer were modeled and drawdown is limited to less than 1 foot, resulting in no impacts to existing groundwater wells or future well construction in the project vicinity.

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 (MNHP) was utilized to determine if there are any threatened or endangered fish, wildlife, plants of aquatic species or any "species of special concern", that could be impacted by the proposed project. The MNHP identified the following species of concern: Westslope Cutthroat Trout, Bull Trout, Lewis's Woodpecker, Townsend's Big-eared bat, Northern Hoary Bat, Bobolink, Great Blue Heron, Grizzly Bear, Pileated Woodpecker, Brewer's Sparrow, Black-necked Stilt, Western Skink, Brown Creekper, Cassin's Finch, Ferruginous Hawk, Ranklin's Gull, Suckley's Cuckoo Bumble Bee, Little Brown Myotis, Long-eared Myotis, Evening Grosbeak, Long-billed Curlew, Monarch, American White Pelican, Verry, Western Pearlshell, Northern Alligator Lizard, Yellow-billed Cuckoo, Canada Lynx, Fringed Myotis, Trumpeter Swan, Lyrate Mountainsnail, American Bittern, Horned Grebe, A Caddisfly, Harlequin Duck and Wolverine.
Additionally, the following plant species of concern have been identified: Alkali-march Ragwort, Dwarf woolly-heads, flatleaf Bladderwort, Columbia Water-meal, Panic Grass, Pale-yellow Jewel-weed, Long-sheath Waterweed, Pointed Broom Sedge, Coville's Rush, Crawe's Sedge, Beaked Spikerush, Western Pearl-flower and Meesia Moss.

The location of the proposed groundwater diversions and places of use are in an area that supports both agricultural and residential development. The place of use is unirrigated grassland and has been use for grazing. Some impacts to the above-listed species may occur through the nature of this proposal.

Determination: No significant impacts.

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

The project does not involve or impact any wetlands.

Determination: No impacts.

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

The project does not involve any ponds.

Determination: No impacts.

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 major soils at the proposed place of use are Bigarm-Minesinger complex, 4 to 15% slopes and 15 to 30 % slopes, and Grassvalley silty clay loam 4 to 8% slopes and 8 to 15% slopes. The use of groundwater for multiple domestic, commercial, irrigation and lawn and garden purposes will not cause degradation of soil quality or stability. Water will be diverted from two wells and

conveyed in underground conveyance facilities. The project is also not anticipated to result in any saline seep. This place of use is currently undeveloped open lands grasslands. Soil disturbances will occur from this project and impacts are unavoidable with the commercial/multiple domestic purposes. The Grass Valley Gardens PUD subdivision is a proposed major residential and commercial subdivision. Therefore, impacts to soils are inevitable.

Determination: Potential significant impacts.

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 actual diversion of water for commercial, multiple domestic, lawn and garden and irrigation purposes will not cause degradation of existing vegetation. However, changing from existing grass/grazing lands to commercial/multiple domestic uses will affect the vegetation in the area. Any spread of noxious weeds would be the landowner's responsibility to manage and/or mitigate.

Determination: Potential significant impacts.

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 because of this project. The water will be diverted using submersed electric pumps. No major impacts are anticipated related to the water diversion/use.

Determination: Minimal impacts.

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 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.*

All impacts have been identified and discussed.

Determination: No significant impacts.

HUMAN ENVIRONMENT

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

There are no locally adopted environmental plans or goals. The property was zoned Neighborhood Residential in July 2022 in compliance with the 2019 Land Use Element designation of Planned Neighborhood. This project consists of four phases for development across the parcel. Much of the parcel will remain open space/undeveloped during the beginning phases.

Determination: No impacts.

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 project site is private property with limited recreational opportunities for the public. No wilderness areas will be impacted by the proposed use of water.

Determination: No impacts.

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

Determination: No significant impacts.

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 impacts.

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 impacts

(*b) Local and state tax base and tax revenues?*
The Grass Valley Gardens subdivision would presumably bring an increased tax base and additional revenues to the area.

(c) Existing land uses?
The land use would change from grass/grazing lands to commercial, multiple domestic and irrigation.

(*d) Quantity and distribution of employment?*
The commercial part of this proposal would provide employment opportunities for residents.

(e) *Distribution and density of population and housing?*
This project would add hundreds of domestic homes to the area. A significant increase to the local population would also occur.

(f) *Demands for government services?*
Demand for some government services such as public safety, police protection, transportation and health care may increase with this PUD development.

(g) *Industrial and commercial activity?*
The development would bring additional commercial purposes/uses to the area.

(h) *Utilities?*
The project would bring new power supplies to the area. It is unclear if the power lines would be above ground or buried.

(i) *Transportation?*
This development will cause an increase in traffic. New traffic patterns will be incorporated to connect the development to the existing roadway (Highway 10).

(j) *Safety?*
There could be some impacts on existing emergency responses and evacuation with the addition of hundreds of homes and several commercial buildings to the area.

(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:***

No mitigation/stipulation measures were identified for the proposed action.

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 no action alternative is the only alternative to the proposed action. Under the no action alternative, the application would be unable to obtain a water right for the proposed commercial, multiple domestic, lawn and garden and irrigation purposes.

PART III. Conclusion

1. ***Preferred Alternative*** N/A

2 ***Comments and Responses*** N/A

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 why the EA is the appropriate level of analysis for this proposed action:

The EA is the appropriate level of analysis for the proposed action because only potential significant impacts to soil and vegetation have been identified because of the proposed action.

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

Name: Alex Dalgleish
Title: Water Conservation Specialist
Date: April 8, 2025