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: Missoula County Depart. Public Works
6089 Training Drive
Missoula, MT 59808

2. Type of action: Application For Beneficial Water Use Permit No. 76G 30050801
Application to Change a Water Right No. 76G 30050805

3. Water source name: Groundwater

4. Location affected by project: NE Section 27, T12N, R17W, Missoula County

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

The Applicant proposes to divert groundwater by means of two wells, 63 and 99 feet deep, fitted with 3 and 5 hp submersible pumps from January 1 to December 31 annually at a maximum rate of 60 GPM up to 5.43 AF for multiple domestic use and 11.07 AF for lawn and garden irrigation use. The total combined annual volume of water to be appropriated is 16.5 AF. Multiple domestic use will occur on a year round basis in a 42 lot subdivision, and lawn and garden irrigation use will occur from April 28 to October 4 annually on a total of 2.5 acres of lawn and landscaping. The two public supply water wells are located in the NWSENE of Section 27, T12N, R17W, Missoula County, in the town of Clinton. The proposed public water supply wells are located approximately 1/2 mile east of the Clark Fork River. The proposed diverted volume of groundwater is 11.92 AF for lawn and garden irrigation and 6.16 AF for multiple domestic. The use of groundwater pumped from wells for multiple domestic and lawn and garden irrigation will result in approximately 4.52 AF of depletion of surface water in the Clark Fork River.

To offset depletions of surface water the Applicant is proposing to change a portion of an existing groundwater source water right historically used for irrigation in the Clinton area. The change proposes to take 5.55 acres out of irrigation, and leave the water historically diverted for irrigation in the groundwater aquifer to recharge the Clark Fork River, offsetting depletions from pumping the public water supply wells.

The use of groundwater for this project will provide the benefit of domestic water for 42 residences and lawn and garden irrigation in the Lewis and Clark subdivision. Both domestic and lawn and garden irrigation uses are considered beneficial by the State of

Montana. The volume of water requested is reasonable, and does not constitute a waste of water.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met. DNRC shall issue a change authorization if the applicant proves the criteria in 85-2-402.

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

Montana Department of Fish, Wildlife and Parks	2005 Dewatered Stream List
Montana Department of Environmental Quality	303(d) list of impaired streams
Montana Natural Heritage Program	Species of Concern
Missoula Valley Soil Survey	Soil data

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.*

Not applicable. The source of supply is groundwater diverted from a well.

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.*

Not applicable. The source of supply is groundwater diverted from a well.

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 Applicant has shown that water is physically available at the proposed diversion by pumping the wells at the requested rate of 60 gpm for a period greater than 72 hours without the water level in the wells casing dropping below the pump in the well. Impacts to groundwater quantity were addressed by modeling drawdown in the groundwater aquifer from pumping the proposed public water supply wells at the request rate and volume. According the Applicant's model, no

more than 0.035 feet of drawdown will occur in the local groundwater aquifer outside of the Applicant's property boundary after 5 years of pumping the proposed public water supply wells. Drawdowns of this magnitude will not lessen the quantity of groundwater available for present and future appropriations of groundwater. The wells were constructed to Department of Environmental Quality public water supply system specifications, and no sources of groundwater contamination where identified. The groundwater is hydraulically connected to surface water, including the Clark Fork River. The applicant estimates an annual depletion of 4.52 acre-feet, which equals a depletion rate to the Clark Fork River of 2.78 GPM. This depletion rate will not have a measurable impact on the Clark Fork River, however, the Applicant has provided a plan to offset their depletion to the Clark Fork River by retiring irrigated acreage from an existing irrigation right, and leaving the water that would have been diverted to irrigate that acreage in the groundwater aquifer to offset depletions from pumping the public water supply wells. With the proposed change to mitigation for a portion of two existing irrigation water rights there will be no impact to surface water quantity in the Clark Fork River.

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 wells were drilled by a licensed well drilling company in accordance to state laws, rules and regulations. The Montana Department of Environmental Quality approved the well locations. The project does not involve disturbance of any stream channels and/or riparian areas. The project will not create any barriers or utilize any dams, or cause any flow modifications in adjacent surface water sources. The aquifer test performed by the applicant indicates that the drawdown resulting from pumping from the well will have no noticeable affect on neighboring wells, and will not prevent any future well construction in the area.

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.

The Montana Natural Heritage Program identified the following animal species, Great Blue Heron (nesting area), Bald Eagle (nesting area), Flammulated Owl (breeding area), Pileated Woodpecker (breeding area), Westslope Cutthroat Trout, Bull Trout, Fisher, Wolverine, Canada Lynx, Western Skink and Magnum Mantleslug occurring within the vicinity of Township 12 North, Range 17 West, Missoula County.

The Lewis and Clark Subdivision where the public water supply wells are located and the groundwater will be put to use was originally constructed in the early 1970's and has been in existence ever since. The subdivision has operated without a water right and is now applying for a water right to come into compliance with the Montana Water Use Act. Granting of a provisional permit for the groundwater wells will not result in any new or additional construction activity within the subdivision parcel boundaries that would result in a loss of habitat to the above mentioned species. The subdivision is located in the community of Clinton, Montana in an area of existing residential development that does not currently provide habitat for the above listed species. Aquatic species such as Cutthroat Trout and Bull Trout will not be impacted because there will be no reduction in water flowing in the Clark Fork River that would result in a loss of habitat.

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.*

The project does not involve any wetlands.

Determination: No impact.

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 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.*

There will be no disturbance of soil or any other construction activity required that could cause soil instability if DNRC grants the water right permit. This water right filing is for the use of a well for a public water supply system that has been in place for decades. Application of water to soil will occur during irrigation of the 2.5 acres of lawn and garden irrigation within the 42-lot subdivision. This irrigation will be done using sprinklers, and the amount of water applied will not cause degradation of soil quality or stability. The soils at the site are not heavy and salts and saline seep will not 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.*

Existing vegetative cover consists of 2.5 acres of lawn and garden landscaping, which will not change if the water right permit is granted. The project is located entirely on private property, and the applicants will be responsible for controlling noxious weeds. The change of irrigation water rights to mitigation will result in 5.55 acres of land not being irrigated using the historic water right being changed to mitigation. The 5.55 parcel of land that will not be irrigated has not been irrigated to date and there will be no change or impact to existing vegetation on these acres.

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. The water will be diverted using submersed electric pumps. No air pollutants were identified as resulting from the applicant's proposed use of groundwater for domestic and lawn and garden purposes.

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.*

NA – project not located on State of Federal Lands.

Determination: No impact.

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 the 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 in the valley.

Determination: No impact.

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

The project does not pose a significant risk to the 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? 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:***

No reasonable alternatives were identified in the EA.

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:***

PART III. Conclusion

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

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:

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: Jim Nave
Title: Deputy Regional Manager
Date: March 14, 2012