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*: James T. & Carolyn J. Carver
PO Box 11
Malta, MT 59538

2. *Type of action*: Application to Change a Water Right 41QJ-30027444

3. *Water source name*: Missouri River

4. *Location affected by project*: Section 20, T16N, R2W, Cascade County.
COS 934 MK 8E & Lot 4, SRB Tracts
Approximately 0.25 miles northeast of Mid Canon, MT.

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

The applicant proposes to add a new, additional point of diversion to legally access water for 0.46 acres of lawn & garden irrigation. The new point of diversion located at 13 Meadow Lane has a legal description of NWNWNE Section 20 T16N R2W; this pump site will be approximately 500 feet downstream from the original point of diversion situated at 3 Meadow Lane. The land in question was originally irrigated via a wheel line sprinkler system. The applicant is requesting to utilize 18 gallons per minute (gpm) from the Missouri River using a 2 horsepower electric pump. The total diversion would not exceed 1.24 acre-feet (AF) per year and would occur from April 1 through September 30 each year. The system is already in place and operable.

The DNRC will authorize the change if the applicant proves the criteria in MCA 85-2-402.

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

MT Dept. of Environmental Quality	- Final 2004 Montana Water Quality Integrated Report
MT Dept. of Fish, Wildlife and Parks	- Montana Fisheries Information System
MT Natural Heritage Program	- Species of Concern, T/E
MT Dept. of Agriculture	- Weed Survey and Mapping System
US DOI/Fish and Wildlife Service	- National Wetlands Inventory

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: Low likelihood of impact.

The Missouri River is not identified as a chronically or periodically dewatered stream by the Department of Fish, Wildlife and Parks (DFWP). The DFWP has a water reservation on this portion of the Missouri River for 3876 cfs to maintain instream flows. The applicant is proposing to use up to 1.24 AF on 0.46 acres, or 2.7 ac-ft/acre. This is within DNRC standards for sprinkler irrigation (Climatic Area III: 2.08-2.74 ac-ft/ac). According the Cascade County Water Resources Survey, the area of interest has been historically irrigated. In addition, given the proximity of the parcel to the Missouri River, it's reasonable to assume that this land received adequate irrigation.

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: Low likelihood of impact – minor impact

The reach of the Missouri River is not listed in the Draft 2004 Montana 303(d) list as water quality impaired or threatened. Depending on management of the land in question, fertilizer and allied chemicals may infiltrate the shallow groundwater adjacent to the river and thus enter the Missouri. However, it is unlikely that contaminant levels would increase above historic levels.

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: Low likelihood of impact – minor impact.

Given the relatively small flow being withdrawn from the Missouri River at the new point of diversion, it is unlikely that any significant change in the groundwater-surface water interaction will occur. As stated above, fertilizer and allied chemicals may infiltrate the shallow groundwater adjacent to the river. However, it is unlikely that contaminant levels would increase above historic levels.

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: Low Likelihood of Impact

As the system is already in place and being used, no new impacts are expected.

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: Low likelihood of impact.

As the project is already in place it is unlikely that any impacts to endangered species would occur. This is particularly true because no endangered aquatic species are known to exist in this reach of the Missouri River. Impacts to non-aquatic species would be minimal as the project is consistent with the existing development in the area.

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: Low likelihood of impact.

There are no known wetlands associated with this change application.

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

Determination: Low likelihood of impact.

There are no ponds associated with this change application

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: Low likelihood of impact.

Because the project is already complete, impacts to the soil and the underlying geological structure have already occurred.

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: Low likelihood of impact – minor impact.

Leafy Spurge, Spotted Knapweed, and Dalmation Toadflax are present in the area of interest. The proposed project replaced 0.46 acres of existing vegetation with 0.46 acres of lawn and garden. This may encourage the spread of existing noxious weeds populations and the establishment of new invasive species. However, local land management practices should keep them under control. It is the responsibility of the property owner 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: Low likelihood of impact.

The project will be powered by electricity delivered from the existing distribution system. As such, no localized impacts associated with air quality are expected.

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

Determination: Low likelihood of impact.

Because the construction and excavation has occurred, it is unlikely that any cultural resources would be further impacted by this project.

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 other demands have been 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: No local plans or goals are known.

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: Low likelihood of impact.

The small size of this project would have little if any impact on the recreation opportunities associated with the Missouri River. It is consistent with other similar developments in the area.

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

Determination: Low likelihood of impact.

No impacts to human health have been identified.

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.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

1. *Impacts on:*

(a) Cultural uniqueness and diversity? **None**

(*b) Local and state tax base and tax revenues?* **None**

(c) Existing land uses? **None**

(*d) Quantity and distribution of employment?* **None**

(e) Distribution and density of population and housing? **None**

(f) Demands for government services? **None**

(g) Industrial and commercial activity? **None**

(h) Utilities? **None**

(i) Transportation? **None**

(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: No secondary impacts are anticipated.

Cumulative Impacts: No cumulative impacts are anticipated

3. ***Describe any mitigation/stipulation measures:*** N/A

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 additional point of diversion is denied. Applicants would be unable to legally access Missouri River water for lawn & garden use.

PART III. Conclusion

1. Preferred Alternative: Approve application for change of water right to allow for new point of diversion.

2. Comments and Responses

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:

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

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

Name: Douglas D. Mann
Title: Water Resources Specialist, Lewistown Regional Office
Date: 10/5/07