

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: **City of Helena,
Department of Parks and Recreation
316 N. Park Avenue
Helena, MT 59644**
2. Type of action: **APPLICATION FOR BENEFICIAL WATER USE PERMIT
NO. 41I-30026231**
3. Water source name: **Groundwater Well**
4. Location affected by project: **Sec. 30, TWP 10N RGE 3W, Lewis and Clark County**
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:
This project will pump water from a well for municipal irrigation. More specifically, it will be a permit to replace the water source of a historically irrigated municipal park from the municipal water supply to an individual well. This application is for an 85 gpm up to 15.6 acre-feet/year well in the NENWNE of Sec. 30 TWP 10N RGE 3W, Lewis and Clark County. The application will be used to irrigate 7.89 acres of the Kindrick Legion Field/ Memorial Park in the NE of Sec. 10 TWP 10N RGE 3W, Lewis and Clark County, from April 15- October 15.

The DNRC shall issue a water use permit to the applicant if the criteria in 85-2-311, MCA are met.

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

**MT Natural Heritage Program - Species of Concern, T/E
Montana Bureau of Mines and Geology-GWIC
The Montana Noxious Weed Survey and Mapping System
NRCS Web Soil Survey
Dan Schaffer, TtEMI, Consultant
Bill Uthman, DNRC Hydrogeologist**

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: No significant impact.

This application will utilize groundwater at a rate of 85 GPM. The applicant will augment to reduce any impacts to any chronically or periodically dewatered streams in the project area.

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: No significant impact.

The applicant will be utilizing groundwater at a rate of 80-100 GPM to irrigate a municipal park. The irrigation was historically supplied from the municipal water source and will not have any significant impacts to water quality related to the change in water supply.

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: This is an application for an 85 gpm groundwater well dug to a depth of 225 feet. The well log filed with this application shows a clay layer topsoil from 0-2 feet, clay and rock layer from 2-90 feet, and a shaley limestone from 90-225 feet. An observation well was installed at a depth of 86 feet. This appropriation of groundwater may cause a stream-depletion impact at a future time within the basin, and the applicant proposes to mitigate this impact with existing surface water right(s) within the basin through use of an augmentation plan. The applicant has provided credible calculations that estimate the consumptive volume of 12.28 acre-feet per year to be augmented and an annual rate of stream depletion.

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: No significant impact.

The groundwater well was completed in 5/31/2002 by Lindsay Drilling, a licensed well driller. A 7 ½ HP pump is being used to divert water from the well, and conveyed directly to the park irrigation system. The irrigation system has been historically used and supplied by municipal water source. Since the project will be utilizing groundwater, there

will be no significant channel impacts, flow modifications, barriers or impacts to riparian areas.

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: No significant impact.

The MT Natural Heritage Program identified the Lesser Rushy Milkvetch, *Astragalus convallarius*, Brewer’s Sparrow, *Spizella breweri*, Small Yellow Lady’s-slipper, *Cypripedium parviflorum*, Canada Lynx, *Lynx Canadensis*, Wedge-leaved Saltbush, *Atriplex truncata*, Box elder, *Acer negundo*, and Lewis’s Woodpecker, *Melanerpes lewis*, as species of special concern in the vicinity of the project.

Lesser Rushy Milkvetch is a vulnerable species of the pea family and is found in valleys and foothills of grasslands and in open woodland areas.

Brewer’s Sparrow’s can be abundant in sagebrush, desert, and shrubland/chaparral habitat and will breed in high densities. This species prefers habitat with tall sagebrush shrubs for nesting and song perches; and low percentage grass cover to facilitating foraging on the ground. Loss of breeding habitat and sagebrush fragmentation are a concern for this species linked to population declines.

American Yellow Lady’s-slipper is a perennial plant that grows in fens, damp mossy woods, seepage areas, and moist forest meadow ecotones, in valley to lower montane zones.

Canada Lynx generally occur in boreal and montane regions dominated by coniferous or mixed forest with thick undergrowth; may also enter open forest, rocky areas, and tundra to forage for abundant prey.

Wedge-leaved saltbush occurs in vernal moist, alkaline soil around ponds and along streams in valleys.

Box-elder’s occur in bottomland forests, disturbed and weedy areas, mesic upland forests, or mixed forest edges. Box-elder’s are a common tree of generally small size and great tolerance. The species is common in waste areas and is considered by some to be weed-like in nature. It can be used as a street tree in harsh urban environments and a soil stabilizer in disturbed areas.

The Lewis Woodpeckers are vulnerable to permanent losses of large snags necessary for nesting sites or degradation of foraging habitat. Important habitat features include an open tree canopy, a brushy understory with ground cover, and dead trees for nest cavities.

The groundwater system/well would be used to irrigate a city park which is currently irrigated by city municipal water. It is unlikely that the proposed project would impact these widespread species.

No fish species of special concern were identified.

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: No significant impact.

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

Determination: No significant 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.

Determination: No significant 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: No significant impact.

The Montana Noxious Weed Survey and Mapping System identified Spotted Knapweed, Leafy spurge, and Dalmatian toadflax as the noxious weeds in the proposed project area. The landowner is responsible for controlling any establishment of noxious weed as a result of disturbance.

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

Determination: No significant impact.

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

Determination: No significant impact.

The State Historic Preservation Office was not contacted about this proposed project. The land has been historically used for municipal irrigation purposes and the area would have already disturbed any historic sites. Since the property is located on the City of Helena property, the decision to conduct a cultural inventory would be at the discretion of the City of Helena.

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 significant impact.

The proposed project will not cause any additional impacts on land, water, or energy resources.

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 significant 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.

Determination: **No significant impact.**

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

Determination: **No significant 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.

1. Impacts on:

- (a) Cultural uniqueness and diversity? **No significant impact.**
- (b) Local and state tax base and tax revenues? **No significant impact.**
- (c) Existing land uses? **No significant impact.**
- (d) Quantity and distribution of employment? **No significant impact.**
- (e) Distribution and density of population and housing? **No significant impact.**
- (f) Demands for government services? **No significant impact.**
- (g) Industrial and commercial activity? **No significant impact.**
- (h) Utilities? **No significant impact.**
- (i) Transportation? **No significant impact.**

(j) Safety? **No significant impact.**

(k) Other appropriate social and economic circumstances? **No significant impact.**

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: **No impacts were identified.**

Cumulative Impacts: **No impacts were identified.**

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:*

Under the no action alternative, the project would continue to be used as it is today. There do not appear to be alternatives.

PART III. Conclusion

1. *Preferred Alternative:* **Issue the authorization for the proposed project.**

2. *Comments and Responses:* **There have been no comments or 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 why the EA is the appropriate level of analysis for this proposed action: **An EA is the appropriate level of analysis for this action. There are no significant impacts identified, therefore an EIS is not required.**

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

Name: **Lindsay Arthur**

Title: **Water Resource Specialist**

Date: **4/09/2007**