

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
316 N Park Ave
Helena MT 59623-0001**
2. Type of action: **Application to Change a Water Right No. 30049152-411
(Application is to change Water Reservation No. 72581-411)**
3. Water source name: **Groundwater**
4. Location affected by project: **In and around Helena Kindrick Legion Field, Sec 30,
Twp 10N, Rge 3W, Lewis and Clark County**
5. **Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to add a point of diversion to its Water Reservation water right number 411-72581. This will be the first use of the Applicant's Water Reservation. The Applicant has been irrigating the local baseball field, Kindrick Legion Field, with treated water. The Applicant will discontinue use of the treated water and will instead use a well located at the ball field.**

The Applicant will use 85 GPM up to 19.73 AF/YR for irrigation on 7.89 acres. The well is located in the NENWNE of Sec 30, Twp 10N, Rge 3W, Lewis and Clark County. The well 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 to October 15 of each year.

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

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

**The MT Natural Heritage Program
Montana Bureau of Mines and Geology-GWIC
The Montana Noxious Weed Survey and Mapping System
NRCS Web Soil Survey
Dan Schaffer, TetraTech EMI, Consultant
Bill Uthman, DNRC Groundwater Hydrogeologist
James Heffner, DNRC Groundwater Hydrogeologist
Russell Levens, DNRC Groundwater 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.

This application will utilize groundwater that will not have any impacts to chronically or periodically dewatered streams in the project area.

Determination: **No significant adverse 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. This use is for ground water, not surface water.

Determination: **No significant adverse 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.

This application is for an 85 gpm groundwater well dug to a depth of 225 feet. There are 3 existing water rights within 1200' of the proposed well and may experience drawdown of approximately 1'. Wells beyond 1200' may experience drawdown of less than 1'. One existing well is 200' deep and two are 70' deep. Drawdown in the range of 1-3 feet does not typically prevent a senior ground water user from reasonably exercising their water right.

The proposed well generally would have the same impact on surface water as evaluated in the water reservation application which showed no significant impact.

Determination: **No significant adverse 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 diversion is a groundwater well and will not impact a channel, flow modifications, barriers, riparian areas, dams, or other well construction.

Determination: **No significant adverse 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 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 well would be used to irrigate a city park which is currently irrigated by treated city water. It is unlikely that the proposed project would impact these widespread species. No fish species of special concern were identified.

Determination: **No significant adverse 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.

This proposed project does not involve wetlands.

Determination: **No significant adverse impact.**

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

This proposed project does not involve ponds

Determination: **No significant adverse 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.

This project will not change the soil quality or alter soil stability or moisture content. The area has been irrigated for many years, it will now be irrigated using ground water rather than surface water.

Determination: **No significant adverse 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 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 weeds as a result of construction or disturbance to the existing vegetative cover.

Determination: **No significant adverse impact.**

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

Changing from surface water to ground water use does not affect air quality.

Determination: **No significant adverse 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.

The State Historic Preservation Office was not contacted about this proposed project. Kindrick Legion Field and Memorial Park have been irrigated for many years and any historic sites that may have existed would have been disturbed long ago.

Determination: **No significant adverse 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.

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

Determination: **No significant adverse impact.**

HUMAN ENVIRONMENT

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

Irrigation has occurred on this property for many years. The change from surface water to ground water will not change the impact.

Determination: **No significant adverse 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.

Irrigation has occurred on this property for many years. The change from surface water to ground water will not change the impact.

Determination: **No significant adverse impact.**

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

Irrigation has occurred on this property for many years. The change from surface water to ground water will not change the impact.

Determination: **No significant adverse 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**
- (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 have been identified.**

Cumulative Impacts **No cumulative impacts have been 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:
The applicant could continue to use potable water for irrigation. To make water potable, it must be treated; an expensive process. It is more prudent to use potable water for people and non-potable water for uses that will not be impacted by the lack of treatment.

PART III. Conclusion

- 1. Preferred Alternative: **Grant the application for use of non-potable water.**
- 2. Comments and Responses: **There have been no comments or responses at this time.**
- 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: **No significant adverse impacts have been identified.**

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

Name: **Kathy Arndt**
Title: **Water Resources Specialist**
Date: **September 1, 2010**