

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:* Joy Stevens  
539 Indian Trail  
Billings, MT 59105
2. *Type of action:* Application for Beneficial Water Use Permit No. 43Q-30022346
3. *Water source name:* Alkali Creek, Tributary to Yellowstone River
4. *Location affected by project:* NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> Section 28, T1N, R26E, Yellowstone County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*  
This project is to pump 68 gallons per minute from Alkali Creek to irrigate ½ acre of lawn and garden in the NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> Section 28, T1N, R26E, Yellowstone County. DNRC will issue a provisional water use permit if all criteria for issuance under MCA 85-2-311 are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*  
*(include agencies with overlapping jurisdiction)*  
Montana Natural Heritage Program  
Montana Historic Preservation Office  
Montana Department of Fish Wildlife & Parks (MFWP)  
Montana Department of Environmental Quality (MDEQ)  
Yellowstone County Planning Office

**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:* Alkali Creek is not on the MFWP list of chronically or periodically dewatered streams. The application is to pump 68 gallons per minute from the creek to irrigate ½ acre of lawn and garden. The proposed project should not worsen the stream condition.

**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:* Alkali Creek is not on the MDEQ list of water quality impaired or threatened streams. This proposed use for lawn and garden should have no significant impact on water quality issues in the area.

**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:* There will be no increase in the pumping of groundwater; this proposed use of water should have no significant impact on groundwater quality or quantity in the area.

**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:* The applicant has installed a 1½ HP pump and a 2" screened poly line running to a valve box on a sprinkler system. This proposed diversion, its construction and operation should not have significant impacts on the channel, historic flows, barriers, riparian areas, dams or well construction.

#### **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:* The Montana Natural Heritage Program has identified 5 endangered species or species of special concern and 2 ecological sites within this proposed project area. The species identified are the Spiny Softshell turtle, Spotted bat, Western Hognose snake, Peregrine falcon, and Milk snake. There are inferred extent reports for the Greater sage-grouse and the spotted bat. The ecological sites are Two Moon Park and Yellowstone River Corridor. The applicant would be expected to ensure that these species are not harmed as a result of the construction and use of this irrigation system.

**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:* The area does not appear to be a wetland area, so there should be no significant impacts.

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

*Determination:* There are no ponds associated with this project. There should be no significant impacts on existing wildlife, waterfowl or fisheries from this proposed use.

**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:* This proposed use should not degrade soil quality or cause saline seep problems in the area. The acres are already under irrigation. It is not expected that saline seep will occur.

**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:* There will be minimal soil disturbance during construction of this proposed project and there will be a small possibility of some noxious weeds spread and establishment. It is expected that the landowner will control the spread of noxious weeds on her property.

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

*Determination:* There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed project.

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

*Determination:* The Montana Historic Preservation Office has identified 15 archeological or historic sites of record in the proposed project area. A cultural resource inventory is warranted at this time. Should cultural materials be inadvertently discovered during this project the Montana Historical Society would like to be contacted and the site investigated.

**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:* There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

## **HUMAN ENVIRONMENT**

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

*Determination:* This proposed use is not inconsistent with any locally adopted environmental plans and goals for Yellowstone County.

**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:* There should be no significant adverse impacts on recreational or wilderness activities from this proposed use.

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

*Determination:* There should be no significant impact on human health from this proposed use.

**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 significant 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? 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: The use of this water for irrigation should not impact water users downstream of the project.

Cumulative Impacts: As more development takes place in this area, there could be higher demands for water for domestic, irrigation, stock, recreation, and other uses.

- 3. *Describe any mitigation/stipulation measures:*** The applicant is aware that she would be required to cease using water if the use of the water is adversely impacting the rights of downstream users.
- 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:*** Ms. Stevens could drill wells to supply the amount of water she wishes to have for the proposed use. She could also request that the city run a water line but this would not be practical and would be very expensive.

The “no action” alternative would mean that Ms. Stevens could not use her pump and sprinkler system to water her lawn.

**PART III. Conclusion**

- 1. *Preferred Alternative:*** The preferred alternative would be to allow the use of the water from Alkali Creek with the condition that the water rights of senior water users would not be adversely impacted.
- 2. *Comments and Responses:*** None to report
- 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 environmental impacts were identified. No EIS is required.

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

*Name:* Christine Smith  
*Title:* Water Resources Specialist  
*Date:* November 6, 2006