

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:**

Edward A. & Lavay V. Johnson  
35 Jimmy Green Rd.  
East Helena MT 59635-3461

**2. Type of action:** Water right change application no. 41I-G(W)001042-03

**3. Water source name:** Spokane Creek

**4. Location affected by action:** SENWSW, S09, T09N, R01W, Broadwater Co.

**5. Narrative summary of the proposed project and action to be taken:** The area has been subdivided. Applicant received a portion of the historic water right shown above. The historic ditches were destroyed by the creation of the subdivision. In order to use the right, the point of diversion must be changed to Johnson's property located in Lot 12 of the Lazy HM Estates, Phase 1 Subdivision. The applicant received 92.30 gpm up to 43.60 acre-feet per year. The historic number of acres irrigated by this right was and is 5.00 acres. This environmental assessment will attempt to address the environmental impacts to the physical and human environment with regard to the point of diversion and place of use.

The DNRC shall issue an Authorization to Change if the applicants prove the criteria in 85-2-402, MCA is met.

**6. Agencies consulted during preparation of the environmental assessment:**

State Historic Preservation Office (SHPO)  
Montana Natural Heritage Program (MNHP)  
Steve Dalbey, Fish Wildlife and Parks (FWP)  
Ron Spoon, Fish Wildlife and Parks (FWP)  
DEQ - 1998 TMDL Listing  
FWP - Dewatered Streams List (1997)  
EA Prepared for Broadwater County Commissioners prior to development of Lazy HM Estates (Copy included in the file)

**PART II. ENVIRONMENTAL REVIEW**

1. Environmental Impact Checklist:

**PHYSICAL ENVIRONMENT**

**Water quantity, quality and distribution**

Water quantity: Determine whether the source of supply is identified as a dewatered stream by DFWP or listed as chronically dewatered by DNRC. Determine whether the proposed use will worsen the already dewatered condition.

Determination: Spokane Creek is not on the Dewatered Streams List provided by FWP. This is a very small portion of an historic right. It should not have an adverse impact on the stream.

The area is not in a designated flood plane. This is based on flood hazard boundary map no. 300145 0005B.

Water quality: Determine whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: Spokane Creek is not listed in the DEQ TMDL listing. The proposed project, if approved, will require the applicant to do some construction in and around the creek. He plans to construct a sump pit as part of the diversion works. The construction will have an adverse affect on the turbidity, thereby causing a temporary degradation of the water quality. Applicant has said a 310 permit was necessary. The work has been done. It has been inspected and approved by DFWP.

Jim Beck of the DNRC Helena Regional Office has completed an in-depth analysis to determine the efficiency of the project. The applicant has been informed of the findings and given a copy of the analysis. The original is in the file.

Groundwater: Determine if the proposed project impacts ground water quality or supply by either depleting ground water or by degrading ground water quality from return flows. If this is a groundwater appropriation, determine if it could impact adjacent surface water flows.

Determination: The irrigation is from Spokane Creek a surface water source and will not have any impact on groundwater.

### **Diversion works**

Determine 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 proposes to construct a sump pit with a concrete tube with a trash screen in the creek to supply the pump. During construction there will be impacts to the creek and immediate riparian area. When I spoke with Steve Dalby of DFWP concerning an earlier application in the same area he was also concerned about the disturbance to the water and creek bank during construction. A 310 permit was necessary. The work is done and it has been inspected and approved by DFWP. The impact to the creek was minimal and temporary.

### **Unique, endangered, fragile or limited environmental resources**

Endangered and threatened species: Determine 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, determine whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: Spokane Creek has Brown Trout, Rainbow Trout, Montana Whitefish and Kokanee. Based on the MNHP (Montana Rivers Information System) none are on the threatened or endangered list. Also based on the MNHP there are no plant species of special concern in the area. According to a letter from Tom Carlson, Wildlife Biologist with DFWP the area was a wintering location for elk and mule deer. It also appeared to be a travel corridor between the Spokane Hills and the Elkhorn Mountains. Mr. Carlson felt the subdivision could be a direct impact to the movement of the wildlife and that the displaced animals may cause adjacent landowners problems. There are no threatened or endangered species listed in the area. DFWP had no comment concerning fish composition.

Wetlands: For wetlands, consult and determine whether existing fisheries resources or wetlands resources would be impacted.

Determination: There are no wetlands in the area.

Ponds: For ponds, consult and determine whether existing fisheries resources or wetlands resources would be impacted.

Determination: There are no ponds involved in this appropriation.

### **Geology/Soil quality, stability and moisture**

Determine whether there will be degradation of soil quality or alteration of soil stability. Determine whether the soils are glacial till -- heavy in salts that could cause saline seep.

Determination: The Broadwater County Soil Survey lists two types of soils in this particular area. They are Fairdale Silt Loam (Fa) and Sappinton Clay Loam (SaC). The soil erosion hazard is slight and runoff is medium. Both soils are used for irrigated alfalfa, some grains and pastures. Based on the survey, soil quality should not be affected and the soil stability should not be at risk. Saline seep should not be a concern. The environmental assessment prepared for Broadwater County indicated there are no geologic hazards in the area. The site however lies in Seismic Zone III which indicates the probability of seismic activity is high. This project would cause slight or no impact.

### **Vegetation cover, quantity and quality/Noxious weeds**

Determine impacts to existing vegetative cover. Determine whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: The area is newly subdivided. Mr. Johnson only has a small lot within the subdivision. During the construction of the lots and roads vegetative cover depletion and/or the spread of noxious weeds would have already occurred. It was intended the developers would reseed natural grass where vegetative cover had been disturbed during construction. The landowners are responsible for all weed control management efforts on their properties. This project would cause little or no impact.

### **Air quality**

Determine whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There should not be an adverse affect to air quality.

### **Historical and archeological sites**

Determine whether there will be degradation of unique archeological sites in the vicinity of the proposed project.

Determination: When SHPO was contacted about the project they were aware of several sites involving Tipi Rings, Lithic Scatter, Rock Piles and a Historic Railroad in the vicinity. There were no historic sites on the Johnson property. This was confirmed by the original landowner. This was historic agricultural (irrigated) ground.

### **Demands on environmental resources of land, water, and energy**

Determine any other impacts on environmental resources of land, water and energy not already addressed.

Determination: There are no other impacts anticipated concerning this project.

## HUMAN ENVIRONMENT

### **Locally adopted environmental plans and goals**

Determine whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: The subdivision was approved by Broadwater County. All construction was subject to the Broadwater County Comprehensive Plan.

### **Access to and quality of recreational and wilderness activities**

Determine whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No. This is a lot in the middle of an established subdivision.

### **Human health**

Determine whether the proposed project impacts on human health.

Determination: No.

### **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? The area has been subdivided. Part of this lot will be developed and it could have a slightly favorable impact on the local and state tax base as well as tax revenues.
- © Existing land uses? The area was privately owned agricultural ground that has been subdivided. The applicant purchased a lot and plans to sprinkler irrigate grass and alfalfa. The portion being irrigated was also historically irrigated. Any domestic construction would be on non-agricultural ground. The impact if any should be positive.
- (d) Quantity and distribution of employment? None
- (e) Distribution and density of population and housing? This particular use will not have an adverse affect.
- (f) Demands for government services? None
- (g) Industrial and commercial activities? None
- (h) Utilities? There will be a small increase in the demand for electricity to run the pump
- (l) Transportation? No
- (j) Safety? No

(k) Other appropriate social and economic circumstances? No

2. Secondary and cumulative impacts on the physical environment and human population: The water right involved in this change is an historic decreed right. When the property was subdivided the right was withheld in the deeds. Later if the purchased lot bordered the creek the new owner had the option of buying a portion of the right. The sixteen new owners have staggered the development of their properties so the impacts on the creek, to water quality and fish habitat have been minimal. The development and impacts have been minor, with several of the applicants using existing headgates and ditches. The secondary and cumulative impacts on the environment at this time has been slight. DFWP may have concerns about the secondary impacts concerning increased sediment as specifically related to the fisheries resources. We will continue to consult with DFWP on the environmental issues.

3. 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 alternative would be not to irrigate the property. Based on the application, that was the main reason for buying this particular property so irrigation could occur. If the application is denied that portion of the historic right will be lost.

### **PART III. CONCLUSION**

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

The possible impacts from this project are not significant. Therefore, an EIS is not required.

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

NAME: Kathy Arndt  
TITLE: Water Resources Specialist  
DATE: [Automatic date code removed]