

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION  
WATER RESOURCES DIVISION  
WATER RIGHTS BUREAU

**ENVIRONMENTAL ASSESSMENT**

**PART I. PROPOSED ACTION DESCRIPTION**

- Type of action:** WATER RIGHT PERMIT APPLICATION NO.  
41S-P110655-00
- Applicant/Contact name and address:**  
RAY BECK  
11 SADDLE MOUNTAIN DR  
CLANCY, MT 59634
- Water source name:** SRPING BRANCH, TRIBUTARY TO CASTLE CREEK
- Location affected by action:** SW SW NW SEC. 18, T14N, R19E, FERGUS COUNTY  
approximately 6 miles Southeast of Lewistown
- Narrative summary of the proposed project and action to be taken:** The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311, MCA are met. This application is to use 17 GPM up to 31.65 acre-feet for a 2.7 ac-ft fish pond / stock reservoir supplying a stock tank down gradient of the reservoir site.
- Agencies consulted during preparation of the environmental assessment:**  
NRCS plans were included with the application.  
State Historic Preservation Office  
Montana Natural Heritage Program  
Montana Rivers Information System

**PART II. ENVIRONMENTAL REVIEW**

- Environmental Impact Checklist:

**PHYSICAL ENVIRONMENT**

**Soils/Geologic Features:**

Degradation of soil quality or alteration of soil stability, moisture content, geologic substructure, unique geologic features, archeological sites?

**NO SIGNIFICANT IMPACT**

The Fergus County Soil Survey names the soil in this location **Straw loam**. On site analysis concurs with the description of the soil. The Soil Survey indicates that moderate seepage will occur when this soil is used to impound water. The moisture content of the soils downstream of the dam will increase as a result of this project. No unique geologic features were found.

**Erosion:**

Alteration of erosion or siltation patterns which modify stream beds or lake shores?

**NO SIGNIFICANT IMPACT**

Erosion and siltation patterns may be altered by the reservoir controlling high flows.

**Vegetation/Noxious weeds:**

Change in or adverse affect on diversity and production of local plant species including any unique or endangered species (including trees, shrubs, grass, and aquatic plants)? Establishment or spread of noxious weeds?

**NO SIGNIFICANT IMPACT**

Vegetation in the project area consists of Rough Fescue, Western Wheatgrass, Wild Rose, Red Dogwood, Ponderosa Pine, and Hounds Tongue. All of these species will be impacted by the construction of the reservoir, but sufficient populations remain to prevent any impact on the diversity of the local plant species. Canadian Thistle, a noxious weed, is present on the site. The project may encourage the proliferation of the Canadian Thistle unless controlled.

**Air:**

Deterioration of air quality, or adverse effects on vegetation due to increased air pollutants.

NO IMPACT

**Water:**

Alteration of surface water or groundwater quality including but not limited to temperature, dissolved oxygen or turbidity or quantity or distribution?

NO SIGNIFICANT IMPACT

The reservoir may increase water temperature while decreasing turbidity. There may be a minimal alteration of water quantity and distribution. Referencing the Montana Rivers Information System, the MT Dept. of Fish, Wildlife & Parks has not identified the source or Castle Creek as being de-watered. Neither Spring Branch nor Castle Creek has been identified as needing a TMDL plan.

**Floodplain:**

Changes in drainage patterns, course or magnitude of flood flows, or exposure of people/property to hazards (flood)?

NO SIGNIFICANT IMPACT

The magnitudes of flood flows may be reduced by the reservoir. The reservoir capacity of 2.7 ac-ft could increase the exposure of people / property to flood hazards if the reservoir were to breach and overtop the road immediately downstream.

**Wildlife Habitat/Migration:**

Deterioration of critical fish or wildlife habitat? Creation of a barrier to the migration or movement of fish or wildlife?

NO SIGNIFICANT IMPACT

Spring Branch has not been identified as critical fish habitat by DFWP in the MRIS web site. The dam would impede the migration of fish upstream. The DFWP has visited the site and has been included in the public notice process and has expressed no concern regarding fish habitat or migration.

**Endangered Species:**

Adverse effects on any unique or endangered species?

NO SIGNIFICANT IMPACT

A literature search of the Natural Resource Information System found no endangered plant species. A ground search found the same.

NRIS identified both the Bald Eagle and the American Goshawk as species of concern. The site survey found no evidence of the presence of either species or any other species of concern. The MRIS web site shows DFWP has identified no fish species of concern in Castle Creek or its tributaries.

**HUMAN ENVIRONMENT**

**Existing Land Use:**

Alteration of or interference with the productivity or profitability of the existing land use of an area?

NO IMPACT

The land will continued to be used as grazing land.

**Historical Significance:**

Destruction or alteration of a natural area of scientific or educational value or prehistoric or paleontological importance?

NO IMPACT

A literature search by the State Historic Preservation Office found no sites of historical significance at the project location. Because a previous cultural survey had been conducted in the area, the State Historic Preservation Office believes it is unlikely any cultural properties would be affected by this project. A field survey of the site found no sites of historical significance.

**Populace:**

Alteration of the location, distribution, density, or growth rate of the human population of an area?  
Alteration of social structure of community? NO IMPACT

**Transportation:**

Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods? NO IMPACT

**Safety:**

Creation of any health hazard or affect on existing emergency response or evacuation plans?  
NO SIGNIFICANT IMPACT  
A breach of the dam could inundate the county road, possibly creating a safety concern.

**Public Services:**

Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? Have an effect upon local or state tax base?

NO IMPACT

**Utilities:**

Creates need for new or altered facilities for any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?

NO IMPACT

**Aesthetics:**

Alteration of any scenic vista or recreation opportunity or creation of an aesthetically offensive site to the public?

NO SIGNIFICANT IMPACT

The reservoir and installation of a stock tank possibly could alter a scenic vista.

**Other: NO**

2. Secondary and cumulative impacts: **None found.**

3. Reasonable alternatives to the proposed action, including the no action alternative:

This project is designed to enhance the wildlife habitat and protect the riparian area from livestock. Not building the project is an option but the aforementioned desirable affects would not occur.

**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: An EA is adequate for this action because no significant impacts have been identified.

PREPARED BY:

NAME: ANDY BRUMMOND  
TITLE: WATER RESOURCES SPECIALIST  
DATE: [Automatic date code removed]