

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

ENVIRONMENTAL ASSESSMENT

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of action:** AUTHORIZATION TO CHANGE NO.
40B-G(P)110643-00
2. **Applicant/Contact name and address:**
JIM CHALMERS
201 E 14TH ST
TEMPE, AZ 85281
3. **Water source name:** UNNAMED TRIBUTARY TO NORTH FORK MCDONALD CREEK
4. **Location affected by action:** NW SE SE SECTION 18, T15N, R20E, FERGUS COUNTY
approximately 9 miles east of Lewistown.
5. **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 change the location of a proposed 2.0 ac-ft reservoir with a 15.0 GPM flow through rate and a total maximum volume of 24.2 ac-ft.
6. **Agencies consulted during preparation of the environmental assessment:**
State Historic Preservation Office
Montana Rivers Information System
Montana Natural Heritage Program
Montana Dept. of Environmental Quality

PART II. ENVIRONMENTAL REVIEW

1. 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 identifies the soil in the project area as **Fluvaquentic Haplaquolls**. This is a clay – loam soil. The site survey confirms this soil type. This soil experiences moderate seepage when used as dam building material. It also erodes easily. The site survey revealed no unique geologic structures.

Erosion:

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

NO SIGNIFICANT IMPACT

The reservoir will modify siltation patterns as silt will be stored in the reservoir and erosion patterns will change due to the influence of the reservoir.

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

The vegetation in the area consists of American Managrass, Slender Wheatgrass, Wild Rose, Willows, Cat Tails, and Curly Dock. These populations will not be significantly impacted by the construction of the reservoir as any disturbed areas will quickly re-vegetate given the fertile soil and

ample moisture. No noxious weeds were identified. The Montana Natural Heritage Program web-site identified no plant species of concern and none were identified during the site survey.

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 temperature of the surface water in the source downstream of the pond may be slightly increased. The amount of dissolved oxygen may be decreased due to increase aquatic plant populations. The quantity and distribution of water will change slightly due to increased evaporative losses and the increased volume required for the initial fill of the expanded area. The Montana Rivers Information System does not list the source. The North Fork McDonald Creek, of which the source is a tributary, is not listed as being considered de-watered by the Department of Fish, Wildlife, & Parks as found in the MRIS web-site. Neither the source nor North Fork McDonald Creek are listed by MT Dept. of Environmental Quality 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 reservoir may slightly diminish the magnitude of flood flows but also would increase the potential hazard if the dam were to fail.

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

The reservoir may impact with the migration patterns of fish.

Endangered Species:

Adverse effects on any unique or endangered species?

NO SIGNIFICANT IMPACT

The Montana Natural Heritage Program identified the Mountain Plover, Bairds Sparrow, and the Northern Goshawk as bird species of concern in the area. None of these species were present at the time of the site survey. The project will not alter any bird habitat. No other endangered species were identified during the site survey.

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 use will remain recreational/ agricultural.

Historical Significance:

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

NO SIGNIFICANT IMPACT

A literature search by the State Historic Preservation Office found no recorded historical or archeological sites. A site survey of the area to be excavated found the same.

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 IMPACT

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?

BENEFICIAL IMPACT

The volume of the reservoir will allow for greater fire protection in the area.

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 project is visible from the public road but given its limited size would not likely be considered aesthetically offensive.

Other: NO

- 2. Secondary and cumulative impacts: **NONE**
- 3. Reasonable alternatives to the proposed action, including the no action alternative: No action would result in a lower likelihood that the applicant could sustain a fish population in the beaver pond. The applicant could build a new reservoir on the source. This alternative would result in great environmental impacts.

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: No significant impacts have been identified. Therefore, an EIS is not required.

PREPARED BY:

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DATE: [Automatic date code removed]