

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

ENVIRONMENTAL ASSESSMENT

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of action:** WATER CHANGE APPLICATION NO.
40EJ-G(C)110584-00
2. **Applicant/Contact name and address:**
INDIAN BUTTE COOPERATIVE GRAZING DISTRICT &
BEATRICE MURRAY
c/o CATHY WHITNEY
200 ROCKY POINT RD
ROY, MT 59471
3. **Water source name:** GROUNDWATER
4. **Location affected by action:** SECTIONS 25, 26, 34, 35, 36 T21N, T22E, FERGUS CO.
SECTION 3, T20N, R22E, FERGUS COUNTY.
Approximately 15 miles northeast of Roy.
5. **Narrative summary of the proposed project and action to be taken:** The DNRC shall issue an authorization to change if an applicant proves the criteria in 85-2-402, MCA are met. This application is add 3 stock tanks and approximately 4.5 miles of pipeline to an existing well and stockwater system. No additional flow or volume will be used.
6. **Agencies consulted during preparation of the environmental assessment:**
Montana Dept. of Natural Resources and Conservation (DNRC) –
Trust Land Management Division – Northeastern Land Office
Sate Historic Preservation Office
Montana Natural Heritage Program (MTNHP)
USDA Soil Survey of Fergus County, Montana

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 soils in the project area being **Dilts-Julin- Rock outcrop complex, Neldor-Thebo clays, Thebo clay, and Thebo Weingart-Absher clays.** Where disturbed when the pipeline is installed all of these soils are susceptible to erosion until vegetation is re-established. The Dilts-Julin complex may have difficulty re-establishing vegetation and thus be extremely susceptible to erosion. This soil type is encountered only in limited areas. The soil types where the tanks are located have a low permeability. Because of this, mud holes may develop around the tanks unless they are placed on gravel pads. While the potential for soil degradation exists, it is quite limited in the scope the entire area and therefore does not present a significant impact.

Aerial photos indicate no unique geologic features in the area.

Erosion:

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

NO SIGNIFICANT IMPACT

The project only involves one non-perennial drainage. Little if any impact to the drainage will result, particularly once vegetation is re-established.

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

Native grasses and forbes are present as none of the available aerial photos indicates any type of cultivation has occurred. The Environmental Checklist completed by the DNRC Trust Land Management Division concerning the portion of this project on School Trust Land identifies no noxious weeds in the area. A search of the MTNHP web-site identified no plant species of concern in the area.

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 distribution of water will change with the addition of the new system. The quantity used should not change as the number of cattle in the pasture will remain the same. The system will incorporate float systems that will prevent free flow of water which potentially could lower the artesian pressure of the source well. This additional system should not impact water quality in any way.

Floodplain:

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

NO IMPACT

The project does not involve any lands in a designate flood plain.

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

This development could change wildlife movement patterns because of the redistribution of cattle in response to more sources of water. This impact would be minimal and the system may ultimately benefit wildlife by providing additional sources of water.

Endangered Species:

Adverse effects on any unique or endangered species?

NO SIGNIFICANT IMPACT

A search of the MTNHP web-site found that the American White Pelican and Forster's Tern have indirect evidence of breeding in the area. The Burrowing Owl has direct evidence of breeding in the area. These species of concern could temporarily be impacted by construction of the project. But given that none are endangered, the long term impacts are negligible. The DNRC – Trust Land Management Division identified no endangered animal species in the area.

HUMAN ENVIRONMENT

Existing Land Use:

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

BENEFICIAL IMPACT

The better distribution of cattle should increase both the productivity of the range and the cattle thus increasing profitability.

Historical Significance:

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

NO SIGNIFICANT IMPACT

The DNRC Trust Land Management Division Environmental Checklist identified petrified wood as being present. It is their assessment that there would be no significant impact to this resource. Direct contact with this agency revealed that they know of no other cultural resources in the area. A literature search by the State Historic Preservation Office identified to cultural resources in the area. They recommend cultural inventory. Given the small amount of ground disturbance and the fact that the pipelines primarily follow already existing roadways, it is unlikely that any undisturbed cultural resources would be found.

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?

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 IMPACT

This project is in a remote location that is not visible from any improved public roads. It will not interfere with any recreation opportunities on State Land.

Other:

NONE

2. Secondary and cumulative impacts: NONE IDENTIFIED

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

ALTERNATIVE 1 – NO ACTION

The benefits of better distribution of cattle on public and private land will not be realized. Impacts to the environment will remain unchanged from the present.

ALTERNATIVE 2 – INDIVIDUAL WELLS

This alternative would likely create less land disturbance but it would be cost prohibitive to drill wells at each individual location as artesian water is at a depth in excess of 1500 feet.

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. There will be no significant impacts, therefore, and EIS is not required.

PREPARED BY:

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