Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Revised 1-01

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: Engellant Ranch Co.
PO Box 314
Geraldine, MT 59446

2. *Type of action*: Applications for Beneficial Water Use Permit No. 41R-30022666

3. *Water source name*: Unnamed tributary of Mud Spring Coulee

4. *Location affected by action*: N2N2SW Sec. 17, T22N R12E, Chouteau County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*:
The proposed project is to construct a shallow reservoir to impound water for wildlife and waterfowl. The project was preliminarily designed by Ducks Unlimited and approved by the USDA, Natural Resources and Conservation Service under the federal Wetland Reserve Program. The application proposes to impound 20.6 acre-feet of water from January 1 to December 31. The reservoir is proposed to be about 11 surface acres at a maximum depth of five feet behind the dam.

   The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311, MCA, are met.

6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)
Montana State Historic Preservation Office (SHPO)
Montana Natural Heritage Program
Natural Resources and Conservation Service – Chouteau County Office
Dept. of Environmental Quality Website (TMDL 303D listing)
Montana Fish, Wildlife & Parks, Montana Rivers Information System Website
National Wetlands Inventory Website

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: The source is an unnamed tributary of Mud Spring Coulee. The surface flows consist of springs in the area, runoff from snow melt and precipitation events. The afore-mentioned source is not considered to be a chronically or periodically dewatered stream by DFWP.

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: The source is not listed as water quality impaired or threatened by the Montana Department of Environmental Quality. This proposed project is not expected to affect water quality.

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: This is not a groundwater application.

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: This project was designed by Ducks Unlimited and approved by the USDA Natural Resources and Conservation Service (NRCS) through the Wetlands Reserve Program (WRP). Channel impacts, barriers and riparian areas will not be impacted. Flows may be impacted in times of drought, however, since the project will store water early in the year and outflows will be maintained through management of the splashboards on the impoundment structure, negative impacts should be minor. NRCS will employ Ducks Unlimited as a technical service provider to gather survey information, complete engineering designs for the dam and water control structures and for overseeing restoration of the degraded wetland.

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: A report from the Montana Natural Heritage Program indicates there are no species of special concern within the general area of the project. Impacts to wildlife in the area as a result of the proposed impoundment structure should be minimal or none. The wetland enhancement will provide cover and water for small upland gamebirds and migratory waterfowl. It is anticipated that the positive effects will be greater than any negative impacts.

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 proposed project is in a functioning wetland area. The proposed project is considered wetland enhancement. The NRCS states that the impoundment will add approximately 10 - 11 total surface acres at a maximum depth of 5 feet deep behind the dam for wetland species. The wetland resource will be enhanced by constructing the dam, which will create a greater acreage of standing water with deeper depths up to about 5 feet for diving ducks such as canvasback and redheads. The shallower water will support dabbling ducks such as mallards, pintails, shovelers, gadwall, widgeon, and blue wing, green wing, and cinnamon teal.

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

Determination: It is anticipated that existing wildlife and waterfowl habitat will benefit from the wetland enhancement project. With the construction of the impoundment structure, additional shallow water areas will be provided that will enhance the waterfowl resources. The projects were not designed as a fisheries resource so impact to the fishery resource will not occur. There should be no adverse impact on upland wildlife.

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: Soils in the reservoir area are Marcott-Bigsandy complex with 0 to 4 percent slopes and the neighboring soils consist of the Zahill-Vida clay loams with 8 to 25 percent slopes. The Marcott soil is identified as silty clay and clay loam, somewhat poorly drained, and the Big Sandy soil group is defined as loam and clay loam, poorly drained. The Big Sandy soil group, which makes up about 35 percent of the soil unit, contains hydric soils. While the reservoir site has no apparent problems with salinity, according to the Chouteau County NRCS, some areas further downstream from the proposed reservoir have salinity problems. The neighboring soils, according to the NRCS, indicates that the onsite soils are labeled "somewhat limited" for embankments. The NRCS states that the final engineering design of the embankment will take this into consideration and will meet or exceed NRCS Engineering Standards and Specifications.

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: The existing native vegetation is an indicator of good water quality. This is likely due to the wetlands being fed by springs in the area. Construction of this wetland impoundment could result in the establishment or spread of noxious weeds. Any bare ground resulting from the project construction will be re-vegetated with native species. It is the responsibility of the property owner to control noxious weeds on their property.

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

Determination: Air quality will remain unaffected by these projects.

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

Determination: According to the Montana Historical Society, there have been no previously recorded historic or archaeological sites within these designated areas. The Historical Society feels there is a low likelihood cultural properties will be impacted and do not recommend a cultural resource inventory be conducted. They further state that should cultural materials be inadvertently discovered during the construction of this project, the Montana Historical Society should be contacted and the site investigated. Since the project is located on private property, any inventory conducted would be at the landowner's discretion.

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: No additional impacts on other environmental resources have been identified.

HUMAN ENVIRONMENT

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

Determination: The NRCS is working on a WRP easement with the applicant. Although I'm unsure, the easement may be contingent on the issuance of the water right permit.

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: These projects will have no impact on recreational or wilderness activities.

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

Determination: There will be no impact on human health as a result of these projects.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
**Yes___ No___. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: Whether the proposed WRP easement has any government regulatory impacts on the applicant's private property is unknown.

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 ?* Existing land uses will generally remain as they currently are. Grazing will be limited to compatible use as defined by USDA, NRCS.

(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 ?* There will be no additional demand for utilities.

(i) *Transportation ?* This project has no impact on the roads or transportation.

(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:*** No secondary impacts have been identified.

3. ***Describe any mitigation/stipulation measures:*** None at this time.

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:*** No significant impacts have been identified. Under the no action alternative, this permit would not be approved and the land use would remain as is. The waterfowl and wildlife would not benefit from the increased wetland areas resulting from the impoundment structure. At this time, a reasonable alternative has not been determined.

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 necessary.

Name of person(s) responsible for preparation of EA:
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Title: Water Resources Specialist
Date: January 17, 2007