EA Form R 1/2001

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

Applicant/Contact name and address: **RONALD L TALCOTT**
P.O.BOX 392
BROADUS, MT 59317

1. *Type of action*: **APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 42I**

2. *Water source name*: **LITTLE POWDER RIVER**

3. *Location affected by project*: **W½ W½ E½, SECTION 29, T4S, R52E, POWDER RIVER COUNTY.**

4. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*:
This project is for the purpose of providing supplementary water on 52 acres of alfalfa. The source of water is the Little Powder River located in Section 29 in Powder River County. The irrigation system consists of a 16" Crusafulli pump that produces 6,400 Gallons per minute (GPM) or 14.26 cubic feet per second (CFS) into a waterspreading/spreader dike system capable of irrigating the applicants 52 acres. The applicant has applied to divert up to 215 acre-feet (AF) annually from the Little Powder River, with a requested period of diversion and period of use from March 1st – October 31st. The purpose of requesting irrigation water in March is to utilize the abundance of runoff during high flow conditions.

The DNRC will issue a provisional water use permit if all criteria for issuance under §§ 85-2-311, MCA are met.

5. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)

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: **No significant impact.**
The Little Powder River is not on the Montana Fish Wildlife and Parks list of chronically or periodically dewatered streams.

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: **No significant impact.**
The Little Powder River is not on the Montana Department of Environmental Quality's list of water quality impaired or threatened streams. This proposed use should have no significant impact on water quality issues in the area.

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: **No significant impact.**
This application is requesting the use of surface water; therefore, no significant impacts to groundwater quality or quantity are expected.

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: **No significant impact.**
The applicants' diversion system consists of a 16-inch Crusafulli pump controlled by the throttle on his 150 horsepower tractor. Water is pumped from the Little Powder River three times a year for irrigation of an alfalfa field through a diked waterspreading system. Water is first diverted in early spring when flows are high. The first two irrigations are 24 hours for a duration of three days. The third irrigation takes place for three to five days depending on the water available in the source and the diversion schedule of the neighbors. The applicant states during the first irrigation when pumping at 14.26 CFS there is not a noticeable drop in the level of the River, during the second irrigation when pumping at 14.26 CFS about 50% of the Rivers' flow is diverted, and during the third irrigation pumping is reduced to 4,000 GPM or (8.91 CFS) and diverts nearly all of the flow. There are not expected to be any significant impacts.

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: **No significant impact.**
The Montana Natural Heritage Program has identified four species of concern within this proposed project area: the Greater Sage-grouse (*Centrocercus urophasianus*), Sturgeon Chub (*Macrhybopsis gelida*), Sauger (*Sander canadensis*), and the Milksnake (*Lampropeltis triangulum*). It is not expected that this proposed project will adversely impact any of these species.

***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: **No significant impact.**
No wetlands are claimed within the project area.

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

Determination: **Unknown impact.**
This project will increase the available water to wildlife in the area and may have impacts on fish due to more than 50% of total river volume being diverted at times.

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: **No significant impact.**
This project should not degrade soil quality or cause saline seep problems within the area. It is not expected that saline seep or other negative effects will occur.

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: **No significant impact.**
There is a possibility for spread or establishment of noxious weeds. The landowner is responsible for controlling any establishment of noxious weed as a result of disturbance.

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

Determination: **No significant impact.**
No deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this project is expected.

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

Determination: **No significant impact.**

The State of Montana Historic Preservation Office (SHPO) identified the "Little Powder River Bridge" as a site historically designated near the proposed project area. This proposed use of water is not expected to have any significant impact on historical or archeological sites in the area.

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 significant impact.**
There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

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

Determination: **No significant impact.**
This proposed use is not inconsistent with any locally adopted environmental plans and goals for Powder River County.

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: **No significant impact.**
There should be no significant impacts on recreational or wilderness activities from this proposed use.

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

Determination: **No significant impact.**
There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No _**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: **No significant impact**.

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?* **No significant impact.**

(*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? **No significant impact.**

(i) Transportation? **No significant impact.**

(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:*

Secondary Impacts: **No significant impact.**

Cumulative Impacts: **No significant impact.**

3. *Describe any mitigation/stipulation measures:* **If and when any person was to make call for water the applicant has complete control over the diversion system and will stop irrigating to satisfy downstream users.**

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:* **Mr. Talcott could drill wells to supply the amount of water he wishes to have for the proposed uses. However, this would be very costly and it is questionable whether the water would be available in the amount requested.**

The "no action" alternative would mean that Mr. Talcott could not raise an alfalfa crop and may not be able to continue owning the family's property.

PART III. Conclusion

1. *Preferred Alternative:* **The preferred alternative would be to allow use of water, from the Little Powder River, for irrigation of 52 acres of alfalfa field with the condition that there will be no adverse impacts to any senior water rights.**

2. *Comments and Responses:* **None to report.**

3. *Finding:*
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?* **No EIS is required.**

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **No significant environmental impacts were identified, therefore no EIS is required.**

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

Name: **Mark V Corrao**
Title: **Water Conservation Specialist**
Date: **December 10, 2008**