EA Form R 1/2007

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

1. *Applicant/Contact name and address:* Craig Randall
49 Moorhead Rd
Broadus, MT 59317-9518

2. *Type of action:* Application for Beneficial Water Use Permit

3. *Water source name:* Powder River

4. *Location affected by project:* T5S, R51E, Sections 4, 5, 8 and 9.

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:* Craig Randall is requesting a beneficial water use permit in order to divert 1850 GPM (4.12 CFS) up to 750 acre-feet per year from Powder River to use for irrigation of 284.6 acres. The DNRC shall issue a water use permit if an 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 Natural Heritage Program	Endangered-Threatened Species
Montana Department of Fish Wildlife & Parks (MFWP)	Dewatered Stream Information
Montana Department of Environmental Quality (MDEQ)	TMDL Information

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: minor impact

Powder River from the Montana/Wyoming border to the mouth is on the DFWP list of chronically dewatered streams. There will be some depletion on the Powder River during the period of diversion. A comparison of physical and legal availability within the affected stream reach showed water is available for appropriation throughout the period of diversion.

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 impact

Powder River, from the Montana/Wyoming border to the mouth is on the DEQ list of water quality impaired streams. This application is for irrigation through a center pivot, this use should not 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: No Impact

This proposed use of water should have no significant impact on groundwater quality or quantity in the area. There may be some recharge to alluvial groundwater.

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: Minor Impact.

The diversion will consist of an 8 inch Cornell centrifugal pump, the installation of the pump site will be permitted by the Powder River Conservation District and the Army Corps of Engineers. DFWP has agreed to this diversion so long as the pump site is restricted above the ordinary high water mark and that a screen is installed and maintained on the pump to minimize adult fish entrainment into the irrigation system. This diversion should not impact channels, flow, barriers, riparian areas dams, or well construction.

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 Impact

The Natural Heritage Program identified the following species of concern within the project area: Great Blue Heron, Greater Sage-Grouse, Milksnake, Blue Sucker, Sturgeon Chub and Sauger. Potential species of concern are the White-footed Mouse, Short-eared Owl, Plains

Minnow, Creek Chub, and Plains Clubtail. There are no plant species of concern or potential concern identified within the area of affect. This area is already actively farmed; there should be no new impacts to endangered or threatened species due to this proposed use of water.

***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 Impact

The project area is not within a wetland, so there should be no significant impacts to wetlands from this proposed use.

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

Determination: No impact

There are no ponds associated with this water right application.

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 Impact

This application is for center pivot irrigation. The soils in the project area consist of Bankard fine sandy loam, Glenberg fine sandy loam (0-2% slopes), Haverson loam, Haverson silt loam, Haverson silty clay loam, Haverson silty clay, Heldt silty clay loam (0-2% slopes) and Keiser silty clay loam (4-8% slopes). The operator will manage irrigation water to flush salts from the soil. There should be no saline seep from this use of water.

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 Impact

The project area is already actively farmed, there should be no new establishment or spread of noxious weeds due to this project. The land owner is expected to prevent the establishment or spread of noxious weeds on his property.

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

Determination: No Impact

There should be no deterioration of air quality due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: NA-project not located on State or Federal Lands

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 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 Impact

This proposed use is not inconsistent with 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 Impact

The project is located in an area that is already actively farmed; this project should have no impact on recreational or wilderness activities.

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

Determination: No 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 None identified.

Cumulative Impacts This water use is expected to have minimal impact on water users downstream. The applicant is aware that they will have to cease diversion if a call is made by a senior water user.

3. *Describe any mitigation/stipulation measures:* The applicant is aware that they would be required to cease diverting water if that use is adversely impacting the rights of 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:*** The proposed activity is reasonable, and is within accepted practices for irrigation water use. The no action alternative would mean that the applicant could not use water for irrigation and therefore could not benefit financially from increased crop production.

PART III. Conclusion

1. ***Preferred Alternative*** To authorize the beneficial water use permit.

2 ***Comments and Responses***

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

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

Name: Christine Smith
Title: Water Resources Specialist
Date: October 1, 2013