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*: Richland County Conservation District
2745 West Holly Street
Sidney, MT 59270

2. *Type of action*: Conservation District Application to Change Water Reservation No. 40S-30105096

3. *Water source name*: Missouri River

4. *Location affected by action*: SE, Section 2, W2NE Sec 11, T27N, R53E, Richland County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*: The proposed project adds a point of diversion and place of use to the Richland County CD water reservation for irrigation of agricultural crops using a center pivot which will cover 70 acres in the S2SE of Section 2 and the W2NE and NENW of Section 11, T27N, R53E, Richland County. The proposed diverted flow rate is 1.10 CFS up to 161 AF per annum.

   The DNRC shall issue an authorization to change if the applicant proves the criteria in 85-2-402, MCA are met.

6. *Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction*

   Montana Department of Environmental Quality (DEQ)
   Montana Natural Heritage Program (website)
   Montana Department of Environmental Quality Website (TMDL 303d Listing)
   USDA Web Soil Survey
   National Wetlands Inventory

## 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.*

This reach of the Missouri River has not been identified by the Department of Fish, Wildlife, & Parks (FWP) as chronically or periodically dewatered. Additionally, FWP holds an instream flow right on this section of the Missouri River for 5178 CFS, effective year-round.

*Determination*: No significant impact

***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.*

The reach of the Missouri River where the proposed POD is located has been identified by the Department of Environmental Quality (DEQ) as fully supporting agricultural and drinking water uses and not supporting aquatic life. It was not assessed for primary contact recreation. The probable cause of impairment on aquatic life is Fort Peck Dam which impacts the natural flow of the river. The proposed project will not have any significant effect on water quality.

*Determination:* No significant impact

***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 surface water appropriation should have no significant impact on groundwater in the area.

**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.*

The diversion will consist of a Cornell 5HH centrifugal floating pump and will not have any impacts to the river channel or create any barriers or flow modifications. There will likely be some disturbance within the riparian area associated with the installation of the pump site; however no lasting impacts are anticipated. A 310 Permit Application will need to be filed with the Richland County CD prior to the installation of the diversion works. This project will have no effect on dams and will not involve well construction.

*Determination*: No significant impact

## 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."*

The Montana Natural Heritage Program identified a list of 17 animal species of concern within the township and range that the project is in. Of this list, the Least Tern and Pallid Sturgeon are listed by the US Fish & Wildlife Service as endangered. The Piping Plover, a species identified as threatened, was also identified. There were no plant species of special concern identified.

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|---|---|---|---|---|---|
| Hoary Bat | Sprague's Pipit | Piping Plover | Black-billed Cuckoo | Bobolink | Red-headed Woodpecker |
| Least Tern | Northern Redbelly Dace | Blue Sucker | Iowa Darter | Shortnose Gar | Sturgeon Chub |
| Sicklefin Chub | Pearl Dace | Paddlefish | Sauger | Pallid Sturgeon | |

The Least Tern is a species that prefer unvegetated sand-pebble beaches and islands of large reservoirs and rivers in northeastern and southeastern Montana; specifically the Yellowstone and Missouri River systems. The irrigation pump used is a floating pump with a small footprint and is not anticipated to have an effect on the Least Tern.

Pallid Sturgeon are found in the Missouri River and use large, turbid rivers over sand and gravel bottoms, usually in strong current. They use all channel types, but primarily use straight reaches with islands. The irrigation pump used is a floating pump and is not anticipated to have an effect on Pallid Sturgeon.

Piping Plovers primarily select unvegetated sand or pebble beaches on shorelines or islands. Vegetation, if present at all, is sparse. The pump location selected for this diversion would not be likely to provide suitable nesting habitat for the plover.

*Determination*: No significant impact

***Wetlands*** *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

According to the National Wetland Inventory, the only wetland identified within the project area is the Missouri River.

*Determination*: No significant impact

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

*Determination*: Not applicable.

**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.*

The USDA Web Soil Survey identified three soil types for the irrigated acres. They are Vida clay loam, Vida-Zahill complex and Lonna-Cambeth silt loams. Vida Clay Loam and Vida-Zahill complex are identified as nonsaline to very slightly saline and Lonna-Cambeth silt loams is identified as nonsaline to moderately saline. It is not anticipated that there will be degradation to the soil nor development of a saline seep caused by development of this project.

*Determination*: No significant impact

**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.*

There were no plant species of special concern identified by the Montana Heritage Program website.

Leafy spurge is known to be present in the areas surrounding the project area; however it has not been identified within the project area itself. As the proposed project is to develop land for irrigation of agricultural crops, it is not anticipated that spread of noxious weeds will occur due to this project. It will be the responsibility of the landowner to ensure that noxious weeds do not spread as a result of this project.

*Determination*: No significant impact

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

*Determination*: The pump will be electric and there will be no deterioration of air quality as a result of this appropriation.

**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 additional impacts on other environmental resources were 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*: There are no known local environmental plans or goals in this area.

**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*: This project will have no significant impact on recreational or wilderness activities.

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

*Determination*: This project will have no significant impact on human health.

**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*: There are no additional government regulatory impacts on private property rights associated with this application.

**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 secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

**3.** ***Describe any mitigation/stipulation measures:*** None

**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:***

## PART III. Conclusion

***1.*** ***Preferred Alternative:*** Issue a water use permit if the applicant proves the criteria in 85-2-311, MCA are met.

***2.*** ***Comments and Responses***

**3.** ***Finding:***

*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:*
*Name:* Todd Netto
*Title:* Water Resource Specialist
*Date:* May 11, 2016