



## **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

This reach of the Missouri River has not been identified by the Department of Fish, Wildlife, & Parks (FWP) as chronically or periodically dewatered. Also, FWP holds an instream flow right on this section of the Missouri River for 5178 CFS, effective year-round. Based on the flow requested and the DFWP instream right, the proposed diversion is unlikely to alter the current condition of the river, therefore no significant impacts to water quantity related to this application have been identified.

**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 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 hydrostructure flow of the river. The proposed project will not have any significant effect on 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 identified

The proposed project is for surface water from the Missouri River and will not have any impact on the groundwater quality or supply 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.*

*Determination:* No significant impact

The diversion will consist of a floating river 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 point of diversion; 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.

**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 impacts

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.

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.

***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

The only wetland identified within the project area is the Missouri River.

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

*Determination:* No impact identified

There have not been any ponds identified within the project area.

**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

The soil type for the irrigated acres is Vida clay loam of 1-4% slope or 4-8% slope. It is identified as prime farmland if irrigated. It is not anticipated that there will be degradation to the soil nor development of a saline seep caused by development of this project.

**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

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.

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

*Determination:* No impacts identified

This project is for irrigation of agricultural crops. The diversion pump used is electric and will not have an impact on air quality.

**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 is 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 other potential impacts have been identified.

<b>HUMAN ENVIRONMENT</b>
--------------------------

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

*Determination:* No known environmental plans or goals will be impacted by this project.

**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 access or recreational activities will be significantly impacted by this project.

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

*Determination:* This proposed 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:* No regulatory impacts are known.

**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 impacts identified
- (b) Local and state tax base and tax revenues? No significant impacts identified
- (c) Existing land uses? No significant impacts identified
- (d) Quantity and distribution of employment? No significant impacts identified
- (e) Distribution and density of population and housing? No significant impacts identified
- (f) Demands for government services? No significant impacts identified
- (g) Industrial and commercial activity? No significant impacts identified
- (h) Utilities? No significant impacts identified
- (i) Transportation? No significant impacts identified
- (j) Safety? No significant impacts identified
- (k) Other appropriate social and economic circumstances? No significant impacts identified

**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:**

The only alternative to the proposed action would be the no action alternative. The no action alternative would not allow for the development of additional irrigated acres using the Richland County CD water reservation.

**PART III. Conclusion**

**1. Preferred Alternative**

Issue a change authorization if the Applicant proves the criteria in §85.2.402, MCA, are met.

**2. 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 impacts related to the proposed project have been identified.

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

Name: Nathaniel T. Ward

Title: Water Resource Specialist

Date: May 4, 2015