

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 W HOLLY ST.
SIDNEY, MT 59270
2. Type of action: Conservation District Application to Change Water Reservation
3. Water source name: Missouri River
4. Location affected by project: Point of Diversion: SESWSE, Section 33, T28N, R55E, Richland County.
SESESE, Section 34, Lot 10, T28N, R55E, Richland County.
SWSESE, Section 03, Lot 10, T27N, R55E, Richland County.

Place of Use: See Table 1

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert water from the Missouri River, by means of three pumps, from April 1 to November 1 at 8.9 CFS up to 590.25 AF. The water will be diverted from three pumps located in the following locations: Point of Diversion 1: SWSESE, Section 03, Lot 10, T27N, R55E, Point of Diversion 2: SESWSE, Section 33, T28N, R55E, and Point of Diversion 3: SESESE, Section 34, Lot 10, T28N, R55E, Richland County. Point of Diversion 1 is for Flood Irrigation, Point of Diversion 2 is for Sprinkler Irrigation as well as Lawn and Garden Irrigation, and Point of Diversion 3 is for Sprinkler Irrigation use. The period of use is April 1 to November 1. A total of 295 AC will be irrigated. The proposed place of use is located in the following locations:

Table 3: Proposed Place of Use							
Irrigation Type	POD ID #	Total ACRES	QTR	SECTION	TWN	RGE	COUNTY
Sprinkler	3	2.6	S2S2SE	34	28N	55E	RICHLAND
	3	48.2	N2NE	3	27N	55E	RICHLAND
	3	58.8	S2NE	3	27N	55E	RICHLAND
Sprinkler	3	35.9	SE	3	27N	55E	RICHLAND
Flood	1	44.4					
Flood	1	23.3	W2NE	10	27N	55E	RICHLAND
Sprinkler	2	8.2	S2NESW	3	27N	55E	RICHLAND
	2	40.3	S2SW	3	27N	55E	RICHLAND
	2	18.4	S2SE	4	27N	55E	RICHLAND
	2	14.9	N2NE	9	27N	55E	RICHLAND
Lawn and Garden	2	0.01	E2E2NENE	9	27N	55E	RICHLAND

The DNRC issue a change authorization if an 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)
 - o US Fish & Wildlife Service
 - o Montana Natural Heritage Program
 - o Montana Department of Fish, Wildlife, & Parks
 - o Montana Department of Environmental Quality
 - o USDA Web Soil Survey
 - o 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. 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 has been identified.

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 fully supporting aquatic life. It was not assessed for primary contact recreation. Probable sources of the impairment are the upstream Fort Peck Dam/impoundment and hydro-structure flow regulation/modification. 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: Where the proposed project is associated with a water reservation, no historical data is available to assess any positive or negative impacts to groundwater resources.

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 first point of diversion is located in the SESWSE, Section 33, T28N, R55E, Richland County. The diversion method is a Cornell 5HH – 1800 rpm pump and is shared with an existing system. No new flow rate is being proposed. A variable flow drive panel (VFD) is used to manage water flow and pressure based on system demand.

The second point of diversion is located in the SESESE, Section 34, Lot 10, T28N, R55E, Richland County. The diversion method is a Cornell 4RB - 1800 rpm pump. A 2 CFS flow rate is being proposed.

The third point of diversion is located in the SWSESE, Section 03, Lot 10, T27N, R55E, Richland County. The diversion method is a Cornell 6YB - 1800 rpm pump. A 6.7 CFS flow rate is being proposed.

All pumps use a self-cleaning screen manufactured by Ames Manufacturing of Williston, ND. In addition, all systems are powered by public power and have 480 volts, three-phase power available.

Determination: No significant impact is expected as this land has already been developed for irrigation. No new disturbance will occur.

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.”

Common Name	Scientific Name	Global Rank	State Rank
Eastern Red Bat	Lasiurus borealis	G3G4	S3B
Black-billed Cuckoo	Coccyzus erythrophthalmus	G5	S3B
Great Blue Heron	Ardea herodias	G5	S3B
Least Tern	Sternula antillarum	G4	S2B
Piping Plover	Charadrius melodus	G3	S2B
Whooping Crane	Grus americana	G1	S1M
Blue Sucker	Cycleptus elongatus	G3G4	S2S3
Iowa Darter	Etheostoma exile	G5	S3
Northern Redbelly Dace	Chrosomus eos	G5	S3
Paddlefish	Polyodon spathula	G4	S2
Pallid Sturgeon	Scaphirhynchus albus	G2	S1
Sauger	Sander canadensis	G5	S2
Shortnose Gar	Lepisosteus platostomus	G5	S3
Sicklefin Chub	Macrhybopsis meeki	G3	S1
Sturgeon Chub	Macrhybopsis gelida	G3	S2S3

Rank		Definition
G1	S1	Critically Imperiled — At very high risk of collapse or global extinction or state extirpation due to a very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
G2	S2	Imperiled — At high risk of collapse or global extinction or state extirpation due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
G3	S3	Vulnerable — At moderate risk of collapse or global extinction or state extirpation due to a fairly restricted range, few populations or occurrences, recent and widespread declines, threats, or other factors.
G4	S4	Apparently Secure — At a fairly low risk of collapse or global extinction or state extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
G5	S5	Secure — At very low or no risk of collapse or global extinction or state extirpation due to a very extensive range, abundance populations or occurrences, with little to no concern from declines or threats.
Quantifiers		Definition
B		Breeding — Rank refers to the breeding population of the species in Montana.
N		Nonbreeding — Rank refers to the non-breeding population of the species in Montana.
M		Migratory — Species occurs in Montana only during migration.

Determination: Three critically imperiled species utilize the characteristic habitat as found at the proposed project point of diversion: the Pallid Sturgeon, the Whooping Crane, and the Sicklefin Chub. There are also several species listed above that are listed as threatened or sensitive species. This project will not create a barrier to the migration or movement of fish or wildlife.

Pallid Sturgeon: The Pallid Sturgeon utilizes turbid rivers with fine sandy-silty substrates, such as the stretch of the Missouri River where the proposed project is found. The screened intake structure for the project is designed to lower the intake velocity, a design that the applicant has

successfully used in other applications that have presumably passed USFWS & Montana FW &P standards. The impact on the Pallid Sturgeon population in this reach of the Missouri River is not expected to be significant.

Whooping Crane: The Whooping Crane is identified by the Montana Natural Heritage Program Animal Species of Concern database to utilize habitat as found in the section where the Applicant proposes the project. This bird utilizes freshwater emergent marshes, as identified in the National Wetlands Inventory map of the section, to forage during spring and fall migrations. Given the mobility of the species, the limited emergent wetland habitat found near the site, and seasonal use, this site is unlikely to negatively affect the wellbeing of this population.

Sicklefin Chub: The Sicklefin Chub is a rare, large-river minnow species found in the lower Missouri and Yellowstone Rivers (Large Valley River Ecosystems) of Montana. The Sicklefin Chub is found in large, turbid streams in the plain region of Montana. The development of pump sights is not expected to have significant impact on the 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.

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

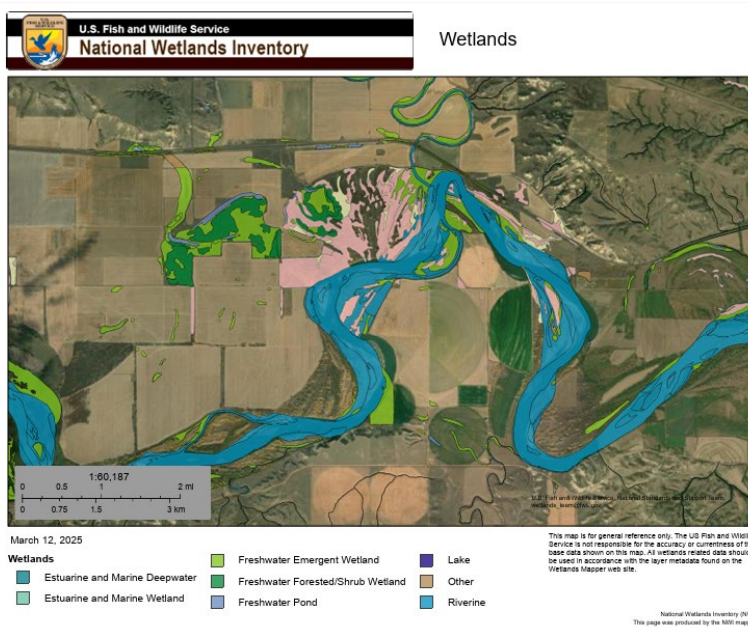


Figure 1: National Wetlands Inventory Map of Proposed Place of Use

Determination: No significant impact.

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

Determination: Not applicable to the 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.*

The soil type at the place of use is mainly composed of 24.1% Havrelon silt loam, 0 to 1 percent slopes, 38% Havrelon silty clay loam, and 32.6% Lohler silty clay loam. % Havrelon silt loam, 0 to 1 percent slopes is identified as prime farmland if irrigated and is well drained. Havrelon silty clay loam is identified as prime farmland if irrigated, has a 0-2% slope, and is well drained. Lohler silty clay loam is identified as prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60, has a 0-2% slope, and is well drained. Degradation to soil or development of a saline seep is not anticipated.

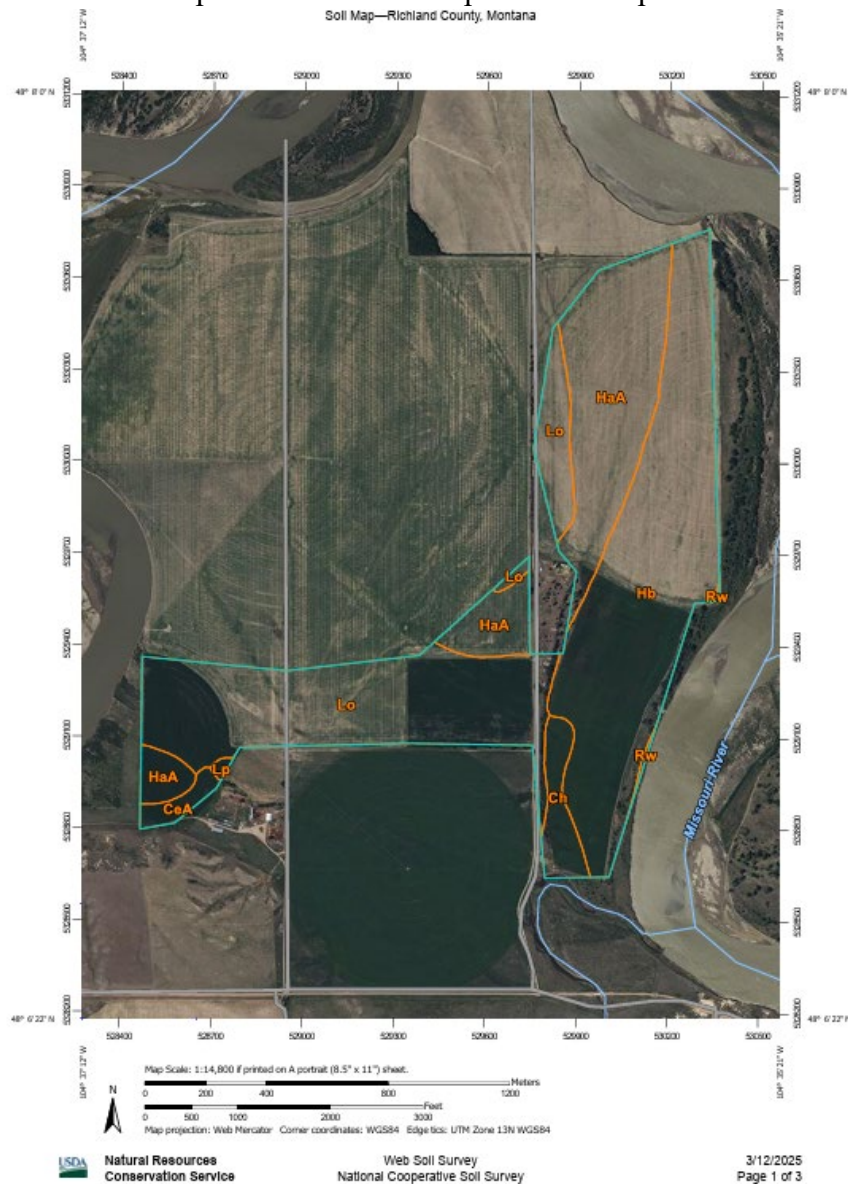


Figure 2: Place of Use Soil Composition Map

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeA	Cherry silty clay loam, 0 to 2 percent slopes	4.9	1.4%
Ch	Cherry, Havrelon, and Trembles soils, occasionally flooded	12.0	3.5%
HaA	Havrelon silt loam, 0 to 1 percent slopes	83.6	24.1%
Hb	Havrelon silty clay loam	132.0	38.0%
Lo	Lohler silty clay loam	113.4	32.6%
Lp	Lohler clay	0.8	0.2%
Rw	Riverwash	0.7	0.2%
Totals for Area of Interest		347.4	100.0%

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.

As the proposed project is to develop land for irrigation of agricultural crops, it is not anticipated that the 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.*

All systems are powered by public power and have 480 volts, three phase power available.

Determination: No significant impact.

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 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: The project should have no significant or harmful impact on recreational or wilderness activities.

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

Determination: The development should have no 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:*

No action alternative:

The applicant would not be able to develop their water reservation and put the water to beneficial use as was granted to the water user by the Richland County Conservation District. The applicant's water reservation would continue undeveloped and without the previously stated benefits.

Alternative 1:

Approve the change application as submitted if the applicant proves the statutory criteria has been met.

PART III. Conclusion

1. *Preferred Alternative:*

Alternative 1

2. *Comments and Responses* None

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 impacts have been identified; therefore, an EIS is not necessary.

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

Name: Kailee Ingalls

Title: Water Resources Specialist

Date: 5/7/2025