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: 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: NESESW, Section 27, T27N, R51E, Richland County.
Place of Use: See Table 1

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

6. This application is to add points of diversion and places of use to the Richland County Conservation District Water Reservation (40S 84500-00) that were not included in the original water reservation public notice. The Applicant proposes to divert water from the Missouri River, by means of a pump, from April 1 through October 31 at 2.7 CFS up to 368 AF, from a point in the NESESW, Section 27, T27N, R51E, Richland County, for Sprinkler Irrigation use from April 1 through October 31. The place of use includes two pivots located in the following locations:

Table 1: Proposed Place of Use

Pivot Description	Acres	Lot	Quarter Section	Section	Twp.	Range	County
98 AC	4.5	1		21	27N	51E	Richland
	4	5		22	27N	51E	Richland
	34	1		27	27N	51E	Richland
	35.5		NENE	28	27N	51E	Richland
	4		N2SWNW	27	27N	51E	Richland
	16		SENE	28	27N	51E	Richland
60 AC	28		NWSE	28	27N	51E	Richland
	32		SWSE	28	27N	51E	Richland

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

7. 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 point of diversion is located in the NESESW, Section 27, T27N, R51E, Richland County. The diversion method is a Cornell 5RB - frame pump. The pump is powered by a John Deer 4045T diesel motor. The motor and pump will be mounted on a trailer with an A frame that will support the suction pipe and self-cleaning screen. The water will be pumped into 100' of 10" aluminum pipe. The aluminum pipe will hook into a 10" 80 psi PIP pipe that will feed the 98 AC pivot with end guns. A 10" hose line will feed the 60 AC pivot. The system will be automated and a control wire from the pivots to the pump will provide a reliable safety system in the event of a malfunction. Existing Conservation District Record (40S 104484 00) and proposed pivots may be operated at the same time or individually; depending on the fields needs to prevent over-saturation. A 2.7 CFS flow rate is being proposed.

Determination: No significant impact is expected as this land and pump site have 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
Bobolink	Dolichonyx oryzivorus	G5	S3B
Least Tern	Sternula antillarum	G4	S2B
Piping Plover	Charadrius melodus	G3	S2B
Blue Sucker	Cycleptus elongatus	G3G4	S2
Iowa Darter	Etheostoma exile	G5	S3
Northern Redbelly Dace	Chrosomus eos	G5	S2
Paddlefish	Polyodon spathula	G4	S3S4
Pallid Sturgeon	Scaphirhynchus albus	G2	S1
Sauger	Sander canadensis	G5	S2
Shortnose Gar	Lepisosteus platostomus	G5	S3
Sicklefin Chub	Macrhybopsis meeki	G3	S2
Sturgeon Chub	Macrhybopsis gelida	G3	S3

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: One critically imperiled species utilizes the characteristic habitat as found at the proposed project point of diversion: the Pallid Sturgeon. There are also several species listed above that are listed as a 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.

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 wetland identified within the project area is the Missouri River. In addition, a 9.32 AC Freshwater Emergent Wetland is identified within the project area. The system is classified as PEM1Af. It is a Palustrine System.
Surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season. Farmed wetlands occur where the soil surface has been mechanically or physically altered for the production of crops, but where hydrophytes would become reestablished if the farming were discontinued.

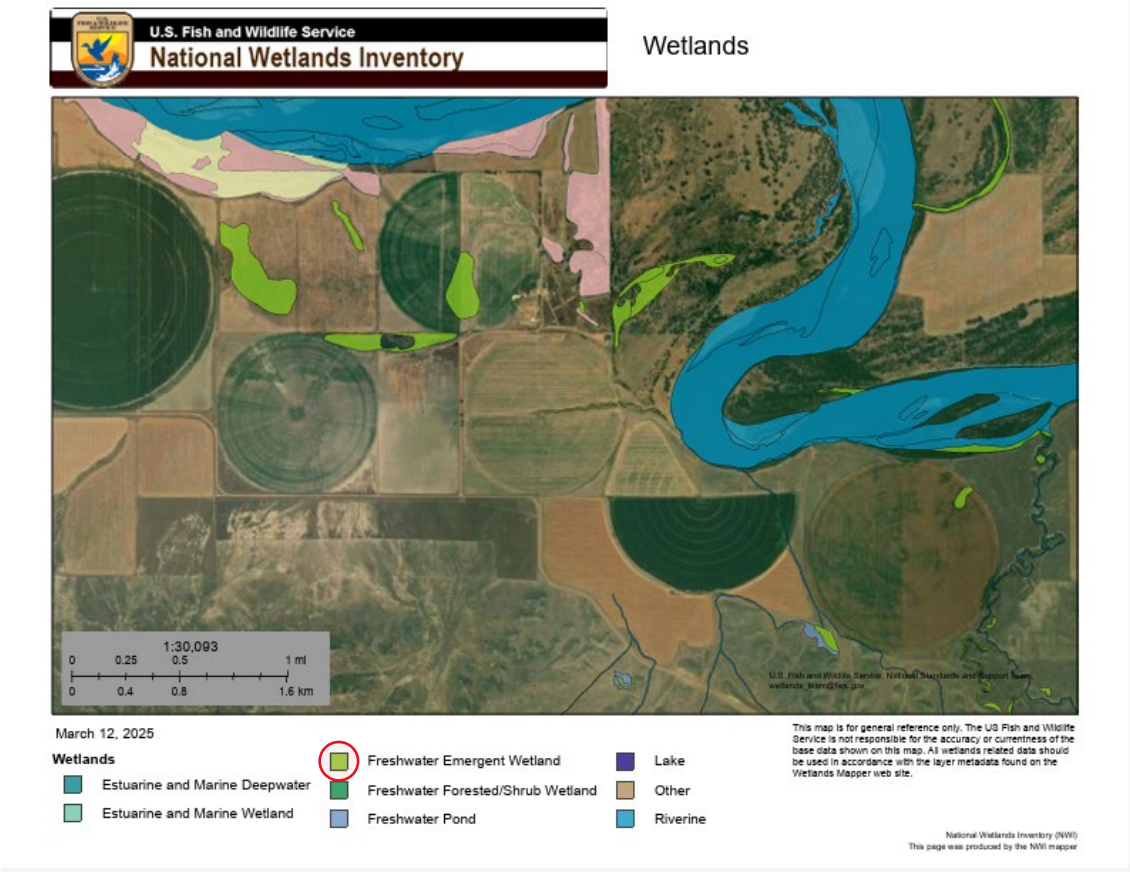

Figure 1: National Wetlands Inventory Map of Proposed Place of Use

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 60 AC pivot place of use (Figure 2) is 20.4% Marias silty clay, 57.8% Vanda clay, 12.8% Adger silty clay loam. An additional 9% of the area of interest is on the outside of the pivot and consists of two other clay loams. Marias silty clay is identified as not prime farmland if irrigated, has a 0-2 percent slope, is well drained, and is very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm). Vanda clay is identified as not prime farmland if irrigated, has a 0-4 percent slope, is well drained, and is moderately saline to strongly saline (8.0 to 16.0 mmhos/cm). Adger silty clay loam is identified as not prime farmland if irrigated, has a 0-8 percent slope, is well drained, and is moderately saline to strongly saline (8.0 to 16.0 mmhos/cm).

The soil type at the 98 AC pivot place of use (Figure 3) is 27.9% Havrelon silty clay loam, 61.2% Lohler silty clay loam, and 10.9% Wyola silty clay loam. Havrelon silty clay loam is identified as prime farmland if irrigated, has a 0-2 percent slope, is well drained. Lohler silty clay loam is identified as prime farmland if irrigated, has a 0-2 percent slope, and is well drained. Wyola silty clay loam is identified as prime farmland if irrigated, has a 0-2 percent slope, is well drained, and is nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm).

Degradation to soil or development of a saline seep is not anticipated.

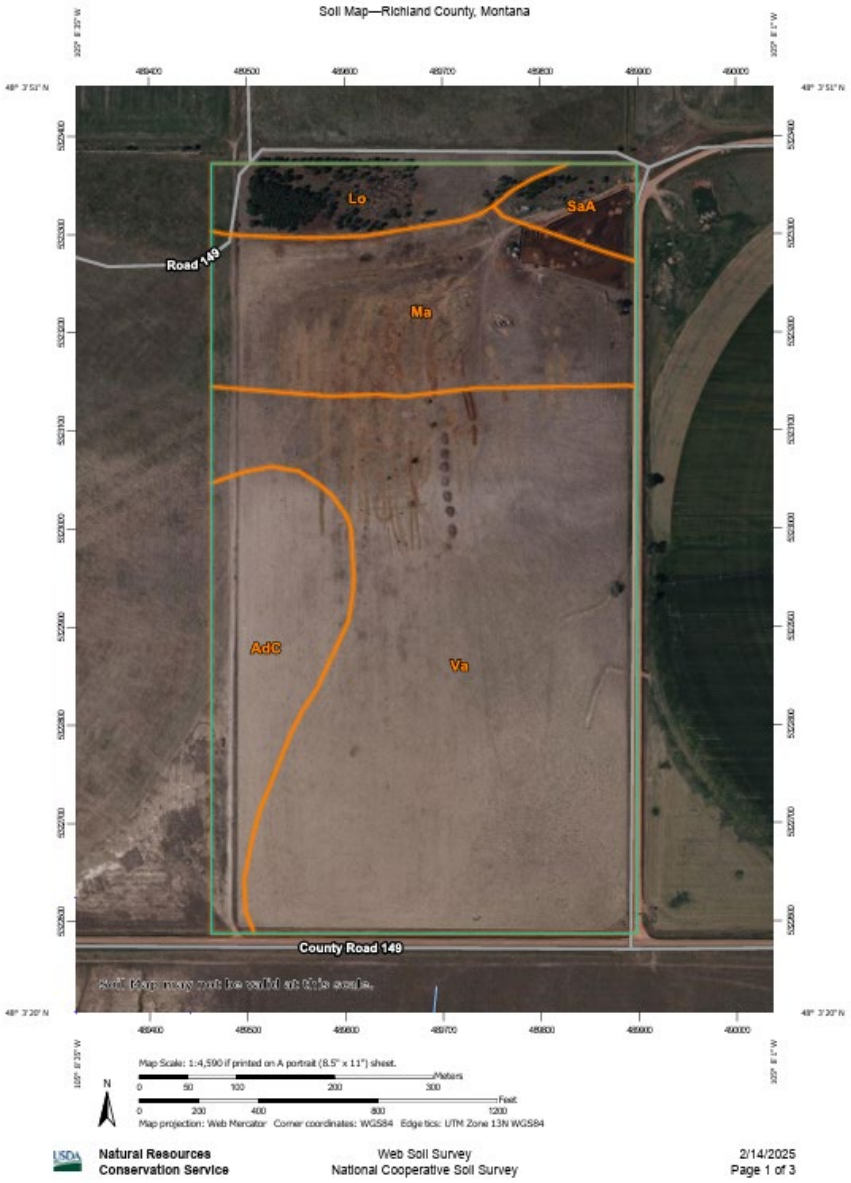

Figure 2: 60 AC Pivot Soil Composition Map

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AdC	Adger silty clay loam, 0 to 8 percent slopes	10.8	12.8%
Lo	Lohler silty clay loam	5.3	6.2%
Ma	Marias silty clay	17.3	20.4%
SaA	Wyola silty clay loam, 0 to 2 percent slopes	2.4	2.8%
Va	Vanda clay	48.9	57.8%
Totals for Area of Interest		**84.7**	**100.0%**

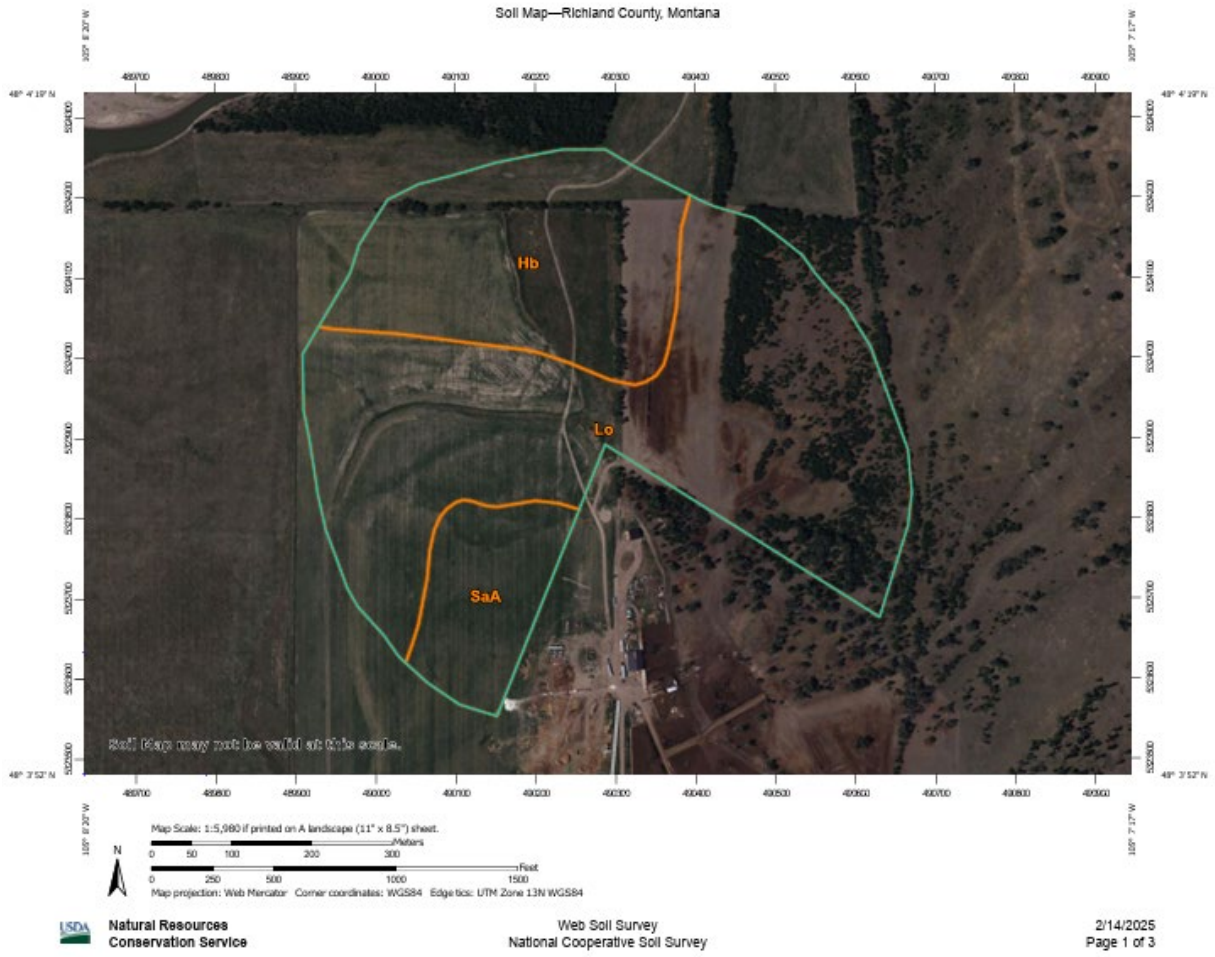

Figure 3: 98 AC Pivot Soil Composition Map

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Hb	Havrelon silty clay loam	23.0	27.9%
Lo	Lohler silty clay loam	50.5	61.2%
SaA	Wyola silty clay loam, 0 to 2 percent slopes	9.0	10.9%
Totals for Area of Interest		**82.6**	**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.*

No vegetation was listed as endangered or threatened by the USFWS or BLM in the project area. The control of noxious weeds is the responsibility of the landowner.

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.*

The pump is powered by a John Deer 4045T diesel motor. The pump has already been established and put to use by Conservation District Record 40S 104484 00, CD Number: RI-009-MT.

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 ultimate 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: 7/31/25