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: Hydra MT, LLC
945 Bunker Hill Rd
Suite 1200
Houston, TX 77024

2. Type of action: Application for Beneficial Water Use Permit No 40S 30164987

3. Water source name: Missouri River

4. Location affected by project:

Proposed Point of Diversion: SWSESE Section 04, T26N, R58E, Richland County

Proposed Place of Use:

Table 1: Proposed Place of Use for Application No 40S 30164987

POU #	1/4	1/4	1/4	LOT	SEC	TWP	RGE	COUNTY
1		NW	NE	02	03	25N	57E	RICHLAND
2		NE	NW		13	26N	57E	RICHLAND
3		NE	NE		14	26N	57E	RICHLAND
4		NE	NW		16	26N	57E	RICHLAND
5		NW	NE		20	26N	57E	RICHLAND
6		NE	NW		22	26N	57E	RICHLAND

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

The Applicant proposes to divert water from the Missouri River, by means of a pump, from January 1st to December 31st at 8.9 CFS up to 755 AF, from a point in the SWSESE Section 04, T26N, R58E, Richland County, for Industrial use from January 1 to December 31. The Applicant proposes to use water for oil field development. The place of use is generally located in the following locations referenced in Table 1.

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 have 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 (HC No 10060005) 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. The probable cause of impairment on aquatic life is Fort Peck Dam which impacts the natural hydro structure flow of the river. Another probable cause of impairment on aquatic life is temperature.

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.*

The surface water appropriation should have no significant impact on ground water in the area.

Determination: No significant impact.

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.*

Water will flow from the POD into a screened aluminum pipe. The pump will discharge water into a portable trailer, that has a ModMag Electromagnetic in-line flow meter capable of taking continuous measurements. The water is then discharged into the 10" lay-flat pipeline which conveys the water to the POUs. In freezing conditions, water will be discharged into a hot oiler before being diverted into the 10" lay-flat pipeline. Along the route, Hydra and Kraken will secure easements where appropriate for any railway, county road, state highway, or private land crossings where a flat line will be laid. The diesel engine and pump will only be in place while being used. More inline pumps can be installed, if necessary, to maintain adequate pressure and volume. Once the water reaches the place of use, it is delivered into a portable, 50' x 200', RhinoKore above-ground frac tank with a 20,000-barrel capacity, which will be installed at the well pads (POUs) during the completion phase of operations. Because of the high rate necessary for completions, the RhinoKore can act as a median between the transfer of water from the source to the downhole fracturing process.

This is a pump site that has already developed the bank of the river by an established water right. The proposed diversion does not involve well construction and should have no significant impact on stream channels, flow modifications, barriers, riparian areas, or dams.

D*etermination*: 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."*

State Rank	Global Rank	Common Name	Scientific name	BLM RANKING
S1M	G1	Whooping Crane	Grus americana	Endangered
S1	G2	Pallid Sturgeon	Scaphirhynchus albus	Endangered
S2B	G3	Piping Plover	Charadrius melodus	Threatened
S2S3	G3/G4	Blue Sucker	Cycleptus elongatus	Threatened
S1	G3	Sicklefin Chub	Macrhybopsis meeki	Sensitive
S2S3	G3	Sturgeon Chub	Macrhybopsis gelida	Not Assessed
S1B	G4	Least Tern	Sternula antillarum	Sensitive
S3B	G5	Red-headed Woodpecker	Melanerpes erythrocephalus	Sensitive
S3	G5	Iowa Darter	Etheostoma exile	Sensitive
S2	G5	Paddle Fish	Polyodon spathula	Sensitive
S2	G5	Sauger	Sander canadensis)	Sensitive
S2S3	G5	Nannyberry	Viburnum lentago	Not Assessed
S3	G5	Northern Redbelly Dace	Chrosomus eos	Not Assessed
S3	G5	Shortnose Gar	Lepisosteus platostomus	Not Assessed

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: Two endangered species utilize the characteristic habitat as found at the proposed project point of diversion: the Pallid Sturgeon and the Whooping Crane. There are also several species listed above that are listed as a threatened or sensitive species. The project will be located at a site that is already developed as a pump site. In addition, the pipe used to convey the water will be lay flat line. Therefore, 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 which the applicant has successfully used in other applications that have presumably passed USFWS & Montana FW &P standards. Impact to 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.

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

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 main soil type at the point of diversion is Havrelon silty clay loam (90%). It is identified as prime farmland if irrigated, has a 0-2 percent slope, and is well drained. Frequency of flooding is rare. Miner components of the soil make up 10% of its contents. Degradation to soil is not anticipated because the proposed project is using equipment such as lay-flat hoses and a pump trailer which cause low disturbance.

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.*

This project consists of mobile pumps, lay flat hose, and above ground storage tanks, which is not expected to produce heavy ground disturbance or dust levels.

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: N/A – The 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: Water is currently legally available in the Missouri River, including all senior appropriations and a substantial instream flow reservation held by the Montana Department of Fish, Wildlife & Parks. This development is relatively minor within this context and is not anticipated to prose significant impacts to this resource. No additional potential impacts have been 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: No significant impact.

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 Montana Department of Environmental Quality has not assessed the support for recreational use along this stretch of the Missouri River at this point in time. The proposed site is not with a wilderness area or setting. Impacts to recreation are anticipated to be minimal.

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

Determination: No known impacts are anticipated to affect 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: N/A

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?* Purpose is to provide available water for oilfield development & servicing.

(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 significant impacts have been identified.

Cumulative Impacts No significant 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:***

This proposed project utilizes a preexisting cleared pump site that is currently being utilized by another appropriator.

PART III. Conclusion

1. Preferred Alternative

Utilizing the proposed action, significant impacts are not expected to occur, and the project will likely develop as proposed.

2 Comments and Responses

No comments.

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 Resource Specialist
Date: January 30th, 2025