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: KAR, INC.
PO BOX 1
CULBERTSON, MT 59218-0001

2. Type of action: Application for Beneficial Water Use Permit No 40S 30165533

3. Water source name: Missouri River

4. Location affected by project: SENE, Section 4, T27N, R56E, Roosevelt County

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 1 to December 31 at 11.1 CFS up to 1,000 AF, from a point in the NWSENE, Section 4, T27N, R56E, Roosevelt County, for water marketing use from January 1 to December 31. The place of use is the point of sale, which is NWSENE, Section 4, T27N, R56E.

6. Agencies websites reviewed during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

   - US Fish & Wildlife Service
   - Montana Natural Heritage Program
   - Montana Department of Fish, Wildlife, & Parks
   - Montana Department of Environmental Quality
   - USDA Web Soil Survey
   - National Wetlands Inventory
   - United States Environmental Protection Agency

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.*

The reach of the Missouri River is not identified as a chronically or periodically dewatered stream by the Montana Department of Fish, Wildlife & Parks. The DFWP has an instream flow reservation for fisheries on this portion of the Missouri River for 5,178 CFS and 3,748,500 AF, year-round. The proposed withdrawal of water is not expected to alter the hydrologic regime of the river.

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 lower Missouri River is listed on the 2020 Montana 303(d) list as fully supporting agriculture, drinking water and not fully supporting aquatic life. Causes of impairment for aquatic life are the temperature and flow regime modification. 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.*

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.*

The Applicant plans to divert water at a rate of 11.1 CFS and 1,000 AF from the Missouri River from a diversion point in the NWSENE, Section 4, T27N, R56E, Roosevelt County using a screened intake pump. The Applicant provided a data sheet and pump curve for the 8NHG19

Cornell which identifies the operating level of 1,200 GPM to 7,000 GPM and a shut-off head of 625 FT. The pump is powered by a 765 HP, Caterpillar C18 ACERT diesel engine, which meets Tier 3 U.S. EPA standards. The Applicant stated this combination can pump 65 barrels (2,730 gallons) of water 7.2 miles before a booster pump is needed.

A floating "Riverscreen" system will be used at the intake to prevent wildlife and debris from entering the conveyance system. Water will be measured via a GloTech flow meter model GEM2, which is an electromagnetic flow meter. Measurements will be taken at the river diversion and at the service area and are monitored by staff on location. Water will be conveyed directly to the individual oil wells in the service area via 12" lay-flat hose operated at a maximum of 200 PSI and 65 barrels per minute.

The Applicant will obtain permission before laying hose on private property, railroad tracks, and roadways. In winter conditions, the water will be pumped from the river and heated prior to conveyance. Water may be reheated, depending on the distance to the service area. The heaters are fueled by propane with a capacity of 1,000,000 BTUs.

The proposed diversion does not involve well construction and should have no significant impact on stream channels, flow modifications, barriers, riparian areas, or dams.

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 species of concern within and surrounding Section 4, T27N, R56E. Of this list, the Whooping Crane and Pallid Sturgeon are listed as endangered by the United States Fish, and Wildlife Service (USWS) and Bureau of Land Management.

Species Group	Common Name	Scientific name
Fish	Blue Sucker	Cycleptus elongatus
Fish	Iowa Darter	Etheostoma exile
Fish	Northern Redbelly Dace	Chrosomus eos
Fish	Pallid Sturgeon*	Scaphirhynchus albus
Fish	Sauger	Sander canadensis
Fish	Shortnose Gar	Lepisosteus platostomus
Fish	Sicklefin Chub	Macrhybopsis meeki
Fish	Sturgeon Chub	Macrhybopsis gelida
Birds	Black-billed Cuckoo	Coccyzus erythropthalmus
Mammals	Silver-haired Bat	Lasionycteris noctivagans
Mammals	Townsend's Big-eared Bat	Corynorhinus townsendii
Birds	Least Tern	Sternula antillarum

Birds	Piping Plover**	Charadrius melodus
Birds	Red-headed Woodpecker	Melanerpes erythrocephalus
Birds	Whooping Crane*	Grus americana
Birds	Long-billed Curlew	Numenius americanus

*Listed Endangered by the USFWS and BLM
**Listed Threatened by the USFWS and BLM

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 pumps will use floating screens with small footprints and are not anticipated to have an effect on Pallid Sturgeons.

The Whooping Crane has been observed in the marsh habitat present at Medicine Lake National Wildlife Refuge and the Red Rock Lakes National Wildlife Refuge. Birds have been observed in other areas of the state, which include grain and stubble fields as well as wet meadows, wet prairie habitat, and freshwater marshes that are usually shallow and broad with safe roosting sites and nearby foraging opportunities. The pump location selected for this diversion would not likely provide suitable habitat for Whooping crane.

The Piping plover prefer unvegetated sand or pebble beaches on shorelines or islands in freshwater and saline wetlands. Open shorelines and sandbars of rivers and large reservoirs in the eastern and north-central portions of the state provide prime breeding habitat.

Because the diversion point is adjacent to land used for agricultural purposes and the equipment needed for the proposed use, such as pump trailers and lay-flat hoses, are mobile and removable, the proposed use is not expected to further impact river conditions.

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.*

The wetlands identified within NWSENE Section 4, T27N, R56E, Roosevelt County are Riverine habitat and Freshwater Emergent Wetland.

The Freshwater Emergent Wetland is classified as a PEM1A.

- System **Palustrine (P)**: The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.
- Class **Emergent (EM)**: Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

- Subclass **Persistent (1)**: Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.
- Water Regime **Temporary Flooded (A)**: 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.

The Riverine habitat of the Missouri River is classified as R2UBH.

- System **Riverine (R)**: The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.
- Subsystem **Lower Perennial (2)**: This Subsystem is characterized by a low gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought. The substrate consists mainly of sand and mud. Oxygen deficits may sometimes occur. The fauna is composed mostly of species that reach their maximum abundance in still water, and true planktonic organisms are common. The gradient is lower than that of the Upper Perennial Subsystem and the floodplain is well developed.
- Class **Unconsolidated Bottom (UB)**: Includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.
- Water Regime **Permanently Flooded (H)**: Water covers the substrate throughout the year in all years.

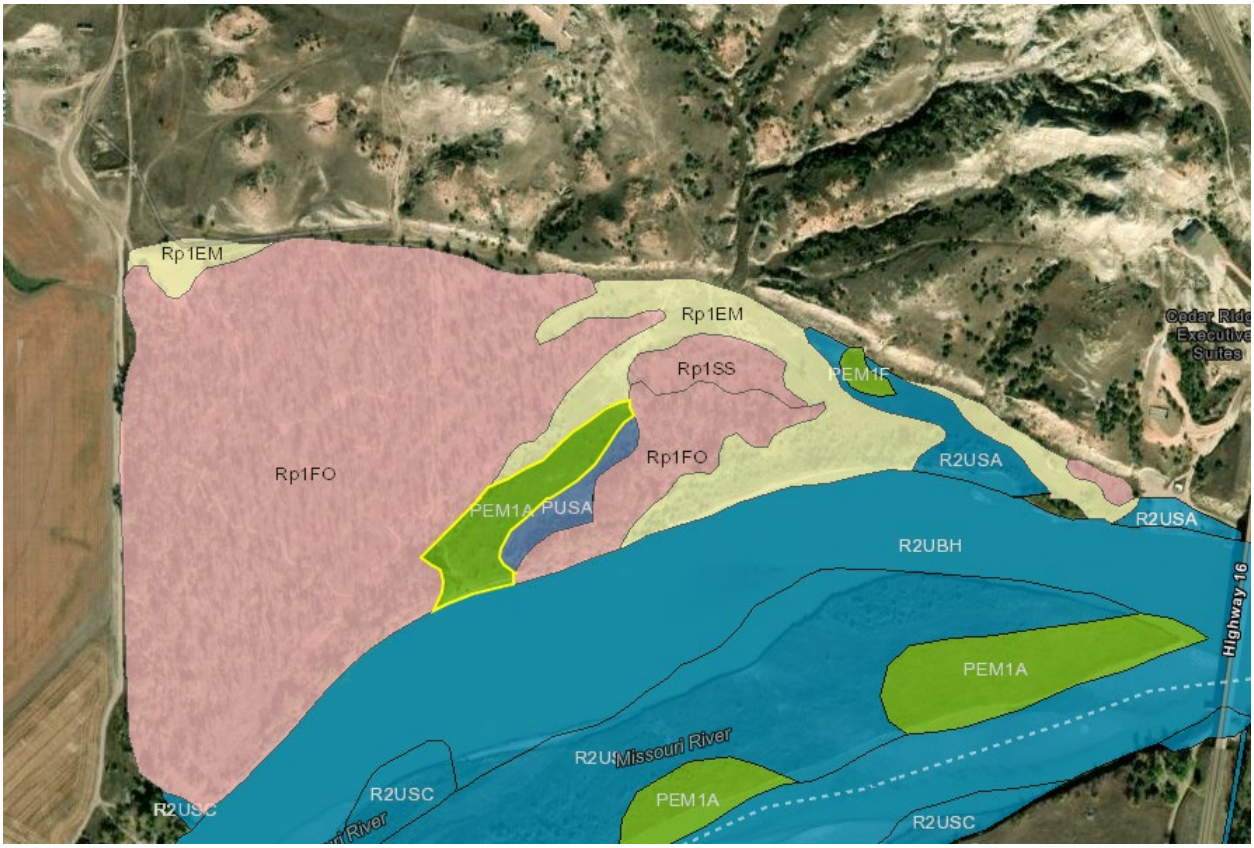

Figure 1: USFWS National Wetlands Inventory

The diversion point is adjacent to land used for agricultural purposes and has already experienced human activity. The equipment needed for the proposed use is temporary and its placement is not expected to cause substantial land disturbance.

Determination: No significant impact.

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

There is a minor amount of Freshwater Pond habitat within the project area, which is classified as PUSA.

- System Palustrine (P): The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.
- Class Unconsolidated Shore (US): Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

- Water Regime Temporary Flooded (A): 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.

The diversion point is adjacent to land used for agricultural purposes and has already experienced human activity. The equipment needed for the proposed use is temporary and its placement is not expected to cause substantial land disturbance.

Determination: No significant impact.

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 point of diversion is mainly Havrelon-Trembles complex. It is identified as prime farmland if irrigated, has a 0-2 percent slope, is well drained and is non-saline to very slightly saline to moderately saline (0.0 to 2.0 mmhos/cm). With equipment such as lay-flat hoses, pump trailer, and above ground storage tanks, degradation to soil or development of a saline seep is not anticipated.

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 and lay flat hose, which is not expected to produce heavy ground disturbance or dust levels. The pump is powered by a Tier 3 U.S. EPA rated diesel engine, which can have an impact on air quality due to the emissions of air pollutants. The pump meets current EPA standards, is in a remote area, and will not run continuously, so is not expected to have a substantial impact on the air quality.

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: Not applicable, 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 other 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 known environmental plans or goals will be significantly 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: The local land use is mainly agricultural. 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 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 significant impact.

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?*

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts No significant impacts.

Cumulative Impacts No significant impacts.

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 other viable alternative would be the no action alternative in which the Department would not authorize a water right permit for industrial use. Under the no action alternative, the Applicant would not be able to withdraw water for water marketing.

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:*
*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: Ashley Kemmis
Title: Water Resource Specialist
Date: January 2, 2026