

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:

JUMPING HORSE STOCK RANCH LLC
C/O DMS NATURAL RESOURCES LLC
602 S. FERGUSON AVE, SUITE 2
BOZEMAN, MT 59718

2. Type of action: APPLICATION TO CHANGE WATER RIGHT NO. 41F 30155891

3. Water source name: MADISON RIVER

4. Location affected by project: The Applicant proposes to change the purpose, point of diversion (POD), and place of use (POU) and add three places of storage for stock water for Statement of Claim Nos. 41F 132837-00, 41F 132838-00, 41F 136475-00, 41F 136476-00, 41F 136477-00, and 41F 136478-00. The water rights proposed for change have historically been used for irrigation of 3,190 acres located in Township 1 North, Range 1 East and Township 1 North, Range 2 East, Gallatin County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the purpose, place of use (POU), point of diversion (POD), and add three places of storage for Statement of Claim Nos. 41F 132837-00, 41F 132838-00, 41F 136475-00, 41F 136476-00, 41F 136477-00, and 41F 136478-00. The Applicant proposes to add 609.2 acres of irrigation and permanently retire 877.6 acres of historical irrigation to offset the new consumptive use occurring outside of the historical place of use. The Applicant proposes to continue to irrigate 2,312.4 acres within the historical place of use, resulting in a total of 2,921.6 acres of irrigation under the proposed change.

The proposed POD is a pump site on the Madison River located in the NESWNE of Section 20, T1N R2E, Gallatin County.

The Applicant proposes to add three places of storage for stock water and add stock as a purpose to the water rights proposed for change (Table 1). The ponds would be lined, and the source of water is the Madison River.

Table 1: Proposed stock reservoirs.

Name	Location	Surface Area (acres)	Max Depth (ft)	Capacity (AF)	Net Evaporation (AF)	Total Volume (AF)
North Reservoir	S2NENW and N2SENW of Section 7, T1N R2E	0.7	9	2.52	1.79	4.31
Middle Reservoir	NWSESW of Secton 18, T1N R2E	0.4	7	1.12	1.02	2.14
South Reservoir	NWNWNW of Secton 29, T1N R2E	0.18	12	0.86	0.45	1.31
Total				4.5	3.26	7.76

The DNRC shall 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:

- Montana Natural Heritage Program – Natural Heritage MapViewer
- Montana Department of Fish, Wildlife and Parks – Dewatered Streams List (2005)
- Montana Department of Environmental Quality – Impaired Waters Report (2020)
- US Fish and Wildlife Service – National Wetlands Inventory
- Natural Resources Conservation Service – Web Soil Survey

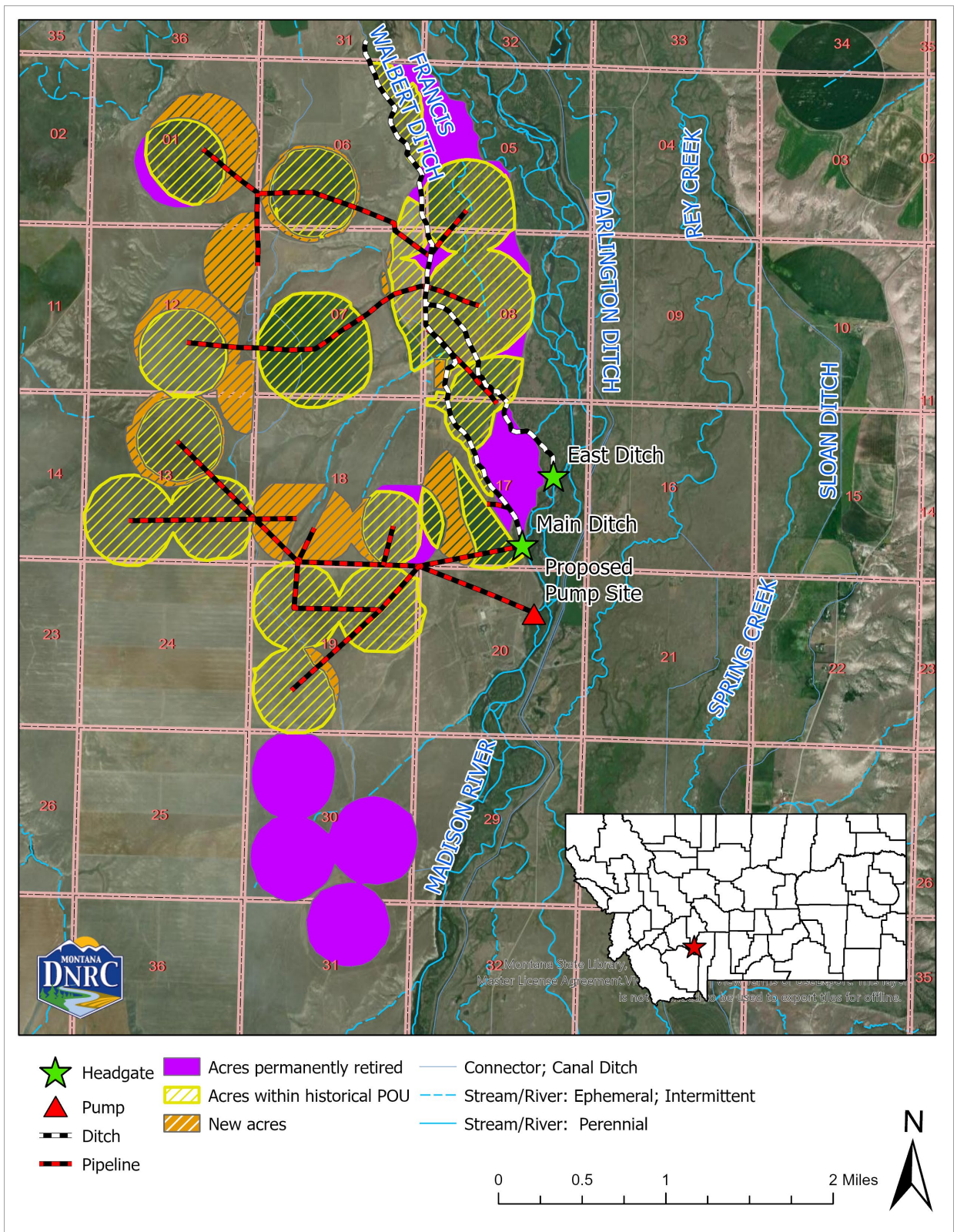


Figure 1: Map of the proposed project.

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.*

Determination: No significant impact.

FWP has not identified the reach of the Madison River adjacent to the proposed project as chronically or periodically dewatered. Flow in the Madison River is regulated by Ennis Dam and Hebgen Dam and do not exhibit periods of dewatering. The consumed volume of water will not increase because of this change. In addition, 8,110.4 acre-feet (AF) of water would be left instream and available for future use due to reduced conveyance losses and retired acres under the proposed change.

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 Madison River has been classified by DEQ as not fully supporting aquatic life and drinking water beneficial uses due to arsenic loads. Agricultural and primary contact recreation were not assessed in the 2020 reporting cycle. DEQ's metals assessment methods determined that the largest source of arsenic to the Madison River is Yellowstone National Park geothermal and geologic formations. The proposed change would not contribute to the arsenic loading in the Madison River and would result in increased streamflow compared to historical conditions. The proposed change will not result in a change in land use practices or alteration of stream habitat that may affect 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: Not applicable.

The proposed project's source is surface water limited to the volume historically used.

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 proposed POD consists of two pumps to deliver water to existing infrastructure and the proposed place of use. The Applicant also proposes to continue to use three historical PODs. The

operation of the pumps and historical PODs will have negligible impacts to the channel and riparian areas and will not require flow modification.

The proposed ponds would consist of lined pits and require temporary soil disturbance. The ponds will be located in agricultural fields and not require channel modifications.

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 impact. A search of the Montana Heritage Program’s website on January 6, 2025, for T1N R1E, and T1N R2E, Gallatin County returned the following results:

- 45 animal Species of Concern: Canada Lynx, Wolverine, American Bittern, American Goshawk, American White Pelican, Black-billed Cuckoo, Black-crowned Night-heron, Black-necked Stilt, Bobolink, Brewer’s Sparrow, Brown Creeper, Burrowing Owl, Caspian Tern, Cassin’s Finch, Clark’s Nutcracker, Common Loon, Evening Grosbeak, Ferruginous Hawk, Forester’s Tern, Franklin’s Gull, Golden Eagle, Gray-crowned Rosy-Finch, Great Blue Heron, Great Gray Owl, Green-tailed Towhee, Horned Grebe, Lewis’s Woodpecker, Loggerhead Shrike, Long-billed Curlew, Pinyon Jay, Sage Thrasher, Sharp-tailed Grouse, Sprague’s Pipit, Thick-billed Longspur, Trumpeter Swan, Varied Thrush, Veery, White-faced Ibis, Yellow Rail, Greater Short-horned Lizard., Northern Leopard Frog, Western Toad, Arctic Grayling, Northern Redbelly Dace, Westslope Cutthroat Trout
- 8 animal Potential Species of Concern: North American Porcupine, Silver-haired Bat, Barrow’s Goldeneye, Broad-tailed Hummingbird, Hooded Merganser, Rufous Hummingbird, Short-eared Owl, Tennessee Warbler
- 1 animal Special Status Species: Bald Eagle
- 3 plant Species of Concern: Annual Indian Paintbrush, Beaked Spikerush, Annual Muhly, Ute Ladies’-Tresses
- 1 plant Potential Species of Concern: Limestone Larkspur
- 0 plant Special Status Species

The proposed project requires less diverted volume than historical practices and would not create a barrier to movement or migration of the species of concern or special status species identified.

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.

A January 6, 2025, search of the National Wetlands Inventory Mapper shows no wetlands exist in the project area, and no wetlands are involved in the project. Wetlands located along nearby surface water are unlikely to be impacted by the proposed POD. The proposed stock reservoirs would be located in an agricultural field and not impact existing wetlands.

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

Determination: No significant impact.

The proposed reservoirs would provide water for stock and not include a fishery purpose. The proposed project requires less diverted volume compared to historical practices and would not impact fisheries resources. The proposed stock reservoirs would be lined and located in an existing agricultural field. No impacts to wildlife or waterfowl were identified.

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 proposed project is located in primarily Crago-Musselshell soil complex consisting of cobbly loam and gravelly sandy loam soil types. No soils heavy in salts were identified that may result in a saline seep. The proposed change will not degrade soil quality or soil stability, and the continued irrigation will not result in significant land use changes.

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.

No change in land use is proposed with this project. Minor soil disturbance would occur from construction of the proposed stock reservoirs but will not promote the establishment of noxious weeds. The Applicant stated that the proposed stock reservoirs would improve rangeland and herd management for their livestock operation.

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

Determination: No significant impact.

No activities that would cause deterioration of air quality were identified with the proposed project.

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: No significant impact.

The project is not located on state or federal land and was not assessed for degradation of archeological or historical sites.

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 significant impact.

No other impacts on environmental resources in addition to those identified previously were assessed.

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

The proposed project is consistent with regional agricultural practices.

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 significant impact

The project is located entirely on private land and will not impact access to or the quality of recreational and wilderness activities.

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

Determination: No significant impact

No impact on human health from the proposed project was identified.

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 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 were identified.

Cumulative Impacts: No cumulative impacts were identified.

3. *Describe any mitigation/stipulation measures:*

The proposed change will be used to irrigate 2,921.6 acres, of which 609.2 acres are located outside the historical POU. The Applicant would retire 877.6 acres to offset the new consumptive use occurring outside the historical POU and the proposed stock reservoirs.

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 no action alternative is to not authorize the proposed change. The Applicant has identified a need for the proposed POD due to deterioration in historical infrastructure as well as a need to improve rangeland and herd management from the proposed stock reservoirs. The no action alternative will keep the historical irrigation purpose and PODs and not allow the Applicant to address the issues identified.

PART III. Conclusion

1. **Preferred Alternative:** The preferred alternative is to grant the change in purpose, point of diversion, place of use, and place of storage as proposed. This will allow the Applicant to continue to irrigate the historical POU, improve efficiency in the operation with the change in POU, and improve rangeland and herd management with the addition of three stock reservoirs. The proposed change would require less diverted volume than historical practices and not result in reduced water quantity in the Madison River. The proposed change is consistent with local agricultural and economic practices.

2 **Comments and Responses:** None to report.

4. **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 environmental impacts were identified, therefore no EIS is required.

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

Name: Jack Landers

Title: Hydrologist

Date: January 7, 2025