

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 name and address: **Kite Cattle Company
664 Fattig Creek Rd
Roundup, MT 59072**
2. Type of action: **Application for Beneficial Water Use Permit No. 40C 30123160**
3. Water source name: **Musselshell River**
4. Location affected by project: **SENE Sec 33 & W2 Sec 34 Twp 9N Rge 28E,
Musselshell County**
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Applicant proposes to appropriate water in the amounts of 5.57 cubic feet per second (CFS), up to 66.4 acre-feet (AF), from the Musselshell River during the periods of May 1 to June 30 and September 1 to October 31. The proposed periods of diversion and use are outside of the restricted July and August Musselshell River basin closure dates.

Applicant proposes to divert surface water from the river via a pump and pipeline containing a flow meter. A buried pipeline will carry water to gated pipe to irrigate the 66.4-acre field.

The Applicant currently irrigates the 66.4-acre place of use with its Deadmans Basin contract water. If authorized, the Applicant intends to supplement its contract water with 1 AF per acre of water being requested in this proceeding.

DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

A map depicting the proposed project is displayed below:



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

- Dept. of Environmental Quality Website – Clean Water Act Information Center
- MT. National Heritage Program Website - Species of Concern
- USDI Fish & Wildlife Service Website - Endangered and Threatened Species
- USDI Fish & Wildlife Service – Wetlands Online Mapper
- USDA Natural Resources Conservation Service – Web Soil Survey

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.**

The source of water associated with this permit is the Musselshell River in Musselshell County. Per the Department of Environmental Quality (DEQ) Clean Water Act Information Center website, the source is identified as chronically dewatered. It is not anticipated that the addition of the proposed project will worsen the condition of the stream. The Applicant is proposing to divert water during periods when higher stream flows are more prevalent. Applicant also has a plan to not create adverse effects and the Department will propose conditions for diversion. The Applicant is currently irrigating the 66.4-acre place of use using its Deadmans Basin contract water. If the permit is granted by the Department, it will be used to supplement the Applicant's contract water. The requested volume of 66.4 AF can be applied to the place of use in 6 days at the associated flow rate of 5.57 CFS.

The Applicant is proposing to divert water during high water periods, when stream flows are above the minimum threshold flow levels. Applicant also plans to prevent potential negative downstream impacts by monitoring stream flows and measuring water diverted from the river to its irrigation system. It is expected that measurement conditions will be applied to this water right if the permit is granted by the Department.

The Musselshell River is also involved in a water right enforcement program known as the Musselshell River Distribution Project. The Fourteenth Judicial District Court administers the enforcement program on the river and water commissioners assist the court by distributing water to water right users based on stream flows and priority on the source.

Measurement conditions and the ongoing Musselshell River distribution project will both help to ensure the Applicant does not exceed its permitted volume. Applicant will not be authorized to divert any private water unless there is sufficient flow in the river to meet other demands on the source.

***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 DEQ website identifies the stretch of the Musselshell River the Applicant's diversion is located in (HUC boundary near Roundup to Flatwillow Creek) as not fully supporting aquatic life. Probable causes are listed as alteration in streamside or littoral vegetation covers, flow regime modification, habitat alterations, and iron. The probable sources for the listed causes are likely due to agricultural related uses, impacts from abandoned mining lands, as well as streambank modifications and destabilization. Some causes are natural, like flooding, while others are related to manmade alterations of the stream channel and flow regimes resulting from livestock watering and irrigation diversions. There is a low likelihood that water quality will be adversely affected as a result of the proposed project. As explained above, the Applicant already irrigates the 66.4-acre place of use using Deadmans Basin contract water and plans to use the same pumpsite for diversion. The intent of the proposed water to be appropriated by this permit is to supplement the Applicant's contract water.

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: **No Significant Impact.**

The proposed permit should not have a significant impact on ground water quality or supply. The pump diverts surface water from the Musselshell River and the Applicant has been irrigating its field with the pump using contract water released from Deadmans Basin, an off-stream reservoir owned by the State of Montana and located miles upstream of the Applicants' diversion. No significant changes are anticipated from diverting additional surface water.

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.**

It is not anticipated that the proposed permit will have a significant impact on stream channels, riparian areas, or stream flows. The Applicant is requesting to divert additional water (volume) to supplement its contract water released from Deadmans Basin. The pump has already been installed and is being used to divert Applicant's contract water to flood irrigate a 66.4-acre place of use.

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.**

The Montana National Heritage Program lists six Species of Concern within Township 9 North, Range 28 East. The common names for the mammal species listed are the Black-tailed Prairie Dog, Hoary Bat, and Little Brown Myotis. The common name for the bird species is the Greater Sage Grouse. The common names for the reptile species are the Spiny Softshell and Plains Hog-nosed Snake. The website lists one special status species, a bird, whose common name is the Bald Eagle.

The United States Department of Interior Fish and Wildlife Service does not list any endangered, threatened, proposed, or candidate species in Musselshell County according to its most recent list dated June 20, 2020.

The proposed project is not located in designated sage grouse habitat therefore the Applicant does not have to consult with the Sage Grouse Habitat Conservation Program or obtain a letter regarding the consultation.

***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.**

The USDI Fish & Wildlife Service – Wetlands Online Mapper shows some Freshwater Emergent Wetland and Forested/Shrub Riparian bordering portions of the Applicant’s field. No wetlands are shown within the Applicant’s irrigated 66.4-acre place of use therefore no impacts to wetlands are anticipated.

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

Determination: **No Significant Impact.**

This permit proceeding does not involve a pond. If permitted, a pump and pipeline will be used to divert surface water from the Musselshell River to irrigate the 66.4-acre place of use with private water to supplement the Applicant’s contract water.

***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.**

No significant impacts to the soil profile are anticipated. The predominant soil type is Havre, calcareous-Glendive complex, 0 to 2 percent slopes, rarely flooded. The Sodium Adsorption Ratio for the Havre Calcareous component is nonsaline to slightly saline and the available water storage is high. The Sodium Absorption Ratio for the Glendive component is very slightly saline to moderately saline and the available water storage is moderate. The Applicant proposes to divert an additional 1 AF per acre to supplement its contract water. If its EQIP grant is approved, it also plans to install gated pipe in its currently open ditch along the southern border of the irrigated field. The Applicant has been irrigating the 66.4-acre field with contract water from Deadmans Basin. If permitted, it will allow the Applicant to supplement its contract water with private water from the Musselshell River. No alteration to the field is proposed and most of the system infrastructure is in place with the exception pipe proposed to replace the open ditch. Therefore, it is not anticipated that soil quality, alteration of soil stability, or moisture content will be negatively impacted by this project on the previously farmed place of use.

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.**

The pump has already been installed and is being used to divert Deadmans Basin contract water from the Musselshell River to irrigate its 66.4-acre place of use. The buried pipeline conveying pumped water from the river to gated pipes is already installed. Most of the gated pipes have also been installed, with the exception of one segment. The Applicant has a pending Environmental Quality Incentives Program (EQIP) grant to purchase additional gated pipe to install in the ditch that traverses the bottom portion of its field. If the grant is approved, the open ditch will be replaced with gated pipe. With the exception of the last portion of gated pipe involved with the Applicant's pending EQIP grant, the gated pipe is installed and the soil and vegetative cover have already been disturbed. These areas have been revegetated. Filling the existing ditch and using gated pipe should not significantly disturb the soil and vegetation. It is expected that any areas which are disturbed, the vegetation will regrow. The property owner is responsible for controlling noxious weeds on their property.

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.**

An electric pump is in place and will be used to pump water from the river to the 66.4-acre place of use. No impacts to air quality or adverse effects to vegetation are expected as a result of this proposal.

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 - 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 Significant Impact.**

No additional impacts are anticipated.

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.**

No locally adopted environmental plans or goals have been identified.

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 proposal should not negatively impact recreational activities in the area.

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

Determination: **No Significant Impact.**

No impacts to human health have been 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? **None**
- (b) Local and state tax base and tax revenues? **The 66.4-acre place of use is already being irrigated with Deadmans Basin contract water therefore little change to state tax base and tax revenue is anticipated from the proposed action.**
- (c) Existing land uses? **The 66.4-acre place of use is currently being irrigated with Deadmans Basin contract water. The existing system involves an open ditch which the Applicant proposes to replace with gated pipe if its EQIP grant is approved. The proposed action will allow the Applicant to apply additional water to its place of use to supplement its contract water.**
- (d) Quantity and distribution of employment? **None**

- (e) Distribution and density of population and housing? **None**
- (f) Demands for government services? **None**
- (g) Industrial and commercial activity? **None**
- (h) Utilities? **The pump involved in the proposed action is currently being used to irrigate the 66.4-acre place of use. The Applicant is requesting 1 AF per acre of additional water to supplement its contract water. If permitted, it is anticipated that utility costs to divert up to six days of additional water will rise slightly for the Applicant.**
- (i) Transportation? **None**
- (j) Safety? **None**
- (k) Other appropriate social and economic circumstances? **None**

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

Secondary Impacts – No secondary impacts are anticipated.

Cumulative Impacts – No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:*

The Applicant has proposed to measure its diversions with an inline flow meter. The Department anticipates imposing trigger flow and measurement conditions to ensure the Applicant can only divert private water, if permitted, during times when water is legally available.

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: Deny the application. This alternative would result in none of the benefits of supplemental irrigation being realized by the Applicant.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is the proposed alternative.

2. Comments and Responses

None Received.

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:

None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524.

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

Name: Melissa Norris

Title: Water Resources Specialist – Lewistown Regional Office

Date: 07/29/2020