

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:* Bergin Land & Livestock, LTD (BLL)
2. *Type of action:* Application for Beneficial Water Use Permit No. 40C 30160973
3. *Water source name:* Groundwater
4. *Location affected by project:*

POD:	SWSESE Sec 14 Twp 9N Rge 29E
POUs:	SESE Sec 14 Twp 9N Rge 29E
	SWSWNW Sec 17 Twp 9N Rge 30E
	SENWNW Sec 17 Twp 9N Rge 30E
Pipe Route:	N2S2 & S2N2 Sec 13 Twp 9N Rge 29E
	N2S2 & S2N2 Sec 18 Twp 9N Rge 30E
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
 This project is to drill a new groundwater well in Musselshell County for the purpose of marketing. The Application is for a flow rate of 51 GPM and a volume of 81.1 AF of water annually from January 1 through December 31.

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

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

Montana Department of Environmental Quality – Web site
 National Wetlands Inventory
 Montana Natural Heritage Program

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: The Department showed that drawdown from the BLL well will propagate horizontally to the location where the Fort Union Formation subcrops beneath alluvium of the Musselshell River a half mile from the proposed well. This is the location where depletion will manifest in the Musselshell River. The DFWP has a water reservation on this portion of the Musselshell River of 150.00 CFS to maintain instream flows.

Groundwater is not on the DFWP list of chronically or periodically dewatered streams. However, the Musselshell River from Deadman's Basin supply canal to the mouth (confluence with the Missouri River) is listed as chronically dewatered. A river as dynamic as the Musselshell fluctuates by more than the modeled developed depletion in any given reach. The modeled depletion will likely create an adverse effect to appropriators on the source because depletions are year-round. The Applicant will need to mitigate to offset depletions.

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 reach of the Musselshell River from Roundup to the confluence with Flatwillow Creek is listed on the Montana DEQ Water Quality Standards Attainment Record (2020 reporting cycle) as not fully supporting aquatic life. The probable sources for the impairment are alteration in stream-side or littoral vegetative covers; iron; flow regime modification; and habitat alterations.

This groundwater diversion will not have a significant or long-term impact on 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.

Modeling shows that water is available in the aquifer more than the proposed appropriation and existing demands. Modeling also shows that the proposed use will deplete the Musselshell River by 50.4 GPM up to 81.1 AF/YR.

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 diversion was constructed by a licensed water well contractor. There will be no impacts to channels, no flow modifications or barriers, no changes to riparian areas, dams, and no impacts to well construction.

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: Minimal impact.

The Montana Natural Heritage Program (MNHP) did not identify any endangered or threatened species. MNHP did however identify the following Species of Concern within the project area: Sauger; Great Blue Heron; Great Plains Toad; Spiny Softshell; Plains Hog-nosed Snake; Greater Sage-Grouse; Golden Eagle; Black-tailed Prairie Dog; Sauger; Yellow-billed Cuckoo; Danaus plexippus (Monarch); Northern Leopard Frog; Merriam’s Shrew; Fringed Myotis (Myotis thysanodes); Little Brown Myotis (Myotis thysanodes); Hoary Bat; American White Pelican; Black-billed Cuckoo; Bobolink; Townsend’s Big-eared Bat; Sharp-tailed Grouse; Brewer’s Sparrow; Chenopodium subglabrum; Cyperus schweinitzii; Triodanis leptocarpa; Dwarf Schrew; Long-eared Myotis; Preble’s Shrew; Golden Eagle; Pinyon Jay; Greater Short-horned Lizard; Western Milksnake; Spotted Bat; Burrowing Owl; Loggerhead Shrike; Long-billed Curlew; Sage Thrasher; Long-legged Myotis; Carex crawei; Psilocarphus brevissimus; Eastern red Bat; American Bittern; Red-headed Woodpecker; Bombus suckleyi; Elodea bifoliolate; Veery; Potentilla plattensis; Baird’s Sparrow; Black-necked Stilt; White-faced Ibis; Sprague’s Pipit.

This groundwater project centers around already developed residential and commercial livestock land. Disturbance of land for initial pipeline construction may pose a minimal temporary impact to species.

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: Minimal impact.

According to the National Wetlands Inventory, the proposed pipeline will cross, at roughly perpendicular angles, approximately six (6) R4SBC Riverine habitat locations (intermittent tributaries).

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 soil is heavy in salts that could cause saline seep.

Determination: No impact.

The soils in this area are primarily Delpoint-Cabbart-Yamacall loam and calcareous loams which are well drained soils. Given that these soil types are nonsaline to slightly saline and that the

project's water is pipelined, there is very little likelihood of saline seep and there will be no changes to soil quality or stability. The Project will have no significant impact on soil in the project area.

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 Impact.

Since the project's groundwater will be conveyed via pipeline into stock tanks, no water should be made available for noxious weeds. The landowner is expected to prevent the establishment or spread of 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 Impact.

There will be no deterioration of air quality because of this appropriation.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: No impact.

The Project will likely have no impact on historical, cultural, or archeological 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 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 local 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 is in a rural area that has historically been used for agricultural purposes and will not have an impact on recreation or wilderness activities

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

Determination: This project will have no impact on human health.

PRIVATE PROPERTY - Assess whether there is any government regulatory impact 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: This assessment does not indicate possible secondary impacts on the physical environment and/or the local human population.

Cumulative Impacts: There are three pending change applications for basin 40C. One change involves solely moving an irrigation Point of Diversion; and second includes

Point of Diversion changes and partial change to Place of Use; and the third contains proposed changes to Place of Use and Place of Storage (construction of a regulating reservoir for an unperfected permit).

3. ***Describe any mitigation/stipulation measures:*** N/A
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:*** An alternative analysis of the project identified a no action alternative to the increase the volume for marketing purposes. This alternative would not have any direct impacts that are typically associated with construction and operation of Industrial purpose. The no-action alternative would not allow the Applicant to meet the purpose of and need for the project.

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: Matthew Shaw
Title: Water Resource Specialist
Date: February 20, 2024