

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

Applicant/Contact name and address: Ronald Whited
10745 County RD 355
Sidney, MT 59270

1. Type of action: Application to Change a Water Right – Additional Stock Tanks
42M 30162772
2. Water source name: Groundwater
3. Location affected by project: NWNWSW Sec. 27, T20N, R60E
4. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

TO ADD ONE STOCK TANK LOCATED IN NWNWSW SECTION 27, T20N R60E IN RICHLAND COUNTY. GROUNDWATER CERTIFICATE 42M 21473-00 IS CURRENTLY APPROPRIATED FOR ONE WELL AND ONE STOCK TANK LOCATED IN NENESE SECTION 28, T20N R60E, RICHLAND COUNTY AT A FLOW RATE OF 12 GPM FOR ONE DOMESTIC AND 225 AU LIVESTOCK FOR A TOTAL VOLUME OF 5.33 AF PER YEAR. THE ADDITION OF A STOCK TANK WILL ALLOW THE APPLICANT TO SEPARATE A SMALL NUMBER OF BULLS (LESS THAN 10) FROM THE REMAINDER OF THE HERD AS NEEDED.

The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

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

Montana Department of Natural Resources and Conservation (DNRC)
United States Bureau of Land Management (BLM)
Montana Natural Heritage Program
United States Fish and Wildlife Service (USFWS)
Montana Department of Environmental Quality (DEQ)
United States Department of Agriculture (USDA)

Part II. Environmental Review

1. Environmental Impact Checklist:

<h3>PHYSICAL ENVIRONMENT</h3>

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 proposed project is within DNRC Basin 42M, Yellowstone River Below Powder River. Water is diverted through a well 1360 feet deep, with the static water level at 18 feet. The flow rate and volume of the original water rights is 12 GPM and 5.33 AF. They will remain the same under the proposed change. The applicant has been providing water for 225 animal units and one household since 1979. Because this well has been historically supplying water with no known issues, significant impact on water quantity is not expected.

The historic appropriation is not to exceed 35 GPM or 10 AF per year and is thus excepted from the requirement of aquifer testing and demonstration of physical and legal availability of water [MCA 85-2-306(5)]. This well is located in the Fort Union Aquifer and was drilled at a depth of 1360 feet, indicating it is not hydraulically connected to the shallow Alluvial Aquifers of nearby surface waters, and is therefore not expected to disrupt flows.

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 place of use is adjacent to Shadwell Creek, which is not listed as impaired and should not be impacted by the addition of a stock tank.

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.*

According to the Richland County Water Resources Survey, the underlying aquifer is the Fort Union aquifer of the Tertiary period. The groundwater quality of the Fort Union aquifer is characterized by elevated alkalinity and salinity within suitable level for livestock consumption. On the surface, the place of use (stock tanks) drains to Shadwell Creek, which flows into the Yellowstone River.

The proposed project is a groundwater appropriation not to exceed 35 GPM or 10 AF per year and is thus excepted from the requirement of aquifer testing and demonstration of physical and legal availability of water [MCA 85-2-306(5)]. The applicant indicated that this well has been

reliable for the claimed 225 animal units and one household since 1979. Because the proposed project will not increase the flow rate and volume, the addition of one stock tank is not expected to impact the groundwater supply. Furthermore, the additional stock tank is not expected to disrupt surface streams in the watershed.

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 point of diversion is a well located in NENESE, section 28, T20N, R60E. The well was completed to a depth of 1,360 feet deep, with the static water level at 18 feet. Diversion is operated with a 1 hp pump, which pumps water to the house, barn, and the original stock tank. The pump has not changed since it was initially placed in 1978. The additional stock tank is located approximately 700 feet east via a 6-foot deep, 1.5-inch PVC pipeline which contains an underground shut off valve and a float valve in the stock tank. Water has been supplied without issue while using these diversion works.

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 Natural Heritage Program shows the potential species of concern could include the following:

Species Group	Common Name	Scientific Name
Birds	Black-billed Cuckoo	Coccyzus erythrophthalmus
Birds	Bobolink	Dolichonyx oryzivorus
Birds	Sprague's Pipit	Anthus spragueii
Birds	Greater Sage-Grouse	Centrocercus urophasianus
Birds	American Bittern	Botaurus lentiginosus
Birds	American White Pelican	Pelecanus erythrorhynchos
Birds	Baird's Sparrow	Centronyx bairdii
Birds	Brewer's Sparrow	Spizella breweri
Birds	Burrowing Owl	Athene cunicularia
Birds	Chestnut-collared Longspur	Calcarius ornatus
Birds	Ferruginous Hawk	Buteo regalis
Birds	Loggerhead Shrike	Lanius ludovicianus
Birds	Long-billed Curlew	Numenius americanus

Birds	Whooping Crane*	Grus americana
Invertebrates	Suckley Cuckoo Bumble Bee	Bombus suckleyi
Invertebrates	Monarch	Danaus plexippus
Mammals	Eastern Red Bat	Lasiurus borealis
Mammals	Little Brown Myotis	Myotis lucifugus
Mammals	Long-eared Myotis	Myotis evotis
Mammals	Long-legged Myotis	Myotis volans
Mammals	Hoary Bat	Lasiurus cinereus
Mammals	Spotted Bat	Euderma maculatum
Mammals	Northern Myotis*	Myotis septentrionalis
Reptiles	Plains Hog-nosed Snake	Heterodon nasicus
Reptiles	Snapping Turtle	Chelydra serpentina
Vascular Plants	Slim-pod Venus'-looking-glass	Triodanis leptocarpa
Vascular Plants	Dwarf woolly-heads	Psilocarphus brevissimus
Vascular Plants	Long-sheath Waterweed	Elodea bifoliata
Vascular Plants	Silver Bladderpod	Physaria ludoviciana

* On Endangered list by BLM and USFWS

The Northern Myotis is among the least observed species found in Montana. It is associated with deciduous forest along the riparian habitat in the project area. The bats use such habitat for drinking water near the forest, flyways through wooded areas, and foraging in open forest. Species presence was confirmed in Valley, Roosevelt, Richland and Dawson Counties in a 2016-2019 survey. No recorded observations of the Northern Myotis exist near the location of the proposed stock tank.

The Whooping Crane (*Grus americana*) is listed by the USFWS and BLM as an endangered species. The Whooping Crane is known to fly through Montana during both spring and fall migration. The Whooping Crane has been observed in the marsh habitat present at Medicine Lake National Wildlife Refuge and Red Rock Lakes National Wildlife Refuge. Observations of individual birds in other areas of the state 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. No recorded observations of the Whooping Crane exist near the location of the proposed stock tank.

The additional stock tank is located on a field that has also been historically farmed, so the addition of a stock tank for the temporary housing of bulls should not have a significant impact on the area's habitat.

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.

According to the U.S. Fish and Wildlife Service National Wetlands Mapper, the stock tank is located next to a Riparian wetland, classified as Rp1FO, which are usually dominated by

forests/shrubs such as eastern cottonwood, box-elder, green ash, and the exotic Russian olive, common chokecherry, wood's rose, black greasewood, coyote willow, silver sagebrush and western snowberry. Riparian emergent communities are primarily dominated by grasses, rushes, and sedges or non-native pasture grasses such as timothy. Cattle grazing can have positive and negative effects on wetlands, and if grazing is managed, the negative effects can be minimized. Because the additional place of use will only contain a small number of cattle for approximately half of the year, the impact should be insignificant.

Determination: No significant impact.

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

No ponds were determined to be near the place of use.

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.*

According to the NRCS Soil Survey, the place of use is located on Cherry silty clay loam soils, with a 0-2% slope, is well drained and contains little to no saline (0.0 to 3.0 mmhos/cm). This area is farmed when it is not used for cattle, and the soil is described as prime farmland if irrigated. The soil should not be impacted as the area is already farmed, and according to the applicant, there is a small amount of cattle that will use the additional stock tank.

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.*

The place of use is farmed when not being used for cattle, so the vegetation should not be affected as it is already largely controlled by the owners' agronomical practices. The private landowner/applicant is responsible for the control of noxious weeds.

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.*

The stock tank is already in place and therefore should not affect 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.*

NA-project not located on state or federal lands.

Determination: No significant impact.

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 additional impacts on 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.*

The project is located on remote, rural private land which has been historically used for cattle ranching. It will not affect the quality of recreational and wilderness activities.

Determination: No significant impact.

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

The project is located on remote private land and will not affect human health.

Determination: No significant impact.

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: There are no additional government regulatory requirements 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 application does not present possible secondary impacts on the physical environment and human population.

Cumulative Impacts This application does not present possible cumulative impacts on the physical environment and human population.

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 granting the requested water right change to the Applicant. The applicant would not be able to obtain a change authorization for the added stock tank under the No-Action alternative. This alternative would not have any direct impacts that are typically associated with a stock tank.

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: March 27, 2023