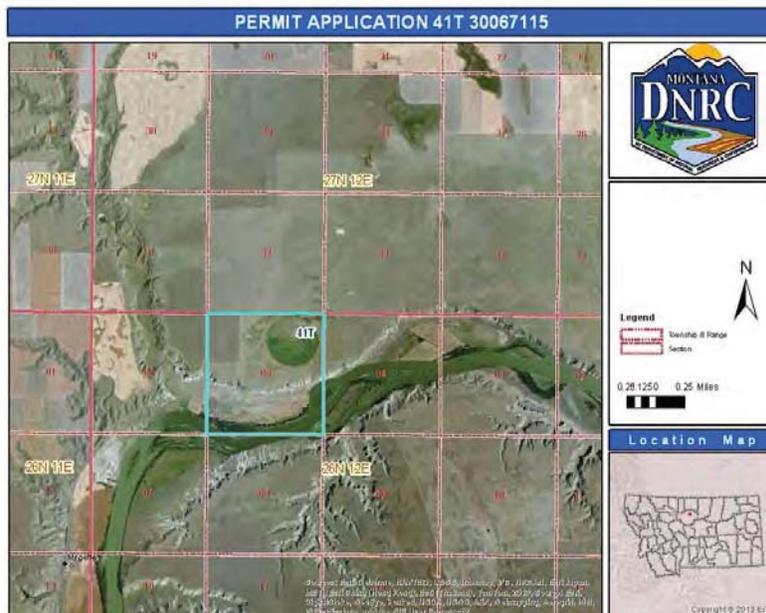


Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Virgelle Valley Ranch Inc
215 Terry LN
Loma MT 59460
2. Type of action: Application for Beneficial Water Use Permit. 41T 30067115
3. Water source name: Missouri River
4. Location affected by project: The Applicant proposes to divert water from the Missouri River, by means of a pump, from April 1 – October 31 at 550 GPM up to 278.90 AF, from a point in the NENESE, Section 05, T26N, R12E, Chouteau County, for Irrigation use from April 1 – October 31. The Applicant proposes to sprinkle irrigate crops 104.00 acres via center pivot. The place of use is generally located in the NE, Section 05, T26N, R12E, Chouteau County. The following is a map depicting the general area the proposed project is located in:



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.**

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

Montana Natural Heritage Program
USDA Natural Resources Conservation Service (NRCS) Soils Data Website
Montana Dept. of Environmental Quality Website (TMDL 303d listing)
Montana Dept. of Fish, Wildlife & Parks Website (Montana Rivers Information System)
USDI National Wetlands Inventory Website
Montana Natural Resource Information System

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 reach of the Missouri River where the proposed project is to be located is not identified as a periodically or chronically dewatered stream by DFWP. It is unlikely that the proposed project will not worsen an already dewatered condition.

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: According to Montana Department of Environmental Quality (DEQ), all required Total Maximum Daily Load (TMDL) reports have been completed on the Missouri River from the confluence of the Marias River to the confluence of Bullwhacker Creek. The 2014 water quality information obtained from DEQ's Clean Water Act Information Center indicates that quality of the water found in this reach of the Missouri River fully supports drinking water and agriculture. Not supported are aquatic life and primary contact recreation use. It is not anticipated that the proposed project will cause an adverse effect to water quality found in this reach of the Missouri River.

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: Minimal impacts to groundwater quality or supply are anticipated by the proposed new use of surface flows found in this reach of the Missouri River

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: Water will be diverted from the Missouri River via a pumping system capable of delivering 550 GPM. The means of diversion will use a Cornell 3YH 50 HP pump. The pump, with total dynamic head of 80 feet, is connected to 1650 feet of 8” PIP pipe. The pipe is attached to the center pivot that is to be 1,196 feet in length. The system design is for a desired application rate of 5.3 gallons per minute. The project has already been constructed. Therefore, any impacts to stream channels, flow modifications, barriers, riparian areas and/or dams have already occurred.

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: According to the information provided by the Montana Natural Heritage program, there are three mammals (mammalia) species of concern in the vicinity. The species identified are the Townsend's Big-eared Bat, the Black-tailed Prairie Dog and the Hoary Bat. There is one potential mammal (mammalia) species of concern which is the Silver-haired Bat.

There are five bird (aves) species of concern in the vicinity of the proposed project. The species identified are the Great Blue Heron, Burrowing Owl, Veery, Greater Sage-Grouse and the Brewer's Sparrow. There are two potential bird (aves) species of concern which are the Eastern Screech-Owl and the Ovenbird.

The one Reptile (Reptilia) species of concern in the vicinity is the Spiny Softshell Turtle.

There are six fish (actinopterygii) species of concern in the vicinity which are the Northern Redbelly Dace, Blue Sucker, Sturgeon Chub, Paddlefish, Sauger and the Pallid Sturgeon. There are also three fish (actinopterygii) potential species of concern which are the Brook Stickleback, Plains Minnow and the Burbot.

Additionally, there is one bird (aves) species of concern special status species identified by the Montana Natural Heritage as the Bald Eagle.

The proposed project is located in a sparsely populated area primarily composed of primarily cropland, it is not anticipated that the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or the species of special concern identified. It is also not anticipated that the proposed project will create a barrier to the migration or movement of fish or wildlife. No impacts are anticipated because the construction of the proposed project has already taken place.

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: There are no wetlands identified from GIS mapping of the proposed project utilizing NWI data. Because there are no wetlands identified within the proposed project area, there are no impacts anticipated.

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

Determination: No ponds or reservoirs are associated with the proposed project therefore the assessment is 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 soils are heavy in salts that could cause saline seep.

Determination: Data from the NRCS soils website indicate soil types within the proposed project area. Three soil types dominate the proposed project area. The dominate soil types are identified as Lihen loamy fine sand, 0 to 6 percent slopes and Yetull-Lonesome loamy fine sands, 0 to 6 percent slopes. Degradation of soil quality, alteration of soil stability or moisture content is expected to be minimal to non-existent. Saline seepage in the area does not appear to be problematic nor does the proposed project appear to worsen any saline seepage problems.

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 impacts are anticipated because the system has been constructed. However, it is the applicant's responsibility to control 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: The applicant included plans in their application to incorporate electric motor driven centrifugal pumps. No deterioration of air quality or adverse effects on vegetation due to an increase in air pollutants is expected.

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: NA-project is 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 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 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 development should have no impact on human health.

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

Determination: The development should have no 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 adverse effect on private property rights is anticipated from this development.

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?

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

Secondary Impacts No secondary impacts have been identified.

Cumulative Impacts No cumulative impacts have been identified.

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:*

No action alternative:

The applicant would not be able to develop their project as proposed.

Alternative 1:

Approve the application if the applicant proves the statutory criterion has been met.

PART III. Conclusion

1. *Preferred Alternative:* Alternative 1

2. *Comments and Responses* None to date.

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: An EA is the appropriate level of assessment for the proposed action as no significant impacts were identified.

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

Name: /s/ Matt Miles

Title: Water Resource Specialist

Date: May 15, 2014