

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

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Revised 11-00

Note: Instructions to DNRC staff for preparing this EA can be found at:
http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

1. **Applicant/Contact name and address:** STANLEY KIMM
16 BUNNY DRIVE
THREE FORKS, MT 59752-9500
2. **Type of action:** APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41G-110412
3. **Water source name:** GROUNDWATER WELL
4. **Location affected by action:** CENTER OF NW¼ SECTION 18, T02N R01E, BROADWATER COUNTY
5. **Narrative summary of the proposed project, purpose, action to be taken, and benefits:**
THIS PROJECT IS TO PUMP WATER FROM A NEW WELL DRILLED IN JANUARY OF 2000. IT WILL BE PUMPED AT 800 GPM UP TO 675.00 ACRE-FEET FROM MAY 1 TO NOVEMBER 15 OF EACH YEAR. THE APPLICANT PROPOSES TO SPRINKLE IRRIGATE GRAIN AND/OR ALFALFA USING TWO 135 ACRE PIVOTS, FOR A TOTAL OF 270 ACRES, LOCATED IN THE N¼ OF SECTION 18, T02N, R01E, BROADWATER COUNTY. THE APPLICANT PLANS TO ALTERNATE THE WATER USE BETWEEN THE TWO PIVOTS, RUNNING THE PUMP 24 HOURS PER DAY, EACH PIVOT OPERATING 12 HOURS A SET. 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)
STATE HISTORIC PRESERVATION OFFICE
MONTANA NATURAL HERITAGE PROGRAM
NRCS (KELLY MORRIS), FOR SOIL SURVEY INFORMATION

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: This is a groundwater appropriation. See groundwater section below.

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: This is a groundwater appropriation. See groundwater section below.

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: This groundwater appropriation is for 800 gpm up to 675.00 acre-feet. The well log and test performed by the driller, Red Tiger Drilling Inc., License #386, indicates the well was pump tested at 1050 gpm for about 56 hours. It had a drawdown of 190' after 56 hours of continuous pumping, and recovered to 67.5' within 30 minutes after the pump was shut down. The driller's test indicates there is sufficient water for the 800 gpm withdrawal. The applicant may be required to install a measuring device to ensure that the water use is not exceeded and to protect prior existing users.

The rules of the Board of Water Well Contractors require a back flow prevention device to ensure there is no impact on water quality.

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: The diversion works consists of a well that was drilled according to the requirements of the Board of Water Well Contractors by a licensed well driller. The proposed project well poses no potential impacts to any of the above listed elements.

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: The Montana Natural Heritage Program was contacted to determine if there were any threatened or endangered species or "species of special concern" within the area. Their report and map indicates there are none within or near the project. Their report did indicate a species of special concern, commonly called a 'milk snake' located about 5 miles away in Sec. 25, T02N R01E, however, this project should not pose any impact to the 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: There are no known wetlands within the project area.

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

Determination: This is a groundwater project. There are no ponds or storage structures related to this project or within the project area.

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: Information provided by the NRCS in Townsend indicate that the soils in the area are predominantly Abor silty clay, Amesha loam, and Delphill-Abor complex. All these soils are primarily used for dryland crops and range, with some irrigated land in the Amesha loam area. Root depth is shallow, typically under 2' in the Abor series, but slightly deeper in the Delphill series. There is a layer of weathered shale below the clay, particularly in the Abor series soils, although also found in the other soils at greater depths. Wind and runoff erosion are problematic in these soil areas. The NRCS specialist indicated that although these areas are not the preferred soil for irrigation, there is some irrigation in these areas.

There should be no further impact on the soils and geology from the proposed use. It is probable that the irrigation and crop cover will provide some protection from wind and water erosion. Irrigation also increases plant residues returned to the soil and soil structure is improved.

This area is not susceptible to saline seep problems and this proposed use should cause no saline seep 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: The vegetation in the area is native grass. The well, pipeline and one pivot has already been installed. The area was temporarily disturbed during this construction, however, it is minimal and the additional pivot and pipeline is not expected to cause any significant impact.

There are no known noxious weeds in the area. There is always the possibility of noxious weeds infesting cropland and it is the responsibility of the property owner to control the 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: There will be no impacts to air quality due to this project. There is an electric pump installed in the well with the power coming from about 1/2 mile to the north.

Historical and archeological sites

Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: According to the Montana State Historic Preservation Office (SHPO), there are no previously recorded historic or archaeological sites within the project area. Due to the lack of a previous inventory of the area, SHPO recommended that a reconnaissance survey be conducted. Because the project is located on private land, the decision to conduct this survey is at the discretion of the landowner.

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 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 and 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: This project is all on private land and there are no access roads to recreational or wilderness areas in the project area. Therefore, no impact is expected from this project.

Human health

Assess whether the proposed project impacts on human health.

Determination: This project 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: There are no known additional government regulatory impacts on private property rights associated with this project.

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 known impact.
- (b) Local and state tax base and tax revenues ? This irrigation project will enhance the local and state tax base.
- (c) Existing land uses ? No known impact.
- (d) Quantity and distribution of employment ? No known impact.
- (e) Distribution and density of population and housing ? No known impact.
- (f) Demands for government services ? No known impact.
- (g) Industrial and commercial activity ? No known impact.
- (h) Utilities ? This new irrigation project will require additional electrical power. As stated earlier in the EA, the power is coming from about 1 mile to the north. No significant impact is expected.
- (i) Transportation ? No known impact.
- (j) Safety ? No known impact.
- (k) Other appropriate social and economic circumstances ? No known impact.

2. **Secondary and cumulative impacts on the physical environment and human population:** No significant secondary or cumulative impacts have been identified or are expected from this project.
3. **Describe any mitigation/stipulation measures:** None at this time.
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:**

Under the no action alternative, the applicant would not enjoy the economic benefits of the crop grown by this project. Since the well has already been drilled, it is likely that the applicant will make an application for a different purpose or modify this application.

No reasonable alternatives to the proposed project have been identified.

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? No

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, the EA is an appropriate level of analysis for this action.

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

Name: Dixie Brough
Title: Water Resources Specialist
Date: December 27, 2000