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: Daniel & Rachel Negaard
112441 US HWY 87
Grass Range, MT 59032

2. Type of action: Application for Beneficial Water Use Permit 30026071-40B

3. Water source name: South Fork McDonald Creek

4. Location affected by project: The point of diversion is located in SE SE SW, Section 21, T15N, R23E, Fergus County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This permit application is to supplement storage in an existing offstream pit/reservoir by diverting 3.34 cubic feet per second (CFS) up to 49.0 acre-feet (AF) of water from the South Fork McDonald Creek from October 1 through December 30 inclusive of each year. Supplemental irrigation of 105 acres (44.1 AF) and a new 1 acre place of use for lawn & garden (2.5 AF) are included in this application. This application will also allow the applicant to store 2.4 AF for watering 120 cows and 100 sheep throughout the entire year. The animals will drink directly from the reservoir. The point of diversion (dam) is in the SE SE SW Section 21 and the place of use for irrigation is in the west half of Section 21 all in T15N R23E, Fergus County. The offstream pit/reservoir has a capacity of 49.65 AF. The stored water for irrigation and lawn & garden purposes will be used during the time frame of April 15 to October 15.

The benefits to the applicant would include increased agriculture production due to additional water being stored in the reservoir, prior to the irrigation season.

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)

Dept. of Environmental Quality Website - TMDL 303d listing
MT. National Heritage Program Website - Species of Concern
USDI Fish & Wildlife Service Website - Endangered and Threatened Species Fergus County, MT
MT State Historic Preservation Office - Archeological/Historical Sites

USDA Natural Resources Conservation Service – Web Soil Survey
USDI Fish & Wildlife Service – Wetlands Online Mapper

## 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*: Minor impact.

The MT Department of Fish, Wildlife and Parks identifies the South Fork McDonald Creek as chronically dewatered. This source is chronically dewatered from river mile 0.0 to river mile 31.0. The total length of the stream is listed as 37.6 miles. If this application increases the historic consumptive water use; there could be a minor impact to the source identified above.

***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:* Low likelihood of impact.

The South Fork McDonald Creek is not listed on the 2006 Montana Water Quality Integrated Report. It is unlikely that the depletion of the source by up to 49.0 AF from October through December would significantly impact 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.*

*Determination*: Low likelihood of impact.

No impacts to groundwater are anticipated as a result of this application.

**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*: Low likelihood of impact.

It's improbable that the project will have any impacts related to the diversion works as the existing reservoir has been previously used to store and convey water for irrigation and stock purposes.

**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*: Low likelihood of impact.

The Montana National Heritage Program lists 1 species as Species of Concern within Township 15 North Range 23 East. The common name for this species is the Ferruginous Hawk. The website for USDI Fish & Wildlife Service Endangered, Threatened, Proposed, and Candidate Species lists the Pallid Sturgeon and the Black-Footed Ferret as Endangered and the Bald Eagle as Threatened in Fergus County. The reservoir is currently being used for storage and the place of use is already irrigated cropland. The pump and supply system are in place and consistent with other developments commonly found in the area.

***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*: Low likelihood of impact.

There are no known wetlands associated with this application. The USDI Fish & Wildlife Service – Wetlands Online Mapper has no data available for the project location.

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

*Determination*: Low likelihood of impact.

The application involves an existing offstream 49.65 AF pit/reservoir. The diversion period requested is from Oct. 1 to Dec. 31. There is a low likelihood that filling the reservoir late in the fall of the year will result in any adverse impacts to existing wildlife, waterfowl, or fisheries resources.

**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*: Low likelihood of impact.

The soils in this area are generally suited for irrigation. The projects are largely in place and are consistent with other agricultural developments in the area; it's unlikely that any unnatural degradation of soil characteristics would occur.

**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*: Low likelihood of impact.

The permit would result in increased forage production due to more water being available during the irrigation season. No spread of noxious weeds would likely be associated with this application, as the property currently exists as irrigated cropland. Normal farm weed management would be used to control noxious weeds potentially invading disturbed areas. It is the responsibility of the property owner 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*: Low likelihood of impact.

It is unlikely air quality would be significantly impacted; this supplemental diversion will utilize an existing 25HP pump to fill the reservoir.

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

*Determination*: Low likelihood of impact.

The State Historic Preservation Office found that there is a low likelihood cultural properties will be impacted; a cultural resource inventory is unwarranted at this time. The place of use and point of diversion associated with this application have been previously utilized for agricultural practices.

**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*: Low likelihood of 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*: Low likelihood of impact.

The proposed action is consistent with historic agricultural practices in the 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*: Low likelihood of impact.

The proposed action will not impact recreational activities in the area.

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

*Determination*: Low likelihood of impact.

Since its introduction to the U.S. in 1999, West Nile virus has become a potential threat in many states. In 2006, 4 in every 1000 mosquitoes captured on the Milk River near Malta, MT were infected with West Nile. Mosquito habitat development has been associated with standing water containing debris and vegetation. Proper weed management and reservoir maintenance will help to control the conditions required for larva growth, thus making the impacts associated with the stagnant water insignificant.

**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 known impacts.

**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?* None

*(c) Existing land uses?* None

(*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?* None

*(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 are anticipated.

**3.** ***Describe any mitigation/stipulation measures:***

The following stipulation has been identified to insure that the applicable rules and statues are included on the water right permit.

**Water Measurement Records Required
The appropriator shall install a department approved in-line flow meter at a point in the delivery line approved by the department. Water must not be diverted until the required measuring device is in place and operating. On a form provided by the department, the appropriator shall keep a written daily record of the flow rate and volume of all water diverted, including the period of time. Records shall be submitted by January 30 of each following year and upon request at other times during the year. Failure to submit reports may be cause for revocation of a permit or change. The records must be sent to the Lewistown Water Resources Regional Office. The appropriator shall maintain the measuring device so it always operates properly and measures flow rate and volume accurately.
Lewistown - ph: 406-538-7459 fax: 406-538-7089

**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 increased forage production and the related economic benefits being realized by the applicant. No other impacts would likely occur, as operation of the project would continue in the same manner as in the past.

## *PART III. Conclusion*

***1.*** ***Preferred Alternative***

The preferred alternative is the proposed alternative, but only if the recommended stipulation is included.

***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:* Douglas Mann
*Title:* Water Resources Specialist - LRO
*Date*: 6/28/2007