

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: David E. Ageson
Verges A. Ageson
24884 Road 165 N.
Gildford Montana 59525

2. Type of action: Proponent has applied with the DNRC to request authorization to change the location of the point of diversion, place of use consisting of 124.8 acres of historically flood-irrigated land to 87 acres of proposed center pivot sprinkler irrigation (Application to Change a Water Right No. 40F 30065839).

3. Water source name: Milk River

4. Location affected by project: As proposed, the location of the new point of diversion is to be located in the NWSWNW of Section 9; the new 87 acres place of use is to be located in the N2 of Section 8, all in T37N, R10E, Hill County.

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 §85-2-402, 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:

<h2>PHYSICAL ENVIRONMENT</h2>

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 Milk River 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: The 2012 water quality information obtained from DEQ's Clean Water Act Information Center indicates that quality of the water found in the Milk River does not support drinking or aquatic life. However, primary contact recreation use and agricultural use are fully supporting. There is no TMDL report for the Milk River. It is not anticipated that the proposed project will cause an adverse effect to water quality found in the Milk 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 the Milk 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: A 550 GPM Cornell 4HH pump with a 50 HP electric motor will divert water from the Milk River and convey it through 2,700 feet of 8 inch pipe. An 8-span Valley center pivot with drop hoses will irrigate a total of 87.0 acres. The pivot is designed to apply approximately .50 inches per day over the 87.0 acres. The project has already been developed 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 two bird (aves) species of concern in the vicinity of the proposed project. The species identified are the Baird’s Sparrow (*Ammodramus bairdii*) and the Greater Sage-Grouse (*Centrocercus urophasianus*). Also listed is one reptile (reptilian) species of concern which is the Greater Short-horned Lizard (*Phrynosoma hernandesi*). Two fish (actinopterygii) species of concern are listed which is the Northern Redbelly Dace (*Chrosomus eos*) and the Sauger (*Sander canadensis*). One invertebrate-insect species of concern is also listed which is a Sand-dwelling Mayfly (*Lachlania saskatchewanensis*). The following charts contain specific information about the identified species:

Species of Concern										
6 Species Filtered by the following criteria: Township = 37 N Range = 10 E										
BIRDS (AVES)										
2 SPECIES FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 37 N RANGE = 10 E										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Ammodramus bairdii</i> Baird's Sparrow	Emberizidae Sparrows	G4	S3B			SENSITIVE	2	27%	67%	Grasslands
Species verified in these Counties: Blaine, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Glacier, Hill, Lewis and Clark, Liberty, McCone, Meagher, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
State Rank Reason: Montana populations were declining until recently and the species is declining in most of the surrounding states and provinces.										
<i>Centrocercus urophasianus</i> Greater Sage-Grouse	Phasianidae Upland Game Birds	G3G4	S2	C		SENSITIVE	1	17%	75%	Sagebrush
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Glacier, Hill, Liberty, Madison, McCone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Roosevelt, Rosebud, Silver Bow, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
REPTILES (REPTILIA)										
1 SPECIES FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 37 N RANGE = 10 E										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Phrynosoma hernandesi</i> Greater Short-horned Lizard	Phrynosomatidae Sagebrush / Spiny Lizards	G5	S3			SENSITIVE	2	19%	66%	Sandy / gravelly soils
Species verified in these Counties: Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Glacier, Hill, Judith Basin, Lewis and Clark, McCone, Meagher, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Rosebud, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone										
FISH (ACTINOPTERYGII)										
2 SPECIES FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 37 N RANGE = 10 E										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Chrosomus eos</i> Northern Redbelly Dace	Cyprinidae Minnows	G5	S2				3	43%	27%	Small prairie rivers
Species verified in these Counties: Blaine, Cascade, Chouteau, Daniels, Dawson, Fergus, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, McCone, Meagher, Musselshell, Petroleum, Phillips, Pondera, Richland, Roosevelt, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux										
<i>Sander canadensis</i> Sauger	Percidae Perches	G5	S2			SENSITIVE	1	1%	15%	Large prairie rivers
Species verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Fallon, Fergus, Glacier, Hill, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Stillwater, Teton, Treasure, Valley, Wibaux, Yellowstone										
INVERTEBRATES - INSECTS										
1 SPECIES FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 37 N RANGE = 10 E										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Lachlania saskatchewanensis</i> A Sand-dwelling Mayfly	Oligoneuridae Oligoneurid Mayflies	G4	S1					33%	5%	Large prairie rivers
Species verified in these Counties: Dawson, Hill, Powder River, Richland										

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 system has been constructed and in operation.

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 the two dominate soil types located within the proposed project area. The dominate soil types are identified as Telstad-Joplin loams, 0 to 4 percent slopes and Telstad-Hillon, 0 to 4 percent slopes. Degradation of soil quality, alteration of soil stability or moisture content is expected to be minimal to non-existent.

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: The project was developed prior to any assessment of degradation of unique archeological or historical sites in the vicinity.

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: There are no known environmental plans or goals in this area.

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 project should have no significant or harmful impact on recreational or wilderness activities.

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? No significant impact

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 operate 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***

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:

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

Name: Matt Miles

Title: Water Resource Specialist

Date: October 10, 2013