

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: Wesley and Fred Fenger
56 Henry Rd
Galata MT, 59444
2. Type of action: Surface Water Change Application 41N 30116268
3. Water source name: Strawberry Creek
4. Location affected by project:
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.

The Applicant proposes to irrigate an 87 acre field under a center pivot. The diversion works already exist to serve a separate water right.

Crop irrigation is a recognized beneficial use of water.
6. Agencies consulted during preparation of the Environmental Assessment: Montana Natural Heritage Program, Natural Resources Conservation Service (NRCS) Soils Data Website, Department of Environmental Quality, National Wetlands Inventory Website, and the Natural Resources Information System, and the Department of Fish, Wildlife, & Parks.

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity

Strawberry Creek is not identified as a dewatered stream but is listed as an intermittent stream by the USGS.

Determination: No impact to water quantity is expected.

Water quality

Strawberry Creek flows in Trail Creek which then flows into Willow Creek. DEQ does not list or have a water quality assessment for Strawberry Creek nor is one available for Trail Creek. Willow Creek has a use class of B-2. It is fully supporting primary contact recreation, drinking water, and aquatic life. Agricultural beneficial use was not assessed.

Determination: No impact to water quality is expected.

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.*

Groundwater is not involved in the proposed project.

Determination: Assessment not applicable.

DIVERSION WORKS

No new diversion works are planned.

Determination: No impact from diversion works is expected.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species

During the preparation of this Environmental Assessment there was an issue with the MNHP website and species would not filter by 35N 3E so the species assessment is based on 35N 2E and 35N 4E.

No plant species of concern, potential species of concern, or special status species were identified by the Montana Natural Heritage Program.

Animal species in the local area are listed below:

35N 2E

Species of Concern

Species of Concern

1 Species

Filtered by the following criteria:

Township = 035N002E (based on mapped Species Occurrences)

FISH (ACTINOPTERYGII)										1 SPECIES
TOWNSHIP = 035N002E (based on mapped Species Occurrences)										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Chrosomus eos</i> Northern Redbelly Dace	Cyprinidae Minnows	G5	S3				SGCN3	4%	27%	Small prairie rivers
Species Occurrences verified in these Counties: Blaine, Cascade, Chouteau, Daniels, Dawson, Fergus, Garfield, 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										
State Rank Reason: The Northern Redbelly Dace is currently listed as an "S3" species of concern in Montana because they are potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.										

Potential Species of Concern

Potential Species of Concern

0 Species

Filtered by the following criteria:

Township = 035N002E (based on mapped Species Occurrences)

Special Status Species

Special Status Species

0 Species

Filtered by the following criteria:

Township = 035N002E (based on mapped Species Occurrences)

35N 4E

Montana Natural Heritage - SOC Report

Animal Species of Concern

2 Species of Concern

Filtered by the following criteria:

Township = 035N004E (based on mapped Species Occurrences)

Species List Last Updated 05/03/2016



A program of the Montana State Library's
Natural Resource Information System
operated by the University of Montana.

Expand All | Collapse All

Introduction

Species of Concern

Species of Concern

2 Species

Filtered by the following criteria:

Township = 035N004E (based on mapped Species Occurrences)

BIRDS (AVES)										1 SPECIES
TOWNSHIP = 035N004E (based on mapped Species Occurrences)										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Ammodramus bairdii</i> Baird's Sparrow	Emberizidae Sparrows	G4	S3B	AIBTA; BCC11; BCC17		SENSITIVE	SGCN3	27%	67%	Grazlands
Species Occurrences verified in these Counties: Blaine, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Divide, Fallon, Fergus, Glacier, Hill, Judith Basin, 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.										
INVERTEBRATES - INSECTS										1 SPECIES
TOWNSHIP = 035N004E (based on mapped Species Occurrences)										
SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
<i>Polygonia progne</i> Gray Comma	Nymphalidae Brush-footed Butterflies	G5	S2						50%	Deciduous woodland, riparian woodland, aspen parkland
Species Occurrences verified in these Counties: Carter, Custer, Dawson, Fallon, Liberty, Powder River, Richland, Toole, Valley										

Potential Species of Concern

Potential Species of Concern

0 Species

Filtered by the following criteria:

Township = 035N004E (based on mapped Species Occurrences)

Special Status Species

Special Status Species

0 Species

Filtered by the following criteria:

Township = 035N004E (based on mapped Species Occurrences)

The Species Ranks for these species range from S2, S3, S3B, G4, and G5. A rank of S2 signifies a species is "at risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction or extirpation in the state." An S3 rank means the species is "potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas", and the B means the species breeds in Montana and is at risk during the breeding season. A G4 indicated that the species is

“apparently secure, though it may be quite rare in parts of its range, and/or suspected to be declining.” Finally, a G5 rank is attributed to species that are “common, widespread, and abundant (although it may be rare in parts of its range); Not vulnerable in most of its range.”

The Gray Comma has a G5 global rank and an S2 state rank. This species has only had 8 reported observations in Montana, one being in Liberty County. There is no management plan for this species.

The Baird’s Sparrow has a G4 and S3B rank. The Montana population was recently declining but has now leveled off. The species is declining in most of states and provinces around Montana. This species is most commonly spotted in North Eastern Montana. The Baird’s Sparrow has been reported as observed less than ten times in the project area, and the most recent reported observation is more than ten years old for the Sweet Grass Hills area. The Baird’s Sparrow likes to nest in native prairie vegetation and is sensitive to grazing. The U.S. Fish and Wildlife Service Region 6 lists the Baird’s Sparrow as a Species of Management Concern. The MNHP cites “Partners in Flight Draft Bird Conservation Plan Montana” by D. Casey as recommending the “preservation of remaining native grassland habitat; prescription burning of areas to prevent encroachment by woody vegetation; delayed mowing until mid-July or August (later, rather than sooner, if spring weather has been adverse); light grazing; and maintaining vegetative diversity.” If the species is spotted and identified, these practices could be voluntarily implemented by the Applicant.

The Northern Redbelly Dace is listed as a G5 and S3 species. It is small native minnow that lives in small prairie streams and rivers. The minnow acquired its name from the colorful red flanks on the males. There have only been 1-3 reported observations for the Sweet Grass Hills area and none in the last ten years. The species could be negatively impacted by reductions to discharge, but studies have not been conducted to assess the species in Montana. No management plan exists for this species.

Determination: No impact is expected to species of concern, potential species of concern, or special status 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.*

The diversion system for this project already exists to serve another water right. The new disturbance is limited to the 87 acre center pivot. No wetlands were identified in the National Wetlands Inventory on those 87 acres or in the path of the pipeline.

Determination: No impact to wetlands is expected.

Ponds

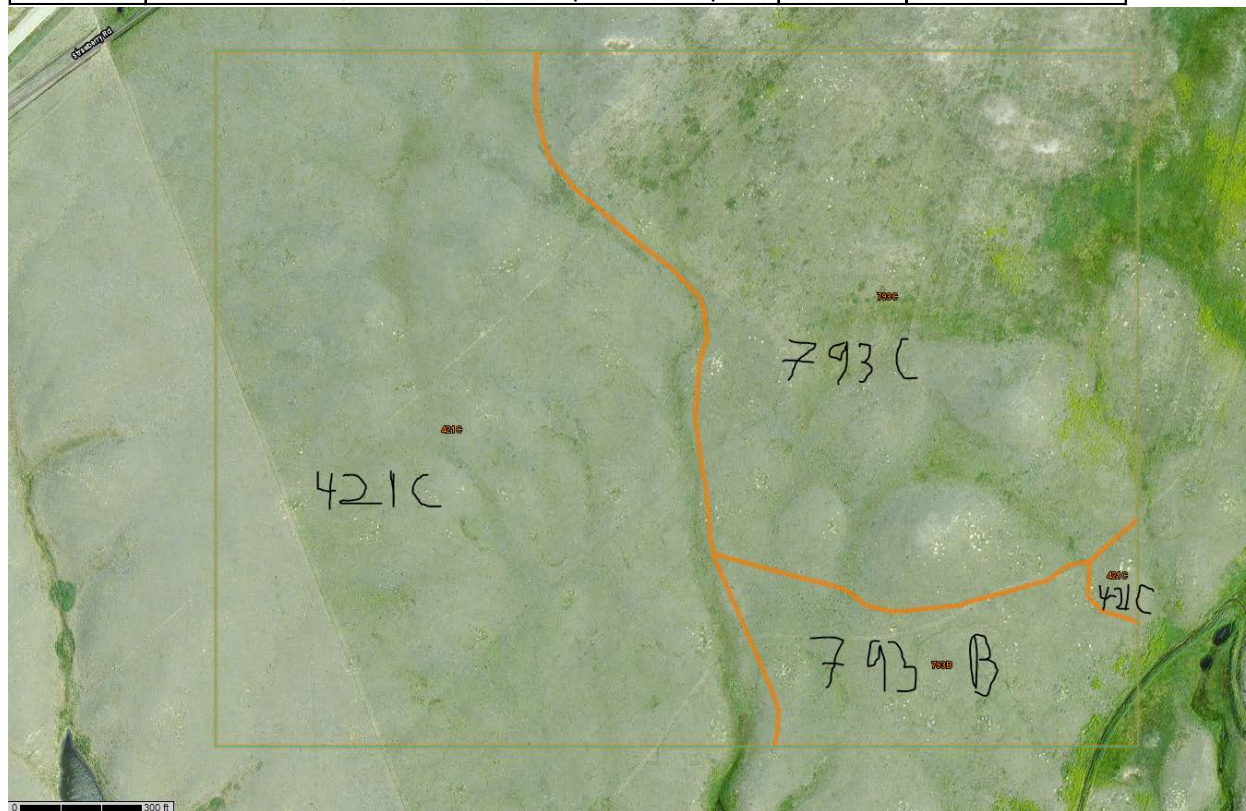
The pond involved in this project already exists to serve a flood irrigation system.

Determination: No impact to the existing pond is expected.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE

Project Area Soil Map:

Map Unit	Map Unit Name	Acres	Percent of Area
421C	Joplin-Hillon loams, 2 to 8 percent slopes	45.2	50.40%
793B	Yamacall loam, calcareous, 0 to 4 percent slopes	8.3	9.20%
793C	Yamacall loam, calcareous, 4 to 8 percent slopes	36.3	40.40%



Soil moisture will be increased due to irrigation. Soil stability is not expected to change due to vegetation cover changes. 421C soils are slightly saline to moderately saline (4.0 to 8.0 mmhos/cm) and is classified as well drained. 793B and 793C soils are also classified as well drained. No salinity information is provided by NRCS for 793B or 793C soil types. If salinity issues are noticed, the Applicant should contact NRCS or the Montana Salinity Control Association for management solutions.

Determination: No impact is expected to soil quality, stability, or moisture is expected.

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 project falls entirely on land described as Great Plains Mixedgrass Prairie according to the MNHP Map Viewer. There will be 87 acres of Great Plains Mixedgrass Prairie that has been historically grazed converted to pivot irrigation. There were 16,717,667 acres of Great Plains Mixedgrass Prairie estimated to be in Montana in 2016.

It is the responsibility of the landowner to control for noxious weeds.

Determination: No impact to Montana's Great Plains Mixedgrass Prairie Ecosystem.

AIR QUALITY

A small gas pump, 600 GPM capacity, will be installed to serve the center pivot.

Determination: No impact to air quality is expected.

HISTORICAL AND ARCHEOLOGICAL SITES

The project is not located on State or Federal lands

Determination: Assessment is not applicable.

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 environmental impacts 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: No local environmental plans and goals were identified.

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: No recreational or wilderness activities were identified.

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

No human health issues were identified.

Determination: No impact to human health is expected.

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 impact to private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES

Impacts on:

- (a) Cultural uniqueness and diversity? No impact.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No impact.
- (d) Quantity and distribution of employment? No impact.
- (e) Distribution and density of population and housing? No impact.
- (f) Demands for government services? No impact.
- (g) Industrial and commercial activity? No impact.
- (h) Utilities? No impact.
- (i) Transportation? No impact.
- (j) Safety? No impact.
- (k) Other appropriate social and economic circumstances? No impact.

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

Secondary Impacts

No secondary impacts identified.

Cumulative Impacts

No cumulative impacts identified.

3. *Describe any mitigation/stipulation measures:*

No measures or stipulations exist 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:*

No action alternative: The Applicant would not be able to develop the project as proposed.

PART III. Conclusion

1. ***Preferred Alternative:*** Proposed action.

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:

No impacts were identified in the EA making it the appropriate level of analysis for this project.

Name of person responsible for preparation of EA: Tyler Lystash

Title: Water Resource Specialist

Date: 3/5/2018