

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: Custer County Conservation District 3120 Valley Drive East, Miles City, MT 59301.
2. Type of action: Application to change a water reservation 42K 30067545
3. Water source name: Yellowstone River
4. Location affected by project: Sections 1 and 12 T8N R47E and Section 6 and 7 T8N R48E, Custer County.
5. The proposed project is to allow the producer (Muggli Bros. Inc.) to use a portion of the Custer County Conservation District water reservation. The project would divert 14.5 CFS up to 1685 AF/year from the Yellowstone River to irrigate 702 acres using center pivot sprinklers. The project would benefit the Custer County Conservation District by allowing them to fulfill the purpose of their water reservation and would benefit the producers by increasing their agricultural yield. The DNRC shall issue a change authorization 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 State Department of Fish, Wildlife and Parks
Montana State Department of Environmental Quality
United States Geologic Survey
Montana Natural Heritage Program
United States Fish and Wildlife Service
United States Department of Agriculture, Natural Resource Conservation Service

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: No significant impact.

The Yellowstone River in this area is not listed by the Montana Department of Fish, Wildlife and Parks as a chronically or periodically dewatered stream.

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: No significant impact.

The stretch of the Yellowstone River in Custer County is listed as impaired with respect to aquatic life by the Montana State Department of Environmental Quality. Other uses have insufficient information. Causes of impairment are either unknown or related to stream alteration due to grazing and irrigation. The proposed project will change the type of irrigation on current agricultural land. No additional land is being irrigated. Center pivot sprinklers will be used. The high efficiency of this type of irrigation will decrease the likelihood that return flows could degrade 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: Not Applicable.

The proposed project does not appropriate groundwater and is located immediately adjacent to the Yellowstone River. Return flow from the irrigation will be directly to the Yellowstone River. Groundwater supply may increase locally due to mounding beneath the irrigated acres.

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: No significant impact.

The diversion will be by two pumps on floating units in the Yellowstone River and through 3300 feet of 24 inch steel pipe. These pumps will not create flow barriers or modification and do not require any dams or wells. The diversion will not impact the bed of the stream or block aquatic migration. There may be some local disruption of the channel banks and riparian area due to installation of the piping. There are approximately 600 feet of partially disturbed riparian area between the river bank and active farm land. This area is crossed by dirt roads and contains local water filled depressions.

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: Possible impact.

There are a variety of animal species of concern within the potentially affected area as well as listed endangered species. The United States Bureau of Land Management lists the Greater Sage Grouse, Yellow-billed Cuckoo, Black-tailed Prairie Dog, Fringed Myotis, Spiny Softshell, Greater Short-horned Lizard, Blue Sucker, Sturgeon Chub, Paddlefish, and Sauger as sensitive species in the affected region. The United States Forest Service lists the Greater Sage Grouse and Greater Short-horned Lizard as sensitive. The Pallid Sturgeon is listed as endangered by the United States Forest Service and the United States Fish and Wildlife Service. The Bald Eagle has special status and both agencies list it as sensitive. In addition the United States Fish and Wildlife Service lists the Interior Least Tern, Black-footed Ferret and Whooping Crane as endangered species found in the region. Schweinitz' Flatsedge is the only plant species of concern in the potentially affected area. The proposed project will have little impact on any of the listed species because no alterations to the stream channel or bank are anticipated, a single steel pipe will cross the riparian areas to current agricultural land, no trees or other vegetation will be disturbed and the amount of water removed from the river is insufficient to alter channel patterns, bar migration or change overall turbidity.

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: No significant impact.

There are several palustrine wetlands near the proposed project area. These are primarily emergent and occasionally flooded but often dry by the end of the summer. These wetlands lie in the riparian zone adjacent to the Yellowstone River and are commonly abandoned channels and meander scars. The proposed project would not divert water from these wetlands nor discharge water to them.

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

Determination: Not applicable.

The proposed project does not involve ponds.

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: No significant impact.

The primary soils of the proposed project area are Kobase silty clay loam and Yamacall loam. Both of these have slopes of 0-2% in the area, are well drained, thick, and non-saline to very slightly saline. Both are important farmland soils in Montana. The area of the project has been irrigated in the past.

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 significant impact.

The proposed project is primarily on acreage currently irrigated for crop production. The area that may be disturbed to place diversion equipment is well served by roads and covers a short distance between the river and the land to be irrigated. The disruption of land to install diversion equipment may allow spread of noxious weeds. The applicant needs to take responsibility to control noxious weeds and prevent their spread.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact.

The proposal is for center pivot sprinkler irrigation and will have little to no impact on air quality.

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: Not applicable. This 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 other impacts indicated.

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 locally adopted environmental plans and goals.

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 significant impact.

The area has been used historically for agriculture. Access to the river would not be impacted and there are no other recreational or wilderness areas in the potentially impacted area.

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

Determination: No impact.
The proposed project is irrigation on agricultural land.

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.

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 were identified as a result of this assessment.

Cumulative Impacts: There are no pending applications or non-perfected permits within this reach. No cumulative impacts were foreseen as a result of this project.

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:** The alternative to this project is the no action alternative. The land to be irrigated is already under cultivation so the current proposal has almost no more impact than the no action alternative. The no action alternative would deny the benefit to both the producer and the conservation district.

PART III. Conclusion

1. **Preferred Alternative:** Issue a change authorization if the applicant proves the criteria in 85.2.402 MCA are met.

2. **Comments and Responses:** None

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 analysis for this action. There are no significant impacts identified as defined in ARM 36.254, therefore an EIS is not required.

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

Name: Mark Elison

Title: Hydrologist/Specialist

Date: 11/29/2013