

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 Dr E
Miles City, MT 59301
2. Type of action: Conservation District Application to Change Water Reservation #42KJ
30145892
3. Water source name: Yellowstone River
4. Location affected by project: Sections 12 and 13, T07N, R45E, and Section 7, T07N,
R46E, Custer County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This application is to add a point of diversion and place of use to the Custer County Conservation District Water Reservation water right (42KJ 9947-00). A flow rate of 4.13 CFS (1,853.7 GPM) and a maximum volume of 478 AF/YR of the Custer County Conservation District water reservation will be used for center pivot irrigation on 191.0 acres (9.7 GPM/AC and 2.5 AF/AC). The proposed place of use is north of Interstate Highway 94 approximately 12 miles west of Miles City, MT and includes 129 AC in SW of Section 12, T07N, R45E, Custer County and 62 AC in NW of Section 7, T07N, R46E, Custer County. The 4.13 CFS will be diverted from the Yellowstone River by a vertical turbine pump located in the SWSWNW Section 13, T07N, R45E. 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 Department of Natural Resources and Conservation
Montana Department of Fish, Wildlife, and Parks
Montana Department of Environmental Quality
Montana Sage Grouse Habitat Conservation Program
Montana Natural Heritage Program
United States Natural Resource Conservation Service
United State Fish and Wildlife Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The Yellowstone River below the confluence with the Big Horn River is not listed as chronically or periodically dewatered by the Montana Department of Fish, Wildlife, and Parks. The proposed use will appropriate Conservation District water reserved for irrigation purposes as planned. The median flow at the proposed point of diversion is greater than 6,900 CFS for all months within the proposed period of diversion. Diversion of 4.13 CFS of water reserved for irrigation use will not dewater the Yellowstone River.

Determination: No significant impact

Water quality – The Yellowstone River from the Cartersville Diversion Dam to the Powder River is listed as water quality category 5 by the Montana Department of Environmental Quality. This category includes waters where one or more applicable beneficial uses are impaired or threatened and a TMDL is required to address the factors causing the impairment or threat. This source is listed as not fully supporting aquatic life. There is insufficient information on drinking water, primary contact recreation, and agricultural uses. None of these beneficial uses is threatened. The proposed use of water for high efficiency center pivot sprinkler irrigation will not impair the water quality on this source.

Determination: No significant impact

Groundwater – Irrigation using water from the Yellowstone River has no likely impact on groundwater quality or quantity. Infiltration of irrigation water may locally increase the availability of groundwater.

Determination: No significant impact

1. **DIVERSION WORKS** - The Applicant proposes to divert water from the Yellowstone River in SWSWNW Section 13, T7N, R45E, Custer County using a Layne Verti-Line 14RL vertical turbine pump operating at 1800 rpm will pump 1850 GPM (4.13 CFS) into 4100 feet of 15-inch PIP to the first center pivot and then into 5100 feet of 10-inch PIP to a second center pivot. The proposed pump site has already been established as a pump site for other irrigation projects. The addition of another pump at this site is not likely to cause any significant impact.

Determination: No significant impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – According to the Montana Natural Heritage Program, there are 19 animal species of concern, 1 special status species, and 4 plant species of concern in the proposed project area. Animal species of concern include Black-tailed Prairie Dog, Hoary Bat, Little Brown Myotis, Fringed Myotis, Swift Fox, Golden Eagle, Great Blue Heron, Veery, Greater Sage-Grouse, Bobolink, Brewer’s Sparrow, Spiny Softshell turtle, Snapping Turtle,

Greater Short-horned Lizard, Blue Sucker, Sturgeon Chub, Paddlefish, Sauger, and Pallid Sturgeon. The Bald Eagle is a special status species in the area. Plant species of concern include Bractless Blazing star, Persistent-sepal Yellow-cress, Large Flowered Beardtongue, and Slender-branched Popcorn-flower. According to the Montana Sage Grouse Habitat Conservation Map, a portion of this project is in general habitat for sage grouse. The project is consistent with the Montana Sage Grouse Conservation Strategy according to a letter from Carolyn Sime, Project Manager, dated January 11, 2018. The proposed project is consistent with the current agricultural use of land in the area and is not likely to impact threatened or endangered species or create barriers to migration or movement of fish or wildlife.

Determination: No significant impact

Wetlands – There are no wetlands in the proposed project area.

Determination: No impact

Ponds – There are no ponds associated with the proposed project.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – According to the USDA Natural Resources Conservation Service, the predominant soil type in the project area is Davidell silty clay loam with 0 to 4 percent slopes. This soil is well drained and classified as moderately saline to strongly saline. High efficiency center pivot irrigation of saline soils could contribute to increased salinity of the soils at the project site but should not affect the salinity of return flows to the source supply.

Determination: Potential for minor impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – Existing vegetative cover in the area is agricultural. High efficiency center pivot irrigation will increase agricultural productivity. The installation of pipelines and pivots may contribute to the establishment and spread of noxious weeds. It is the responsibility of the property owner to monitor for and implement measures for noxious weed control.

Determination: No significant impact

AIR QUALITY – Irrigation of land already used for agricultural purposes has little potential to adversely affect air quality.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES – NA-project not located on State or Federal Lands.

Determination: Not applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - No additional demands on environmental resources are recognized.

Determination: No impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known locally adopted environmental plans or goals.

Determination: Not applicable

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The proposed project is located on private owned agricultural land. The project will not impact access to recreational or wilderness activities.

Determination: No impact

HUMAN HEALTH – No impacts to human health have been identified for the proposed irrigation project.

Determination: No impact

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 are recognized

Cumulative Impacts: No cumulative impacts are recognized

3. *Describe any mitigation/stipulation measures:* No mitigation or stipulation measures have been identified. A measurement condition will be placed on the water right as required by the Custer County Conservation District reservation.

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 the proposed project is the no action alternative. The no action alternative prevents the property owner from utilizing the agricultural land to the full potential and prevents the Conservation District from fulfilling their goal of utilizing reserved water for irrigation. The no action alternative does not prevent or mitigate any significant environmental impacts.

PART III. Conclusion

1. *Preferred Alternative:* Issue the 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?*

Although there are possible minor impacts associated with the project, an environmental assessment is the appropriate level of analysis.

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

Name: Jill Lippard
Title: Water Resource Specialist
Date: 1/17/2020