

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: Sweet Grass County Conservation District
2. Type of action: Application to Change a Water Reservation #43B 30066486
3. Water source name: Yellowstone River
4. Location affected by project: T1S R16E sections 4 and 5, T1N R16E sections 32 and 33.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The producers (Langfords) would divert water from the Yellowstone River at a rate of 5.35 CFS and a maximum volume of 813 AF/year to flood irrigate new agricultural land. The producers would add pipe from the pump in the Yellowstone River to secondary pumps and then to two main ditches. The benefit of the project would be to use a portion of the Conservation District water reservation and bring 271 acres of land into production. 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 Natural Heritage Program
National Wetlands Inventory
United States Department of Agriculture – Natural Resources Conservation Service
Montana Department of Fish Wildlife and Parks
Montana Department of Environmental Quality

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 impact.

The source of supply is the Yellowstone River which is neither chronically nor periodically dewatered. A water reservation has been granted to the conservation district and will now be put to beneficial use.

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 impact.

The Yellowstone River in this area is not listed on the 303(d) list of impaired or threatened streams. Efficiency for the project is estimated at 50%. The return flow from the irrigation system will discharge back to the Yellowstone River through established ditches and is unlikely to degrade the water quality or impact the bed or banks of the 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: No impact.

The project uses surface water for irrigation and will not adversely affect groundwater.

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 means of diversion is an existing pump located on the Yellowstone River and is not to be changed with this project. Several thousand feet of 10 inch and 12 inch PVC pipe will carry the water to the proposed place of use. The area of the project is historically agricultural and riparian areas will remain as they have been developed. The project will have no dams or wells and little impact on channel, flow, or riparian areas.

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: No significant impact.

According to the Montana Natural Heritage Program website, the Bureau of Land Management (BLM), lists the Black-tailed Prairie Dog, Greater Sage Grouse, Bobolink and Yellowstone Cutthroat Trout as sensitive. The US Forest Service (USFS) lists the Black-tailed Prairie Dog, Greater Sage Grouse and Yellowstone Cutthroat Trout as sensitive. The Bald Eagle is a species of special status. There are no threatened or endangered species in the area. No plant species of concern are listed.

Black-tailed Prairie Dog

Black-tailed Prairie Dog colonies are found on flat, open grasslands and shrub/grasslands with low, relatively sparse vegetation. The most frequently occupied habitat in Montana is dominated by western wheatgrass, blue grama and big sagebrush (MFWP 2002). Colonies are associated with silty clay loams, sandy clay loams, and loams (Thorp 1949, Bonham and Lerwick 1976, Klatt and Hein 1978, Agnew et al. 1986) and fine to medium textured soils are preferred (Merriam 1902, Thorp 1949, Koford 1958), presumably because burrows and other structures tend to retain their shape and strength better than in coarse, loose soils. Encroachment into sands (e.g., loamy fine sand) occurs if the habitat is needed for colony expansion (Osborn 1942).

Shallow slopes of less than 10% are preferred (Koford 1958, Hillman et al. 1979, Dalsted et al. 1981), presumably in part because such areas drain well and are only slightly prone to flooding. By colonizing areas with low vegetative stature, Black-tailed Prairie Dogs often select areas with past human (as well as animal) disturbance. In Montana, colonies tended to be associated with areas heavily used by cattle, such as water tanks and long-term supplemental feeding sites (Licht and Sanchez 1993, FaunaWest 1998).

Greater Sage Grouse

Sagebrush is the preferred habitat. They use 6 to 18 inch high sagebrush covered benches in June to July (average 213 acres); move to alfalfa fields (144 acres) or greasewood bottoms (91 acres) when forbs on the benches dry out; and move back to sagebrush (average 128 acres) in late August to early September (Peterson 1969).

Yellowstone Cutthroat Trout

Yellowstone cutthroat trout inhabit relatively clear, cold streams, rivers, and lakes. Optimal temperatures have been reported to be from 4 to 15 degrees C., with occupied waters ranging from 0 to 27 degrees C. (Gresswell 1995) (AFS website 2003).

Bobolink

Nests built in tall grass and mixed-grass prairies. Prefers "old" hay fields with high grass-to-legume ratios.

Bald Eagle

In Montana, as elsewhere, the Bald Eagle is primarily a species of riparian and lacustrine habitats (forested areas along rivers and lakes), especially during the breeding season. Important year-round habitat includes wetlands, major water bodies, spring spawning streams, ungulate winter ranges and open water areas (Bureau of Land Management 1986). Wintering habitat may include upland sites. Nesting sites are generally located within larger forested areas near large lakes and rivers where nests are usually built in the tallest, oldest, large diameter trees. Nesting site selection is dependent upon maximum local food availability and minimum disturbance from human activity (Montana Bald Eagle Working Group 1994). See the Montana Bald Eagle Management Plan (1994) for further details including home range sizes and habitat requirements of fledgling birds.

The limited aerial extent of the project and use of pre-existing diversion works will limit the impact on sensitive species. No significant impact is expected.

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.

Several small palustrine wetlands exist within a mile to two miles of the project area. These are emergent freshwater wetlands temporarily or seasonally flooded. No depletion of these wetlands or discharge into these wetlands is proposed. Therefore, the project will have no significant impact on wetlands.

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

Determination: Not applicable. This 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 soils in the region of the proposed project are predominantly fine loamy to clayey soils typified by Yamacall Loam or Ethridge Clay Loam. These soils are fine loamy mixed to fine loamy clayey soils with occasional calcareous components. They are generally well drained with low salinity and low to moderate susceptibility to frost action. The slopes in the project area are generally low.

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 existing vegetative cover would be altered to agricultural production. The use of an existing pump structure will limit impact on the riparian vegetation. Disturbance to ground cover during pipe installation could spread noxious weeds. It will be the responsibility of the property owner to monitor and control weeds.

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 project will be flood irrigation and will not cause deterioration in 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. The project is not located on state or federal land.

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 additional impacts are foreseen.

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 or 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 impact.

The area of the proposed project is historically agricultural. The project will not impact access to or the quality of recreational or wilderness activities.

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

Determination: No impact.

There are no significant adverse affects on human health from the proposed project.

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.

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 Impact: This assessment does not indicate any possible secondary impacts on the physical environment and/or the local human population.

Cumulative Impacts: This assessment does not indicate possible cumulative impacts on the physical environment and/or the local human population.

3. *Describe any mitigation/stipulation measures:* There are no mitigation measures or stipulations involved with this project.

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 only reasonable alternative to the proposed project is the no action alternative. The no action alternative would have no impacts but precludes beneficial development of the agricultural land.

PART III. Conclusion

1. *Preferred Alternative:* Issue a change authorization if 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:

No significant impacts have been identified therefore an EIS is not necessary.

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

Name: Mark Elison

Title: Hydrologist/Specialist

Date: 11/01/2013