

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

Applicant/Contact name and address: **TREASURE COUNTY CONSERVATION DIST.
P.O. BOX 388
HYSHAM, MT 59038**

1. *Type of action:* **CHANGE APPLICATION FOR WATER RESERVATION 10003-r42KJ APPLICATION NO. 42KJ 30042279**
2. *Water source name:* **YELLOWSTONE RIVER**
3. *Location affected by project:* **N½ SW¼ , SECTION 34, T7N, R36E, IN TREASURE COUNTY.**
4. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
This project is to use 88 acre feet (AF) of water reservation M10003-r42KJ for irrigation on 32 acres of alfalfa. The source of water is the Yellowstone River. The irrigation system consists of a 16-inch Crisafulli Centrifugal pump controlled by the throttle of a 108 horsepower tractor. The diversion will be 5.4 cubic feet per second (CFS) into a graded border irrigation system. The applicant is requesting to divert up to 88 acre-feet (AF) annually, with a period of diversion and period of use from April 1st – November 1st.

The DNRC will issue a provisional water use permit if all criteria for issuance under §§ 85-2-311, MCA are met.

5. *Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)*
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Treasure County Conservation District

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 is not on the Montana Fish Wildlife and Parks list of chronically or periodically dewatered streams. There will be minimal impacts on the source from this proposed use, but those impacts are not expected to be significant.

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 Yellowstone River is not on the Montana Department of Environmental Quality's list of water quality impaired or threatened streams. This proposed irrigation use is expected to have no significant impact on water quality issues in the area.

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 significant impact.

This application is requesting the use of surface water; therefore, no significant impacts to groundwater quality or quantity are expected.

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 applicants' diversion system consists of a 16-inch Crusafulli Centrifugal pump controlled by the throttle on a 150 horsepower tractor. Water is pumped from the Yellowstone River for flood irrigation of an alfalfa field using a 12 inch gated piping system between 1000 and 1750 feet in length. The applicant states water will be pumped at 5.4 CFS into the gated 12 inch PVC piping system in order to irrigate the 32 acre field with a total of 88 AF through graded border irrigation. Pump curve # L16-C modeling a High lift, variable speed sixteen-inch Crisafulli pump was used to determine flow rate for this application. The curve estimates at 150 HP and 35 feet of head, approximately 5.4 CFS (2,400 GPM) can be produced. The applicant stated there will be an approximate discharge volume of 8 AF conveyed back to the Yellowstone River via a return channel.

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.

The Montana Natural Heritage Program has identified some species of concern within this proposed project area:

Bald Eagle (*Haliaeetus leucocephalus*)

Greater Sage-Grouse (*Centrocercus urophasianus*)

Blue Sucker (*Cycleptus elongates*)

Sauger (*Sander canadensis*)

Spiny Softshell (*Apalone spinifera*)

It is not expected that this proposed project will adversely impact any of these 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.

Determination: No significant impact.

No wetlands are claimed within the project area.

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

Determination: No significant impact.

This project will increase the available water to wildlife in the area and is expected to have no effects on fish due to the volume of the remaining source.

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.

This project should not degrade soil quality or cause saline seep problems within the area.

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.

There will be some soil disturbance during construction of this proposed project and there is a possibility for spread or establishment of noxious weeds. The landowner is responsible for controlling any establishment of noxious weeds as a result of disturbance.

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

Determination: No significant impact.

No deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this project 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.

Determination: No significant impact.

The State of Montana Historic Preservation Office (SHPO), did not identify any historic or archeological sites of record in the proposed project area. This proposed use of water is not expected to have any significant impact on historical or archeological sites in the area.

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 significant impact.

There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

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 significant impact.

This proposed use is not inconsistent with any locally adopted environmental plans and goals for Treasure County.

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.

There should be no significant impacts on recreational or wilderness activities from this proposed use.

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

Determination: No significant impact.

There should be no significant impact on human health from this proposed use.

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 significant 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 significant impact.**

Cumulative Impacts: **No significant impact.**

3. *Describe any mitigation/stipulation measures:* **The final order from the Board of natural Resources includes a finding of fact stating, as conditioned, and subject to existing water rights with an earlier priority date, the applicant's water reservation will not adversely affect any senior water rights. That rule states, "For the board to adopt an order reserving water, it must find that the reservation, as proposed for adoption, will not adversely affect existing water rights, including other reservations". The application has been conditioned to require that measurements of the diversion, impoundment, conveyance, and delivery facilities be recorded throughout the life of the project.**

This change is required because the point of diversion and the place of use are different than the original project areas identified in the water reservation application. The applicant is proposing to add an irrigation project to their water reservation and has provided information to show, with the addition of this project, they will remain within the limits of the reservation. Additionally, the Treasure County Conservation District published notice of this proposed project on April 4, 2008 in the Hysham Echo and allowed for a 15 day objection period. The conservation district also sent public notices to water users downstream of the proposed point of diversion and to the contacts and agencies that are normally noticed by the Water Resources Division during the public notice process. No objections were received.

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 applicant could drill wells or haul water in by truck to supply the amount of water needed for the proposed uses. However, either of these alternatives would be very costly and it is questionable whether the water would be available in the amount requested if wells were to be used.

The “no action” alternative would mean the applicant could not have water for irrigation and therefore not be able to persist by means of agriculture.

PART III. Conclusion

1. *Preferred Alternative:* **The preferred alternative would be to allow use of water, from the Yellowstone River with the condition that there will be no adverse impacts to any senior water rights.**
2. *Comments and Responses:* **None to report.**
3. *Finding:*
Yes___ No **X** *Based on the significance criteria evaluated in this EA, is an EIS required?* **No EIS is required.**

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **No significant environmental impacts were identified, therefore no EIS is required.**

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

Name: **Mark V Corrao**
Title: **Water Resource Specialist**
Date: **January 21, 2009**