

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: **McFarland White Ranch Inc.
PO Box 235
Two Dot, MT 59085**
2. Type of action: **Application to Change an Existing Irrigation Water Right No. 40A 30119319**
- 3.
4. Water source name: **Big Elk Creek**
5. Location affected by project: **The project is located in Wheatland County near the town of Two Dot, Montana**
6. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Applicant proposes to add a point of diversion (POD) and place of use (POU) for Statement of Claim Nos. 40A 110020 and 40A 30002022. Specifically, the Applicant is proposing to add a headgate for the Dunning Ditch in the SENESW Section 26, T8N, R13E to supply up to 6.25 cubic feet per second (CFS) and 210.9 acre-feet (AF) on an additional 176.2 acres of flood irrigation in Sections 24, 25 & 26 T8N R13E. The existing POD's include a headgate for the Freezer-Montgomery Ditch located in the SESWSW Section 12 T7N R13E and a pumpsite for pivot operations in the NWSNW Section 35, T8N, R13E. The current POU includes irrigation in Section 2 T7N R13E and Sections 25, 26, 35 & 36 T8N R13E. This change, if authorized, would simply allow the Applicant to exchange water rights and reduce the amount of historical flood water used on the 176.2-acre place of use. Place of use was formerly irrigated by Statement of Claim No. 40A 110018, which was previously moved to pivot irrigation by Change Authorization No. 40A 30117289.

Additional Information:

Statement of Claim No. 40A 110020 was originally claimed with a flow rate of 19.08 CFS, however Wheatland County Case # 1834, June 1911, decreed two separate flow rates to this priority date, one for 12.5 CFS to ranch owner John H. Freezer and the other to neighboring ranch owner William R. Montgomery for 6.58 CFS. During adjudication of Statement of Claim No. 40A 110020, the Montana Water Court generated Statement of Claim No. 40A 30002022 to reflect the individual decreed flow rate for the Montgomery appropriation of 6.58 CFS. The associated flow rate for Statement of Claim No. 40A 110020 is pending a water court reduction to 12.5 CFS to match the Freezer decreed appropriation.

7. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Dept. of Environmental Quality Website – Clean Water Act Information Center
 MT. National Heritage Program Website - Species of Concern
 USDI Fish & Wildlife Service Website - Endangered and Threatened Species
 MT State Historic Preservation Office - Archeological/Historical Sites
 USDA Natural Resources Conservation Service – Web Soil Survey
 USDI Fish & Wildlife Service – Wetlands Online Mapper

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.**

Big Elk Creek is listed as a chronically dewatered stream by DFWP. The stream reach listed as chronically dewatered begins at river mile 0 and ends at river mile 10. Big Elk Creek also has FWP Instream Flow Protection/Qualifications. The table below contains information relating to DFWP’s Water Reservation.

Section: MOUTH to BIG ELK CR, LEBO FK Type: Water Reservation Granted River Miles: 0 to 23.9			
Begin Date	End Date	Flow (CFS)	Priority Date
01 / 01	12 / 31	9.50	07/01/1985

The total combined flow rate and volume on these two claims are the amounts associated with the historic flood system approved for beneficial use in previous Change Authorization No. 40A 30072653. Historical use for that change included 381.4 acres of flood irrigation with an associated flow rate of 19.08 CFS. The previous authorization allowed Applicant to add a pumpsite for pivot operations and expand the place of use to provide a portion of the water required for 378.7 acres of pivot irrigation, while also retaining 99.2 acres of historic flood irrigation.

Although the Applicants’ acres will expand, the volumes associated with the two rights to be changed are less than the amounts historically diverted. No significant impacts to water quantity are expected.

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 DEQ website does not list any information regarding Big Elk Creek. This change should not have a significant impact on water quality, diversions from Elk Creek will be reduced compared to historical use.

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.**

The place of use for the proposed flood irrigation in this proceeding was historically irrigated by Statement of Claim No. 40A 110018, however a supplemental change to Statement of Claim No. 40A 110018 was recently approved by Change Authorization No. 40A 30117289 to change the POD and POU (moved to 220 acres under Applicants' pivots). The acres will now be irrigated by Statement of Claim Nos. 40A 110020 and 40A 30002022 and the proposed change should not have a significant impact on ground water quality or supply.

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 change in point of diversion for this application will add a headgate in the SENESW Section 26, T8N, R13E to supply up to 6.25 CFS to 176.2-acres of proposed flood irrigation in Sections 24, 25 & 26 T8N, R13E. Two existing POD's are listed on the claims, a headgate for the Freezer-Montgomery Ditch located in the SESWSW Section 12 T7N R13E and a pumpsite for pivot operations in the NWSNW Section 35, T8N, R13E. The combination of the three diversions will not exceed the historical flow rate of 19.08 CFS. These three diversions are all existing infrastructure and no negative effects to channel impacts, flow modifications, barriers, riparian areas, dams, and well construction are anticipated.

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 National Heritage Program lists seven Species of Concern within Township 8 North, Range 13 East. The common names for the six bird species include Great Blue Heron, Ferruginous Hawk, Long-billed Curlew, Chestnut-collared Longspur, Mountain Plover and the McCown's Longspur. The Montana National Heritage Program also lists one fish; the Northern Redbelly Dace. The USDI Fish & Wildlife Service Report (updated 10/23/2018) indicates that Wheatland County has two species listed as threatened (Canada Lynx & Grizzly Bear), one species is proposed for listing (Wolverine) and one species is a candidate (Whitebark Pine). Since this project is associated with ground that has been previously disturbed by past agriculture practices, there is a low likelihood of impact to endangered or threatened species because of this change proposal.

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.**

The National Wetlands Inventory website shows Freshwater Emergent Type Wetlands adjacent to the source through a limited portion of the Applicant's claimed place of use. The acreage involved in this application has been previously farmed and therefore, no wetlands should not be impacted within the irrigated fields.

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

Determination: **No Significant Impact.**

This project does not involve a pond. No impact to wildlife, waterfowl, or fisheries is expected.

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 NRCS Web Soil Survey shows the predominant soil unit under the proposed flood location is the Fairway loam with 0 to 2 percent slopes. This unit consists of a silt loam mix that is somewhat poorly drained. There is a low likelihood of significant impact to soil quality because of this project, the acres have been farmed for many years.

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.**

Construction of the diversion works associated to this project was completed long before this change application was submitted, the place of use has been irrigated by another claim

for more than 100 years. Since these acres have been previously farmed, any impacts to existing cover have already occurred and have caused no significant impact thus far. It is the responsibility of the land owner to control the spread of noxious 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 Significant Impact.**

No impacts to air quality or adverse effects to vegetation are expected as a result of this proposal.

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 acres under the proposed pivot have been previously disturbed by farming, irrigation, and grazing operations. There is a low likelihood cultural properties will be affected; a cultural resource inventory is unwarranted at this time.

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.**

No additional impacts are anticipated.

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.**

No locally adopted environmental plans or goals have been 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 Significant Impact.**

The proposed action should not negatively impact recreational activities in the area.

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

Determination: **No Significant Impact.**

No impacts to human health have been identified.

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 known impacts.**

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? **None**
- (b) Local and state tax base and tax revenues? **None**
- (c) Existing land uses? **None**
- (d) Quantity and distribution of employment? **None**
- (e) Distribution and density of population and housing? **None**
- (f) Demands for government services? **None**
- (g) Industrial and commercial activity? **None**
- (h) Utilities? **None**
- (i) Transportation? **None**
- (j) Safety? **None**
- (k) Other appropriate social and economic circumstances? **None**

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

Secondary Impacts – **No secondary impacts have been identified.**

Cumulative Impacts – **No cumulative impacts have been identified.**

3. *Describe any mitigation/stipulation measures:*

No mitigation or stipulation measures have been identified by the Applicant. The Department may impose a measurement condition to ensure required criteria are met.

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: Deny the application. This alternative would result in no change to the existing water rights for irrigation.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is the proposed alternative.

2 Comments and Responses

None Received.

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:

None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524.

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

Name: Douglas D. Mann

Title: Hydrologist – LRO

Date: 7/24/2019