

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: MT Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620
2. Type of action: Application to Change Water Right
No. 41D 30051693
3. Water source name: LaMarche Creek
4. Location affected by project:

LaMarche Creek is located in the upper Big Hole River watershed, Deer Lodge County. The reach of LaMarche Creek proposed for instream fisheries protection is approximately 1.25 miles long and is located in Section 27, Township 2 North, Range 13 West.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to temporarily change Water Right Claim No. 41D 182287-00, an irrigation water right out of LaMarche Creek owned by the LaMarche Creek Ranch. The Applicant has leased water rights owned by LaMarche Creek Ranch with the intent of enhancing and maintaining instream flows in LaMarche Creek through October 19, 2020.

The Applicant is proposing to temporarily change the purpose, point of diversion and place of use of the water right claim. Pursuant to the terms of the lease agreement, the claim would be retired from its historic irrigation use for ten years and protected instream up to the historic "consumed from the reach" volume. Historically, 49.5 acres of ground located in Section 27, Township 2 North, Range 13 West, were irrigated by the water right claim proposed for change. Between May 15 and September 9, 435 acre-feet (AF) would be protected for instream fisheries use at a flow rate up to 1.875 cubic feet per second (CFS) under the temporary change authorization.

The Applicant also proposed changing a portion of Water Right Claim No. 41D 182286-00 to instream fisheries use in LaMarche Creek, while retaining the remainder of the historic appropriation for the claimed irrigation use on 45 acres in Section 27, Township 2 North, Range 13 West. The source of Water Right Claim No. 41D

182286-00 is an un-named tributary to LaMarche Creek, also known as Porcupine Spring Creek, and the historic place of use is in part supplemental with the LaMarche Creek water right claim (41D 182287-00). The DNRC found insufficient historic evidence to substantiate the water right claim's historic use (i.e. perfection of the water right). All available information indicates that LaMarche Creek water has been available to provide full service irrigation throughout the claimed period of use.

The Montana Department of Natural Resources and Conservation (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:

- MT Dept. of Environmental Quality
- MT. National Heritage Program Website - Species of Concern
- USDI Fish & Wildlife Service Website - Endangered and Threatened Species
- USDA Natural Resources Conservation Service – Web Soil Survey
- USDI Fish & Wildlife Service – Wetlands Online Mapper
- MT Dept. of Fish, Wildlife & Parks

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.

LaMarche Creek has not been identified as chronically or periodically dewatered by DFWP. However, the reach of LaMarche Creek proposed for protection is enrolled in the DFWP's and the U.S. Fish and Wildlife Service's Site-Specific Plan for the Candidate Conservation Agreement with Assurances for Fluvial Arctic Grayling in the Upper Big Hole River, a comprehensive program involving private landowners and several government agencies that seeks to improve Arctic grayling habitat in the upper Big Hole River watershed by enhancing instream flows. The intent of the change proposal is to make more water available for the LaMarche Creek fishery.

Determination: No Significant Impact

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.

No significant water quality issues have been identified by DEQ (303(d) list) for LaMarche Creek. The temporary reduction in return flows following the retirement of historically irrigated land should result in improved water quality in LaMarche Creek.

Determination: No Significant Impact

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.*

The proposed change does not involve a groundwater source. Any alterations to the rate, timing and location of return flows following the temporary retirement of 49.5 acres of historic irrigation will not adversely affect other water users or ecological resources. Flows are available year-round in LaMarche Creek to satisfy all legal water right demands in the vicinity of the proposed project.

Determination: No Significant Impact

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.*

The temporary change proposal does not involve the construction or modification of diversionary infrastructure. All water authorized to be changed under this proposal is to be left instream.

Determination: No Significant Impact

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."*

The Montana National Heritage Program lists four animal species as Species of Concern in the proposed project area: Arctic Grayling (*Thymallus arcticus*), Fringed Myotis (*Myotis thysanodes*), Hoary Bat (*Lasiurus cinereus*) and Wolverine (*Gulo gulo*). No Plant Species of Concern are listed in the area of interest.

The U.S. Fish & Wildlife Service lists Bull Trout (*Salvelinus confluentus*), Arctic Grayling (*Thymallus arcticus*), Wolverine (*Gulo gulo luscus*) and Whitebark Pine (*Pinus albicaulis*) as the listed or candidate threatened and/or endangered species in Deer Lodge County.

The intent of the proposed water right change is to enhance fisheries habitat by making more water available for instream flows. The afore-mentioned Arctic grayling is the primary species that the Applicant intends to benefit.

Determination: No Significant Impact

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

The U.S. Fish & Wildlife Service National Wetlands Inventory shows no wetlands in the vicinity of the project area. The Montana Natural Heritage Program, however, does identify “freshwater emergent wetland” on and around the historic place of use of the water right claim proposed for temporary retirement. Although LaMarche Creek waters will not sustain the wetland during the temporary change, it is noted that waters from Porcupine Spring Creek will continue to provide an element of sub-irrigation to the “man made” wetlands identified by the Natural Heritage Program.

Determination: No Significant Impact

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

Ponds are not a part of the proposed water right change.

Determination: No Significant Impact

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.*

The predominant soil types under the historic place of use of the water right claim proposed for change are the Mooseflat loam and the Mooseflat-Foolhen complexes (soil map units 114A and 514A, respectively). The soil types are characterized as being poorly drained on low-gradient slopes (0 to 8%) with no indication of salinity issues. Under the change proposal, irrigation of the place of use would be temporarily retired and no environmental impacts are anticipated.

Determination: No Significant Impact

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.*

No impacts to vegetation will occur following an increase of instream flows in LaMarche Creek. The historic irrigated place of use will continue to receive some sub-irrigation from Porcupine Spring Creek flows. If anything, the LaMarche Creek riparian vegetation community will only benefit from added flows.

Determination: No Significant Impact

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

No impacts to air quality will occur.

Determination: No Significant Impact

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.

Not applicable – project not located on State or Federal Lands.

Determination: No Significant Impact

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

No additional impacts are anticipated.

Determination: No Significant Impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

No local environmental plans or goals have been identified.

Determination: No Significant Impact

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.

The proposed project will not adversely affect access or the quality of recreational activities. The additional water left in LaMarche Creek can only improve recreational opportunities.

Determination: No Significant Impact

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

No impacts to human health have been identified.

Determination: No Significant 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 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) <u>Cultural uniqueness and diversity?</u> | N/A |
| (b) <u>Local and state tax base and tax revenues?</u> | N/A |
| (c) <u>Existing land uses?</u> | Flood irrigation will temporarily cease on historic place of use. |
| (d) <u>Quantity and distribution of employment?</u> | N/A |
| (e) <u>Distribution and density of population and housing?</u> | N/A |
| (f) <u>Demands for government services?</u> | N/A |
| (g) <u>Industrial and commercial activity?</u> | N/A |
| (h) <u>Utilities?</u> | N/A |
| (i) <u>Transportation?</u> | N/A |
| (j) <u>Safety?</u> | N/A |
| (k) <u>Other appropriate social and economic circumstances?</u> | N/A |

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

Secondary Impacts

As discussed above, historic return flow patterns are expected to change during the temporary instream flow lease. All other existing water right legal demands in LaMarche Creek will continue to be met due to the flows physically available in the source. A reduction in irrigation return flows means that more water will be available in LaMarche Creek for the enhancement of the physical environment.

Cumulative Impacts

No adverse cumulative impacts will occur following implementation of the proposed temporary change. More streamflow will be left in LaMarche Creek, benefiting the fishery and riparian ecology as a whole.

3. *Describe any mitigation/stipulation measures:*

The DNRC will require the Applicant to collect and report routine flow measurements to ensure that the changed elements of Water Right Claim No. 41D 182287-00 will not be exceed the historic use of the water right.

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 change application. This alternative would result in less instream flow protection than currently exists.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is to grant the change proposal as described above in Part 1, Section 5.

2. Comments and Responses

None received.

4. 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: Bryan Gartland

Title: Hydrologist / Water Resource Specialist

Date: January 31, 2013