

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. 41A 30051567
3. Water source name: Narrows Creek
4. Location affected by project:

Narrows Creek is located in the upper Red Rock River watershed, Beaverhead County. The area proposed for pipeline construction and fisheries habitat enhancement is located just north of Elk Lake in Section 29, Township 13 South, Range 1 East.

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

The Applicant proposes to add a point of diversion (POD) and place of use (POU) to Water Reservation Nos. 41A 30014368 and 41A 30017527. The new POD would consist of a pipeline diversion approximately 2,300 feet long that would bypass a naturally losing reach of Narrows Creek. The pipeline would be configured in a way that flows could be diverted into either the lower-most reach of Narrows Creek or into a nearby spring creek (un-named tributary of Elk Lake), hereafter referred to as "Spring Creek".

Narrows Creek has not been observed to have achieved surface water connectivity with Elk Lake for approximately 20 years, limiting the spawning habitat available to the Elk Lake fishery. Several native and non-native fish species reside in Elk Lake, but a primary goal of the proposed project is to benefit resident Arctic grayling, a candidate species under the Endangered Species Act. Indications are that fish have recently favored spawning in Spring Creek over Narrows Creek, possibly due to diminished flows in the later source. The pipeline bypass would enhance streamflows and spawning habitat in one of the two sources at any given time.

Under Water Reservation No. 41A 30014368, flows up to 1.2 CFS would be diverted via the pipeline into either spawning reach from May 1 to July 15 (180.85 AF). Under Water Reservation No. 41A 30017527, flows up to 0.5 CFS would be diverted via the pipeline into either spawning reach from July 15 to April 30 (286.54 AF).

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:
(include agencies with overlapping jurisdiction)

MT Dept. of Environmental Quality
MT. National Heritage Program Website - Species of Concern
USDI Fish & Wildlife Service Website - Endangered and Threatened Species
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.

Narrows Creek has not been identified as chronically or periodically dewatered by DFWP. The intent of the change proposal is to make more water available in two spawning reaches of the Elk Lake 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 information on Narrows Creek could be found in the DEQ's Montana Clean Water Act Information Center (CWAIC) and no other water quality issues are known to exist.

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 source proposed for change, Narrows Creek, is surface water. Installation of the pipeline bypass would reduce channel infiltration in Narrows Creek along an approximately 2,300-foot long reach, thereby altering the historic recharge regime of the Narrows Creek alluvial aquifer. However, no groundwater legal demands exist for the aquifer and all surface and groundwater

flows would eventually discharge into Elk Lake. Elk Lake is a large water body and it would attenuate any effects to downstream water users.

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.*

Narrows Creek flows would be diverted into the bypass infrastructure with a gravity screen box connected to a 10-inch pipe. The project area consists of property solely managed by the U.S. Forest Service (USFS), a partner to the spawning enhancement project. Both the Applicant and the USFS have proceeded in a manner that ensures that all ecological disturbances created by the construction of the diversion works have been appropriately addressed and mitigated.

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 Natural Heritage Program lists twelve animal species of concern located in the vicinity of the proposed project area: Black-crowned Night-Heron, White-faced Ibis, Trumpeter Swan, Bald Eagle, Golden Eagle, Franklin's Gull, Forster's Tern, Yellowstone Cutthroat Trout, Westslope Cutthroat Trout, Lake Trout, Arctic Grayling, and Wolverine. No Plant Species of Concern are listed in the area of interest.

The U.S. Fish & Wildlife Service lists Ute Ladies' Tresses, Grizzly Bear, Greater Sage-Grouse, Arctic Grayling, Wolverine and Whitebark Pine as the listed or candidate threatened and/or endangered species in Beaverhead County.

The intent of the proposed water right change is to enhance spawning habitat by making more water available in critical spawning reaches. 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 and the Montana Natural Heritage Program identify “freshwater forested/shrub wetlands” in parts of the proposed project area. The pipeline bypass could adversely affect parts of the wetlands historically sustained in

part by streamflow in Narrows Creek. However, it is noted that the proposed rerouting of water will provide more hydrologic inputs to the wetlands located on the Narrows Creek alluvial fan.

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 reservation 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.*

No degradation to soil quality or stability is anticipated to occur. Water historically protected for instream flows would only be rerouted to other reaches to serve the same purpose.

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 installation of the pipeline bypass.

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.*

The project is located on federal land where no known historical or archeological sites are known to exist. The USFS is a partner to the project and the agency has assumingly addressed all relevant considerations.

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, other than the Endangered Species Act matters previously discussed herein.

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. Enhancement of the Elk Lake fishery 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) Cultural uniqueness and diversity? N/A

(b) Local and state tax base and tax revenues? N/A

(c) <u>Existing land uses?</u>	None
(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>	None
(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>	None
(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 groundwater recharge from streambed infiltration is anticipated to change following implementation of the proposed pipeline bypass. However, Elk Lake is the receiving body for all water in the Narrows Creek alluvial aquifer and the stream reaches proposed for instream flow protection – therefore no significant environmental impacts should occur.

Cumulative Impacts

3. *Describe any mitigation/stipulation measures:*

The DNRC will require the Applicant to collect and report routine flow measurements, when practicable, to ensure that the use of Water Reservation Nos. 41A 30014368 and 41A 30017527 will not be exceed the historic parameters.

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.

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: Bryan Gartland

Title: Hydrologist / Water Resource Specialist

Date: January 31, 2013