EA Form R 1/2007

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:
Northwest Development Trust
PO Box 710
Alberton, MT 59820-0710

2. Type of action: Surface Water Application for Beneficial Water Use Permit 76M 30164389

3. Water source name: Madison Creek

4. Location affected by project: S2NE & N2SE Sec. 19, T14N, R22W

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant is seeking an increase in the volume permitted for an existing nonconsumptive hydropower generation system. Water will be diverted from a point in Madison Creek in the NENESE Sec. 19, T14N, R22W and run through a pipeline to a turbine in the NENWSE Sec. 19, T14N, R22W, after which it will be discharged by a pipe into Madison Creek in the same location. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
Montana Department of Fish, Wildlife & Parks (DFWP)
Montana Department of Environmental Quality (DEQ)
Montana Natural Heritage Program Species of Concern Report
U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory

Part II. Environmental Review

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.*

While the proposed source of supply (Madison Creek) is not identified as chronically or periodically dewatered by the DFWP, Petty Creek, to which Madison Creek is a tributary

The proposed source of supply, Madison Creek, is not identified as chronically or periodically dewatered by the DFWP. However, Petty Creek, to which Madison Creek is a tributary, is identified as chronically dewatered from Gus Creek to 1.5 miles above its confluence with the Clark Fork River. While Madison Creek empties into Petty Creek within this reach, no negative effects are anticipated due to the nonconsumptive nature of the proposed water use.

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.*

The water quality in Madison Creek has not been assessed by the DEQ. As the power generation system is already in place and the water use is nonconsumptive, no impacts to water quality are anticipated.

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 application does not involve groundwater.

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.*

Water is diverted from Madison Creek into a pipeline and carried approximately 0.3 miles downstream before passing through the turbine and being discharged back into the creek. The capacity of the turbine is 80 gallons per minute (GPM), and flow rate measurements of the creek from September 2023 to August 2024 record a low flow of 98 GPM in December and a high of 222 GPM in August. The proposed appropriation would remove between 36% and 82% of the

measured flow in Madison Creek for approximately 0.3 miles. At present, the Applicant is permitted for about half of the volume necessary to appropriate water year-round. This application would allow the Applicant to appropriate water non-stop throughout the year.

Determination: Significant reductions to the flow rate in a 0.3-mile reach of Madison Creek intermittently occur due to permitted appropriation of water for hydropower. This proposal would allow for continuous appropriation of water, resulting in a continuous reduction in flow in the affected reach.

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 website was reviewed to determine if there are any "threatened" or "endangered" fish, wildlife, plants, or aquatic species that could potentially be impacted by this project. "Species of special concern" were also included in this search.

According to the Montana Natural Heritage Program, 6 animal species of concern may be found in the area of potential impact. Two of these species are listed as "threatened" by the USFWS in this area: the Wolverine *(Gulo gulo)* and the Grizzly Bear *(Ursus arctos)*.

Animal species of concern include:
Evening Grosbeak *(Coccothraustes vespertinus)*
Fisher *(Pekania pennanti)*
Grizzly Bear *(Ursus arctos)*
Western Skink *(Plestiodon skiltonianus)*
Westslope Cutthroat Trout *(Oncorhynchus lewisi)*
Wolverine *(Gulo gulo)*

No construction or development is associated with this proposal. Significant flow reductions to a 0.3-mile reach of Madison Creek are likely to occur during a greater portion of the year as a result of this proposal. This may constitute a barrier to fish migration for Western Cutthroat Trout.

Determination: Potential impact to Western Cutthroat Trout

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

No wetlands were identified within the project area.

Determination: No significant impact

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

No ponds exist within the project area.

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 nonconsumptive use of water for hydropower generation will not affect soil quality nor cause saline seep.

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.*

As this permit is for increased volume to an already-existing hydropower system, no physical changes to the vegetative environment are anticipated. No establishment or spread of noxious weeds is expected.

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 deterioration of air quality or adverse air quality impacts from increased air pollutants are expected due to this project.

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.*

Determination: N/A – Project not located on State or Federal Lands

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 to land, water, or energy 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.*

This project does not violate any known locally adopted environmental plans or regulations.

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 inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact

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

No impacts on human health are anticipated as a result of this project.

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?* None identified

(*b)* *Local and state tax base and tax revenues?* None identified

(c) *Existing land uses?* None identified

(*d)* *Quantity and distribution of employment?* None identified

(e) *Distribution and density of population and housing?* None identified

(f) *Demands for government services?* None identified

(g) *Industrial and commercial activity?* None identified

(h) *Utilities?* None identified

(i) *Transportation?* None identified

(j) *Safety?* None identified

(k) *Other appropriate social and economic circumstances?* None identified

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

Secondary Impacts: None identified

Cumulative Impacts: None identified

3. ***Describe any mitigation/stipulation measures:*** None

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:*** None identified

PART III. Conclusion

1. ***Preferred Alternative***
Issue a water use permit if the Applicant proves the criteria in 85-2-311 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:

Madison Creek is a minor waterway, and the flow reductions resulting from the proposed use of water do not amount to a significant enough impact to warrant an EIS.

Name of person(s) responsible for preparation of EA:
Name: Benjamin Thomas
Title: Water Conservation Specialist
Date: 2/21/2025