

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: Jack E. Anderson
PO Box 522
Augusta, MT 59410
2. Type of action: Application to Change a Water Right No. 30051766 41I
(Statement of Claim Nos. 41I 127490 and 41I 127507)
3. Water source name: Tenmile Creek
4. Location affected by project: Sec. 12 & 13 T10N, R4W, Lewis and Clark County.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:
The Applicant proposes to change the purpose, place of use, point of diversion and means of diversion for two water rights. The proposed temporary change would convert two water right claims, one for stock and the other for irrigation on 140 acres, to instream flow to benefit the fisheries in Tenmile Creek. The Applicant proposes to protect 1.1 miles of Tenmile Creek in Sections 12 and 13, T10N, R4W, up to 2.5 CFS and 50.9 AF during the period of May 1 to July 10.

The DNRC shall issue an Authorization to Change if the criteria in 85-2-402, MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(Include agencies with overlapping jurisdiction)
 - Montana Department of Natural Resources (DNRC) – Bryan Gartland, Hydrologist/Water Resource Specialist
 - Montana Natural Heritage Program (MTNHP)
 - Montana Department of Environmental Quality (TMDL listing 2006 303(d)(list))
 - Montana Department of Fish, Wildlife & Parks (DFWP)(MFISH)

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.

The Montana Department of Fish, Wildlife and Parks (DFWP) identifies on its 2003 Dewatered Stream List 13.5 miles of Tenmile Creek as being chronically dewatered. The proposed temporary change would protect up to 2.5 CFS of flow left instream, thus improving the water quantity.

Determination: No 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 Montana Department of Environmental Quality 303(d) list for 2012 identifies several causes for water quality impairment for Tenmile Creek, from the Helena Treatment Plant to mouth at Prickly Pear Creek. The proposed additional flow in Tenmile Creek should not negatively affect existing water quality. The DEQ lists the quality impairments for Tenmile Creek as follows:

Probable Causes for Impairment	Probable Sources
Alteration in stream-side or littoral vegetative covers	Channelization, Habitat Modification, New Construction (Roads, Bridges, Highways, Infrastructure), Site Clearance (Land Development or Redevelopment)
Arsenic	Acid Mine Drainage, Impacts from Abandoned Mine Lands
Cadmium	Acid Mine Drainage, Impacts from Abandoned Mine Lands
Copper	Acid Mine Drainage, Impacts from Abandoned Mine Lands
Lead	Acid Mine Drainage, Impacts from Abandoned Mine Lands
Low flow alterations	Impacts from Hydrostructure Flow, Regulation/modification, Irrigated Crop Production
Mercury	Acid Mine Drainage, Impacts from Abandoned Mine Lands
Nitrogen (total)	NA
Nutrient/ Eutrophication Biological Indicators	Irrigated Crop Production
Phosphorus (total)	NA
Sedimentation/ Siltation	Habitat Modification, New Construction (Roads, Bridges, Highways, Infrastructure), Site Clearance (Land Development or Redevelopment), Irrigated Crop Production
Zinc	Acid Mine Drainage, Impacts from Abandoned Mine Lands

Determination: No 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 project is to leave water instream to enhance fisheries in Tenmile Creek and should not have any impacts to groundwater quality or supply. Due to the soil types of the historic place of use and its close proximity to Tenmile Creek, changes to return flow patterns should be minimal and will not adversely affect surface water flows.

Determination: No 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 Applicant historically diverted water from Tenmile Creek using a wooden flume box. Since the proposed temporary change is to leave water instream, no diversion will take place.

Determination: No 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 identified eight animal species of concern and one plant species of concern. The animal species of concern are: great blue heron (*Ardea Herodias*), lewis's woodpecker (*Melanerpes lewis*), pinyon jay (*Gymnorhinus cyanocephalus*), clark's nutcracker (*Nucifraga columbiana*), brewer's sparrow (*Spizella breweri*), cassin's finch (*Carpodacus cassinii*), westslope cutthroat trout (*Oncorhynchus clarkia lewisii*) and hoary bat (*Lasiurus cinereus*). The wedge-leaved saltbush (*Atriplex truncate*) is the only plant species of concern in the project area. Since the proposed project is to enhance stream flows in Tenmile Creek, no adverse impacts are anticipated.

Determination: No 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.*

Determination: This proposed project does not involve wetlands.

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

Determination: This proposed project does not involve ponds.

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 historic place of use consists primarily of Meadow-creek Fairway complex soils. The typical profile is 0 to 10 inches loam, 10 to 15 inches silt loam, 15 to 35 inches loam and 35 to 60 inches very gravelly sand. The Water Rights proposed to be changed have been severed from the historic place of use and a majority of the area is now a subdivision. Since the proposed project is to enhance instream flows, soil stability or quality is not likely to be affected.

Determination: No 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.*

The proposed project is to cease irrigation and leave water instream to improve the fisheries in Tenmile Creek. An impact to vegetative cover or spread of noxious weeds is unlikely because a large subdivision and church have been built in the middle of the historic place of use.

Determination: No impact.

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

Determination: NA

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 other demands have been identified.

Determination: N/A

HUMAN ENVIRONMENT

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

There have been no zoning or related issues identified with the project area.

Determination: No 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.

This project will increase the flow in Tenmile Creek to help improve the fisheries resource, having a positive impact on recreational and wilderness activities.

Determination: No adverse impact.

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

Determination: There will be no significant adverse impact to human health from the proposed project.

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: N/A

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 impact.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No significant adverse impact. The land was used for agriculture but has since been parceled out to vacant lots, a church and subdivision.
- (d) Quantity and distribution of employment? No impact.

- (e) Distribution and density of population and housing? Although a subdivision has been built on a portion of the historic place of use, the proposed project is to enhance instream flows in Tenmile Creek to improve the fisheries resource. No significant adverse impact.
- (f) Demands for government services? No impact.
- (g) Industrial and commercial activity? No impact.
- (h) Utilities? No impact.
- (i) Transportation? No impact.
- (j) Safety? No impact.
- (k) Other appropriate social and economic circumstances? No impact.

Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts There have been no secondary impacts on the physical environment and human population identified at this time.

Cumulative Impacts There have been no cumulative impacts on the physical environment and human population identified at this time.

Describe any mitigation/stipulation measures:

There is no mitigation involved with this proposed project. There have not been stipulation measures identified at this time. The application will go through the public notice process, and water users concerned with potential impacts will be given the opportunity to object to the proposed project. The final decision by the DNRC to grant or deny the application would not be made until all review processes are completed.

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 no action alternative would limit the applicant to exercise their water rights because they have been severed from the land and the historic place of use is now owned by different entities. The only reasonable alternative to the proposed action would to apply for another change application.

PART III. Conclusion

Preferred Alternative:

Implement the project as proposed with a volume modification.

Comments and Responses:

None.

Based on the significance criteria evaluated in this EA, is an EIS required?

Finding: Yes___ No_X__

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An environmental assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.

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

Name: Jennifer Daly

Title: Water Resources Specialist, DNRC Helena Regional Office

Date: October 29, 2012