

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:* Fish Wildlife and Parks
ATTN: Andy Brummond
P.O. Box 938
Lewistown, MT 59457
2. *Type of action:* Change Application No. 43D 30014974
3. *Water source name:* Artesian well near Big Bluewater Spring
4. *Location affected by project:* NW SW NW of Section 9 in Township 6 South, Range 24 East.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The intention of this change is to add an artesian well as an additional point of diversion to two existing water rights (43D 26064 & 43D 26063). The change does not request an increase in flow, volume, or a change in the purpose of the existing claims.

The water from these claims is used for fish raceways at the Bluewater Fish Hatchery. Currently, the source of both water rights is the Big Bluewater Spring. The artesian well was installed as a backup water source for the hatchery in 1997. After drilling the well, it increased in flow and pressure. As the artesian well increased in flow, the Big Bluewater Spring decreased in flow proportionally. The permit for the artesian well was terminated by FWP because the flow eventually exceeded the amount on the original permit.

The two existing claims were established in 1947, and have been continually used for the Bluewater Hatchery. It is the FWP assertion, supported by a good amount of credible evidence, that the new artesian well is hydrologically connected to the Big Bluewater Spring.

The benefit of this change would be that Fish Wildlife and Parks would add as a source, an artesian well, this will allow them to continue using the historic flow and volume of the two existing water rights. The original source of these claims has reduced in flow as the artesian well has increased.

6. *Agencies consulted during preparation of the Environmental Assessment:*

(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)

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: The Bluewater Creek is not listed as chronically or periodically dewatered by Department of Fish Wildlife and Parks.

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: The source for the proposed change is ground water and should have no effect on water quality in the project area.

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: The change to the existing permit will not increase flow or volume and as such should have no additional impact on ground water quantity. The artesian well flows with considerable pressure and does not require a backflow preventer.

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: The Fish Wildlife and Parks have kept excellent records about the artesian well's history and performance. Currently the well produces 1300 GPM and maintains a pressure of 13 PSI. The well casing has a 10 inch diameter and is equipped with an adequate flow meter. The entire flow of the well is piped into the Big Bluewater Spring and in turn is used in the hatchery.

It was expressed in the change application that while there is a control valve on the well, there is a concern from hydrology professionals that the well would blow out if the valve were closed. The artesian well as it exists now has supplied water to the fish raceways for several years without waste.

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: The Montana Natural Heritage Program found four vascular plants and one vertebrate animal that are species of special concern in the project area. The Milk Snake, the Joe-Pye Weed, the Giant Helleborine, the Swamp Milkweed, and the Beaked Spike rush all have habitats that overlap the project area.

The construction for this project was completed in 1997; therefore any impact would have already happened.

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: There should be no impacts to wetlands from this proposed use.

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

Determination: The water from this diversion has been used in the Fish Raceways for more than eight years. There would be no impact if this change was authorized. If this change for some reason is not approved there would be a certain negative impact on the Big Bluewater Fishery.

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: The proposed change should not degrade soil quality or cause saline seep problems in the area.

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: There is not expected to be any additional impact on vegetative cover. The Fish Wildlife and Parks will control noxious weeds around the facility.

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

Determination: There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: The Montana Historic Preservation Office identified the Bluewater Spring and the Bluewater Springs Fisheries as historic sites of record in the project area. This use of water is not expected to have any additional impact on these historical sites.

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: There should be no additional impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

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

Determination: This proposed use is not inconsistent with any locally adopted environmental plans and goals for Carbon County.

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: The proposed change would have only a positive impact on recreational or wilderness activities due to the benefit to the Big Bluewater Hatchery.

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

Determination: There should be no significant impact on human health from this proposed use.

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? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact

- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

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

Secondary Impacts: There is not expected to be any secondary impacts downstream of the Big Bluewater Spring. There may however, be eventual changes on the flow and pressure of the artesian well. As a result, the Big Bluewater Spring may eventually change in flow and pressure proportionally. This possible secondary impact may not be serious if the FWP continue proactive management of the Bluewater Fish Hatchery.

Cumulative Impacts: If more development takes place in this area, there will be more demands on ground and surface water for stock, irrigation, and other uses. Increased development could cause impacts on all water users and increased pressure on ground and surface water.

3. *Describe any mitigation/stipulation measures:*

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:*

The alternatives are difficult in this matter. One reasonable alternative would be that the FWP apply for a separate permit for the artesian well. Though, this would result in the Bluewater Fish Hatchery having two original claims that exceed what is available from the source described on those water rights. The flow and volume of the original claims would need to be changed to match what is available from the Big Bluewater Spring.

In this situation the “no action” alternative is not possible. The FWP is forced to take action to resolve this issue one way or another.

PART III. Conclusion

1. **Preferred Alternative:** The preferred alternative would be to allow the FWP to add the artesian well to the two existing water rights.
2. **Comments and Responses:** None to report
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: No significant environmental impacts were identified. No EIS is required.

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

Name: Tim Lewis

Title: Water Conservation Specialist

Date: January 28, 2015