

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: Thomas C Ryan, PO Box 117, Billings, MT 59103
2. Type of action: Application for Beneficial Water Use Permit 43D 30068847
3. Water source name: Willow Creek
4. Location affected by project: SWNW Section 27 T5S R20E, Carbon County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to create a 6.4 AF fishery from an abandoned gravel pit. The allocated water would keep the water in the fishery oxygenated and cool. The fishery would be stocked with rainbow trout.

The DNRC shall issue a change authorization if an applicant proves the criteria in 85.2.311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:  
Montana State Department of Fish, Wildlife and Parks  
Montana State Department of Environmental Quality  
United States Fish and Wildlife Service  
Montana Natural Heritage Program  
United States Department of Agriculture Natural Resource Conservation Service

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

**PHYSICAL ENVIRONMENT**

**WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** – The source of water for this project is Willow Creek. The water requested is already allocated through an active irrigation water right. No additional water would be used by this proposed fishery. Willow Creek is not listed as a chronically or periodically dewatered stream by the Montana Department of Fish, Wildlife and Parks. A USGS gage on Willow Creek downstream of the proposed fishery indicates that the creek is not dewatered. The proposed

project is not located in the floodplain and would cause no changes to drainage patterns or flood risk.

*Determination:* No Impact.

**Water quality** – Willow Creek is listed as not supporting aquatic life by the Montana Department of Environmental Quality. Other uses were not assessed. The probable causes of impairment were low flow alterations and sedimentation. The proposed project would not impact the bed or banks of the stream. Return flows from the fishery would be less impacted in terms of temperature, dissolved solids and turbidity than return flows from the previous irrigation use. Because the gravel pit that will be used for the fishery is already in place, no construction will be required.

*Determination:* No Significant Impact.

**Groundwater** – The proposed project will store water in a reservoir that will be partially lined. The area is underlain, in part, by gravel and the gravel pit is partially filled from groundwater flow into the pit. Little interaction will occur between the fishery and the groundwater due to the lining and a small proportion of water currently used for irrigation will be diverted to the fishery so that there will be little impact on infiltration.

*Determination:* Not Significant Impact.

**DIVERSION WORKS** – The project uses an existing headgate, an existing gravel pit and existing field ditches for conveyance. There will be no changes in diversion works from Willow Creek and all water will move through the existing Doty Ditch to the fishery. There will be no flow modifications, temporary or permanent dewatering or channel impacts and the fishery will not create any barriers within the creek.

*Determination:* No Impact.

#### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** – According to the Montana Natural Heritage Program, the United States Fish and Wildlife Service and the Bureau of Land Management list the Greater Sage Grouse and Yellowstone Cutthroat Trout as sensitive species of concern in the affected region. The Bald Eagle is a species of special status. There are no local plant species of concern. This project increases habitat for birds and will be examined by the Montana Department of Fish Wildlife and Parks for screening and other technical concerns before permitting.

*Determination:* No Impact.

**Wetlands** – There are no mapped wetlands in the potentially affected region according to the United States Fish and Wildlife Service National Wetlands Inventory. The transition from an abandoned gravel pit to a fishery would add functioning wetlands to the area.

*Determination:* Possible Positive Impact.

**Ponds** – The transition from an abandoned gravel pit with highly variable water levels to a maintained fishery would have a positive impact on the availability of habitat for existing wildlife and the requirements of the Department of Fish, Wildlife and Parks would prevent impacts to native fish populations.

*Determination:* No Impact.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - The area of the proposed project is entirely composed of Lohler silty clay loam. This soil is typically slightly alkaline and moderately well drained. The abandoned gravel pit indicates local coarse grained sediments. The project will change a gravel pit to a fishery and, therefore, will not change soil quality or moisture content. The soils are not rich in salt and the slopes in the area are uniformly low.

*Determination:* No Impact.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** – There is no vegetative cover in the proposed project area because it is a partially flooded gravel pit. The project would fill and stock the gravel pit for a fishery and would not change vegetative cover and has no likelihood of spreading noxious weeds.

*Determination:* No Impact.

**AIR QUALITY** – The project has no connection to air quality and no activities that would produce dust, odors, or other impacts to air quality.

*Determination:* No Impact.

**HISTORICAL AND ARCHEOLOGICAL SITES** – The project is not located on State or Federal land so this section is not applicable. Moreover, the excavation of the gravel pit has already occurred and no further disruption of the area is intended.

*Determination:* Not Applicable.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** – There are no recognized demands on natural resources or environmental resources that have not been addressed above.

*Determination:* No Impact.

<b>HUMAN ENVIRONMENT</b>
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** – There are no known applicable locally adopted environmental plans and goals.

*Determination:* No Impact.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** – The proposed project covers a surface area of 1.6 acres and is located entirely within property used for agriculture. There are no recreation or wilderness access paths across the property and the project will not create negative viewshed impacts.

*Determination:* No Impact.

**HUMAN HEALTH** – There are no recognized impacts on human health.

*Determination:* No 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:* Not Applicable.

**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 Impact.
- (d) Quantity and distribution of employment? No Impact.
- (e) Distribution and density of population and housing? No 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.

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

Secondary Impacts: No secondary impacts are recognized for the formation of a fishery from an abandoned gravel pit.

Cumulative Impacts: There are no pending projects in the area that would lead to cumulative impacts and the total number of water projects in the area is small.

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:*** The two alternatives are the proposed plan and the no action alternative. The no action alternative prevents the land owner from creating the fishery and enhancing his property. The no action alternative does not prevent any significant impacts on the environment or natural resources and so has no specific benefit.

### *PART III. Conclusion*

1. ***Preferred Alternative:*** Issue a change authorization 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:* No significant impacts of any kind were recognized or foreseen and, therefore, an environmental assessment is the appropriate level of analysis.

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

*Name:* Mark Elison

*Title:* Hydrologist

*Date:* 8/11/2014