

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:* **David Grusin
700 Garcia St.
Santa Fe, NM 87505**

Contact: **Pond & Stream Consulting
ATTN: Scott Davis
626 Ferguson Ave. Suite 1
Bozeman, MT 59718**
2. *Type of action:* **Beneficial Water Use Permit Application 43BJ 30022347**
3. *Water source name:* **West Boulder River**
4. *Location affected by project:* **NE SE NE of Section 16, Township 2 South, Range 13 East in Sweet Grass County.**
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
The application proposes to build an artificial spawning channel next to the West Boulder River near the town of Mc Leod. The proposed channel will be approximately 480 feet long and eight feet wide. It intends to divert 2 CFS from the West Boulder River to flow through the spawning channel. The diversion works include a 12 inch perforated PVC pipe buried under the stream bed of the West Boulder River and controlled by an Agri-Drain gate valve. The water will then return to the West Boulder River through the proposed spawning channel. The DNRC will issue a provisional water use permit only if all criteria for issuance under MCA 85-2-311 are met.
6. *Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)*

Montana Natural Heritage Program Montana Historic Preservation Office Montana Dept of Fish Wildlife & Parks Montana Dept of Environmental Quality Sweet Grass County	Endangered / Threatened Species information Cultural Resource Inventory 2005 Dewatered Stream information 2006 TMDL information
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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.

Determination: The Boulder River is listed as a Chronically Dewatered stream. The West Boulder is not listed but because the proposed diversion is approximately one mile before the confluence of the West Boulder River and the Boulder River it appears that any consumptive use will adversely impact the Chronically Dewatered nature of the Boulder River. Pond & Stream Consulting and the DNRC staff hydrologists agree that the artificial spawning channel will create little if any net increase in consumption. The impact on water quantity in the West Boulder and the Boulder River will depend on if construction is done responsibly and how the project is managed.

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 Boulder River is listed as water quality impaired by the DEQ for Alteration in stream-side or littoral vegetative covers, Chromium, Nickel, Nitrate/Nitrite, and Total Kjehldahl Nitrogen. There is an on going TMDL for each of these water quality problems. The West Boulder River is not listed on the DEQ TMDL report but because the proposed construction is less then a mile before the West Boulder flows into the Boulder some concern about the negative impact of this project is warranted.

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: This proposed use of water should have no impact on groundwater quality or quantity in the area.

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 proposed diversion works include a 12 inch PVC perforated pipe buried under the streambed of the West Boulder River and controlled by an Agri-Drain gate valve. The pipe will channel 2 CFS into the artificial stream channel on the Grusin's private property. If the application is approved it will be required that a flow measuring device be installed on the pipe. The construction of the diversion works will have some impact on the West Boulder River channel and it will reduce the existing flow in the river by 2 CFS. It is expected that all appropriate permits will be acquired by the applicant before doing any construction.

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 identified the Small Yellow Lady's Slipper as the only species of concern within this project area. It is not expected that this development will adversely impact this species.

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 are no wetlands within the project area.

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

Determination: This project does not involve a reservoir.

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 artificial spawning channel is planned to be built immediately next to the West Boulder River over alluvium gravel. There should be no degradation of soil quality or stability due to this construction. Saline seep is not an issue with this project.

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: Much of construction for this project has already been done. The installation of the diversion works may have some impact on stream side vegetation. It's expected that the land owner will take an active roll in preventing the spread of noxious weeds and the rehabilitation of the vegetation after the construction is complete.

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 State Historic Preservation Office recommended, based on the likelihood of historically significant sites in this area, and the lack of a previous cultural resource inventory, a cultural resource inventory should be conducted in order to determine whether or not sites exist and if they will be impacted by this project.

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 is not expected to be any other significant 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 Sweet Grass 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 project diverts 2 CFS from the West Boulder River onto private property to supply an artificial spawning channel. This will impact the access and quality of recreation. It is difficult to tell if the negative impact on recreation access and the privatization of this portion of the river outweigh the possible benefit to the West Boulder River fish habitat. It depends on how the construction is done and how the project is managed.

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.

1. *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: The privatization of this portion of the West Boulder River impacts users with recreation and other valid uses. While this development may help fish populations in the West Boulder River it does propose to divert 2 CFS onto private land at the expense of the original stream channel.

Cumulative Impacts: If this permit is granted it may impact how “beneficial use” is defined in the case of aesthetic improvements of property and how broadly the “fishery” use could be used in the future. The privatization of public waters for a vague beneficial use may have unforeseen impacts on water permitting in Montana.

There are also cumulative impacts with regards to the overall development of water resources in the Boulder River Basin and future impacts on the resource if more development of this kind takes place. Competition between water users will increase as more water is appropriated for private use.

3. *Describe any mitigation/stipulation measures:* **None described in application.**

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:*

PART III. Conclusion

1. *Preferred Alternative* **The preferred alternative is for the land owner to improve the existing stream bank with out diverting water out of the river onto private property.**

Because this is an elective project and the beneficial use is difficult to quantify, the “No Action” alternative would cause no negative impacts to the applicant or the environment.

2. *Comments and Responses:* **None to report**

3. *Finding:*

4. *Yes* *No* *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: **The impacts identified depend largely on how the construction and management of the project is done. The largest concern is how this application will impact water use policy in Montana and that this application proposes to divert water out of a stream channel for an unclear beneficial use. No EIS is required.**

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

Name: **Tim Lewis**

Title: **Water Resources Specialist**

Date: **February 5, 2015**