

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: **Sieben Ranch Company**  
**P.O. Box 1683**  
**Helena, Montana 59624**
2. Type of action: **Application to Change Water Right No. 41QJ 22801 00**
3. Water source name: **Levings Gulch**
4. Location affected by project: **Sec 9 and 10, T13N, 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 point of diversion (POD), the place of use (POU), the purpose of use, and the maximum flow rate for Water Right No. 41QJ 22801 00.**

**The historic diversion consists of a diversion structure and associated 12-inch diameter pipeline. The historic POD is located on BLM owned land, SESENE of Section 10, T13N, R4W. The Applicant proposes moving the POD several hundred feet downstream onto land owned by the Applicant. A new diversion structure and associated 8-inch diameter pipeline would be constructed at the new POD.**

**The historic POU is a 55-acre irrigated field located south of the historic POD, Section 10, T13N, R4W. The Applicant is proposing to permanently retire the 55-acre POU. The proposed POU is a hydroelectric generator located near the ranch headquarters, in Section 9, T13N, R4W in Lewis and Clark County. Water diverted from Levings Gulch would be used to produce power for the ranch facilities.**

**The purpose of use for Water Right No. 41QJ 22801 00 would change from irrigation to hydroelectric power generation. The hydroelectric power generation would be considered non-consumptive. Water used by the hydroelectric generator would be discharged into a drainage ditch that confluences with Clark Creek.**

**Water Right No. 41QJ 22801 00 has a historic maximum flow rate of 2.08 CFS with a period of diversion from March 15 to November 15. The proposed change would reduce the maximum diverted flow rate to 0.45 CFS and would not change the period of diversion.**

The DNRC shall issue a change authorization if an applicant proves 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**  
**Montana Department of Natural Resources (DNRC) – John Connors, CES**  
**Montana Department of Natural Resources (DNRC) – JenniferDaly, WRS**  
**Montana Natural Heritage Program (MTNHP)**  
**USDA Natural Resources Conservation Service (NRCS)- WSS**  
**Montana Department of Fish, Wildlife and Parks (DFWP)- MFISH**

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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#### **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:* **No apparent adverse impact.**

**Levings Gulch is not included on the list of chronically or periodically dewatered streams.**

**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:* **No apparent adverse impact.**

**Levings Gulch is not listed on the 303(d) list of impaired and threatened streams. The project does not cause any apparent adverse affects on water quality according to DEQ water quality criteria.**

**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:* **No apparent adverse impact.**

**The project may cause changes in the timing and quantity of groundwater discharge into Clark Creek, but any depletion should be offset by the discharge water from the hydroelectric generator to Clark Creek.**

**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:* **No apparent adverse impacts.**

**The historic POD will be relocated several hundred feet downstream. The new diversion structure should have a similar configuration to the historic diversion structure.**

**Construction activities in the stream bed may require additional permits from the Army CORPS of Engineers, Montana Department of Fish Wildlife and Parks, and the Montana Department of Environmental Quality.**

**Construction of the diversion structure should not create a barrier to fish or other aquatic species. Levings Gulch is a non-perennial stream and surface water does not confluence with Clark Creek for a significant portion of the year.**

**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:* **No apparent adverse impact**

**According to MTNHP there are twelve species of concern in proximity to the project area.**

**The following are the listed species of concern:**

- **Bald Eagle (*Haliaeetus leucocephalus*)**
- **Long-billed Curlew (*Numenius americanus*)**
- **Lewis's Woodpecker (*Melanerpes lewis*)**
- **Clark's Nutcracker (*Nucifraga columbiana*)**
- **Veery (*Catharus fuscens*)**
- **Sage Thrasher (*Oreoscoptes montanus*)**
- **Brewer's Sparrow (*Spizella breweri*)**
- **Bobolink (*Dolichonyx oryzivorus*)**
- **Fringed Myotis (*Myotis thysanodes*)**
- **Black-tailed Prairie Dog (*Cynomys ludovicianus*)**
- **Fisher (*Martes pennant*)**
- **Wolverine (*Gulo gulo*)**

**The project does not constitute a significant change to the surrounding ecosystem, so there are no apparent impacts to the above listed 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:* **The proposed project does not involve any apparent wetlands.**

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

*Determination:* **The 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.

*Determination:* **No apparent adverse impact.**

**The project area consists predominantly of Sieben Gravelly Loam in an alluvial fan deposit. The soil is typically well drained with a depth to water table of greater than 80-inches. The soil is considered nonsaline. The typical profile for Sieben Gravelly Loam is:**

- **0-inches to 9-inches: Gravelly Loam**
- **9-inches to 17-inches: Very gravelly clay loam**
- **17-inches to 41 inches: Very gravelly loam**
- **41-inches to 60-inches: Extremely gravelly loam**

**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:* **No apparent adverse impact.**

**The historic POU was infrequently irrigated. The proposed changes to Water Right No. 41QJ 22801 00 do not represent a significant change to the existing conditions at either the historic POU or the proposed POU.**

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

*Determination:* **No apparent adverse 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:* **The proposed project is not located on state or federal land so this section is not applicable.**

**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:* **No apparent adverse impacts.**

## HUMAN ENVIRONMENT

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

Determination: **No apparent adverse impacts.**

**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: **No apparent adverse impacts.**

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

Determination: **No apparent adverse impacts.**

**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 apparent adverse impacts.**

**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 apparent adverse impacts.**
- (b) Local and state tax base and tax revenues? **No apparent adverse impacts.**
- (c) Existing land uses? **No apparent adverse impacts.**
- (d) Quantity and distribution of employment? **No apparent adverse impacts.**
- (e) Distribution and density of population and housing? **No apparent adverse impacts.**
- (f) Demands for government services? **No apparent adverse impacts.**
- (g) Industrial and commercial activity? **No apparent adverse impacts.**
- (h) Utilities? **No apparent adverse impacts.**
- (i) Transportation? **No apparent adverse impacts.**
- (j) Safety? **No apparent adverse impacts.**

(k) Other appropriate social and economic circumstances? **No apparent adverse impacts.**

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

Secondary Impacts **No apparent adverse impacts.**

Cumulative Impacts **No apparent adverse impacts.**

3. ***Describe any mitigation/stipulation measures: There is no mitigation involved with the proposed project. There have not been stipulations measures identified at this time.***

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: No reasonable alternatives have been identified.***

***PART III. Conclusion***

1. ***Preferred Alternative: No reasonable alternatives have been identified.***

2. ***Comments and Responses: None at this time.***

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: 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:*** John Connors, P.E.

***Title:*** Civil Engineering Specialist, DNRC Helena Regional Office

***Date:*** January 11, 2012