

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:* Stillwater Mining Company  
PO Box 1227  
Big Timber, MT 59047
2. *Type of action:* Application to Change an Existing Water Right
3. *Water source name:* East Boulder River, Brownlee Creek and Unnamed Tributaries
4. *Location affected by project:* T4S, R13E, Sections 2, 3, 4, 11, 19, 20, 21, 22, 26, 27, 28, 29, 33, 34, 35, 36; T4S, R12E, Sections 13, 14, 24; T5S, R13E, Sections 1, 2 and 12.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*  
The application requests to add points of diversion and places of use to existing water right number 43BJ 86300-00 for industrial uses. 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 Natural Heritage Program	Endangered-Threatened Species
Montana Department of Fish Wildlife & Parks (MFWP)	Dewatered Stream Information
Montana Department of Environmental Quality (MDEQ)	TMDL Information

**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:* No impact

East Boulder River is on the DFWP list of Chronically Dewatered Streams from the Forest Service Boundary to the mouth. Brownlee Creek and the Unnamed Tributaries to Brownlee Creek and the East Boulder River are not on the DFWP list of chronically and periodically dewatered streams. This is an application to change an existing water right, there will be no increase in diversion rate or consumptive use.

**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 impact

East Boulder River is on the DEQ list of water quality impaired streams. There will be no increase in diversion from East Boulder River and there will be no discharge of water into the river.

**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 Impact

This proposed use of water should have no significant impact on groundwater quality or quantity in the area. All exploratory drilling will be done according to accepted practices.

**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:* Minor Impact.

There will be various types of diversion associated with this change depending on the location and type of use. The system will use an electric instream Flygt pump with a 3" diameter impeller connected to a 3" HDPE pipeline with an inline flow totalizer meter. They will use screened gravity flow poly HDPE pipelines or pumps where gravity cannot be utilized. Diversions will be in deep pools in the stream and will utilize a flow through/around design. For drilling, maintenance, and construction activities that do not require continuous flow, holding tanks or sumps may be used at the project location. While there will be some ground disturbance at the diversion sites, these diversions should not impact channels, flow, barriers, riparian areas dams, or well 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: Minor Impact*

The Natural Heritage Program identified the following species of concern within the project area: Wolverine, Canada Lynx, Grizzly Bear, Hoary Bat, Northern Goshawk, Brown Creeper, Peregrine Falcon, Cassin's Finch, Harlequin Duck, Clark's Nutcracker, Yellowstone Cutthroat Trout, and also listed the Ovenbird as a potential species of concern. The noise and commotion of this project may have some impact on the habitat of these animals. The impact should be minor and will be temporary.

**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: No Impact*

The project area is not within a wetland, so there should be no significant impacts to wetlands from this proposed use.

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

*Determination: Minor impact*

One of the proposed points of diversion is from Sheer Zone Ponds located in Section 35, T4S, R13E. It is expected that the applicant will take care not to impact existing wildlife, waterfowl or fisheries at these 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 Impact*

Water will be used for industrial purposes, there should be no degradation of soil quality, alteration of soil stability, or moisture content. There should be no saline seep from these uses of water.

**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: Minor Impact*

There will be some soil and vegetation disturbance during construction of the proposed project and there will be a possibility of some noxious weeds spread and establishment. It is expected that the Stillwater Mining Company will take an active role to reduce that risk.

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

*Determination:* No Impact

There should be no deterioration of air quality 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 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:* NA-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.

*Determination:* No Impact

There should be no 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:* No Impact

This proposed use is not inconsistent with locally adopted environmental plans and goals for Stillwater 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:* No Impact

Due to the remote location and lack of trails in the project area, this project should have minimal impacts on recreational or wilderness activities from this proposed activity.

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

*Determination:* No Impact

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 Any secondary impacts of this water use are overshadowed by the impacts of the larger mine operation that is occurring around the project.

Cumulative Impacts This water use is expected to have no impact on water users downstream.

**3. Describe any mitigation/stipulation measures:** The applicant is aware that they would be required to cease diverting water if that use is adversely impacting the rights of downstream users.

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 proposed activity is reasonable, and is within accepted practices for the ongoing mine operations and mineral exploration. The no action alternative may force the Stillwater Mining Company to either truck or fly the water they need for this activity to the site or drill wells that are exempt from permitting. This would require more traffic and equipment that may create more impacts on the environment.

*PART III. Conclusion*

1. **Preferred Alternative** To authorize the change and allow this project to continue

2 **Comments and Responses**

3. **Finding:**

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:* No significant environmental impacts were identified. No EIS required.

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

*Name:* Christine Smith

*Title:* Water Resources Specialist

*Date:* June 10, 2013