

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: **CASINO CREEK ENTERPRISES  
PO BOX 3501  
LEWISTOWN, MT 59457**
2. Type of action: **Application to Change a Water Right 41S 30064275**
3. Water source name: **Boyd Creek, Big Casino Creek, Burnett or Burnette Creek and Big Spring Creek**
4. Location affected by project: **Section 20 T16N R17E, Section 4 T15N R18E and Sections 32 & 33 T16N R18E (Fergus County)**
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

**Applicant seeks to add a tributary source of water and change the Point of Diversion (POD) and Place of Use (POU) for the following Water Rights. The following table reflects the industrial purpose of the water rights to be changed, irrigation is also included on three rights, however no changes to the irrigation purpose are proposed. Applicant was authorized a partial change in 2005 (41S 30000873) to accommodate an industrial purpose, specifically an aggregate wash plant on Big Spring Creek for a gravel mining operation. The maximum use authorized in the 2005 partial change to industrial use was 1.94 CFS up to 51.2 AF annually.**

Table 1: WATER RIGHTS PROPOSED FOR CHANGE:

<b>WR Number</b>	<b>Purpose</b>	<b>Flow Rate</b>	<b>Volume</b>	<b>Period of Use</b>	<b>Point of Diversion</b>	<b>Place of Use</b>	<b>Priority Date</b>
41S 100150 00 (Boyd Creek, added Big Spring Creek)	Industrial (No Change to Irrigation Purpose)	1.0 Cubic Feet per Second (CFS)	6.8 Acre-Feet (AF)	4/15-10/19	NESWNE Sec 20 T16N R17E	N2 & N2NESE Section 20 T16N R17E	June 6, 1881
41S 100152 00 (Big Spring)	Industrial (No Change to	1.94 CFS	51.2 AF	4/15-10/19	NESWNE Sec 20 T16N	N2 & N2NESE Section 20	April 20, 1886

Creek)	Irrigation Purpose)				R17E	T16N R17E	
41S 100153 00 (Big Spring Creek)	Industrial (No Change to Irrigation Purpose)	1.94 CFS	51.2 AF	4/15-10/19	NESWNE Sec 20 T16N R17E	N2 & N2NESE Section 20 T16N R17E	May 3, 1887
41S 135282 00 (Big Spring Creek, formerly Burnett Creek)	Industrial	1.44 CFS	42.3 AF	4/1-10/31	NESWNE Sec 20 T16N R17E	N2 & N2NESE Section 20 T16N R17E	April 29, 1882
41S 22520 00 (Big Spring Creek, formerly included Big Casino Creek)	Industrial	150 Gallons per Minute (GPM)	13.0 AF	1/1-12/31	NESWNE Sec 20 T16N R17E	N2 & N2NESE Section 20 T16N R17E	April 24, 1979

**Applicant seeks to add a source of water, and change the point of diversion (POD) and place of use (POU) on the industrial portion of the above water rights to accommodate a new wash plant for gravel mining operations. Burnett Creek, also known as Burnette Creek, is tributary to Big Spring Creek and will be added as a new source of water. Burnett Creek was the source of water for Statement of Claim No. 41S 135282 00, which was modified by the 2005 change authorization. The primary POD will move from Big Spring Creek in the NESWNE Section 20 T16N R17E to Burnett Creek in the NENWSW Section 33 T16N R18E, Fergus County. A contingent POD will remain in Big Spring Creek to accommodate diversions in the SWSWNW Section 4 T15N R18E. In the event there is not sufficient water in Burnett Creek in Section 33, the Applicant will pump water from Big Spring Creek in Section 4 to fill trucks for mobile transport. The POU will change from the N2 and N2NESE Section 20 T16N R17E to the NENESE Section 32 T16N R18E.**

**Industrial water use is a beneficial use and the Applicant has long been in the business of operating a gravel mining, crushing and wash plant to meet its needs as a gravel and concrete supplier.**

6. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)

**Dept. of Environmental Quality Website - TMDL 303d listing  
MT. National Heritage Program Website - Species of Concern  
USDI Fish & Wildlife Service Website - Endangered and Threatened Species  
MT State Historic Preservation Office - Archeological/Historical Sites  
USDA Natural Resources Conservation Service – Web Soil Survey  
USDI Fish & Wildlife Service – Wetlands Online Mapper  
Montana Fish, Wildlife & Parks – MFISH Website**

## 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 Significant Impact**

In this change proceeding the Applicant is requesting to move from a more consistent and reliable source of water (Big Spring Creek) to a less reliable source of water (Burnett Creek) located adjacent to the new wash plant. Neither of the reaches of interest in Burnett Creek or Big Spring Creek described in this application has been identified as a chronically or periodically dewatered stream by DFWP. Whereas, the Applicant will be required to measure appropriations from each of the two diversions being changed, will be required to leave water for downstream stock use and will be limited to the same consumptive use associated with the historic wash plant operation, this project will not have a significant impact on surface water quantity in the Big Spring Creek watershed. Burnette Creek, however, will experience reductions in flow up to 275 gpm. The Applicant is proposing to use a contingent point of diversion on Big Spring Creek during times flows in Burnett Creek are insufficient to pump 275 gallons per minute and supply downstream stock water.

**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 Significant Impact**

The reach of the Big Spring Creek downstream of this project has been designated as fully supporting drinking water and agricultural beneficial uses, but not fully supporting primary contact recreation or aquatic life. The 303d listing identifies impairments to recreation and aquatic life support probably caused by riparian degradation, permitted aquaculture, contaminated sediment (PCB's), high Phosphorous levels and sedimentation/siltation. As mentioned above, Burnett Creek is a less consistent source of supply than Big Spring Creek and the Applicant will be required to leave water in the source for a downstream stock water right. No significant impacts to water quality are anticipated because of this project; consumptive water use will remain the same.

**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 Significant Impact**

There should be no significant impact to groundwater quality or supply. The Applicant is proposing to use the new wash plant in the same manner as the previous wash plant; location of seepage return flows will move upstream to Burnett 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 Significant Impact**

Applicant is requesting to move its appropriations works from Big Spring Creek to Burnett Creek. A contingent POD will remain in Big Spring Creek and the Applicant maintains that in the event there is not sufficient water in Burnett Creek, the Applicant will pump water from Big Spring Creek to fill trucks for mobile transport. Applicant's attorney provided current pump information with the application for a 15-HP Aermoter model 66MB250-15. This same pump has been utilized at the previous wash plant on Big Spring Creek since the 2005 change authorization. Considering Applicant's lift to the storage pond, pump specifications indicate a maximum capacity of 275 GPM is achievable. There is potential for the Applicant to dewater the reach of Burnett Creek below their point of diversion, however the Applicant maintains they will measure all appropriations and use the contingent diversion on Big Spring Creek when Burnett Creek flows are insufficient for their diversion and downstream stock water use. The proposed change is not expected to have any significant impacts because of the diversion works.

**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 Significant Impact**

The Montana National Heritage Program website lists three birds and a fish species as Species of Concern within Township 16 North Range 18 East. Common names for these species are the Great Blue Heron, the American Bittern, Clark's Nutcracker and the Northern Redbelly Dace. The website lists five Potential Animal Species of Concern, a bird, two fish and two insects. No plant species are listed. The USDI Fish & Wildlife Service Website shows that Fergus County has two species listed as candidates for the Endangered Species Act; the Greater Sage-Grouse and Sprague's Pipit. The website also lists the Black-footed Ferret and the Pallid Sturgeon as endangered and the Canada Lynx as threatened. This project is not expected to impact any species listed above as the project will be located on acreage that has been previously disturbed by past gravel mining operations. The MT MFISH website shows that FWP Management in Burnette Creek designates the water type as non-trout water for the entire length of the creek (River Miles 0.0 to 8.8).

**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 Significant Impact**

The acreage involved in this change application has been previously disturbed by gravel mining. The USDI Fish & Wildlife Service – Wetlands Online Mapper shows an offstream freshwater pond about 400 feet south from Applicants point of diversion and two freshwater emergent type wetlands about 850 feet south of Burnett Creek. No impacts to existing wetlands are expected because of this project.

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

Determination: **No Significant Impact**

This project involves a storage pond and three settling ponds constructed within the gravel mining area. Total surface acreage of the four offstream ponds is approximately 2.6 acres. Wildlife and waterfowl may beneficially use the ponds, however no significant impacts to wildlife, waterfowl, or fisheries is anticipated.

**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 Significant Impact**

The predominant soil type under the gravel mining operation is the Tamaneen clay loam, a well-drained clay loam to gravelly sandy loam profile. This soil composition is largely nonsaline and should not contribute to saline seep issues.

**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 Significant Impact**

Other than short-term effects from power, pump and pipeline installation, no new disturbance of vegetative cover is expected. The acres under the proposed gravel mining operation have been previously disturbed. It is the responsibility of the property owner to control noxious weeds on their property.

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

Determination: **No Significant Impact**

**No impacts to air quality have been identified. The pump will be powered by an electric motor.**

**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:*           **No Significant Impact**

**Not Applicable – 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 Significant Impact**

**No significant impacts are anticipated. There will be an increase in electrical energy consumption at the Burnett Creek plant, however all power consumption at the Big Spring plant will cease.**

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

*Determination:*           **No Significant Impact**

**No local environmental plans or goals have been identified.**

**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 Significant Impact**

**The proposed action should not negatively affect recreational activities in the area.**

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

*Determination:*           **No Significant Impact**

**No impacts to human health have been identified.**

**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? **None**
- (b) Local and state tax base and tax revenues? **None**
- (c) Existing land uses? **Gravel washing adjacent to Big Spring Creek will cease.**
- (d) Quantity and distribution of employment? **None**
- (e) Distribution and density of population and housing? **None**
- (f) Demands for government services? **None**
- (g) Industrial and commercial activity? **None**
- (h) Utilities? **Location of power consumption will change.**
- (i) Transportation? **None**
- (j) Safety? **None**
- (k) Other appropriate social and economic circumstances? **None**

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

Secondary Impacts:

**As mentioned above, the Applicant is requesting to add a tributary source of water, Burnett Creek that is less consistent and reliable than the current source of water, Big Spring Creek. There is potential to dewater the tributary source from Applicant's point of diversion downstream to Big Spring Creek during times Burnett Creek has low flows. The Applicant will be required to measure all appropriations and states they will leave water in the source for downstream stock water use.**

Cumulative Impacts:

**No cumulative impacts have been identified.**

3. *Describe any mitigation/stipulation measures:*

**The Department may or may not deem specific conditions necessary to meet the statutory criteria for changes of water right set forth at § 85-2-402, MCA. These**

**conditions would be required in the Departments' preliminary determination, if applicable.**

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 action alternative: Deny the change application. This alternative would result in no change to the existing water rights for industrial use.**

*PART III. Conclusion*

1. *Preferred Alternative*

**The preferred alternative is the proposed alternative.**

2. *Comments and Responses*

**None Received.**

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:*

**None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524**

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

*Name:* **Douglas Mann**  
*Title:* **Water Resources Specialist**  
*Date:* **4/15/2014**