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: Diamond T Bar Ranch, Inc.
521 E Peach STE 2B
Bozeman, MT 59715

2. Type of action: Application For Beneficial Water Use Permit
43D-30050523

3. Water source name: Rock Creek

4. Location affected by project: Project is nonconsumptive and has no affect.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This project proposes to add an inline hydro-project to existing irrigation system infrastructure. Water will be diverted from Rock Creek, by means of the Rock Creek Clear Creek (RCCC) Ditch headgate, from April 1st through October 31st at 25 CFS up to 10,609 AF. The RCCC Ditch headgate is in the SENWSW Section 9, T8S, R20E, Carbon County. The proposed diversion is for power generation from April 1st through October 31st. The place of use (hydropower plant) is generally located in the SENWNE Section 21, T7S, R21E, Carbon County. The proposed power plant will reuse water from an existing up-gradient power plant (Water Right No.43D 54097-00) and water already being diverted for irrigation from Rock Creek (Water Right No.s 43D 6532-00, 43D 6533-00, 43D 6534-00 and 43D 6535-00). There will be no change in the historic diversion of Rock Creek or any of its tributaries, which are subject to an administrative basin closure.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Department of Environmental Quality Website – TMDL 303d Listing
Montana National Heritage Program Website – Species of Concern
United States Fish and Wildlife Website – National Wetland Inventory
Montana Department of Fish Wildlife and Parks – Dewatering Concern Areas
Montana Bureau of Mines and Geology – Geologic Map, Red Lodge 30'x60' Quadrangle

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.

Rock Creek is listed by the Montana DFWP as a chronically dewatered stream from Red Lodge to its confluence with the Clarks Fork River. This is a nonconsumptive appropriation which will not increase the amount of water diverted from Rock Creek.

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.

Rock Creek is listed on the Montana DEQ website, Clean Water Act Information Center. Aquatic Life, Cold Water Fisheries, and Primary Contact Recreation have been impaired due to chronic dewatering or habitat modification. There are no potential effects to water quality due to the nonconsumptive nature of the proposed appropriation. This appropriation will use water already diverted under an existing water right.

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.

The application includes only surface water from Rock 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 impact.

The primary diversion from Rock Creek, for the Rock Creek Clear Creek Ditch is a headgate control structure. The headgate, in some form, has been used for the past 100 plus years. The existing irrigation system has proven adequate for supplying irrigation to the Diamond T Bar

Ranch. The only proposed change to the existing system is the replacement of an existing pressure reducing valve for a hydropower plant.

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 impact.

The proposed project will not change the historic diversion pattern of Rock Creek.

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.

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

Determination: This project does not involve a pond.

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 long-term impact.

The soil will be temporarily disturbed when the existing pressure reducing valve is removed and the hydropower plant is installed. Permanent degradation to the soil quality, stability, or moisture content is not anticipated.

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 long-term impact.

The land will experience a brief disturbance during construction, but should not result in the establishment or spread of noxious weeds. The control of noxious weeds is the responsibility of the property owner.

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.

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.*

Determination: No Impact, the 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: This assessment did not identify additional impacts on environmental resources.

HUMAN ENVIRONMENT

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

Determination: There are no known environmental plans or goals in this area.

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.

HUMAN HEALTH - *Assess whether the proposed project 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: No 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 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: This assessment does not indicate potential secondary impacts on the physical environment or human population.

Cumulative Impacts: This assessment does not indicate potential cumulative impacts on the physical environment or the human population.

3. ***Describe any mitigation/stipulation measures:*** Not 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:***

The no action alternative is the only available alternative. If the no action alternative were followed, the applicant would not benefit from the power generation. This would increase operation costs.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is the nonconsumptive generation of power from water that is already being diverted for irrigation use.

2 Comments and Responses

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:

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

Name: Brad Bennett
Title: Hydrologist/Specialist
Date: March 14, 2011