

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Revised 11-00

Note: Instructions to DNRC staff for preparing this EA can be found at:
http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

Applicant/Contact name and address:
DANNY MC CULLUM
6474 JACKSON CREEK ROAD
BOZEMAN, MT 59715
41H-G©092548, GALLATIN CO.

1. **Type of action: REPLACEMENT WELL**
2. **Water source name: GROUNDWATER**
3. **Location affected by action: SW NW SW, SEC 21 TWP. 01S RANGE 07E**
4. **Narrative summary of the proposed project, purpose, action to be taken, and benefits:**
REPLACE A NON-PRODUCTIVE WELL.

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: SEE BELOW AS TO GROUNDWATER

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: SEE BELOW AS TO GROUNDWATER

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 WELL SHOULD AHAVE NO EFFECT ON APPROPRIATORS BECAUSE WATER IS USED TO SUPPLY ONLY A SINGLE DWELLING. DNRC REGULATIONS REQUIRE A BACK FLOW PREVENTION DEVICE AS A CONDITION OF ISSUENCE OF A PERMIT TO INSURE NO IMPACT ON WATER QUALITY.

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 DRILLER ‘S LICENSE # 380. AS THIS PROJECT IS UTILIZING GROUND WATER, THERE WILL BE NO CHANNEL IMPACTS, FLOW MODIFICATIONS, BARRIERS OR IMPACTS TO RIPARIAN AREAS

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: THERE ARE NO THREATENED OR ENDANGERED SPECIES, OR SPECIES OF SPECIAL CONCERN, WITHIN THE PROJECT AREA

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 KNOWN WETLANDS EXIST IN THE PROJECT AREA

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

Determination: NOT APPLICABLE - THIS APPLICATION WILL BE USING GROUNDWATER.

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 PROJECT LOCATION IS NOT KNOWN FOR SALINE SEEP PROBLEMS.

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: DRILLING A NEW WELL WILL CAUSE VERRY LITTLE DISRUPTION TO THE SURFACE.

Air quality

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

Determination: THE ADDITION OF A WELL WILL LIKELY HAVE NO EFFECT ON AIR QUALITY.

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 WELL TO BE DRILLED WILL LIKELY HAVE NO IMPACTS

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

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 LOCALLY ADOPTED ENVIRONMENTAL PLANS AND 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

Human health

Assess whether the proposed project impacts on human health.

Determination: NO SIGNIFICANT 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 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 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 ? NONE

2. **Secondary and cumulative impacts on the physical environment and human population:** A NEW REPLACEMENT WELL COULD LOWER, DEWATER OR IN SOME WAY IMPACT THE AQUIFER. THIS COULD CAUSE PROBLEMS WITH OTHER WELL OWNERS.

3. **Describe any mitigation/stipulation measures:** THE USE OF THIS WELL COULD POTENTIALLY DEWATER OTHER WELLS IN THE AREA. BY LOWERING THE AQUIFER IT COULD CREATE UNDUE EXPENSES FOR LOCAL WELL OWNERS

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:**

ALTERNATIVE #1 – NO REASONABLE ALTERNATIVES EXIST

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? NO

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

AN EA IS ADEQUATE FOR THIS ACTION BECAUSE THERE WILL BE NO SIGNIFICANT ENVIRONMENTAL IMPACTS; THEREFORE AN EIS IS NOT REQUIRED.

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

Name: PORTER DASSENKO

Title: WATER RESOURCES SPECIALIST

Date: 12/28/00