

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: Gallatin Airport Authority
850 Gallatin Field Road Suite #6
Belgrade, MT 59714
2. Type of action: Application for Beneficial Water Use Permit
41H-30048319
3. Water source name: Groundwater
4. Location affected by project: SW Sec. 6 T1S, R5E, Gallatin County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The application for the beneficial water use permit under consideration is a proposal to divert groundwater from a well for the purpose of cooling the Gallatin Field Airport at 850 Gallatin Field Road, Belgrade Montana. This application is requesting 1120 gallons per minute, up to an annual volume of 570.47 acre-feet for a period of use from January 1 through December 31. The diverted groundwater will be injected back into the groundwater aquifer through an injection well after passing through the building air conditioning system. 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:
(include agencies with overlapping jurisdiction)

Dept. of Environmental Quality Website – Clean Water Act Information Center
MT. National Heritage Program Website - Species of Concern
USDI Fish & Wildlife Service Website - Endangered and Threatened Species
USDA Natural Resources Conservation Service – Web Soil Survey
USDI Fish & Wildlife Service – Wetlands Online Mapper

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 impacts identified.
See ground water section below.

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 impacts identified.
See ground water section below.

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: The proposed project is expected to have minimal impacts to ground water supply and quality. The proposed system uses diverted groundwater that interacts with a heat exchanger for air conditioning purposes. After use, the diverted groundwater is returned to the groundwater source via an injection well.

The source of groundwater is the local alluvial aquifer that is tributary to the Gallatin River. The applicant conducted an aquifer test and submitted a hydrologic assessment report that indicated no depletions to any surface water source in the affected area. The applicant has presented information that indicates no impacts to a surface water source.

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 impacts identified.
A licensed well driller constructed the production and injection wells. The applicant provided copies of the well driller's logs with the application.

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 impacts identified.
Research provided by the Montana Natural Heritage Program

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 impacts identified.
There are no wetlands associated with the proposed project.

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

Determination: No impacts identified.
There are no ponds associated with the proposed project.

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 impacts identified.
No water will be applied to soils in the area from the proposed project. The diverted water will pass through a heat exchange system and be injected into the groundwater aquifer.

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 impacts identified.
Some soil disturbance has occurred with the construction of the production and injection wells. The expansion to the existing building has created considerable soil disturbance.

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

Determination: No impacts identified.
The construction of wells may result in the spread of some dust. This dust would have been short in duration and not a factor after wells are completed.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: No impacts identified
This project is not located on state or federal land and 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 impacts identified.
No additional impacts are anticipated.

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 impacts identified.

The proposed project is consistent with locally adopted plans and goals. The proposed system is projected to provide a cost effective and efficient method of air conditioning.

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 impacts identified.

The construction of wells for air conditioning the Gallatin Field Airport will not limit access to wilderness of recreational activities.

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

Determination: No impacts 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 impacts identified.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- | | |
|--|-----------------------|
| (a) <u>Cultural uniqueness and diversity?</u> | No impacts identified |
| (b) <u>Local and state tax base and tax revenues?</u> | No impacts identified |
| (c) <u>Existing land uses?</u> | No impacts identified |
| (d) <u>Quantity and distribution of employment?</u> | No impacts identified |
| (e) <u>Distribution and density of population and housing?</u> | No impacts identified |
| (f) <u>Demands for government services?</u> | No impacts identified |
| (g) <u>Industrial and commercial activity?</u> | No impacts identified |
| (h) <u>Utilities?</u> | No impacts identified |
| (i) <u>Transportation?</u> | No impacts identified |

(j) Safety? No impacts identified

(k) Other appropriate social and economic circumstances? No impacts identified

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

Secondary Impacts No secondary impacts have been identified

Cumulative Impacts No cumulative impacts have been identified

3. Describe any mitigation/stipulation measures: Mitigation or stipulations are not planned 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: The no action alternative is the only alternative to the proposed action. Under the no action alternative, the applicant would be unable to obtain a water right for the proposed geothermal cooling system.

PART III. Conclusion

1. Preferred Alternative. Obtain a water right for the proposed purpose.

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:

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

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

Name: Porter Dassenko

Title: Water Resource Specialist

Date: November 9, 2010