

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:

Flathead Municipal Airport Authority
4170 Highway 2 East
Kalispell, MT 59901

2. Type of action:

Beneficial Water Use Permit

3. Water source name:

Groundwater

4. Location affected by project:

The proposed wells are located approximately 8,500 feet from the Flathead River, 2,040 feet from Trumbull Creek, 9,800 feet from Spring Creek, 9,400 feet from Gooderich Bayou, and 7,100 feet from the Whitefish River.

NE ¼ of the SW ¼ of NE ¼ of Section 3, Township 29N, Range 21W, Flathead County, Montana.

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

The Applicant proposes to divert water from the Flathead Deep Aquifer, by means of two wells drilled to 255 and 235 ft, from January 1 to December 31 at 140 GPM up to 15.46 AF, from a point in the NE ¼ of SW ¼ of NE ¼ of Section 3, Township 29N, Range 21W, Flathead County, Montana, for Commercial beneficial use. The Applicant proposes to provide potable water to airport patrons via a PWS approved and monitored by the Montana DEQ. The place of use is generally located in Government Lot 3 in the NE ¼ of SW ¼ of NE ¼ of Section 3, Township 29N, Range 21W, Flathead County, Montana.

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:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resource Conservation Service (NRCS): Web Soil Survey

76LJ 30163930- Flathead Municipal Airport Authority



Legend

- ★ Proposed POD
- ▨ Proposed Place of Use (POU)
- ▭ Township & Range
- ▭ Section

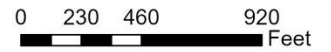
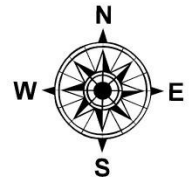


Figure 1: Map of Proposed Place of Use and Points of Diversion

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.

Although the source of water for this proposed beneficial water use permit is groundwater, the inherent link of groundwater to surface water implies that withdrawal of water for this project could ultimately affect water levels in the Flathead River and Flathead Lake. The Flathead River system are not listed as chronically or periodically dewatered by the Montana Department of Fish and Wildlife.

Determination: No significant impact.

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.

Flathead River north of Flathead Lake has not been assessed in the available records.

Flathead Lake is classified as oligotrophic, meaning the waters are clear, cold, and biodiverse with low nutrients and high oxygen levels. In this assessment, Flathead Lake was deemed fully supporting for agricultural, drinking water, and primary contact water uses. The Lake was deemed not fully supporting of aquatic life, due to low levels of mercury, polychlorinated biphenyls (PCBs), total nitrogen, and total phosphorus.

Withdrawal of groundwater water via wells will not affect water quality.

Determination: No significant impact.

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.

For purposes of modeling depletions from drawdown, a recommended aquifer Transmissivity (T) of 1,652 ft² per day and Storativity (S) of 1.1×10^{-4} was derived from the Hantush (1960) solution applied to the data submitted from the January 24, 2024 aquifer test on the West PWS well (POD #2). Based on these values, drawdown is the largest at the end of the fifth. The 1-foot drawdown contour would occur at 1.1 ft from the proposed wells, and zero groundwater rights are predicted to experience drawdown equal to or greater than one foot.

Surface Water:

The proposed wells are located approximately 8,500 ft from the Flathead River, 2,040 ft from Trumbull Creek, 9,800 ft from Spring Creek, 9,400 ft from Gooderich Bayou, and 7, 100 ft from the Whitefish River. Of these sources, the Whitefish River and Flathead River were considered to be connected to the

shallow aquifer (more details in the Groundwater Permit Technical Analysis Report Part A generated for this application, available upon request).

There will be no adverse effects to senior surface or groundwater appropriators on potential affected surface and groundwater sources resulting from the Applicant's proposed use of water based on:

- a. The Applicant's plan to regulate their water use to satisfy the water rights of senior appropriators;
- b. The analysis of potential drawdown in neighboring wells demonstrating that there are zero wells anticipated to experience drawdown from the proposed appropriation;
- c. The Department's finding that water is legally available in the aquifer; and,
- d. The Department's finding that water is legally available in the hydraulically connected reaches of Flathead River and Flathead Lake.

Determination: No significant impact.

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.*

The proposed project will utilize two public water supply (PWS) wells completed in the Flathead Deep Alluvial Aquifer (Deep Aquifer). The East well, POD #1, is drilled to a depth of 235 feet BGS and is perforated between 219-234 feet BGS. The West Well, POD #2, is drilled to a depth of 255 feet BGS and a perforated interval between 205-220 feet BGS. The two wells, which are 50 feet apart, both have a static water level at 15 feet BTC. The two wells will operate on an alternating schedule pumping up to 140 GPM (peak instantaneous demand) up to 15.46 AF per year.

A Franklin Electric 6 inch Sand Fighter 10-horsepower 3-phase submersible motor equipped with a Franklin Electric 6-inch SSI series 10-horsepower 150SSI pump end is installed in each of the wells. The pumps are controlled by a variable frequency drive (VFD) set to maintain system pressure at 60 PSI. The total dynamic head (TDH) of the system at a pumping rate of 140 GPM is 216.34 feet based on:

- a. The maximum operating pressure of 60 PSI (equivalent to 200.14 feet of head);
- b. The 16-foot elevation gain from the static water level to the control room; and,
- c. Friction losses for 16 feet of 4-inch galvanized drop pipe (0.25 feet of head).

Water is conveyed from the well heads through a pitless adaptor and via 440 feet of 4-inch diameter PVC (DR18, C900) pipe to the mechanical room located in the basement of the terminal building, where water is then distributed for various commercial uses throughout the building.

The proposed appropriation is permitted by Public Water Supply (PWS) #MT0000929, which is actively monitored by the Montana Department of Environmental Quality (DEQ).

Determination: No significant impact.

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.”

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern” in Township 29N, Range 21W that could be impacted by the proposed project. Forty-two animal and thirty plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Canada Lynx (*lynx canadensis*), the Grizzly Bear (*Ursus arctos*), the Wolverine (*Gulo gulo*), the Bull Trout (*Salvelinus confluentus*), the Whitebark Pine (*Pinus albicaulis*), and the Spalding’s Catchfly (*Silene spaldingii*) are listed as threatened by the USFWS. This area is already developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern in Township 30N, Range 21 W, Flathead County, Montana.

Species Group	Common Name	Scientific Name	U.S. FWS – Status under the Federal Endangered Species Act of 1973
Mammals	Canada Lynx	<i>Lynx canadensis</i>	Listed Threatened; Critical Habitat
	Fisher	<i>Pekania pennanti</i>	
	Grizzly Bear	<i>Ursus arctos</i>	Listed Threatened
	Hoary Bat	<i>Lasiurus cinereus</i>	
	Little Brown Myotis	<i>Myotis lucifugus</i>	
	Long-eared Myotis	<i>Myotis evotis</i>	
	Townsend’s Big-eared Bat	<i>Corynorhinus townsendii</i>	
	Wolverine	<i>Gulo gulo</i>	Listed Threatened
Birds	American Bittern	<i>Botaurus Lentiginosus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	American Goshawk	<i>Accipiter atricapillus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Black Tern	<i>Chlidonias niger</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern (BCC), Regions 10, 11, 17
	Bobolink	<i>Chlidonias niger</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern (BCC), Regions 10, 11, 17
	Boreal Chickadee	<i>Poecile hudsonicus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Brewer’s Sparrow	<i>Spizella breweri</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Brown Creeper	<i>Certhi americana</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Cassin’s Finch	<i>Haemorhous cassinii</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern, Region 10
	Clark’s Nutcracker	<i>Nucifraga Columbiana</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern, Region 10
	Golden Eagle	<i>Aquila chrysaetos</i>	Bald and Golden Eagle Protection Act of 1940 (BGEPA); Migratory Bird Treaty Act of 1918 (MBTA)
	Gray-crowned Rosy-Finch	<i>Leucosticte tephrocotis</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Great Blue Heron	<i>Ardea Herodias</i>	Migratory Bird Treaty Act of 1918 (MBTA)

	Great Gray Owl	<i>Strix nebulosa</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Harlequin Duck	<i>Histrionicus histrionicus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Horned Grebe	<i>Podiceps auratus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Lewis's Woodpecker	<i>Melanerpes lewis</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern, Regions 10, 17
	Long-billed Curlew	<i>Numenius americanus</i>	Migratory Bird Treaty Act of 1918 (MBTA); Birds of Conservation Concern, Region 11
	Pacific Wren	<i>Troglodytes pacificus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Pileated Woodpecker	<i>Dryocopus pileatus</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Trumpeter Swan	<i>Cygnus buccinator</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Varied Thrush	<i>Ixoreus naevius</i>	Migratory Bird Treaty Act of 1918 (MBTA)
	Veery	<i>Catharus fuscescens</i>	Migratory Bird Treaty Act of 1918 (MBTA)
Reptiles	Northern Alligator Lizard	<i>Elgaria coerulea</i>	
Amphibians	Northern Leopard Frog	<i>Lithobates pipiens</i>	
	Western Toad	<i>Anaxyrus boreas</i>	
Fish	Bull Trout	<i>Salvelinus confluentus</i>	Listed Threatened; Critical Habitat
	Pygmy Whitefish	<i>Prosopium coulterii</i>	
	Westslope Cutthroat Trout	<i>Onchorhynchus clarkii lewisi</i>	
Invertebrates	Suckley Cuckoo Bumble Bee	<i>Bombus suckleyi</i>	
	Hooked Snowfly	<i>Isocapnia crinite</i>	
	Alberta Snowfly	<i>Isocapnia integra</i>	
	Oblique Ambersnail	<i>Oxyloma nuttallianum</i>	
	A Cave Obligate Isopod	<i>Salmasellus steganothrix</i>	

Table 2. Plant Species of Concern in Township 30N, Range 21 W, Flathead County, Montana.

Species Group	Common Name	Scientific Name	USFWS Status
Vascular Plants	Sweetflag	<i>Acorus americanus</i>	
	Geyer's Onion	<i>Allium geyeri var. geyeri</i>	
	Beck Water-marigold	<i>Bidens beckii</i>	
	Watershield	<i>Brasenia schreberi</i>	
	Sparrow's Egg Lady's-slipper	<i>Cypripedium passerinum</i>	
	English Sundew	<i>Drosera anglica</i>	
	Beaked Spikerush	<i>Eleocharis rostellata</i>	
	Giant Helleborine	<i>Epipactis gigantea</i>	
	Marsh Horsetail	<i>Equisetum palustre</i>	
	Meadow Horsetail	<i>Equisetum pratense</i>	
	Slender Cottongrass	<i>Eriophorum gracile</i>	
	Water Star-grass	<i>Heteranthera dubia</i>	
	Latah Tule Pea	<i>Lathyrus bijugatus</i>	
Kalm's Lobelia	<i>Lobelia kalmia</i>		

	Pygmy Water-lily	<i>Nymphaea leibergii</i>	
	Whitebark Pine	<i>Pinus albicaulis</i>	Listed Threatened
	Pod Grass	<i>Scheuchzeria palustris</i>	
	Water Bulrush	<i>Schoenoplectus subterminalis</i>	
	Sprangletop	<i>Scolochloa festucacea</i>	
	Spaulding's Catchfly	<i>Silene spaldingii</i>	Listed Threatened
	Tufted Club-rush	<i>Trichophorum cespitosum</i>	
	Flatleaf Bladderwort	<i>Utricularia intermedia</i>	
	Columbia Water-meal	<i>Wolffia Columbiana</i>	
Bryophytes	Short-beaked Aloe Moss	<i>Aloina brevirostris</i>	
	Schreber's Dicranella Moss	<i>Dicranella schreberiana</i>	
	Schreber's Dicranella Moss	<i>Grimmia brittoniae</i>	
	Meesia Moss	<i>Meesia uliginosa</i>	
	Lyall's Polytrichum Moss	<i>Meiotrichum lyallii</i>	
	Warnstorfia Moss	<i>Sarmentypnum exannulatum</i>	
	A Scorpidium Moss	<i>Scorpidium scorpioides</i>	
Norwegian Syntrichia Moss	<i>Syntrichia norvegica</i>		
Lichens	Pustulate Tarpaper Lichen	<i>Collema curtisporum</i>	

Determination: No significant impact.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

N/A- There are no wetlands in the immediate vicinity of the project location.

Determination: No significant impact.

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

N/A; the proposed project does not include ponds.

Determination: No significant impact.

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.

Soils in the area are dominated by fine sandy loams, existing as terrace and outwash fan formations derived from alluvium, according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey. The bulk of the soils in the project area have a slight slope/erodibility rating in terms of erodibility from unsurfaced roads, trails, off road and off trail areas. The soils in the project area are given the hydrologic soil rating of B, which have moderate infiltration rates and a moderate rate of water transmission. Soil groups throughout the area have low content of sodium, calcium, potassium, and magnesium minerals and are thus minimally susceptible to saline seep.

Determination: No significant impact.

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.*

According to the Montana Natural Heritage (MNHP) Map Viewer, the land cover within the project area is dominated by human uses such as commercial development, low-density residential units, railways, roadways, and agriculture.

Of the noxious weed species in Montana, Spotted Knapweed, Tall Baby's breath, and Scotch Thistle are the most dominate. The classification of the project area according to the MNHP Montana Invasive Weed Dashboard is in the top 10% of cumulative invasion risk. It is the landowner's responsibility to exercise due diligence in the spread of noxious weeds.

Determination: No significant impact.

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

According to the USDA Web Soil Survey, soils in this area have low to moderate resistance to dust propagation, therefore there is likelihood of fugitive dust as a result of development. It is the responsibility of the landowner and developer to minimize the effects of fugitive dust when developing the land.

Determination: No significant 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. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

N/A- project not on State or Federal Lands.

Determination: No significant impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

N/A

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 significant impact.

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.*

This project is to supply potable water to an existing airport, and therefore no access or quality of recreational or wilderness activities will be impeded.

Determination: No significant impact.

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

All wastewater from this project will be disposed of with permitted onsite drainfields. It is the responsibility of the landowners and developers to obtain proper permitting from local regulatory agencies and oversee proper installation of onsite wastewater treatment systems.

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 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?
None.
- (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?

None.

(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

None.

Cumulative Impacts

None.

3. *Describe any mitigation/stipulation measures:*

It is the responsibility of the landowner and developer to mitigate any environmental risks in development and use of this property.

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 alternative to the proposed issuance of this beneficial water use permit is the no action alternative.

PART III. Conclusion

1. Preferred Alternative

Authorize a water right change if the Applicant proves the criteria in 85-2-311 MCA are met.

2. Comments and Responses

None.

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:

No significant impacts related to the proposed project have been identified.

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

Name: Kristal Kiel

Title: Water Resources Specialist

Date: 02.06.2025