ENVIRONMENTAL ASSESSMENT

August 18, 2025

Water Quality Division
Montana Department of Environmental Quality

PROJECT/SITE NAME:	**Glacier Ranch Subdivision, with the Glacier Park International Airport Addition**	
APPLICANT/COMPANY NAME: Alpine Pacific Utilities, LLC		
PROPOSED PERMIT NUMBER: MTX000164 (Montana Ground Water Pollution Control System)		
LOCATION: SESE, Section 09, Township 29 North, Range 21 West Latitude: 48.28400°, Longitude: -114.27052°		**COUNTY: Flathead**
PROPERTY OWNERSHIP:	**FEDERAL ____ STATE ____ COUNTY__X__ PRIVATE __X__**	

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1. OVERVIEW OF PROPOSED ACTION

1.1. AUTHORIZING ACTION

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action, described in **Section 1.3** below, is considered a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) has prepared an environmental review. This Environmental Assessment (EA) examines the proposed action and alternatives to the proposed action and discloses potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

1.2. DESCRIPTION OF DEQ REGULATORY OVERSIGHT

1.2.a. Montana Water Quality Act

DEQ administers the Montana Water Quality Act, issuing Montana Ground Water Pollutant Control System (MGWPCS) discharge permits pursuant to Title 75, Chapter 5, part 4, Montana Code Annotated (MCA). Regulations governing MGWPCS permitting are codified at Administrative Rules of Montana (ARM) Title 17, Chapter 30, Sub-chapter 10.

1.2.b. Montana Public Water Supply Act

DEQ implements the Public Water Supply Act, reviewing public water and wastewater systems pursuant to Section 75-6-101, et. seq., MCA. Rules authorized by the act are adopted in ARM Title 17, Chapter 38, Sub-chapter 1. Circular DEQ-2: Design Standards for Public Sewage Systems is adopted and incorporated by reference into ARM 17-38-101.

1.2.c. Montana Sanitation in Subdivision Act

DEQ implements the Sanitation in Subdivision Act, reviewing public water and wastewater systems pursuant to Section 76-4-101, et. seq., MCA. Rules authorized by the act are adopted in ARM Title 17, Chapter 36, Sub-chapter 1. Circular DEQ-4: Montana Standards for Subsurface Wastewater Treatment Systems is adopted and incorporated by reference into ARM 17-36-101.

1.3. PROPOSED ACTION

Alpine Pacific Utilities, LLC (APU) applied to modify their existing Glacier Ranch Subdivision MGWPCS permit. The first permit issued in 2007 was for the existing drainfield located within the Glacier Ranch Subdivision. In 2023, the Permittee proposed to add additional capacity with new drainfields located on the Glacier Park International Airport (GPIA) lands. DEQ will be addressing both sites within the modified permit. The facility is located on private and county (airport) lands in between Kalispell and Columbia Falls, Flathead County, Montana (**Figure 1**).

The Permittee plans to expand the existing treatment system into a centralized facility to treat wastewaters from all sources. The existing drainfield will be maintained to dispose of wastewater from the Glacier Ranch Subdivision. To meet the capacity of the new airport connection, new drainfields have been proposed within airport property. The proposed location is to the Southwest of the main airport runway, approximately 3,000 feet to the North of the Glacier Ranch Subdivision (**Figure 2**). The airport is

administered by the Flathead Municipal Airport Authority (FMAA).

APU has yet to submit engineering plans to DEQ's Engineering Bureau. The future engineering review may result in modifications or restrictions that may need to be addressed within a future major modification action for the MGWPCS permit.

All information included in this EA is derived from the MGWPCS permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools. See the MGWPCS Fact Sheet (MT DEQ, 2025) and references cited in **Section 7** for more information.

Table 1. Summary of Proposed Action

Proposed Action	
General Overview	The proposed action is to modify the existing individual MGWPCS permit with the addition of new drainfields to handle the added capacity of wastewater generated by the airport. The permit contains effluent limitations, special conditions, best management practices, wastewater monitoring and reporting, and ground water monitoring and reporting requirements. The permit is issued under the authority of the Montana Water Quality Act. Design, construction, operation, and maintenance of the treatment and disposal systems for the proposed airport addition is regulated by DEQ's Engineering Bureau under the authority of the Montana Public Water Supply Act and the Sanitation in Subdivisions Act. Engineering plans for the modifications have not yet been received by DEQ. Therefore, the EA associated with the engineering actions will be completed at a later time. The MGWPCS permitting action will regulate the discharge of pollutants to ground water by imposing effluent limitations and special conditions including requirements for monitoring wastewater and ground water quality for a five-year permit duration. See the Permit for the legally binding requirements and the Fact Sheet for the technical rationale behind permitting decisions.
Personnel Onsite	**Operation:** A part-time contractor/operator for wastewater and ground water sampling.
Location and Analysis Area	Existing Glacier Ranch Subdivision ***Location:*** NENE, Section 16, Township 29 North, Range 21 West; Latitude: 48.28356°, Longitude: -114.27033° Proposed Airport Property ***Location:*** SWNE, Section 09, Township 29 North, Range 21 West; Latitude: 48.29422°, Longitude: -114.27431° ***Analysis Area:*** The area being analyzed as part of this environmental review includes the immediate project areas (**Figure 2**), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.
The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.	

Air Quality	No air quality regulations apply for issuance of the MGWPCS permit.
Water Quality	The applicant proposes to modify existing MGWPCS permit coverage and to comply with permit requirements.
Erosion Control and Sediment Transport	Erosion control and sediment transport regulations do not apply to a domestic wastewater treatment plant. Applicable construction stormwater regulations and permits are discussed below in **Section 2.2 and Section 5**.
Solid Waste	No solid waste regulations apply for issuance of the MGWPCS permit.
Cultural Resources	DEQ consulted the Montana Cultural Resource Database on 06/04/2025. No historical sites may be present in the new project area. The permitting action will not affect cultural resources.
Hazardous Substances	Hazardous waste disposal is not allowed under the MGWPCS permit.

Cumulative Impact Considerations	
Past Actions	The existing Glacier Ranch Subdivision wastewater system was first established in 2007. It has since maintained MGWPCS permit coverage and is included within Present Actions to modify existing coverage. There is no history of wastewater systems occurring within the portions of the proposed airport project area. Surrounding properties have septic systems regulated by Flathead County. The ambient nitrate concentration in the shallow receiving aquifer measured by the permittee during the application process was 1.17 mg/L (milligrams per liter) for the existing Glacier Ranch drainfield area, and 1.24 mg/L in the proposed airport property.
Present Actions	The permitting action will regulate the discharge to Class I ground water of wastewater treated to permit requirements.
Related Future Actions	There are no other applications under consideration for the analysis area. The proposed project will undergo review by DEQ's Engineering Bureau. All engineering requirements, including setbacks must be met. Any resulting major modifications to the current plans may result for the need to modify the MGWPCS permit prior to facility construction.

1.4. PURPOSE, NEED, AND BENEFITS

The existing treatment system was designed to treat and dispose of wastewater generated by the existing Glacier Ranch Subdivision. The Permittee recently requested a modification to increase overall capacity by adding wastewaters generated by the airport.

The Permittee plans to expand the existing treatment system into a centralized facility to treat wastewaters from all sources. The existing drainfield will be maintained to dispose of wastewater from the Glacier Ranch Subdivision. To meet the capacity of the new airport connection, new drainfields have

been proposed on airport property. The proposed location is to the Southwest of the main airport runway, approximately 3,000 feet to the North of the Glacier Ranch Subdivision (**Figure 3**).

The existing Glacier Ranch drainfield will be maintained at the existing wastewater disposal capacity of 52,000 gpd. For the new airport facility, an estimated capacity of 67,600 gpd is proposed between the two allowable drainfield areas (Outfall 002 and 003). While proposed by APU, DEQ is not authorizing drainfields associated with Outfall 004 at this time.

The applicant's purpose and need, as expressed to DEQ in seeking this action, is to address growing wastewater collection, treatment, and disposal needs, and discharge treated wastewater from subsurface discharge structures into Class I ground water. The MGWPCS permit will include effluent limitations, conditions, and monitoring requirements to ensure compliance with water quality standards and to protect beneficial uses.

Figure 1. Regional Map

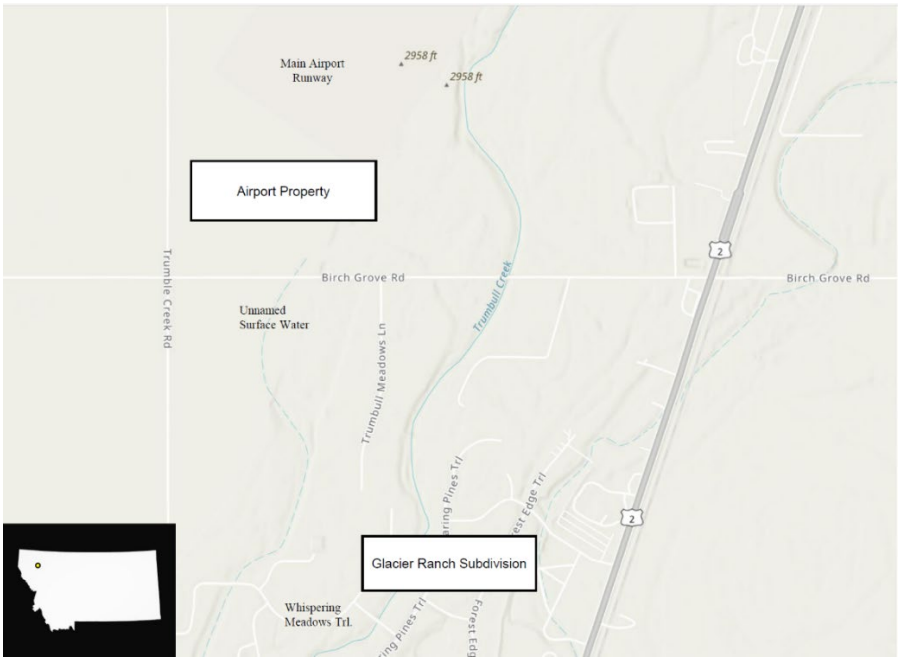

Figure 2. Vicinity Map

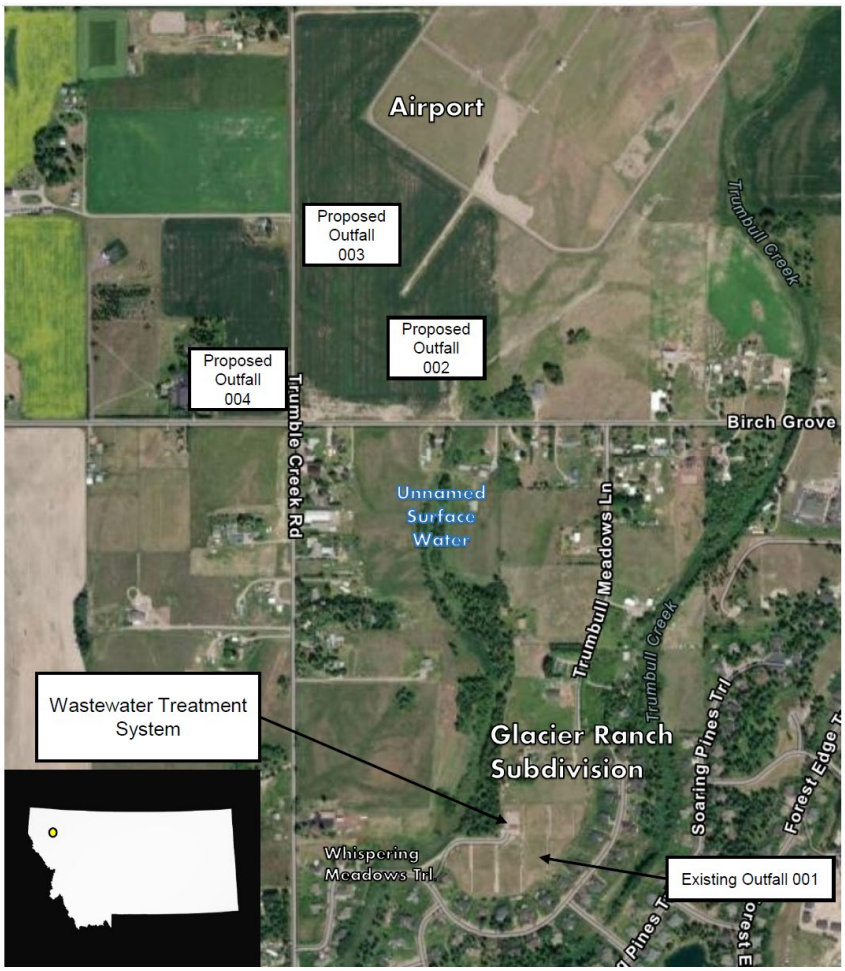

Figure 3. Facility Map

1.5. OTHER GOVERNMENTAL AGENCIES AND PROGRAMS WITH JURISDICTION

The proposed action is located on private and county (airport) land. All applicable local, state, and federal rules must be adhered to, which may also include other local, state, federal, or tribal agency jurisdiction. Other governmental agencies which may have overlapped, or additional jurisdiction include but may not be limited to: FFMA, GPIA, Montana Department of Natural Resources, Montana Department of Fish Wildlife and Parks, U.S. Fish and Wildlife Service, U.S Army Corps of Engineers, and Flathead County.

2. EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

The impact analysis will identify and evaluate direct, secondary, and cumulative impacts to the physical environment and human population in the area to be affected by the proposed project. *Direct impacts* occur at the same time and place as the action that causes the impact. *Secondary impacts* are a further impact to the human environment that may be stimulated, induced by, or otherwise result from a direct impact of the action, (ARM 17.4.603(18)). Where impacts would occur, the impacts will be described in this analysis.

Cumulative impacts are "the collective impacts on the human environment within the borders of Montana of the proposed action when considered in conjunction with other past, present, and future actions related to the proposed action by location *or* generic type. Section 75-1-220(4), MCA. "Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures. ARM 17.4.603(7). The projects identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The intensity of the impacts is measured using the following:

- **No impact**: There would be no change from current conditions.
- **Negligible**: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor**: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate**: The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major**: The effect would alter the resource.

2.1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE

Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?

A geotechnical investigation for the newly proposed airport site has not yet been submitted to DEQ. Previous soil pits dug by APU to the north of the project site indicate poorly graded gravel overlain by a thin deposit of silt. Borehole data from three recently installed monitoring wells in the proposed project area indicate sandy gravel.

Prior to construction, the DEQ Engineering Bureau will review soil data of the new project area to determine that the proper infiltration from the proposed drainfield is met under the Public Water Supply Act and Sanitation in Subdivisions Act. The existing drainfield site at Glacier Ranch Subdivision has already been reviewed and approved by DEQ.

Direct Impacts

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative

Determination documents for the current MGWPCS (Montana Ground Water Pollution Control System) permit action (DEQ, 2025). **No impact.**

Secondary Impacts

Secondary impacts to geology and soil quality, stability and moisture are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to geology and soil quality, stability and moisture are not expected with this permitting action. **No impact**.

2.2. WATER QUALITY, QUANTITY, AND DISTRIBUTION

Are any surface or groundwater resources present in the analysis area? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels or degradation of water quality?

Direct Impacts

See the MGWPCS Fact Sheet (DEQ, 2025) for information regarding the receiving water classification, beneficial uses, water quality standards, nondegradation, water quality based effluent limit development, and special conditions.

In order to maintain beneficial uses of the aquifer, DEQ performed an analysis of the potential impacts this project may have on the receiving aquifer. The resulting projections indicate that the nitrate levels downgradient of the drainfield should meet water quality standards and that all beneficial uses will be maintained.

The facility covered under this permit is required to operate and maintain treatment capable of meeting the established effluent limitations and permit conditions, which are derived from the most restrictive ground water quality standards and significance criteria. The effluent limitations, along with special conditions of the permit are developed to maintain the beneficial uses of all state ground waters including for drinking water. Facilities must be able to meet the restrictive effluent limitations prior to discharge.

An existing ground water monitoring network was established in 2009 for the existing Glacier Ranch Subdivision drainfield. The MGWPCS permit special conditions requires the installation of a similar monitoring network for each of the proposed airport drainfields. These networks will provide for ongoing monitoring of the condition of the aquifer. All reported data is available to the public. DEQ and the public will therefore be able to confirm that the direct impacts of this activity are as anticipated by this assessment.

All discharge disposal structures must meet the minimum setback requirements which includes neighboring properties, water wells, surface water, flood plains, ditches and springs (ARM 17.36.323, ARM 17.36.918, ARM 17.36.122). There may also be restrictions on placement of mixing zones onto neighboring properties pending the location of water wells, seasonal ground water fluctuations, and whether engineering review under the Sanitation in Subdivisions Act is applicable. Preliminary engineering reports have not yet been submitted to DEQ. Therefore, the engineering regulatory pathway is unknown at this time. Until

additional information is received, the MGWPCS permit will prohibit construction of drainfields next to and on neighboring properties. This will ensure that all setbacks (ARM 17.36.323, ARM 17.36.918), trespass (ARM 17.36.122), beneficial uses, and regulatory restrictions are maintained. Completion of the proposed MGWPCS special conditions, along with review and approval of the new system engineering plans are a critical next step in protecting water quality and human health.

APU's compliance in addressing the permit special conditions is critical to protect beneficial uses, analyzing for setback restrictions, and establishing a ground water monitoring network for the proposed airport drainfield areas. If the permittee does not comply with the terms and conditions of the permit, DEQ has enforcement authority to ensure a return to compliance.

Nearby surface waters include Trumbull Creek and an unnamed stream to the South of the proposed airport drainfields (**Figure 3**). The first step in analyzing for the potential measurable impacts on surface water is the collection of additional site-specific hydrogeology. The MGWPCS permit requires these additional studies through defined special permit conditions in Section I.E. of the permit, (**Monitoring Well Survey and Seasonal Ground Water Flow Direction Report,** and **Monitoring Well Installation Plan and Report**). After successful completion, the next steps are: a stream characterization study, ground water to surface water connectivity study, and possibly a fate and transport study at both project sites to determine if an impact to surface waters is anticipated. Compliance with the MGWPCS special permit conditions, in Section I.E. of the permit, is a critical next step, noncompliance with these conditions may result in enforcement action.

Construction activities may temporarily impact water quality by contributing discharges of sediment to surface waters. If the construction related disturbance exceeds one acre, the permittee will be required to obtain permit coverage under a Montana Pollutant Discharge Elimination System (MPDES) General Permit for Storm Water Discharges Associated with Construction Activity; and develop and implement a Storm Water Pollution Prevention Plan (SWPPP).

The permit established drainfield and mixing zone restrictions to ensure that setbacks to water wells are established. This provides the distance needed for natural bacterial disinfection to occur in the subsurface.

Providing connections to this centralized wastewater system provides a net reduction of nitrogen discharged to the aquifer when compared to having individual septic systems. The level of nitrogen reduction the system is capable of far exceeds the treatment capabilities of conventional systems.

APU may need to request a major modification of the MGWPCS permit pending the results of the special condition reports, impacts to surface water studies, and the DEQ engineering review. **Minor impact**.

Secondary Impacts

The wastewater discharge authorized by this permitting action may elevate pollutant levels above previous ambient conditions in the aquifer. The facility must operate within the bounds

of their MGWPCS permit. See the Fact Sheet (DEQ, 2025) for information regarding the receiving water classification, beneficial uses, water quality standards, nondegradation, water quality based effluent limit, and special condition development. If the facility does not comply with the terms and conditions of the permit, DEQ has enforcement authority to ensure a return to compliance.

Nearby surface waters include Trumbull Creek and an unnamed stream to the South of the proposed airport drainfields (**Figure 3**). The first step in analyzing for the potential measurable impacts on surface water is the collection of additional site-specific hydrogeology. The MGWPCS permit requires these additional studies through defined special permit conditions in Section I.E. of the permit, (**Monitoring Well Survey and Seasonal Ground Water Flow Direction Report,** and **Monitoring Well Installation Plan and Report**). After successful completion, the next steps are: a stream characterization study, ground water to surface water connectivity study, and possibly a fate and transport study at both project sites to determine if an impact to surface waters is anticipated. Compliance with the MGWPCS special permit conditions, in Section I.E. of the permit, is a critical next step, noncompliance with these conditions may result in enforcement action.

Providing connections to this centralized wastewater system provides a net reduction of nitrogen discharged to the aquifer when compared to having individual septic systems. The level of nitrogen reduction the system is capable of far exceeds the treatment capabilities of conventional systems.

APU may need to request a major modification of the MGWPCS permit pending the results of the special condition reports, impacts to surface water studies, and the DEQ engineering review. **Minor impact**.

Cumulative Impacts

DEQ considered cumulative environmental impacts of the construction and operation of the facility and found no significant adverse effects on water quality, the human environment, or the physical environment. The DEQ analysis included the cumulative impact from other past and present actions.

While review of the initial application materials indicate no significant adverse effects, DEQ established special conditions to the MGWPCS permit that requires APU to take a deeper look into the hydrogeologic characteristics of the proposed airport drainfield area. APU's compliance with the permit conditions of the permit is vital in preventing cumulative impacts from occurring by establishing additional restrictions as needed.

All major discharge permitting actions, including the current action and any future actions, will include any substantive information derived from public input relating to potential impacts on the human environment and on water quality. All future actions related to this current action will be addressed by DEQ through additional discharge permitting process procedures. Any actions that are outside the purview of the discharge permit may not be addressed by DEQ until the next permitting action takes place.

To protect beneficial uses, there shall be no increase of a pollutant to a level that renders the waters harmful, detrimental, or injurious. Therefore, no wastewaters may be discharged such

that the wastewater either alone or in combination with other wastes will violate or can reasonably be expected to violate any standard.

The allowable discharge is derived from a mass-balance equation that considers the assimilative capacity of the receiving aquifer. Testing of the aquifer was completed to determine the existing impacts of all upgradient discharge sources. The resulting analysis ensure limitations were achieved that factor in these upgradient sources.

An existing ground water monitoring network was established in 2009 for the existing Glacier Ranch Subdivision drainfield. MGWPCS special conditions requires the installation of a similar monitoring network for each of the proposed airport drainfields. The monitoring and data reporting will provide for continual oversight of the health of the aquifer including the impacts of any upgradient dischargers. The data will also be used to update permit conditions and cumulative effect analyses for all future major modifications or renewal of this permitting action. These actions will be made available to the public for comment. Continued monitoring and compliance with the effluent limitations and conditions in the Permit are expected to maintain nitrate levels downgradient at levels that meet water quality standards and protect beneficial uses.

Long-term wastewater and ground water monitoring and reporting, continual analysis, maintenance of permit conditions, and public notice and comment is a benefit to having a system that is covered under a MGWPCS permit. APU's compliance in addressing the special conditions is vital in protecting beneficial uses, analyzing for setback prohibitions (ARM 17.36.323, ARM 17.36.918, ARM 17.36.122) and establishing a ground water monitoring network for the proposed airport area. If the facility does not comply with the terms and conditions of the permit, DEQ has enforcement authority to ensure a return to compliance.

Nearby surface waters include Trumbull Creek and an unnamed stream to the South of the proposed airport drainfields (**Figure 3**). The first step in analyzing for the potential measurable impacts on surface water is the collection of additional site-specific hydrogeology. The MGWPCS permit requires these additional studies through defined special permit conditions in Section I.E. of the permit, (**Monitoring Well Survey and Seasonal Ground Water Flow Direction Report,** and **Monitoring Well Installation Plan and Report**). After successful completion, the next steps are: a stream characterization study, ground water to surface water connectivity study, and possibly a fate and transport study at both project sites to determine if an impact to surface waters is anticipated. Compliance with the MGWPCS special permit conditions, in Section I.E. of the permit, is a critical next step, noncompliance with these conditions may result in enforcement action.

Providing connections to this centralized wastewater system provides a net reduction of nitrogen discharged to the aquifer when compared to having individual septic systems. The level of nitrogen reduction the system is capable of far exceeds the treatment capabilities of conventional systems.

APU may need to request a major modification of the MGWPCS permit pending the results of the special condition reports, impacts to surface water studies, and the DEQ engineering review. **Minor impact**.

2.3. AIR QUALITY

Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Direct Impacts

Impacts on air quality resulting from this permitting action would be short-term during construction activities. These short-term impacts are expected to be negligible. These short-term negative impacts on air quality are expected from heavy equipment in the form of dust and exhaust fumes. Proper best management practices will minimize this problem with the project specifications requiring dust control.

The Permittee will be required to comply with regulations and plans adopted by the Flathead County Air Pollution Control District.

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current MGWPCS (Montana Ground Water Pollution Control System) permit action (DEQ, 2025). **Negligible impact**.

Secondary Impacts

The wastewater collection, treatment and disposal structures include sealed piping, buildings, and subsurface installations making traveling odors unlikely. **Negligible impact**.

Cumulative Impacts

Cumulative impacts to air quality are not expected with this permitting action. **No impact**.

2.4. VEGETATION COVER, QUANTITY, AND QUALITY

Will any vegetative communities be significantly impacted? Are any rare plants or cover types present?

Based on a search of the Natural Heritage Database, there are no plant species listed as either S1 (at high risk), S2 (at risk), LE (listed endangered), or LT (listed threatened) within the immediate vicinity of the proposed facility. (http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank).

Direct Impacts

The new facility areas will be built on lands previously disturbed by airport maintenance and agricultural activities. No long-term change of land use will occur because of the drainfield or wastewater piping.

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current MGWPCS permit action (DEQ, 2025). **Minor impact**.

Secondary Impacts

Secondary impacts to vegetation cover, quantity, and quality are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to vegetation cover, quantity, and quality are not expected with this permitting action. **No impact**.

2.5. TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS

Is there substantial use of the area by important wildlife, birds, or fish? Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern? Impacts related to the Montana Sage Grouse Executive Order?

The land has been historically used for agriculture, and is currently used for airport operation and maintenance practices, so no significant impacts on terrestrial, avian and aquatic life and habitats are expected.

Based on a search of the Natural Heritage Database, there are eight animal species listed as either S1 (at high risk), S2 (at risk), LE (listed endangered), or LT (listed threatened) in the general area surrounding the project areas.
(http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank).

Grizzly Bear (*Ursus arctos*), Canada Lynx (*Lynx canadensis*), and Wolverine (*Gulo gulo*) are listed as LT and are located regionally within their general habitat.

Cave Obligate Isopod (*Salmasellus steganothrix*) listed as S1, tend to live in alluvial areas. No exact location was provided due to potential protection efforts. The general area provided is centered on the airport runway located to the North of the project areas.

Westslope Cutthroat Trout (*Oncorhynchus lewisi*) is listed as S2, and Bull Trout (*Salvelinus confluentus*) is listed as S2/LT. Both are located regionally within their general habitat. The project areas are located in between the Whitefish and Flathead Rivers. Regional ground water flow tends to parallel these rivers (from North to South).

Lewis's Woodpecker (*Melanerpes lewis*) and Little Brown Myotis (*Myotis lucifugus*) are both listed as S2. Myotis is a species of bat. Myotis observations are located near the Flathead River, approximately two miles East of the project areas. The Lewis's Woodpecker observations are located approximately three miles Northwest of the project areas.

The Natural Heritage site report map of the species is provided below (**Figure 4**). The orange polygon in the center of the map represents the location of the existing facility and proposed project site.

The project site is not listed as being located within sage grouse habitat. DEQ referred to the Habitat and Occurrence mapping program at https://sagegrouse.mt.gov/projects/. If there are questions about Sage Grouse at this site, the applicant must contact and consult with the Sage Grouse Habitat Conservation Program at: https://sagegrouse.mt.gov/.

Nearby surface waters include Trumbull Creek and an unnamed stream to the South of the proposed airport drainfields (**Figure 3**). The MGWPCS permit establishes effluent limitations and conditions that will prevent significant impacts to surface waters. The MGWPCS permit requires additional studies to further characterize, describe, and avoid potential impacts to downgradient surface water. Once the

aforementioned studies are complete, next steps will include: a stream characterization study, ground water to surface water connectivity study, and a fate and transport study at both the airport and Glacier Ranch sites.

APU's compliance in addressing the special conditions of the proposed MGWPCS permit is vital in protecting habitat near the proposed project area. If the facility does not comply with the terms and conditions of the permit, DEQ has enforcement authority to ensure a return to compliance.

Direct Impacts

The facility will be built on previously disturbed lands. No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current MGWPCS permit action (DEQ, 2025).

Direct impacts to the terrestrial, avian, and aquatic habitats are rated as a **Minor impact**.

Secondary Impacts

The wastewater discharge authorized by this permitting action may elevate nutrient levels above previous ambient conditions in the aquifer. This may effect nearby surface waters that may be gaining (aquifer loss) streams. The nearby streams were not identified as observation occurrences for the species listed above, but possibly for unidentified populations. **Minor impact**.

Cumulative Impacts

The wastewater discharge authorized by this permitting action may elevate nutrient levels above previous ambient conditions in the aquifer. This may effect nearby surface waters that may be gaining (aquifer loss) streams. The nearby streams were not identified as observation occurrences for the species listed above, but possibly for unidentified populations. **Minor impact**.

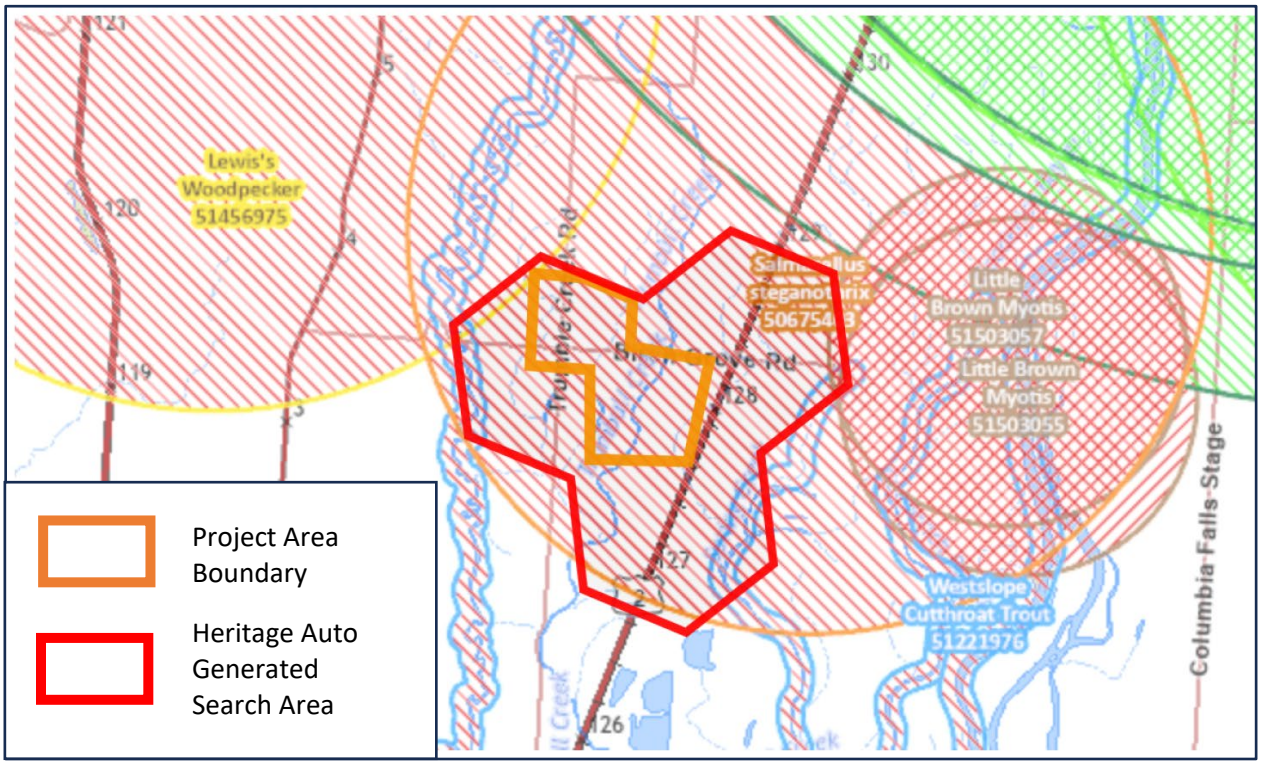

FIGURE 4. Natural Heritage Site Report Map

2.6. HISTORY, CULTURE, AND ARCHAEOLOGICAL UNIQUENESS

Are there any historical, archaeological or paleontological resources present? Will the action cause a shift in some unique quality of the area?

It is not anticipated that this project would cause a shift in any unique quality of the area. A general recommendation by the Montana State Historic Preservation Office (MSHPO) states that in the event that cultural materials are discovered, the permittee should contact the MSHPO office for investigation.

Direct Impacts

DEQ accessed the Montana Cultural Resource Database on 6/11/2025. There are no historical sites present in the project area, therefore no impacts to history, culture, or archaeological uniqueness are expected. No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current permit action (DEQ, 2025). **No impact**.

Secondary Impacts

Secondary impacts to history, culture, and archaeological uniqueness are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to history, culture, and archaeological uniqueness are not expected with this permitting action. **No impact**.

2.7. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, OR ENERGY

Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Are there other activities nearby that will affect the project?

Water that is sourced for use in the Subdivision or Airport will be cycled back into the aquifer via the discharge of treated wastewater.

Direct Impacts

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current MGWPCS permit action (DEQ, 2025). **Negligible impact**.

Secondary Impacts

Secondary impacts to demands on environmental resources of land, water, air, or energy are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to demands on environmental resources of land, water, air, or energy are not expected with this permitting action. **No impact**.

2.8. HUMAN HEALTH AND SAFETY

Will this project add to health and safety risks in the area?

The applicant would be required to adhere to all applicable state and federal safety laws. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Few, if any, members of the public would be in immediate proximity to the project during construction or operations.

The permit established drainfield and mixing zone restrictions to ensure that setbacks to water wells are established. This provides the distance needed for natural bacterial disinfection to occur in the subsurface.

Direct Impacts

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current permit action (DEQ, 2025). **No impact**.

Secondary Impacts

Secondary impacts to health and human safety are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to health and human safety are not expected with this permitting action. **No impact**.

2.9. SOCIOECONOMICS

Included in this section are the following: industrial, commercial and agricultural activities and production; quantity and distribution of employment; local and state tax base and tax revenues; demand for government services; locally adopted environmental plans and goals; access to and quality of recreational and wilderness activities; density and distribution of population and housing; social structures and mores; and other appropriate social and economic circumstances.

Will the project add to or alter industrial or agricultural activities? Will the project create, move or eliminate jobs? If so, estimated number. Will the project create or eliminate tax revenue? Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed? Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect? Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract? Will the project add to the population and require additional housing? Is some disruption of native or traditional lifestyles or communities possible?

The project would occur on both public and private lands. The wastewater treatment plant is to be maintained long-term and will have negligible impacts to the population. The new project area would be subject to any plans or rules set forth by Flathead County. The facility will be built on land that may have been historically used for agricultural purposes. The construction of the updated wastewater treatment systems and new discharge structures may result in the creation of several temporary jobs until construction is completed. The operation and maintenance of the wastewater treatment system may also result in part-time permanent jobs. Traffic may increase during the construction. Once construction is complete, there may be minimal traffic for the operation and maintenance of the wastewater treatment system. These wastewater systems are a vital tool in protection of public and environmental health. DEQ does not anticipate that this project would disrupt native or traditional lifestyles or communities.

Direct Impacts

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current permit action (DEQ, 2025). **No impact**.

Secondary Impacts

Secondary impacts to socioeconomics are not expected with this permitting action. **No impact**.

Cumulative Impacts

Cumulative impacts to socioeconomics are not expected with this permitting action. **No impact**.

2.10. PRIVATE PROPERTY IMPACTS

DEQ is proposing to renew and modify MGWPCS MTX000164 authorizing discharges to Class I ground water from an existing wastewater treatment system serving the Glacier Ranch Subdivision and the Glacier Park International Airport. DEQ must evaluate if this permitting renewal action has any regulatory impacts upon private property. The Proposed Action would regulate the activities of the

owners or operators of the treatment system but does not regulate the use of real property or water rights. DEQ's approval of the Proposed Action would, therefore, have no effect on private real property rights. Permit limitations and conditions are within DEQ's permitting authority and are reasonably necessary to ensure compliance with applicable requirements under the Montana Water Quality Act. Renewal and modification of MGWPCS MTX000164 would not have private property-taking or damaging implications.

The Glacier Ranch Subdivision portions of the facility are already built and are located on private land owned by the Operator (APU) or by the residential properties within Glacier Ranch Subdivision. The new drainfields serving Glacier Park International Airport will be constructed on public land. DEQ's approval of the renewed and modified MGWPCS Permit No. MTX000164 will not have private property-taking or damaging implications.

Additionally, the MGWPCS Permit prohibits drainfield construction near neighboring private properties to mitigate potential impacts.

Direct Impacts

No significant impacts were identified by DEQ after an in-depth review of the Application, Research, and other Government Agency References in development of the Tentative Determination documents for the current permit action (DEQ, 2025). **No impact**.

Secondary Impacts

Secondary impacts to private property are not expected with this permitting action. Please refer to the drainfield prohibition discussion in *Direct Impacts* above. **No impact**.

Cumulative Impacts

Cumulative impacts to private property are not expected with this permitting action. **No impact**.

2.11. GREENHOUSE GAS ASSESSMENT

Issuance of this permit would authorize use of various equipment and vehicles for sampling.

The analysis area for this resource is limited to the activities regulated by the issuance of the MGWPCS permit which covers wastewater and ground water sampling events. The amount of gasoline fuel utilized at this site may be impacted by a number of factors including seasonal weather impediments and equipment malfunctions. To account for these factors DEQ has calculated the range of emissions using a factor of +/- 10.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products. Other pollutants can have some properties that also are similar to those mentioned above, but the EPA has clearly identified the species above as the primary GHGs. Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

The combustion of gasoline fuel at the site would release GHGs primarily being carbon dioxide (CO_2), nitrous oxide (N_2O) and much smaller concentrations of uncombusted fuel components including methane (CH_4) and other volatile organic compounds (VOCs).

DEQ has calculated GHG emissions using the EPA Greenhouse Gas Equivalencies Calculator, for the purpose of totaling GHG emissions. This tool totals carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) and reports the total as CO_2 equivalent (CO_2e) in metric tons CO_2e. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory. DEQ has determined EPA's Scope 1 GHG impacts as defined in the Inventory Guidance for Greenhouse Gas Emissions are appropriate under MEPA for this Proposed Action. Scope 1 emissions are defined as direct GHG emissions that occur from sources that are controlled or owned by the organization (EPA Center for Corporate Climate Leadership). DEQ's review of Scope 1 emissions is consistent with the agency not evaluating downstream effects of other types of impacts.

This review does not include an assessment of GHG impacts in quantitative economic terms, otherwise known as evaluating the social cost of carbon. DEQ instead calculates potential GHG emissions and provides a narrative description of GHG impacts. This approach is consistent with Montana Supreme Court caselaw and the agency's discussion of other impacts in this EA. *See Belk v. Mont. DEQ*, 2022 MT 38, ¶ 29.

Operation of gasoline fueled vehicles throughout the life of the proposed project would produce exhaust fumes containing GHGs. The MGWPCS permit requires regular monitoring and sampling. DEQ estimates that a heavy duty truck with a fuel efficiency of 12-15 miles per gallon (mpg) is estimated to burn approximately two gallons of fuel per sampling event. Over the course of the five year permit cycle, this amounts to a total fuel consumption of 120 gallons. According to the EPA Greenhouse Gas Equivalencies Calculator, this fuel usage would result in approximately 1.1 metric tons of carbon dioxide (CO_2) emissions.

Secondary Impacts

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM, 2021).

Per EPA's website "Climate Change Indicators", the lifetime of carbon dioxide cannot be represented with a single value because the gas is not destroyed over time. The gas instead moves between air, ocean, and land mediums with atmospheric carbon dioxide remaining in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments. Methane remains in the atmosphere for approximately 12 years. Nitrous oxide has the potential to remain in the atmosphere for about 109 years (EPA, Climate Change Indictors). The impacts of climate change throughout the Flathead Valley of Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM, 2021).

Cumulative Impacts

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory in conjunction with preparation of a possible grant application for the Community Planning Reduction Grant (CPRG) program. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with carbon dioxide, methane, and nitrous oxide and reports

the total as CO_2e. The SIT consists of eleven Excel based modules with pre-populated data that can be used with default settings or in some cases, allows states to input their own data when the state believes their own data provides a higher level of quality and accuracy. Once each of the eleven modules is filled out, the data from each module is exported into a final "synthesis" module which summarizes all of the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as GHG emissions by sector and GHG emissions by type of greenhouse gas.

DEQ has determined the use of the default data provides a reasonable representation of the greenhouse gas inventory for the various sectors of the state, and the estimated total annual greenhouse gas inventory by year. The SIT data from EPA is currently only updated through the year 2021, as it takes several years to validate and make new data available within revised modules. DEQ maintains a copy of the output results of the SIT.

DEQ has determined that the use of the default data provides a reasonable representation of the GHG inventory for all of the state sectors, and an estimated total annual GHG inventory by year. At present, Montana accounts for 47.77 million metric tons of CO_2e based on the EPA SIT for the year 2021. This project may contribute up to 1.1 metric tons per year of CO_2e. The estimated emission from this project would contribute 0.0% of Montana's annual CO_2e emissions.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources. The No Action Alternative would contribute less than the Proposed Action Alternative of GHG emissions. The current land use of the proposed project area is agriculture and airport maintenance.

3. DESCRIPTION OF ALTERNATIVES

No Action Alternative: In addition to the proposed action, DEQ must also considered a "no action" alternative. The "no action" alternative would be the denial of the modified MGWPCS permit. APU would then lack the authority to build and conduct activity with the newly proposed airport facility, but would retain operation of the existing Glacier Ranch Subdivision system under the existing permit. Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If the applicant demonstrates compliance with all applicable rules and regulations required for approval, the “no action” alternative would not be appropriate because it would leave the Glacier Park International Airport without a permitting mechanism for discharge to state waters. The Glacier Park International Airport would then be required to explore alternatives such as land-application, loading tanker trucks, or (if allowed) discharging into the municipal sanitary sewer system.

4. CONSULTATION

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. External scoping efforts also included queries to other government websites, to conduct the impact analysis discussed above in **Section 2**. External scoping efforts also included queries to the following websites/databases/personnel:

- U.S. EPA Center for Corporate Climate Leadership, Scopes 1, 2 and 3 Emissions Inventorying and Guidance
- U.S. EPA Center for Corporate Climate Leadership, Simplified GHG Emissions Calculator
- Montana Bureau of Mines and Geology
- Montana Natural Heritage Program
- Montana State Historic Preservation Office (SHPO)
- U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey
- U.S. Environmental Protection Agency
- U.S. Forest Service, Prevention of Significant Deterioration (PSD) Program
- U.S. Geological Survey

5. SIGNIFICANCE OF POTENTIAL IMPACTS AND NEED FOR FURTHER ANALYSIS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected;
- Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

DEQ assessed potential impacts with the assumption that the facility will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. Violations of the permit are not an effect of the agency action since the permit itself forbids such activities. However, the Department has taken steps to ensure that violations do not occur. The Department provides technical assistance to permittees for operation and maintenance, and in understanding and implementing the requirements of the permit. The Department also conducts periodic inspections of permitted facilities and identifies potential problems with design or management practices. If violations of the permit do occur, the Department will take appropriate action under the Montana Water Quality Act. Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

The preferred action is to issue the modified individual MGWPCS discharge permit. This action is preferred because the permit provides a regulatory mechanism for protecting ground water quality by applying effluent limits and monitoring requirements to the discharged wastewater.

An EIS is not required under MEPA because the project lacks significant adverse effects to the human and physical environment based on above listed criteria.

As described above, DEQ's decision to issue MGWPCS Permit No. MTX000164 authorizes discharge of treated wastewater to Class I ground water. The discharge is subject to permit conditions and limitations that would protect beneficial uses and prevent significant changes in water quality. Environmental impacts resulting from issuance of the MGWPCS permit are localized and would be managed through permit conditions and limitations. At the time of this analysis, there are no known conflicts with local, state, or federal laws, requirements, or plans.

6. PUBLIC INVOLVEMENT

Legal notice information for water quality discharge permits is available at the following website: http://deq.mt.gov/Public/notices/wqnotices. Public comments on this proposal are invited any time before close of business on **September 18, 2025.** Comments may be directed to:

DEQWPBPublicComments@mt.gov

or to:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620

All comments received or postmarked prior to the close of the public comment period will be considered in the formulation of the final permit. DEQ will respond to all substantive comments pertinent to this permitting action and may issue a final decision within thirty days of the close of the public comment period.

All persons, including the applicant, who believe any condition of the draft permit is inappropriate, or that DEQ's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing). All public comments received for this draft permit will be included in the administrative record and will be available for public viewing during normal business hours.

Copies of the public notice are mailed to the applicant, state and federal agencies, and interested persons who have expressed interest in being notified of permit actions. A copy of the distribution list is available in the administrative record for this draft permit. Electronic copies of the public notice, draft permit, fact sheet, and draft environmental assessment are available at the following website: http://deq.mt.gov/Public/notices/wqnotices.

Any person interested in being placed on the mailing list for information regarding this permit may contact the DEQ Water Protection Bureau at (406) 444-5546 or email DEQWPBPublicComments@mt.gov. All inquiries will need to reference the permit number (MTX000164), and include the following information: name, address, and phone number.

During the public comment period provided by the notice, DEQ will accept requests for a public hearing. A request for a public hearing must be in writing and must state the nature of the issue proposed to be raised in the hearing.

Environmental Assessment and Significance Determination Prepared By:

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Environmental Assessment Reviewed By:

Erik Englebert, Supervisor
Tatiana Davila, Bureau Chief
Kirsten Bowers, Legal

Approved By:

DRAFT _____ _____ ***DRAFT***

Tatiana Davila, Bureau Chief — Date
Department of Environmental Quality

7. REFERENCES

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- Subchapter 2 - Water Quality Permit Fees.
- Subchapter 5 – Mixing Zones in Surface and Ground Water.
- Subchapter 7 – Nondegradation of Water Quality.
- Subchapter 10 – Montana Ground Water Pollution Control System.
- Subchapter 13 – Montana Pollutant Discharge Elimination System.

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- Circular DEQ-4 – Montana Standards for On-Site Subsurface Sewage Treatment Systems.
- Circular DEQ-7 – Montana Numeric Water Quality Standards, Required Reporting Values, and Trigger Values.

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