

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

Note: Instructions to DNRC staff for preparing this EA can be found at:  
[http://www.dnrc.state.mt.us/eis\\_ea.html](http://www.dnrc.state.mt.us/eis_ea.html)

**Part I. Proposed Action Description**

1. *Applicant/Contact name and address:* Frenchtown School District  
Box 117  
Frenchtown, MT 59834
2. *Type of action:* Application For Beneficial Water Use Permit
3. *Water source name:* Groundwater
4. *Location affected by project:* SW1/4 Sec. 35 & SE Sec. 34, T15N R21W  
NW1/4 Sec 2 & NE Sec 3, T14N R21W
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

Frenchtown School District submitted an Application For Beneficial Water Use Permit to DNRC seeking approval from the State of Montana to divert 100 gpm up to 38.4 acre-feet per year for irrigation purposes from a groundwater well. The applicant proposes to use water diverted from this well to irrigate 18.5 acres of grass for baseball, soccer and playground fields on school property from April 15 to October 15 annually. The playgrounds will benefit the school district and citizens of Frenchtown by providing recreational sports facilities. If the applicant meets the criteria for issuance of a permit, found in MCA 85-2-311, the State of Montana will grant a provisional water right permit for the above stated amount of water and purpose.

6. *Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)*

None.

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

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| <h2><b>PHYSICAL ENVIRONMENT</b></h2> |
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### **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.*

The source of supply is groundwater diverted from a 171 foot deep well. The groundwater aquifer from which the well diverts water is 152 to 165 feet below the ground surface. The groundwater aquifer is below confining clay layers that are laterally extensive. This confined aquifer results in flowing artesian conditions in the well and water flows from the top of the casing. Due to the confining clay layers and depth of the groundwater aquifer, no interaction between surface and groundwater occurs when the well is pumped at the requested flow rate of 100 gpm through the requested period of use. If a water right permit is granted the school district will stop using a natural slough for irrigation water to the benefit of wildlife and surface water users who also divert water from the slough.

*Determination:* No 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.*

The proposed groundwater appropriation is from a deep confined aquifer that is not hydrologically connected to any surface water. There will be no impact to surface water sources from pumping this well.

*Determination:* No 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.*

The proposed groundwater appropriation is from a deep confined aquifer that is not hydrologically connected to any surface water. There will be no impact to surface water sources from pumping this well. The applicant proposes to divert up to 38.4 acre-feet per year for irrigation purposes. This will not impact groundwater quantity (supply). The applicant calculated volumetric flux of the groundwater aquifer within the ½ mile radius zone of influence from pumping the well. Approximately 4,460 acre-feet of groundwater will flow through this area each year, while the applicant is only requesting an appropriation of 38.4 acre-feet. Drawdown in neighboring wells will be approximately 0.26 feet at a distance of 1000 feet from the applicant's well. This amount of drawdown will not adversely impact other groundwater users from exercising their groundwater rights. There were no sources of potential groundwater pollution identified.

*Determination:* No 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 groundwater appropriation was demonstrated to not affect surface water, therefore, there will be no impacts to stream channels, flow modifications, barriers, riparian areas or dams. The proposed appropriation will cause 0.26 feet of drawdown in neighboring wells 1000 feet away, which will not limit other groundwater users from diverting water through their wells or construction of new wells in the area. The total amount of water to be diverted annually equals 0.86% of the total amount of groundwater available to other water users.

*Determination:* No 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 proposed appropriation of groundwater will not impact any threatened or endangered fish, wildlife, plants or aquatic species. The applicant proposes to divert groundwater from a deep confined aquifer that is not hydrologically connected to any surface water. The pumping of 100 gpm from the applicant's well will not cause a decrease in the amount of water flowing in any surface water sources in the project vicinity. Previously the applicant used surface water from an adjacent slough to irrigate the playground fields. Once the applicant obtains approval from the State of Montana, the well will become the sole source of water for irrigation of the playground fields, which will have a positive influence on the amount of water in the slough for fish and wildlife species.

If the State of Montana approves the proposed groundwater use there will be no impact on existing vegetation. The place of use for irrigation is already grass cultivated for playground use. Review of aerial photographs indicate that the project site is already sports fields and that existing vegetative cover is manipulated through irrigation and cultivation.

*Determination:* No 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.*

This project does not involve any development of wetland areas, including dredging or fill activities. The applicant historically used a nearby slough as a source of irrigation water. If this water right permit is granted for use of the well, the applicant will discontinue pumping from the slough. This will have a positive impact on the slough due to increased water availability for

other water users and wildlife reliant on the slough. Pumping the groundwater well will not have an impact on surface water and wetlands near the project site.

*Determination:* No impact.

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

No ponds are involved with the proposed project.

*Determination:* No 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.*

The proposed use of a groundwater well for irrigation will not cause a degradation of soil quality, or alteration of soil stability. The site is already developed as a sports and playground facility, with grass grown for soccer and baseball fields. The soils will be sprinkler irrigated and the applicant will be limited to a volume of 38.4 acre-feet of water per year. This will not allow the applicant to apply too much water to the soil; which could cause degradation. The soils irrigated are not heavy in salts and saline seep is not a concern. Moisture content of the soil will be controlled through the use of sprinkler irrigation to the benefit of the applicant.

*Determination:* No 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.*

Existing vegetation consists of turf grass. The site is already developed for sports and playground fields, and grass will continue to be grown for these uses. Since soil disturbance is minimal, consisting only of drilling the well and connecting the well to an underground sprinkler system, therefore establishment or spread of noxious weeds is limited. Weeds will be controlled through the application of irrigation water and mowing of the fields. The project site is owned by the Frenchtown School District and control of noxious weeds will be the responsibility of the landowner.

*Determination:* No impact.

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

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. The water will be diverted using submersed electric pumps. No air pollutants were identified as resulting from the applicant's proposed use of groundwater for irrigation.

*Determination:* No impact.

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

The proposed use of groundwater to irrigate existing playground fields will not cause degradation of unique archeological or historical sites in the vicinity of the proposed project. The site is already developed and no additional ground disturbance will be required to complete the proposed project.

*Determination:* No 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.

None identified.

*Determination:* No impact.

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| <b>HUMAN ENVIRONMENT</b> |
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* No 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.

*Determination:* No impact.

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

*Determination:* No impact.

**PRIVATE PROPERTY** - Assess whether there are any government regulatory impacts on private property rights.

Yes \_\_\_ No XX 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? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

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

Secondary Impacts None identified.

Cumulative Impacts None identified.

**3. Describe any mitigation/stipulation measures:** N/A

**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:** N/A

**PART III. Conclusion**

**1. Preferred Alternative** N/A

**2. Comments and Responses**

**3. Finding:**  
Yes \_\_\_ No XX Based on the significance criteria evaluated in this EA, is an EIS required?

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

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

*Name:* Jim Nave  
*Title:* Water Resource Specialist  
*Date:* 3/22/2006