APPLICATION FOR APPROVAL TO CONSTRUCT A GEOTHERMAL HEATING/COOLING EXCHANGE WELL

Mail form and payment to:

Office of the Engineer
PO Box 37
Ronan, MT 59864
For questions contact: contact@frwmb.gov or (406) 201-2532

Approval from the Office of the Engineer must be received before drilling the well(s) or developing any spring(s).

REQUIREMENTS FOR GEOTHERMAL HEATING OR COOLING WELLS:

Maximum Appropriation: 350 gallons per minute non-consumptive use

Source: Groundwater, meaning any water located beneath the surface of the earth.

All water extracted must be injected into the same source aquifer, and at similar depth intervals to the extraction well, without delay, such that, water withdrawal and discharge are equivalent after coming into balance.

The nearest existing well and any hydraulically connected surface waters must be more than twice the distance away from the extraction well as the distance between the extraction and injection wells.

FILING FEE: $400.00 *Make checks payable to FRWMB*

Upon completion of the well or developed spring, an appropriator must submit form 646F-Part B within 120 days of putting the water to use.

OFFICE USE ONLY

Water Right #_____ Basin____
Date Rec'd _____
Time _____ AM / PM
Rec'd By _____
Payor _____
Amount Rec'd _____
Check # _____
Receipt# _____

READ AND ANSWER THE QUESTIONS BELOW TO DETERMINE IF THIS IS THE CORRECT FORM.

☐ Yes ☐ No Is the proposed appropriation located outside the boundaries of a controlled groundwater area?

☐ Yes ☐ No Is the proposed maximum appropriation 350 gallons per minute (GPM) or less?

☐ Yes ☐ No Is all the proposed water to be extracted going to be returned without delay into the same source aquifer?

☐ Yes ☐ No Is the distance between the proposed extraction well and both the nearest existing well and any hydraulically connected surface water source more than twice the distance between the proposed extraction and proposed injection well?

If the answer to all the above questions is "yes," continue completing this form.

1. **WATER RIGHT OWNER INFORMATION**

Name(s)_____

Mailing Address _____

City _____ State _____ Zip _____

Cell/Home Phone _____ Email Address _____

2. **WATER SUPPLY DESCRIPTION**

Please describe the proposed appropriation works (including anticipated Well Shaft Casing Description).

_____

_____

_____

_____

3. **PERIOD OF USE**

Year-round use? ☐ Yes ☐ No If no, from _____ to _____, inclusive of each year.

4. **EXTRACTION WELL LOCATION** **leave fields blank if not applicable*

Latitude _____ Longitude_____

____ ¼ ___ ¼ ____¼ Section_____ Township____ ☐ N ☐ S Range____ ☐ E ☐ W

County _____ Lot* _____ Block*_____ Subdivision Name* _____

Tract No.*_____ COS/TSR No.*_____ Government Lot* _____

Street Address, including City/State/Zip Code _____

5. INJECTION WELL LOCATION **leave fields blank if not applicable*

Latitude _____ Longitude_____

____ ¼ ___ ¼ ____¼ Section_____ Township____ ☐ N ☐ S Range____ ☐ E ☐ W

County _____ Lot* _____ Block*_____ Subdivision Name* _____

Tract No.*_____ COS/TSR No.*_____ Government Lot* _____

Street Address, including City/State/Zip Code _____

6. **DISTANCE FROM EXTRACTION WELL HEAD TO INJECTION WELL HEAD AND DEPTH OF EACH WELL**

Distance from extraction well head to injection well head: _____ feet

7. **DISTANCE FROM EXTRACTION WELL HEAD TO BOTH NEAREST EXISTING WELL AND HYDRAULICALLY CONNECTED SURFACE WATER**

Distance to nearest well: ____ feet

Distance to nearest hydraulically connected surface water source: ____ feet

8. **PLACE OF USE**

a. Geocode of the place of use (17 digits) _____

If there are multiple places of use, list the geocode for each parcel on an attached sheet.
Geocodes can be found in county records, tax statements, or on Montana Cadastral at http://svc.mt.gov/msl/mtcadastral/.

b. Is the place where water will be used the same as the point of diversion? ☐ Yes ☐ No
IF NO, enter the place of use land description below. If there is more than one place of use, please attach a separate sheet with additional land descriptions.
** Leave field blank if not applicable*

____ ¼ ___ ¼ ____¼ Section_____ Township _____ ☐ N ☐ S Range ____ ☐ E ☐ W
County _____ Lot* _____ Block*_____ Subdivision Name* _____

Tract No.*_____ COS/TSR No.*_____ Government Lot* _____

Street Address, including City/State/Zip Code: _____

9. MAP

Montana Cadastral aerial images can be used to help generate a map.
(*http://svc.mt.gov/msl/mtcadastral/*)
A marked and labeled map must be submitted with the application and include the following:

- Property boundaries and ownership information;
- Township, Range, and Section of the point of diversion and place of use;
- All buildings on the property;
- Sewage facilities including septic tanks and drain fields within the property boundaries;
- All wells within a 500-foot radius of the proposed well or spring; and
- Other well connections including conveyance, points of diversions, and surface water features

10. ATTACH GEOTHERMAL PUMPING DESIGN SCHEMATIC THAT CLEARLY IDENTIFIES ISOLATION OF THE SYSTEM

Attached geothermal pumping design schematic? ☐ Yes ☐ No

11. DECLARATION OF OWNERSHIP

I declare under penalty of perjury that the statements appearing here are, to the best of my knowledge, true and correct and affirm that I have possessory interest, or the written consent of the person with the possessory interest, in the point of diversion, place of use, and conveyance.

Applicant 1 Printed Name: _____
Authorized Signature: _____ **Date:** _____
Applicant 2 Printed Name: _____
Authorized Signature: _____ **Date:** _____
Applicant 3 Printed Name: _____
Authorized Signature: _____ **Date:** _____

*****Please note, you must submit ORIGINAL owner signatures.**
Copies will not be accepted.***

INSTRUCTIONS FOR GEOTHERMAL HEATING/COOLIING APPLICATION FOR AUTHORIZATION

There are special federal requirements regarding injection wells and water quality. Filing requirements may apply to your development. Please visit http://water.epa.gov/type/groundwater/uic/class5/ for more information regarding the Class V well inventory process.

To use this form, the following must apply to your proposed water use.

- The source is groundwater, meaning any water located beneath the surface of the earth.
- The water is diverted from the ground via a well or developed spring.
- The flow rate used is 350 gallons per minute or less. This is the rate you are taking water from the source. If the water use exceeds that amount, you cannot file for this proposed use using this form.

Complete this form ONLY if you have determined this is the correct form to file.

1. **Eligibility Verification**
   If you answer no to any of the questions you cannot file this form.
2. **Water Right Owner Information**
   Enter the complete name of the person(s) to be listed as the water right owner(s), their mailing address, and a phone and email address. Applicants should match the title on the property.
3. **Proposed Source of Water Supply**
   Provide a description of proposed developments including the proposed well casing, well screen, perforations, well depths, and any other pertinent details.
4. **Period of Use**
   Enter the proposed period of use.
5. **Extraction Well Location**
   Latitude and Longitude must be entered. Enter the land description for the location of extraction. Describe
   the location to the nearest 2.5 acres if possible.
   Legal land descriptions, subdivisions, geocodes, and certificate of survey information may be obtained from
   the county records, tax statements, or from the Montana Cadastral system at:
   http://svc.mt.gov/msl/mtcadastral/
   Certificate of Survey - In addition to the land description, enter the certificate of survey number.
   Subdivisions – In addition to the above description, if applicable, enter the lot and block or tract number,
   subdivision name.
   Government Lots – In addition to the land description, if applicable, enter the government lot number.
   Street or Road Address – Enter the physical address of the development including city, state, and zip code.
6. **Injection Well Location**
   Follow the same instructions above (Extraction Well Location) for the location of the Injection well
7. **Distance from extraction well head to Injection well head**
   Enter distance (in feet) between point of extraction and point of injection. Enter the depth of both the extraction well head and the injection well head in feet.
8. **Distance from Extraction well head to both Nearest Existing Well and Hydraulically**

Connected Surface Water

Enter distance (in feet) from the extraction well to both the nearest existing well and nearest hydraulically connected surface water source.

9. **Place of Use**

The geocode of the place of use must be provided.

If the point of diversion (extraction well location) differs from the place of use, check the 'No' box and

fill out the land description for the place of use following the instructions listed above in #5 (extraction well location).

10. **Map**

A map is required. Include all information required on the form. A good option for producing a map is to print out an image of your parcel from the Montana Cadastral (http://svc.mt.gov/msl/mtcadastral/) and draw features directly on the printed map that includes your property boundaries.

11. **Pumping Design Schematic**

A design schematic is required to show that the system is entirely isolated.

12. **Declaration of ownership**

All owners of record at the place of use, point of diversion, and conveyance must sign the application and attest that the statements on the form are true and correct.

Montana Groundwater Diversion Standards adopted in the Unitary Administration and Management Ordinance (MCA 85-20-1902)

1. Wells:

   a. Persons that drill, make, or construct wells, including monitoring wells, on the Reservation shall comply with Title 37 Chapter 43, MCA, and ARM 36 Chapter 21 licensing, conduct, and regulatory requirements, or any successor provisions promulgated in State law.

   b. All well construction on the Flathead Reservation shall meet the standards set forth in ARM 36 Chapter 21, or any successor provisions promulgated in State law.

   c. Construction and operations of all wells must comply with all applicable federal, State, Tribal, and local environmental regulations.

2. Developed Springs:

   a. All Developed Spring collection components, including but not limited to infiltration galleries, infiltration basins, and French drains, shall be installed and buried under the surface of the ground.

   b. All means of storage and conveyance, including but not limited to supply pipes, cisterns, and pump housings, shall be sealed and made impervious to water and designed in a manner that protects the source from backflow and surface contamination.

   c. Open pits, ponds, or excavations shall not be used as a means of diversion for Developed Springs.

   d. Construction and operation of all Developed Springs must comply with all applicable federal, State, Tribal, and local environmental regulations.

3. Aquifer injection is not allowed except when used exclusively for Heating/Cooling Exchange Wells.

ATTENTION

This application does not exclude you from other permitting requirements such as <u>but not limited to</u>:

- **CSKT Aquatic Lands Conservation Ordinance (ALCO)**
- **Section 404 of the Clean Water Act (CWA)**
- **Section 401 of the CWA**
- **MT DEQ Subdivision of Platting Act**