

GEOTHERMAL HEATING/COOLING EXCHANGE WELL NOTICE OF COMPLETION

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

Use this form after the Office of the Engineer has issued an Authorization to Construct a Geothermal Heating/Cooling Well (Form 646F-Part A) and well has been constructed.

OFFICE USE ONLY

You must file this form within 120 days after putting water to use in order to receive your water right.

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 withdraw 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.

Water Right # _____ Basin _____
Date Rec'd _____
Time _____ AM / PM
Rec'd By _____

FILING FEE: \$0.00

1. WATER RIGHT NUMBER _____

2. WATER RIGHT OWNER INFORMATION

Name(s) _____

Mailing Address _____

City _____ State _____ Zip _____

Cell/Home Phone _____ Email Address _____

3. PROJECT CONSTRUCTION

- Date wells were constructed:

Extraction Well: _____ Injection Well: _____

- Date water was first put to use: _____

- Include your Well Log which can be found online: <https://mbmqgwic.mtech.edu/>

4. PERIOD OF USE

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

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

Latitude _____ Longitude _____
_____ 1/4 _____ 1/4 _____ 1/4 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. INJECTION WELL LOCATION *leave fields blank if not applicable

Latitude _____ Longitude _____
_____ 1/4 _____ 1/4 _____ 1/4 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 _____

7. FLOW RATE AND PUMP INFORMATION

Flow Rate _____ GPM Pump Size _____ HP
Pump Make/Model _____ Depth of Pump Intake _____ FT

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

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

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

Distance to nearest well: _____ feet

Distance to hydraulically connected surface water source: _____ feet

10. 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

_____ 1/4 _____ 1/4 _____ 1/4 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: _____

11. 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

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

Attached geothermal pumping design schematic? Yes No

13. 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/COOLING NOTICE OF COMPLETION

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.

1. 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.

2. Project Construction

Attach the well log to your application and Provide the construction date and completion date.

Well logs can be found at <https://mbmgqwic.mtech.edu/>

3. Period of Use

Enter the period of use.

4. 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.

5. Injection Well Location

Follow the same instructions above (Extraction Well Location) for the location of the Injection well.

6. Flow Rate and Pump Information

Enter the flow rate used, the depth of the pump intake, and the make/model of the pump used for your geothermal heating/cooling 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 #4 (extraction

well location).

10. Map

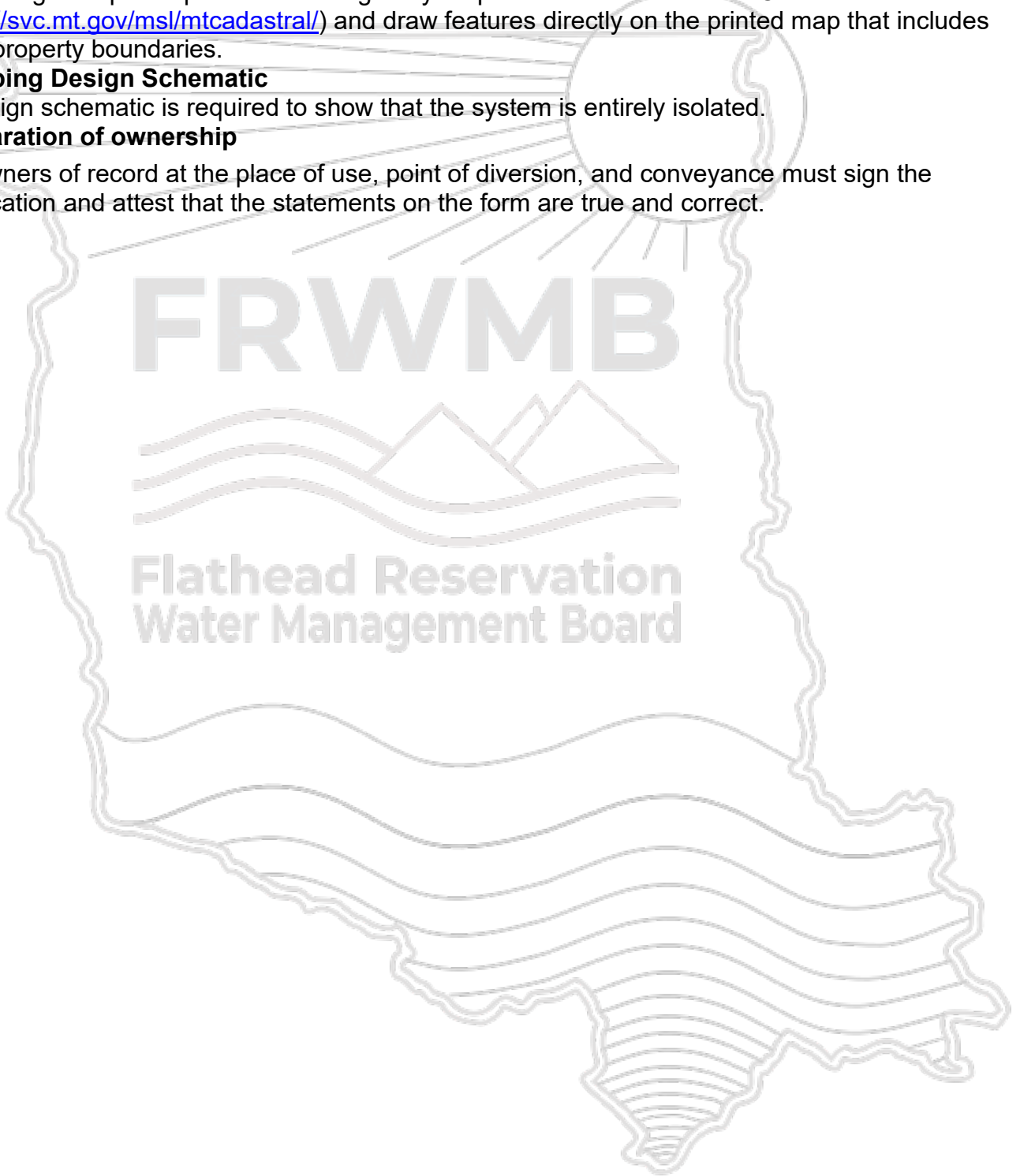
A finalized map is required. Include all information required on the form. A good option for producing a map is to print out an image of your parcel from the Montana Cadastral (<http://svc.mt.gov/msl/mtcadastral/>) and draw features directly on the printed map that includes your property boundaries.

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 **but not limited to:**

- **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**