



The Yellowstone Controlled Groundwater Area Water Right Permit Process

Background

The Yellowstone Controlled Groundwater Area (YCGA) was established on January 31, 1994, under the Reserved Water Rights Compact between the U.S. National Park Service (NPS) and the State of Montana ([§ 85-20-401, MCA](#)). The purpose of the YCGA is to monitor and regulate groundwater development adjacent to Yellowstone National Park to preserve the park's natural geothermal features. Applicants wishing to appropriate water in the YCGA must apply for a Permit for Beneficial Water Use from the Montana Department of Natural Resources and Conservation (DNRC) and install a meter to measure the total volume of water used. Meters are provided free of charge by DNRC, made possible with NPS funding. The Montana Bureau of Mines and Geology (MBMG) monitors the YCGA by inventorying wells and collecting meter data.

This procedure describes a Type "A" permit for small uses. For uses that may exceed 35 gallons per minute or 10 acre-feet per year, contact the Bozeman DNRC office.

Procedure

1. **Location:** Is your project within the YCGA? The following communities and adjacent areas are all within the YCGA: Gallatin Canyon south of Big Sky, West Yellowstone, Hebgen Lake, Gardiner, Jardine, Corwin Springs, and Cooke City-Silver Gate.
2. **Drilling:** The well may be completed prior to applying. Your driller will provide you with a well log.

Well drillers working in the YCGA should be prepared to encounter artesian pressures, hot water, and heaving sands and to abandon wells if needed!

3. **Water Temperature:** The driller should measure the water temperature once it has stabilized after pumping. If you have an existing well log with no temperature listed, you can measure the temperature yourself using a thermometer. Pump the well until the temperature stabilizes and then measure the temperature at an outside spigot or even in your bathtub (with the temperature on cold).
4. **Specific Conductance – Water Sample:** When your driller measures the temperature, a water sample should also be collected in a clean plastic or glass bottle with as little air as possible. Deliver the sample to the Bozeman DNRC office to test the specific conductance. Samples may also be tested by a drinking water laboratory or by making other arrangements. If you need to collect your own sample, pump the well and then collect from an outside spigot or from a location before your water softener or other equipment.
5. **Water Right Permit Application:** After drilling the well and before using the water, file a [Form 600 YCGA: Yellowstone Controlled Groundwater Area Permit Application](#) with the Bozeman DNRC office. Forms must be fully completed.
6. **NPS Notification:** Once DNRC has enough information to determine that your application is correct and complete, NPS will be notified and has 60 days to review applications. If NPS does not object, your permit will be issued.

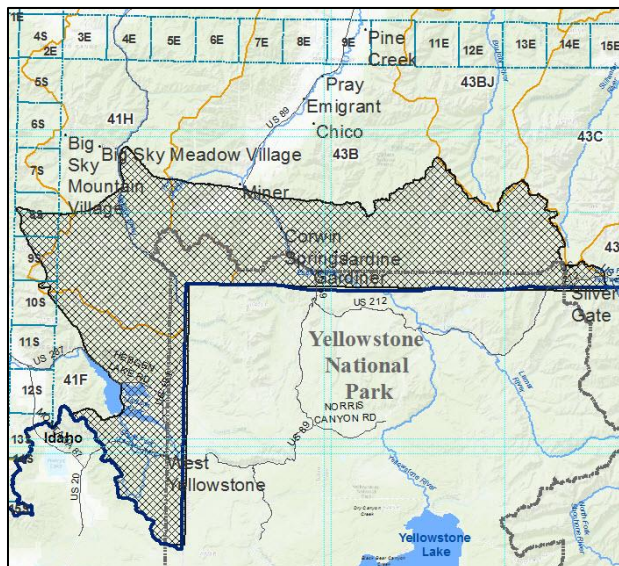


Figure 1: Yellowstone Controlled Groundwater Area.

Even if you have an existing well without a permit, you still need to apply for one! Please call the Bozeman DNRC office if you are unsure if you have a permit.

Thank you for helping to protect Yellowstone. With over 10,000 hydrothermal features and 300 geysers, Yellowstone contains over half of all hydrothermal features and three-quarters of all geysers in the world and is one of the only essentially undisturbed geyser basins left in the world. nps.gov/yell

7. **Meter:** DNRC will issue you a water use meter free of charge, but applicants are responsible for installing and maintaining their meters. The meter should be installed somewhere easily accessible so that you can read it.
8. **Project Completion:** After you have installed your meter and completed your project by putting the water to use, file Form 617: Project Completion Notice with the Bozeman DNRC office before the deadline indicated on your permit. Be sure to include a photograph of your meter in place.
9. **Water Use Reporting:** After filing your Project Completion Notice, please continue to report your annual volume used to the MBMG. You will receive reminder postcards every year.



Figure 2: Water use meter.

Helpful Resources

- Yellowstone Controlled Groundwater Area map: https://dnrc.mt.gov/_docs/water/Water-Rights-Forms/yellowstone-controlled-groundwater-area-map.pdf
- Form 600 YCGA, Yellowstone Controlled Groundwater Area Permit Application form: https://dnrc.mt.gov/_docs/water/Water-Rights-Forms/600-YCGA-R03-2019_fillable.pdf
- Form 615, Water Conversion Table (DNRC's general water requirement guidelines): https://dnrc.mt.gov/_docs/water/Water-Rights-Forms/615.pdf
- Form 617, Project Completion Notice:
 - Form & Instructions – https://dnrc.mt.gov/_docs/water/Water-Rights-Forms/Combined-617-Instructions.pdf
- Ground Water Information Center, GWIC (well logs): <http://mbmgwic.mtech.edu/>
- Montana Cadastral (property ownership, legal land descriptions): <http://svc.mt.gov/msl/mtcadastral>
- Meters in the YCGA: <http://www.mtrules.org/gateway/RuleNo.asp?RN=36.12.1211>

Lost your postcard or have questions about reading your meter? Contact:
MT Bureau of Mines & Geology
1300 W Park St, Suite A
Butte, MT 59701-9900
406-496-4606
pubsales@mtech.edu

Glossary

- Acre-foot (AF or ac-ft): One acre-foot is a volume of water equal to 1 acre covered 1 foot deep, which supplies a family of five for a full year (1 acre-foot = 325,851 gallons).
- Flow rate: The rate at which water is pumped from your well, which cannot exceed 35 gallons per minute (GPM) for Type "A" (small use) permits.
- Place of use (POU): The location where you use water. Your domestic place of use is your house.
- Point of diversion (POD): The groundwater development's location, written as a legal land description.
- Specific conductance: A measurement of how well water conducts electrical current (micromhos, $\mu\Omega$).
- Type "A" Permit: Small use permit, not to exceed 35 gallons per minute or 10 acre-feet per year.
- Well log: A physical record of the well, provided by your driller. This is not a water right!

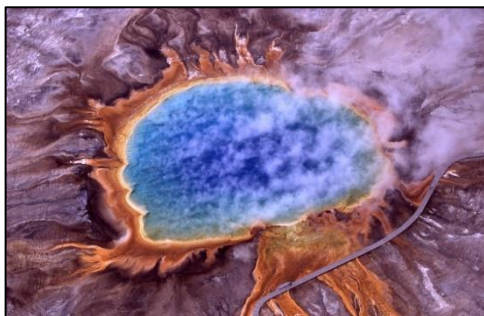


Figure 3: Grand Prismatic Spring. *Jim Peaco, NPS.*

Water right permit questions? Contact:
Dept. of Natural Resources & Conservation
Bozeman Water Resources Office
2273 Boot Hill Court, Suite 110
Bozeman, MT 59715
406-586-3136