GEOTHERMAL Pump & Reinjection

High Capacity Wells

What You Need to Know...

Iowa DNR Water Use and Allocation
Water Supply Engineering
Wallace State Office Building
502 E 9th St
Des Moines, Iowa 50319

Are you considering Pump & Reinjection?

? WILL you be pumping at or above 500 Gallons per Minute (gpm)?

? ARE there nearby Private Wells, Other High Capacity Wells or Industrial Wells?

Know your well’s geology, aquifers & water-bearing formations:
- Bedrock - dolomite, limestone, sandstone
- Alluvial or Buried sands and gravel
- Protected aquifers such as:
  - Jordan Sandstone (Ordovician)
  - Devonian Limestone
  - Silurian Dolomite
  - Dakota Sandstone (Cretaceous)

WHY is this IMPORTANT?

... Protect your well

... Protect your neighbor’s well

... Protect Iowa’s Ground Water

To Obtain a Water Use Permit for a High Capacity Well

✓ Provide map of proposed irrigation well site
✓ Provide map inventory of wells and well construction details within a 1 mile radius
✓ Contact us prior or during construction for pump testing guidance based upon your geological setting
✓ Submit results of any required pump testing – including production well and observation well(s)
What Permits do you need?

- **County Private Well Construction Permit**
  - Your local Iowa Certified Well Driller

- **DNR Water Use & Allocation Permit**
  - DNR – Water Supply Engineering – Water Use & Allocation Team

Contact:

**DNR Water Supply Engineering**
Water Allocation & Use (WSE- WAT)

Michael K. Anderson, PE, Senior Engineer
📞 (515) 725-0336

Deborah R. Williams, Geologist III
📞 (515) 725-0290

**DNR – Private Well Program**
[http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Well-Program](http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Well-Program)

Russell Tell, Environmental Specialist Senior
📞 (515) 725-0462

**Additional Resources for**
Well Mapping Resources
Iowa Geological Survey - GEOSAM
[https://geosam.iahr.uiowa.edu/home](https://geosam.iahr.uiowa.edu/home)

Iowa DNR - Technical Bulletin 23.1 – SD 0014