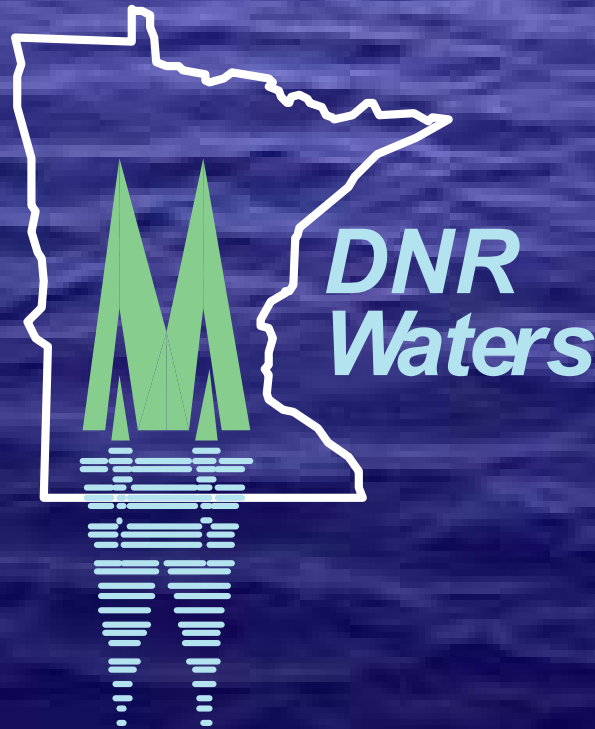


Minnesota Department of Natural Resources



DNR Waters Core Functions

- Regulating activities that affect the State's ground and surface waters
- Collecting, maintaining and interpreting water data
- Conducting technical water resource analyses
- Providing support to local units of government on water management issues



Based on Riparian Rights

Minnesota's Water Law is based on the common law doctrine of riparian rights modified by the concept of reasonable use.

If you own land abutting a surface water source or overlying a ground water source you have the reasonable right to use the resource subject to the rights of other riparian landowners.

Reasonable use defined by statutes and rules that guide issuance water water appropriation permits.



Ground Water Functions

- **Regulation**
- **Monitoring**
- **Mapping**

Water Appropriation Program

Established by the legislature in 1937

Provide a water policy for the state that balances the development and protection of the State's water resources

Permit system to regulate water use

- **10,000 gallons per day or 1 million gallons per year**
- **6,700 permits – 900 permits for public water supply**



Water Use Permitting

Guided by Statute (M.S. 103G) and Rule (M.R. 6115) which set forth standards for:

"regulation, conservation, and allocation of the water resources of the state, including the review, issuance, and denial of water appropriation applications, and the modification, suspension, or termination of existing permits"



Primary Program Elements

- **Water Use Priorities**
- **Resource Protections**
- **Conflict Resolution**
- **Water Conservation**
- **Water Use Reporting**
- **Inter-Basin Diversions**



Water Use Priorities



Domestic water supply



**Consumptive
less than
10,000
gallons/day**



**Agricultural
irrigation &
processing**



**Power
production**

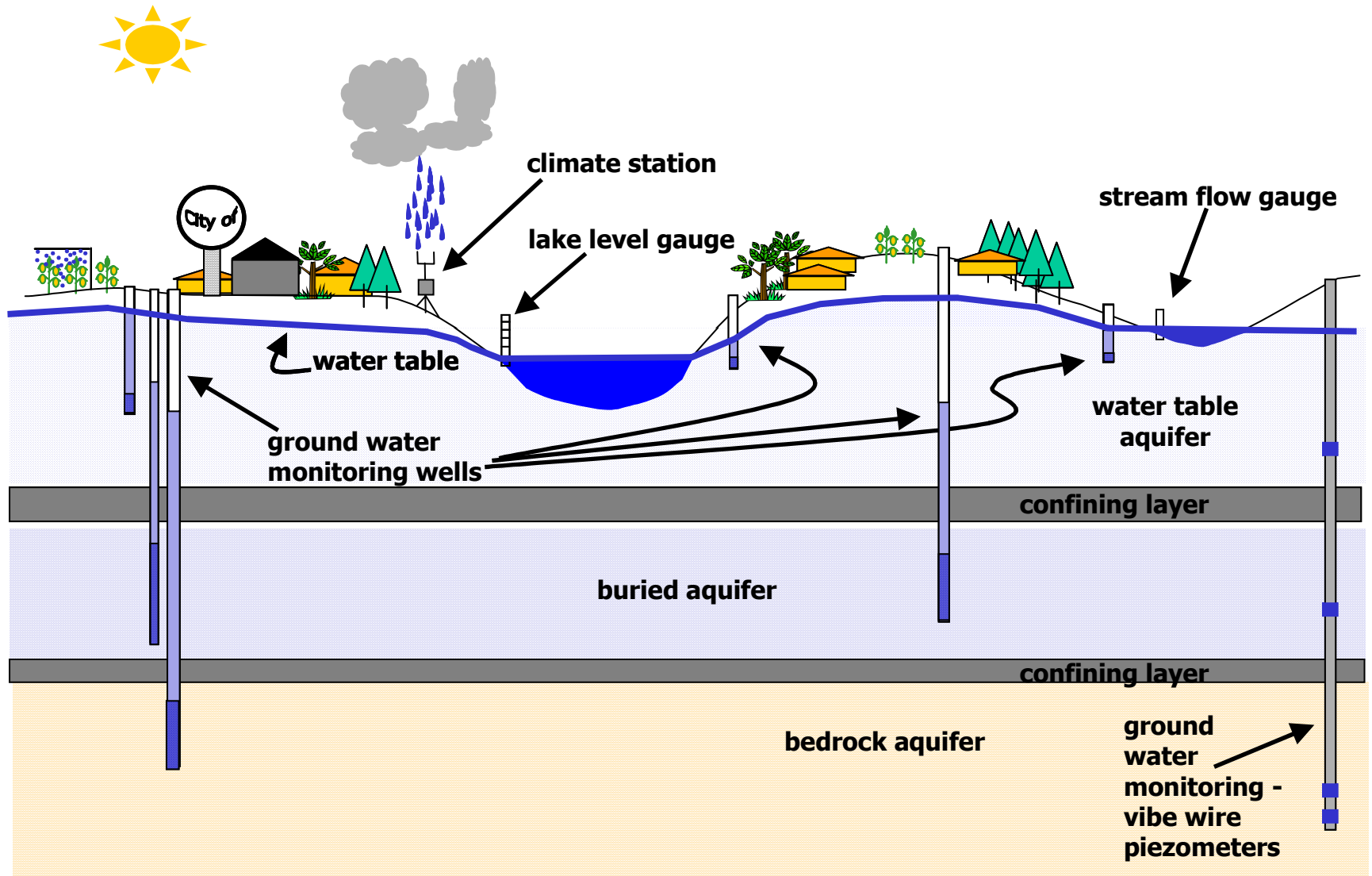


**Consumptive uses in
excess of 10,000
gallons/day**



**Non-essential
uses**

Monitoring the Hydrologic Cycle

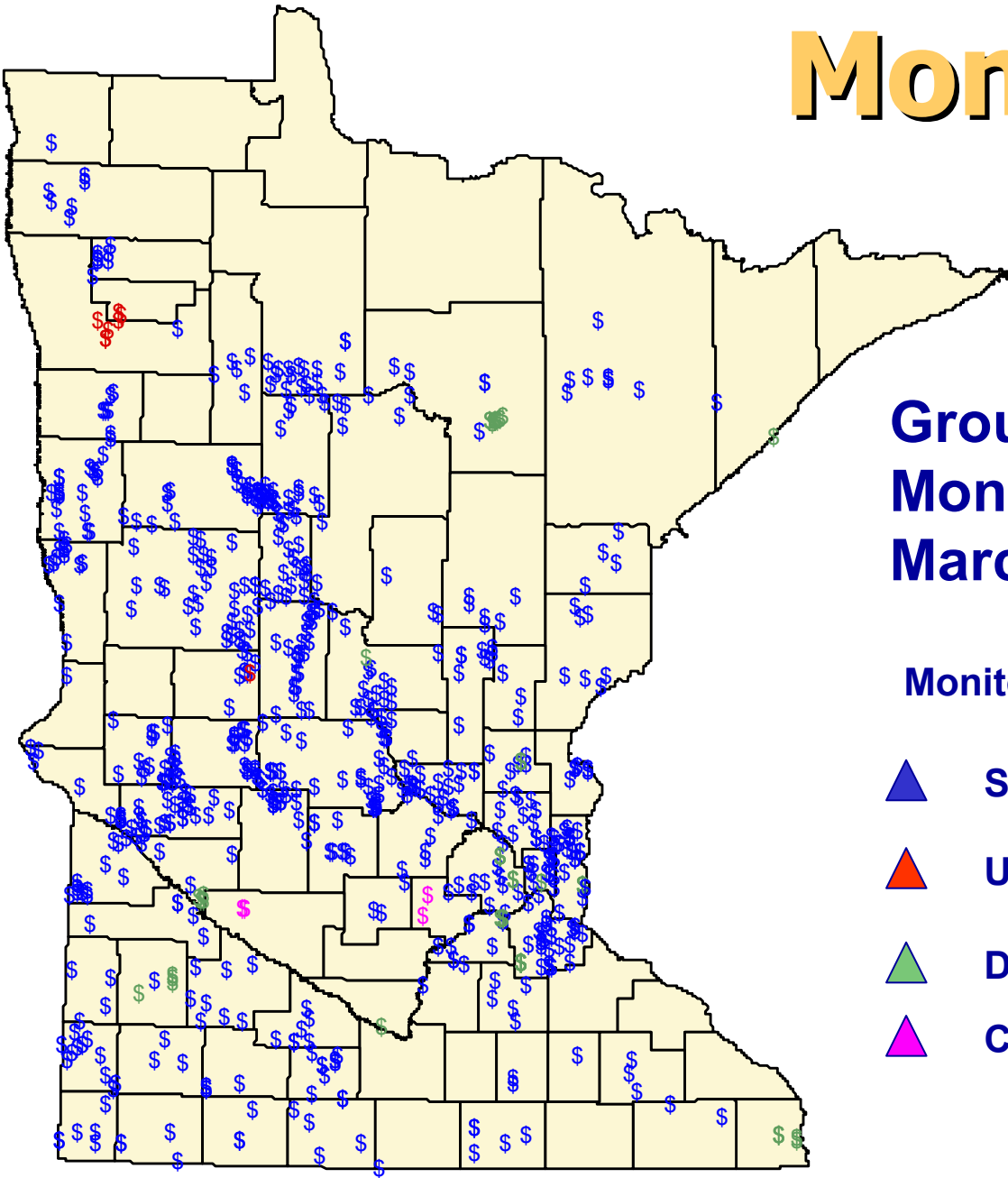


Monitoring

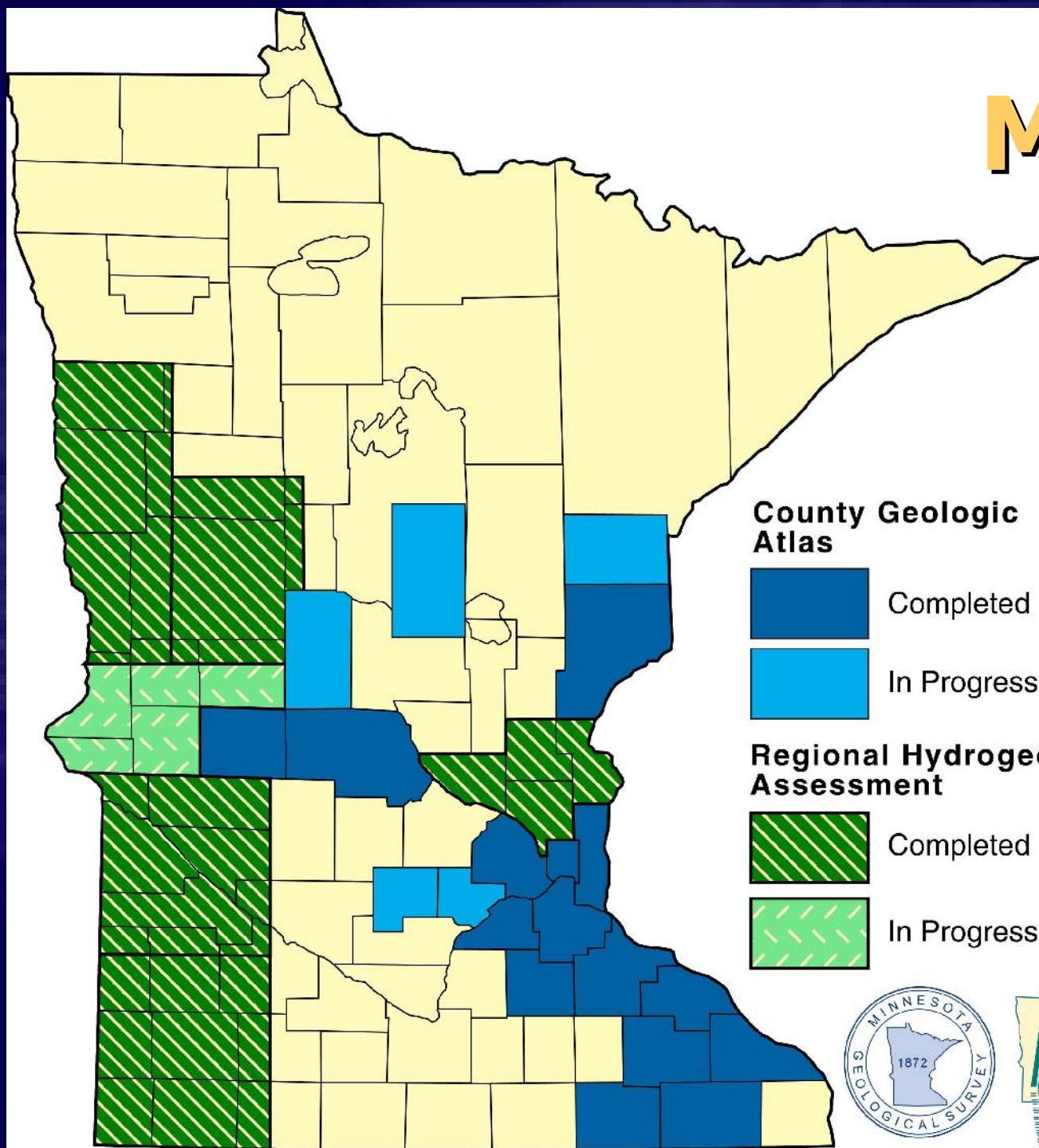
Ground Water Level Monitoring Network March 2005

Monitored by:

-  SWCD - 681
-  USGS - 8
-  DNR - 57
-  County or Watershed - 4



Mapping



County Geologic Atlas



Completed



In Progress

Regional Hydrogeologic Assessment



Completed



In Progress



*DNR
Waters*

Resource Protection Laws

Surface Water

- Protected Flows and Elevations
- Wetland Requirements

Ground water

- Safe Yields
- Mt. Simon-Hinckley - Sole Source

Special Protection

- Trout Streams – temporary uses only
- Calcareous Fens – no degradation
- Endangered Species

Future Water Use Challenges in Minnesota

- increased competition among users
- meeting demand for anticipated growth, anticipated to increase TC metro population 30% in next 30 years (increase in demand, reduction in recharge areas lost to development)
- groundwater quality (nitrate, radium, etc.)

Future Water Use Challenges in Minnesota

- high volume, continuous withdrawal industrial & agricultural processing
- fostering a conservation ethic in the customer base
- ground water/surface water interaction
- sustainability of aquifers
- water supply interference

Future Water Use Challenges in Minnesota

➤ Strategies & plans for water supply & aquifer utilization for the whole state

From a sustainability perspective, the key point is that pumping decisions today will affect surface-water and groundwater availability; however, these effects may not be fully realized for many years.

*Author
unknown*





Photo credit: Kenneth Bradbury, Wisconsin

“More so than any other state, the quality and quantity of water in Minnesota is central to our way of life. It helps define who we are and what we value.”

Governor Pawlenty

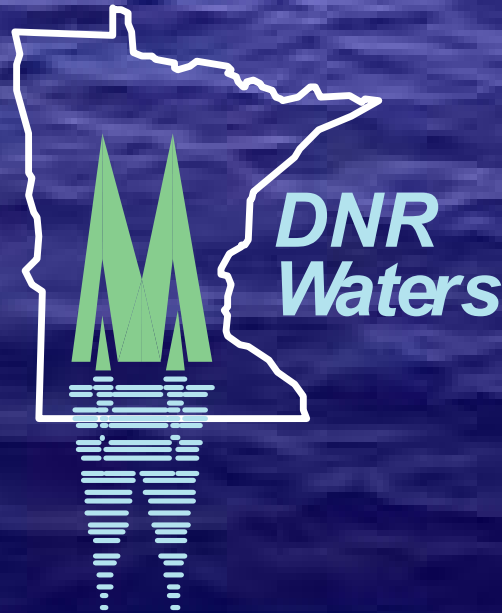
<http://cwc.state.mn.us/>



Questions???

Please visit our web site at:
www.dnr.state.mn.us/waters

or contact the DNR Hydrologist serving your location



Thank you