

Source Water Protection  
in  
Secondary Permeability Environments

MGWA Meeting April 19, 2007

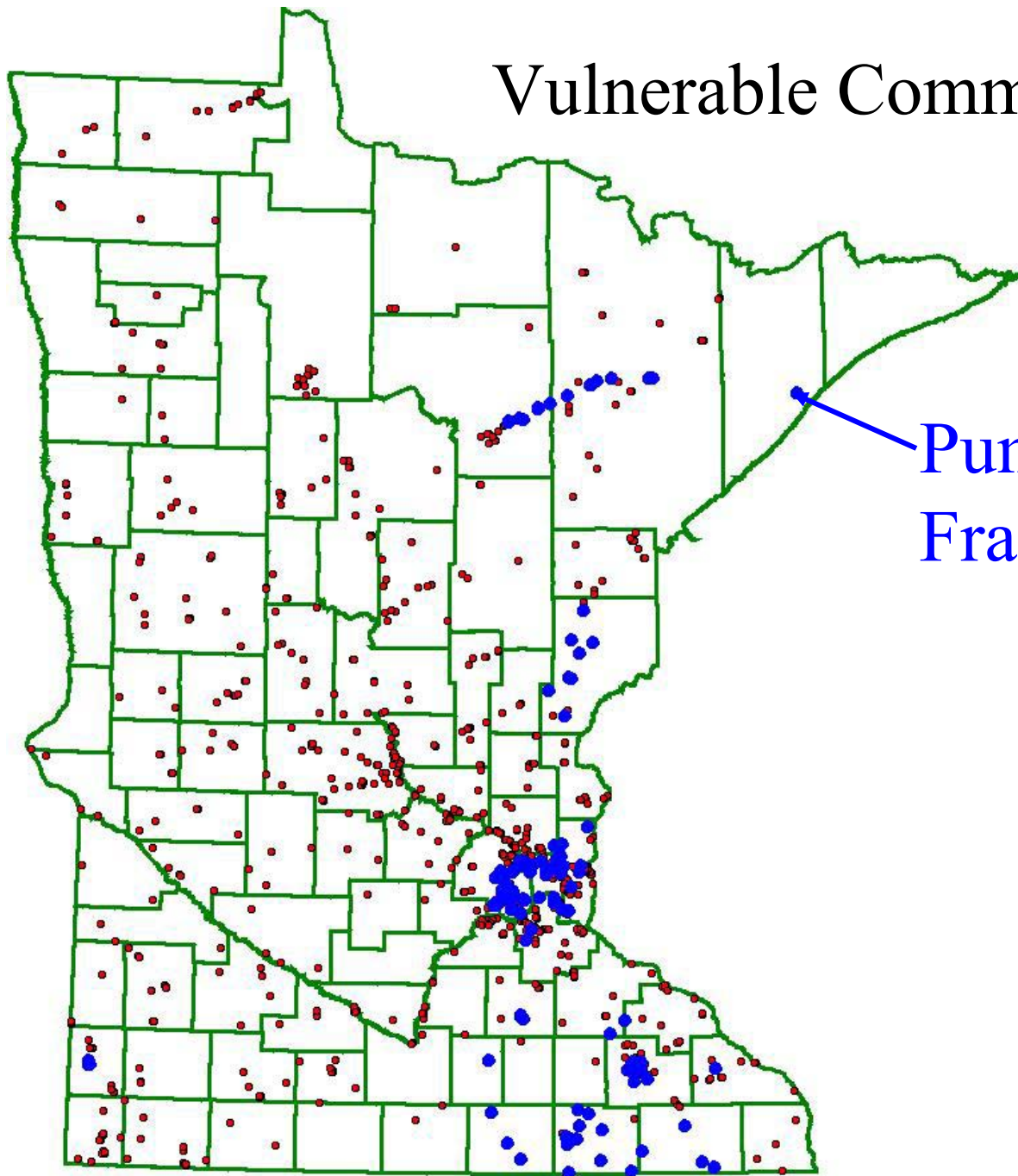
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# MDH Roles in Drinking Water Protection

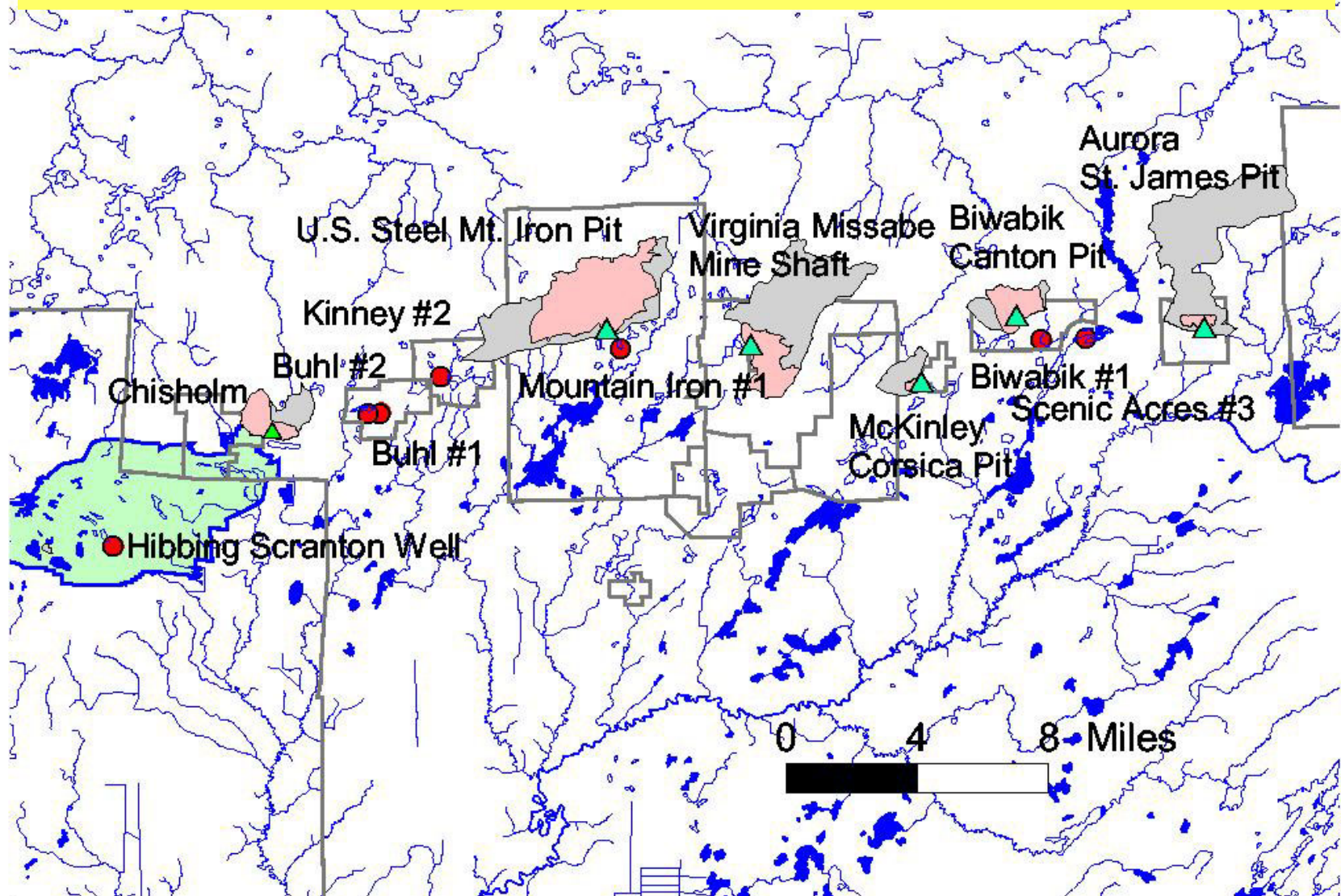
- Principle Agency Responsible for Public Health Protection
- Primacy Agency for Federal Safe Drinking Water Act
- MDH Administers State Regulations Affecting Drinking Water Supplies
- Member Agency of the EQB

# Vulnerable Community Wells



Pump From  
Fractured Rock

# SWP ON THE MESABI IRON RANGE



# Challenges

- The Source Water Protection Area is Difficult to Designate and May Have a Large Geographic Extent
- Public Water Suppliers Have Limited or No Jurisdictional Authority Beyond Their Corporate Limits

# Challenges

- Managing Potential Contamination Sources Should Address the Impacts of Fracture Systems
- Integrate Surface Water and Ground Water Protection Programs

# Meeting the Challenges

- Develop Better Coordination Between Surface Water and Ground Water Protection Programs
- Identify the Water Resource Evaluation and Contamination Source Management Tools That Relate To SWP In Fractured Rock Terrains.

# Federal/State/Local Coordination

- Federal Spending and Policies (4 to 10 Years)
- State Spending and Policies (2 to 6 Years)
- Local Spending and Policies (1 to 4 Years)



# Focus on Federal Programs

- Safe Drinking Water Act
- Clean Water Act
- Farm Bill, Energy Bill, Source Water Coalition, etc.

# Safe Drinking Water Act

(Title XIV of the Public Health Services Act)

- Addresses Public Water Supplies Only
- Requires that States Have WHP but Not Surface Intake Protection Programs
- No National Standards For Well Construction and Ground Water Protection

# Safe Drinking Water Act

- National Drinking Water Standards (MCLs)
- PWSS Program
- Source Water Protection
- Underground Injection Control
- Sole Source Aquifer Program

# Clean Water Act

## (Federal Water Pollution Control Act)

- Primary Focus Is On Surface Water
- Limited Authority to Protect Ground Water

# Clean Water Act

- Water Quality Standards/Designated Use
- On-site/Decentralized Wastewater
- Storm Water Discharge Program
- Animal Feeding Operations
- Biosolids Program
- Non-point Source Pollution
- Total Daily Maximum Loads

# Integrating the CWA and SDWA

- CS(WA)<sup>2</sup>
- Priority for EPA
- Recognize the Interconnection Between Surface Water and Ground Water

# What Has Been Done?

- Address Public Wells in Feedlot Regulations
- Standards for On-site Systems in WHPAs and for Siting New Systems to Protect Ground Water
- Address Public Wells in Storm Water Permitting

# Things to Do

- Integrate WHP Goals With Basin Planning
- Identify Portions of WHPAs Where Nonpoint Source Management BMPS Support WHP Efforts
- Identify Where the TMDL Program Can Be Applied to Ground Water
- Expand CWA/SDWA Integration To Farm Bill Conservation Programs



# QUESTIONS

SANDSTONE



LIMESTONE



TILL



IRON FORMATION

