

US EPA Forum on  
**Surface Discharging  
Wastewater Systems**

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# Surface discharging systems

- Straight pipes
- Unsewered areas
- Areas of wastewater needs
- Imminent threat to Public Health



# Discussion topics for today – Surface Dischargers

## **MPCA programs/permits**

### **How do we find?**

- Small community wastewater needs
- Individual wastewater needs

### **How do we fix?**

- Legislation/Statutes/Rules
- Enforcement
- Funding Programs
- Pilot Projects

# Minnesota's regulatory authority

## MPCA regulatory programs

- Surface Water Discharges - National Pollutant Discharge Elimination System permit (NPDES)
- > 10,000 gpd Land Dispersal Systems - State Disposal System permit (SDS)
- Prepare Statutes/Rules for LGU - <10,000 gpd
- Licensing/Certification for SSTS businesses/Individuals

## Local Government Unit regulatory program

< 10,000 gpd Land Dispersal System permit called - Subsurface Sewage Treatment Systems (SSTS)  
... based on MPCA prepared Rules



# Minnesota strategic plan statement

By January 2014, strengthen local programs to reduce the percentage of septic systems characterized as failing or imminent threats to public health and safety from 39% to <5%.



Sewage on the ground surface

# How do we find areas with wastewater needs in Minnesota?



# Plan to address small community wastewater needs in Minnesota

- List of accomplishments past 12 years
- Updated list of small community wastewater needs (survey to counties)
- Identify barriers, priorities, and strategy to work proactively with communities



# Report summary of prioritized wastewater needs

- 33** Communities with common straight pipes discharging to surface waters (and prioritize impaired waters, community size, volume, etc.)
- 73** Communities with individual straight pipe discharging to surface waters or ground surface and prioritize
- 688** Lake communities with suspected problem site conditions for modern septic systems

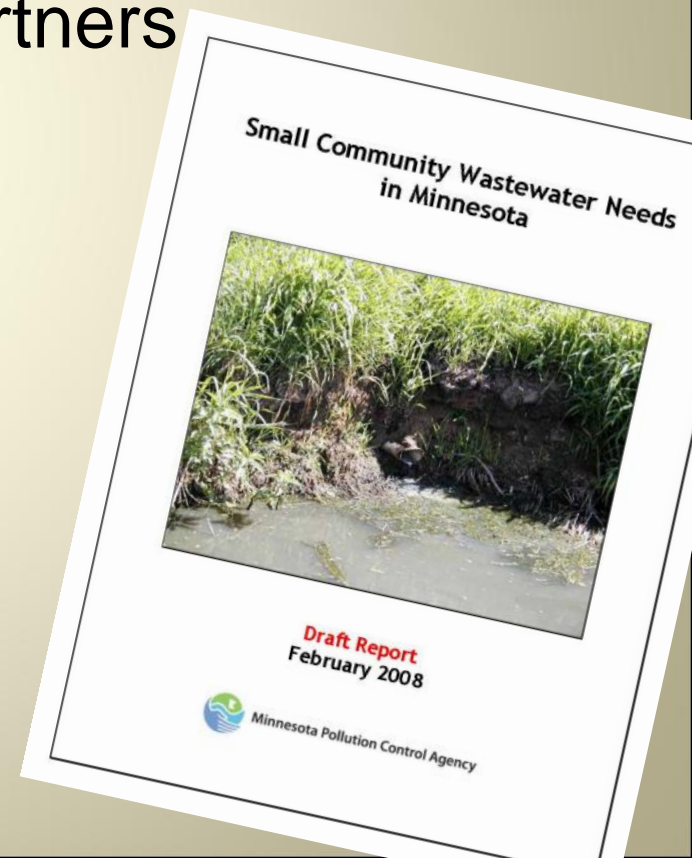




# Report includes next steps

Establish regional teams

- rank communities in each region
- develop and coordinate with partners
- work with priority communities
- sample straight pipes (TMDL's)
- communication plan

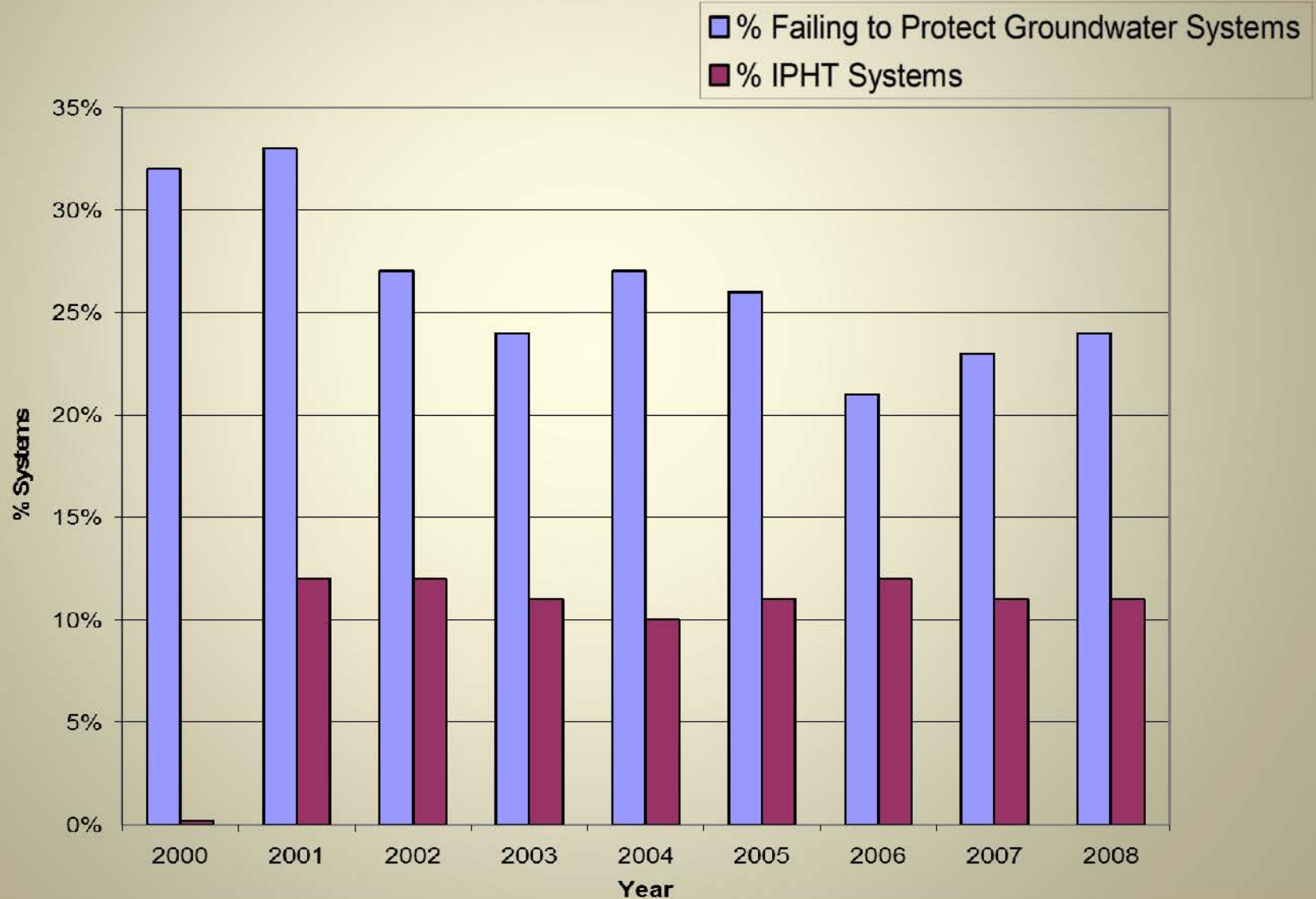


# How do we find areas with WW needs in Minnesota – SSTS

Annual County Reports –  
Required by 87 counties in  
Minnesota to identify their  
successes and needs



# Progress in SSTS upgrades, 2000 – 2008



# How do we fix areas with wastewater need?



Legislation/Statutes/Rules

Enforcement

Funding programs

Pilot projects



# How do we fix areas with wastewater need?

## Legislation/Statutes/Rules

### 2006 “Straight Pipe” Statute (115.55 Subp. 11)

- Local Governments put owners on notice to fix
- After 10 months refer to State for \$500/month penalties
- Penalties split between LGU and State

# 2006 'Straight Pipe' Statute status

## Enforcement

**142** referrals to State to date

**130** require no action:

**105** fixed to satisfaction of county

**19** suspended by county

**6** issued extensions

# How do we fix areas with wastewater need?

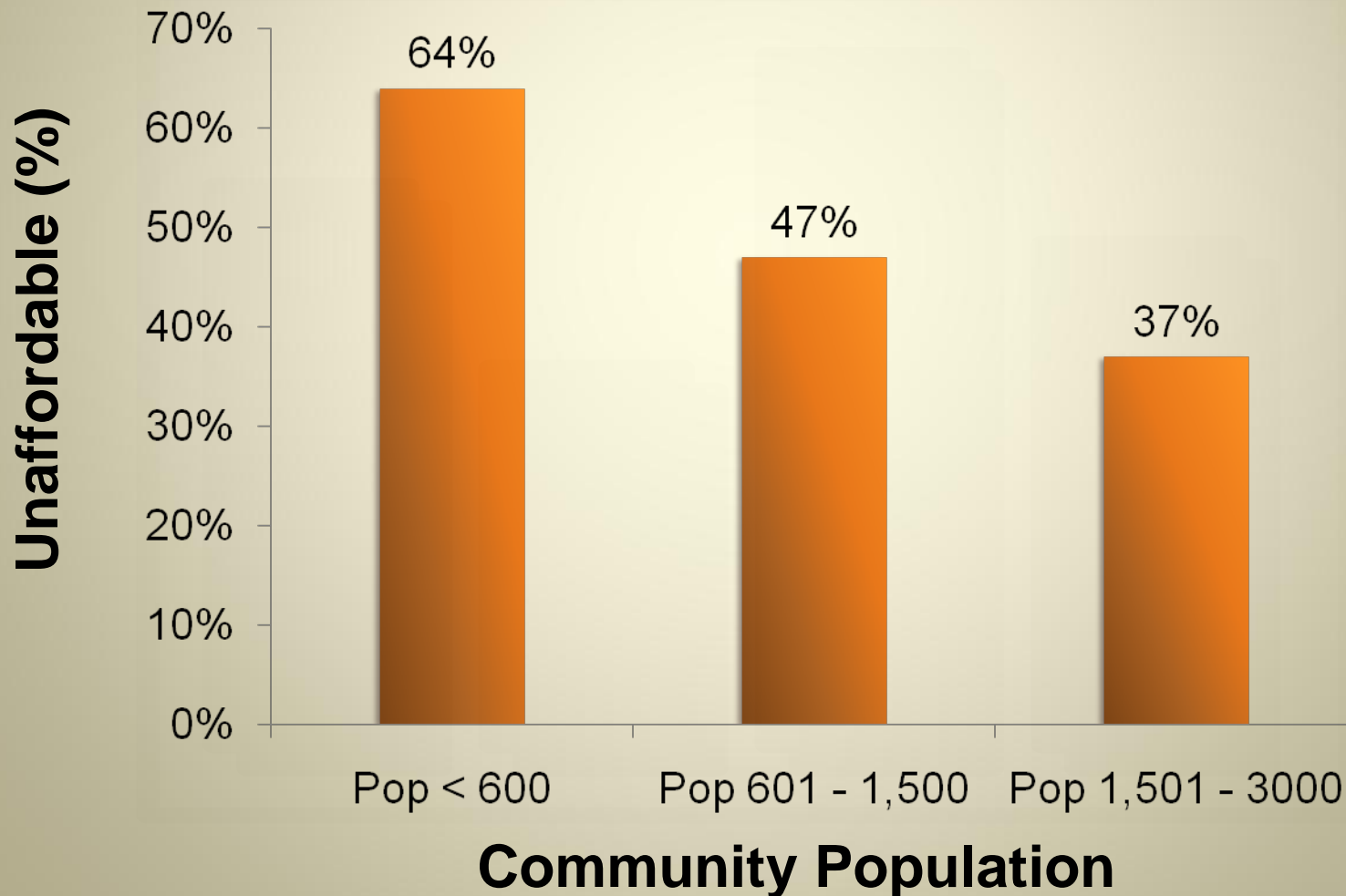
Legislation/Statutes/Rules

## 2008 Mn Rule 7080 (septic system) program improvements

- Strengthen local units of government – improve septic system design, installation, operation and maintenance
- Technical changes
- Product registration
- Management plans
- Operating permits

How do we fix areas with wastewater need?

# Can communities afford wastewater treatment?





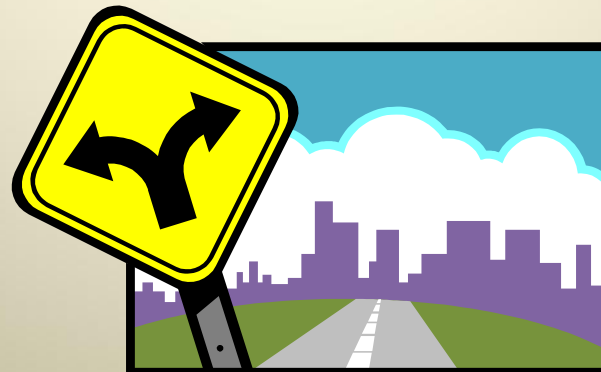
# There is a fork in the road

## Public solution

- PFA
- USDA – Rural Development
- DEED Small Cities
- Corp of Engineers
- IRRRB

## Continued private ownership

- Dept of Ag BMP
- Grants (BWSR, CWP)
- USDA – RD
- County-based loans
- Private foundations
- Home owner loans



# Public financial assistance programs

## Funding programs

### **Clean Water State Revolving Fund**

Low interest loans to cities for wastewater and stormwater projects

### **TMDL grant program**

50% grants for WW or stormwater projects required by TMDL plans

### **Wastewater Infrastructure Fund (WIF)**

Supplemental assistance grants and 0% loans for high priority WW projects

### **Small Community Wastewater Treatment Grant/Loan Program**

- Loans and grants to replace non-complying septic systems
- Technical assistance from U of MN Extension (community involvement process and/or soil and site evaluation)

# Clean Water Revolving Fund – Project Priority List

- Integrated scoring criteria for wastewater and stormwater
- 2009 PPL
  - Approximately \$1.8 billion in identified need
  - 261 projects
    - 60% rehab, 40% unsewered area
    - One stormwater project

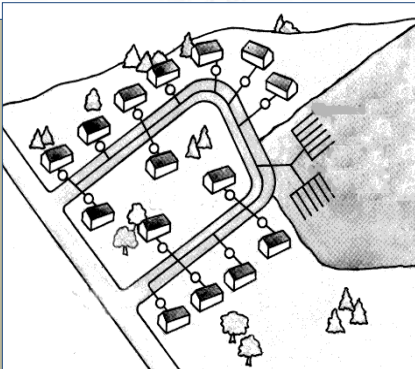
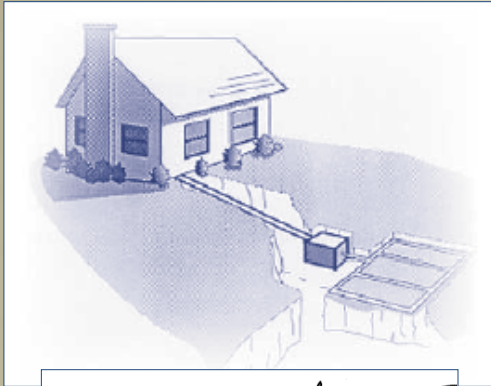
# Wastewater hierarchy

## Unsewered area alternative analysis

1. Replace failed ISTS with new ISTS
2. Decentralized cluster system
3. Connect to existing facility
4. Connect to a facility which requires an expansion
5. Construct a new wastewater and treatment facility

Note:

Solution may be a combination of approaches





# How do we fix areas with wastewater need?

## Pilot projects

- **3 county pilot projects near completion** – \$250,000 to each county over 4 yrs to identify and fix problem septic systems
- **Board of Water and Soil Resources/LGU/MPCA Partnership** – \$2m total to identify and fix problem septic systems



# 2008 wastewater successes in Minnesota

## Projects constructed or under construction

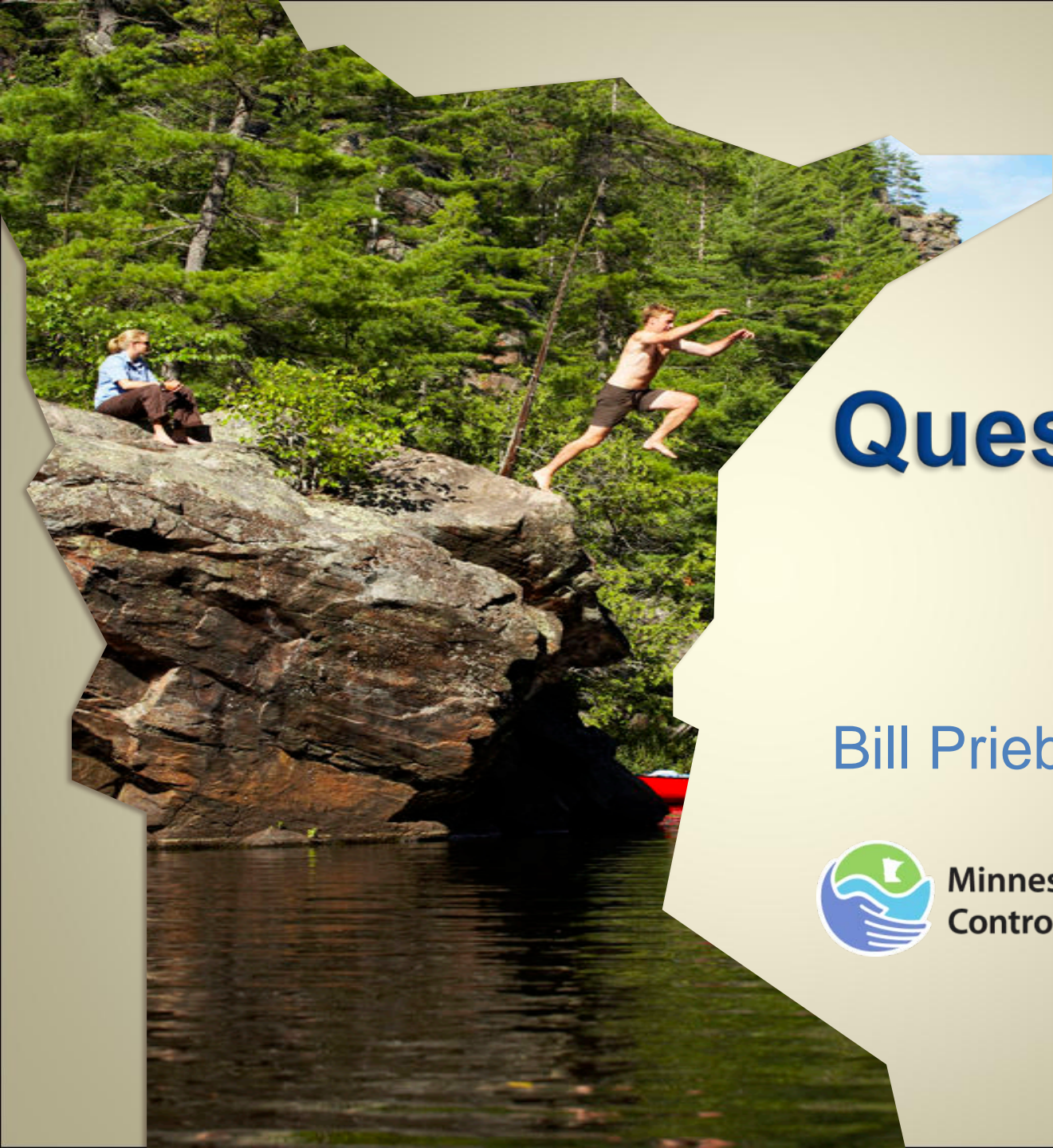
- In 2008, nine of the 106 straight pipe communities fixed their wastewater needs.
- 16 other small communities in unsewered areas made significant progress in resolving their wastewater issues
- 2 of 4 County pilot projects successful in elimination of 'straight pipes' from the 3 County Pilot Program
- BWSR Grants – 47% surface dischargers identified have been replaced to date

# Opportunity for success



**FIX IN PROGRESS**





# Questions?

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