



# Minnesota's Clean Water Legacy

**Paul Gardner** Clean Water Council Administrator  
**John Barten** Clean Water Council Representative  
**Chris Elvrum** Interagency Coordination Team Chair





# 2006 Clean Water Legacy Act



## Set the Direction

- **Created the Clean Water Council** to advise Legislature and Governor
- A comprehensive **watershed approach** to the work
  - Identify the impaired waters
  - Develop plans
  - Implement restoration
  - Protect
  - De-list



# 2008 Clean Water, Land and Legacy Amendment

**Minnesota voters took bold action to protect water resources, protect and enhance habitats, improve our parks and trails, and preserve our cultural heritage.**



Expanded our water resources charge to:

- Protect, enhance, restore water quality in lakes, rivers, and streams
- Protect groundwater, with a special focus on drinking water sources



# Clean Water Council



***Protect and Restore Minnesota's Waters for  
Generations to Come***



## Seventeen voting members, appointed by the governor

- statewide farm organizations (2)
- business organizations (2)
- environmental organizations (2)
- soil and water conservation districts (1)
- watershed districts (1)
- nonprofit organizations focused on improvement of Minnesota lakes or streams (1)
- rural (1) and metro (1) county governments
- city governments (1)
- township officers (1)
- tribal governments (1)
- statewide hunting organizations (1)
- statewide fishing organizations (1)

# Clean Water Council Goals and Objectives



## **Drinking water is safe for everyone, everywhere in Minnesota**

- Protect public water supplies
- Ensure private well users have safe water



## **Groundwater is clean and available**

- Improve and protect groundwater quality
- Ensure sustainable long-term trends in aquifer levels
- Avoid adverse impacts to surface water features due to groundwater use

# Clean Water Goals and Objectives



## **Surface waters are swimmable and fishable**

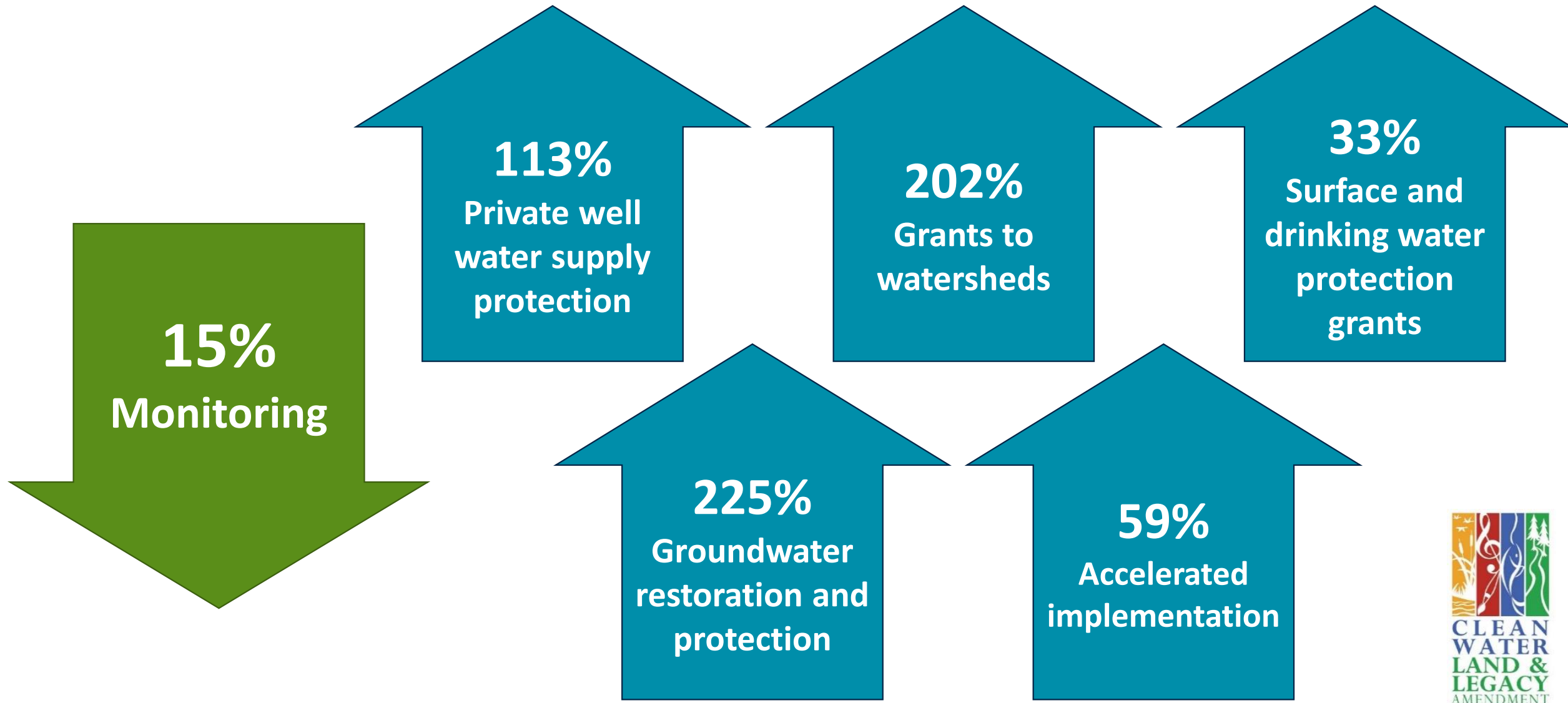
- Prevent and reduce pollution of surface waters
- Maintain and improve the health of aquatic ecosystems
- Protect and restore hydrologic systems



## **Minnesotans value water and take actions to sustain and protect it**

- Build capacity of local communities to protect and sustain water resources
- Encourage systems and approaches that support, protect and improve water
- Provide education and outreach to inform Minnesotans' water choices
- Encourage citizen and community engagement on water issues

# Less measurement, more implementation



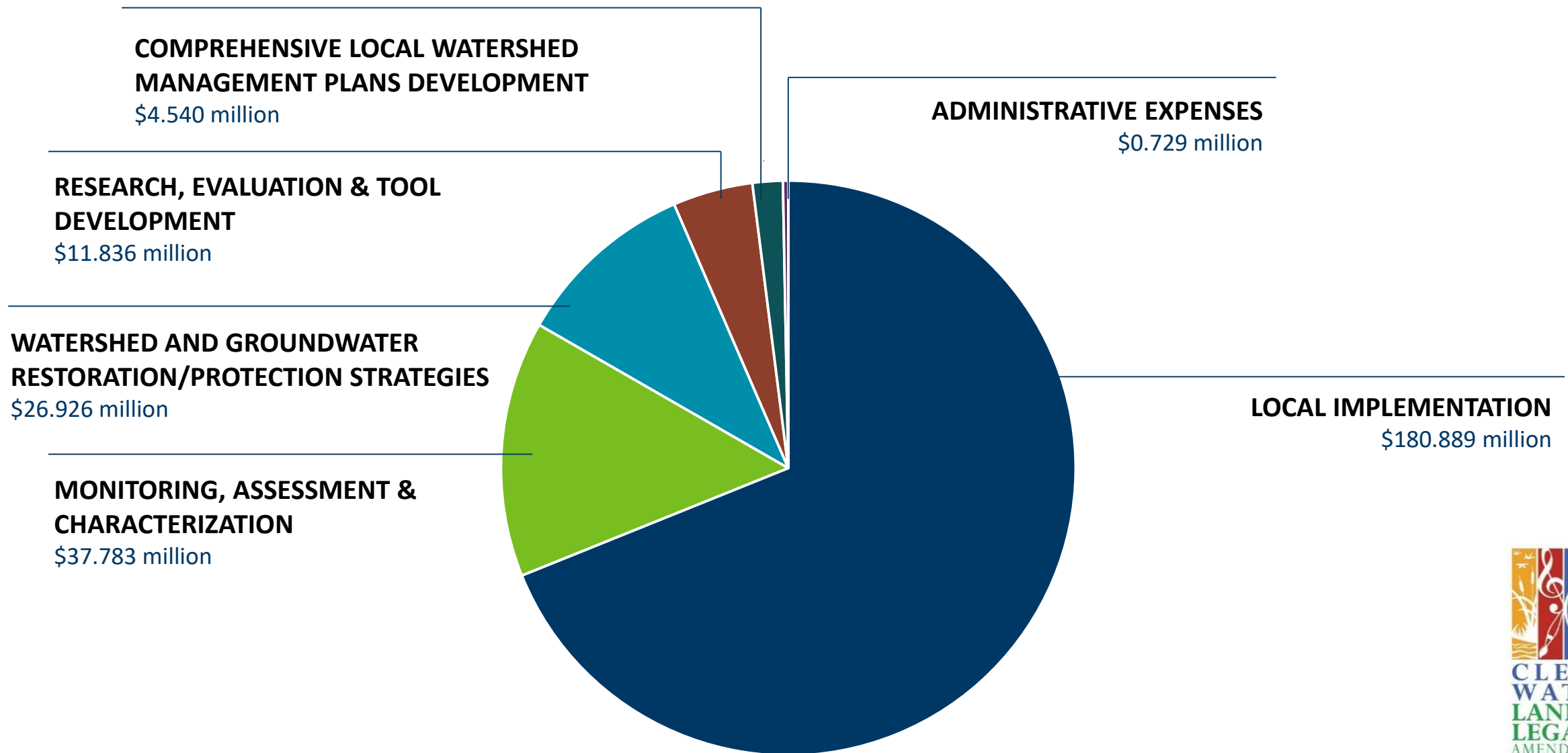


# Supplementing, Not Supplanting



- The St. Louis River Area of Concern attracted federal dollars from the Great Lakes Restoration Initiative, with de-listing likely in 2025
- Local units of government have cleaned up 700 septic systems
- Contaminants of Emerging Concern Initiative (MDH) does what the federal government has failed to do
- Grant-funded restoration and protection activities throughout the state

# FY20-21 Clean Water Funding Recommendations







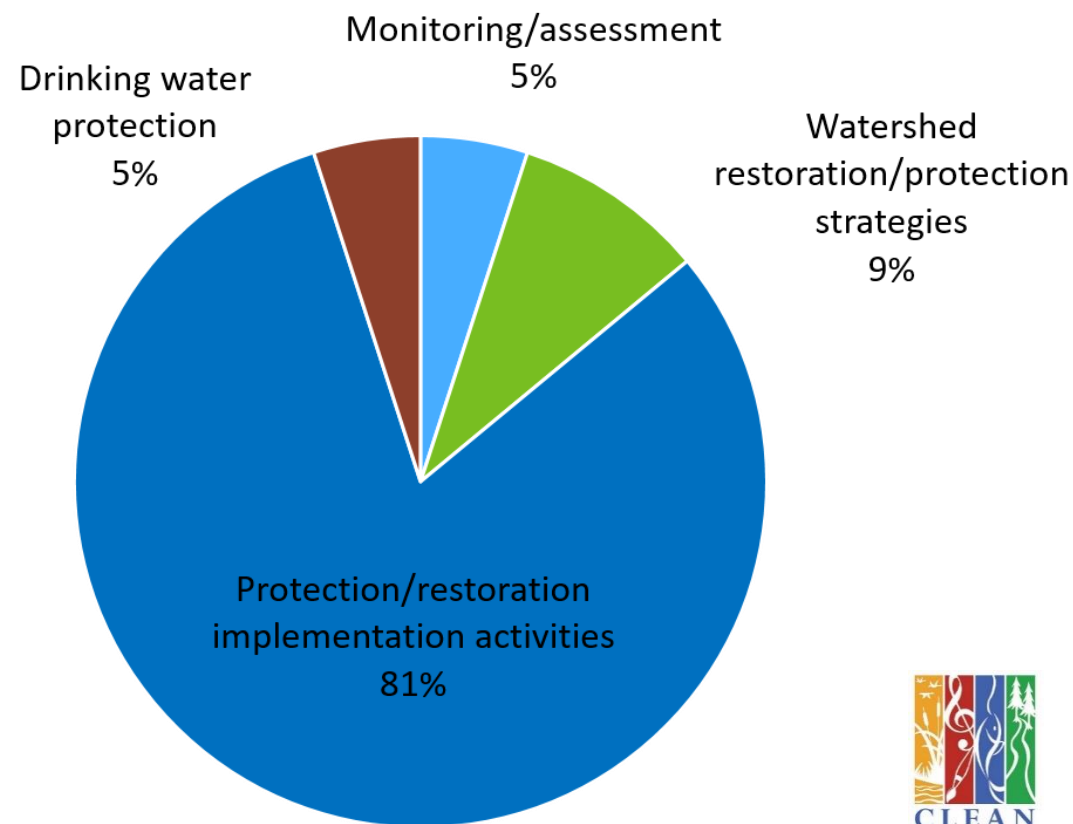
**Local Implementation**  
\$180.889 million (68.9 percent)



# Implementation: Total Dollars Awarded

- \$361 million in Clean Water Funds were passed through to non-state agency partners since 2010.
- 81 percent of those awards focused on restoration and protection activities.

FY10-17 grant and contract awards by major activity



# Conservation Reserve Enhancement Program (CREP)

**Voluntary, locally driven conservation project targeting the most environmentally sensitive areas**

- Improves hydrology, increases infiltration, and provides flood mitigation
- Provides habitat for wildlife, non-game species, and pollinators
- Reduces nitrate loading in drinking water supplies



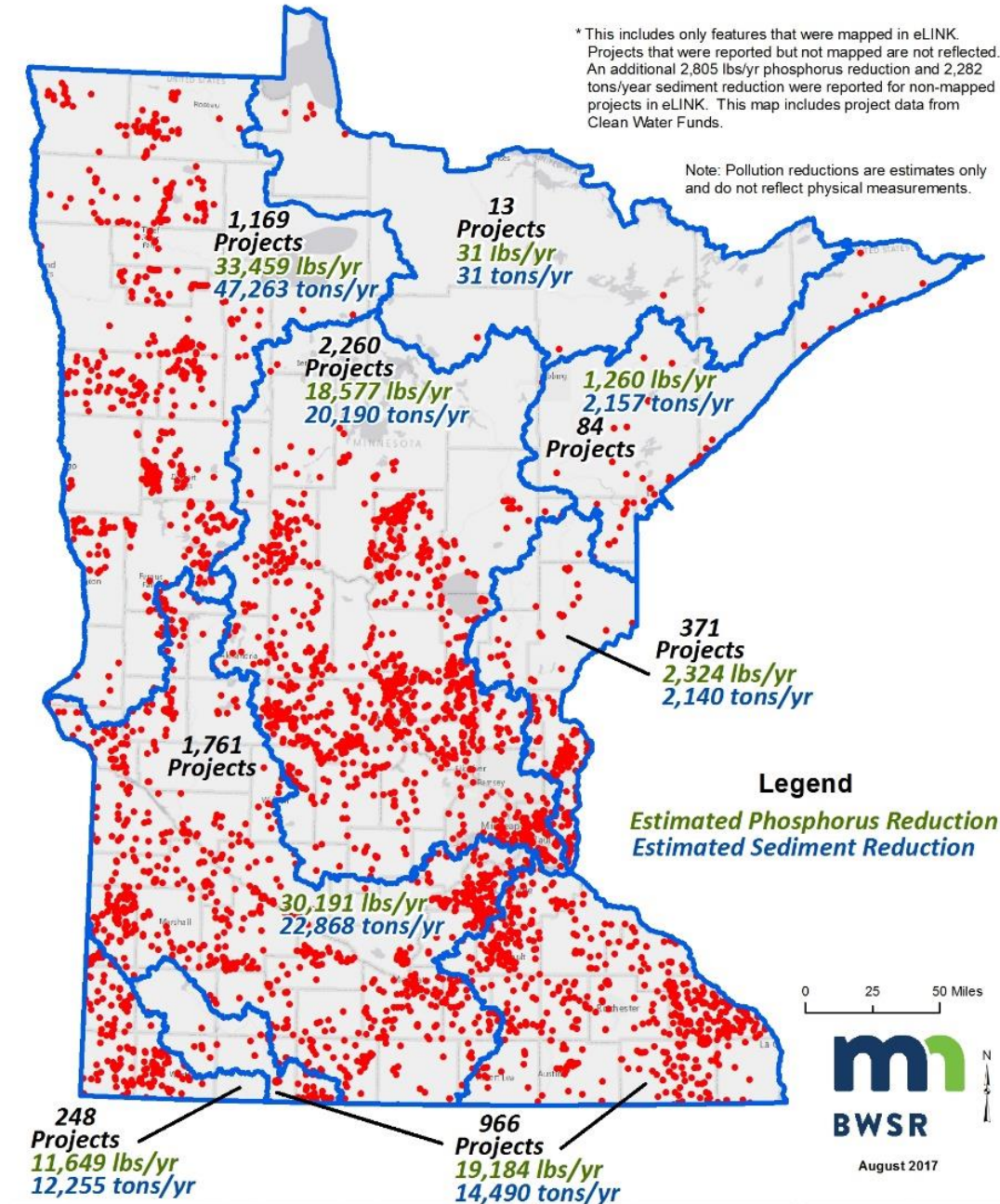


## Clean Water Fund Projects 2010 - 2017

### Projects and Estimated Pollution Reductions by Major Basin

\* This includes only features that were mapped in eLINK. Projects that were reported but not mapped are not reflected. An additional 2,805 lbs/yr phosphorus reduction and 2,282 tons/year sediment reduction were reported for non-mapped projects in eLINK. This map includes project data from Clean Water Funds.

Note: Pollution reductions are estimates only and do not reflect physical measurements.



# Nonpoint Source BMP Implementation

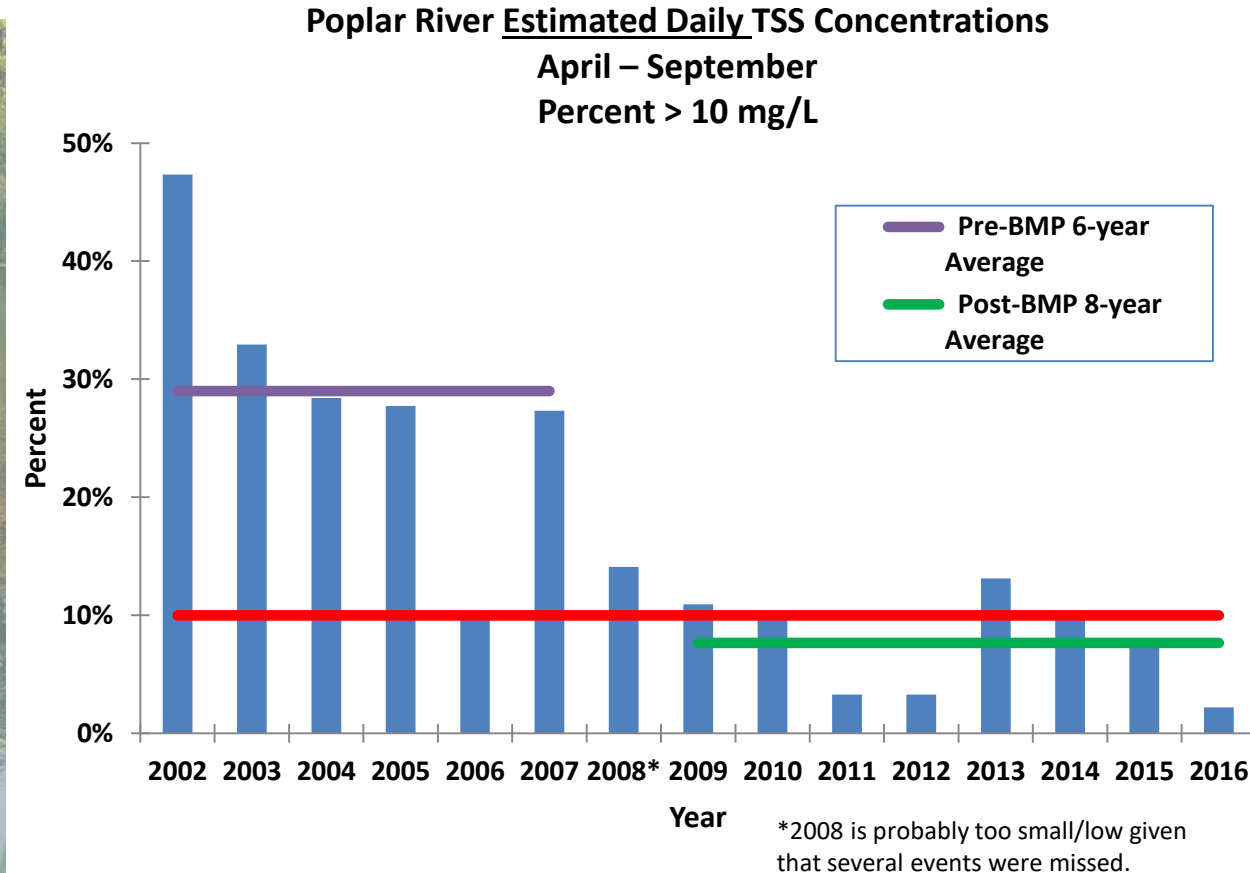
Clean Water Funds (FY10-17) have provided for **1,487 grants, 789 loans, and 490 easements** to implement restoration and protection activities.

Minnesota Agricultural Water Quality Certification Program certified **704 farms** covering **460,090 acres** and has resulted in **1,388 new conservation practices** implemented.

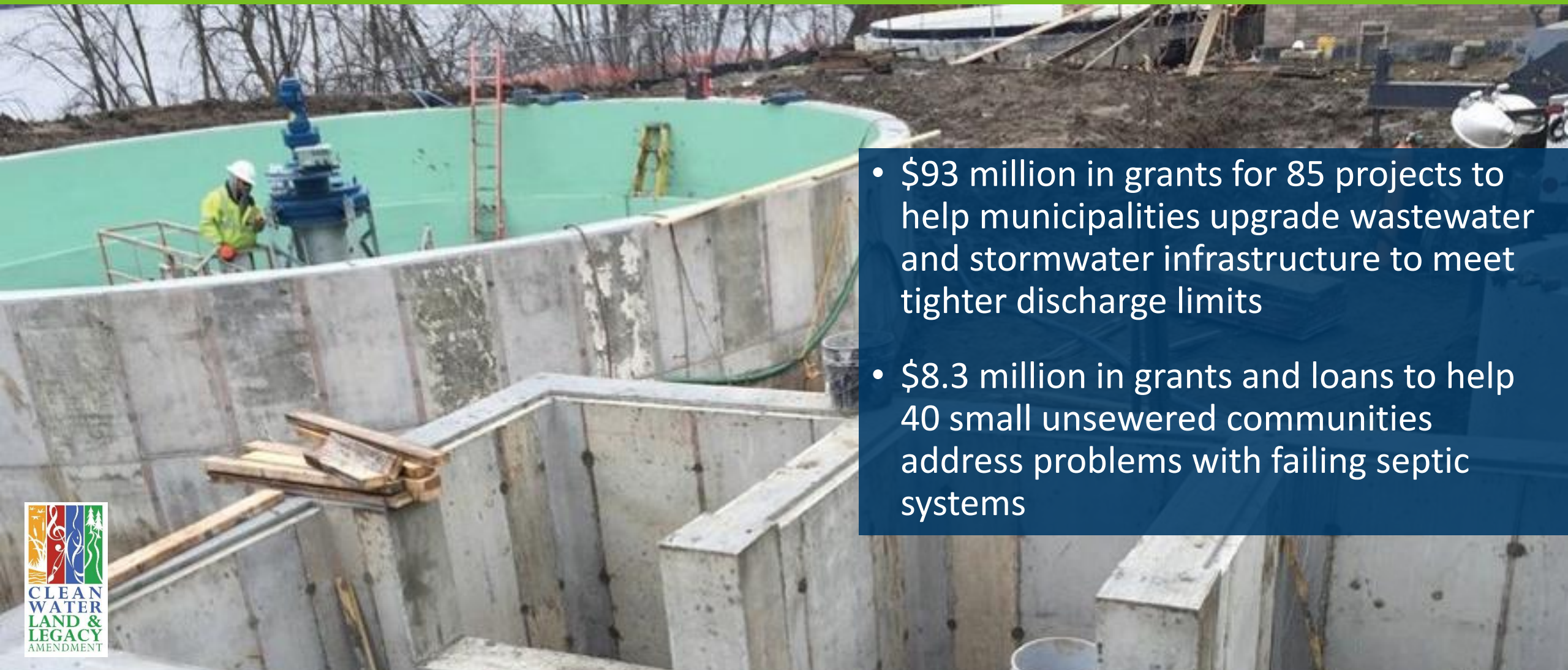


# Nonpoint Source BMP Implementation

## Success at last! Poplar River meets water quality goals



# Point Source Implementation



- \$93 million in grants for 85 projects to help municipalities upgrade wastewater and stormwater infrastructure to meet tighter discharge limits
- \$8.3 million in grants and loans to help 40 small unsewered communities address problems with failing septic systems



# Groundwater/Drinking Water Implementation

- BWSR and MDH are sealing unused wells and targeting wellhead protection to reduce the risk of groundwater contamination
- MDA is working with local governments, farmers, and crop advisors to address nitrate concerns and promote nitrogen fertilizer BMPs
- MPCA provides grants to counties to enhance inspections and corrective actions for subsurface sewage treatment systems





# Monitoring, Assessment and Characterization

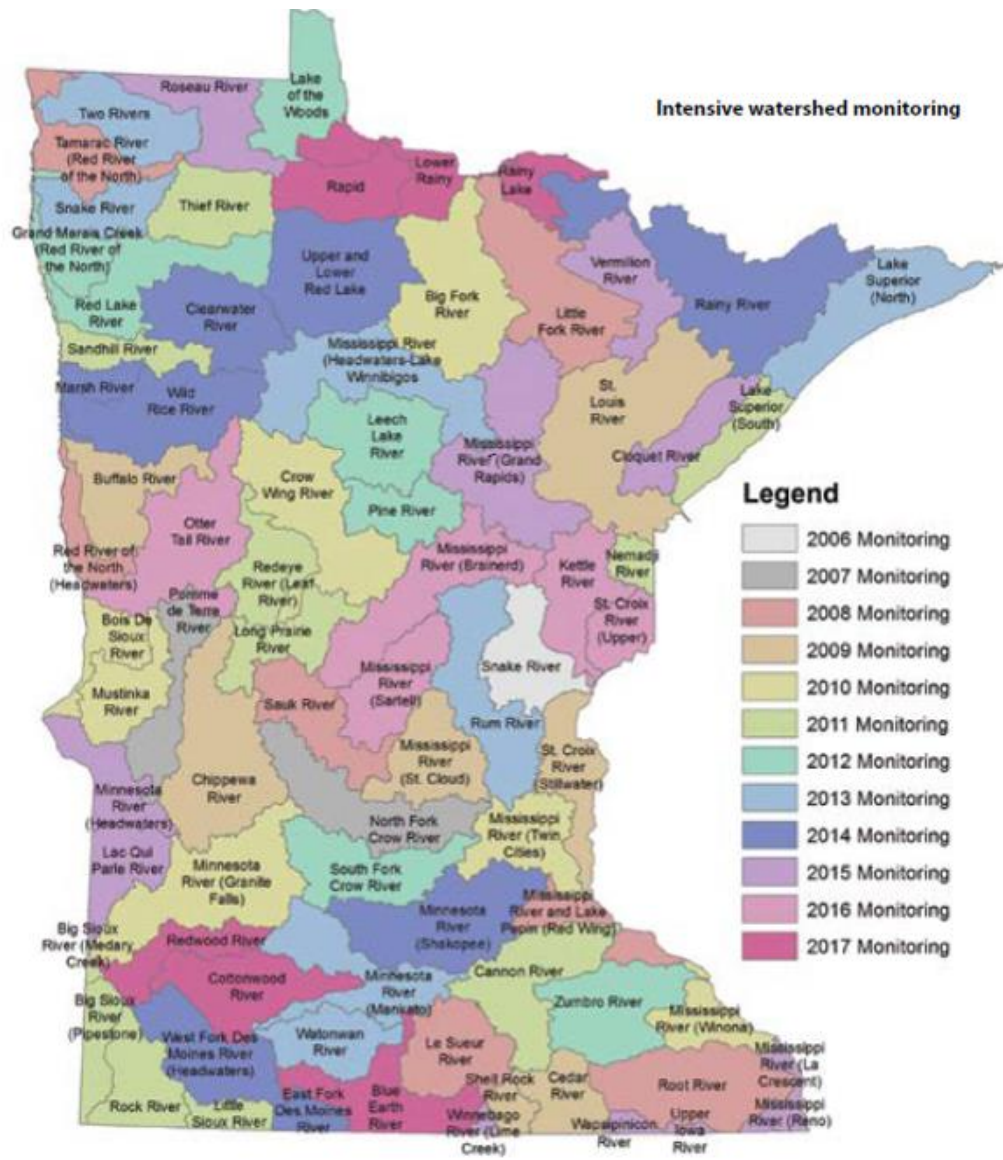
\$37.783 million (14.4 percent)



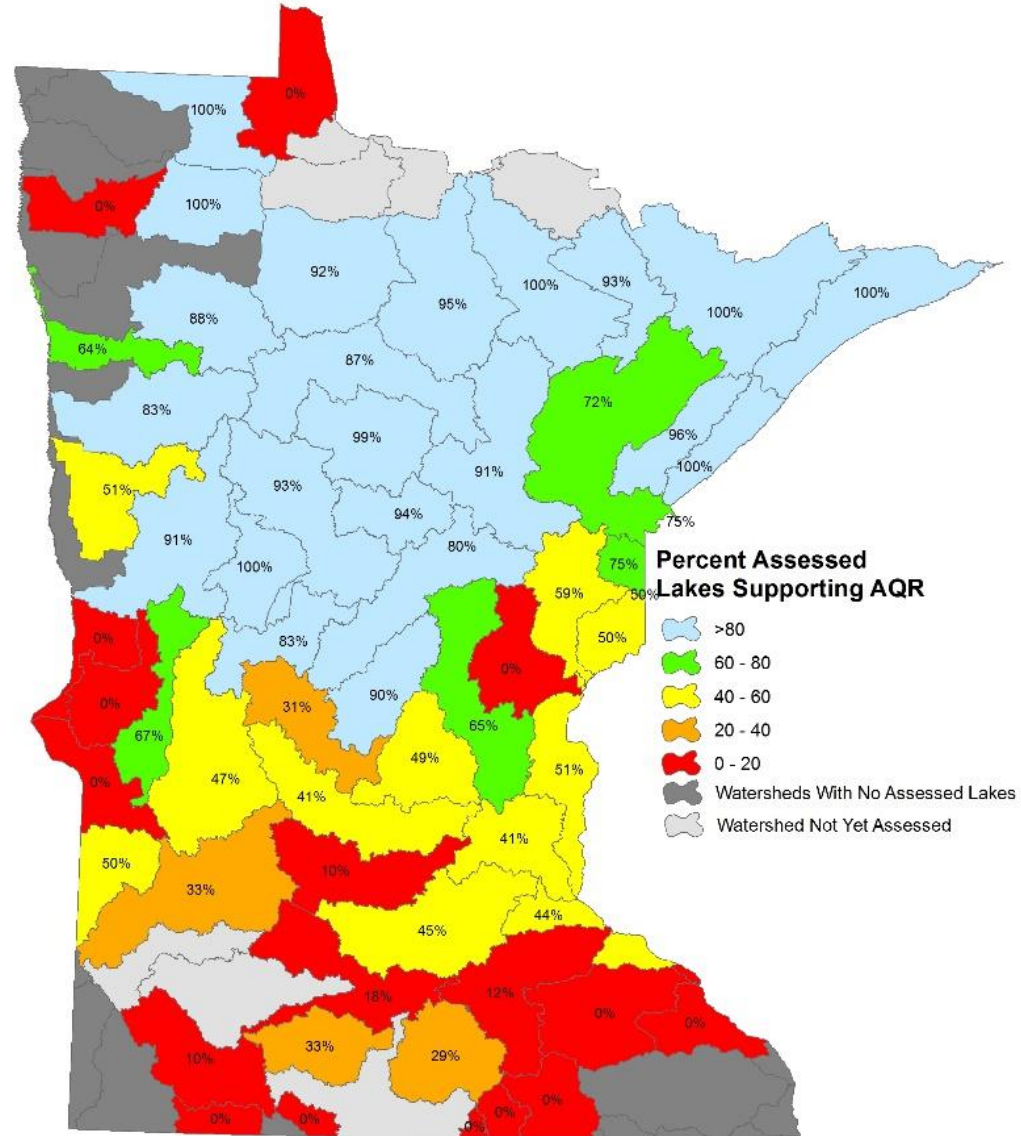
# Major Watersheds Monitored

The first 10-year cycle began in 2008 and, to date, watershed monitoring is on track.

- All 80 major watersheds are completely monitored
- All watershed outlets, mainstem river sites have ongoing monitoring







# Surface Water Health

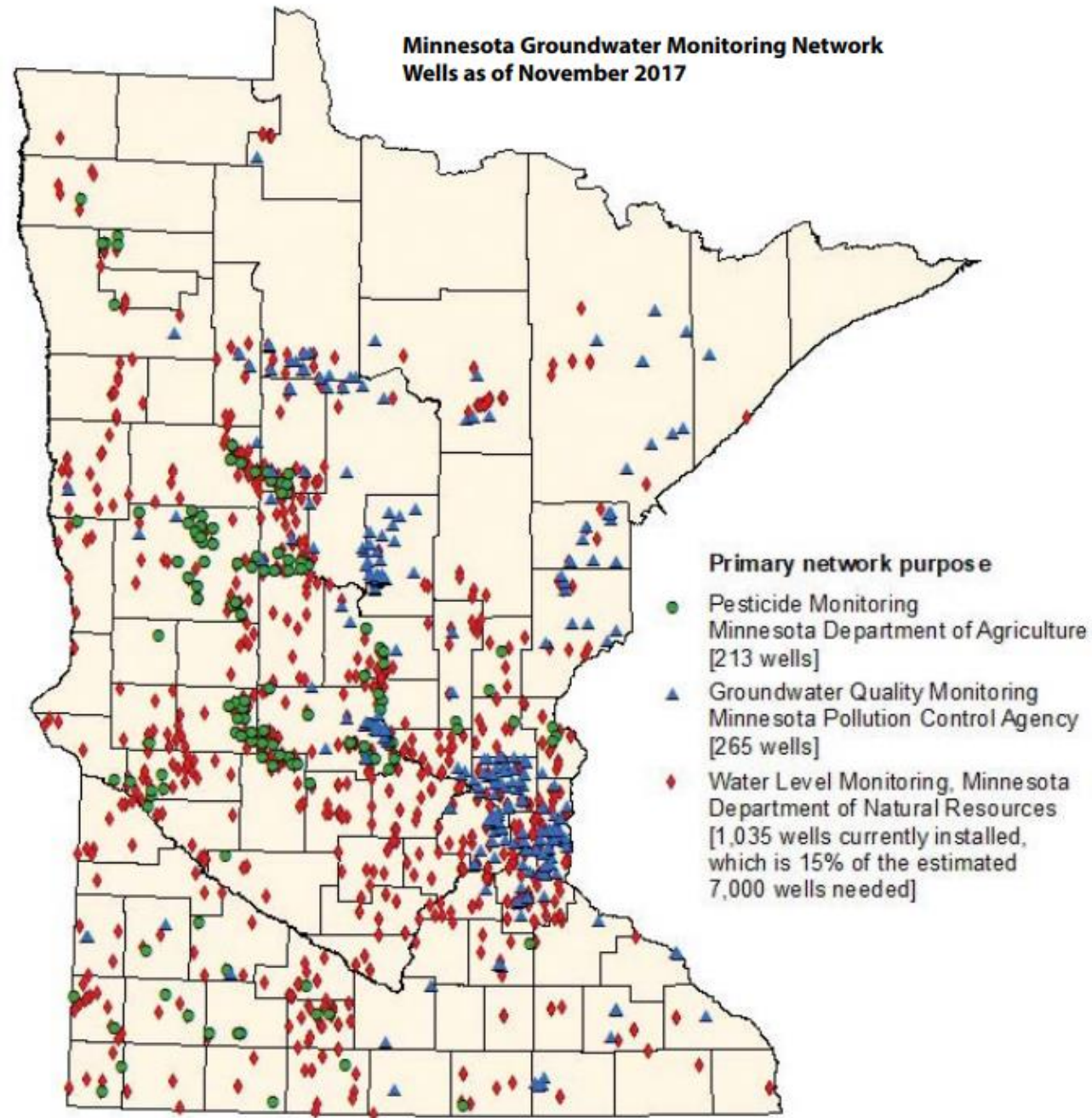
Water quality varies by region, but more lakes improving than declining.





# Groundwater Quality and Quantity

Minnesota Groundwater Monitoring Network  
Wells as of November 2017



- MDH is protecting private water supplies and evaluating contaminants of emerging concern
- MDA is sampling monitoring wells, naturally occurring springs, and private drinking water wells for pesticides and nitrate
- MPCA is sampling vulnerable aquifers for non-agricultural chemicals
- DNR is gathering needed data to assure sustainable water supplies





# Watershed and Groundwater Restoration/Protection Strategies

\$26.926 million (10.2 percent)



## WRAPS Report Completion Status



**Restoration and  
Protection Strategies  
Complete or Underway**



# Groundwater Restoration and Protection Strategies

- Provides existing groundwater and drinking water information on a watershed scale
- Develops groundwater and drinking water protection strategies for integration into the Local Comprehensive Water Management Plan
- Small grants are available to local governments to promote and implement practices





# Comprehensive Local Watershed Management

\$4.54 million (1.7 percent)



# Watershed Management Plans (1W1P) that:





# Research, Evaluation and Tool Development

\$11.836 million (4.5 percent)



# Forever Green Initiative



Perennial Flax



Pennycress



Hazelnut



Intermediate Wheatgrass

The **Forever Green Initiative** is developing new perennial and winter annual crops that preserve and enhance water quality, and supporting the development of new supply chains that provide profitable markets for these crops

- Led by the University of Minnesota in partnership with the Minnesota Department of Agriculture



# Clean Water Fund: Looking to the Future

- Strong foundation of understanding of our water resources
- Now we need to accelerate implementation
  - Investment
  - Innovation
  - Communication





Thank You!

