Tracking Minnesota's Clean Water Legacy Effectiveness

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CLEAN WATER LAND & LEGACY AMENDMENT

Mississippi River Forum

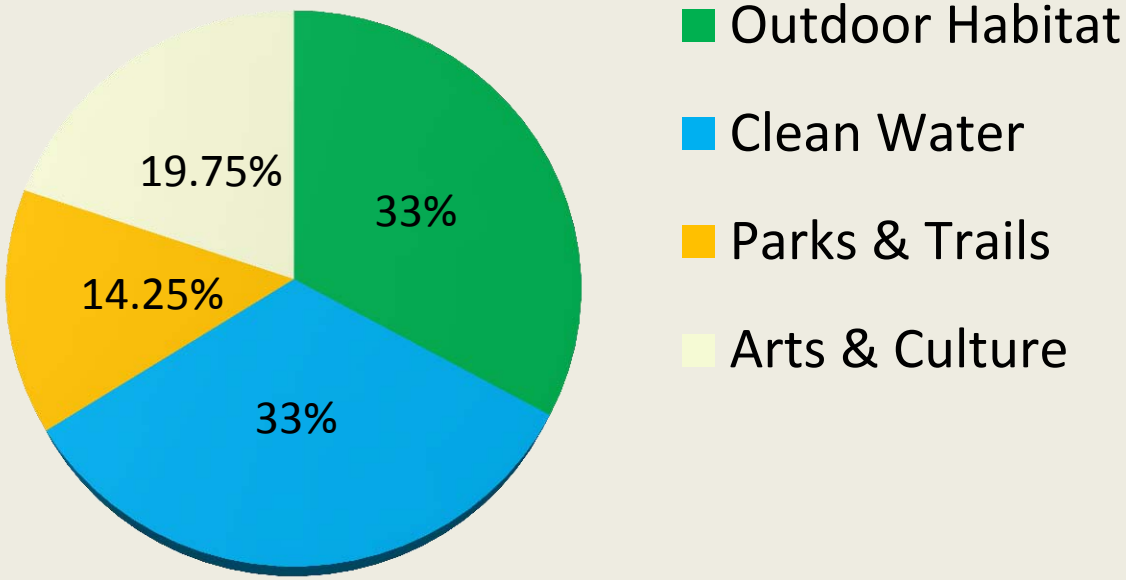
December 16th, 2011

Presentation overview

- Background
- Clean Water Tracking Framework
- Clean Water Performance Report
- Communication plan
- Next steps / timeline

Clean Water, Land and Legacy Amendment

- A big investment



- The big question: How is it being spent and what is being accomplished?

Accountability to results

- Show how the money is being spent
- Learn and adapt
- Be more transparent

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Where it all started

- Clean Water Legacy Act and Clean Water Council
- Multi-agency & stakeholder process hosted by Water Resources Center at U of MN – report 11/2008
- Clean Water, Land and Legacy Amendment passed 11/2008
- Environmental Protection Agency – measures pilot
- Clean Water Council Research & Measures Team
- Interagency staff team – started 1/2009

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Guiding principles

- Can’t measure and report on everything.
- Need to collect data on key measures that show how we are performing in context of multiple pressures.

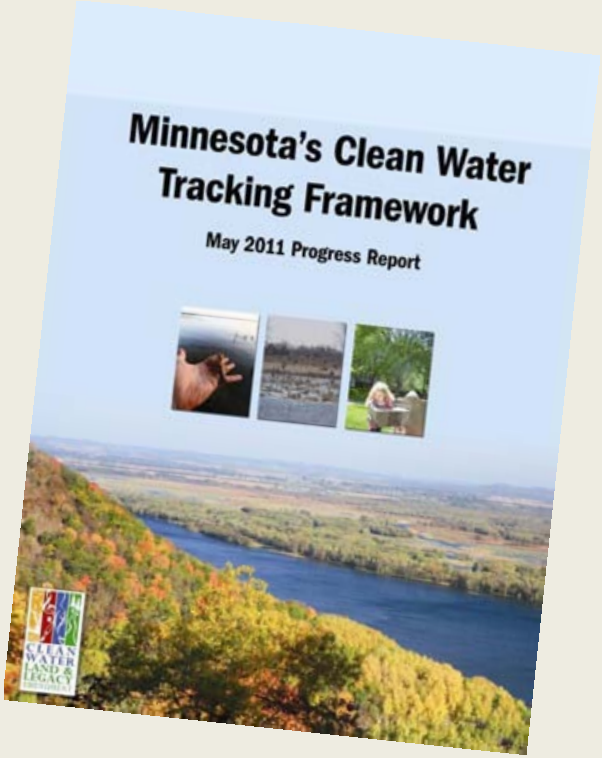
Clean Water Tracking Framework

Five agencies, CWF focus

4 measure categories

- Environmental outcomes
- Partnerships and leveraging
- Organizational performance
- Financial investments

36 measures



Social indicators & stressor measures – under development

Measures Table Handout

Measures Table (excerpt from May 2011 Clean Water Tracking Framework report)

Proposed measures for 2012 Clean Water Performance Report

Performance Measure	Coordinating Agency	Estimated Date to Begin Reporting
Category: Environmental and Drinking Water Outcome Measures (EDWOM)		
EDWOM 1: Rate of impairment/unimpairment of surface water statewide and by watershed	Minnesota Pollution Control Agency	Fall 2011
EDWOM 2: Changes over time in key water quality parameters for lakes, streams, and wetlands	Minnesota Pollution Control Agency with support from Department of Natural Resources and Minnesota Department of Agriculture	Fall 2011
EDWOM 3: Changes over time in pesticides, nitrates and other key water quality parameters in groundwater	Minnesota Department of Agriculture with support from the Minnesota Pollution Control Agency	2011-12
EDWOM 4: Changes over time in raw water quality from community water supplies	Minnesota Department of Health	2013-14
EDWOM 5: Changes over time in aquifer levels	Minnesota Department of Natural Resources	Fall 2011
EDWOM 6: Changes over time in the age of groundwater	Minnesota Department of Health Minnesota Department of Natural Resources	Fall 2011

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Three measure types

Input measures

Financial investments

→

Output measures

Actions taken by state and local government

→

Outcome measures

Benefits to water quality

Measures track incremental progress to achieve long-term results

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Metadata information sheets

- For each of the 36 measures
  - Measure description and why it is important
  - Visual depiction
  - Definitions of terms/phrases
  - Target
  - Methodology and supporting data
  - Caveats and limitations

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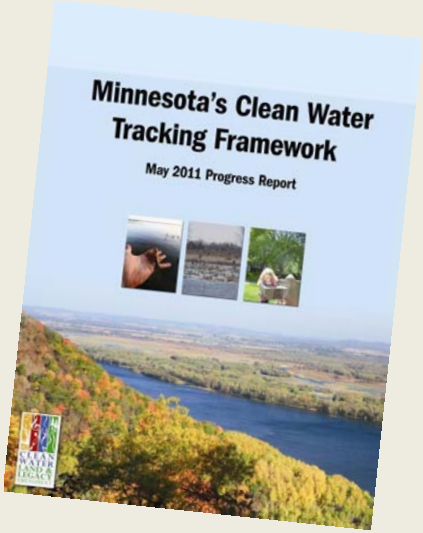
Summary : Clean Water Tracking Framework

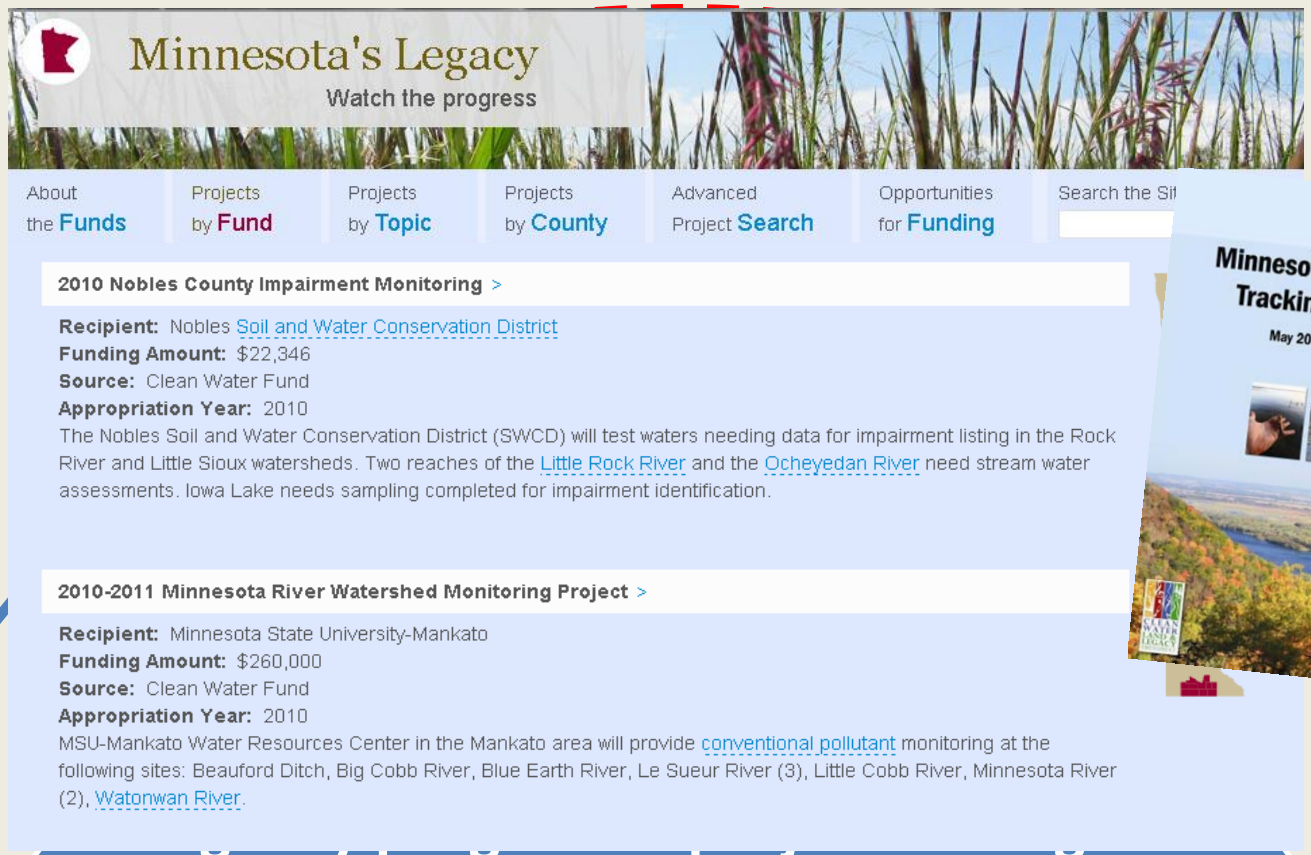
Suite of 36 quantifiable performance measures that tells the story of:

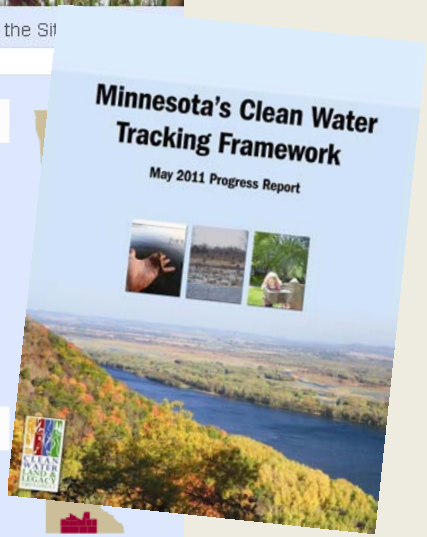
- State of water quality.
- Response of agencies and partners working to restore and protect MN's water resources.



Goal: Clarify connections between funds invested, actions taken, and outcomes achieved

Hierarchy of performance measures





More measures

(Minnesota's Legacy Website – 100s of measures)

Base

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APEX selection process (1)

- **Seven criteria to rank**
  - Measure data readily available
  - Measure data answers common questions
  - Measure best suited to a general audience
  - Measure shows progress being made
  - Measure represents work of many agencies
  - Measure represents financial investment
  - Measure is “hot button” or “emerging issue” that requires reporting

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APEX selection process (2)

- **Three lenses for evaluation**
  - Representation across the pillars of the tracking framework (4 categories, input/output/outcome).
  - Broad representation of agency involvement.
  - Representation of groundwater, drinking water, and surface water.

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Draft Clean Water Performance Report outline

- Answers common questions
- 16-20 nested input, output and outcome measures
- Contextual information and highlights of work

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Clean Water Performance Report: 2012

❑ How much and where is money being spent?

Input measures (financial investments)

- Percent of total funds by category of expenditure
- Total dollars spent per watershed or statewide
- Total dollars passed through from state agencies to external partners
- Total dollars leveraged by Clean Water Fund

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Clean Water Performance Report: 2012

❑ Is our water getting cleaner? (1)

Output measures (actions taken)

- Percent of state's major watersheds intensively monitored through the watershed approach
- Number of BMPs implemented with Clean Water funding and estimated pollutant load reductions
- Number of point source municipal infrastructure projects implemented with Clean Water funding and estimated pollutant load reductions
- Number of local government partners participating in Clean Water funded nitrate monitoring and reduction activities

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Clean Water Performance Report: 2012

❑ Is our water getting cleaner? (2)

Output measures (actions taken)

- Number of public water supply systems assisted with developing and implementing source water protection plans
- Cumulative number of waterbodies sampled annually for fish contaminant concentrations
- Number of new health-based guidance values for contaminants of emerging concern

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Clean Water Performance Report: 2012

❑ Is our water getting cleaner? (3)

Outcome measures (benefits to water quality)

- Rate of impairment/unimpairment of surface water statewide and by watershed
- Changes over time in key water quality parameters for lakes, streams, and wetlands
- Number of previous impairments now meeting water quality standards due to corrective actions
- Changes over time in municipal wastewater phosphorus discharges

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Clean Water Performance Report: 2012

❑ Is our water getting cleaner? (4)

Outcome measures (benefits to water quality)

- Changes over time in pesticides, nitrates and other key water quality parameters in groundwater
- Changes over time in raw water quality from community water supplies
- Nitrate levels in newly constructed wells
- Municipal wastewater phosphorus trends

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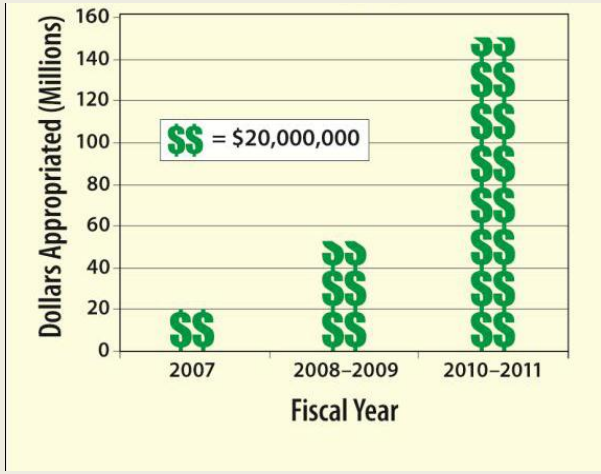
Measure profile sheets

Measure:

Why is this measure important?

What are we doing?

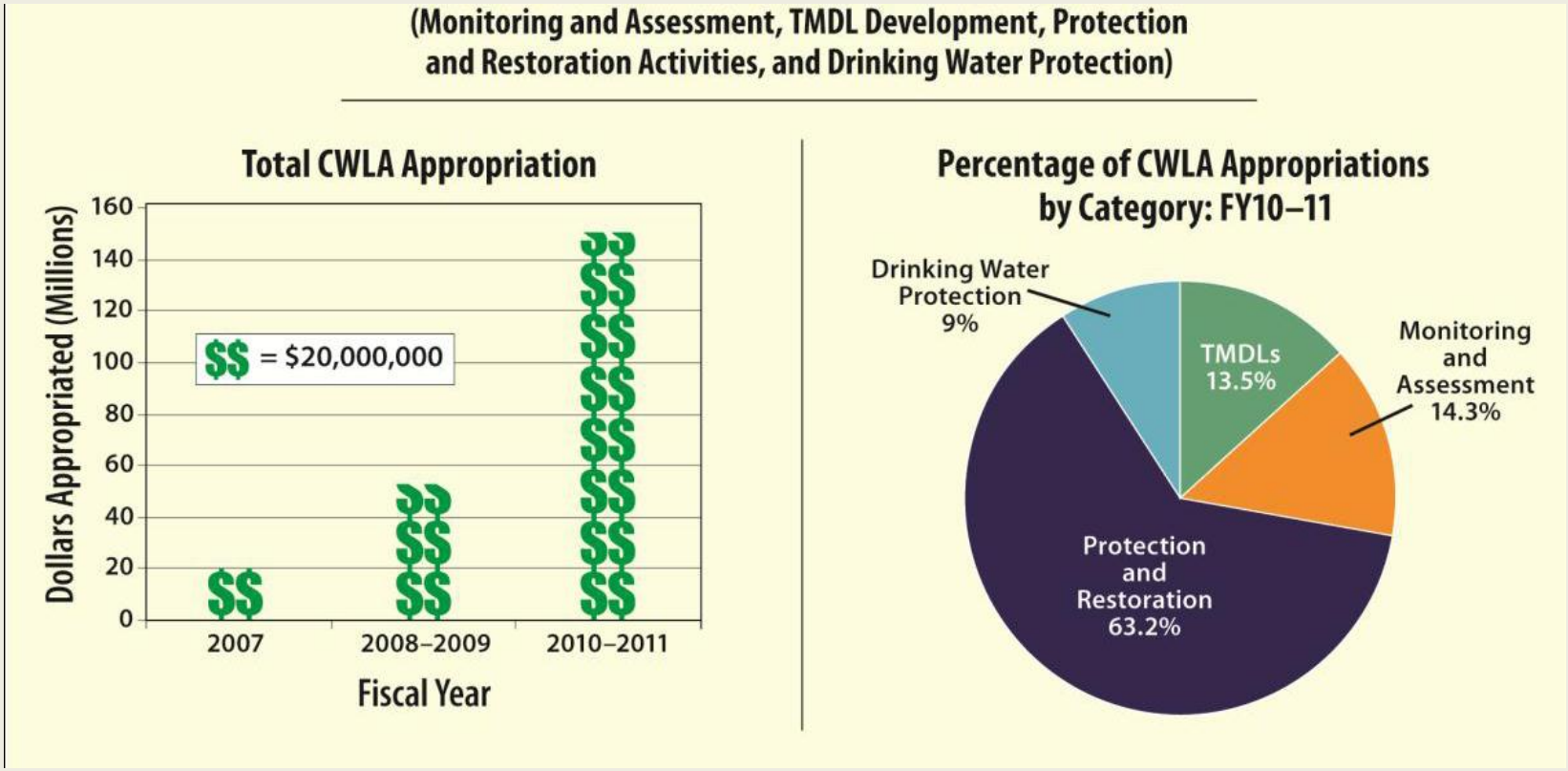
What progress has been made?



Learn more:

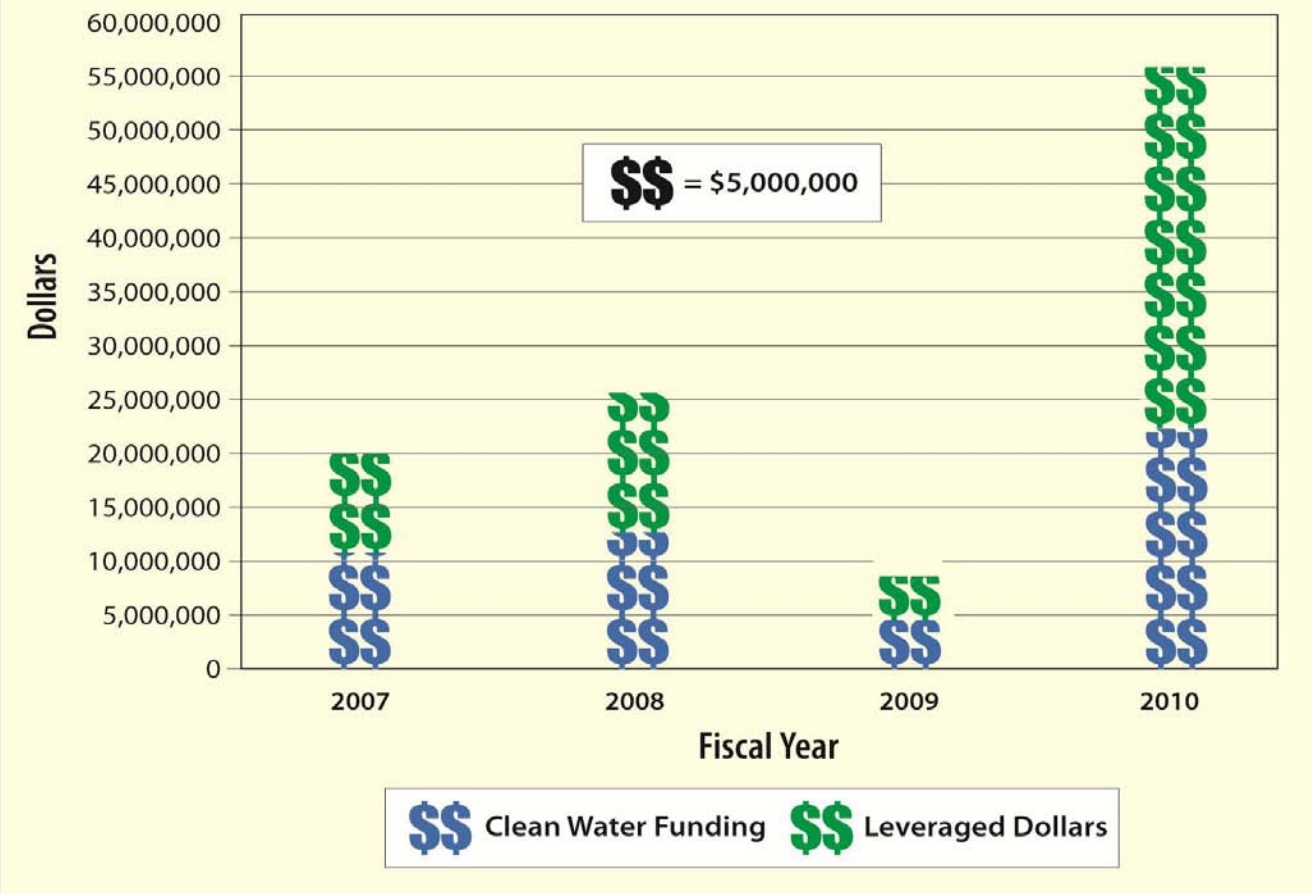
Example: How much money is being spent?

Measure: Percent of total funds by category of expenditure



Example: How much is being leveraged?

Measure: Dollars leveraged by Clean Water Fund



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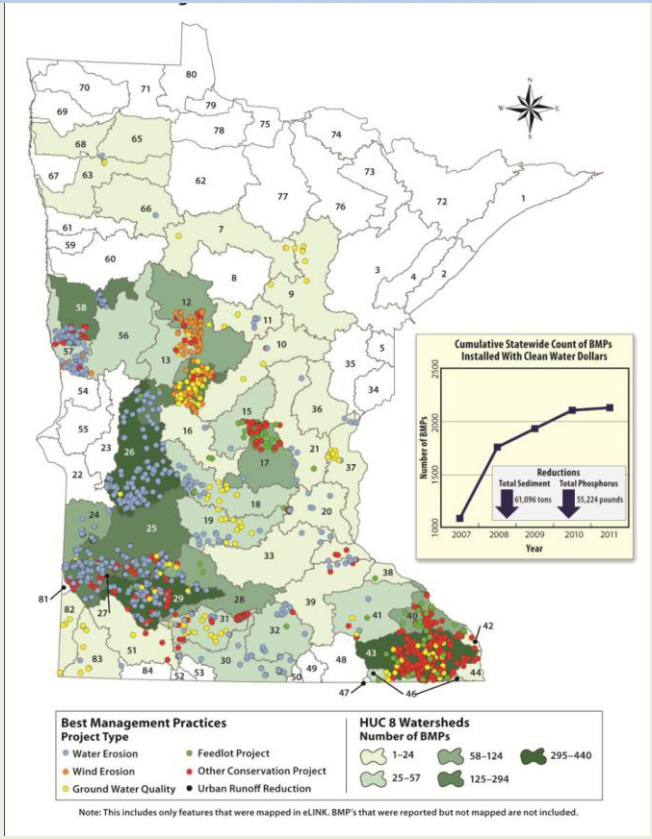
Example: Is our water getting cleaner?

Measure: Number of BMPs implemented with Clean Water funding and estimated pollutant load reductions



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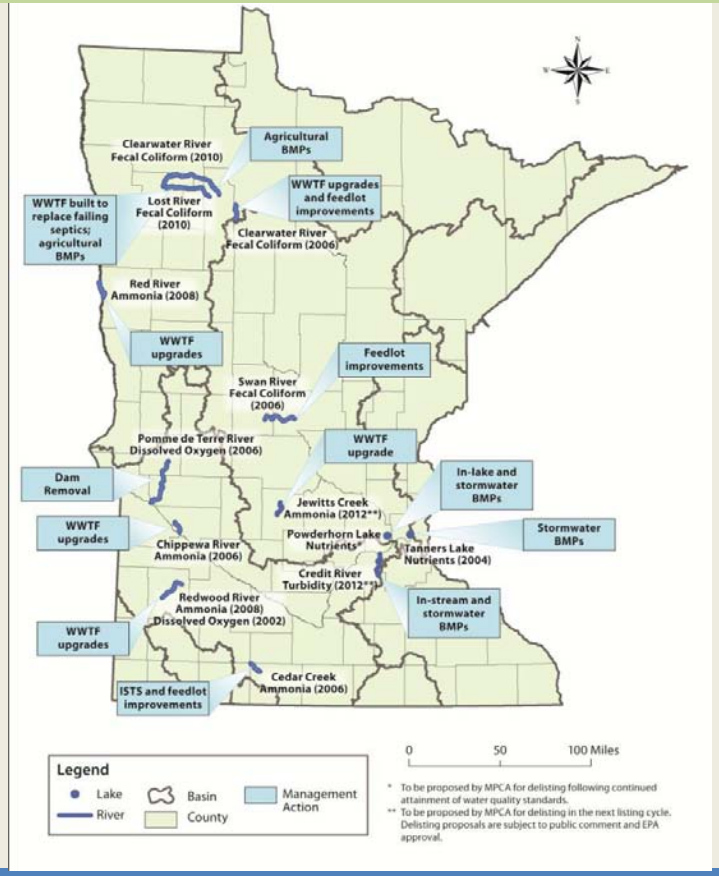
Example: Is our water getting cleaner?

Measure: Number of previous impairments now meeting water quality standards due to corrective actions



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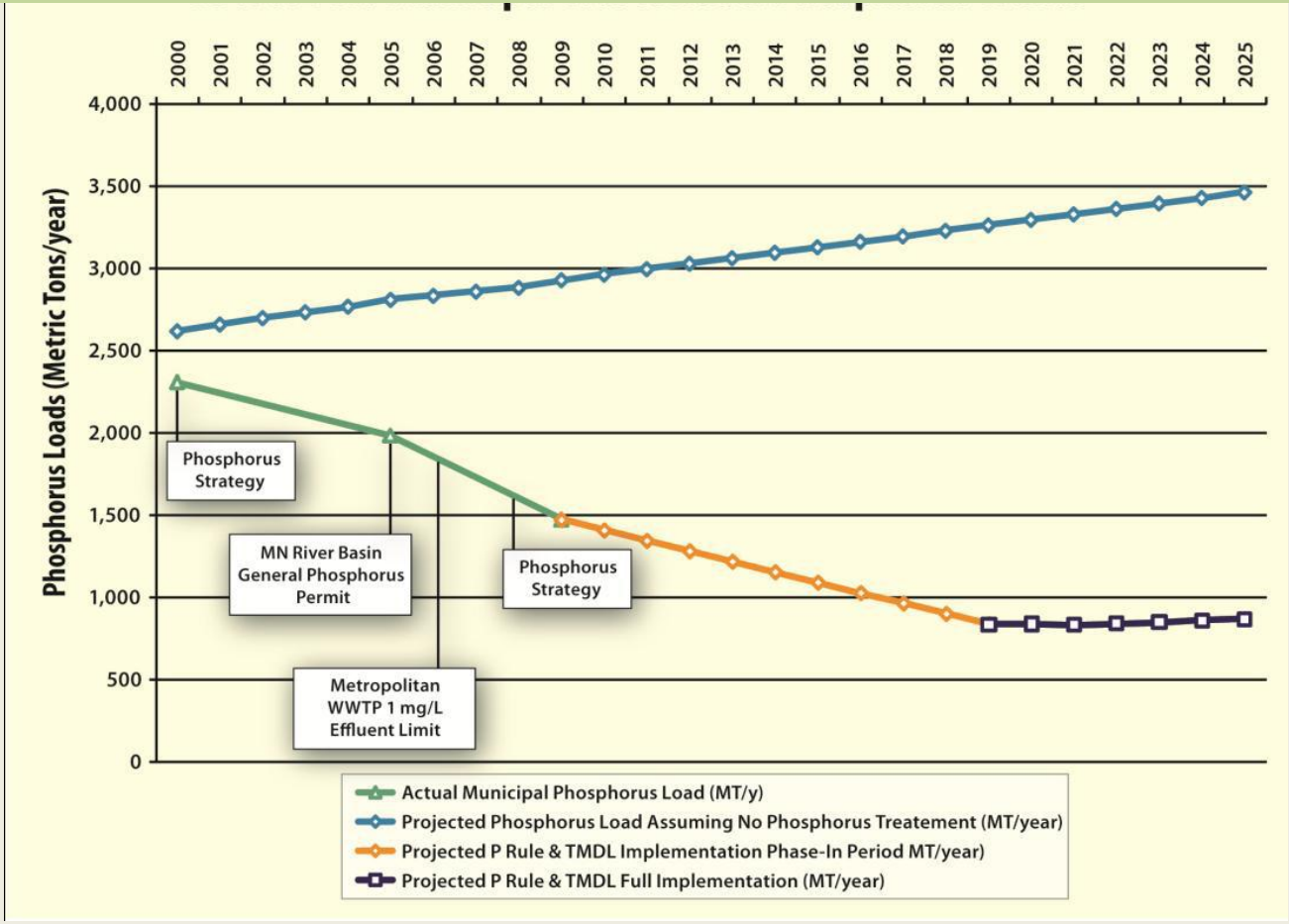
Example: Is our water getting cleaner?

Measure: Municipal wastewater phosphorus trends



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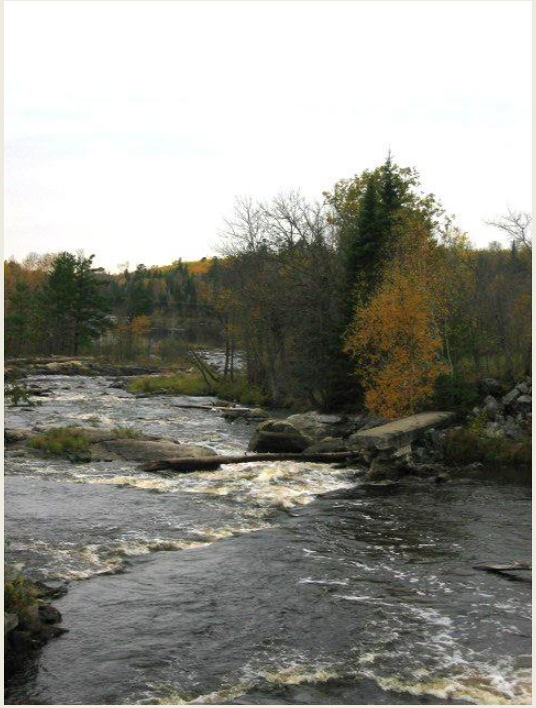
Testing the concept

- Presentation at Clean Water Council (October)
- Presentation at Water Resources Conference (October)
- Interagency team meeting (November)
- Meeting with various stakeholders (October-December)



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Communication plan

First "Performance Report" release in early 2012

- Goal: to connect CWF dollars invested, actions taken, and outcomes achieved
- Use layered approach, responsive to audience needs
  - One page executive summary
  - One page profile for APEX measures
  - CWF stories that illustrate content

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Communication plan

- Use existing channels for delivery
  - Agency - news release, Web sites, Facebook
  - Stakeholders/Partners - newsletters, Web sites, presentations
  - Place report on LCC Web site, agency Web sites
- Remaining tracking measures report (later 2012)
  - One page profiles for full suite of measures
  - Interactive webpage/site for users to mine data

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Next steps

- Finalize measure profiles (December)
- Finalize report template (December)
- Interagency review of draft report (Dec.-January)
- Complete and release final report (late January)

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