



Water Governance Evaluation: Update 2014

Recommendations to streamline, strengthen, and improve
sustainable water management



Minnesota Pollution
Control Agency

April 2014

Legislative Charge

This report is an update to the Water Governance Evaluation 2013 Report. The statutory requirement for that report is found in Minnesota Session Laws, 1st Special Session, Chapter 2, Article 4, Section 33, which reads:

EVALUATION REQUIRED

(a) The Pollution Control Agency, in conjunction with other water agencies and the University of Minnesota, shall evaluate water-related statutes, rules, and governing structures to streamline, strengthen, and improve sustainable water management.

(b) The Pollution Control Agency must submit the study results and make recommendations to agencies listed under paragraph (a) and to the chairs and ranking minority party members of the senate and house of representatives committees having primary jurisdiction over environment and natural resources policy and finance no later than January 15, 2013.

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I. Introduction & Background

This report is a follow-up to the 2013 *Water Governance Evaluation*, prepared by the Minnesota Pollution Control Agency (MPCA) in collaboration with the other state water management agencies at the direction of the Legislature.

The statutory requirement for that report is found in Minnesota Session Laws, 1st Special Session, Chapter 2, Article 4, Section 33, which reads:

EVALUATION REQUIRED

- (a) The Pollution Control Agency, in conjunction with other water agencies and the University of Minnesota, shall evaluate water-related statutes, rules, and governing structures to streamline, strengthen, and improve sustainable water management.
- (b) The Pollution Control Agency must submit the study results and make recommendations to agencies listed under paragraph (a) and to the chairs and ranking minority party members of the Senate and House of Representatives committees having primary jurisdiction over environment and natural resources policy and finance no later than January 15, 2013.

The 2013 report identified over thirty initiatives that were already in progress or that could be undertaken by the state water management agencies. Since the report was released, the Water Governance Workgroup that developed its recommendations has continued to meet every few months to plan for and track implementation of these initiatives. This 2014 progress report focuses on:

- initiatives that have been completed or are in progress
- new initiatives that the group has identified; and
- issues in need of further legislative action or direction

Given increasing interest in water-related issues at the legislature and Governor Dayton's 2014 Unsession initiative, we see many opportunities to continue to "streamline, strengthen, and improve sustainable water management."

II. Status of Implementation

Many of the activities and actions listed below were already under discussion or in progress when the *Water Governance Evaluation* was prepared or were initiated at the direction of the Legislature in 2013. Others have emerged from work group discussions and are still being developed and refined. A number of initiatives are also being pursued or tracked by the Clean Water Fund Interagency Coordination Team (ICT).

Other initiatives listed in the 2013 *Water Governance Evaluation* but not discussed in this progress report are still considered viable but are not immediate agency or legislative priorities.

A1. Implement Water Management at a Watershed Scale at all Levels of Governance.

This recommendation focused on the multiplicity of local government units (LGUs) engaged in water management, the widely varying levels of capacity of these LGUs, and the lack of consistent baseline funding for water management functions.

BWSR's vision for One Watershed, One Plan is to align local water planning on major watershed boundaries with state strategies towards prioritized, targeted and measurable implementation plans – the next logical step in the evolution of water planning in Minnesota.

BWSR factsheet

- Establish the One Watershed – One Plan model as the preferred option for local watershed management outside the Metropolitan Area. The 2012 “One Watershed – One Plan” (1W1P) legislation (MS 103B.301 – 355, [Laws 2012, Chapter 272, Sec. 34](#)) and subsequent funding in 2013 (Laws 2013, [Chapter 137, Art. 2, Sec. 7\(j\)](#); \$900,000) have catalyzed activity in this area. The Board of Water and Soil Resources (BWSR) has taken the lead in establishing parameters for the program. To date, these include a suggested watershed boundary framework, guiding principles, and a pilot grant program. Program policies, criteria, and guidance will be developed over the next year. A ten-year transition period is envisioned during which local plans focused around the state’s major watersheds will be developed.
- The Water Governance Work Group recommends consideration of a target date and supplemental funding for conversion to the 1W1P model statewide, which could be coordinated with the ten-year Watershed Restoration and Protection Strategy (WRAPS) cycle. The year 2020 would fall approximately two years after completion of all WRAPS in the ten-year cycle.
- Define essential watershed management services for defined watershed outcomes. This recommendation includes several potential actions, including:
 - enhancing local governments’ limited levying authority for water management purposes
 - expanding delegation of some state regulatory authorities to those local governments with demonstrated capacity and potential for alignment with other local authorities; and
 - exploring ways that existing clean water funding can be packaged at the watershed or regional scale

The Local Government Roundtable is a collaborative working group comprised of the Minnesota Association of Watershed Districts (MAWD), the Minnesota Association of Soil and Water Conservation Districts (MASWCD) and the Association of Minnesota Counties (AMC), facilitated by BWSR. The Roundtable has explored the topic of watershed management services in its “Comprehensive Water Planning and Management Policy Paper,” published in November 2013. The Roundtable’s recommendations include:

- sharing of services and resources among local government units for watershed management
- a set of minimum requirements for a comprehensive water management plan; and
- a set of activities that will typically fall within the scope of watershed management

A2. Synchronize State Approach to Water Management: While a single Water Management System has not yet developed, “systems thinking” is gradually taking hold across state agencies, as expressed through a range of initiatives:

- The WRAPS cycle is in use by MPCA, BWSR, Minnesota Department of Natural Resources (DNR) and Minnesota Department of Agriculture (MDA) to synchronize agency and local government efforts to monitor, plan and implement clean water strategies. The cycle, as shown in simplified form in Figure 1, links investigation and monitoring, planning, and implementation actions, along with responsibilities for each phase, within the overall framework of MPCA’s ten-year watershed monitoring and assessment cycle.

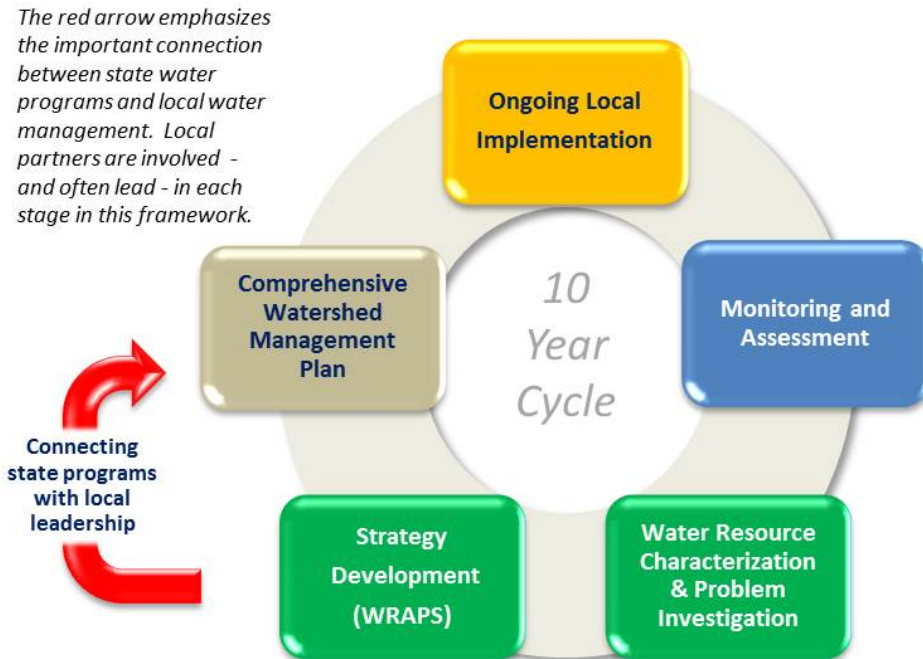


Figure 1: WRAPS Cycle

Source: DNR - EWR

- The 2013 Clean Water Accountability Act ([Laws 2013, Chapter 137, Art. 2, Sec. 13](#)) formalizes the WRAPS cycle in statute and requires that agencies communicate their efforts. The bill sets requirements for the contents of each WRAPS document (such as the identification of point and nonpoint pollution sources), requires reporting on the program towards implementation of completed total maximum daily loads (TMDL) and WRAPS documents, and requires BWSR to prepare a priority funding plan for potential nonpoint source pollution reduction actions.
- The Clean Water Fund Roadmap, an initiative of the state agency leaders (MDA, BWSR, DNR, Minnesota Department of Health (MDH), MPCA, the Public Facilities Authority (PFA) - and the Metropolitan Council) will establish common high level goals in implementing the fund and will monitor progress and results over the course of the 25 years of constitutional amendment funding. The Roadmap is intended to set common expectations across agencies and departments to achieve desired outcomes in four areas: 1) lake water quality; 2) river/stream water quality; 3) groundwater quality; and 4) groundwater quantity. The Roadmap will establish five-year benchmarks to measure the pace of progress in achieving clean water goals. It will be completed in mid-2014 and the results shared with the public. (For more information see: <http://www.environmental-initiative.org/projects/71-projects/projects/514-clean-water-roadmap>)
- Work on the state Water Portal is in progress, with funding from the 2013 Legislature ([Laws 2013 Chapter 137, Art. 2 Sec. 5\(h\)](#); \$2 million), managed by a team of information technology and business representatives from MDA, BWSR, MDH, MPCA, DNR and the Metropolitan Council. The team is currently inventorying each agency's data and defining the data needs of "technical" users and the information needs of "public/non-technical" users.

A3. Improve Delivery of Water Management Services at the Regional Scale: This initiative focuses on improving collaboration among water management agency staff, shifting their focus toward watershed management, and establishing new regional entities where needed and appropriate. Many of these activities are already occurring as a byproduct of the WRAPS cycle and 1W1P.

Co-location of agency offices is underway in Rochester and under discussion in other locations but still not a specifically defined administration policy in comparison to other factors. Table 1 identifies agency office locations that are currently co-located or that are located in the same city, which may provide co-location opportunities in the future.

Table 1: Agency Regional Offices and Co-Location Arrangements

Cities	MDA	MDH	DNR	MPCA	BWSR
Bemidji		○	○		○
Brainerd			●	○	●
Detroit Lakes				○	○
Duluth		○		○	○
Fergus Falls	●		●		
Mankato	●	●		●	●
Marshall		●	●		●
Rochester	●	●	●	●	
St. Cloud	○	○			
Slayton	●		●		

Current co-location arrangements:

Brainerd: BWSR, DNR

Fergus Falls: MDA, DNR
(BWSR to Detroit Lakes)

Mankato: BWSR, MDA, MPCA, MDH

Marshall: BWSR, DNR, MDH

Rochester:
MDA, BWSR, DNR
MDH, MPCA

Slayton: MDA, DNR

Co-location with other agencies:

St. Cloud: MDA, MnDOT

Detroit Lakes: BWSR, USFWS



co-located



same city

B1. Public Waters and Wetlands – Improve Alignment of Statutes, Rules, and Regulatory Processes:

This initiative focuses on the need to simplify and clarify the roles and responsibilities of wetland regulatory agencies, reducing the jurisdictional overlap between public waters wetland (regulated by DNR) and Wetland Conservation Act (WCA) wetlands (regulated by local governments with BWSR assistance).

- The DNR and BWSR are working to clarify and potentially modify the classifications of public water wetlands and WCA wetlands. This work implements directives of Executive Order 12-04 and the subsequent BWSR report, *Supporting and Strengthening Implementation of the State's Wetlands Policy*.
- The MPARS (MN DNR Permitting and Reporting System) will streamline joint application processes for wetland (public waters works) permits among DNR, BWSR and the U.S. Army Corps of Engineers (USACE), although regulatory authorities remain the same.
- BWSR, PCA and DNR (along with the USACE and the U.S. Environmental Protection Agency [EPA]) are working to align the relationships among DNR's mining permit process, BWSR's

wetland protection/replacement permit requirements, and MPCA's Section Clean Water Act Section 401 water quality standards certification process.

B2. Groundwater Management – Interagency Consensus and Usable Withdrawal Standards: With expanded funding from the 2013 Legislature ([Laws 2013, Chapter 137, Art. 2, Sec. 6\(j\)](#); \$3 million, and [Chapter 114, Art. 3, Sec. 4, Subd. 3](#); \$7.6 million), DNR's groundwater planning and management efforts have intensified. Partnerships between other water management agencies have occurred as well.

- DNR has prepared a *Draft Groundwater Management Strategic Plan*, currently out for public review (see discussion in Section IV). Planning is underway for three pilot Groundwater Management Areas, in the northeast Metro, the Bonanza Valley in west central Minnesota, and the Straight River watershed near Park Rapids. Work on the County Geologic Atlas – Regional Hydrogeologic Assessments has been accelerated, yielding new information on the sensitivity of groundwater to pollution.
- A subteam of the Clean Water Fund Interagency Coordination Team has developed a groundwater version of the WRAPS cycle. There may be an opportunity for establishing phasing (similar to WRAPS) so that all areas of the state where groundwater management plans are needed will be covered by a certain date.
- Water appropriations and well construction approvals, once separate processes, have been partially integrated by DNR and MDH. As directed by the 2013 Minnesota Legislature ([Laws 2013, Chapter 114, Art. 4, Sec. 71](#), MS 103G.287), preliminary approval from DNR is now required for any well that will be used to withdraw more than 10,000 gallons of water per day or 1 million gallons per year (that is, any well that will require a water appropriations permit). There is potential for future improvements to the system, including synchronized online permitting.
- Water reuse (a broad term encompassing the utilization of wastewater, stormwater and harvested rainwater) was identified as an issue in need of further research and coordination. A Water Reuse Interagency Work Group of staff from MDH, MPCA, DNR and the Metropolitan Council, along with the Department of Labor and Industry and the Minnesota Plumbing Board, is exploring options for formalizing and synchronizing state rules that control use of stormwater and harvested rainwater, and reuse of gray water. Additional research and policy analysis are expected in 2014, focusing on the safety of water used for various applications and on the permitting and performance standards needed to encourage and manage water utilization and reuse. Further research is needed to identify barriers, jurisdictional conflicts, analysis of statutes and rules, and development of recommendations to support water utilization, reuse and aquifer recharge.
- MDA consulted with MPCA, DNR, MDH, BWSR and other local governments on the development of the draft Nitrogen Fertilizer Management Plan (NFMP). The draft plan was released for comment in August, 2013. Further agency coordination will occur with implementation of the draft NFMP.

B3. Efficient Linkage of Land Use and Water Management: The connection between water quality and land use management, is widely recognized. However, state agencies have limited authority to influence local land use decisions. Despite this, several initiatives are underway in this area:

- The Metropolitan Area Local Water Management Rules (Chapter 8410) are being revised by BWSR in partnership with the Metropolitan Council to move away from an overly prescriptive approach to a more results-oriented framework. The timing of metropolitan local surface water

plan reviews will be synchronized with the 10-year cycle of comprehensive plan reviews by the Metropolitan Council.

- DNR is exploring opportunities to link Clean Water funding with local environmental regulations for shoreland and floodplain areas that go beyond minimum requirements and achieve multiple water quality and habitat protection goals. There are additional opportunities to merge, update, and streamline DNR's shoreland, Wild and Scenic Rivers, and other river-related programs.

B4. Support and Strengthen Landowner and Land

Occupier Efforts. This initiative area is focused on the continuing need for more effective management of nonpoint impacts on water resources and soil health.

- The 2013 Legislature authorized the voluntary Minnesota Agricultural Water Quality Certification Program (MAWQCP) ([Laws 2013, Chapter 114, Art. 2, Sec. 5](#); [Chapter 137, Art. 2, Sec. 3g](#); \$3 million), designed to accelerate voluntary adoption of on-farm conservation practices that enhance water quality, is now in its pilot phase, under the direction of the MDA in consultation with DNR, BWSR, and MPCA. Under the program, a farmer demonstrating the implementation of best management practices to protect water quality receives a 10-year certification, and will be regarded as meeting any new targeted reductions and water quality regulations that occur in those 10 years.
- Four pilot watershed areas have been identified for an initial three-year period: Elm Creek, in Faribault, Jackson and Martin counties; Middle Sauk River, in Stearns County; Whiskey Creek, in Wilkin and western Otter Tail counties; and the Whitewater River, in Olmsted, Wabasha, and Winona counties (see Figure 2). A farmer-led advisory committee is being established for each area. The pilot period will be used to further refine details of the program and gather feedback from local producers and conservation professionals. All producers farming within those areas will be eligible for evaluation and certification during the pilot period. There are opportunities to monitor and report on the pilot program in order to best structure it for statewide operations.
- A related initiative is a new Soil Erosion and Drainage Law Compliance program. The 2013 Minnesota Legislature appropriated Clean Water Funds to BWSR for grants to local government units to ensure compliance with state drainage law and soil erosion control provisions ([Laws 2013 Chapter 143, Art. 4, Sec. 5](#); \$1.35 million); Minn. Stat. 103E and Sections 103F.401 – 104F.455). This program will begin in 2014.



Figure 2: MAWQCP Pilot Areas

III. Roles & Responsibilities in 2014 and Beyond

The Water Governance Workgroup currently consists of managers and senior staff from the state water management agencies and the Metropolitan Council. In 2013, the Environmental Quality Board (EQB) was reorganized around several areas of focus. The EQB has proposed focusing some attention on water management and governance in 2014. EQB's efforts will include a review of water management agencies' activities, ongoing monitoring of water governance synchronization and alignment efforts, and research into emerging policy issues or concerns. The Water Governance Workgroup, with the addition of EQB representatives, will continue to meet on a quarterly basis, and will produce another report on its activities in early, 2015.

IV. Related Reports Released During 2013

The following reports were released during 2013 and exemplify the collaborative approach to water governance and water management among state agencies and other partners.

[Nitrogen in Minnesota Surface Waters](#) (June 2013) was prepared by MPCA in collaboration with the University of Minnesota and U.S. Geological Survey, with input from state, federal, international (Province of Manitoba and Environment Canada), regional and local agencies and governments. The study shows elevated nitrate levels, particularly in the southern third of Minnesota, with more than 70% coming from cropland, the rest from sources such as wastewater treatment plants, septic systems, urban runoff, forest, and the atmosphere. The study identifies tactics for reducing cropland nitrate losses to waters, such as better in-field nutrient management, tile drainage water management and treatment, and vegetation/landscape diversification.

Findings of the study contributed to the Nutrient Reduction Strategy discussed below.

The [Draft Minnesota Nutrient Reduction Strategy](#) (October 2013) was prepared by MPCA in collaboration with nine state and federal agencies and the University of Minnesota. Not only does excessive nutrients (nitrogen and phosphorus) in Minnesota waters cause water quality problems, but in recent decades, nutrients downstream of Minnesota have reached critical levels, including their effect in the Gulf of Mexico which results in an expansive "dead zone" (an area of low, or no, oxygen in the water which impacts or kills aquatic life). Excessive nutrients also lead to algal blooms in Lake Winnipeg the Great Lakes. Minnesota's involvement in these issues with other states in the Mississippi basin, as well as the EPA focus on statewide nutrient reduction planning, served as key driving forces for Minnesota's strategy development.

The Strategy guides state-level programs to achieve nitrogen and phosphorus reductions within Minnesota water bodies to enhance the health of aquatic life, improve public health and safety, and increase the recreational potential of Minnesota's numerous lakes, rivers, and streams, as well as the health of the groundwater supply. In addition, nutrient reductions will also benefit downstream waters (the Gulf of Mexico, Lake Winnipeg and Lake Superior.)

The Strategy establishes goals and milestones for nutrient reduction at multiple scales, including major basins and watersheds (HUC 8). In addition, the Strategy includes a groundwater/source water protection goal to address groundwater as a drinking water source.

The [Draft Strategic Plan for Minnesota DNR's Groundwater Management Program](#) (October 2013) was developed by DNR to address issues of overuse and contamination of groundwater resources and in response to related initiatives by the Legislature and others in 2013. The draft plan outlines actions DNR proposes to take to improve its groundwater management program and meet its statutory responsibilities. It establishes management objectives and identifies strategies DNR will pursue during the 2013-2018 period. Strategies include improving information available for groundwater management decisions, improving the management of groundwater appropriation permits, and effectively addressing groundwater management challenges in areas of high use and/or limited supply. The plan is expected to be finalized in mid-2014.