

Metro MAWD Meeting Minutes

*“Metro MAWD” is the Metro Chapter of the
Minnesota Association of Watershed Districts*

7:00 PM, Tuesday, October 17, 2017

Capitol Region Watershed District

Attending:

Board Members

Bill Olson, Minnehaha Creek
Marianne Breitbach, Prior Lake Spring Lake
Pat Preiner, Rice Creek
Mary Texer, Capitol Region
Shirley Reider, Capitol Region
Barb Haake, Rice Creek
Craig Leiser, Brown’s Creek
Joe Collins, Capitol Region
John Waller, Rice Creek
Mike Bradley, Rice Creek

Staff and Guests

Phil Belfiori, RCWD
Mark Doneux, CRWD
Gwen Willems, CRWD /RCD
Carrie Raber, MDH
Terry McDill, MPCA
Mike Kinney, CLFLWD
Lars Erdahl, CRWD
Brian Livinston, MPCA
Ray Bohn, MAWD
Anita Anderson, MDH

I. Call to Order

- a. Mary Texer called the meeting to Order at 7:00 PM. Attendance was taken and introductions were made.

II. Special Reports

A. Water Reuse Report Update, Anita Anderson, MN Department of Health

Anita Anderson from the Department of Health gave a presentation on the draft Water Reuse Report.

Water demands in Minnesota are increasing, and interest in water reuse is growing. Currently, some Minnesota municipalities, industries and households are implementing water reuse activities, but there is no comprehensive state policy and only limited regulations for water reuse. In 2015, the Minnesota Legislature directed Minnesota Department of Health (MDH) to:

“Prepare a comprehensive study of and recommendations for regulatory and non-regulatory approaches to water reuse for use in the development of state policy for water reuse in Minnesota” (Session Law 2015, 1st special session, Chapter 2, Article 2, Section 8).

The study was funded through the Clean Water Fund of the Clean Water, Land and Legacy Amendment. In response to the Legislature’s directive and funding, the Water Reuse Interagency Workgroup (“Workgroup”) formed. The Workgroup includes representatives from the Board of Water and Soil Resources (BWSR), Pollution Control Agency (MPCA), Metropolitan Council, University of Minnesota Water Resources Center, and the Departments of Labor and Industry

(DLI), Natural Resources (DNR), Agriculture (MDA), and Health (MDH). The Workgroup researched types of water reuse systems; assessed how Minnesota currently regulates water reuse activities through other water management roles; researched regulations in other places; assessed the health, environmental, and liability risks of water reuse; sought perspectives on water reuse and current practices in Minnesota through surveys and stakeholder meetings; and researched how other water reuse programs communicate. The Workgroup used this research to develop eight Minnesota-specific recommendations for state and local governments, non-governmental organizations, businesses and industries to consider in developing regulations and guidance for water reuse. The recommendations are:

Recommendation 1: Define who will do what

Develop a framework for overseeing and monitoring water reuse activities.

Overseeing and monitoring water reuse activities will likely involve multiple agencies. Currently, there is no coherent or comprehensive structure for overseeing and monitoring water reuse activities. Depending on the reuse application, there may be little or no oversight for the application; the regulatory process can be complex, and there may be overlapping agency responsibilities. This recommendation focuses on developing a framework that clearly defines the agency responsible for specific parts of oversight and monitoring for each type of water reuse activity. One option would be to modify and enhance the current water governance structure so that the framework builds on agencies' existing expertise and authorities. Implementing this recommendation will likely require additional resources.

Recommendation 2: Develop water quality criteria based on the pathogen reduction target approach

Set pathogen reduction targets for a variety of water reuse sources and end uses.

The pathogen reduction target approach is a flexible approach that uses the quality of the source water and the level of exposure at the end use to determine what safeguard(s) (typically treatment or management techniques) need to be in place to safely implement water reuse. The pathogen reduction approach is already the basis for reuse of municipal wastewater in Minnesota but may be new to some reuse practitioners. With this approach, each treatment process or management technique is individually monitored or verified as appropriate to ensure effectiveness. Benefits of this approach include a variety of options for meeting reduction targets, the ability to update reduction targets as new information becomes available, and the ability to manage risks due to specific pathogens of concern.

Recommendation 3: Develop a risk-based management system

Develop and use a risk-based framework to determine whether system design, water quality, operation, and maintenance are managed primarily through guidance or regulation.

A combination of guidance and regulation can be used to ensure water reuse activities can be implemented while protecting public health and the environment. Developing a risk-based management system could take into account factors like contaminant concentrations in the source water, the number of people likely to be exposed to the contaminant, and the complexity of the

system. In general, higher numbers of people likely to be exposed to the contaminant or higher concentrations of the contaminant at the source water could result in higher levels of risk and thus suggest more regulation. Lower risk categories could rely on guidance more than regulation. This option provides increased protection and reliability where public health and/or environmental risk is high and is consistent with Minnesota's current regulatory structure. The system could include the three risk categories with related management approaches outlined in the report.

Recommendation 4: Determine standards and guidelines

Develop and improve standards and guidelines for unregulated water reuse activities and reuse activities regulated by state or local governments.

Standards and guidelines for design—including those for treatment barriers and management techniques used to meet pathogen reduction targets—and best practices for different types of water reuse in Minnesota should be developed. The content included in *Minnesota's Stormwater Manual*³ could be used as a guide. Equivalent information could be developed for wastewater (reclaimed water) systems and potentially for graywater systems; content could build on existing information on proven technologies. Guidelines and standards could include:

- What should be included in operation and maintenance agreements and plans.
- Selection, sizing, siting, and design of system components—including pre-treatment, collection, storage, treatment, distribution, overflow and bypass systems, makeup water supply, and backflow prevention.
- Recommendations and requirements for monitoring and reporting.
- Signage and safety features.
- Whom applicants should contact in various agencies for assistance.

Minnesota could establish a multidisciplinary group of agency staff and technical experts to develop these guidelines and standards. The group could also determine the best ways to share the standards and guidelines with the public. They could evaluate the need and potential for a central web portal to direct users to information. They could also investigate whether a wiki-type manual, similar to the *Minnesota Stormwater Manual*, would be an effective way to provide guidance for other water reuse activities.

Recommendation 5: Simplify the process for implementers

Explore options for clarifying and simplifying the regulatory path (including permitting) implementers have to navigate.

Options may include modifying current requirements or developing additional categories or steps and sharing information with implementers. Surveys and stakeholder meetings both highlighted that many implementers found the current regulatory requirements difficult to navigate. Listening sessions conducted in November 2016 indicated that stakeholders would like to see more user-friendly permits, including online applications and tracking. The same tools used to communicate about standards and guidelines in Recommendation 4 could be used to provide guidance for navigating the approval process and reporting process.

Recommendation 6: Educate about water reuse

Offer educational opportunities and resources about regulated and unregulated water reuse activities.

An evaluation could be conducted to determine if training/education should be required for designers and operators of water reuse projects and the pros and cons of different education approaches. Training requirements could be based on system complexity, operation and maintenance needs, and potential human health risks. Existing organizations and methods could be used to provide educational opportunities and resources to system designers and operators. There are several organizations and methods available that could provide educational opportunities and distribute educational resources. For example:

- University of Minnesota Water Resources Center provides training through its Onsite Sewage Treatment Program to installers, homeowners, and small communities.
- University of Minnesota Extension Stormwater Education Program provides training for managers, contractors, developers, and engineers.
- A number of watershed districts provide training to member communities.
- American Water Works Association and Minnesota Wastewater Operators Association provide training for water and wastewater operators.

Recommendation 7: Work to resolve the unique issues related to graywater reuse.

Maintain the variance process for graywater reuse, while working to determine its feasibility in Minnesota.

Graywater reuse is currently allowed only by variance to the plumbing code. There are a number of potential issues that remain to be examined before establishing a regulatory system for graywater reuse. Therefore, the Workgroup recommends maintaining the variance process for graywater at this time, while working to resolve these issues, which include:

- Potential changes to the quality of wastewater if graywater is removed from the collection and treatment system.
- Concerns with maintaining the separation distances between outdoor graywater dispersal and saturated soils or bedrock.
- The need for drip irrigation design standards for “laundry to landscape” graywater uses, recognizing the limitation of these methods in Minnesota’s cold climate.
- The need for traditional full-sized septic systems to manage kitchen sink and toilet waste in conjunction with graywater use in many cases.
- The question of whether graywater use actually results in water conservation—some states have seen an increase in overall water use when graywater reuse is implemented.

Recommendation 8: Conduct ongoing research

Conduct ongoing research to support water reuse in both the short- and long-term.

Several agencies and other entities conduct ongoing research on water reuse through literature reviews, policy reviews, pilot studies, and original research. It could be beneficial for all Minnesota

agencies, academic researchers, and stakeholders researching water reuse to work together to prioritize future research needs.

This research, report, and the resulting recommendations are intended to assist decision-makers and stakeholders in setting a course of action to advance safe and sustainable water reuse in Minnesota.

Ray Bohn from MAWD stated that it was unfortunate that the Inter-agency Workgroup did not include local implementers such as Watershed District representatives. Watershed Districts and their local city and county partners have decades of experience in assessing the "on the ground" benefits, challenges, and risks associated with stormwater reuse for landscape irrigation. All too often state agencies like to refer to us as "stakeholders" during the planning process, but then somehow we become "partners" when asked to implement their ideas.

Phil Belfiori said that given the significant water quality and groundwater protection benefits of stormwater reuse for landscape irrigation It will be critical as the workgroup moves forward with implementing the recommendations outlined in the report that watershed districts are at the table from the beginning. Future decisions on guidance and regulation will have a significant impact on the ability of watershed districts and others to promote and implement reuse projects. Including watershed districts in future discussions will ensure benefits to water resources are properly considered.

Phil Belfiori also stated that watershed districts have concern regarding the pathogen reduction target approach. The approach is difficult to understand and would be even more difficult to describe to a non-technical partner interested in pursuing a reuse project. The approach also differs from the water quality standards approach recently added to the plumbing code, and it is unclear whether the pathogen reduction target approach would replace them. In cases such as using a stormwater reuse for landscape irrigation, it is difficult to understand how the reduction target approach would influence the treatment system needed or add costs that may prohibit implementation. It is recommended that further consideration be given to an approach for determining treatment levels that is easy to understand and implement, and does not place undue burden on projects with low-risk to public health.

Several members of the group indicated that they felt the report did not adequately address all of the benefits of reuse such as aquifer, water conservation, water quality and flood control.

Ms. Anderson responded to the questions from the group and said that the report would be submitted to the Clean Water Council and the Legislative Water Commission.

The group thanks Ms. Anderson for her presentation.

B. MAWD Executive Director Update, Barb Haake'

Barb Haake gave the Executive Director Search Update. Ray also noted that the MAWD Annual Meeting was coming up and the luncheon keynote speaker will be Jeff Peterson from the University of Minnesota, Water Resources Center. Ray also noted that there is a need for a Region 3, MAWD Manager needed for MAWD Board.

C. Goals and Objectives for MAWD and Metro MAWD, Mary Texer

Mary Texer reminded the group that at the July 18th meeting the group conducted a brainstorming exercise to identify goals and objectives for both MAWD and Metro MAWD.

Ms. Texer reviewed with the group a summary of the brainstorming effort. This information will be passed on to the MAWD Board,

D. MAWD Annual Meeting Preview, Ray Bohn

Ray Bohn had already given the MAWD Annual Meeting preview earlier in the meeting.

E. MPCA Wraps Update

Terry McDill gave the MPCA Wraps Update

Ms. McDill stated the MPCA employs a watershed approach to restoring and protecting Minnesota's rivers, lakes, and wetlands. Money to accelerate efforts to monitor, assess, and restore impaired waters, and to protect unimpaired waters was funded by the Minnesota's Clean Water Legacy Act.

There are 80 major watersheds in Minnesota. Intensive water quality monitoring and assessments will be conducted in each of these watersheds every ten years.

During the ten-year cycle, the MPCA and its partner organizations work on each of the state's 80 major watersheds to evaluate water conditions, establish priorities and goals for improvement, and take actions designed to restore or protect water quality. When a watershed's ten-year cycle is completed, a new cycle begins.

The primary feature of the watershed approach is that it focuses on the watershed's condition as the starting point for water quality assessment, planning, implementation, and measurement of results. This approach may be modified to meet local conditions, based on factors such as watershed size, landscape diversity, and geographic complexity (e.g., Twin Cities metro area).

Many of the members had questions about what a “WRAPS Equivalent” meant and what “deferred” meant. Discussion occurred. Based on some confusion about the intent and status of the Metro WRAPS Cycle Two, it was recommended that a meeting be set up to discuss further with MPCA staff.

III. Agency and Association Updates

A. BWSR Updates, Kevin Bigalke

There was no BWSR Update.

B. MPCA Updates, Teresa McDill

Terry McDill had already provided the MPCA update.

C. DNR Updates, Jen Sorenson

There was no DNR update.

D. MN Department of Health, Carrie Raber

Carrie Raber gave the MN Department of Health Update.

E. MnDOT Updates, Beth Neuendorf

There was no MnDOT update.

F. Met Council Updates, Judy Sventek

There was no Met Council Update

G. MAWD Updates, Ray Bohn

Ray Bohn had already given the MAWD update.

H. Administrator's Update, Matt Moore

Mark Doneux gave the MAWA update and stated that the Administrator group will be meeting again at the Annual Meeting.

IV. Action Items

- A) Approve July 18, 2017 minutes.

Motion by Pat Preiner to approve the July 18, 2017 minutes, second by Craig Leiser. Motion carried.

V. Unfinished Business

- A) Education
- B) Permitting & Regulations
- C) Governance
- D) Stormwater Research

VI. General Information

Roundtable Discussion – Current Issues, Trends, and Topics, All

VII. Next meeting

A. Metro MAWD, Tuesday, January 16, 2018, 7:00 – 9:00 PM, CRWD Offices

VIII. Adjournment

Motion by Marianne Breitbach, second by Shirley Reider, to adjourn. Motion carried.

The meeting was adjourned at 9:15 PM.

Respectfully submitted,

Mark Doneux, Administrator
Capitol Region Watershed District

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