

Drainage Work Group (DWG) Meeting

July 17, 2025

Following the welcome and introductions, Tom Gile, Board of Water and Soil Resources (BWSR) gave an overview of the agenda. Information was provided about the following drainage-related events.

- Viewers' Seminar – July 24 in Fergus Falls
- MADI/Auditors fall meeting – Tentatively scheduled for September 9 - 11 in St. Cloud
- Drainage report from MCEA available; link will be shared and possibility discussed at a future DWG meeting

Storage Program Update

Rita Weaver gave an update on the storage program.

- \$8.6M awarded from the general fund.
- Minnesota and Upper Mississippi River Basins are the priority area.
- Four application periods, 57 applications received.
- During the first two years funding was available, drainage projects were not eligible. 14 of the last 18 funded projects were associated with drainage systems.
- All projects must prove they have an adequate outlet to qualify for funding.
- Quantifiable outcomes: 1,500 acre-feet of storage; 10,000 tons of suspended solids and 1,300 pounds of phosphorus removed annually.

Approximately \$10M in funds remain, which were originally slated as match for the RCPP grant. BWSR is having internal discussions whether to disburse the funds quickly or wait to see if they get RCPP funding and use the remaining \$10M as match. The \$10M must be disbursed by 2029. Tom will share the program summary with the DWG. It is important to include storage projects in upcoming tours.

Prioritization List

Tom shared the prioritization list.

Future presentations

- Drainage system road crossings.
- Wetland Conservation Act rulemaking will be given at the August meeting.
- Public Waters Inventory and how it impacts drainage projects.

Tom will be contacting Brian Martinson, Jan Voit, Alex Trunnel, Randall Doneen, and representatives of MCEA and IWL to schedule a meeting to discuss notice requirements.

Topics with Potential for Consensus Recommendations	Priority	Status
▪ Adequate Outlets - Engineers have begun using the Tech report to improve clarity in OA assessments. - Considering discussions around MN River Assessment idea to help provide a framework for water management that can inform watershed scale goals. -	H/M	DWG Technical subcommittee delivered OA report to DWG late 2023. Need for work may depend on how process is going and use of OA report.
▪ Clarifying and Aligning Notice Requirements DWG identified the following for future work to establish consensus on these items: - Subgroup needs to meet to determine the applicability of expanding notice to a statewide notice framework in the larger effort. - The DWG will consider application of the public notice framework to chapter 103E. - The DWG will bring any consensus recommendations proposing modification of 103E to the legislature.	H	Overarching framework is primarily set. Pending subcommittee discussions next step would be to move forward with drafting chapter revisions to implement.
▪ Drainage Manual Sections related to WCA and 404 need revision. - WCA statute and rule changes drive some need for change - 404/federal guidance and process revisions drive some need for change - Federal position/program seems to fluctuate relatively frequently perhaps adjustments that are less "specific" and more general would be prudent? -	H	
▪ 103E.067 Ditch Buffer Strip Annual Reporting - Repealed	DONE	Completed and approved.
▪ DNR guidance for public waters permit law and permission in drainage law - Coordinate with DNR for outreach to drainage authorities and their advisors, including when a permit or permission is or isn't needed - Discuss experience to date with the guidance and concerns - Consider if, or what, DWG can do to address concerns - Some concern on inconsistency in data requested and application	L	DWG input to DNR 2014-2017; guidance published 2-28-18; DNR presented at AMC and MAWD 2018, with stakeholder input. This may be related to info topic below on DNR Reviews
▪ Transfer of drainage authority provision in Sec. 103D.625, Subd. 4 for establishment or improvement of a drainage system Consider how a watershed district might delegate drainage authority to a county or joint county drainage authority, if/where appropriate	L	Recent Supreme Court case may impact ideas for work. Will consult further with impacted folks.
▪ Drainage system Road Crossings - Who pays for road crossing repairs? - Is the statute clear or can it be tweaked to provide additional clarity Potential to remove...	L	This seems to come up from time to time but lacks general momentum to move into formal action.

Information/Discussion Topics	Priority	Status
▪ Wetland Conservation Act Legislative updates and Rule Making - Update to DWG membership on next steps and opportunities for input. - Regular updates to DWG membership from appropriate staff	H	Interested in high level status update. Rule making is progressing and those interested can participate directly in that process.
▪ DNR Public Waters Definition and Public Waters Inventory - Update to DWG membership on next steps and opportunities for input. - Regular updates to DWG membership from appropriate staff	H	High level updated to consider potential impacts to 103E systems based on update would be of value.
▪ Storage initiative and potential impacts/needs to be addressed in Drainage - Stay informed about implementation planning - Ways to facilitate studies supporting storage - Early Coordination - Connections between this and Multi-Purpose Drainage Management CWF Grants	M	Separate But Related to Adequate Outlet Conversation
▪ CWC, LCCMR and LSOHC priorities and projects related to drainage - Stay informed about these and other potential sources of funding for multipurpose drainage management - Discussion on Multi-Purpose Drainage Management Grant Program	L	Haven't discussed for some time. Further discussion on potential options to improve/increase program applications
▪ DNR Review. - Early Coordination what can this look like? How do we promote it? -	L	Possible feedback from any Drainage Authorities or DNR on how the process has gone?
▪ Drainage management practices for agriculture, flood damage reduction, water quality, and wildlife habitat - Emphasis on hydrology management and water quality practices, including altered hydrology - Stay informed about drainage management practice research, development and implementation, as well as cost-share programs	L	Some Preliminary Conversations have taken place on some ideas for WQ on Drainage systems.
▪ Separable maintenance in relation to tile drainage systems - Evaluate need to better define reasonably & consistently - Maybe moves to more of an outreach/education piece but can likely remove from "consensus items"	L	No detailed discussion to date. Stay aware and have some discussion . Maybe Viewer discussion.

Minnesota River Outlet Adequacy

Tom shared the following paragraphs regarding Evaluation of Bank Full Events from the Outlet Adequacy Technical Report.

Competing interests between managing for peak flows and minimizing duration of bank full events can result in activities with positive intentions cumulatively leading to adverse and unintended downstream consequences. In several areas of this report there is discussion about the potential effects of peak flow and duration of bank flow on channel stability, scour and sedimentation, and non-sediment related water quality issues. The Storage section specifically speaks to the challenges of managing for peak flow potentially adversely affecting bank flow duration and velocities in respect to water quality and channel stability. These competing interests lead to uncertainty and challenge when designing a drainage project, storage projects and even planning for general water quality improvement projects which are dependent on hydraulic change as the mechanism to provide for water quality treatment (water quality ponding for example). While some of this seems focused on the MN River basin, it may not be exclusively of concern there.

To inform the decision-making process and help guide implementation of these potentially beneficial activities the technical subcommittee encourages the DWG to consider a recommendation for funding of a pilot assessment of the MN River basin to prioritize areas of the basin which should be managed for peak flows versus bank flow. This

prioritization and basin wide assessment would be best completed by a disinterested third party, so that all appropriate Minnesota stakeholders could participate, through a facilitated process. This discussion should result in a technical assessment and modeling of geological, land use, hydraulic, and other factors which are influenced and affected by changes to hydrology resulting from these or other potentially beneficial activities.

With an assessment of this nature the third party could develop and provide recommendations of landscape specific areas throughout the MN River Basin which should be managed for peak flows, high frequency flows, or other hydrological recommendations. Such recommendations can help inform thoughtful and intentional drainage, storage, and water quality design. This will improve the likelihood of more sustainable agricultural production and environmental and societal outcomes with fewer unintended downstream consequences.

Rita – prioritize areas of the basin which should be managed for peak flows versus bank flow (statistical analysis of water coming into the MN River). Don't have an event that we can model across the basin. Need to look at historical events. Tough thing – not cumulative effects. Prioritizing areas. USACOE – planning assistance to the states grant.

Discussion

- Presumed need for a basin-wide assessment in the Minnesota River Basin, similar to Red River Valley's tiered approach.
- Technical and political challenges in modeling, funding, and implementing such an assessment.
- Importance of not applying a "one size fits all" approach; local conditions and watershed differences must be considered.
- A proposal was supported by the Army Corps of Engineers for a comprehensive study to develop a strategic framework for water storage projects. The estimated cost was \$600,000 to \$700,000. The effort is not currently moving forward due to federal funding uncertainty.
- Further work will be done on a proposal by BWSR staff and other interested parties.
- This topic will be considered again at a future meeting.

Outlet Adequacy Technical Report

Adam Nies, Houston Engineering, Inc. and Jacob Rischmiller, ISG each gave a PowerPoint presentation about how they are incorporating recommendations from the Outlet Adequacy Technical Report into preliminary and final engineering reports. Most of these things were already being done, just not written in the reports.

- Use of clear definitions (project terminus versus outlet), geomorphic assessments, storm event modeling, and visual aids.
- Improved clarity and transparency in reports have led to more efficient agency reviews and public hearings.
- Need for consistency across regions in review standards for state agencies.

The general reaction is that the Outlet Adequacy Technical Report is useful and should be published on the BWSR website. Mark Ten Eyck asked that the decision on publishing the report wait until the August meeting.

The report could be a topic for the Drainage Workshop at the Minnesota Watersheds Annual Conference in December.

Next Meeting

The next meeting will be held on Thursday, August 21 at 11:00 a.m. in St. Cloud. Because the MnDOT building is not available in September, it is likely that the September meeting will be canceled.

Meeting notes by Jan Voit