

Public Drainage system administration

November 2017 Snapshots



In recent years, the Board of Water and Soil Resources (BWSR) has managed two projects that provide M.S. Chapter 103E drainage authorities with new tools for their work, as well as an ongoing program for multipurpose drainage management grants and one-time drainage records modernization grants.

Minnesota public drainage manual

The [*Minnesota Public Drainage Manual \(MPDM\)*](#) was first published in 1991 by the Minnesota Department of Natural Resources (DNR) to provide uniform guidance to county, joint county, and watershed district drainage authorities and their advisors (county auditors, attorneys, engineers, viewers, drainage inspectors). A key goal was to promote consistent use of Chapter 103E Drainage law. After 25 years, a number of revisions of drainage law, and additional case law, the MPDM was updated and republished in 2016 in a web-based Wiki format accessible via the BWSR website. This update was enabled by a Clean Water Fund legislative appropriation to BWSR. The process involved contracted engineering and legal consultants and a broad stakeholder advisory committee.

The current MPDM is more robust than the original, including many case law references, clarifications regarding drainage law revisions, and a new drainage system Best Management Practices chapter. In December 2016, the BWSR Board adopted a maintenance plan for the MPDM, for which the stakeholder Drainage Work Group will serve as a standing advisory group when major revisions are needed. Outreach about the MPDM to drainage authorities and their advisors, DNR area hydrologists, and others was provided in April and May 2017. Recently, improvements have been made to the navigation and printing capabilities for the Wiki-based manual. Check it out, if you're a user of the MPDM.

Clean water fund multipurpose drainage management grant program

Applications are currently being ranked for the FY 2018 Multipurpose Drainage Management grant program. The purpose of this program is to integrate public and private funding for multipurpose drainage management practices that reduce erosion, sedimentation and flooding, while improving water quality and reducing drainage system maintenance for priority Chapter 103E drainage systems. These grants require non-state matching funds, which can include drainage system funds and individual landowner contributions for eligible conservation practices in the watershed of a drainage system. This program requires a partnership of a Chapter 103E drainage authority and a Soil and Water Conservation District to integrate drainage system administration with conservation practices on private lands.

Recent Chapter 103E revisions include provisions enabling drainage systems to use external sources of funding for wetland restoration or protection, water quality protection and improvement, and flood control. These provisions can apply to drainage system improvements and repairs. Some of these provisions, including ditch side inlet erosion control and 2-stage ditches, were recommended by the stakeholder Drainage Work Group.

The legislature has appropriated funds for FY 2019 MDM grants.

Drainage Records Modernization (DRM) – GIS database template and drainage records modernization guidelines

There are currently 96 county and watershed district drainage authorities in Minnesota that administer several tens of thousands of miles of Chapter 103E drainage ditches and subsurface tile. Drainage system records have been evolving from deteriorating hard copy on various types of materials to more modern electronic records. BWSR was appropriated general funds in FY 2008 to develop the first Drainage Records Modernization Guidelines.



In recent years, BWSR sought and was appropriated an LCCMR Environment and Natural Resources Trust Fund (ENRTF) grant (Phase 1) to develop a GIS Database Template and updated Drainage Records Modernization Guidelines for use by Chapter 103E drainage authorities. A goal was to build on experience from prior drainage records modernization work using current technology. This includes better drainage records access for drainage system management, as well as easier public access to drainage system hydrographic information (location, type, dimensions, and profile) for watershed modeling and planning. The [DRM Database Template Request Form](#) and [Drainage Records Modernization Guidelines](#) are available free of charge to drainage authorities on the Drainage page of the BWSR website. Users of the template are required to annually upload drainage system hydrographic information to a statewide database maintained on the MnGeo GeoCommons website.

Drainage records modernization match grants

In 2009 and 2011, BWSR assisted 25 drainage authorities using Drainage Records Modernization Cost-Share funding appropriated by the Legislature. For FY 2018, BWSR sought and was appropriated an LCCMR ENRTF grant of \$540,000 (Phase 2) for DRM Match Grants with Chapter 103E drainage authorities. These grants (\$500,000) will require use of the GIS Database Template, Drainage Records Modernization Guidelines and annual uploading of drainage system hydrographic information to the statewide database, with a minimum 1:1 match. Applications have been received from 16 drainage authorities and will soon be ranked for funding recommendations.