Introduction and Definitions

A. Background and Overview

Minnesota has long been recognized for its abundant and important water resources—A state that is home to more than 10,000 lakes, the headwaters of three major river basins (Mississippi River, Red River of the North, and the Great Lakes), world class fisheries, and a sizable portion of the prairie pothole region of the Midwest. Minnesotans value these water resources. Over the years, Minnesota has reinforced these values through development of public waters and wetland conservation laws, conservation programs, and comprehensive water planning and implementation at the local and state levels, in coordination with federal laws and programs.

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Water has also provided challenges from the early days of statehood. Much of the glaciated prairie areas of Minnesota, as well as the areas transitional to forest lands, included wetlands and other poorly drained lands interspersed with drier uplands. The first state drainage act was passed in 1858, the same year that Minnesota became a state. The primary purposes of the act and subsequent state drainage law were to enable joint, private drainage projects across private ownership and governmental boundaries to make land more productive for agriculture, to enable and protect roadways, to protect public health from stagnant waters, and to promote commerce (King, 1980). Over the years, Minnesota drainage law has retained these purposes, while adding provisions with regard to protection of public waters and, more recently, wetlands, as well as consideration criteria for environmental and natural resource protection. Minnesota drainage law (aka “drainage code”) is currently contained in Minnesota Statutes, Chapter 103E Drainage.

State drainage law initially authorized drainage corporations of multiple landowners, with drainage plans filed at the registrar of the applicable county(ies). Townships could serve as public drainage authorities at one time. County boards of commissioners and joint county boards have served as drainage authorities since the 1870s. Over the years, drainage authorities have also included an 8-county commission in the Red River Basin, a State Drainage Commission, district courts, drainage and conservancy districts, a State Drainage Commissioner, the Division of Drainage and Waters in the Department of Conservation (precursor of the Minnesota Department of Natural Resources) and, since 1959, watershed district boards of managers (King, 1980). Current Chapter 103E drainage authorities in Minnesota are county, joint county or watershed district boards. These public drainage authorities are responsible for administering Chapter 103E drainage systems under their jurisdiction in accordance with all applicable current law. Minnesota’s various Chapter 103E drainage system identifiers reflect the different entities that have had drainage authority over the years, including: town ditches, county ditches, state ditches, judicial ditches and watershed district project ditches, all of which can involve open ditches and/or subsurface tile systems. Drainage system identifiers also include laterals or branches of drainage systems.

Minnesota drainage law is substantially prescriptive and does not include associated rules. State courts have found that drainage authorities must follow drainage law carefully. Administrative and Legal Issues
section of this manual includes numerous references to pertinent case law that helps clarify interpretation, limits, and some potential unsettled aspects of the drainage code. Drainage authorities and their key advisors (public and private attorneys, county and private engineers, county auditors, viewers and inspectors) are responsible to administer Chapter 103E drainage systems in accordance with all applicable law. This manual cannot change the law. Chapter 103E drainage law has been updated several times in recent years by the Legislature and Governor-based on consensus recommendations of the stakeholder Drainage Work Group facilitated by BWSR in accordance with Minnesota Statutes Section 103B.101, Subdivision 13.

The Minnesota Public Drainage Manual (MPDM) was first published in September 1991, with financial assistance through an Environmental Protection Agency (EPA) Section 319 grant and had not been updated until the 2016 version. The 1991 MPDM was prepared with limited graphics for use in a hard copy 3-ring binder and was substantial in size. In 1998, the Minnesota Association of Counties published a condensed stand-alone document that summarized key information for drainage authority decision makers entitled “Understanding Minnesota Public Drainage Law” that was subsequently updated in 2002. These two documents had been key resources about Minnesota drainage law since publication.

B. Authority and Format
The Minnesota Board of Water and Soil Resources (BWSR) received a legislative appropriation and direction in the FY14-15 biennium to update the Minnesota Public Drainage Manual (MPDM) and the Understanding Minnesota Public Drainage Law (UMPDL) documents. Early in the process BWSR, in consultation with the stakeholder Project Advisory Committee, also chose to publish the updated document in a “Wiki” format that would allow easy online access and greater flexibility in updating of the document over time. The Minnesota Pollution Control Agency (MPCA) had prior experience with the Wiki format used for the Minnesota Stormwater Manual and made the associated Wiki framework available for the MPDM.

Although the Wiki format offered these advantages, it was difficult for BWSR staff to update and was unavailable to users through much of 2020 due to security problems with the server. In addition, the MPCA will no longer support the Wiki format after 2021. Therefore, the manual will now be offered on BWSR’s website, with updates as needed to address changes in statute or court cases affecting drainage law.

C. Purposes
The purposes for the updated MPDM and UMPDL include the four original purposes and four more identified below.

Original Purposes
1. promote uniformity in the interpretation of Minnesota drainage law, without speculating as to what drainage law ought to say;
2. provide information about the interaction between drainage law and other laws, state and federal;
3. suggest uniform procedures for implementing drainage law statewide; and
4. provide standardized forms for use in drainage proceedings.
**Additional Purposes**

1. create a web-based, user-friendly version that is easy to update;
2. provide enhanced guidance related to multipurpose water management considerations and authorities in drainage law;
3. provide guidance in a new chapter regarding implementation of BMPs for drainage projects and systems; and
4. update the MPDM to reflect changes in drainage law and associated law since the document was first published in 1991.

**D. Process**

Through a request for proposal (RFP process), BWSR contracted with the team of Houston Engineering, Inc. (HEI) and Rinke Noonan Attorneys to update the MPDM and integrate the UMPDL document. A Project Advisory Committee (PAC), with Subcommittees for Chapters 2, 3, 4 and new Chapter 5, were established to help provide broad stakeholder perspective in the MPDM update process. Additionally, focus group input was obtained at the beginning of the project, to develop an understanding of the uses of the existing MPDM and UMPDL. The focus group input was utilized in crafting chapter outlines and general content for the updated document(s).

During the revision process, the participants realized the critical need to assess and understand new scientific and technical information, and to suggest methods to utilize new tools and approaches. The participants also realized that this is an ongoing effort for all involved.

**E. General Guidance for Use of the MPDM**

The MPDM does not replace drainage law or create associated rules for public drainage authorities to follow. It does not have legal precedent or authority other than that provided by the drainage law and associated case law. It does attempt to capture current practice, case law, and helpful forms/templates and information that can be utilized by drainage authorities, their key advisors and various stakeholders working with and interested in Chapter 103E public drainage systems.

As is typically the case with these types of guidance documents, it is critical that the users consult with appropriate professionals when engaged in the various public drainage system proceedings. Applicable early coordination with (including but not limited to) regulatory agencies, drainage engineers, and legal counsel is essential in any proposed project. There are many decisions throughout the life of a drainage system that require attention to detail in the drainage law and associated law, as well as professional judgement associated with individual projects. This manual can help identify and understand applicable drainage law process, roles and responsibilities, links to related law and policy, as well as opportunity for multipurpose water management and drainage system BMPs.

The Wiki allows users to search topically, or by subject area in the outline. It is important to remember that search tools will identify any reference to the search phrase and that search results may only provide part of the information necessary. Finding and understanding the full context of a topic may require reviewing multiple sections and links within each section.

**Acronyms**

AMC – Association of Minnesota Counties

ABH – Agricultural BMP Handbook
BMP – Best Management Practice
BWSR – Minnesota Board of Water and Soil Resources
C – Chapter of Minnesota Statutes
CFS – Cubic Feet Per Second
COE – US Army Corps of Engineers
CP – Conservation Practice
CRP – Conservation Reserve Program (USDA Farm Service Agency)
CWA – Clean Water Act
DNR – MN Department of Natural Resources
DWG – Drainage Work Group
DWM – Drainage Water Management
EAW – Environmental Assessment Worksheet
EIS – Environmental Impact Statement
EPA – United States Environmental Protection Agency
EQB – Minnesota Environmental Quality Board
EQIP – Environmental Quality Incentives Program (USDA Natural Resources Conservation Service)
ER – Environmental Review
FOTG – Field Office Technical Guide (USDA Natural Resources Conservation Service)
FWS – Fish and Wildlife Service (US Department of Interior)
HEC – Hydrologic Engineering Center (US Army Corps of Engineers)
LGU – Local Government Unit
MAWD – Minnesota Association of Watershed Districts
MDA – Minnesota Department of Agriculture
MNDOT – Minnesota Department of Transportation
MPCA – Minnesota Pollution Control Agency
MPDM – Minnesota Public Drainage Manual
MS – Minnesota Statute
MSL – Mean Sea Level
NAVD – North American Vertical Datum
NGVD – National Geodetic Vertical Datum
NPDES/SDS – National Pollutant Discharge Elimination System/State Disposal System
NRCS – Natural Resources Conservation Service (USDA)
OHWL – Ordinary High Water Level
PWI – MN Protected Waters Inventory
RGU – Responsible Government Unit
RIM – Reinvest in Minnesota
SCS – Soil Conservation Service (USDA)
Subd. – Subdivision
TMDL – Total Maximum Daily Load
TSAC – Technical and Scientific Advisory Committee
USACOE – United States Army Corps of Engineers
USCA – United States Code Annotated
USDA – United States Department of Agriculture
USGS – United States Geological Survey
WCA – Wetland Conservation Act
WRAPS – Watershed Restoration and Protection Strategy
WRP – Wetland Reserve Program