Drainage Work Group Meeting Notes  
December 10, 2015  
12:30 – 3:30 p.m.  
Minnesota Farm Bureau Building, Eagan, MN  
(Revised)

Attendance
Tom Loveall, BWSR Brd.; Craig Austinson, Blue Earth Co.; Mark Morreim, MNLICA; Harlan Madsen, Kandiyohi Co., AMC; Jennifer Berquam, AMC; Ron Ringquist, MVA; Alan Perish, MFU, MVA; Larry Kuseske, MAWD; Laura Nehl-Trueman, MnDOT; Mark Ten Eyck, MCEA; John Genet, MPCA; Wayne Anderson, MPCA; Mark Dittrich, MDA; Will Bouchard, MPCA; Dan Larson, MRCC; Todd Miller, MRCC; Ron Harnack, RRWMB; Jerome Deal, MAWD; Dan Wilkens, RRWMB; John Thompson, Faribault Co., MACATFO; Scott Henderson, SRWD; Paul Senne, RESPEC Consulting; Janelle Taylor, House of Rep; Ray Bohn, MAWD; Dave Weirens, BWSR; Tim Gillette, BWSR; Al Kean, BWSR (via phone)

Handouts prior to or during the meeting
1) Meeting logistics and agenda for 12-10-15  
2) Meeting notes for 11-12-15  
3) Tiered Aquatic Life Uses Factsheet, MPCA, November 2015  
4) Tiered Aquatic Life Uses Overview, MPCA, December 2015  
6) Runoff-Based Drainage Assessments Option – Overview 12-2-15  
7) DWG - Runoff-Based Drainage Assessments Option – Discussion Paper 12-5-15

Introductions and agenda overview
Tim Gillette shared that he would facilitate the meeting. Al Kean had to be out of town for a family illness, but listened in via conference call. All in attendance introduced themselves. Extra copies of the agenda were provided. No additions to the agenda were offered.

Approval of 11-12-15 meeting notes
Extra copies of the meeting notes were distributed and corrections or additions invited. No corrections or additions were identified.

Share information about recent and upcoming drainage related events
Recent events attended by some DWG members were acknowledged:
- International Annual Meeting of the ASA, CSSA, Soil Science Society of America and Entomological Society of America, Nov. 15-18, 2015, Minneapolis Convention Center
- 2015 MN-IA Drainage Research Forum, Monday, Nov. 23, Cabela’s, Owatonna, MN
- MAWD Drainage Workshop, Thursday, Dec. 3, 2015 in conjunction with the MAWD Annual Meeting, Arrowwood Conference Center, Alexandria, MN

It was also noted that the MN Land Improvement Contractors Association (MNLICA) Annual Conference will be held on January 7-8, 2016 at the Best Western Hotel, New Ulm, MN. Al or Tim were asked to share information with the DWG.

Tiered Aquatic Life Uses (TALU) and MN Water Quality Standards rules update
Will Bouchard, MPCA, referenced the TALU handouts and link that Al Kean had previously sent out and provided a presentation about the status of updating MN Water Quality Standards to include adoption of a TALU framework. Current MN water quality standards are based on 7 beneficial use classes, one of
which is aquatic life and recreation, but all watercourses have the same aquatic life goals (CWA interim
Goal – “protection and propagation of fish shellfish and wildlife”, which mirrors Minnesota rule for the
protection of surface waters). Ohio adopted a TALU framework in 1990. The purpose of TALU is to
better fit biological criteria and expectations to watercourse potential. MPCA has been collecting aquatic
life monitoring data (fish, invertebrates) statewide for more than 20 years. The Index of biological
Integrity (IBI) is used to measure the health of fish and invertebrate communities. Ditches are currently
held to the same biological goals as natural channel streams by default. TALU includes three uses:
Exceptional Use, General Use, and Modified Use. There are different biological criteria for each tier and
for different stream types (e.g., warm vs. cold waters, rivers versus streams). Discussion about
applicability to Waters of the State. All ditches can be Waters of the State, but many ditches are not
Public Waters. Waters of the U.S. is a separate issue. Discussion about concerns related to unreasonably
increasing or reducing water quality and related expectations for ditches. TALU does not change
chemical standards for water quality, create additional authority to regulate ditches, or remove waters
from the impaired waters list. TALU is expected to provide refined and more realistic aquatic life
expectations for different situations involving drainage ditches, including channelized streams, as well as
ditches where no stream existed. Some discussion about connection to the recent 2-stage ditch
clarification added to drainage law and channelized streams. Also some discussion about connection to
One Watershed, One Plan implementation.

**DWG Public Waters and Drainage Subgroup update**

Because Jim Sehl, DNR, Steve Colvin, DNR, and Al Kean, BWSR, were not in attendance, the discussion
was limited to acknowledging what was in the agenda about DNR being ready to further discuss its
internal determination(s) and has a Doodle Poll out to subgroup members to find a date and time for
the subgroup to meet in December.

**Runoff rates and fees for Sauk River Watershed District Water Management Districts**

Scott Henderson, SRWD Administrator, briefly overviewed that the Sauk River Watershed District has
established Water Management Districts (WMDs) for water quality and quantity project
implementation. The SRWD contracted with RESPEC Consulting & Services to develop a project cost
assessment method for WMDs. Paul Senne, RESPEC, provided an overview of the method developed
using HSPF (Hydrologic Simulation Program Fortran) model data for runoff and phosphorus export,
along with GIS data layers and analysis. RESPEC had previously developed a calibrated HSPF model for
the Sauk River watershed for the MPCA. The assessment method uses county parcel data and other data
layers in conjunction with HSPF runoff and phosphorus coefficients that are related to land category and
slope. Considers non-assessed (exempted) lands. Question about frequency of HSPF model updates,
which are likely related to the MPCA 10-yr. watershed monitoring cycle. Question about cost-
effectiveness of the method and resolution of some of the data layers and inputs in relation to parcels.
Some discussion about this method having a focus on water quality projects rather than drainage
system projects, including repair/maintenance. Also a question about ability to define sediment related
to ditch cleanouts.

**Runoff-Based Option for Drainage System Assessments**

Time for discussion was limited. It was noted that Al K. had updated the DWG discussion paper for this
topic (current dated 12-5-15) and prepared an overview document dated 12-2-15 about the topic and
the BWSR grant agreement with the RRWMB to help inform MAWD and AMC members at their annual
meetings, and others.

**Next Meeting**

Thursday, January 14, 2016, 12:30 – 3:30 p.m. at the Minnesota Farm Bureau building in Eagan, MN.