Drainage Work Group Meeting Notes January 21, 2010

Attendance

Greg Eggers, DNR; Ron Ringquist, MVA; Kurt Deter, Rinke-Noonan; Tom Loveall, BWSR Board; Joel Peterson, BWSR; Craig Austinson, Blue Earth Co.; Larry Kuseske, MAWD; Allan Kuseske, MADI-NFCRWD; Alan Perish, MFU, MVA; Larry Gunderson, MPCA; Jerome Deal, MAWD, BDSWD; Rick Moore, MSU Mankato WRC; Gerald Amiot, Polk Co., MACO; Henry Erdman, MSRPO; Mark Dittrich, MDA; Ray Bohn, MAWD; Al Kean, BWSR

Handouts Prior to or During Meeting:

- 1. DWG Meeting Agenda for 1-21-10
- 2. DWG Meeting Notes for 12-10-09
- 3. Drainage Work Group 2008-2009 Consensus Recommendations, Final 12-10-09
- 4. Riparian Buffer Areas Study, Legislature Directive and Summary of DRAFT Findings, 1-20-10
- 5. BWSR GIS analysis of Cultivated Riparian Acres Adjacent to Public Surface Waters (in Counties with More than 30% Cultivated Land), November 2009
- 6. Example of Canon River Watershed Partnership Shoreland Mapping Project
- 7. Minnesota Land Cover Classification System Status Map, December 2009

Introductions and Agenda Overview

All in attendance introduced themselves. Al Kean provided an overview of the agenda and extra copies.

Approval of 12-10-09 Meeting Notes

Extra copies of the subject meeting notes were distributed. Comments or corrections were requested. None were offered.

DWG 2008-2009 Consensus Policy Recommendations, Final 12-10-09

Additional copies were distributed of the 6-page document that includes the DWG consensus policy recommendations developed in 2008 and 2009 with brief explanations for recommended revisions of Chapter 103E and Chapter 103B. Al Kean noted that as discussed in November, the 2008 funding recommendation for drainage records modernization cost-share was removed, because the 2010 legislative session is not a general fund year. He also noted addition of the DWG consensus recommendation developed in 2009 to add BWSR authority in Section 103B.101regarding drainage stakeholder coordination. Al indicated that he will communicate with the chief authors of HF162 and SF364 (Rep. Hansen and Sen. Sparks) to draft and introduce technical amendments to these bills to reflect these final DWG consensus recommendations. Al will also continue to coordinate with Annalee Garletz, AMC, in regard to the 2009 Sen. Frederickson amendment to SF364 and AMC seeking change of "and" to "or" for website notification of hearings in Section 103E.805.

Redetermination of Benefits and Damages

Ron Ringquist provided an overview of the viewing process and basis for determining benefits for a large redetermination project in the Bois de Sioux Watershed District and other redetermination projects. The mass appraisal process used can include use of GIS for soils data, parcel data, taxpayer information, and other pertinent data, where available. Reasons identified for conducting a redetermination of benefits include: 1) update drainage system assessment roles for more appropriate distribution of repair costs; 2) update benefits to enable adequate repair funds; 3) required for improvement projects. Members present had a lengthy and spirited discussion about the pros, cons and potential to define drainage system assessments based on runoff contributions of benefited parcels rather than mass appraisal for highest and best use. It was noted that the current method for benefits determination and assessment does not provide incentive to limit or reduce runoff, whereas a runoff based approach for assessment determination could. Stormwater utilities are a current runoff based approach. It was also noted that a runoff based method for

assessments would be a major change for Chapter 103E drainage systems that would require different expertise than the current mass appraisal method. However, mass appraisal for project benefits determination would still be needed, because benefit-cost comparison is needed for project feasibility analysis and as a basis for repair fund limits. Development of a runoff based method for drainage system assessments would require substantial effort and likely would need to be tested via a pilot, maybe as an alternative to the current redetermination methods. There seemed to be significant support for further discussion and investigation of a runoff based approach for determining drainage system assessments.

Riparian Buffer Areas Study

Al distributed copies of hand out number 4 above and reviewed the draft findings to date. The Public Drainage Ditch Buffer Study (Feb. 2006) included a GIS analysis using available data layers to estimate natural and conservation program buffers along public drainage ditches. That analysis indicated a range of about 20% to 90% by county of public drainage ditch miles have natural or conservation program buffers. However, the limitations of the data sources are substantial. The BWSR Cultivated Riparian Zone Estimates (2009) within 50-ft. riparian zones of public waters for counties with greater than 30% cropland were compared to estimates developed by the Cannon River Watershed Partnership (CRWP) Shoreland Mapping Project for Goodhue, Mower, Rice and Winona Counties. The CRWP estimates (240 to 410 acres) are about one-third to one-half of the BWSR estimates (770 to 950 acres) for three of these counties, but higher for one of these counties. Because the 2008 cropland data layer used for the BWSR estimates has a resolution of 56-meters (184 feet), while the CRWP data is based on visual digitizing of high resolution aerial photos, Al indicated that BWSR estimates appear to be unreliable. A point was made that if the CWRP estimates are accurate, it would seem that conservation programs could acquire land rights for remaining 50-ft. buffer opportunities along all public waters in these counties.

Professor Steve Taff, UMN Applied Economics, provided assistance for a literature search regarding incentives, cost-effectiveness and landowner participation for riparian buffers. Al summarized the articles and information identified to date. Jeff Forester, MSRPO, and others on the study advisory committee have also provided literature search assistance for riparian programs and experience in other states. Al will continue to research and prepare a report to the Legislature, which is due by March 1, 2010.

Section 103E.015 Considerations before Drainage Work is Done

Because time was running short, there was only a brief discussion about priorities regarding the subtopics and issues defined for this topic at the 12-10-09 DWG meeting. The subtopics and issues in italics below were identified as higher priority discussion topics.

- For the 9 criteria in 103E.015, what should be the project area or watershed for which these criteria apply and are considered for individual projects?
- Water quality considerations generally are of increasing concern
- Expectations regarding extent and level of detail of hydrologic analyses (and cost considerations)
- Watershed solutions vs. individual drainage system focus (via watershed districts or other ways?)
- Aquatic habitat considerations (e.g. IBI)
- DNR and BWSR review of engineers' reports advisory only
- How to use TMDL watershed analyses in drainage management considerations (flow and WO)
- Minnesota Public Drainage Manual as key information and education source
- Watershed approach what does it involve?

Next Meeting

The DWG will not plan to meet until after the 2010 legislative session. Al will communicate via email with DWG members during session regarding pertinent issues and information, including the status of HF162 and SF364.