

Minnesota River Turbidity TMDL and Lake Pepin TMDL Meeting

Southern Research and Outreach Center, Waseca

Thursday, July 20, 2006

Purpose of meeting: To learn about how drainage simultaneously plays an important role in moving water off the land to support Minnesota's agricultural economy while potentially altering receiving stream discharge characteristics and channel geometry.

9:30 **Welcome**

9:45 **Status of Minnesota River//Lake Pepin TMDL projects** – Larry Gunderson and Norman Senjem

10:15 **Basics of Agricultural Drainage** – Dr. Craig Schrader, U of M Extension Service

11:00 **Impacts of drainage on hydrology and watershed management** – Dr. Bruce Wilson, U of M, Biosystems and Agricultural Engineering

11:45 **Lunch**

12:00 **Causes & Consequences of Stream Channel Instability** – Dr. Karen Gran, U of M, National Center for Earth-surface Dynamics

12:45 **Panel**

1:30 **Tour** – group divides into two. Group 1 visits the drainage research facilities first and then proceeds to the ditch system. Group 2 begins with the ditch system and ends with the drainage research facilities.

First stop - Tile drainage research facilities – Dr. Gyles Randall and Dr. Craig Schrader

Discuss long-term effects of nitrogen management factors, cropping systems, manure, and tillage on nitrate, phosphorus, and pathogen losses in tile drainage.

- Future evaluation of various herbaceous and woody crops and their effects on tile drainage
- Potential for drainage management features (controlled drainage, bio-filters, etc.) to reduce nitrate losses in drainage

Second stop – See a typical ditch system in southern Minnesota and discuss channel stability issues.

3:30 **Adjourn**