What is Multipurpose Drainage Management?

It’s the use of various practices and designs to achieve multiple water management purposes and goals, including drainage. Minnesota’s comprehensive local water planning laws and programs, including One Watershed, One Plan (1W1P), all aim to manage water for multiple purposes. These purposes include beneficial use, flood control, water quality, drainage, and wildlife habitat (aquatic and terrestrial).

Multipurpose drainage management is vital in areas of Minnesota where there is substantial agricultural drainage, in order to achieve multipurpose water management goals, including protection and improvement of drainage systems that reduces future maintenance. Both rural and urban multipurpose water management can involve reducing runoff volume, peak flows, erosion, sedimentation, and nutrient transport, as well as increasing infiltration, evapotranspiration and wildlife habitat.

This fact sheet focuses on multipurpose agricultural drainage management.

Examples of Multipurpose Drainage Management Practices (there are more)

- Side Inlet to a Ditch (NRCS FOTG Std. 410)
- Wetland Restoration (Std. 657) or Impoundment
- Water & Sediment Control Basin (Std. 638)
- Grassed Waterway (Std. 412)
- Saturated Buffer (Std. 604)
- Controlled Subsurface Drainage (Std. 587 and Std. 554)

Applicable Provisions of Public Drainage Law (Minnesota Statutes Chapter 103E)

- Sec. 103E.011, Subd. 5. Use of external sources of funding.
  Enables use of external funding for water quality improvements, wetland restoration, or flood control.
Considerations before drainage work is done.

“Drainage projects” (establishment, improvement, improvement of an outlet, laterals) are required to consider a number of criteria, including alternative measures to achieve multipurpose water management. This includes alternative measures identified in applicable state-approved and locally-adopted water management plans.

Investigating use of external sources of funding and technical assistance.

Requires investigation of applicable external sources of funding for multipurpose water management, including early coordination with local water planning authorities. Applies to “drainage projects” and petitioned repairs, all of which require the appointment of an engineer to conduct project investigations, prepare plans, and submit a report to the drainage authority.

Impounding, rerouting, and diverting drainage system waters.

Enables drainage system cooperation with landowners and applicable programs, including use of external funding for impoundments, wetland restoration, rerouting or diverting of a drainage system.

Wetland restoration & replacement; water quality protection & improvement.

Enables wetland restoration and water quality practices to be part of a drainage system repair.

Repair by resloping ditches, incorporating multistage ditch cross-section, leveling spoil banks, installing erosion control, or removing trees.

Enables erosion control measures and a 2-stage channel to be part of a petitioned repair.

Applicable BWSR Grant and Cost-Share Programs

Clean Water Fund – Multipurpose Drainage Management

Eligible Applicants

A Chapter 103E drainage authority (County Board, Joint County Board, or Watershed District Board), together with a Soil and Water Conservation District, for a priority Chapter 103E drainage system.

General Program Characteristics

- Annual, competitive process with ranking criteria specifically for this program and eligible practices
- Minimum grant match 25% (can include from landowner(s) and the drainage system)

Clean Water Fund – Projects and Practices

Eligible Applicants

Soil and Water Conservation Districts, Watershed Districts, Counties, Water Management Organizations.

General Program Characteristics

- Annual, competitive process with ranking criteria, for a wide range of projects and practices
- Minimum grant match 25% (can include from landowner(s) and a drainage system)

Clean Water Fund – Watershed-based Funding (currently a pilot program)

Eligible Applicants

Local government units that have a current state approved and locally adopted comprehensive watershed management plan through the One Watershed, One Plan program, Metropolitan Surface Water Management Act, or the Metropolitan Groundwater Management Act.

General Program Characteristics

- Noncompetitive process
- Minimum grant match 10% (can include from landowner(s) and a drainage system)

General Fund – Erosion Control and Water Management Program (State Cost-Share)

General Program Characteristics

- Annual, formula-based grants to Soil and Water Conservation Districts

Eligible Applicants

- Individual landowners with priority resource conservation needs