

MCLEOD COUNTY JOINT DRAINAGE SYSTEM POLICY AND GUEIDELINES FOR REPAIR

MEEKER, DISTRICTS 3, 4 and 5 OF MCLEOD, RENVILLE AND SIBLEY COUNTIES

The following policy is intended to supplement Minnesota Statutes Chapter 103E in the Maintenance and Operation of Joint Drainage Systems within Meeker County, Districts 3,4 and 5 of McLeod County, Renville County and Sibley County. This policy does apply to the Joint operation of Joint drainage systems in Meeker, Districts 3, 4 and 5 McLeod, Renville and Sibley Counties.

Most of the drainage systems in the Counties were established with the aid of federal wetlands grant monies, starting in 1890 and ending in 1925. Minnesota adopted its drainage laws in the 1800's and with the exception of a few changes, most of these laws still read as originally worded. Most of the original drainage work was done to add value to the land for agricultural purposes or to prevent diseases caused by mosquitoes.

1. DEFINITIONS:

County Drainage Inspector(CDI): appointed by a County Ditch Authority

Drainage Authority Representative(DAR): The member of the Drainage Authority whose County Commissioner District encompasses the portion of the Drainage System where repairs are contemplated pursuant to this policy.

Joint County Drainage Authority: Drainage Authority Representative that is part of a Joint Ditch System with another county.

County Ditch: A term that means either an open ditch or a tile in the drainage system.

Combined: When used, this is to include total expenditures on all activities in all affected counties on a ditch for the year, these activities would include repairs, cleanouts, crossings, vegetation control and drop inlet structures. These expenditures are approved subject to final approval at the Annual Joint Ditch Meeting.

2. **VEGETATION CONTROL:**

Spraying Program: The intent of vegetation control is primarily to prevent a growth of any type of tree or brush within the ditch itself or its right-of-way and to reduce future repair and maintenance costs. The County Drainage Inspector or Drainage Authority Representative may conduct an annual review of the County Ditch Systems. After review, the CDI or DAR will present a spraying program to the Joint Drainage Authority for approval for spraying costs greater than \$20,000 combined.

Approved Chemicals: On ditches selected by the CDI or DAR only approved chemicals will be applied to eliminate trees and brush within the ditch bank and within the 16.5-foot right-of-way. If landowner sprays any of their own ditch within the drainage system, they also must use only approved chemicals for such an application.

Opt Out of Spraying Program: Landowners who do not approve of chemical application shall notify the CDI or DAR in writing each year. Upon receipt of said notification, the CDI or DAR shall provide a “start date” after which the proposed spraying will be commenced. The landowner shall have the option to remove all trees and brush in the ditch right-of-way at their own expense. Upon completion, the landowner shall notify the CDI or DAR who shall then inspect the removal. If the removal is satisfactory, the CDI or DAR shall remove that portion of the ditch from the chemical spraying area. If the removal is not satisfactory, or if it is not completed by the “start date,” chemical spray will be applied.

Tree Growth: Pursuant to the Meeker, McLeod, Renville and Sibley County Joint Ditch Policy, no person shall plant trees within 75 feet of the center of the ditch unless: 1.) A property owner may plant trees within 16.5 feet of the top of the ditch within 100 feet of the ditch’s inlet or outlet from a lake as measured from the lake ordinary high water level; 2.) A property owner receives approval by the appropriate County Zoning Department through a variance procedure.

Tree Removal: Trees that need to be removed from a drainage system will be removed in a manner that will reduce erosion. Trees will be piled, burned and buried when dry. Landowner may remove trees themselves for wood before the repair is started, at their own expense.

Crop Damage: During the course of the spraying operations and when crops are encountered, the Drainage Authority or its designee will use reasonable and prudent care in the operation of vehicles to minimize crop damage.

3. DITCH CLEAN OUTS:

Repair Authorization: Minor ditch cleaning (repairs costing less than \$20,000 combined) commonly referred too as “dip outs,” will be done on a request basis. These requests must be directed to the CDI or the DAR in appropriate county’s written format. The CDI or DAR may make arrangements for an appropriate contractor to be involved with the clean out, but shall not authorize such work until the Drainage Authority Representative is informed.

Repairs anticipated to cost more than \$20,000 combined shall be brought to the full Joint County Drainage Authority for approval. The repair work documentation shall become part of the drainage system permanent file.

Scope of Work: All clean out requests will be reviewed to determine the appropriate limits of work so that any work done will return the ditch to proper operating condition. That may mean that work may extend downstream and upstream of an area that a request for clean out occurs.

4. **TILE REPAIR:**

Repair Authorization: Minor tile repairs (repairs costing less than \$20,000 combined) will be done on a request basis. These requests must be directed to the CDI or DAR in appropriate county's written format. The CDI or DAR may make arrangements for an appropriate contractor to be involved with the repair, but shall not authorize such work until the Drainage Authority Representative is informed.

Repairs anticipated to cost more than \$20,000 combined shall be brought to the full Joint County Drainage Authority for approval. The repair work documentation shall become part of the drainage system permanent file.

Scope of Work: All repair requests will be reviewed to determine the appropriate limits of work so that any work done will return the tile to proper operating condition. That may mean that work may extend downstream and upstream of an area that a request for repair occurs.

5. **DROP INLET PIPE STRUCTURES:**

The Joint County Drainage Authority will actively promote erosion control measures within their County's Drainage System to prevent future costly ditch clean outs. Since the most common cause of erosion in ditches is a lack of adequate structures to control side inlet water flow into the ditch, the Joint County Drainage Authority will have drop inlet pipe structures installed in areas where it determines erosion is a problem as a

maintenance procedure. The Drainage System shall be responsible for paying for the following expenses, which are necessary to install a drop inlet tile structure:

- a. Forty-(40) feet of pipe; dual wall plastic pipe preferred, the first twenty (20) feet of the outlet end being non-perforated steel pipe.
- b. The blind tee.
- c. The marker flag.
- d. Five (5) foot perforated riser, which must extend one (1) foot above ground level. A six (6) inch diameter hole must be cut in the side of the riser above ground, near the top to handle heavy rains.
- e. All necessary digging and dirt moving to install the drop inlet pipe structure.

The above changes are recommended, any further changes must be approved by the DAR of the affected county. All expenses associated with extending the horizontal pipe beyond forty (40) feet will be paid by the landowner or the person requesting the extension.

Sites will be selected based on the requests by property owners and inspections of the ditches by the CDI or DAR. Drop inlet pipe inspection authorization will rest with the Ditch Authority Representative. The design of a drop inlet structure must be approved by the CDI and/or DAR. If the installation of drop inlet pipe and dip out is expected to exceed \$20,000, the project, in order to proceed, shall be brought to the full Joint County Drainage Authority for their approval.

Attached to this policy is a diagram of what a typical drop inlet pipe structure would look like.

A property owner who has a tile system that brings sub-surface water drainage into the Drainage System shall be solely responsible for installing and payment for an adequate inlet into the System.

6. BEAVER CONTROL:

Trapping: When beaver dams are reported or discovered when inspecting drainage systems, a trapper will be retained by the CDI or DAR to remove the problem beaver. In order to be compensated, trappers will be responsible for providing the CDI or DAR with the number of beaver trapped along with their tails and where they were trapped. It is the trapper's responsibility to contact the DNR for appropriate approval for trapping beavers out-of-season. The Joint County Drainage Authority will annually set the rate of payment for the removal of beaver.

Beaver Dams: After the beaver have been removed, the CDI or Drainage Authority Representative may hire a contractor to remove the beaver dam(s) by mechanical means, if possible. If explosives are to be used by a contractor, it must be approved by the County Sheriff and provide proper permits and insurance.

The Joint Drainage Authority should participate in the State's nuisance control program for beavers if it is available.

7. **GRASS BUFFER STRIPS:**

Requirements: A permanent grass buffer strip of at least five feet wide from the top edge of the channel, should, wherever possible, be maintained for those systems not required to comply with Minn. Stat. 103E.021, up to the maximums required for Minn. Stat. 103E.021 compliance. For all other systems, Minn. Stat. 103E.021 shall be complied with including a permanent grass buffer strip being maintained on the banks and on a strip of land 16 ½ feet in width or the crown of the leveled spoil bank, whichever is greater, on each side of the channel or ditch. Grass buffer strips may be required on systems when repairs are done that require re-sloping of the ditch banks within the system. All landowners are encouraged to contact the Farm Service Agency concerning the installation of grass buffer strips.

Violations: Landowners will be notified by the Joint County Drainage Authority if a violation of the buffer strip requirement is found. The landowner will be given 60 days to bring the area of non-compliance into compliance. If the area is not brought into compliance during this period, the Joint County Drainage Authority will proceed in a manner described in Minnesota Statute 103E.021 subd. 4 and 5.

Agricultural Practices: Agricultural practices such as plowing, tilling, pasturing livestock or other practices, which are not consistent with the purpose of the grass buffer

strip, are not permitted. The grass buffer strip may be cut from time to time, but the cut hay must be removed. Grasses used to seed slopes and grass buffer strip will need to be resistant to sprays and chemicals used to control brush. Alfalfa seeding will not be allowed on the slopes or grass buffer strips.

8. APPROACHES AND CROSSINGS:

Field and Approach Crossings: All replacement of existing crossings must be requested in writing by the landowner and approved by the CDI or Joint County Drainage Authority, combined costs greater than \$20,000 must be approved by Joint Ditch Authority. The CDI will size the culvert needed to replace or repair approaches and crossings needed by the landowner. Private crossings shall be maintained by the landowner. All costs associated with widening of a private crossing will be the responsibility of the landowner. All new crossings must be approved and sized by the CDI or DAR and all costs will be paid by the landowner. The CDI or DAR will set the width, depth and size of the crossing and will inspect the crossing after installation.

Bridges: Bridge expenses will need to be reviewed by the Joint Ditch Authority on a case by case basis.

Irrigation Crossings: Irrigation crossings should be of a bridge type that will not affect the flow of water, be installed in a manner that will not restrict repairs on a system, and be able to be removed easily. All costs associated with the crossings will be the

responsibility of the landowner. The CDI or DAR will set the width, depth and size of the crossing and will inspect the crossing after installation.

9. **ADDITIONAL DRAINAGE BY USING DITCHES AND NEW TILE:**

Adding Drainage within the Drainage System: Landowners on the benefited property list may be allowed to drain into the system whether by open ditch or by tile, if it is done in a correct manner. When the work is completed, a GPS map or the GPS coordinates which identifies the location where the tile or open ditch enters the County ditch, should be submitted to the CDI or DAR. The information submitted also shall include the size of the tile and the location of drop pipes used.

Adding Drainage from Outside the Drainage System: Landowners wishing to bring water from property not included in the benefited property list, need to follow MN Statute 103E.401. The Joint County Drainage Authority will determine the fee and prorated assessment base for adding land to the drainage system. This may include outlet fees and assessments for benefits.

Construction Methods: Open ditches must have drop pipes (prefer steel) and enough elevation to drop water away from the slopes of the ditch. Plastic pipe will not be allowed either as exposed or drop inlet pipes. It is not recommended that tile outlets be installed below the normal flow level water height of the ditch.

Municipal Discharge: Municipalities requesting to discharge into a drainage system must follow MN Statute 103E.411, must obtain a permit from the Joint County Drainage Authority and meet minimum discharge standards at all times. Continuous monitoring equipment should be installed at their expense.

10. DRAINAGE SYSTEM IMPROVEMENTS:

All improvements to a drainage system will follow MN Statute 103E.215 or .221. Signed petitions and bonds will be required. Petitioners or benefited property owners of the improvements will be required to pay the costs of the improvements.

11. REVIEW OF BENEFITS:

Prior to recommending any project herein, the CDI or DAR shall review the benefits for the affected drainage system and determine whether the project is cost effective for the most recent determination of property benefited. If the CDI or DAR determines that the benefits need to be reviewed and subsequently re-determined, he shall include a preliminary recommendation to the Joint County Drainage Authority prior to any work being performed.

12. REMOVAL OF PROPERTY OR ABANDONMENT:

Removal of property or abandonment of any section of ditch or tile will follow MN Statutes 103E.805 or 103E.811.

13. DRAINAGE SYSTEM REPAIR FUNDS:

According to MN Statute, 103E.735, the Joint County Drainage Authority may establish a maintenance repair fund for each of the drainage systems. The repair fund for each of the drainage systems may not exceed 20% of the most recent benefit determination or \$40,000 whichever is greater. Assessments will be prorated according to the determination of benefits. The CDI or DAR may recommend to the Joint County Drainage Authority which systems should have repair funds and how much the yearly assessments should be. If land has drainage system benefits when it is sold and is assessed into the drainage system, the purchaser, even if it is the State or Federal government, should be responsible for paying future assessments.

14. MISCELLANEOUS DRAINAGE SYSTEM ISSUES:

Livestock: Livestock will not be allowed to be in a drainage ditch except to cross at approved locations. If livestock must cross a ditch, the preferred method is to have them cross at an installed crossing to prevent the livestock from entering the water. Livestock may be watered from a ditch but the access to the amount of ditch must be controlled. Livestock will be allowed to graze along the ditch banks for a short period of time. Owners wishing to graze the spoils and slopes must contact the CDI or DAR to work out a rotation for the livestock to be allowed to graze.

Manure: Manure shall be spread a minimum of 100 feet and any stockpiling of manure shall be a minimum of 300 feet from crown of the spoils, unless County regulation require a greater distance.

Feedlot Runoff: Feedlot runoff that is determined to be above state standards for contaminants must be prevented from entering the ditch system either by direct or indirect methods.

Fences: No permanent fence may be installed closer than 16.5 feet from the crown of the spoils. When ditch repair is performed, gates may be installed in the property line fences next to each side of the ditch to allow for the access of equipment used for repairing the ditch.

Erosion-Pollution: If erosion areas are discovered, proper measures shall be taken to correct the problem. If erosion is discovered due to water entering the system over the spoil's bank, then drop inlet pipe structure should be installed to drop the water in the bottom of the ditch. See Section 5 for Drop Inlet Pipe Structures.

No septic system will be allowed to discharge into a drainage system.

Obstructions: Any existing or proposed obstructions in a drainage system must have proper engineering, have a hearing as provided by State Statute and be permitted by the Joint County Drainage Authority.

Deer stands and other facilities used for recreation should not be placed closer than 16.5 feet from the crown of the ditch.

Rock and debris: Rocks or debris will not be allowed to be dumped within the in-slope of a drainage ditch. Landowners should be encouraged to stockpile rock when removing from fields for later use as riprap.

Wetlands: Wetland areas that are part of a drainage system should be used for temporary storage for large rain events. These areas should be allowed to drain out naturally so storage is available for future storm events.

Landowner Rights: None of these policies are intended to allow for additional access to landowners property which is not already allowed by law. Contractor, or CDI or DAR personnel should contact landowners before entering property if possible.

Adopted this _____ day of _____, 2004.

McLeod County Board Of Commissioners Chair, Ray Bayerl

McLeod County Administrator, Nan Crary