North Fork Crow River Watershed District

Drainage System Policy

Adopted 2/12/02
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Drainage System Policy
North Fork Crow River Watershed District
2002

The Watershed District as drainage authority of all the county and judicial ditches located with in the Watershed District in Stearns, Pope, and Kandiyohi Counties recognizes that drainage is of major economic concern to the district. Meeker County has retained control of their drainage systems within the district. All of the drainage systems were established after a federal wetlands grant to the state of Minnesota in the 1850's. Minnesota had adopted a drainage statute in the late 1800's, most of which is still in its original wording with a few changes through time. Most drainage done at the time was to either add value to land through agricultural uses or to prevent diseases caused by mosquitoes. Most of the drainage systems in the district were established under the guidance of the court system between 1890 to 1925.

The watershed district will administer the drainage system under its control according to Minnesota State Statute 103E. Benefited landowners that own the ditch systems have the lawful right to have these drainage systems maintained. These benefited lands and their owners have paid for the construction and maintenance of the systems with no funds from any of the public. State statute allows some out side funds to be used for some environmental purposes only.

1. **Contractor Survey:** Once each year the drainage inspector will seek information from contractors to provide a list of equipment, hourly rates for each piece of equipment, operators and labor costs. This information may be used by the drainage inspector to make estimates of necessary repair costs.

2. **Inspections:** A regular inspection will be done with a written report submitted to the drainage authority and become part of the ditch record. The report will list the necessary repairs and violations found at the time of inspection. The drainage inspector will include an estimated cost of the necessary repairs or maintenance.

   The drainage inspector or staff will make inspections of the work in progress and a final inspection after the work has been completed to insure that repairs have been made in a satisfactory manner.

3. **Informational Meeting:** If the estimated repair costs do not exceed the limits established under MN Statutes, section 103E.705 subd. 6, the drainage authority may give notice of, and hold an informational meeting on the necessary repair and levy before the repairs are ordered.

4. **Contractor Selection:** The drainage authority may, after holding an informational meeting, direct the drainage inspector to select a contractor, do contractor estimates or quotes and make the necessary repairs. The contractor(s) selected will be required to furnish insurance information.

5. **Drainage System Repair Funds:** MN Statutes, Section 103E.735. The drainage authority may create a repair maintenance fund for each of the drainage systems. The repair fund may not exceed 20% of the last assessed benefit determination including property not originally assessed but found to be benefited, or $40,000 which ever is greater. Assessments must be pro-rated according to the determination of benefits. Assessments will be collected as provided in MN.
Statistics. The drainage inspector will recommend to the drainage authority which systems should have repair funds and how much the yearly assessments should be. A yearly review of the fund balance will be done by the drainage inspector and recommendations made to the drainage authority to replenish the fund subject to statutory maximum.

If land has ditch benefits when sold and is assessed into the ditch system, the purchaser, even if it is the state or federal, should be responsible for paying any future assessments.

If a program is offered from FEMA, funds should be sought for damages after a disaster declaration.

6. Beaver Control: Beaver control will be accomplished in the following manner.
   a. When beaver dams are reported or found when inspecting the systems, a trapper will be retained by the drainage inspector to remove the problem beaver. Beaver which have been authorized for removal and trappers authorized to remove nuisance beaver by the drainage inspector will be compensated. It will be the responsibility of the trapper to contact the DNR if not in trapping season, that he will be removing the beaver at the request of the Watershed District. The trapper will be responsible for providing the drainage authority with number of beaver trapped, from which location and provide the drainage inspector the tails of the removed animals. It will be the responsibility of the drainage inspector to dispose of the tail in a manner to prevent the tails from being resubmitted. Rate of payment for the removal of the beaver will be set by the board and reviewed on a yearly bases.

   b. After the beaver have been removed, the drainage inspector will hire a contractor to remove the beaver dam(s) by mechanical means if possible. If explosives are to be use a contractor approved by the sheriff department with the appropriate permits and insurance may be hired and notice to neighboring landowners will be given as to the use of the explosives.

   c. If offered by the state, the district should participate in the nuisance beaver control program.

   d. Contractors removing beaver dams will be paid on a machine-time basis.

Grass Strips: 103E.021 On drainage systems that have a redetermination of benefits that require the grass strip (generally 16.5 feet) or are required to have grass buffer strips installed as part of the legal requirement or proceedings according to statute, will have a regular inspection done to check for compliance of the grass strip.

If a violation of the grass strip requirement is found, the drainage authority and landowner will be notified by the drainage inspector of the violation. The landowner then is given 60 days to bring the area of non-compliance into compliance. After this time period, the drainage inspector will notify the drainage authority and the drainage authority will proceed in a manner described in 103E.021 subd. 4 and 5.

Agricultural practices such as plowing, tiling, pasturing cattle or other practices which are not consistent with the purpose of the grass strip are not permitted on any portion of the property where the grass strip is required.
Grass strips will be required on all systems when repairs are done that require resloping of the ditch banks within the system.

The grass strip may be cut for hay from time to time, but the hay that is cut must be removed.

Grasses used to seed slopes and grass strips will need to be resistant to sprays and chemicals used to control brush. Alfalfa will not be allowed to be seeded on the slopes or grass strip, as it tends to attract gophers and will loosen the soil. It can also promote erosion and is not resistant to most sprays. Landowners should be encouraged to participate in the CRP ditch buffer program. Landowners who's systems have not been redetermined are not required to have a buffer, but should be encouraged to participate in the CRP buffer program.

**Spraying:** The landowners will control any noxious weeds or trees present in the ditch right of way and grass strips. If weeds are not controlled after given notice, the drainage inspector may have a qualified applicator spray the areas affected.

Costs of the spraying will become part of the costs of maintenance of each system and will be assessed back to the benefited landowners of the system. If only one or two landowners do not control the weeds and trees, then the landowners not doing the control will be billed for the spraying.

The district may, if cost effective, consider using a mower to control weeds along a system to prevent possible contamination of the water from spray. Only sprays that are approved for use around and over water should be used.

**Approaches and Crossings:** All crossings must be requested in writing by the landowner and permitted by the drainage authority. The drainage authority will size and supply the culverts needed to construct service and field crossings needed by landowners of the system for equipment. The landowner will be responsible for the costs of labor and dirt work for the installation of the culvert. The drainage authority will set the width, depth and size of the crossing with information supplied by the drainage inspector. Crossings to be installed will be of a width that will accommodate larger equipment and constructed in a manner that will promote safety. After installation, the crossing must be inspected by the drainage inspector and a report of compliance submitted to the drainage authority.

Irrigation crossings will need to be of a bridge type that will not affect the flow of water and be installed in a manner that will not restrict repairs on a system and must be easily removable. The use of multiple culverts new or used will not be allowed for the crossing of irrigation systems unless they are part of a present field crossing.

**Outlets:** 103E.401 Landowners on the benefited property list for the drainage system will be allowed to drain into the system whether by open ditch or by tile by permit only and with detailed plans being submitted. Open ditches must have drop pipes (prefer steel) of proper size and elevation to drop water away from the slopes of the ditch. No plastic pipe will be allowed to be exposed or used for drop pipes.

No tile outlets will be allowed for installation that is below the normal flow level water height of the ditch.

Landowners wishing to bring water from property, not included in the benefit list, need to follow 103E.401. The drainage authority will determine the fee and prorated assessment base. This may include outlet fees and assessments for benefits.
When a permit is applied for, a design plan must be submitted to the district along with the contractor who is installing the tile. When completed as constructed, a GPS map must be submitted to the district along with size of tile, number of feet of each sized tile, location of each size tile and drop pipes used with location.

Any municipality requesting to discharge into a drainage system must follow 103E.411 and must obtain a permit from the district and meet minimum discharge standards at all times. Continuous monitoring equipment should be installed as part of the permit request.

Trees: Trees that need to be removed during repair will be removed in a manner that will reduce erosion. Trees will be piled, burned and buried when dry. Landowners may remove trees themselves for wood before the repair is started at their expense.

Trees that are planted as part of the CRP buffer program or other uses must not encroach closer than 50 feet from the crown of the spoils. Trees planted closer than the 50 feet from the crown will be removed at the landowner expense.

Fences: No fence may be installed closer than 50 feet from the crown of the spoils. When ditch repair is done, gates may be installed next to each side of the ditch in property line fences to allow for the access of equipment used for repairing the ditch.

Cattle: Cattle will not be allowed to be in a drainage ditch except to cross at approved locations. If cattle must cross a ditch, the preferred method is to have them cross at an installed crossing to prevent the cattle from entering the water. Cattle may be watered from a ditch but the access to the amount of ditch must be controlled. Cattle will be allowed to graze along a ditch for short periods of time to remove vegetation and then must be removed. No trampling of the ditch banks will be allowed. Owners wishing to graze the spoils and slopes must contact the drainage inspector to work out a rotation for the cattle to be allowed to graze.

Manure: Manure should be spread a minimum of 100 feet from the crown of the spoils unless county regulations require a greater distance.

Feedlot runoff: Feedlot runoff should be prevented from entering the ditch system either by direct or indirect methods.

Repairs: Owners shall request repairs in writing. This request needs to become part of the ditch record, but does not have to be a petition.

The drainage inspector will inspect the area where repairs are requested and report the findings to the board. The drainage inspector may proceed with the repairs if the costs are under those set by law and approved by the board.

Repaired side slopes of a system should be at a minimum slope ratio of 2 to 1, or more, depending on the type of soil. In areas of deep cuts, a lesser side slope may need to be maintained due to limitation of reaching the bottom with excavation equipment.

Spoils should be spread in a manner that will prevent water from entering the system except in controlled areas. A 6 to 1 or greater slope away from the ditch should be maintained.
Location of existing drainage systems are encouraged to have a recorded document where practicable.

If proper profiles and cut sheet are not available when doing repairs on a system, then the existing culverts in the road and/or soil borings could be used to establish the proper grade of the system.

Improvements: All improvements to a drainage system will follow MN Statute 103E.215 or .221. Petitions and bonds will be required. Petitioners or landowners of the improvement will be required to pay the costs of the improvements.

Erosion-Pollution: If erosion areas are discovered when an inspection is done, proper measures should be taken to correct the problem.

If erosion is discovered due to water entering the system over the soil’s bank, then properly sized drop pipes will need to be installed to drop the water in the bottom of the ditch.

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

Tile: The use of tile rather than open ditches should be encouraged with properly installed inlets along with buffers, drop pipes and the use of pattern tile.

Tile installation should follow Minnesota Drainage Guide 210-VI and amendments

Obstructions: Any obstruction requested to be installed in a system must have proper engineering, have a hearing as provided by state statute and be permitted by the district.

Deer stands and other facilities used for recreation should not be placed closer than 33 feet from the crown of the ditch.

Rocks and debris: No rocks or debris will be allowed to be dumped into or next to a drainage ditch.

Landowners should be encouraged to stockpile rock when removing from fields for later uses as riprap.

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

Landowner Rights: None of the policies are to allow any additional trespass by the public beyond allowed by law.

Contractor or Watershed District personnel should contact landowners before entering property if possible

Removal of property or Abandonment: Removal of property or abandonment of any section of ditch will follow 103E.805 or 103E.811

This is effective as of the date of approval by the North Fork Crow River Watershed District.
Drainage System Policy
Required Permits

Permits needed for:

1. Approaches and crossings
2. Irrigation crossings
3. Tile and outlets
4. Open ditches and outlets
5. Water being brought to a drainage system not on the benefited property lists.
6. Municipal discharges of any type into a drainage system
7. Fences
8. Improvement
9. Obstructions
10. Removal of property
11. Abandonment
12. Repairs - large

Permission needed from Drainage Inspector for:

1. Beaver trapping
2. Beaver trappers
3. Beaver dam removal
4. Cutting hay on grass stripes
5. Temporary cattle grassing on grass strips
6. Deer stands
7. Repairs - small
Amended March 11, 2003

Drainage System Policy
North Fork Crow River Watershed District

Amendment #1

Parcel Splits on Ditches: Cost for ownership splits in lands benefited by a drainage system will be charged back to the landowner or lands benefited by the split.