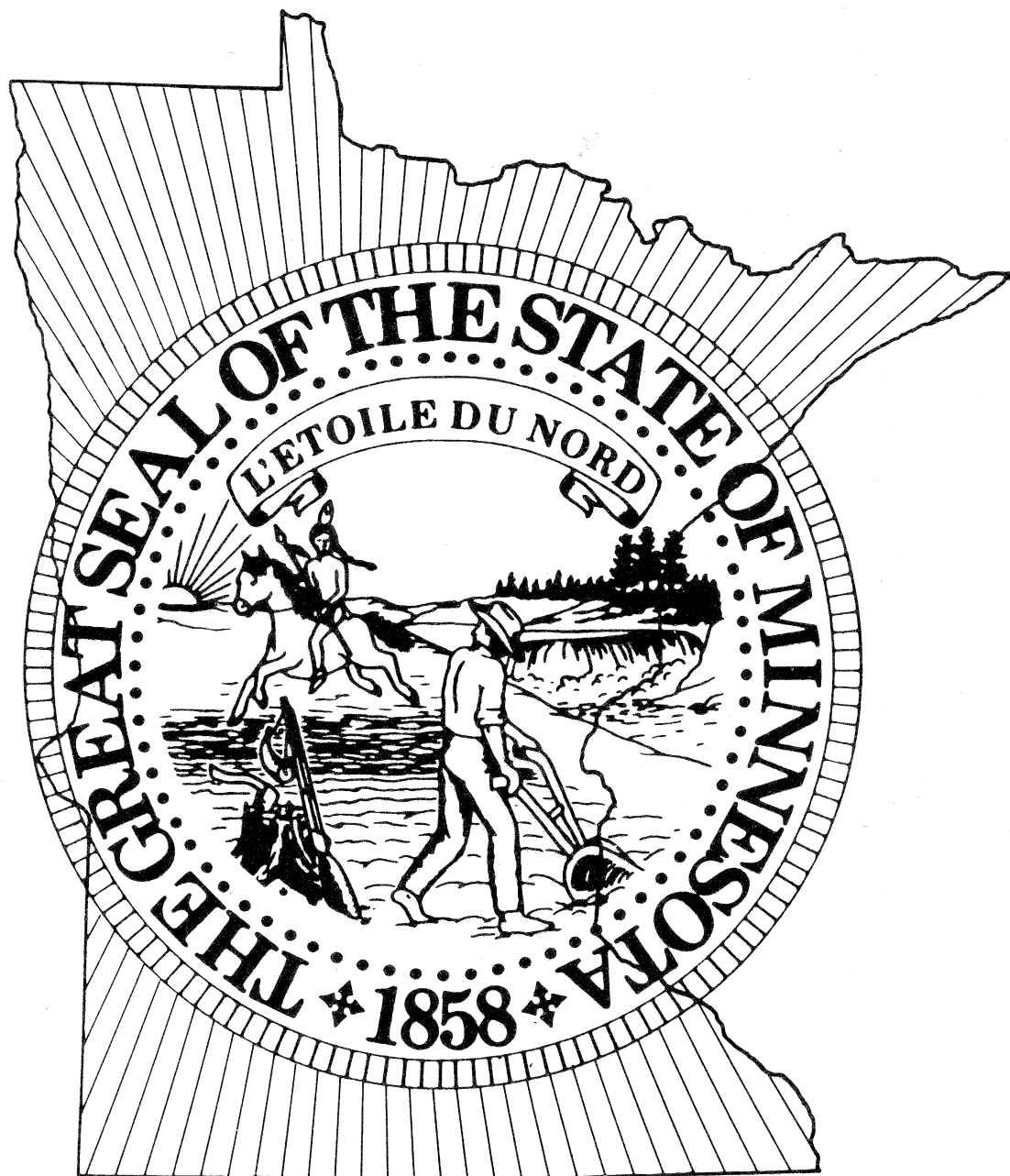


MINNESOTA PUBLIC DRAINAGE MANUAL



September 1991

DISCLAIMER

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This Minnesota Public Drainage Manual is the collective effort of an Advisory Committee that came together to develop a suggested guide for the proper establishment and construction of public drainage systems in Minnesota. The primary writers of the individual Manual chapters are the subcommittee chairpersons and co-chairpersons of the Advisory Committee as indicated on the following page.

The Advisory Committee represents a broad and varied cross section of public and private sector interests involved in public drainage systems in Minnesota. The individual subcommittees were instrumental in advising the main chapter writers and the Project Sponsor as to the content of the document. A special thank you is extended to the Advisory Committee.

MINNESOTA PUBLIC DRAINAGE MANUAL

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CHAPTER 1

INTRODUCTION AND DEFINITIONS

I. INTRODUCTION

A. Overview

Public drainage in Minnesota lacks centralized leadership and control. Since the repeal of the state drainage board law in 1947, there has been no statewide regulatory authority. There is a regulatory gap between the legislature and the counties and watershed districts. The ultimate authority for public drainage is generally vested in the counties, unless a drainage system is located in and is under the authority of a watershed district established pursuant to M.S. c. 103D.

The Department of Natural Resources (hereinafter "DNR") is the state agency most closely involved with public drainage. While it is involved, the DNR is not in a real leadership role. In this arena, the DNR has some, but not an overwhelming amount of power. By the proponents of public drainage, the DNR is often seen as worried about blackbirds and cattails, standing in the way of turning a mosquito infested swamp into a tax revenue producing, productive property.

Counties and the watershed districts are more or less on their own in the interpretation of the drainage law, on a case-by-case basis. There is, therefore, a considerable lack of uniformity of procedures among the counties and watershed districts.

Several organizations function to fill the leadership vacuum. The watershed districts have organized the Minnesota Association of Watershed Districts, Inc., an organization that has supported uniformity in drainage procedures for counties and watershed districts. The counties themselves have the Association of Minnesota Counties ("AMC"). AMC is effective in the shaping of public drainage policy. Because the AMC is managed by county commissioners, many of whom are farmers, it has tended to reflect a "pro-drainage" perspective. The Minnesota Viewers Association, organized first in southwestern Minnesota and now statewide, has as one of its goals to make uniform the viewing duties in public drainage projects.

These efforts have been beneficial and will continue to be so. What has been lacking, however, is a procedural reference source of statewide acceptance and application which might serve to make the process uniform and to standardize public drainage procedures.

B. Objectives of Manual

It will be the objective of this manual to:

- promote uniformity in the interpretation of what is called the Minnesota drainage code that is now found in M.S. c. 103E, and it will not be the objective to speculate as to what the drainage code ought to say;
- inform drainage law proponents of the interaction between the drainage code and other laws, state and federal;
- suggest uniform procedures in implementing the drainage code statewide; and
- provide standardized forms for use in drainage proceedings.

The writers hope to have produced a manual in "handbook" style that will be useful to persons who become involved in public drainage on a regular basis, such as county commissioners, viewers, engineers, county attorneys, county auditors, watershed district's board of managers and petitioners' attorneys. It is anticipated that this effort will reduce controversy, encourage compliance with federal farm programs relating to wetlands, increase compliance with state and federal laws governing protection of wetlands, enhance local decision making regarding public drainage systems, create greater equity in determination of damages and benefits, enhance environmental evaluations and assessments associated with proposed projects, and provide a greater understanding and awareness of alternatives to achieve project objectives.

C. Method of Presentation

Each chapter will be prefaced by an **Overview** section which will summarize the current situation and point out problems to be addressed in that chapter. Definitions relevant to that chapter may be provided, but the main definitions section in this manual is section II of this chapter. There will follow, then, in each chapter a substantive discussion of the subject matter which will be appropriately footnoted. The appendices to each chapter may also include forms, graphics, charts, tables, and checklists to increase the manual's utility to the user. (Note: Chapters 2-4 of this manual were written by three respective subcommittees, and thus the writing style/presentation may vary).

II. ACRONYMS/DEFINITIONS

A. Acronyms

- **AMC** - Association of Minnesota Counties
- **ASCS** - Agricultural Stabilization and Conservation Service (United States Department of Agriculture)
- **BWSR** - MN Board of Water and Soil Resources
- **CFS** - Cubic Feet Per Second
- **COE** - Army Corps of Engineers (United States Department of Defense)
- **CRP** - Conservation Reserve Program
- **DNR** - MN Department of Natural Resources
- **EPA** - United States Environmental Protection Agency
- **EQB** - MN Environmental Quality Board
- **FWS** - Fish and Wildlife Service (United States Department of Interior)
- **HEC** - Hydrologic Engineering Center (Army Corps of Engineers)
- **MSL** - Mean Sea Level
- **PCA** - MN Pollution Control Agency
- **PWI** - Protected Waters Inventory
- **RIM** - Reinvest in Minnesota
- **SCS** - Soil Conservation Service (United States Department of Agriculture)
- **USCA** - United States Code Annotated
- **USDA** - United States Department of Agriculture
- **USGS** - United States Geological Survey

B. Definitions

- **Affected.** "Affected" means benefitted or damaged by a drainage system or project. M.S. § 103E.005, Subd. 2.
- **Auditor.** "Auditor" means the auditor of the county where the petition for a drainage project was properly filed. M.S. § 103E.005, Subd. 3.
- **Benefits.** "Benefits" means improvement of properties in terms of increased value, increased production capacity, and/or increased utility resulting from the construction of public and private drainage systems. These are direct benefits. Indirect benefits are generally the furnishing of an outlet for another drainage system. Indirect benefits are characterized by the difficulty of measuring the economic improvement to the land furnished by the outletting system. For an extensive discussion of direct and indirect benefits, see this manual, chapter 4, section IV, "Assessment of Drainage Benefits."
- **Board.** "Board" means the board of commissioners of the county where the drainage system or project is located. M.S. § 103E.005, Subd. 4.
- **Certiorari.** "Certiorari" means a writ issued by a court to an inferior tribunal directing a review of its proceedings. M.S. § 606.01 et. seq.
- **Commissioner.** "Commissioner" means the commissioner of natural resources. M.S. § 103E.005, Subd. 5.
- **Damages.** "Damages" means the diminution of value resulting from the construction of a drainage system, including the value of the land actually taken for an open channel and for the permanent grass strips bordering it, severance damages, loss of crop production during project construction, and diminished productivity due to increased overflow. M.S. § 103E.315, Subd. 8. For an extensive discussion of damages, see this manual, chapter 4, section V, "Extent of Damages."
- **Director.** "Director" means the director of the Division of Waters in the Department of Natural Resources. M.S. § 103E.005, Subd. 6.
- **Dismissal of proceedings.** "Dismissal of proceedings" means that the petition and proceedings related to the petition are dismissed. M.S. § 103E.005, Subd. 7.

- **Ditch.** "Ditch" means an open channel to conduct the flow of water. M.S. § 103E.005, Subd. 8.
- **Ditch lien.** "Ditch lien" is the common term for drainage lien. It is the obligation imposed upon the property assessed benefits. It is a first and paramount encumbrance, having priority over all mortgages, charges, encumbrances, and other liens, being superior even to federal and state tax liens. M.S. § 103E.605.
- **Division.** "Division" means the Division of Waters of the Department of Natural Resources. M.S. § 103G.005, Subd. 10.
- **Drainage authority.** "Drainage authority" means the board or joint county drainage authority having jurisdiction over a drainage system or project. M.S. § 103E.005, Subd. 9. Pursuant to M.S. § 103D.625, the managers of a watershed district established pursuant to M.S. c. 103D shall take over a joint county or county drainage system within the watershed district and the right to maintain and Repair the drainage system if directed by a joint county drainage authority or a county board.
- **Drainage code.** "Drainage code" as herein used refers to M.S. c. 103E.
- **Drainage lien.** "Drainage lien" means a lien recorded on property for the costs of drainage proceedings and construction and interest on the lien, as provided under M.S. c. 103E. M.S. § 103E.005, Subd. 10.
- **Drainage project.** "Drainage project" means a new drainage system, an improvement of a drainage system, an improvement of an outlet, or a lateral. M.S. § 103E.005, Subd. 11.
- **Drainage system.** "Drainage system" means a system of ditch or tile, or both, to drain property, including laterals, improvements, and improvements of outlets, established and constructed by a drainage authority. "Drainage system" includes the improvement of a natural waterway used in the construction of a drainage system and any part of a flood control plan proposed by the United States or its agencies in the drainage system. M.S. § 103E.005, Subd. 12.
- **Easement.** "Easement" means a right in the owner of one parcel of land, by reason of such ownership, to use the land of another for a special purpose not inconsistent

with a general property in the owner. An easement may arise by prescription, grant, or necessary implication. Black's Law Dictionary, 4th Ed.

- **Engineer.** "Engineer" or "Project Engineer" means the engineer for a drainage project appointed by the drainage authority under section 103E.241, Subd. 1. M.S. § 103E.005, Subd. 13.
- **Established.** "Established" means the drainage authority has made the order to construct the drainage project. M.S. § 103E.005, Subd. 14.
- **Establishment petition.** "Establishment petition" means a petition to establish a watershed district and may consist of one or more separate petitions. M.S. § 103D.011, Subd. 11.
- **Improvement.** "Improvement" means the tiling, enlarging, extending, straightening, or deepening of an established and constructed drainage system including construction of ditches to realign or replace tile and construction of tile to replace a ditch. M.S. § 103E.215, Subd. 2. In this manual, an Improvement is sometimes referred to as an "ordinary Improvement" in order to distinguish it from Improvement of Outlet which is dealt with at M.S. § 103E.221.
- **Injunction.** "Injunction" means a prohibitive writ issued by a court at the suit of a party complainant directed to a party defendant in the action forbidding the latter to do some act which is threatened or attempted or restraining such person from continuance thereof, such act being unjust and inequitable, injurious to the person bringing the suit when there is no other legal remedy. Black's Law Dictionary, 4th Ed.
- **Lateral.** "Lateral" means any drainage construction by branch or extension, or a system of branches and extensions, or a drain that connects or provides an outlet to property with an established drainage system. M.S. § 103E.005, Subd. 15.
- **Maintenance.** "Maintenance" means Repairs done without a petition and without appointing viewers.
- **Mandamus.** "Mandamus" means a writ issued by a court to an inferior tribunal, corporation, board, or person to compel the performance of an act which the law specifically enjoins as a duty resulting from an office, trust, or station. It may require an inferior tribunal to exercise its judgment or proceed to the

discharge of any of its functions, but it cannot control judicial discretion. M.S. § 586.01.

- **Managers.** "Managers" means the board of managers of a watershed district. M.S. § 103D.011, Subd. 15.
- **Municipality.** "Municipality" means a statutory or home rule charter city, or a town having urban powers under M.S. § 368.01, Subd. 1 or 1a. M.S. § 103E.005, Subd. 16.
- **Notice by mail.** "Notice by mail" means a notice mailed and addressed to each person entitled to receive the notice, if the address is known to the auditor or can be determined by the county treasurer of the county where the affected property is located. M.S. § 103E.005, Subd. 17.
- **Owner.** "Owner" means an owner of property or a buyer of property under a contract for deed. M.S. § 103E.005, Subd. 18.
- **Passes over.** "Passes over" means in reference to property that has a drainage project or system, the 40-acre tracts or government lots or property that is bordered by, touched by, or underneath the path of the proposed drainage project. M.S. § 103E.005, Subd. 19.
- **Person.** "Person" means an individual, firm, partnership, association, or private corporation. M.S. § 103E.005, Subd. 20.
- **Political subdivisions.** "Political subdivisions" means statutory and home rule charter cities, counties, towns, school districts, and other political subdivisions. M.S. § 103E.005, Subd. 21.
- **Proceeding.** "Proceeding" means a procedure subject to M.S. c. 103E for or related to drainage that begins with filing a petition and ends by dismissal or establishment of a drainage project. M.S. § 103E.005, Subd. 22.
- **Property.** "Property" means real property. M.S. § 103E.005, Subd. 23.
- **Publication.** "Publication" means a notice published at least once a week for three successive weeks in a legal newspaper in general circulation in each county affected by the notice. M.S. § 103E.005, Subd. 24.

- **Public health.** "Public health" includes an act or thing that tends to improve the general sanitary condition of the community by drainage, relieving low wetland or stagnant and unhealthful conditions, or preventing the overflow of any property that produces or tends to produce unhealthful conditions. M.S. § 103E.005, Subd. 25.
- **Public waters.** "Public waters" has the meaning given in M.S. § 103G.005, Subd. 15. M.S. § 103E.005, Subd. 26.
- **Public welfare or public benefit.** "Public welfare" or "public benefit" includes an act or thing that tends to improve or benefit the general public, either as a whole or as to any particular community or part, including works contemplated by M.S. c. 103E that drain or protect roads from overflow, protect property from overflow, or reclaim and render property suitable for cultivation that is normally wet and needing drainage or subject to overflow. M.S. § 103E.005, Subd. 27.
- **Road.** "Road" means any road used by the public for transportation purposes. M.S. § 103E.005, Subd. 28.
- **Secretary.** "Secretary" means the secretary to the board of managers of a watershed district that has been established by the Board of Water and Soil Resources pursuant to M.S. c. 103D.
- **Spoil banks.** "Spoil banks" mean a berm or a ridge made up of earthen materials resulting from the excavation of an open ditch. M.S. § 103E.021, Subd. 1.
- **Viewers.** "Viewers" means three persons appointed by the drainage authority to determine and report the benefits and damages to all property affected by the proposed drainage project. M.S. § 103E.305.

CHAPTER 2

ADMINISTRATION AND LEGAL ISSUES

I. HISTORICAL OVERVIEW OF MINNESOTA DRAINAGE LAW

Historical Periods of Note

- 1857-1880's - the early years
- 1890's-1915 - drainage law renaissance: the state recognizes its role and drainage activity takes a giant leap forward
- 1916-pre-WWII - growing pains, difficult gains, and no rains
- WWII-1960's - the prosperous years: increased land values and plentiful moisture ensure a drainage boom while opponents arm for battle
- 1960's to present - policy changes, more laws, and less drainage

A. The Early Years: 1857 to 1880's

When the United States was settled, there were approximately 215 million acres of vegetated wetlands, excluding Alaska.¹ Ten million of these wetland acres were in Minnesota.² Before 1850, the prevailing thought in the United States held that these wetlands were vast wastelands and nuisances.³ Until the United States Congress formed a national policy of draining and filling wetlands for reclamation, there were no laws or acts addressing swamplands, drainage, wetlands, or ditches.

The Swamp Lands Acts of 1850 and 1860 appropriated around 65 million acres of wetlands for swamp reclamation to 15 western states, including Minnesota.⁴ These grants were contingent upon the proceeds being used to drain the lands.⁵ The railroads and other purchasers did not comply initially with this condition. By 1881, legislation was enacted which prohibited swampland grants to railroads.⁶ Ironically, because of widespread fraud in the land grant programs at this time, much of the 65 million acres were not wetlands and many acres of actual wetlands went unreclaimed.⁷

Minnesota settlement moved north and west from the Mississippi River in the 1850's. Except for small scale private party and railroad beds drainage, there was not much drainage activity.⁸ As

settlement reached the Red River Valley, it was discovered that wheat could be grown profitably, but the land was still too flat for private drainage.⁹ In 1858, an act entitled "An act to encourage the drainage of lands" was the first drainage act in Minnesota. The act provided no protection for water bodies, but it did provide for compensatory damages should they be lowered or drained without the riparian owner's consent.¹⁰

Despite the dearth of drainage activity in the early years, perhaps the most important years of Minnesota drainage law were the 1880's. In 1883, the legislature passed "an act to enable the owners of lands to drain and reclaim them when the same cannot be done without affecting the lands of others..." This was the first comprehensive drainage act in Minnesota.¹¹

The 1887 drainage act superseded the 1883 act.¹² While substantially the same as the 1883 act, the 1887 act provided for the petition of a single owner of land liable to be affected by, or assessed for the expense of, the construction of the ditch. When the county commissioners determined that a ditch was of public benefit, utility or was conducive to the public welfare, they accepted the petition and appointed three viewers to survey, locate and to prepare a report on the ditch (containing a statement of damages and benefits.) If the report conformed to the statute, the commissioners could establish the ditch. The act provided for the payment of damages out of the county treasury, the letting of a contract for the construction of the ditch, and the assessment of benefits against the lands to be benefitted by its construction.¹³ There is a striking parallel between this legislation and modern drainage law. Nonetheless, it was not until the state intervened that drainage law finally began to flourish.

B. Drainage Law Renaissance: 1880's to 1915

Eventually, plans for the financing and construction of large scale drainage meant that counties for the first time were involved in the supervision of drainage projects.¹⁴ In 1893, the Red River Drainage Commission was formed to deal with ditches tributary to the Red River.¹⁵ However, a very significant breakthrough in Minnesota drainage law came in 1897, when a three member drainage board of commissioners was ordained by the legislature and appointed by the governor.¹⁶ The state had assumed an active role in land drainage.

The first fifteen years of the twentieth century saw widespread growth of drainage activity. In 1901, the State Drainage Commission was formed.¹⁷ It began the construction of drainage systems close to larger trade centers and the railroads.¹⁸ Automobile roads were under construction and road ditches provided drainage.¹⁹ The state commission conducted regular inspections to ensure that counties fulfilled their duty to Repair and maintain the state funded drainage systems.²⁰ It is important to note that

at this time the state encouraged drainage despite the fact that most of the farmable land had been settled. Drainage had the support of the public. There were few complaints.²¹ Also, the initiation of a drainage petition at this time required only one person.²²

C. Growing Pains, Difficult Gains, No Rains: 1916 to WWII

Around 1916, drainage activity stopped due to adverse WWI federal policies relating to drainage, a ten year drought, floods, an agricultural depression, tile failures and a reversal of public and political sentiment relating to drainage.²³ Because of severe flooding in 1918 and 1919, the legislature authorized the establishment of drainage and flood control districts²⁴ and drainage and conservation districts.²⁵ This helped to solve the previously ignored question of how downstream water systems could handle the drained water. During WWI, drainage slowed considerably as labor and supplies became scarce and the Federal War Industries Board issued several rulings that were adverse to public drainage.²⁶

After the war, land values and agriculture commodity prices rose. However, due to the high costs of drainage immediately after the war, there were few new projects. Drainage work was limited to Improvements and Repairs of existing projects.²⁷ By the mid-1920's, farm prices were declining because of the agricultural depression.²⁸ As rainfall stopped and the infamous drought of the 1930's set in, drainage stopped and the existing systems fell into disrepair.²⁹ Many of the projects that were constructed at this time were Works Progress Administration projects.

D. The Prosperous Years: WWII to 1960's

By 1938, normal rainfall returned. The mid-1940's brought record breaking rainfall to some areas.³⁰ Demand for drainage grew as agricultural prices increased.³¹ Due to chronic neglect, Repairs to existing drainage systems sometimes cost more than the original construction.³² In many cases, drainage systems became obsolete before the assessments were paid.³³ The 1945 legislature addressed the problem by enacting a bill relating to Repairs and Improvements of drainage systems.³⁴ An interim commission was formed to study the problem of the increasing and confusing drainage laws in Minnesota.³⁵ As a result, legislation was enacted in 1947 which authorized district courts and county boards to establish drainage systems. State and township drainage was eliminated.³⁶

Prosperity in agriculture continued during the 1950's. New drainage construction projects were built, and drainage systems were repaired and improved in formerly drained agricultural areas.³⁷ Federal programs aided this mammoth effort. Drainage by the use of drain tile became widespread.³⁸ Conservationists

and sportspersons became alarmed at the increasing loss of potholes which were responsible for more than half of waterfowl production.³⁹ Conservation interests regained some of their political clout. The state obtained the authority to purchase wetlands. A commission was appointed to study conservation and flood control.⁴⁰

The State Water Resources Board was created in 1955 as a result of the re-awakening of the conservation movement.⁴¹ Watershed districts were authorized to take over drainage systems within their boundaries.⁴² County boards were also required to evaluate environmental and natural resource consequences when a proposed drainage system was under consideration.⁴³ The number of petitioners required to initiate a project increased.⁴⁴

E. Policy Changes, More Laws, Less Drainage: 1960's to Present

The 1960's saw land values increase. More drainage was needed to "retain" more productive land. By the late 60's and early 70's, however, public policy shifted toward an emphasis on conservation. Policymakers began to question whether drainage was necessarily always "in the public interest."⁴⁵ The district courts were taken out of the drainage business.⁴⁶ Drainage authorities and the commissioner of natural resources were required to evaluate environmental and conservation considerations before the drainage authorities could establish a drainage project.⁴⁷ Although its effectiveness was limited, a state Water Bank Program was established to pay people for not draining private wetlands.⁴⁸

Most of the drainage law up to this point in time was state law. Now the federal government became involved with the passage of several acts addressing flood control and scenic and recreational areas. The U. S. Army Corps of Engineers' authority over the discharge of certain substances into wetlands was recognized as a potent force in controlling drainage activity.⁴⁹

The early 80's saw a decline in land and commodity prices. Technology had improved to the point that farmers could install their own drainage systems using new methods and with or without the technical assistance of the Soil Conservation Service.⁵⁰ The policy of advocating wetland preservation and protection had clearly come of age. Gone were the days of federal and state governmental encouragement of wetland drainage.

In 1985, the United States Congress enacted a major piece of legislation called the Food Security Act of 1985. The act stresses wetland conservation through the denial of farm program benefits to anyone who produces an agricultural commodity on a converted wetland.⁵¹ The 1990 Farm Bill contained even tighter restrictions. It denies farm program benefits to anyone who **converts** a wetland, whether or not a commodity has been produced on it.⁵²

On the state level, the early tangible evidence of the shift from drainage expediency to resource conservation was indicated by the introduction of the now familiar one-rod grass strip on either side of open ditches. This is now required on any project where viewers are appointed. This was at first discretionary with the drainage authority,⁵³ and later was made mandatory.⁵⁴

In 1973, the legislature took a quantum leap in the direction of environmental conservation by enacting what is now M.S. § 103E.015. That section lists nine issues, five of them clearly environmental, to be considered before establishing a project. The same act calls for the commissioner of natural resources to make a preliminary advisory report following the filing of the engineer's preliminary report for a proposed drainage project and requires this advisory report to be read at the preliminary hearing. This piece of legislation produced loud screams of protest from the agricultural sector.

The year 1985 brought a recodification of the drainage law, formerly M.S. c. 106, and thereafter numbered M.S. c. 106A. The objective was merely to reduce redundancy, correct arcane language, and to make the law more readable. No substantive changes were intended.⁵⁵ Senator Gary DeCramer, from Senate District 27, was the prime mover of this legislation.

In 1987, Senator DeCramer was instrumental in the enactment of more ambitious legislation. This bill contained numerous substantive changes, some intended to break the presumption that if the benefits exceed damages, the ditch must be constructed.⁵⁶ Only parts of the bill passed. Among them were measures designed to put some teeth into the grass strip law, to provide more effective communication and disclosure, and to require greater involvement of the county attorney's office.⁵⁷ Also, the need to notify the commissioner of natural resources when a Repair, which may affect public waters, was to be made and a procedure for determining the "as constructed depth" was established.⁵⁸

In 1990, M.S. c. 106A was renumbered as M.S. c. 103E (again, hereinafter referred to as the drainage code) and it was placed in juxtaposition with other water law and conservation measures, all within M.S. c. 103. Numerous changes in terminology were made. Of significance was the inclusion in the drainage code of a provision from M.S. c. 105 (now M.S. c. 103G) relating to "Impounding and Diversion of Drainage System Waters."⁵⁹ In terms of drainage law, this was a radical departure because the objective had always been to move water downstream as fast as possible.

There can be no doubt that the drainage of wet soils in Minnesota has vastly enhanced the agricultural productivity of the state by, not only increasing the number of tillable acres, but also by improving the productivity of otherwise marginal soils. Agriculture has not been the only segment of society that has

benefitted. Industrial and residential development, on otherwise marginal lands, is made possible by drainage. Roads, streets, railroads and airports all need drainage. Properly managed drainage systems may be useful in flood control. Clearly, the welfare of the people of the State of Minnesota has been, and continues to be, served by the drainage activity of the last century which is said to have drained some fourteen million acres of land in the public drainage systems.⁶⁰

It is said that more than 95% of pre-settlement wetlands have been drained, filled or otherwise destroyed. Statewide, the destruction hovers around 80%.⁶¹ Gone are the days when wetlands were viewed as "swamps" which are inimical to the "public health" as that term is used throughout drainage law. There seems to be less tension between the interests of the agricultural community and the environmentalists. Slowly, it seems that the two groups are beginning to realize that their interests are one and the same.

Endnotes

1. William Want, The Law of Wetlands Regulation, (1990) @ § 2.01 [4].
2. K. Elton King, A History of Drainage Law in Minnesota with Special Emphasis on the Legal Status of Wetlands, Water Resources Research Center Bulletin 106, University of Minnesota Graduate School (1980).
3. Want, The Law of Wetlands Regulation, (1990) @ § 2.02 [1]. For an interesting discussion of the "common enemy" attitude toward surface water at this time, consult Elton King's article at pp. 2-3.
4. 43 U.S.C. §§ 982 and 988.
5. 43 U.S.C. § 981.
6. 1883 Minn. Laws, c. 4, § 1.
7. Want, supra, at § 2.02 [1] fn. 29.
8. Mark J. Hanson, Damming Agricultural Drainage: The Effect of Wetland Preservation and Federal Regulation on Agricultural Drainage in Minnesota, 13 Wm. Mitchell Law Review No. 1, at 140, fn. 24 (1987).
9. Hanson, at 140.
10. King, supra, at 18.
11. 1883 Minn. Laws, c. 108.
12. 1887 Minn. Laws, c. 97.
13. 1887 Minn. Laws, c. 97.
14. 1887 Minn. Laws, c. 98.
15. 1893 Minn. Laws, c. 221.
16. 1897 Minn. Laws, c. 318.
17. 1901 Minn. Laws, c. 90.
18. Hanson, supra, at 141.
19. Hanson, supra, at 141-42.

20. Hanson, supra, at 142 fn. 32, quoting State Drainage Commission, Report of the State Drainage Commission on Drainage Work in Minnesota (Jan. 1, 1913) at 8-9.
21. Hanson, supra, at 142 fn. 32.
22. 1907 Minn. Laws, c. 448.
23. Hanson, supra, at 143, 144.
24. 1917 Minn. Laws, c. 442.
25. Special Session Laws, 1919 c. 13.
26. Hanson, supra, at 144.
27. Hanson, supra, at 144.
28. Hanson, supra, at 144.
29. Hanson, supra, at 144-45, quoting Minnesota Department of Drainage and Waters, First Biennial Report, p. 1, Minnesota Department of Conservation (1932); Second Biennial Report, p. 38 (1934); Third Biennial Report, p. 70 (1936).
30. Hanson, supra, at 145-46, quoting Minnesota Department of Conservation, Eighth Biennial Report, p. 26 (1947).
31. Id. at 146
32. Id. at 146.
33. Id. at 146.
34. 1945 Minn. Laws, c. 71, 82.
35. Hanson, supra, at 146.
36. 1947 Minn. Laws, c. 103, 143.
37. Hanson, supra, at 146.
38. Minnesota Department of Conservation, Report of the Division of Waters, 13th Biennium (1956).
39. Hanson, supra, at 147.
40. 1953 Minn. Laws, c. 643.
41. 1955 Minn. Laws, c. 664.
42. 1955 Minn. Laws, c. 799.

43. 1955 Minn. Laws, c. 681.
44. 1957 Minn. Laws, c. 638.
45. Hanson, supra, at 147, quoting Peterson, Agricultural Drainage and the Public Interest, Minnesota Conservation Volunteer (1972) at 39.
46. 1971 Minn. Laws, c. 485.
47. 1976 Minn. Laws, c. 83, §§ 12-19.
48. 1976 Minn. Laws, c. 83, §§ 7-9.
49. Clean Water Act § 404, 33 U.S.C. § 1344, and River and Harbor Act of 1899, 33 U.S.C. § 403.
50. Hanson, supra, at 148, quoting U.S. Department of Commerce, Drainage of Agricultural Lands, Vol. 5 Special Reports 5 (1978).
51. Food Security Act of 1985, 99 Stat. 1354, P.L. 99-198.
52. 1990 Farm Bill, P.L. 101-624.
53. 1959 Minn. Laws, c. 508, § 1.
54. 1977 Minn. Laws, c. 135, § 9.
55. 1985 Minn. Laws, c. 248.
56. A two-tiered petitioning process was called for. That part did not pass.
57. 1987 Minn. Laws, c. 239.
58. 1987 Minn. Laws, c. 239, § 123.
59. Formerly M.S. § 105.81 first enacted by Laws, 1963 c. 817 § 1.
60. Hanson, supra, at 139.
61. Dennis Anderson, Protecting Wetlands Shows True Patriotism, St. Paul Pioneer Press, January 24, 1991.

II. PRE-PETITION ASPECTS OF INITIATING A PROJECT

A. General

The success or failure of a drainage project, as with most human endeavor, is to a great extent dependent upon the amount of planning and forethought that goes into it. The complexity of pre-petition considerations has increased as government at all levels has become increasingly involved in wetlands issues. Persons considering the initiation of a drainage project should be aware that an ill considered project will be costly to the petitioners if it fails, and could be even more costly if improperly established without first determining collateral liability. Few things are as divisive in a community as a failed or ill-considered drainage project.

B. Other Laws Affecting Drainage

There are a number of federal and state laws that may regulate or otherwise impact the design of the proposed project, as follows:

1. **Swampbuster Rules.** The Food Security Act of 1985 brought the United States Department of Agriculture ("USDA") back into the drainage arena.¹ Not more than a decade ago, USDA administered farm subsidies were available for land clearing and drainage expense. Now the USDA, through the Agricultural Stabilization and Conservation Service ("ASCS") and the Soil Conservation Service ("SCS"), administers a new set of rules which, if violated, will result in the denial of agricultural subsidies and other governmental benefits.

Under the wetland conservation provisions of the act, affectionately known as "Swampbuster," wetlands are defined as "Lands that have a predominance of hydric soils and that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and, under normal circumstances, do support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions."² As originally enacted, any person who plants an agricultural commodity on wetland converted after December 23, 1985, is guilty of a Swampbuster violation.

The 1990 Farm Bill, however, makes the act of converting a wetland a Swampbuster violation regardless of whether a commodity is actually grown.³ In the context of public drainage, a landowner whose wetland is converted by a drainage project loses eligibility for USDA farm program benefits if he or she plants a commodity crop on the converted wetland, even though that person might have been opposed to the project. Swampbusters are ineligible for farm program benefits on all lands and warehouses in which he or she has an interest.⁴

Producers may maintain existing drainage systems on drained wetlands designated as farmed in the same manner as they did before December 23, 1985, without loss of USDA benefits as long as these actions do not drain additional wetlands. The scope and effect of the original system is the major consideration.⁵

Proponents of public drainage projects should, therefore, inquire of the local ASCS office as to whether a proposed drainage project will convert wetlands. While the initial inquiry must be made at the ASCS office, the actual determination as to whether the planned actions are purely maintenance or whether they are additional drainage will be made by the local SCS staff. Likewise, the SCS determines what is and is not a wetland that would be a forbidden converted wetland if drained.⁶ Failure on the part of the petitioners' attorney to make such an inquiry could, it would seem, result in huge losses to assessed property owners and concomitant malpractice liability to the attorney.

2. Federal Wetlands and Related Regulation. Please note these acronyms: the U. S. Army Corps of Engineers ("COE"), the Environmental Protection Agency ("EPA"), and the Fish and Wildlife Service ("FWS"). The COE and EPA are responsible for making jurisdictional determinations under Section 404 of the Clean Water Act. The COE is authorized under Section 404 to issue permits for the discharge of dredged or fill material in "waters of the United States." The Army Corps of Engineers' regulations define "waters of the United States" to include wetlands.⁷ The EPA has authority to make final determinations on the extent of Clean Water Act jurisdiction as well as the authority to oversee the Section 404 permit program with authority to overrule a COE's Section 404 permit decision. This means that individuals cannot undertake activities involving filling activity even on privately owned land, if that land comes within the broad definition of wetlands, unless the proponent obtains a COE's permit.

The FWS is conducting an inventory of the nation's wetlands and is producing a series of National Wetlands Inventory maps for the entire country. While the SCS has been involved in wetland identification since 1956, it has recently become more deeply involved in wetland determinations through Swampbuster provisions of the Food Security Act of 1985.

The starting point in wetlands regulation for most landowners is the question of wetlands jurisdiction: is any of their land subject to wetlands regulation and, if so, to what extent? The safe thing to do is to seek a determination from the COE's district office. The COE's regulations provide that the district offices are to perform this function.⁸

Persons should be aware that any drainage activity, including maintenance/Repair of any part of an existing drainage system on wetlands, may affect a landowner's receipt of USDA benefits under

the 1985 Food Securities Act, as amended. Before commencing any activity affecting drainage of the land, the local USDA-SCS office should be contacted.

The Corps of Engineers has regulated major waterbodies (Navigable Waters of the United States) since the passage of the Rivers and Harbors Act of 1899. Only since 1972 has the COE's regulatory authority been extended by the Clean Water Act to cover virtually every waterbody in the nation, including wetlands.

Under Section 404 of the Clean Water Act, the COE's regulates discharges of dredged or fill material into wetland or water areas. Projects that do not include any temporary or permanent discharges do not come within the COE's jurisdiction. Also, Section 404 (f)(1) of the Clean Water Act exempts some normal farming, silvicultural, ranching, drainage ditch maintenance, and certain other activities from regulation, provided that the activities are not "recaptured" by provisions of Section 404 (f)(2). Section 404 (f)(2) provides that discharges are not exempt from regulation if they are associated with an activity that would reduce the reach or circulation of the waterbody (including wetlands) or bring it into a use to which it was not previously subject.

In the case of ditch maintenance projects, the term "maintain" is defined as a return to the depth, width, and sideslopes of the original ditch. In order to be considered exempt from COE's regulation, drainage ditch maintenance or Repair projects must not include new features, such as additional tile lines or ditches, that would result in increased drainage of previously undrained water or wetland areas. Also, the projects must not result in a drainage system having increased capacity to drain wetland and water areas, when compared to the system as it was originally constructed. As an indication that a project is eligible for the exemption, the COE's St. Paul District will normally accept a demonstration that the majority (more than 50%) of the wetlands that would be drained by the proposed work have produced a crop during a majority of the time for which credible records exist. During the past several years, less than 10% of the ditch maintenance or Repair projects proposed in Minnesota have been found to be exempt from COE's regulation.

Persons proposing any activity that may involve work affecting a Navigable Water of the U.S., or a discharge of dredged or fill material into any wetland or water area, should contact the U.S. Army Corps of Engineers to determine if their project will require a COE's permit. Penalties for violations include imprisonment and/or fines of up to \$50,000 per day of violation.

3. Department of Natural Resources' Jurisdiction - Public Waters and Floodplains, Shorelands, and Wild and Scenic Rivers.

The DNR administers Minnesota's public waters permit program, pursuant to M.S. c. 103G. Any person proposing to change the course, current, or cross section of a public water (which includes the act of draining or partially draining a lake or wetland) must obtain a permit from the DNR. The state's jurisdiction for public waters is the ordinary high water mark, which is typically the point where the natural vegetation changes from predominately aquatic to predominately terrestrial. For watercourses, the ordinary high water mark is normally the elevation of the top of the bank of the channel.

A definition of "public waters" is found in M.S. § 103G.005. The DNR has completed a statewide public waters inventory ("PWI") for each county of the state. The approximate boundaries of lakes, watercourses, and wetlands that fall within the definition of public waters are shown on the respective PWI map. Copies of PWI maps may be viewed at several locations: county offices (auditor, planning and zoning, and county engineer), DNR area hydrologist/wildlife manager offices, soil and water conservation district offices, and watershed district offices. Copies may be obtained from the DNR Information Center and the Division of Waters' central office, located in St. Paul. More precise information on boundaries of public waters may be obtained from the respective DNR area hydrologist.

A permit may be required from DNR for such activities as construction of outlet or grade control structures, spoil placement, modifying the runout elevation, modifying the as constructed cross section of an altered natural watercourse or otherwise affecting the ordinary high water mark, etc. The respective DNR area hydrologist should be contacted for a determination of this permit requirement (see the listing of DNR offices in chapter 5). A permit may be issued only if the plans of the applicant prove that the project is reasonable, practical, and will adequately protect the public safety and promote the public health. Permits may contain terms and reservations as reasonably necessary for the safety and welfare of the people of the state. Permits for the drainage of public waters may not be issued unless protected waters are replaced with areas of equal or greater public value.

Until the 1991 legislative session, the DNR administered the state Water Bank Program. This program allowed the DNR to compensate certain landowners if they agreed not to drain certain identified wetlands. The 1991 legislature eliminated this program, and established a permanent wetlands preserve program administered by the Board of Water and Soil Resources (see the discussion that follows in this chapter on the "Wetland Conservation Act of 1991").

The legislature has established in M.S. c. 103F the state's Floodplain, Shoreland, and Wild and Scenic Rivers' Programs (see M.S. §§ 103F.121, Subd. 1, 103F.205, Subd. 4, and 103F.325, respectively, for a definition of the extent of the boundaries of these programs). These programs are implemented at the state level by the DNR. The DNR has promulgated minimum development standards that are adopted and enforced by many local units of government via their zoning, subdivision, and/or building code regulations.

Once adopted, these (or any other) local government land use regulations may require a permit from the local government for the excavation, grading/filling, or other construction proposed by the drainage authority. These state-mandated land use programs are generally adopted by municipalities for incorporated areas or county government for unincorporated areas. Early contact with these local government officials is recommended.

4. Governor's Executive Order and State Wetland Conservation Act. Governor Arne Carlson, ten days after having assumed office in January of 1991, signed Executive Order 91-3 (a copy of which is in Chapter 5, Appendix 5A of this manual). This order directed state agencies and departments to follow a "no-net-loss" policy in regard to wetlands. The order also declares that over 80% of the state's original prairie pothole wetlands have been drained and over 60% of the state's total original wetland base has been drained, filled, or otherwise diminished, and that the loss of wetlands in the state, both urban and rural, is continuing in excess of 5,000 acres per year.

The order also directs all state departments and agencies to protect, enhance, and restore Minnesota's wetlands to the fullest extent of their authority. The order sets forth certain guidelines to avoid, minimize, and mitigate actions that impact on the state's wetlands. It calls for an annual report by the commissioner of natural resources to the governor's office and to the chairs of the senate and house environment committees on the implementation of the order.

The "no-net-loss" concept also became part of Minnesota law in 1991 by the legislature's passage of the Wetlands Conservation Act (a summary of which is in Chapter 5, Appendix 5B of this manual). The essence of the no-net-loss concept is that wetlands that are newly drained must be replaced with artificially created wetlands or restored wetlands of equal or greater size and quality. Wetlands subject to this act, as compared to those public waters and wetlands subject to the DNR's permit program, have been expanded to include most type 1 through type 8 wetlands (with certain statutory exemptions included).

For these newly added wetlands, the drainage authority must now obtain approval of a wetland replacement plan from the appropriate local governmental unit. Local units of government will now be

required to have standards for these wetland replacement plans, and these local government standards will be patterned after statewide rules to be promulgated by the Board of Soil & Water Resources.

As an alternative to wetland alteration/drainage (and the mitigation required by the act, as noted above), the act allows the property owner to place the wetland in permanent wetland preserve. The property owner would receive payment for the land placed in this program for the conveyance of a permanent easement. The Board of Soil & Water Resources is responsible for the administrative aspects of this easement program.

5. Watershed Districts. The authority for the organization, modification, or termination of watershed districts lies with the Board of Water and Soil Resources (BWSR) pursuant to M.S. c. 103D.⁹ Watershed districts are established with boundaries based primarily on a drainage basin's topography which does not often correspond with county lines. Watershed districts are managed by a board of managers made up of persons appointed by the county board. It is one step removed from the political pressure of an electoral constituency. The board of managers of a watershed district can be charged with the responsibility of maintaining all of the drainage systems within the watershed district (see excerpts from M.S. c. 103D pertaining to this subject in Chapter 5, Appendix 5C to this manual).

The board of managers is, therefore, able to take a much more global approach to public drainage than would the individual county boards. County commissioners are often under intense political pressure to establish or not to establish a project. The board of managers is required to adopt a watershed management plan, which may call for a hearing procedure,¹⁰ wherein the counties, the municipalities within the counties, the soil and water conservation districts, the DNR, and the public generally may participate. The final authority on the adoption of a watershed management plan is BWSR. The hearings, if required, are held under the auspices of that agency. The watershed management plan must have the BWSR's approval before it becomes official.

When a watershed district is established, it has no jurisdiction over existing public drainage systems until the respective county boards transfer to the watershed district all or certain joint county or county drainage systems within the watershed district. The transfer does not happen automatically. The respective county boards may transfer their authority over a drainage system to the watershed board of managers only by resolution and after a public hearing. Failing that, the board of managers has no authority to undertake repairs of an existing system, even though it or part of it may lie within a watershed district. After a drainage system is turned over to a watershed district, the procedure for repair proceeds under M.S. c. 103E (referred to again hereinafter as the drainage code).

On the other hand, a watershed district has jurisdiction over all New (drainage) Systems and Improvements to existing systems, but must proceed according to the procedures under the drainage code. The statutes are unclear regarding the specific procedures to be followed for future maintenance and Repair when a county or joint county drainage authority retains jurisdiction over an existing system that has been partially improved by a watershed district. The Board of Water and Soil Resources advises watershed districts that they are responsible for maintenance and Repair of all Improvements they undertake. Assessments for the Repair of Improvements must be based on the benefits determined for the Improvements (see M.S. § 103E.215, subd. 5). To simplify drainage system administration, transfer of the entire system to the watershed district is an option that should be considered when the district acquires jurisdiction over a system Improvement. No project may be initiated until the watershed district has adopted a watershed management plan approved by BWSR in place.

After the transfer of an existing drainage system to the watershed district, projects can be initiated by filing a petition with the secretary of the board of managers of the watershed district. Counsel for petitioners should not simply assume that a particular system lying within a watershed district has been turned over to the board of managers. If a system has not been turned over to the watershed district, the Repair petition should be filed with a county auditor under M.S. c. 103E. The secretary of the board of managers should maintain for each system a copy of the transfer order which can be readily inspected by the petitioners or their attorney.

Since it is required that the procedures for Repair, Improvement, etc., after a transfer of a system must conform to M.S. c. 103E, one should, when dealing with a watershed district project, scrupulously follow the drainage code.

Specific differences between M.S. c. 103D. for watershed districts and M.S. c. 103E, the drainage code, will be highlighted in subsequent discussions, as necessary. Appendix 2A to this chapter provides a discussion of "Drainage Laws Unique To The Seven-County Metropolitan Area."

6. Environmental Quality Board. Notwithstanding the drainage authority's duty to maintain the system as a property right of those who paid for it, the State Environmental Quality Board (EQB) may require the drainage authority to prepare an environmental impact statement. The power of the EQB may be invoked by petition of interested landowners. Normally, EQB will not invoke its power to demand an environmental impact statement. However, where, for example, a Repair is likely to have significant environmental impact, it will order an environmental impact statement. The Supreme Court has pointed out that the environmental impact statement does not make or break the project even if the conclusion

of the environmental impact statement is that the project is environmentally unsound. The Supreme Court has said that the environmental impact statement is only an informational document, forcing the consideration of alternatives, and suggesting measures which would be helpful in mitigating adverse environmental impact. The cost of preparing the environmental impact statement is borne, in the case of a Repair, by the entire system as are all other costs of Repair.¹¹

The entire drainage system would absorb the cost of the preparation of an environmental assessment worksheet (EAW) should one be required pursuant to EQB rules, prior to final action of the drainage authority in establishing the system.

C. Petitioner Liability

1. Generally. The act of signing a petition that proposes a drainage project should not be taken lightly. Often it is done without counsel. A petitioner becomes involved, typically, by a neighbor or friend who has had an attorney prepare a petition proposing a project. The project proponent(s) takes the petition to friends and neighbors, describes orally the proposed project, and asks for support for the project.

Petitioners often sign because they do not wish to offend the proponents. Petitioners frequently hold the vague but unarticulated notion that, if the project turns out to be too expensive, they can withdraw their support as a petitioner. This is not true.

Here follows a discussion of what it means to be a petitioner on a public drainage project.

2. Who Can Be a Petitioner? First of all, the petitioner must own land over which the proposed project will pass, as the project is described in the petition.¹² This is significant in that often times the proposed course of the project is altered by the drainage authority during the pendency of the proceedings. If it turns out that the project as finally established does not pass over the petitioner's land because of such a change, that fact, in and of itself, does not entitle the petitioner to withdraw, except with the written consent of all other petitioners on the filed petition.¹³ Such consent is almost never forthcoming.

3. Joint and Several Liability of Petitioners. This means that each petitioner who signs the petition is liable for all of the costs incurred if for one reason or another the project is not established. Costs consist of engineering fees submitted by the project engineer, attorney's fees submitted by the petitioners' attorney, and county auditor's fees.¹⁴ If the project is established, those costs are absorbed by the system as part of the cost of construction of the project. All persons assessed benefits

help pay for the costs in that case. If the petition is dismissed or a contract is not let, then ultimately the petitioners are responsible to pay the costs from their own resources.

4. Who Must Sign the Petition and Liability. Each separate parcel qualifies as one signature. All co-owners of a particular parcel that is traversed must sign to qualify it as a signatory parcel. No owner's signature counts unless all owners of that parcel have signed the petition. A petitioner may be a signatory petitioner on more than one parcel if the form of ownership is different and each parcel will be counted if it otherwise qualifies and if all of the owners have signed the petition. For example, a person may be a petitioner on one parcel as sole owner, on another as a corporate officer, on another as a co-owner, and on still another as a partner. Each parcel will be counted as a signatory parcel. Spouse's signatures are not required unless they have an actual ownership interest.¹⁵ Each petitioner bears joint and several responsibility to pay all of the costs no matter how small the ownership interest.

Inequities result when petitioners die during the pendency of the proceedings without a probate estate or their estate is closed prior to the time when it is determined that the deceased petitioner is (was) liable for costs. Similar results ensue when the petitioner, during the pendency of the drainage proceedings, files a Chapter 7 petition in bankruptcy. Such petitioner's obligation to the drainage authority is dischargeable in bankruptcy.¹⁶ In such cases, the remaining petitioners will simply have to pick up the slack. If they do not, the drainage authority may obtain a judgment for the unpaid costs, with interest, against all of the living petitioners who have not filed for relief in Chapter 7 bankruptcy.

A petitioner who contemplates not paying the costs by letting the bonding company pay them should reconsider. When the county auditor or county attorney notifies the bonding company that there has been a default, the bonding company will usually pay the remaining costs. The bonding company will then proceed against its principals (the petitioner(s) - one or more, who signed the bond as principal guarantors of the petitioners' obligation to pay the costs). The principals are bound to indemnify (to pay back) all of the money that the bonding company paid to the drainage authority. The principals, however, have a claim for contribution against each of the other petitioners whether or not they are also principals. This is so, because when one undertakes to sign the petition as a petitioner, one agrees to pay all costs incurred if the proceedings are dismissed or if a contract for the construction is not awarded.¹⁷

5. Failure of the Petition. If a project fails, county auditors typically divide the total costs by the number of petitioners when seeking to collect costs from petitioners. Each petitioner is

asked to pay that amount. There is no authority for this method of collection in the drainage code, but normally it works. If the petitioners do not pay, the auditor or county attorney may notify the bonding company of a default. The bonding company then pays that amount which the recalcitrant petitioners fail to pay. It then has the right of indemnification against the principals, some or all of whom are petitioners. In such case, the principals pay not only their own proportionate share of the costs but someone else's as well.

D. Alternatives to Drainage.

1. Generally. A common complaint heard at a "ditch hearing" when the proponents are speaking is that, "I'm paying taxes on the land, and I'm getting no benefit out of it." While true, the taxes on wetlands are usually minimal because of the low valuation employed by the assessor. Certain wetlands are entirely exempt from ad valorem taxation.¹⁸

Nonetheless, the proponents seek to make "productive" land which is at times inundated or is at high risk of drowning out. One answer is a government subsidy. Several programs are available, as discussed during the remainder of this section.

2. USDA Conservation Reserve Program ("CRP"). In the CRP, effective January 10, 1989, certain wetlands became eligible for enrollment during the eighth and ninth enrollment periods. Landowners may enroll wetlands and surrounding cropland into CRP according to the following guidelines: any cropland identified as wetland or farmed wetland as defined under the 1985 Food Security Act that was planted or considered planted by ASCS at least two years of the period 1981-1985 were eligible for CRP. There is no obligation to continue keeping the lands out of production after the expiration of the ten-year contract. Land enrolled under wetland criteria will retain the original wetland designation when the contract expires.

Landowners may enroll cropland areas of a field if:

- at least one-third of the field was an eligible wetland;
- the density of eligible wetlands in the field is at least one wetland per six acres; however, any block 20 acres or larger without wetlands had to be redefined as an ineligible field;
- a field or redefined field from six to nine acres in size contains at least one eligible wetland;
- land areas enrolled under the wetland criteria did not have to meet highly erodible criteria to be eligible;

- vegetation natural to the area to the extent possible must be re-established on the enrolled acres, and cost-share is available from ASCS;
- the CRP contract is for a ten-year period; and
- cost sharing is available from the U. S. Fish and Wildlife Service for restoration of wetlands on CRP.

For more information, the local ASCS office or local SCS office should be contacted.¹⁹

3. Board of Water and Soil Resources' Wetland Programs. The Board of Water and Soil Resources administers several programs dealing with wetland restoration and preservation. The RIM Reserve law was expanded in 1987 to accept previously drained wetlands for enrollment in the RIM Reserve program. The intent is to restore wetlands by plugging ditches, blocking or altering subsurface drainage systems, or using other methods to re-establish the wetland areas. All restoration will be completed on private land after limited land rights have been acquired with a perpetual easement. The landowner will receive a one-time lump sum payment for conveying the easement to the state. All construction costs are covered by the RIM Reserve program and other agencies or private organizations. The minimum wetland restoration size is one acre, along with up to four acres of cropped upland for each acre of wetland restored. The landowner is paid based on appraised market value. The landowner has a hand in restoring the wetland and determining the vegetative cover on the easement.

The easement acquired prohibits alteration of wildlife habitat or other natural features, agricultural crop production (unless specifically approved), grazing of livestock, spraying with chemicals, and, of course, drainage.²⁰

The Minnesota Department of Revenue recommends that counties continue to classify RIM lands (and CRP lands) as Agricultural for taxation purposes, but that land subjected to perpetual easements under RIM be adjusted to a value representative of what the land will eventually become when left unattended (see Letter of Michael Wandmacher - Appendix 2B). Appendix 2B also contains an additional position paper from the Department of Revenue (letter of Gerald D. Garski) that addresses the valuation of restored wetlands or preserved wetlands (i.e., preserved by easement to federal, state, or local government). Wetlands that meet either the "easement" or "restoration" criteria are to be valued at their "wetland value."

The Permanent Wetlands Preserve Program is authorized by language contained in 1991 Laws of Minnesota, Chapter 354. Article 3 of the 1991 Wetlands Conservation Act provides that the Board may acquire permanent easements on land containing type 1, 2, or 3 wetlands, as defined in United States Fish and Wildlife Service Circular No. 39

(1971 edition). The easement may include four adjacent upland acres of land for each acre of wetland included. Payment for the easement will vary by location, but outside the metropolitan counties, the payment on the wetland acres will be 50% of the township average equalized estimated market value of agricultural property. Adjacent upland acreage payment rates for cropped and noncropped land are set at 90% and 60%, respectively, of the township average equalized estimated market value of agricultural land in the township. Details on application procedures are available from the Board.

4. U. S. Fish and Wildlife Service Land Acquisition Program. The Fish and Wildlife Service uses two methods of acquisition. Ideally, the most suitable and permanent habitat is purchased in fee title and the surrounding wetland areas are protected by easement. Acquisition is by negotiated purchase from willing sellers. Acquisition offices are located in Fergus Falls and Litchfield and they can provide information on currently authorized acquisition areas.

Purchased lands and easements become a part of the National Wildlife Refuge System and are managed by the local U. S. Fish and Wildlife Wetlands Management District. A conservation easement amounts to a contract wherein the owner agrees not to drain, fill, burn, or level certain existing or naturally recurring wetlands on the property. Owners retain all other rights and may farm the wetland basins when they are dry of natural causes.

Land is purchased at market value. The U.S. government makes payments in lieu of taxes each year to counties where the lands have been purchased.²¹

Endnotes

1. 16 U.S.C. § 3821, subchapter III- wetland preservation, p. 24 (1985).
2. 16 U.S.C. § 3801(a).
3. 1990 Farm Act.
4. 56 Fed. Reg. 78 (Tues., April 23, 1991).
5. 16 U.S.C. § 3821, subch. III - wetland preservation.
6. Id.
7. 33 C.F.R. § 328.3.
8. 33 C.F.R. §§ 320.1 and 325.9.
9. M.S. § 103D.101, Subd. 1.
10. M.S. § 103D.105, Subd. 2.
11. **Coon Creek Watershed District, et al. v. State of Minnesota Environmental Quality Board**, 315 N.W.2d 604 (1982).
12. M.S. § 103E.202, Subd. 2.
13. Id., Subd. 3.
14. Counties may establish by resolution an auditor's fee schedule. An example of such a schedule recommended by Region VII of the County Auditor's Association (south central Minnesota) is provided in Appendix 2C to this chapter.
15. M.S. § 103E.202, Subd. 2. These rules regarding petitioners were new in 1987. Laws, 1987 c. 239 § 33.
16. 11 U.S.C. § 727.
17. M.S. § 103E.212 (5).
18. M.S. § 272.02, Subd. 1 (10), M.S. § 103G.005, Subd. 18. Types 3, 4, and 5 wetlands of ten acres or more in size in unincorporated areas or 2-1/2 or more acres in incorporated areas are automatically exempt from the property tax. There is no requirement that it be feasible or economically practical to drain these wetlands. These same wetlands are designated with a "W" on the map filed in the county auditor's, recorder's, or zoning administrator's office by the Department of Natural Resources as part of the Public Waters Inventory Program. Owners of land which

is not described in M.S. § 103G.005, Subd. 18, may still be eligible for exemption if it is mostly under water, produces little, if any income, and has no use except for wildlife or water conservation purposes. Types 3, 4, and 5 wetlands not listed as protected wetlands under the Public Waters Inventory because of their size will still be considered eligible for exemption if located in counties where drainage has been a long standing practice. Drainage in these counties is almost always feasible and economically practical (Assessor's Manual 5/90, Sec. 1310). Also, wetlands are exempt from property tax if the landowner established them as wetland preservation areas under Article 4 of the 1991 Wetland Conservation Act of 1991.

19. This material is taken from USDA fact sheet Wetlands Eligible for Conservation Reserve Program, June 1989 (areas under Article 4 of the Wetland Conservation Act of 1991, Laws of 1991, c. 354, M.S. § 272.02, Subd. 1 (10), and M.S. § 103F.612).

20. M.S. §§ 103F.501-601.

21. This material is taken from Questions Most Often Asked About Wetland Preservation, published by the Department of the Interior, U.S. Fish & Wildlife Service, 1979.

III. JURISDICTION AND HOW IT IS OBTAINED

A. General

Drainage proceedings involve elements of eminent domain (taking of private property for public use), of the power to tax, and of the police powers.¹ The county's or watershed district's authority to engage in drainage proceedings is strictly derived from the legislature. Drainage proceedings are entirely statutory.² The concept of **jurisdiction** in drainage proceedings involves jurisdiction in rem, meaning jurisdiction "over the thing," in this case the land. This is to be distinguished from jurisdiction over the person, as in a civil action.³

Unless the drainage authority acquires **jurisdiction** over the land to be traversed with the open ditch or drain tile, the drainage authority has no power to enter upon the land, to disturb the land, nor to levy taxes on it. The flow chart on the following two pages gives a detailed overview of the entire establishment and construction process. Here follows a discussion of the elements of **jurisdiction**. A tabular treatment of jurisdictional requirements is found in Appendix 2D to this chapter.

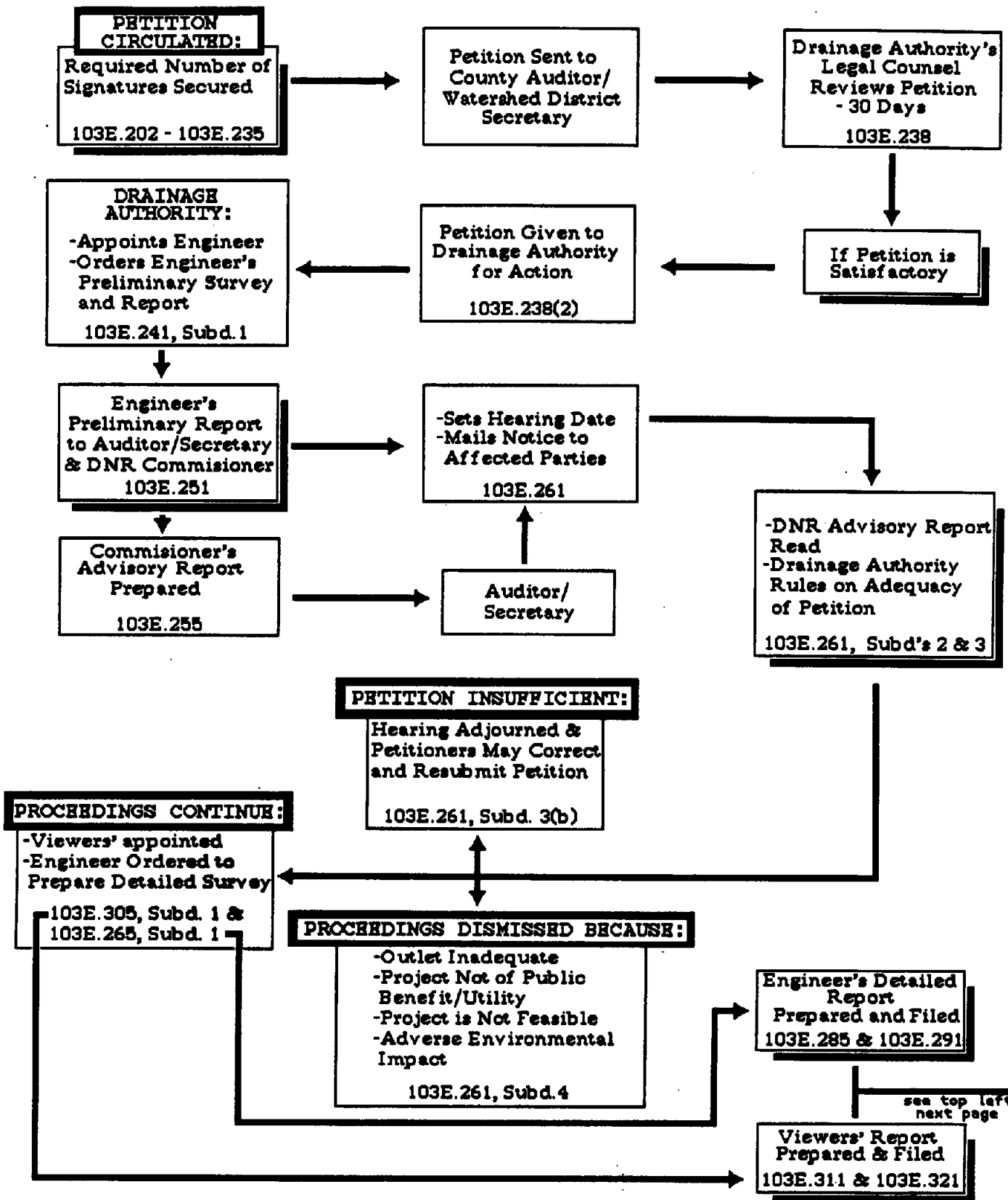
B. Elements of Jurisdiction

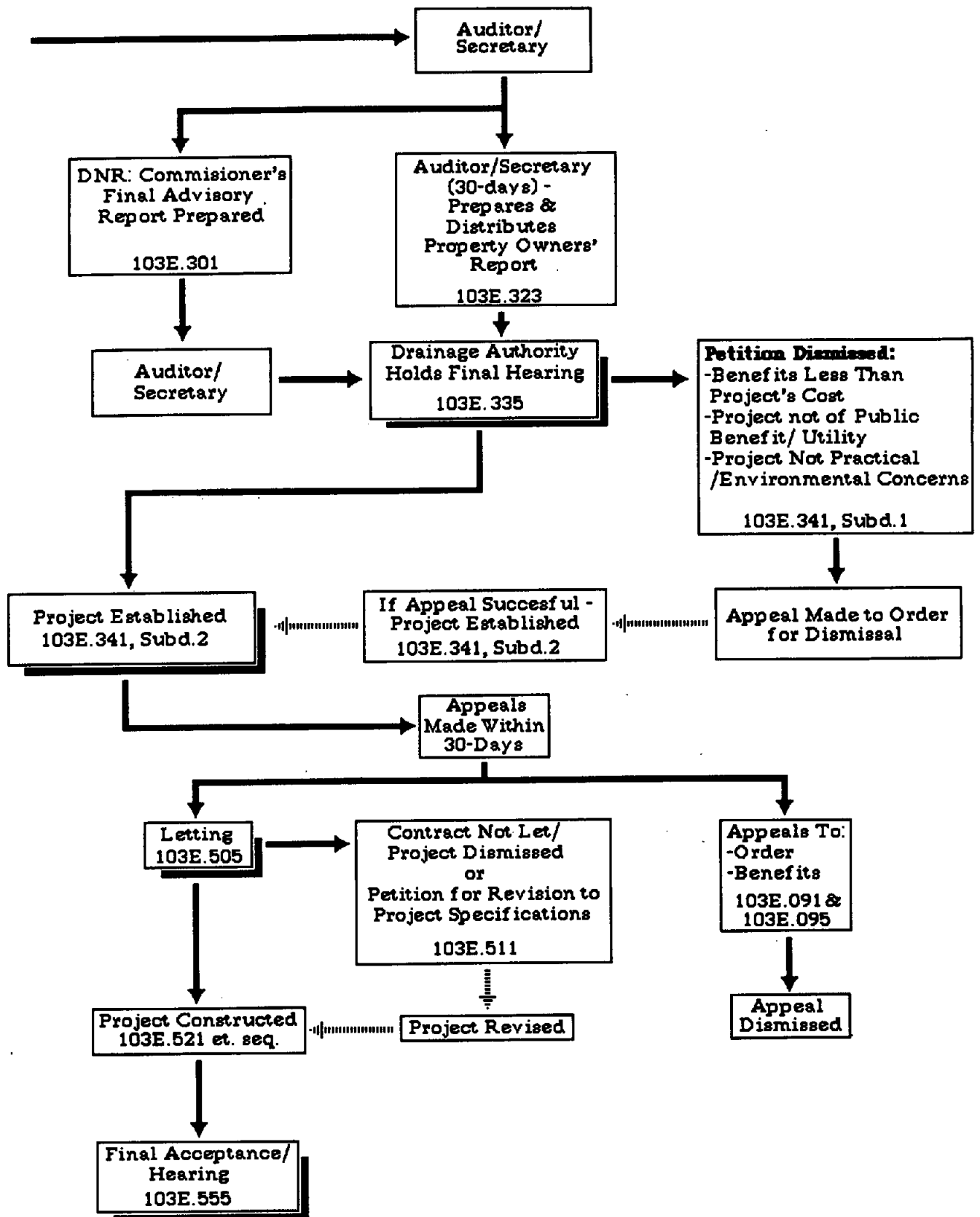
1. A Duly Constituted Drainage Authority. The idea of **jurisdiction** involves the notion of a legal body or entity that is duly constituted, existing, and having been given certain authority to act. In the case of a drainage project on a system which is entirely located within a single county, wherein no watershed district has been organized, the concept is not difficult. The drainage authority is the county board of commissioners. The county board has authority to do drainage work only within the geographic limits of the county.

In the case of a project involving a drainage system which crosses county lines, the drainage authority is a joint county drainage authority, consisting of representatives of two or more county boards.⁴ A joint county drainage authority consists of five county commissioners, at least one from each county wherein property is affected by the drainage system. The statute provides no other guidance on how the joint county drainage authority is to be constituted. It is common practice, where only two counties are involved, to have three members from the county where the petition is filed (the county with the largest area of property in the drainage system) and two members from the other county.

2. Special Requirements of the Joint County Drainage Authority. The joint county drainage authority is duly constituted when: a petition for a proposed joint county drainage project is filed in the county with the largest area of property in the system; the county boards of each county affected have met jointly and have

PUBLIC DRAINAGE SYSTEMS ESTABLISHMENT AND CONSTRUCTION PROCEDURES*





* Where a watershed district has taken over a county drainage system or joint county drainage system pursuant to Minnesota Statute, Section 103D.605, the proceedings for the construction, improvement, repair, or maintenance of public drainage systems shall conform to M.S. Chapter 103E.

considered the petition and have found it to meet statutory requirements; and the affected county boards have appointed five commissioners from their collective number to serve on the joint drainage authority.

3. Watershed District Jurisdiction. When the proposed project falls within the boundaries of a watershed district, **jurisdiction** is established by filing the petition with the board of managers.⁵ While the statute does not say so, presumably one would file the petition with the secretary of the board of managers.

A watershed district has no **jurisdiction** to proceed on a project unless the district has first been duly established by the Board of Water and Soil Resources (BWSR) in accordance with statute,⁶ a board of managers has been appointed, and each manager has filed a bond.⁷ The board of managers must consist of not less than three nor more than nine in number.⁸ The order establishing the watershed district must be filed with the Secretary of State. Once the order is filed, the watershed district is a political subdivision of the state.⁹

Even after so constituted, a watershed district may not undertake any public drainage project until it has first filed a watershed management plan with the BWSR and the plan has been approved by the BWSR board. This is a **jurisdictional** requirement. Having been so established, the watershed district still has no **Repair jurisdiction** on an existing public drainage system until the county or counties lying wholly or partly within the boundaries of the district have transferred the system in question to the watershed district.

C. Requirements of an Adequate Petition

1. General Requirements. A petition that meets statutory requirements is absolutely essential to the establishment of **jurisdiction**. Thanks to the 1987 amendments to the drainage code, the petition must now describe the 40 acre tracts or government lots over which the proposed new drainage passes, including the names and addresses of the property owners obtained from the records in the county assessor's office. This requirement assists the county auditor, county attorney and drainage authority in determining whether the number of petitioners is adequate.

The petition must also describe the starting point and the general course and the terminus of the proposed project if it is a New System. Of course, the petition must always state that it will benefit and be useful to the public and will promote the public health. It is difficult sometimes to understand how a public drainage system or project can improve the public health. Proof would be difficult. In fact, it may be possible to develop a considerable amount of evidence to the contrary. Nonetheless, the

recitation that the system or project will be useful to the public and will promote the public health is **jurisdictional**.

2. Assure Payment of Costs. The petition must also state that the petitioners will pay all costs of the proceedings if the proceedings are dismissed or the contract is not let.¹⁰

3. Additional Requirements of an Improvement. If the petition is for an Improvement of an existing drainage system, the petition must: designate the drainage system proposed to be improved; state that the system has insufficient capacity or lacks a sufficient outlet; and describe the starting point, general course, and terminus of any extension of the system if that is part of the relief sought. It must also describe the nature of the proposed Improvement and list the names and addresses of the owners of all 40 acre tracts or government lots over which the Improvement passes. The petition must state that the Improvement will be of public utility and will promote the public health. Note that the language invoking the police powers varies a bit from one type of proceeding to another. Drafters of petitions would be well advised to consult the specific statute under which they are proceeding in order to get the language just right. It may seem overly technical, but it is **jurisdictional**. Again, the petition must include a provision that the petitioners will pay all costs and expenses that may be incurred if the Improvement proceedings are dismissed.¹¹

Appendix 2D to this chapter contains a table which will set forth in significant detail the legal requirements of each type of petition which may be used to invoke the **jurisdiction** of the drainage authority.

4. The Drainage Authority is a Watershed District. Where the drainage authority is a watershed district, a hybrid type of petition is permissible (but not recommended).¹² A singular statutory petition form is useable for any type of project within the watershed district. The statute makes no distinction between a New System, Improvement, Improvement of outlet, or Lateral, except in the amount of signatures required.

This conflicts with the edict of M.S. § 103D.625, Subds. 3 and 4, which seem to say quite clearly that after transfer to a watershed district is ordered, all proceedings for construction of New Systems, and Repair of existing systems, are to conform to M.S. c. 103E. Why then, in M.S. § 103D.705, Subd. 2 (2) and (3) relating to petition requirements, does the statute simply not just refer to the respectively applicable statutes in M.S. c. 103E? It does not. **It is recommended that drafters of petitions for drainage projects should follow strictly M.S. c. 103E.**

5. Adequate Land Descriptions. Project petitions initiated under the drainage code must specifically describe the land in terms of 40 acre tracts or government lots. Note, however, that the law does not require a description in the petition of the property affected, except in the case of proposed Improvements. Determining the adequacy of a petition for an Improvement can involve a determination of the requisite number of owners of property affected signed the petition.

This is problematic in that when a petition is proposed it is sometimes difficult, if not impossible, to know what property will be affected. That determination is not made until the final hearing. It is recommended that the property affected test not be used by the petitioners unless it is clear that the whole system will be affected by the proposed Improvement.

For purposes of the jurisdictional discussion, it appears that a petition is adequate in this respect if it describes the land in terms of 40 acre tracts or government lots over which the proposed project passes (or is proposed to pass). For watershed district projects, the petition is adequate if the petition describes the land over which the proposed project passes over or is located.¹³ A project petition in a watershed district should also describe the land in units of 40 acres or government lots.¹⁴

When counting signatures on a petition, one really counts 40 acre tracts or government lots. Each such basic unit counts as one signature no matter how many co-owners there are for the parcel. All co-owners of a tract must have signed the petition and together they are counted as one signature.¹⁵ This provision (one parcel equals one signature) was new in 1987.¹⁶ Before that, there was a wide disparity among counties in methods of counting signatures. This post-1987 method of counting signatures may have some inequities, particularly when a petition is dismissed or a contract is not let, but at least it has the attribute of certainty.

6. Requisite Number of Signatures:

- **New System.** In the establishment of a New System, the percentage of owners who must have signed the petition is measured strictly by the "passes over" test. That is, the concept of "property affected" has no bearing on the validity of the petition.¹⁷ In the case of a New System, a majority, presumably more than 50 percent of the owners of the property over which the proposed drainage system described in the petition passes or the owners of 60 percent of the area over which the proposed New System passes, must sign the petition.
- **Improvement.** In all other proceedings under the drainage code (M.S. c. 103E), the test for the percentage of owners who must have signed the petition

is 26 percent. Twenty-six percent of what? In each case the petitioner must check the statute. The most difficult proposed project to deal with is an Improvement. The 26 percent test is applied four different ways:

- twenty-six percent of the owners of the property affected by the proposed Improvement;
- twenty-six percent of the owners of the property that the proposed improvement passes over;
- twenty-six percent of the property area affected by the proposed improvement; or
- the owners of at least 26 percent of the property area that the proposed improvement passes over.

The tests at the second and fourth examples immediately above are workable and are most often used. The first and third tests immediately above are probably not very useable, since the petitioners do not generally know at the time they file the petition what the area "affected" is unless a proposed Improvement will affect the entire system. That is a determination which would be pretty hard to make in most cases at the petition stage of the proceedings. "Affected" is defined by the drainage code as meaning benefitted or damaged by a drainage system or project.¹⁸

- Improvement of Outlet. Petitioners for an Improvement of Outlet have a special problem. The petition must be signed by at least 26 percent of the owners of adjoining overflowed property or by the owners of at least 26 percent of the area of the overflowed property.¹⁹ Overflowed property is a nebulous test. How far downstream may one go in making that determination? How frequently does it overflow: once every ten years, once every 50 years, or once every 100 years? The vagueness of the jurisdiction test for an Improvement of Outlet proceeding, and the likelihood that one could get into an argument about whether or not the drainage authority has jurisdiction, may account for the fact that this type of proceeding is used very little. Usually the same thing can be accomplished by using the more familiar Improvement proceeding. One can, after all, extend an existing system up to one mile downstream under a regular Improvement proceeding.²⁰

The petition must describe the property that has been or is likely to be overflowed, including the names and

addresses of the property owners from the records of the county. Note that the jurisdictional test relates to overflowed property only - not to property likely to be overflowed. There may be a difference.

- **Lateral.** Lateral proceedings do not present a particular problem respecting the determination of the number of petitioners. The requirement is quite simply signatures of 26 percent of the owners of all of the property over which the Lateral will pass or the signatures of the owners of 26 percent of the area over which the Lateral will pass.
- **Impounding and Diversion of Drainage System Waters.** Petitions for Impounding and Diversion of Drainage System Waters may be initiated by one petitioner. The petitioner may be an individual. The statute does not specify what relationship, if any, the petitioning individual must have to the drainage system. Probably such an individual would be a person who is assessed for benefits or one who owns the property upon which the diverted water will be ponded. More often than not the petitioner will be an agency of the state or federal government.²¹
- **Repairs.** Repairs are most often done without a petition. The county board or the joint county drainage authority, upon being requested to make a Repair, will simply order it done by an appropriate contractor on a time and materials basis, and will pay for the work out of the system fund. Repairs by petition require only one petitioner who must be a person who owns property affected.

7. Determination of Final Jurisdiction. Certain aspects of jurisdiction become final after the preliminary hearing. The findings made after the preliminary hearing are to make conclusive only the signatures and legal requirements of the petition.²² The preliminary hearing order is not appealable, however. Thus, it is not really final. Jurisdiction is said to become final only after the final hearing notice is given.²³ The final order dismissing or establishing the drainage project is the only order that is appealable.²⁴

The question of jurisdiction is always open for litigation on appeal. It is central to the drainage authority's ability to make a final order. Thus, the statutory language that certain things become final at certain points in the proceedings, should be regarded as procedural rules only. Jurisdiction can always be litigated.²⁵

With regard to an Improvement of Outlet, there is statutory language to the effect that, after the petition is filed, the drainage authority has jurisdiction of the petition and improvements, the affected property, and all proceedings for the establishment and construction of the outlet improvement and assessment of property benefitted by the outlet improvement.²⁶ This is a quaint aberration in the statutory scheme. No comparable language is found at any other place in the drainage code. The drainage authority could not possibly have jurisdiction to proceed until it has been determined that the petition is adequate. Adequacy of the petition is not determined until the preliminary hearing, and even then is appealable in an appeal from the final order.²⁷

8. Duration of Jurisdiction. Once established, jurisdiction does not last forever. The drainage authority's jurisdiction is good only to proceed with the work that was called for in the petition. If further work is to be done, jurisdiction must be procedurally re-established starting with a new petition.²⁸

9. Out-Of-State Work. Drainage authorities have no jurisdiction to do work outside of the boundaries of the State of Minnesota, except to the limited extent authorized by M.S. § 103E.031. The statutes authorize entering into negotiated agreements for drains across state lines. M.S. § 103E.405 authorizes paying for the purchase of an outlet procured by negotiation in that other state. Presumably a drainage authority in that other state will have to be consulted and its consent obtained. Just purchasing an outlet from a private landowner without procuring the consent of the authority having jurisdiction is likely to lead to trouble. Minnesota property benefitted by procuring or improving the effectiveness of an outlet in an adjoining state may be assessed for the cost thereof.²⁹

What about other states needing outlets in Minnesota? The Minnesota drainage authority is in a position to demand a contribution from that other state for the cost of the original construction and/or maintaining the remaining system. This can be done by negotiation and contract. Such contract, to be valid, must have the approval of both drainage authorities, after a hearing. Proceedings in Minnesota should be conducted in accordance with M.S. § 103E.401 for the procurement of outlets. There are no reported appellate cases on the subject, but following M.S. § 103E.401 would seem to comply with constitutional procedural due process requirements.

D. Proper Filing of Petition

1. General Requirements. While the act of filing the petition appears simple (and it is usually noncontroversial), it is emphasized here because it is one of the elements of jurisdiction.

If a petition is filed in the wrong office, any proceeding commenced thereunder must be dismissed.³⁰

2. Where the Petition is Filed. A petition for a project where the drainage authority is a watershed district is always filed with the board of managers (i.e., with the secretary of the board of managers if there is one). Upon filing, counsel should obtain a filing stamp with the date of filing affixed or secure other proof of filing on a copy of the petition which counsel will retain. This starts the hearing clock running and also distinguishes it from any other petition.

In the case of a petition on all other projects subject strictly to M.S. c. 103E, the petition is filed in the office of the county auditor. If the project is on a system which is a county ditch, the petition is filed in the office of the auditor of that county. Only in the case of a joint county system is there a significant possibility of filing the petition in the wrong office. The statute is a bit tricky. At M.S. § 103E.235 ("Drainage System in Two or More Counties"), the statute seems to say that in every case where a project is proposed on a joint county drainage system, filing is with the auditor of the county with the largest area of property in the drainage system. That is true, apparently, only for proposed New Systems, as seen below.

A petition for a regular Improvement is filed with the auditor of the county having the largest area of property the Improvement would be located on.³¹ Thus, in the case of a joint county system with the largest area in County A (and the records maintained in the office of the auditor of County A), and if the Improvement work is to be done principally in County B, one would file in County B.

For a petition for Improvement of Outlet, there is yet another method. In this case, one files in the county which has the largest acreage of overflowed property. Thus, if all or the majority of the overflowed property is in County B, though the majority of the system is in County A (and the records are maintained in the auditor's office of County A), one would, nonetheless, file in County B.³²

In the case of a Lateral, the petition is filed in the office of the auditor of the county with the largest property area to be passed over by the Lateral.³³ Again, the Lateral petition might not be filed in a county having the largest area of property in the system.

A petition for Impounding and Diversion of Drainage System Waters is directed to the drainage authority where the system is located.³⁴ The statute gives no instruction about where to file a petition in the case of a joint county system. The safe thing to do is to file it in the office of the county auditor of each county having property in the system.

E. Bond Must Accompany the Petition

If proceedings are initiated under M.S. c. 103E, the petitioners' bond must be in an amount of at least \$10,000. The bond is payable to the county where the petition is filed and to all of the counties who are members of a joint county drainage authority. Even if all of the work proposed is to be done within the boundaries of one county, the bond must be payable to all of the counties who are a part of the joint county drainage authority. If the petition is for a project in a watershed district, the minimum face amount of the bond called for by statute remains at \$2,000. There would seem to be no good reason for the disparity in the original amount of the bond to be filed. It may be prudent for the watershed district to require at least a \$10,000 bond, following M.S. c. 103E.

The bond called for by the statute is a surety bond. The purpose of the surety bond is to assure the drainage authority that the petitioners will pay the costs incurred by the drainage authority for a proposed project that is either dismissed or, for one reason or another, is not constructed because no construction contract is let.

A surety bond may be provided by any one or more of the petitioners. In so doing, they are the principal obligors on the bond. The surety, which is usually an insurance company or surety company with publicly disclosed financial information licensed by the state Department of Commerce, serves as a guarantor that the petitioner or petitioners signing as principals will pay the costs to the drainage authority if the other petitioners do not. The surety company has a right to seek indemnity under most, if not all, surety bonds against its principals. Principals who end up having to reimburse the bonding company have the right to sue the other petitioners for contribution towards the payment of any judgment that may be obtained by the bonding company against its principals.

Bonding companies, of course, exact a fee for serving as sureties. A corporate surety bond is nothing more nor less than a financial assurance to the drainage authority that the costs will be paid. It provides no other financial protection or insurance. The surety company assesses its risk at the beginning, collects its fee, and remains obligated until either the project is established, or, if it is not established, the costs are paid.

1. Drainage Authority Advances Costs. When a petition for a New System is filed, there are, of course, no funds on hand. Petitioners are not required to pay in any funds in advance to pay for the anticipated costs. Therefore, the county(ies) or watershed district advance costs. In the case of a county or joint county project, the funds are borrowed from the general fund of one or more counties. If the project is for a regular Improvement or

Improvement of Outlet, there may be excess funds on hand in the drainage system's account which can be advanced to pay the costs. All of the expenses, including legal fees, project engineer's fees, and auditor's fees, are billed periodically to the drainage authority, and are paid to the vendors of those services by the drainage authority with "borrowed" funds.

Finally, there is interest on the "borrowed" funds. This is collectible at the same rate as district court judgments earn; an amount which varies from time to time, and is established annually by the state court administrator and announced through the district court administrators in each county. Interest is based on the secondary market yield of one-year United States Treasury Bills.³⁵ The bond is given to assure the collection of costs if the petitioners do not pay them.

2. Costs Must Not Exceed the Face Value of the Bond. County auditors and watershed boards of managers are mandated by statute not to allow the expenditure of costs in excess of the face amount of the bond and any supplements to the bond on file. The county auditors and the board of managers are mandated to require the filing of an additional surety bond if the costs incurred or to be incurred will exceed the bond(s) already on file. This requires a fair amount of vigilance on the part of the auditor or the secretary of the board of managers since they are not always aware of what costs have been incurred or are to be incurred.

The auditor or the secretary of the board of managers are, generally speaking, in a position to know about only those costs for which billings have been submitted. If the petitioners' attorney and/or engineer are slow in getting their billings to the drainage authority, the auditor or secretary of the board of managers may be in a position of having violated the statute by having allowed the incurrence of costs in excess of the surety bond on file. What happens then? Are the excess costs collectible from the surety company or from the petitioners? Should the auditor be impeached? There are no reported appellate cases in Minnesota on this subject, so it is obviously prudent for the auditor or the secretary to closely monitor expenditures.

3. Surety Liability. The surety is liable only for the face amount of the bond(s) provided by it. If costs unpaid exceed the bond, it would appear that the drainage authority is then in a position of having to sue the petitioners if they refuse to pay. Politically, this is a very distasteful position for an elected official (such as a county commissioner or county attorney). If suit is brought, do the petitioners have a defense because the auditor or board of managers violated the statute by allowing the costs to exceed the bond amount? If such a defense prevails, that part of the costs incurred in excess of the face amount of the bond on file will be lost by the drainage authority.

Such a defense probably would not prevail. The statutory surety bond, and the prohibitions against spending more money than is covered by the bond, are there to protect the drainage authority (i.e., the county or watershed district), not the petitioners. Petitioners may claim, however, that if the county auditor or secretary of the board of managers had notified them that the costs had out-stripped the bond on file, they might have had an opportunity to better control the expenditure of costs. There are no reported appellate cases in Minnesota deciding these questions.³⁶

4. Cost Control is Responsibility of Petitioner. It is submitted that it is the petitioners' responsibility to see to it that the costs incurred or to be incurred do not outrun the amount of the bond. Petitioners, and perhaps more accurately, their attorney, are in the best position to know what costs are incurred or to be incurred. The drainage authority should demand that the petitioners' attorney keep the drainage authority posted on the costs incurred or to be incurred on at least a monthly basis. Such an undertaking could perhaps be required as a local rule of procedure on the drainage petition itself.

5. Self Sureties. A practice has evidently grown up in some counties wherein the petitioners are allowed to serve as their own sureties. On such an instrument, the petitioners, or some of them, serve as principals, and the same persons, or some of them, serve as sureties.³⁷ Such an instrument is no bond at all. The idea of having a surety bond is to obtain the guarantee of the financial strength of somebody who is not already obligated. Auditors and secretaries who are still using that type of bond should discontinue the practice immediately.

Corporate surety bonds should be required in all cases. Corporate surety bond premiums are expensive. There is a tendency of drainage authorities to want to spare the petitioners the expense of a corporate surety bond. In certain instances, perhaps a personal surety bond can suffice, if the sureties are not already petitioners and they make sufficient financial disclosure to assure the drainage authority that their guarantee is meaningful. The cost of providing a surety bond is a valid expense, chargeable against the system, whether or not the project is established.³⁸

6. The Role of the County Attorney. The drainage code requires, since the 1987 amendments, that the county attorney review each petition and surety bond filed.³⁹ There is no similar provision in M.S. c. 103D with respect to watershed districts. In order to facilitate this process, counties should require the county attorney to sign each petition and bond thus indicating that the petition and bond have been reviewed and were found to be facially satisfactory. The petition and bond are then referred back to the drainage authority or, if unsatisfactory, they are referred back to the petitioners. Petition forms should make provision for such

review sign off by the county attorney. The county attorney should not approve a bond upon which the petitioners themselves serve as sureties.

F. Department of Natural Resources' Permit

If a proposed project will affect public waters, whether or not the work itself is within the public water, the drainage authority cannot proceed with the project unless it has first obtained a permit from the Department of Natural Resources.⁴⁰ The Supreme Court of the State of Minnesota has said that a drainage authority has no **jurisdiction** to establish a drainage project affecting public waters where no permit has been obtained from the DNR.⁴¹

Endnotes

1. **Nostdal v. Watonwan County**, 22 N.W.2d 461 (1946).
2. **State v. Oldre**, 179 Minn 566, 229 N.W. 878 (1930).
3. **McLeod County v. Nutter**, 111 Minn 345, 126 N.W. 100 (1910).
4. M.S. § 103E.235.
5. M.S. § 103D.701.
6. M.S. § 103D.101 et. seq.
7. M.S. § 103D.315.
8. M.S. § 103D.205, Subd. 2(b).
9. M.S. § 103D.225, Subd. 6.
10. M.S. § 103E.212.
11. M.S. § 103E.215.
12. M.S. § 103D.705.
13. M.S. § 103D.705.
14. M.S. § 103D.625, Subds. 3, 4.
15. M.S. § 103E.212(b).
16. 1987 Minn. Laws, c. 239.
17. M.S. § 103E.212.
18. M.S. § 103E.005, Subd. 2.
19. M.S. § 103E.221, Subd. 2.
20. M.S. § 103E.215, Subd. 3.
21. M.S. § 103E.227.
22. M.S. § 103E.261, Subd. 7.
23. M.S. § 103E.331.
24. M.S. § 103E.095; **Mosloski v. Martin County**, 248 Minn 503, 80 N.W.2d 637 (1957).

25. See **Oelke v. Faribault County**, 244 Minn. 543, 70 N.W.2d 70 (1955).
26. M.S. § 103E.221, Subd. 4.
27. M.S. § 103E.221, Subd. 4, should probably be read to mean that the drainage authority may, after the petition is filed, appoint an engineer and order a preliminary survey.
28. **Johnson v. Steele County**, 240 Minn. 154, 60 N.W.2d 32 (1953).
29. O.A.G., 1940, No. 122, p. 166.
30. **Matter of Joint Ditch No. 202, Faribault and Martin Counties**, 257 N.W.2d 353 (1977).
31. M.S. § 103E.215, Subd. 4(b).
32. M.S. § 103E.221, Subd. 3.
33. M.S. § 103E.225, Subd. 1.
34. M.S. § 103E.27, Subd. 1.
35. M.S. § 549.09, Subd. 1.
36. **Dodge County v. Martin**, 271 Minn. 489, 136 N.W.2d 652 (1965).
37. In **Dodge v. Martin**, *supra*, such a personal surety bond was evidently used.
38. Op. Atty. Gen., 38-B, July 11, 1956.
39. M.S. § 103E.238.
40. M.S. § 103E.011, Subd. 3.
41. **Holden v. Le Sueur County**, 305 Minn. 239, 232 N.W.2d 806 (1975).

IV. TYPES OF PROCEEDINGS

A. General

It will be the purpose of this section to focus on each particular type of project that can be initiated under the drainage code. Emphasis will be placed upon selection of the appropriate procedure and technical compliance with statutory requirements.

B. New System

Given the governmental pressure to preserve wetlands, there will be few wholly New System projects initiated in the foreseeable future. Where New Systems are established, they are likely to be supplemental to existing systems. Because, in most instances, of the relatively large number of petitioners that are required on a New System one of the other proceedings (i.e., Improvement, Improvement of Outlet, or Lateral) will be used. A sample "Petition For A New System" is found in Appendix 2E to this chapter.

1. Requirements of the Petition. A petition for a New System must:

- describe the 40-acre tracts or government lots and property where the proposed new drainage system passes over, including names and addresses of the property owners from records in the county assessor's office;
- describe the starting point, the general course, and the terminus of the proposed drainage system;
- state why the proposed drainage system is necessary;
- state that the proposed drainage system will benefit and be useful to the public and will promote the public health;
- state that the petitioners will pay all costs of the proceedings if the proceedings are dismissed or the contract for the construction of the proposed drainage system is not awarded; and
- be signed by a majority of the owners of the property that the proposed drainage system described in the petition passes over, or by the property owners of at least 60 percent of the area that the proposed new drainage system passes over.

Petitioners would do well to consult M.S. § 103E.015 before signing on as petitioners for a New System or, for that matter, any other drainage project. That section lists a series of environmental and

land use criteria which the drainage authority is to consider before establishing the project. For convenience, the list of these nine criteria is here set forth:

- private and public benefits and costs of the proposed drainage project;
- the present and anticipated agricultural land acreage availability and use in the drainage project or system;
- the present and anticipated land use within the drainage project or system;
- flooding characteristics of property in the drainage project or system and downstream for 5-, 10-, 25-, and 50-year flood events;
- the waters to be drained and alternative measures to conserve, allocate, and use the waters, including storage and retention of drainage waters;
- the effect on water quality of constructing the proposed drainage project;
- fish and wildlife resources affected by the proposed drainage project;
- shallow ground water availability, distribution, and use in the drainage project or system; and
- the overall environmental impact of all the above criteria.

Because of the general nature of the above criteria, M.S. § 103E.015 can provide a basis for the drainage authority's dismissal of any environmentally suspect project. As previously discussed, the consequences to petitioners when a petition is dismissed can be fairly expensive.

Such consequences can be avoided by early pre-petition consultation with the DNR field personnel and appropriate federal officials from the U. S. Army Corps of Engineers, Fish and Wildlife Service, Soil Conservation Service, etc. (see chapter 5 for a list of state and federal offices).

2. The Bond. A surety bond must be filed with the petition for a New System in the amount of \$2,000, if the petition is to the board of managers of a watershed district, and \$10,000 if directed to a county board. The drainage authority must appoint an engineer to examine the proposed project if the petition appears on its face to meet legal requirements.

3. **Legal Procedures.** The engineer conducts a survey, prepares the engineer's preliminary survey report (hereinafter referred to as the "**engineer's preliminary report**"), and the preliminary hearing is held. If the engineer's preliminary report indicates that the project is feasible, the drainage authority appoints viewers and directs the engineer to prepare a detailed survey and report (hereinafter referred to as the "**engineer's final report**"). The final hearing is held and the project is either established or the petition is dismissed. Legal procedures are discussed in greater detail in sections V and VI in this chapter.

4. **The Easement Acquired.** It is worth noting at this point in the discussion that there is an element of eminent domain involved in the establishment of a project. The drainage code does not speak in terms of eminent domain, nor does it use the word "easement."¹ Yet, when a New System is established, the drainage authority acquires an easement of sorts (i.e., an "implied" easement) to enter upon private property, without the consent of or compensation to the owner, to dig trenches, triangulate fields, cut down trees, and uproot the landscape. While it is said that the drainage authority loses jurisdiction over a project once the work is completed, the implied easement acquired by the establishment of the system persists.

The drainage authority is mandated to maintain the drainage system once it is established,² to maintain the grass strips,³ to remove artificially created obstructions,⁴ and to examine all systems periodically.⁵ The legislature must, therefore, have intended that the drainage authority, its agents, and persons working under contract, have a right to enter upon private property traversed by a drainage project for inspection and maintenance. Otherwise, it would be impossible for the drainage authority to perform its statutory duties.

5. **Nature and Extent of the Easement Acquired.** It is popularly believed that the drainage authority has (is given by statute) only a one-rod easement on each side of an open ditch. This notion comes from the grass strip law, M.S. § 103E.021. Since 1977, it has been mandatory on any project on which viewers are appointed, to establish grass strips on either side of an open ditch, one rod wide, measured from the edge of the excavation, or to the center of the crown of the leveled spoil bank, if a greater distance.⁶ The drainage authority must purchase the right-of-way for the actual grass strip, but there is nothing in the drainage code which so limits the drainage authority's implied easement. Given the mandates of the drainage code referred to above, it can safely be said that the drainage authority has an easement for whatever access is reasonably required to carry out its duties.⁷

The drainage code does, however, recognize that right-of-way must be purchased, and that the right-of-way includes the area occupied by the legal grass strips.⁸ The term right-of-way, as used in the

drainage code, contemplates the land surface occupied by the open ditch and the grass strips. As a practical matter, one rod of width on each side of an open trench is not sufficient to accommodate heavy equipment which may be needed to make repairs.

The drainage authority has, it is submitted, an additional "implied" easement for access to an open ditch, which takes in as much land as is reasonably necessary for the drainage authority to accomplish its mission - the maintenance of the ditch. In the case of a drain tile, of course, there are no grass strips, and the landowner is not paid damages for any permanent right-of-way. The landowner may be paid damages for the loss of use of the land in the year or years of construction of a drain tile,⁹ but no permanent surface right-of-way is purchased. If necessary, the drainage authority, nonetheless, has the obligation to repair the drain tile. No one could seriously contend that, because no permanent right-of-way is expressly acquired, that the drainage authority could, therefore, not enter upon the land.

No damages are payable for the implied easement herein discussed. Damages are payable only for the acquisition of the land required for the channel of an open ditch and the grass strips, the diminished value of the farm due to severance, the loss of crop production during the construction period, and the diminished productivity of land from anticipated increased overflow.¹⁰

The issues of right-of-way and easement may, to a certain extent, also be involved in Improvements, Improvements of Outlets, and Laterals. They are most prevalent and most significant in the establishment of a New System.

6. Establishment of Benefits. The original establishment of benefits on a New System will affect all subsequent projects related to that system. The concept of benefits will be more thoroughly discussed in chapter 4. Suffice it to say here that the term benefits for the inexperienced is confusing. The drainage code would have been easier to understand if the term "responsibility" had been used in place of benefits. In any case, the drainage authority may not levy an assessment for Repairs (or maintenance) in one drainage system for more than 20% in any one year of the benefits originally determined, or \$1,000 per mile of open ditch or \$50,000, whichever is greater. Of course, there is nothing in the statute that prohibits successive annual assessments for Repairs of up to those limits.¹¹ After the original establishment of a New System, all Repair costs will be allocated pro rata according to the original assessment for benefits across the entire system.¹²

C. Improvement

The Improvement proceeding, herein sometimes referred to as regular Improvement to distinguish it from Improvement of Outlet, is

perhaps the most useful and, therefore, most often used proceeding in the drainage code. Once a New System has been established, nearly anything that needs to be done to maintain and improve its function may be done with an Improvement petition.

An Improvement can mean altering entirely the character of the system. For example, an open system can be converted to drain tile or vice versa. Often an open system is added over the top of or along side of an overloaded drain tile. An Improvement may involve the realignment of a ditch or tile. These examples necessarily involve the taking or acquiring of additional right-of-way to accommodate the new channel.

An Improvement may extend the system up to one mile downstream. Presumably, a second petition for Improvement could extend the system another mile downstream, and so forth. There is no limitation on the amount of money that can be spent on an Improvement in any one year as there is in the case of a Repair.

1. Requirements of the Petition. For convenience, the requirements of an Improvement petition are here set forth. The petition must:

- designate the drainage system proposed to be improved by number or another description that identifies the drainage system;
- state that the drainage system has insufficient capacity or needs enlarging or extending to furnish sufficient capacity or a better outlet;
- describe the starting point, general course, and terminus of any extension;
- describe the Improvement, including the names and addresses of owners of the 40-acre tracts or government lots and property that the Improvement passes over;
- state that the proposed Improvement will be of public utility and promote the public health;
- contain an agreement by the petitioners that they will pay all costs and expenses that may be incurred if the Improvement proceedings are dismissed;¹³ and
- be signed by at least:
 - twenty-six percent of the owners of the property affected by the proposed Improvement; or

- twenty-six percent of the owners of property that the proposed Improvement passes over; or
- the owners of at least 26% of the property area affected by the proposed Improvement; or
- the owners of at least 26% of the property area that the proposed Improvement passes over.

As discussed in greater detail elsewhere in this manual, the area affected can probably not be accurately determined until the Improvement has been established by the drainage authority. Thus, the property affected and property area affected test contemplated by the first and third options immediately above are, in many cases, not very workable. In the interest of certainty of jurisdiction, it is much safer to rely on the criteria set forth in the second and fourth options immediately above. Then petitioners can count 40's and government lots traversed by the Improvement project, and then determine with a fair degree of certainty whether 26% of the owners involved have signed the petition (a head count) or the owners of 26% of the land traversed have signed the petition (an acre count).

2. The Bond. A surety bond must be filed with the petition in the amount of \$10,000, if the petition is for the Improvement of a system not in a watershed district, and \$2,000 if for Improvement of a system in a watershed district.

In all cases, the drainage authority must appoint an engineer to examine the system and to make an Improvement report. An Improvement requires the appointment of viewers and the assessment of benefits to land improved as determined by the viewers. The legal procedures for establishment of Improvements are the same as those for the establishment of a New System.

All of the pre-petition considerations discussed in section II of this chapter, and in the preceding discussion on New Systems, apply as well to Improvements. In an Improvement proceeding, additional lands may be brought into the system and assessed for the cost of the Improvement if the Improvement project increases drainage capacity and the lands are benefitted.

3. Responsibility for Improvement (and Repair) Costs. The costs of construction of an Improvement may be assessed only to the lands determined by the viewers to have actually been benefitted by the Improvement.¹⁴ It should be noted, though, that sometimes Improvement projects eliminate the need for a Repair as, for example, where an open channel has become partially filled with silt and debris. If the Improvement project is for widening and deepening of the open channel, the Repair, of course, will not thereafter be necessary.

The cost of Repairs is borne by the entire system. The cost of Improvement is borne only by the improved property. Thus, it is necessary to make some sort of allocation as to what portion of the work of the construction is an obviated Repair. The drainage code provides for such a procedure.¹⁵ The engineer makes an estimate in the engineer's report apportioning the estimated costs of the work allocable to the Repair and the remainder to the Improvement. At the final hearing, the drainage authority makes an order determining and assessing the Repair portion to the entire drainage system and the remainder to the property benefitted by the Improvement.

Because less than all of the property assessed on a particular system may be benefitted by an Improvement, the county auditor must maintain a separate drainage system account for the Improvement. Bond sale proceeds for the cost of the construction of the Improvement may not be commingled with funds held for the rest of the system. Likewise, collections of drainage assessments must not be commingled with funds held for the rest of the system. Thereafter, when Repairs are made, Improvement benefits as well as original New System establishment benefits are considered when allocating the cost of Repairs. This is so because the Improvement is part of the system repaired. There is a layering of benefits where lands were assessed both for the original establishment for the New System and for the Improvement. There may be a certain amount of unfairness if this occurs. The statute requires that "the cost of repairing a drainage system shall be apportioned pro rata on all property and entities that have been assessed benefits for the drainage system . . ."¹⁶ The recommended method for alleviating the unfairness is to do a Redetermination of Benefits¹⁷ after the Improvement is done and before Repairs are needed.

D. Improvement of Outlet

This proceeding is typically chosen to channelize upland drainage waters spilling out at the lower end of a system of insufficient hydraulic capacity to handle the additional discharge, resulting in inundation of surrounding lands during periods of high water. It may amount to little more than an extension of the system or systems contributing the overflow. It might be a system of dikes or pumps to protect from overflow surrounding lands in agricultural or other use, or it may be an impoundment that stores water that might otherwise flood adjoining lands.¹⁸

1. Requirements of the Petition. The petition must:

- describe the property that has been or is likely to be overflowed, including the names and addresses of the property owners from records in the county assessor's office;

- state in general terms by number or otherwise the drainage systems that have caused or are likely to cause the overflow;
- describe the location of the overflow drainage system, watercourse, or body of water and the outlet;
- show the necessity of the Improvement of Outlet by enlarging the system or controlling the waters by take-off ditches, additional outlets, or otherwise;
- show that the Improvement of Outlet will protect the adjoining property from overflow;
- state that the Improvement of Outlet will be of public benefit and utility and improve the public health; and
- state that the petitioners will pay all costs incurred if the proceedings are dismissed or contract for construction of the outlet improvement is not awarded.

2. Place of Filing. The petition is filed, in the case of a county or joint county project, in the office of the county auditor of the county wherein lies the greatest affected area. Presumably, that means the majority, in case two counties are involved, or the plurality of those acres, if more than two counties are involved. If there is any doubt, petitioners should file a petition in the auditor's office in each of the counties involved.

3. Signatures on the Petition and Jurisdiction. If there is a problem with this type of proceeding, it is in determining the number of signatures required on the petition to give the drainage authority jurisdiction. The statute requires the petition to be signed by "at least 26% of the owners of adjoining overflowed property, or by the owners of at least 26% of the area of the overflowed property."¹⁹ It may not always be clear at the time the petition is prepared what lands are overflowed. Until an engineer has been appointed and has done a preliminary survey, reliable information on what is overflowed property is difficult to obtain. Even when the preliminary survey is done, the engineer may give overflow data on storms of ten year frequency, 50-year frequency, and 100-year frequency. What is meant by area of the overflowed property may well depend upon which standard is chosen. If there is any doubt about the adequacy of the number of petitioners, the petitioners may chose to use a regular Improvement proceeding. There, 26% of the owners over which the Improvement passes or the owners of 26% of the area over which the Improvement passes, is used (a more familiar and easily ascertainable test). All lands overflowed or likely to be overflowed may be assessed after the viewers and the engineer have done their work.

4. Assessment of Benefits. A good case can be made for the notion that all upland properties contributing water to the overflowage at the lower end should pay for the cost of the Improvement of Outlet. If a regular Improvement proceeding is used, only those lands found to have received improved drainage, i.e., decreased risk of overflow, will likely be assessed. In a typical case, one would not have to go very far upstream from the Improvement of Outlet project to find that drainage of upstream lands is not actually improved and that the outlet for those lands always was adequate in that there is enough fall to cause the water to run downstream. The Improvement of Outlet proceeding seeks to spread the cost of the construction of the project to all lands on the system contributing water, whether drainage is actually improved by the project or not. This is the language of the statute, ". . . the viewers shall determine and report the benefits to all property from the outlet improvement including property drained or to be drained by the existing drainage system and proposed drainage project" (emphasis added).²⁰ The notion that land can be assessed benefits because it contributes water, even though the land is not actually improved by the proposed project, is troublesome. It may be fair, but it may also be unconstitutional. Several Minnesota Supreme Court cases have held that, where land receives no benefit from construction of a drainage project, it may not be assessed for benefits merely because it is located within the drainage basin of the system.²¹ Yet, Repairs are assessed to the entire system without regard to who actually benefits. For further discussion on assessments for contributing waters, please consult chapter 4 of this manual.

5. Limitations. An Improvement of Outlet proceeding may not be used for the improvement or enlargement of the drainage system itself. It is appropriate for work to be done downstream of the outlet of an existing system or on a system to be built. If deepening and widening of the existing channel or increasing the size of an existing tile is contemplated, or if it is likely that the engineer may recommend such action, then a regular Improvement should be used, either independently, or in combination with an Improvement of Outlet petition.

An Improvement of Outlet is a separate project having its own benefits and damages. The auditor must establish a drainage system account for it. Yet, it is a part of the system it serves. Repairs to the system upstream will be assessed pro rata against all the lands in the system, including those assessed for the Improvement of Outlet.

E. Laterals

A Lateral, as the term implies, is constructed as a tributary to the main stream/ditch - the main stream/ditch being an existing drainage system. It is a separate and distinct project. A Lateral should have its own drainage system account. It has many of the

attributes of a New System in that it is new drainage. It is the collection and channelization of water that theretofore had not been artificially aided in finding its way to the main stream.

1. Requirements of the Petition. A petition for a Lateral must:

- describe in general terms the starting point, general course, and terminus of the proposed Lateral;
- describe the property traversed by the Lateral, including the names and addresses of the property owners from records in the county assessor's office;
- state the necessity to construct the Lateral;
- state that, if constructed, the Lateral will be of public benefit and utility and promote the public health;
- request that the Lateral be constructed and connected with the drainage system; and
- provide that the petitioners will pay all costs incurred if the proceedings are dismissed or if a contract for the construction of the Lateral is not awarded.

Before a petition for a Lateral is filed, all of the pre-petition considerations identified in section II of this chapter should be considered. Additionally, DNR field personnel and appropriate federal officials should be consulted with respect to the environmental and land use criteria listed in M.S. § 103E.015 (this was discussed in greater detail previously under New Systems in this chapter).

Similarly, the discussion pertaining to the eminent domain aspects of public drainage found under New Systems in this chapter are applicable to Laterals. Of particular note is the fact that Laterals that are open ditches require grass strips, the same as open ditches of any of the type constructed since 1977.

A Lateral, while it is a distinct project, becomes part of the system to which it is tributary. When a Lateral is repaired, the cost of the Repair is assessed to the entire system. Likewise, when the outlet is repaired, the Lateral is assessed its proportionate share of the costs.²²

2. Signatures Required for Jurisdiction. The petition for a Lateral must be signed by at least 26% of the owners of the property that the Lateral passes over or by the owners of at least 26% of the area of the property that the Lateral passes over, using the same methods of counting signatures and acres as in a New

System. A surety bond in the amount of \$10,000 is required, if the petition is for a Lateral to a county or a joint county system, or \$2,000, if the petition is for a Lateral to a drainage system which is under the jurisdiction of a watershed district.

3. Place of Filing. The petition for a Lateral is filed with the county auditor of the county in which is located the largest number of acres of the property to be passed over by the Lateral. If the system is a joint county system, the records for that system may be maintained in different auditor's office due to the fact that a majority of the land traversed by the system lies within another county.

4. Procedures After Filing. Once the petition for a Lateral is filed, the procedures are identical to those followed under a New System. That is, the drainage authority appoints a project engineer and orders a preliminary survey. Following the preliminary survey and completion of the engineer's preliminary report, a preliminary hearing is held and, if the drainage authority determines that the project should go forward, it orders the engineer to conduct a final survey and it appoints viewers. The engineer's final report and the viewers' report are considered at the final hearing and, if approved, the Lateral is established.

If a Lateral is to drain only lands that were previously assessed for the previously existing system, then no permission to outlet into that system is required. If, as is usually the case, new lands will be brought into the system, an outlet permit will be required. Procedurally, if it appears at the petition stage that new lands will be drained into the system, a petition seeking to use the system as an outlet should be filed simultaneously with the petition for a Lateral. If there is doubt as to whether previously unassessed lands will be drained into the system, a determination should be made at the preliminary hearing whether or not an outlet permit will be required. If a permit is required, it is prudent to delay the engineer's final survey and the viewing until a petition for a permit to use the system as an outlet has been filed, heard, and approved in accordance with the procedures of M.S. § 103E.401.

While Laterals may be improved and repaired, it is doubtful that an Improvement of Outlet proceeding with respect to a Lateral is appropriate. If the outlet, namely the system to which the Lateral is a tributary, requires maintenance, or is inadequate to handle all of its tributary water, the appropriate proceeding is a Repair or Improvement of the outlet system.

F. Impounding and Diversion of Drainage System Waters

Historically, the drainage code has consisted of the five specific proceedings, *i.e.*, New System, regular Improvement, Improvement of Outlet, Laterals, and Repairs. In 1990, there was added to the drainage code a section which may be considered as a sixth type of

drainage proceeding. The section entitled "Impounding and Diversion of Drainage System Waters" is not a new idea, however. Heretofore, it was found in chapter 105 (now renumbered as chapter 103G).²³

Finding the section on Impoundment and Diversion of Drainage System Waters in the drainage code causes public drainage veterans a bit of a start. Heretofore, the thrust of the drainage code has always been to move water as efficiently and quickly downstream as possible. This new section of the drainage code actually provides a means to divert drainage waters and impound or pond it. As with all the other proceedings, one for Impounding and Diversion of Drainage System Waters is started with a petition. Such a petition may be signed by one person or a governmental entity.²⁴

1. Requirements of the Petition. The petition must:

- contain the location of the installation, plans and specifications for the proposed structure, and a map of the areas likely to be affected by the impoundment or diversion;
- contain a statement that the petitioner agrees to be responsible for the cost of installation and construction of the structure; and
- be accompanied by a public waters' permit or a water use permit from the commissioner of the Department of Natural Resources, if required by M.S. c. 103G.

2. Place of Filing. The petition is filed with the drainage authority. If the drainage authority is a joint county drainage authority, the petition would presumably be filed, to be consistent with the rest of the drainage code, in the county where the majority of the acres to be ponded lie.

3. The Bond. If the petition is filed by the State of Minnesota or one of its agencies, by an agency of the United States government, or by a municipality, no bond is required. In all other cases (where the petitioner is not one of the entities mentioned), a surety bond in the amount of \$10,000 would be required, if the waters to be diverted and impounded are waters of a county system or a joint county system, or \$2,000, if they are waters of a watershed district system. It is probably impossible to buy an adequate corporate surety bond because the obligation of the petitioner to maintain the installation is perpetual.

4. Procedure to Establish the Project. After the petition and bond are received, the drainage authority must, as in other cases, appoint an engineer to investigate the effect of the proposed impoundment's installation and to file a report of findings. After the engineer's report is filed, notice is given and a public

hearing is held. The auditor or board of managers should probably give notice to all persons whose property is assessed for the system waters to be diverted. In many cases, lands in the upper reaches of the system would not be affected by a diversion of waters at the lower end. The statute is silent as to who gets notice. The safe thing to do is to give everyone on the system notice.

The hearing that follows the filing of the engineer's report is both a preliminary and a final hearing. In this respect, this proceeding differs dramatically from the previously discussed proceedings. There is no need for a final hearing since no privately owned lands are going to be assessed for the cost of construction and no viewers are needed.

If, after the hearing, the drainage authority finds that the proposed project will not impair the utility of the system whose waters are being diverted or deprive affected landowners of the benefits of the system, the authority shall make an order modifying the drainage system and shall issue the permit authorizing the proposed installation. This is a final order and is presumably appealable.

Having obtained an order and a permit to construct the installation, the petitioner then must on its own obtain right-of-way easements and flowage easements from landowners whose private property will be inundated by the impounded waters. The petitioner is forever liable for maintenance and repair of the impoundment installation. It is suggested that Impounding and Diversion of Drainage System Waters can also be accomplished by the use of an Improvement of Outlet proceeding. It would seem that the impounding and diversion (containment) of downstream waters, which otherwise fan out and inundate productive lands, would be an entirely appropriate objective of an Improvement of Outlet proceeding. Such an installation could, in that way, be assessed to upstream benefitted landowners.

G. Repairs

Fundamentally, once a drainage system is established, the owners of the land who have been assessed for benefits for its construction have a vested property right in maintaining it in the same condition as it was originally established, and such right cannot be divested without due process of law.²⁵ The drainage authority has an affirmative duty to maintain the system. The system is to be inspected on a regular basis. The drainage authority may undertake to make Repairs on its own volition without a petition.²⁶

1. Repairs Without a Petition. The vast majority of minor Repairs are made by the drainage authority on its own volition. What happens, typically, is that a constituent who observes a

problem will call it to the attention of a member of the drainage authority. It may involve a beaver dam, a fallen tree, a slough (a cave-in), a tile collapse, a blowout, or an inlet blockage. The drainage authority, having become aware of an obvious problem, will simply order it repaired. When the cost of Repairs/maintenance of one drainage system for one year is less than the greater of \$50,000, or \$1,000 per mile, the Repair may be made by the use of day labor without a letting.²⁷

Not only is the drainage authority required to maintain the drainage channels and tile, it is also required to maintain the grass strips required to be established in any proceeding since 1977 involving the appointment of viewers. The drainage authority is required not only to inspect the ditches periodically, but is specifically required to inspect and maintain the grass strips.²⁸ The Repair of grass strips is almost always done at the volition of the drainage authority. Hardly ever does a landowner complain about the fact that the grass strips have not been maintained.

2. Repairs Made on a Petition. A Repair proceeding should be commenced by petition when:

- resloping of ditch banks or leveling of the berm, installation of erosion control devices, or removal of trees is contemplated;
- viewers will have to be appointed to determine damages;
- the drainage authority deems it necessary to appoint an engineer to examine the system and to make a report to substantiate the call for a Repair and to estimate the costs thereof; or
- the drainage authority believes that the costs of Repair work to be done in one year will exceed \$50,000, or \$1,000 per mile of open ditch, whichever is greater.

Repairs costing more than the aforementioned amounts must be advertised and let. It is difficult to let a construction contract without first having an engineer's estimate of the cost of construction, not to mention that a project of that magnitude is not wisely undertaken without the guidance of an engineer.

In the case of a Repair of an open ditch where viewers are appointed, the grass strip law is brought into play. That is, the drainage authority is required to install grass strips on that portion of the open ditch which is repaired. That fact alone requires the drainage authority to acquire additional land and to pay extra damages for the additional right-of-way acquired.²⁹

A Repair proceeding may be commenced by one petitioner.³⁰ This is one case where the petitioner need not file a surety bond. If it

is determined that the petition for Repair should be denied based on the engineer's report or otherwise, the drainage system pays the costs incurred. The petitioner is not required to pay anything. The drainage authority is required to make the Repair if the Repair petition is signed by the owners of at least 26% of the property area affected by and assessed for the original construction of the drainage system and the drainage authority determines that the drainage system is in need of Repair to serve its original purpose.³¹ Note that the drainage authority still has some discretion in determining whether the system is or is not in need of a Repair. If a drainage system has not undergone a Redetermination of Benefits, the drainage authority may be restricted in making a large Repair because of the prohibition against spending more than 20% of the benefits of the system, \$50,000, or \$1,000 per mile of open ditch, whichever is greater.

3. What is a Repair? There has been a considerable amount of litigation about what is and what is not a Repair. The most environmentally significant litigation was the case or cases that involved the question of whether a Repair of an open channel authorized the drainage authority to dig the ditch to the depth originally designed, as opposed to originally constructed.³² The statute now makes it clear that a Repair authorizes the restoration of the system only to the "as constructed depth."

Additionally, Repair has been defined to include resloping of ditch banks and leveling of spoil banks, if necessary to prevent further deterioration, and realignment to original construction, if necessary to restore the effectiveness of the system.³³ The U. S. Army Corps of Engineers' definition of "Repair" does not conform to the Minnesota statutory definition, in that it claims jurisdiction when the work includes resloping of ditch banks. This is so, presumably, because resloping of ditch banks would normally produce additional spoil material which, when deposited in wetlands under the COE's jurisdiction, causes that agency to become involved (see section II.B.2 of this chapter for a further discussion).

4. Repairs Affecting Public Waters. Before a Repair is ordered, the drainage authority must notify the commissioner of the Department of Natural Resources if the Repair is located in or will affect public waters. When the commissioner disagrees with the determination of the drainage authority of the allowable Repair dimensions, the statutes provide that the engineer, a representative appointed by the director, and a soil and water conservation technician will serve as a panel to establish the as constructed drainage system condition. In this evaluation, the three person panel may require the use of soil borings, field surveys, and other available data. Costs for determining the Repair depth beyond the initial meeting of the three member panel must be shared equally by the commissioner and the drainage authority.

This notification process, once the Repair dimensions have been established, then allows the commissioner to determine if the Repair to the as constructed condition would affect significant habitat or protected vegetation. If significant habitat or protected vegetation would be negatively impacted, the drainage authority and the commissioner must mutually agree to appropriate mitigation for the negative impacts.

Provisions in the Wetland Conservation Act of 1991 expand the definition of Repair of a drainage system by including the ". . . restoration or enhancement of wetlands; wetland replacement under M.S. § 103G.222; and the realignment of a drainage system to prevent drainage of a wetland." This new statutory language gives the drainage authority the option to reestablish the as constructed drainage conveyance capacity without having to drain the wetland (i.e., by going around the wetland without going through an Improvement proceeding). If a wetland that has existed for more than twenty years is drained, it may have to be replaced.³⁴

Persons should be aware that any drainage activity, including maintenance/Repair of any part of an existing drainage system on wetlands, may affect a landowner's receipt of USDA benefits under the 1985 Food Securities Act, as amended. Before commencing any activity affecting drainage on the land, the local USDA-SCS office should be contacted. Section II.B.2 of this chapter also provides an in-depth discussion of any potential U.S. Army Corps of Engineers' involvement with the Section 404 permit program.

5. How Repairs Are Assessed. The cost of repairing a system is assessed pro rata on all property that is assessed for benefits, even though the particular Repair in question may actually improve the drainage of just one or a few landowners.³⁵ For example, suppose a Repair is called for at the extreme upper reaches of a system. Only those landowners above the Repair site will benefit. Yet, the cost of the Repair is assessed against the entire system, including the downstream landowners who get no improved drainage. Is this constitutional? It probably is on the theory that the system, once established, is commonly owned private property. It seems that the assessment of benefits against all lands in the system for an Improvement of Outlet should likewise not raise constitutional questions. The reader is cautioned to review section II.B. of this chapter regarding limitations to farm drainage imposed by state and federal permit and farm benefit programs.

In a Repair proceeding by petition, the cost of installation of crossings, bridges, and culverts can be forced upon the railroad, city, or political subdivision whose duty it is to maintain the crossing. If the railroad, political subdivision, or city refuses to do so, the drainage authority may go ahead and install the larger bridge or culvert called for by the project engineer and assess the cost thereof to the railroad or other entity.³⁶ The

burden of maintaining all bridges and culverts constructed on drainage systems established on or after March 25, 1947, is on the road authority (railroad, county, township, or state) charged with maintaining the road. Drainage authorities do have the power to participate in the maintenance of private bridges and culverts constructed as a part of the drainage system by a proceeding begun on or after March 25, 1947. Private bridges or culverts constructed as a part of the system before March 25, 1947, are required to be maintained by the drainage authority.³⁷

6. Pro-rating Repair Costs. In the case of joint county drainage systems, where minor Repairs have been made and paid for out of county revenue, there is to be a balancing of accounts annually. The county auditor whose county has paid for certain Repairs from drainage system funds will submit a Repair cost statement to the other county or counties that shows the nature and necessity of the Repairs and the costs thereof. The other county or counties are then obliged to reimburse the counties advancing the funds, claiming appropriate setoffs. In case of disagreement, the matter is submitted to the drainage authority. The drainage authority then has the power to allow or disallow the Repairs and to balance the accounts.³⁸

In the case of a Repair by petition, the drainage authority simply pays the costs of Repair. If there is not enough money in the drainage system account, the drainage authority may assess the costs for Repairs on all property and entities previously assessed benefits for the drainage system.³⁹ If the assessment is not more than 50% of the **original cost** (distinguished from **benefits** of the drainage system), the number of payment installments may not exceed ten. If the assessments are greater than 50 percent, the number of payment installments may not exceed 15. The interest rate may not exceed 7 percent. A lien is filed only if the assessment is to be paid in more than one installment. If necessary, the drainage authority may sell bonds to finance the Repair.⁴⁰

The drainage authority is authorized to create a Repair fund for each drainage system which is to be used only for Repairs. The drainage authority may apportion and assess any amount against all property and entities assessed for benefits in proceedings for establishment of a drainage system. The fund may not exceed 20% of the assessed benefits of the drainage system or \$40,000, whichever is greater. If the amount in the fund exceeds the larger of 20% of the assessed benefits of the drainage system or \$40,000, assessments for the fund may not be made. As always, assessments are made pro rata according to the previously determined benefits.

If viewers are appointed in a Repair proceeding, additional property not previously assessed may be brought into the system. A hearing on the viewers' Repair report is called for, allowing those landowners who are proposed to be brought into the system an opportunity to be heard. The statute is not very explicit as to

the procedures to be followed in such a situation. It is therefore, preferable, when it is foreseen that additional lands should be brought into a system to pay for upcoming Repairs, to perform a Redetermination of Benefits proceeding first.

H. Redetermination of Benefits

The drainage code does not provide a procedure to petition for a Redetermination of Benefits. Yet, there is an informal practice, wherein the drainage authority is sometimes "petitioned" for a Redetermination of Benefits and Damages. The drainage authority may undertake to redetermine benefits and damages whenever in its judgment the original benefits and damages determined in the drainage proceeding do not reflect reasonable present day values or that the benefitted or damaged areas have changed. The drainage authority may also undertake to redetermine benefits and damages if more than 50% of the owners of the property benefitted or damaged by a drainage proceeding petition for the correction of an error that was made at the time of the proceedings that established the system.⁴¹

The procedure is commenced by resolution of the drainage authority. A suggested resolution is provided in Appendix 2F to this chapter. The drainage authority simply appoints three viewers to perform this redetermination and to report the benefits and damages and the benefitted and damaged areas. The drainage authority may assign an engineer to assist the viewers with this redetermination.

This type of proceeding is undertaken for various reasons, some of which have been mentioned previously in this manual. Here is a non-exclusive enumeration of situations in which this proceeding may be beneficial.

First, the most frequently urged and most compelling reason for a Redetermination of Benefits is that there are lands draining into the system which are not assessed for benefits. Many of the state's drainage systems were established before 1920 when excavation was done with horse power and tile trenches were dug by hand. Viewers in those days presumably considered benefitted lands in that light. Now that technology has advanced to the use of "one pass" tiling machines, that lay plastic tile on grade with the use of laser devices, landowners have the ability to drain lands that were once thought to be out of reach of the system. Further, landowners frequently system-tile lands which were, at the time of the original establishment of the system, not considered in need of drainage. Indeed, the side-hills of agricultural properties often benefit from system tiling. For these reasons, it is exceedingly common to find unassessed lands draining into a public drainage system.

Unassessed lands can be brought into the system when there is an Improvement or Repair petition proceeding commenced. Doing so,

however, is a patch-work remedy. Where there are significant unassessed lands draining into a system, a far more equitable approach is to redetermine benefits for the whole system.

Second, benefits determined many years ago, when land was selling for a small fraction of what it is selling for today in terms of today's dollar, are wholly unrealistic. That fact, in and of itself, may not be a problem unless and until there is a proposal for a major Repair. Assessments for Repairs are limited by statute as previously discussed. Some drainage authorities have attempted to evade such cost limitations by repairing part of the ditch, and later repairing another part of the same ditch, which ought to have been repaired in the first effort. This "bit-by-bit" approach to system maintenance was found impermissible in a recent court of appeals case.⁴² The remedy, when benefit limitations on a major Repair are foreseen, is to do a Redetermination of Benefits and Damages first.

Third, when an existing system has undergone a regular Improvement of less than all of the system, there is a layering of benefits. That is, those lands that are benefitted by the Improvement have two sets of benefits, those of the original establishment and those of the Improvement. That becomes a problem when the system is assessed for Repairs. Those having two layers of benefits will pay an unfair proportion of the Repair assessments. County auditors sometimes devise ways of dealing with the situation. An example of this is when the Improvement is for a supplemental drain tile and the Repairs are to an open channel. The auditor assesses the Repairs only to the benefits related to the open ditch portion of the system. This seems fair, but it may not be legal. The statute on apportionment of Repair costs simply states that "The cost of repairing a drainage system shall be apportioned pro rata on all property and entities that have been assessed benefits for the drainage system except as provided in this section." There are no exceptions for "layered" benefit in that section which is M.S. § 103E.728. While county auditors, by their experience, develop a certain ingenuity for dealing with such situations, they ought not be put in the position of having to bend the law to arrive at a fair result. A better solution is to do a Redetermination of Benefits after there has been established an "Improvement" of less than all of the system.

Fourth, in the case of a Repair by petition, additional lands may be brought into the system that have not previously been assessed benefits.⁴³ This is a quaint provision. A Repair, in theory, arises out of the need to maintain the system owned by the assessed landowners. Yet, the statute allows the drainage authority in a Repair proceeding to declare that the system is owned by yet other lands not previously included. There may not be anything wrong with this constitutionally, but conceptually it is an aberration.

Further, this fourth case suffers from the same flaw as the bringing of additional lands into a system when an Improvement is viewed. It is a patch-work approach. The newly assessed lands are going to be assessed for benefits at current land values. Other lands in the system may have been assessed for benefits at land values determined many years ago. There is no equity in that. A fairer approach is to redetermine benefits and damages on the whole system. The drainage authority may order the redetermination to be done at the same time as the Improvement or Repair proceedings, and the time and place of the hearings on the two separate proceedings can be combined for efficiency.

Prior to 1987, the statute here under discussion spoke only in terms of Redetermination of Benefits. The 1987 amendment changed the statute throughout so that now it speaks of Redetermination of Benefits and Damages.⁴⁴ The legislative intent in making this amendment is obscure. There are no reported appellate cases on the subject. Hopefully, it was not the intention of the statute to require the system to pay for damages long ago determined and paid for at values then prevailing. The majority of damages paid, in the case of an open system, is for the right-of-way occupied by the trench and later by the grass strips. Once the right-of-way has been bought and paid for by the system, it is difficult to understand why a landowner should have a right to be paid for it again simply because land values have risen. What if land values go down - does the system get a refund? A more reasonable interpretation of the statutory amendment is an intention to pay the landowner for damages incurred since the original establishment which have yet to be paid. Even that presents a problem as seen below.

1. How Damages Are to be Redetermined. Prior to 1987, the term damages had not been defined by the drainage code. . A new definition was added in 1987 which defines damages more broadly than previously had been thought to be the case. While there appear to be no appellate court cases defining the term, it is thought prior to 1987 that the term damages included only permanent right-of-way. In 1987, the term was defined to include severance damages, loss of crop production during construction, and diminished productivity of land from increased overflow potential.⁴⁵ While there are no cases on the subject, at least two attorney general's opinions have opined that under the pre-1987 drainage code a drainage system is not liable for damages done due to increased overflow potential after the final order of the board on the subject of damages is final and conclusive.⁴⁶

It may well have been the legislative intent to compensate landowners in a Redetermination of Benefits proceeding for certain elements of damages which are new to the definition, namely, severance damages, loss of crop production, and increased overflow potential and for the land taken for grass strips. That is, it is submitted, a reasonable way of interpreting the 1987 amendment.

Thus, in a Redetermination of Benefits proceeding, the landowner would not again be compensated for right-of-way already bought and paid for, but the landowner could be compensated for the other elements of damages discussed above. Such Damages will include compensation for land taken for new grass strips which are now mandated by M.S. § 103E.021, Subd. 1.

If the viewers determine that there have been damages that have to be paid, where will the money come from? If there is enough money in the drainage system account, presumably damages can be paid out of it. But if there is not enough money in the account, what then? The drainage authority probably has no power to levy a Repair assessment to pay for redetermined damages. These questions are unanswered by the statute. Due to the uncertainty introduced by this amendment, drainage authorities may well shy away from the use of this proceeding until there is legislative or judicial clarification.

2. Viewers' Proceedings. Once viewers are appointed, they proceed with their task as in any other proceeding. The viewers' report is presented by filing of same with the county auditor in a county or joint county system or with the secretary of the board of managers in a watershed district system. A property owners' report should then be prepared by the auditor or secretary from the viewers' report and a copy of the property owners' report is mailed to each owner of property affected by the drainage system.⁴⁷ The drainage authority then holds a hearing on the report. The hearing is to resemble the final hearing in an ordinary proceeding for the establishment of a New System with one exception - the hearing is to be held within 30 days after the property owners' report is mailed, as opposed to 25 to 50 days after the date of the final hearing notice in a New System proceeding. An aggrieved person may appeal from the Redetermination of Benefits and Damages order in the same way that one would appeal from an order establishing benefits and damages.⁴⁸

In re-establishing benefits, the same rules apply as in any other proceeding. That is, the drainage authority may not assess additional lands into the system unless those lands are actually benefitted by the system. The mere fact that water from those lands ultimately ends up in the system is not sufficient cause for assessing benefits to that land.⁴⁹ The niceties of what land may be assessed and what land may not be assessed will be more particularly discussed in chapter 4 of this manual.

Once the drainage authority has made its order redetermining benefits and damages, and all appeals are complete, the redetermined benefits completely supplant all previously determined benefits. The same statement can probably not be made with respect to damages. If damages are determined in the redetermination

process, they should be thought of as supplemental to damages previously determined and paid for - not in substitution thereof.

I. Use of the Drainage System as an Outlet

A public drainage system is property. The persons who are assessed for the benefits own it. In that respect, a public drainage system is not like a road. Roads are built with public funds and may be used by anyone. Public drainage systems are, in effect, built with private funds. They are private property. Public drainage systems are said to be public only because the legislature has vested in the counties (and watershed districts) the ability to tax, to exercise the police power, and to use the eminent domain powers for the public good, i.e., the drainage of lands to render them suitable for agricultural production or other uses. A drainage system is a special kind of property not wholly comparable with any other but, like any other property right, it is subject to reasonable regulation.

Once one understands that drainage systems are private property, then it becomes easy to understand that one may not use that property without obtaining consent and paying for the privilege. That is what is involved in the proceeding contemplated by M.S. §§ 103E.401 and 103E.411. The former section involves the use of an existing public system as an outlet for another system which might be public or private. The critical test is whether or not that other system seeking an outlet would bring in waters from lands which are not assessed into the outlet system. If non-assessed lands are drained into the outlet system, consent must be obtained even if the waters are gathered by a Lateral and the newly drained lands will thereby become part of the whole system.

1. Use by Another Public or Private System. The procedure for seeking authority to use an established system as an outlet is found at M.S. § 103E.401. The proceeding is commenced by a petition. There is a sample of such a petition in Appendix 2G of this chapter.

Any person having an interest in obtaining the outlet may sign the petition. There is no bond required. Presumably, the petitioner would have an ownership interest in land sought to be drained, though the statute does not expressly set forth that requirement. No person ought to commence the construction of a drainage project which will depend upon an established drainage system for an outlet without first having obtained the consent for the outlet.

The petition to obtain consent for use of the outlet should be filed at the same time as the petition for the establishment of a Lateral or a New System which will be dependent on that outlet. If the outlet is a joint county system, the petition for use of outlet may be filed with one county auditor while the petition for the construction of the Lateral or New System is filed with another.

Petitioners should be careful to avoid getting the cart before the horse. In this case, the horse is the outlet. Petitioners should avoid having the Lateral or New System established before consent to use the existing system as an outlet is obtained. There are several reasons for this.

One reason is that there will no doubt be an outlet charge. The outlet charge is a cost of the Lateral or New System which must be assessed to the properties benefitted, and this is part of the cost of construction. The outlet charge affects the relationship of benefits to damages and construction costs. It is important, therefore, to have the consent of the outlet drainage authority and the determination of the outlet charge before the final hearing on the Lateral or New System is convened. Another reason is fundamental in that there can be no Lateral without an outlet.

The filing of a petition for the use of an existing or "to be built" system as an outlet results, as do all other petitions, in a hearing. All persons who are assessed on the system proposed to be used as an outlet must be notified by mail and by publication. The purpose of the hearing is to consider the capacity of the outlet drainage system, to consider proposed terms and conditions for use of the system, and to establish the amount to be paid by the tributary as an outlet fee.

If consent is given by the drainage authority for the outlet drainage system, an order is made which must describe the property in the tributary system that is to be benefitted. In all cases, the property to be benefitted is the same property that is assessed for the benefits of the construction for the tributary system. The outlet charge is paid for by the benefitted property in the same way that other construction costs are paid. The significant thing is that, thereafter, all of the benefitted property in the tributary system is liable for Repair assessments levied by the outlet system. That is, the tributary system is liable for assessments levied for the Repair of the outlet system. The converse is not true (unless it is a Lateral). Costs of Repairs of the tributary system are not borne by the outlet system. The property benefitted in the tributary system is liable for the costs of the Repair of the outlet system on the basis of the benefits as determined in the establishment of the tributary system. Those benefits are treated as if they had been determined in the order establishing the outlet system.

In the case of a private system using a public system as an outlet, there is no legal mechanism for requiring the lands drained by the private system to share in the costs of Repairs of the outlet system. While a substantial outlet fee may be charged, it is probably not possible to determine an equitable, up front fee given the longevity of such an arrangement. The recommended procedure is to charge a one-time outlet fee on a watershed acre basis, and then to do a Redetermination of Benefits in order to establish a basis

for assessment of the newly drained lands for future Repairs to the outlet system.

If a private drain outlets without consent into a public drainage system, the drainage authority may require the private drain to be stopped. The landowner so causing unassessed lands to be drained into the system may be ordered to block the drain. Upon failing to do so, the drainage authority may take steps to block the drain and thereafter assess the costs of so doing to the land drained by the unauthorized drain. Such assessments may be established as a lien against the land so drained and collected as real estate taxes by the auditor. The landowner must be notified that the landowner's tax bill includes an item for the collection of unauthorized outlet compliance expenses.⁵⁰

2. Use by a Municipality. Even a municipality does not have authority to use a public drainage system as an outlet without obtaining the drainage authority's consent and paying an outlet charge determined by the drainage authority. The procedure is much the same as that described immediately above. The petitioner in this case must be the municipality. There is one major difference in that approval of the state Pollution Control Agency is required. That is, the plan for use of the public system as an outlet must be pre-approved by the Pollution Control Agency. Such approval should be obtained in writing and should accompany the petition for use of the drainage system as an outlet. The petition must:

- show the necessity for the use of the drainage system as an outlet;
- show that the use of the drainage system will be of public benefit and utility and promote the public health;
- be accompanied by a plat showing the location of the drainage system and the location of the municipal drainage system; and
- be accompanied by specifications showing the plan of connection from the municipal drainage system to the drainage system.

The petition is filed with the county auditor in the case of a county or a joint county system or with the secretary of the board of managers in the case of a watershed district system. Upon filing, a hearing must be held. Notice is given by publication only. Mailed notice is given only to the auditors of the counties affected in the case of a joint county drainage system.

At the hearing, any interested party may give evidence. The drainage authority may give its consent to use the drainage system as an outlet, subject to conditions that are necessary and proper

to protect the rights of the parties and to safeguard the interests of the public. The drainage authority, if it approves the petition, should make findings that:

- a necessity exists for the use of the drainage system as an outlet for the municipal drainage system or the overflow from the system;
- that the use of the drainage system will be of public utility and will promote the public health; and
- that the proposed connection conforms to the requirements of the Pollution Control Agency and provides for the construction and use of proper disposal works.

The drainage authority must also, in its order, make the municipality a party to the drainage proceedings and determine the benefits for using the drainage system as an outlet. Determination of benefits in such a case is a special problem which is more particularly discussed in section IV.B.2 of chapter 4 of this manual. It is a lump sum charge. The viewers do not actually view each property within the municipality. The benefits so determined should be proportionate to the total benefits of the drainage system. That is, if it can be expected that the municipal outlet will contribute 10% of the water that will flow through the system, then an amount of benefits should be determined which will be approximately 10% of the total benefits for the system after the municipal benefits have been included. Determining the amount of water to be contributed by the municipal connection is, of course, an engineering function, and is probably, at best, an estimate.

J. Consolidation, Division, and Abandonment

Consolidation of two or more systems may be accomplished only after the benefitted area of the systems to be consolidated have been redetermined by a Redetermination of Benefits proceeding under M.S. § 103E.351 or in connection with other drainage proceedings. The same is true of dividing one system into two or more separate systems. It may be done only after there has been a Redetermination of Benefits. The reason for requiring first a Redetermination of Benefits seems obvious; that is, it will avoid inequities in liability for future Repairs.

1. Who is Responsible. Consolidation or Division are most often initiated by the drainage authority itself. The drainage authority may be prodded by a petition, however. One petitioner is all that is required. The petition is filed with the county auditor, or with the secretary of the board of managers in the case of a watershed district system. The petition results in a hearing.

The drainage authority may consolidate or divide drainage systems, by order, if it determines that the Division of one system into two or more separate systems, the Consolidation of two or more systems, the transfer of part of one system to another, or the attachment of a previously abandoned part of a system to another system, is:

- consistent with redetermination of the benefitted areas of the drainage system;
- will provide for the efficient administration of the drainage system; and
- will be fair and equitable.

Consolidation or Division proceedings do not release any property from an existing drainage lien or assessment filed for costs incurred on account of the drainage system before the date of the Consolidation or Division order.⁵¹

2. Removal of Property. Property may be removed from an existing system. The impetus for removal would come from the owner of benefitted property who wishes no longer to be liable for assessments for Repair of the system. Property may be removed from the system only if:

- waters are diverted from the property assessed for benefits so that the drainage from the property does not use or affect the drainage system; or
- a dam authorized by law is constructed in the drainage system so that the property above the dam cannot use or receive benefits from the drainage system.

The petition results in a hearing. The order removing the property from the system must be preceded by findings of the drainage authority that:

- waters from the petitioner's property have been diverted from the drainage system or that a dam has been lawfully constructed and the property cannot use the drainage system;
- that the property is not benefitted by the drainage system and does not use or affect the drainage system; and
- that removing the property from the drainage system will not prejudice the property owners and the property remaining in the system.

The drainage authority may also make findings that part of the drainage system itself should be abandoned, if the drainage

authority determines that part of the system does not serve a substantial useful purpose to any property in the system and is not of a substantial public benefit and utility. Once the property is removed from the system, it will not be liable for future Repairs or Improvements of the drainage system. Existing liens are not affected, however.⁵²

3. Abandonment. An entire system may be abandoned. The impetus for Abandonment must come from assessed landowners presenting a petition signed by at least 51% of the property owners assessed for the construction of the drainage system or by owners of not less than 51% of the area of the property assessed for the system. The petition must designate the drainage system proposed to be abandoned and show that the drainage system is not of public benefit and utility. This showing would be due to the agricultural property that used the drainage system has been generally abandoned or the drainage system has ceased to function and its restoration is not practical.

The petition is filed with the county auditor. However, if the county is a petitioner (and it can be), then the petition must be made to the district court of the county and filed with the court administrator. Here is the sole remaining vestige of judicial involvement in public drainage at the administrative level. If the property assessed for the system to be abandoned is located in two or more counties, the petition is filed with the auditor of the county having the larger benefitted acreage. If the system or part thereof to be abandoned is under the jurisdiction of a watershed district, it must first be transferred back to the county for abandonment as a watershed district has no apparent authority to abandon a ditch.

The petition is filed and a hearing is held. At the hearing, the drainage authority or court examines the petition and determines whether it is sufficient and hears all interested parties. If there is at least one objection to the proposed abandonment, the drainage authority or court appoints three disinterested persons as viewers to examine the property and to report to the drainage authority or the court. The hearing is adjourned to give the viewers time for an examination and to make a report. At the reconvened hearing, the drainage authority or court considers the viewers' report and all other evidence offered, and will either make a finding that:

- the drainage system serves a useful purpose to affected property or the general public and the petition is denied; or
- the drainage system does not serve any useful purpose to the affected property and is not of public benefit and utility and the petition to abandon is approved.

A drainage system may be abandoned even if it is serving some useful purpose if it is impractical to restore it. Once abandoned, a Repair petition for the drainage system may not be accepted, and the responsibility of the drainage authority for the maintenance for the drainage system ends. Existing liens are not affected.⁵³

Endnotes

1. Except once at M.S. § 103E.315, Subd. 5(B).
2. M.S. § 103E.705, Subd. 1.
3. M.S. § 103E.705, Subd. 2.
4. M.S. § 103E.075.
5. M.S. § 103E.065.
6. M.S. § 103E.021.
7. There apparently are no reported appellate cases on the subject.
8. M.S. § 103E.285, Subd. 6.
9. M.S. § 103E.315, Subd. 8 (3).
10. M.S. § 103E.315, Subd. 8.
11. M.S. § 103E.705, Subd. 6.
12. M.S. § 103E.728.
13. M.S. § 103E.215, Subd. 4.
14. M.S. § 103E.215, Subd. 5.
15. M.S. § 103E.221, Subd. 6.
16. M.S. § 103E.728, Subd. 1.
17. M.S. § 103E.351.
18. M.S. § 103E.011, Subd. 4.
19. M.S. § 103E.221, Subd. 2(a).
20. M.S. § 103E.221, Subd. 6.
21. See, **Seidlitz v. Faribault County**, 237 Minn. 358, 55 N.W.2d 308 (1952); **Petition of Hopenner**, 241 Minn. 6, 62 N.W.2d 80 (1954); **Oelke v. Faribault County**, 244 Minn. 543, 70 N.W.2d 853 (1955).
22. **Schultz v. Chippewa County**, 236 Minn. 392, 57 N.W.2d 158 (1953).
23. M.S. § 103E.227 was formerly found at M.S. § 105.81. That section was brought into the drainage code by 1990 Minn. Laws, c. 391, Art. 5, Sec. 32.

24. M.S. § 103E.227, Subd. 1.
25. **Oelke v. Faribault County**, supra at 70 N.W.2d 860; M.S. § 103E.705, Subd. 1.
26. M.S. § 103E.705, Subd. 3.
27. M.S. § 103E.705, Subd. 5.
28. M.S. § 103E.705, Subd. 2.
29. M.S. § 103E.021, Subd. 1.
30. M.S. § 103E.715.
31. M.S. § 103E.715, Subd. 4(2). But see discussion at Section II. B of this chapter relating to other laws affecting drainage.
32. The most significant case in this area is **Taylor v. County of Sherburne**, 243 Minn. 303, 67 N.W.2d 827 (1954). See also **Petition of Zimmer**, 359 N.W.2d 266 (1984). Zimmer overrules Taylor. Zimmer established the "as constructed" limitation now found in statutes in M.S. § 103E.701. Subd. 1.
33. M.S. § 103E.701, Subd. 1.
34. 1991 Minn. Laws, c. 354, art. 6, Sec. 10; M.S. § 103G.2241, Subd. 1 (3).
35. M.S. § 103E.728, Subd. 1.
36. M.S. § 103E.721.
37. M.S. § 103E.701, Subd. 4.
38. M.S. § 103E.711.
39. M.S. § 103E.731, Subd. 1.
40. M.S. § 103E.731.
41. M.S. § 103E.351, Subd. 1.
42. **Appeal of Holasek**, 436 N.W.2d 483 (Minn.App. 1989).
43. M.S. § 103E.741.
44. 1987 Minn. Laws, c. 239, § 83.
45. M.S. § 103A.315, Subd. 8.

46. O.A.G., 602-j October 24, 1961. O.A.G., 602-D, November 15, 1955.

47. M.S. § 103E.351.

48. M.S. § 103E.351, Subd. 4, and M.S. § 103E.091.

49. **In the Matter of County of Douglas, Joint County Ditch No. 4**, 419 N.W.2d 639 (Minn.App. 1988).

50. M.S. § 103E.401, Subds. 7, 8.

51. M.S. § 103E.801.

52. M.S. § 103E.805.

53. Ditch No. 13, Pope County, 308 Minn. 138, 242 N.W.2d 827 (1976); M.S. § 103E.811.

V. THE PRELIMINARY HEARING

A. General

The preliminary hearing is the first real test of whether or not the proposed project has merit. The project may be popular with the drainage authority's constituents, but if the engineer says it will not work, it is going to be too expensive, or that there are significant unmitigated environmental impacts, the project should fail. The hearing process is a healthy one. Early political support for a project often wanes when persons to be assessed see the projected costs, be they environmental or financial.

Cutting the hearings short, before all interested persons have had an opportunity to speak (within reason), is a mistake. In the case of a particularly controversial proposal, informal meetings may be held in advance of the preliminary hearing to help focus the issues and to give guidance to the engineer.¹

From a decisional viewpoint, the preliminary hearing is the most important point in the entire proceeding. If a proposed project is to fail, it should fail at this point. The purpose of this section is to describe the procedures and pitfalls of the preliminary hearing stage in the evolution of a public drainage project.

B. Review and Approval of Petition by the County Attorney

After the petition has been filed, it is to be submitted to the county attorney for review. The county attorney has 30 days in which to review it and return it to the petitioners if it is facially inadequate, or to give it to the drainage authority if it is adequate.² The county attorney should affix and date an endorsement on the petition if it is approved. If not approved, it should be returned to the petitioners with a letter from the county attorney stating the petition's shortcomings. It is submitted that the legal counsel for a watershed district should fulfill a similar role in advising the board of managers of the adequacy of the petition when the proposed drainage project is within the jurisdiction of a watershed district.

C. Appointment of the Engineer

Approval by the county attorney and returning the petition to the county board or joint county drainage authority, or the watershed district's approval of the petition (M.S. c. 103D does not require approval of the petition by the watershed district's attorney), starts another 30-day period running. It is within this 30 days that the drainage authority shall appoint an engineer. The drainage code still contains language about the engineer being "the county highway engineer of the county where the affected property is located or a professional engineer registered under state law."³ It is doubtful that any county highway engineer has the

time or the inclination to undertake to be the engineer for a drainage project. Almost universally, an independent professional engineer is appointed.

1. Requirement of the Bond. The engineer is required to file an oath to faithfully perform the required duties in the best possible manner and must file a bond with the auditor.⁴ The bond therein called for is a fidelity bond intended to assure the engineer's honesty and good faith. The minimum amount of the bond is \$5,000. The drainage authority may set it at a higher level.

The bond required must be conditioned to pay any person or the drainage authority for damages and injuries resulting from negligence of the engineer while the engineer is acting in the proceedings or construction and it must provide that the engineer will diligently and honestly perform the engineer's duties.⁵

The statute prescribing the conditions for the bond calls for more than an assurance of fidelity. It calls for a guarantee of competence. Such a bond more closely resembles an errors and omissions insurance policy. The statute would better serve the public if it required the engineer to provide proof of errors and omissions coverage. An example of a corporate fidelity bond is included in Appendix 2H of this chapter. The bond is to be approved by the county auditor or the secretary of the watershed district, and though the drainage code does not require it, should also be approved by the county attorney or the watershed district's legal counsel. When the bond is filed and approved by the auditor or secretary, the engineer has qualified and may proceed with the preliminary survey.

2. Duties of the Engineer. The drainage authority may hire a consulting engineer to assist the project engineer. The consulting engineer does not have to be bonded. The drainage authority is free to make whatever contractual arrangements that may be practical in retaining a consulting engineer.

The project engineer is to proceed immediately with the preliminary survey of the area likely to be affected by the proposed drainage project. The engineer's mission at this point is to determine whether the proposed project is necessary and feasible, with reference to the environmental and land use criteria set forth in M.S. § 103E.015, Subd. 1. As part of the preliminary survey, the engineer is to try to make a determination whether the proposed project will substantially affect areas that are public waters or that are wetlands protected by other federal and state programs (again, see the discussion in sections II.B and II.D of this chapter on "Other Laws Affecting Drainage" and "Alternatives to Drainage," respectively.) If the drainage project is an open channel, in whole or in part, the engineer shall examine the nature and capacity of the proposed outlet. The statute does not require examination of the nature and capacity of the outlet if the

proposed project is wholly of drain tile.⁶ Yet, prudence would call for some type of outlet review in all cases.

In the preliminary survey, engineers are limited in the extent of the surveying that they do. They are to restrict their activity to the "drainage area described in the petition," except to secure an outlet.⁷ They have some latitude in doing some extra surveying in order to find an outlet with sufficient gradient. It is at this stage that the engineer may be asked by landowners (usually persons who are not petitioners) to do additional surveying to see if this pothole or that slough can be drained into the proposed project. The engineer should resist going beyond the scope of the work described in the petition.

If the engineer determines that the project could be improved if other areas were surveyed, the engineer should report that information to the petitioners' attorney. The petitioners' attorney may then call a meeting of the petitioners to obtain their consent to do additional surveying. If consent appears to be forthcoming, the petitioners' attorney should request the drainage authority to convene a hearing. Petitioners must be given notice by mail of such a hearing. The petitioners' attorney may mail such notice and provide proof of having done so by his or her filing an affidavit with the county auditor.

If the petitioners who are also principals on the bond do not unanimously consent to the additional surveying, the drainage authority may not order additional area surveyed by the engineer. Petitioners who are not principals on the bond do not have to consent. If following the hearing the drainage authority determines that the additional surveying should be done, the petitioners' attorney should prepare an order for the signature of the chairperson of the drainage authority ordering the additional work.⁸

If there is a federal project in the watershed to be drained, the engineer may accept data, plats, maps, plans, or information relating to that project. If the information so obtained is sufficient for the engineer to make a preliminary survey and report, the engineer may not have to do any surveying at all.

D. Engineer's Preliminary Report

The engineer's preliminary report should first and foremost address the feasibility of the project. See chapter 3, section III, of this manual for more complete discussion of the engineer's preliminary report. If the proposed project is not feasible, all other issues are moot. If the project is feasible, the engineer must examine the environmental impact using the environmental and land use criteria set forth in M.S. § 103E.015, Subd. 1. The engineer should point out in the engineer's preliminary report specific findings for each of the environmental and land use

criteria, and specifically note any adverse environmental impact. It is not up to the engineer to decide that the environmental impact is or is not so serious that it should scuttle the project. That decision is up to the drainage authority. The engineer merely reports what is observed.

The engineer must present a plan which includes the elevation of the outlet, the probable size and character of the ditches and laterals necessary to make the plan practical and feasible, the character of the outlet and whether it is sufficient, the probable cost of construction, and anything else bearing on the practicality, necessity, and feasibility of the proposed project.⁹ In addition to the statutory requirements, the engineer should also prepare a list of affected properties by legal description. Upon completion, the engineer files an engineer's preliminary report with the drainage authority (i.e., with the auditor, if this is a county or joint county drainage project, or with the secretary of the board of managers, if this is a watershed district project). There is no statutory time limit prescribed during which the engineer may do the required work. Upon receipt by the auditor or the secretary of the engineer's preliminary report, one copy must be sent to the commissioner of natural resources (i.e., to the director, Division of Waters, DNR).¹⁰ To speed the review time (and especially for lengthy documents), the director has requested two copies of these materials.

E. Commissioner's Preliminary Advisory Report

The commissioner is required to review the engineer's preliminary report and comment thereon. The commissioner cannot approve or reject the report but can only make advisory comments. Since the commissioner must later make a final advisory report on the engineer's final report, the commissioner's comments should be carefully considered. Problems not addressed at this stage will likely show up in the commissioner's final advisory report, probably causing delay and possibly giving project opponents grounds for appeal based on failure to consider the environmental and land use criteria in M.S. § 103E.015.¹¹

Except when a permit is required, the commissioner has no real power to approve or reject the report. In situations where a DNR permit is required, it is important to address those issues early, before significant costs are incurred. Because of their importance, the commissioner's comments have, over the years, tended to shape the form and content of the engineer's preliminary report.¹² It should be noted here that, even though the DNR's advisory comments are called the "commissioner's" preliminary advisory report, the document is normally signed by the director, Division of Waters. Please note that section III.F of chapter 3 provides a detailed discussion of the issues that will be addressed in the commissioner's preliminary advisory report.

F. The Preliminary Hearing

When the engineer files the engineer's preliminary report, the auditor or the secretary of the board of managers notifies the drainage authority and obtains a "resolution" and "order" for hearing (examples can be found in Appendices 2I and 2J of this chapter) which sets the hearing not later than 30 days after the date of the order. Notice of the time and place of the preliminary hearing must be given by mail to the petitioners, to the owners of all property within the watershed likely to be assessed (this information is taken from the engineer's preliminary report), and to political subdivisions likely to be affected. It is recommended that the notice be published at least one time as a legal notice as well in a legal newspaper serving the area of the proposed project. The auditor or secretary should also send a copy of the notice of hearing to the director, Division of Waters, DNR, though the statute does not so require.¹³

At the hearing itself, after convening and opening remarks by the chairperson of the drainage authority, the floor should be turned over to the petitioners' attorney. A well-prepared petitioners' attorney will be familiar with the engineer's preliminary report and with the commissioner's preliminary advisory report. Incidentally, the preliminary hearing may be convened even though the commissioner's preliminary advisory report has not been received. There are provisions for the commissioner (director) to ask for an extension of time, but there is nothing that requires the drainage authority to give it.¹⁴

The petitioners' attorney should set the stage by outlining the problems sought to be solved by the petitioners, describing the petitioners' proposal to remedy them, and discussing the procedures involved. The petitioners' attorney should make it clear that the drainage authority will listen to all evidence presented, both pro and con, and then the drainage authority alone will make the decision. Too often, persons attending hearings have the idea that, if there are more people in the room who favor the project than there are opposed to it, the project must be established. The petitioners' attorney should then introduce the project engineer. The engineer will, with the use of maps and profiles, explain what is proposed, show whose land the proposed project will cross, tell whether tile or open ditch is recommended, delineate the watershed, identify the land likely to be assessed, and give the estimated costs of construction.

When the engineer is finished, the chairperson should have the commissioner's preliminary advisory report read or presented by the commissioner's representative, if one is present. Then the chair should open the meeting for questions and/or comments by interested persons present. Speakers should always be asked to identify themselves and, unless obvious, be required to state the nature of their interest. Hearings should be electronically recorded, or if

an appeal from an order is likely, recorded verbatim by a court reporter. The auditor or secretary to the drainage authority should take careful notes. Costs of having a court reporter present are chargeable to the system or petitioners. The petitioners' attorney may resist the idea of having a court reporter present. The drainage authority may insist on it by virtue of its inherent control of the proceedings.

After everyone has had at least one opportunity to speak, the chairperson should cut off the discussion and do one of three things:

- If there are unanswered questions which will require more work of the engineer or other investigation, adjourn the meeting to another date certain. Adjourning the meeting to a date certain avoids having to send out notices again. However, if the notices are not numerous, it might be desirable to send them out anyway. At a minimum, a notice of the reconvening of the hearing should be published as a legal notice in the local paper;
- Entertain a motion to take the matter under advisement without further testimony. This is the desired course of action if the drainage authority needs more time to think or desires to consult with legal counsel and/or the engineer. Taking the matter under advisement has the advantage of allowing the drainage authority and legal counsel sufficient time to prepare a proposed findings and order. The findings must be adopted at an open meeting of the drainage authority, but they can be adopted without further notice. This method seems unsatisfactory in some respects in that the participants of the meeting leave the meeting not knowing what has happened and are generally suspicious of influences that the drainage authority members may encounter outside of the meeting; or
- Entertain a motion to "dismiss" or "establish." If such a motion is forthcoming, the motion should state with particularity the reasons for the motion. At this point, legal counsel can be helpful in assisting the drainage authority to formulate the motion in a manner which conforms to the statute.¹⁵

G. Reasons for Dismissal

The reasons for dismissal are so broad that it would seem that virtually any project can be dismissed if the drainage authority is so inclined. For convenience, the reasons for dismissal are here set forth:

- the proposed drainage project is not feasible;
- the adverse environmental impact is greater than the public benefit and utility (after considering the environmental and land use criteria in M.S. § 103E.015, Subd. 1) and the engineer has not reported a plan to make the proposed drainage project feasible and acceptable;
- the proposed drainage project is not of public benefit or utility; or
- the outlet is not adequate.

Even if such a motion is made and passed in the open meeting, it should be made clear to all in attendance that the drainage authority will make more elaborate written findings setting forth the facts which support the statutory legal grounds for dismissal. The drainage authority's legal counsel should then be asked to prepare those "findings" and the "order for dismissal" that will accompany it. The petitioners' attorney is not likely to be very helpful in drafting an unassailable order of dismissal. An example of such findings and order for dismissal is found in Appendix 2K to this chapter.

The proposed findings and order should be presented to the drainage authority at a regular open meeting (with or without notice), and the chairperson should be authorized to sign the order by resolution of the drainage authority approved by the majority thereof.

H. Justification for Approval

A motion for approval should describe any proposed changes in the engineer's recommendation and should state that all of the statutory criteria are met.¹⁶ For convenience, the criteria are here set forth:

- the proposed drainage project outlined in the petition, or as modified and recommended by the engineer, is feasible;
- there is a necessity for the proposed drainage project;
- the proposed drainage project will be of public benefit and will promote the public health, after considering the environmental and land use criteria in M.S. § 103E.015, Subd. 1; and
- the outlet is adequate.

Finally, the drainage authority should direct the engineer to proceed with a detailed survey and should order the appointment of viewers. At the open meeting, the resolution adopted may be summary in nature. A sample resolution is found in the Appendix 2L to this chapter.

After the open meeting has adjourned, the petitioners' attorney should prepare detailed findings and a proposed order which should be presented, after approval by the drainage authority's legal counsel, at an open meeting of the drainage authority (with or without notice). A resolution should be passed authorizing the chairperson to sign the findings and the order. A sample resolution is found in the Appendix 2M to this chapter. While the statute does not require it, a copy of the findings and order should be mailed to all persons whose land is likely to be assessed for the project according to the engineer's preliminary report. Keeping the constituency informed is good public relations.

I. Appeals of the Preliminary Order

The preliminary order is, in and of itself, not appealable. The statute says that the findings and order at the preliminary hearing are conclusive as to the signatures and legal requirements of the petition, the nature and extent of the proposed plan, and the need for a detailed survey.¹⁷ The trouble with that statement is that the signatures and legal requirements of the petition are jurisdictional. Jurisdiction is always appealable. The inadequacy of the petition may be raised in an appeal from the final order, though technically the adequacy of the petition is not an issue at the final hearing.

Endnotes

1. M.S. § 103E.043.
2. The county attorney's formal role in the process came into being by 1987 Minn. Laws, c. 239, §42.
3. M.S. § 103E.241, Subd. 1.
4. M.S. § 103E.241, Subd. 2.
5. M.S. § 103E.241.
6. M.S. § 103E.245, Subd. 1(4).
7. M.S. § 103E.245, Subd. 2.
8. M.S. § 103E.245, Subd. 2.
9. M.S. § 103E.245, Subd. 4.
10. M.S. § 103E.251.
11. M.S. § 103E.255.
12. M.S. § 103E.255.
13. M.S. § 103E.261, Subd. 2.
14. M.S. § 103E.255.
15. M.S. § 103E.261, Subd. 4.
16. M.S. § 103E.261, Subd. 5.
17. M.S. § 103E.261, Subd. 7.

VI. THE FINAL HEARING

A. General

After the drainage authority has signed the order calling for a detailed survey and appointing viewers, the engineer should proceed with a detailed survey. The viewers proceed with the viewing. The engineer's and the viewers' reports are the focus of the final hearing. The technical aspects of the detailed survey will be dealt with in chapter 3 of this manual and the technical aspects of preparing the viewers' report will be covered in chapter 4. This section will discuss the execution of the preliminary order through the final hearing and preparation of the final order.

B. Engineer's Final Report

The engineer seemingly has more latitude in preparing the detailed survey than in preparing the preliminary survey. M.S. § 103E.275 allows the engineer to lay out the project differently, to start from a different starting point, and to realign the drain and plan described in the preliminary hearing, in order to drain the property likely to be assessed in the proposed project. The engineer may survey and recommend the location of additional ditches and tile, may recommend more desirable outlets or extension of outlets, and the engineer may even have the drainage flow in different directions from that which was described at the preliminary hearing. Such changes should take into account concerns raised at the preliminary hearing. The engineer should take care not to "over design" the project. If the project gets much bigger than originally contemplated, it may well fail. The engineer will be quite unpopular at the final hearing if a plan is proposed which does not resemble that presented at the preliminary hearing, and particularly if the costs of construction are significantly increased.

The engineer shall order a soil survey to be made if the drainage authority or the commissioner requests it, or the engineer determines that it is necessary.¹ The engineer's final report must include a complete map of the proposed drainage project and scaled drawings of the drainage system, showing:

- the terminus and course of each drain and whether it is ditch or tile and the location of other proposed drainage works;
- the location and situation of the outlet;
- the watershed of the proposed drainage project and the subwatershed of main branches, if any, with the location of existing highway bridges and culverts;
- all property affected, with the names of known owners;

- public roads and railways affected;
- the outline of any lake basin, wetland, or public water body affected;
- other physical characteristics of the watershed necessary to understand the proposed drainage project, and the affected drainage system; and
- the area to be acquired to maintain a grass strip under M.S. § 103E.021.

Please refer to section IV of chapter 3 for additional recommended instructions.

When the engineer files the engineer's final report with the auditor or secretary, the auditor or secretary must send a copy of the report to the commissioner of natural resources (i.e., the director, Division of Waters, DNR). To speed the review time (and especially for lengthy documents), the director has requested two copies of this document. The engineer must also file copies of this report with the auditors of all affected counties.

C. The Commissioner's Final Advisory Report

The commissioner shall then examine the engineer's final report and, within 30 days of receipt of same, make a final advisory report to the drainage authority. Again, this document is normally signed by the director, Division of Waters, DNR. The commissioner's final advisory report must state whether the commissioner:

- finds the engineer's final report is incomplete and not in accordance with the provisions of M.S. c. 103E; or
- approves the engineer's final report as an acceptable plan to drain the property affected; or
- does not approve the plan and makes recommendations for changes; or
- finds the proposed drainage project is not of public benefit or utility under the environmental and land use criteria in M.S. § 103E.015, Subd. 1, specifying the facts and evidence supporting the findings; or
- finds a soil survey is needed and, if it is, makes a request to the engineer to make a soil survey.

The commissioner's final advisory report, while advisory, should be carefully considered. If, for example, the report concludes that

the survey does not comply with the drainage code, or that the environmental and land use considerations are inadequate, there may be grounds for appealing the drainage authority's decision. In addition, the drainage authority would be wise not to rely exclusively on the drainage code's enumerated technical grounds for appeal when considering these matters. The Minnesota Environmental Rights Act (MERA), M.S. c. 116B, provides that any person, a state agency, or the attorney general, may bring a lawsuit to prevent pollution, impairment, or destruction of a wide range of natural resources, including animal, botanical, water, land, and soil resources. Such litigation could drastically delay or even kill a project. Therefore, the drainage authority must take care to correct identified inadequacies and pay particular attention to environmental problems. Of course, if a DNR permit is required, the commissioner's advisory report must be strictly adhered to or problems may surface during the DNR's permit review and the permit may be denied. Please note that section IV.D of chapter 3 provides an additional discussion of the DNR's review including the commissioner's final advisory report. 19

D. The Final Hearing Notice

The final hearing may not be held until the engineer has filed the engineer's final report, the viewers have filed the viewers' report, and the commissioner has filed a final advisory report. The drainage authority in consultation with the auditor or secretary, sets the time, place, and location for the final hearing and makes an order to that effect. The hearing is set not less than 25 days nor more than 50 days after the date of the final hearing notice.

It is the auditor's or secretary's job to mail out a final hearing notice and property owners' report to all interested persons (i.e., members of the drainage authority, auditors of other affected counties, petitioners, all landowners likely to be assessed, and the commissioner) within one week after the notice is first published. A printed copy of the final hearing notice must be posted at the front door of the courthouse for at least three weeks in each county affected and published one-time in a legal newspaper in the county. After the final hearing notice is given, the drainage authority has jurisdiction of all property described in the engineer's and the viewers' reports, of the persons and municipalities named in the reports, and of all persons having an interest in a mortgage, lien, or encumbrance against the property described in the reports.² revised

E. Proceedings at Final Hearing

At the final hearing, the meeting should again be convened by the chairperson of the drainage authority. The petitioners' attorney should then be given the floor to review the proceedings thus far from a legal standpoint. The technical aspects of the proposed

project should be left to the engineer. The petitioners' attorney should take care to explain that the final decision about whether or not to establish the proposed project is made by the drainage authority, not by the persons present at the hearing - at least not directly.

The petitioners' attorney should then return the floor to the chairperson, and the chairperson should call for the reading of the commissioner's final advisory report. The director, or the director's designated representative, typically summarizes and highlights the report. If the director is not present and the report has not been mailed out, the report should be read at length during the hearing. The statute does not require the reading of the report, but there is very little point in having it if its content is not disseminated to the people who are going to be paying for the project. Further, the drainage authority has an obligation to keep all interested persons informed. This type of action will foster good community relations.

Following that, the chairperson should give the floor to the project engineer. The engineer, using maps and profiles, should then explain the proposed project. The hearing should then be open for questions of the engineer.

Following the engineer's presentation, one of the viewers, as spokesperson, should present the viewers' report. Copies of the viewers' report should have been handed out at the beginning of the hearing or, even better, mailed out earlier with the property owners' report. The viewers' presentation should not be a line by line review of each item of benefits and damages. Rather, it should be a discussion of the approach to viewing adopted by the viewers, any special problems encountered, and a statement of the total amounts of benefits and damages found.

When the hearing is opened to questions from the floor, landowners should be encouraged by the chairperson of the drainage authority to confine their questions to the general approach used by the viewers and to reserve specific questions or disputes respecting particular tracts for individualized discussions with the viewers. If it seems that there are numerous disputes, the drainage authority may wish to adjourn the meeting to another date and time certain in order to give the disgruntled landowners an opportunity to meet on an individual basis with the viewers in an effort to resolve disputes.

If it is a small project, and it appears that there are only a few unhappy landowners, the chairperson may wish to simply recess the meeting to facilitate the landowner/viewers' meetings to be held right then and there. The viewers at this point are still able to make adjustments in their report. Small adjustments and compromises frequently will satisfy the landowner. Giving the landowner an opportunity to discuss the benefits, assessments, or

damages award privately before the establishment order comes out will go a long way toward avoiding appeals. When everyone has had a chance to talk to the viewers, and the meeting is reconvened, the viewers present their adjusted report.

F. Making Changes in the Engineer's Final Report

If the drainage authority perceives general dissatisfaction with the plan presented by the engineer, simple changes may be adopted right then and there. The drainage authority may amend the engineer's final report. Such changes in most cases will involve amending the viewers' report as well. When significant changes are necessary, the drainage authority should adjourn the meeting to a new date certain to give the engineer and the viewers an opportunity to amend the engineer's final report and the viewers' report, respectively, in accordance with changes in the plan as directed by the drainage authority by motion adopted by the majority of the drainage authority at the final hearing.

The final hearing may be adjourned as many times as necessary to arrive at a satisfactory detailed report(s). If the final hearing is adjourned to a date certain, it is not necessary to mail notices of the date and time of the reconvened meeting. Nonetheless, it is a good idea to publish a notice of the reconvening of the adjourned final hearing as a reminder to affected landowners.

If, in the revision of the engineer's final report, it appears that lands not included in the original report will be assessed, then formal notice by mail and publication will have to be given to those newly included landowners. The hearing must be scheduled to be held 25 to 50 days after the date of that notice. Only owners of the newly included lands must be given notice. The jurisdiction of the drainage authority over the other property previously given proper notice continues.³

G. The Final Order

The detailed findings should set forth those facts elicited at the final hearing which, by virtue of their source or their frequent repetition, appeared credible enough to support the finding. Testimony at the hearings (preliminary and final) is not taken under oath, nor is it necessarily reported verbatim. Appeals from orders are de novo,⁴ but the findings of the drainage authority are deemed prima facie⁵ evidence of the matters stated therein. The drainage authority's order is deemed prima facie reasonable. Thus, while the reviewing trial court will accept evidence at the appeal hearing (as opposed to a pure review of the record), an appeal from an order is not truly de novo. The more credible facts that can be stated in the order to buttress the drainage authority's conclusion, the more difficult it is for an appellant to overcome the conclusions of the order.⁶ Other features to be included in the final order are discussed in the last section of

this chapter on "Funding, Collection, and Payment of Drainage System Costs."

1. Final Order Dismissing. If, after the final hearing is complete, all potential changes have been explored and all continued hearings held, the drainage authority is still dissatisfied with the plan, the drainage authority may dismiss the proceedings. The specific grounds for dismissal are set forth in M.S. § 103E.341. They are, for convenience, here set forth:

- the benefits of the proposed drainage project are less than the total cost including damages awarded;
- the proposed drainage project will not be of public benefit and utility; or
- the proposed drainage project is not practicable after considering the environmental and land use criteria in M.S. § 103E.015, Subd. 1.

The first two grounds listed immediately above are so broad that the drainage authority can, in all likelihood, find sufficient facts to support a dismissal of any project. If possible, the drainage authority should pass a motion to dismiss at the final hearing stating the grounds upon which the dismissal is made. The persons in attendance, then, should be told that the drainage authority will make detailed findings and will mail them out to persons in attendance and/or all interested persons. The drainage authority's legal counsel should be directed to prepare detailed findings and an order. The drainage authority's legal counsel will have a much easier time of doing that if in attendance at the hearing.

2. Final Order Establishing. If the drainage authority, after the final hearing is concluded, is generally satisfied with the plan and desires to establish the project, a motion so indicating should be adopted. Such a motion should state that all of the criteria necessary for establishment are met and that the project (as amended) is established. The petitioners' attorney should then be directed to prepare detailed findings adopting and confirming the engineer's final report (as amended) and the viewers' report (as amended), and establishing the proposed drainage project as reported. The petitioners' attorney should, in drafting the order, set forth all credible facts established at the final hearing tending to support the conclusion that the project should be established. The attorney for the drainage authority should review and approve the proposed findings and order before same is submitted to the drainage authority for approval.

The proposed findings and order may be considered and adopted at an open meeting of the drainage authority without further notice. The resolution adopting the findings and order should designate the

member of the drainage authority, presumably the chairperson or vice chairperson, who will sign the findings and order on behalf of the drainage authority. It is recommended that a copy of the findings and order be mailed out by the auditor or secretary to all interested persons.

No construction contracts may be let for at least 30 days after date of filing. If no appeals have been filed within that time, contracts may be let.⁷

Endnotes

1. M.S. § 103E.281.
2. M.S. § 103E.331.
3. M.S. § 103E.335, Subd. 2, 3.
4. M.S. § 103E.095; **Schultz v. Chippewa County**, 238 Minn. 392, 57 N.W.2d 158. DeNovo is defined by Black's Law Dictionary, 4th ed., as "anew; afresh; a second time."
5. Prima facia is defined by Black's Law Dictionary, 4th ed., as "such as will suffice until contradicted and overcome by other evidence."
6. M.S. § 103E.095, Subd. 2.
7. M.S. § 103E.505.

VII. CONSTRUCTION OF DRAINAGE PROJECT

A. General

Nothing may be done with respect to letting a contract for the project until at least 30 days after the date of the order establishing the project is filed.¹ Care should be taken by the petitioners' attorney to make sure that the order is actually filed in the office of the county auditor or the secretary of the board of managers of a watershed district for a project within a legally established watershed district to commence the 30 days running. The petitioners' attorney should get a copy of the order with the auditor's or secretary's dated filing stamp on it. If, after the 30 days have run, no appeals regarding the determination of benefits and damages have been filed, then the letting process may begin and contracts may be awarded. Even if an appeal or appeals have been filed, the drainage authority may, by order, authorize a contract to be let. Presumably this will be done only if the benefits so far exceed the damages and costs that, even if successful, the appeals would not undermine the project. Of course, if there is an appeal from the order establishing, the contracts may not be let until the appeal has been determined and the time for further appeals expired.

B. The Letting

The notice of awarding of the contract is to be published in a legal newspaper in the county or counties where the project is to be constructed and in a drainage construction trade newspaper, if the work is contemplated to cost more than \$3,000.

While the drainage code does not say so, the letting is governed by the Uniform Municipal Contracting Law.² That is, if the amount of the contract will exceed \$15,000, sealed bids shall be solicited by public notice. If the contract is expected to run between \$10,000 and \$15,000, the contract may be made either upon sealed bids or by direct negotiation by obtaining two or more quotations from prospective contractors. If the contract is, according to the engineer's estimate, expected to be less than \$10,000, the contract may be made either upon quotation or in the open market, in the discretion of the drainage authority. Ironically, a Repair costing up to \$50,000 can be done by hired labor and equipment without advertising for bids.³

If the project is a county or joint county project, the invitation to bidders must be published two consecutive weeks in a legal newspaper in the county or counties where the work is to be done.⁴ The content of the invitation to bidders is set forth in the statute.⁵

The procedures for letting a contract are approximately the same for a watershed district. Since the watershed district is a

"political subdivision" by definition, the Uniform Municipal Contracting Law requiring a formal letting for any contract over \$15,000 applies.⁶ It is doubtful, however, that the general provisions regarding contracts of county boards found at M.S. § 375.21 apply to watershed districts. As a practical matter, this means that a bid notice or invitation to bid may be published only once, instead of twice, and does not have to be published as a legal notice in the county where the project is pending. Rather, the statute calls for publication "in at least one of the newspapers in the state where notices are usually published."⁷

A project may be split up into several contracts or let as one job. Where a project involves both open ditching and drain tile work, the open portion and the drain tile portion may be let to different contractors, since there is different expertise involved. Sometimes the entire project is let to an excavation contractor who will then sublet the drain tile work. Subletting, while not unlawful, is not highly desirable because of the loss of control that the drainage authority experiences in selecting the subcontractor and supervising the work. When a project calls for more than one specialty, it is preferable to break the project up and to let it in sections.

Bids, if it is a county or joint county project, must be accompanied by a certified check or bond payable to the county auditors of affected counties for 10% of the amount of the bid. If it is a watershed district, bids need not be accompanied by certified checks or bid bonds. The board of managers of a watershed district could make that a requirement of the bid by simply so stating in the call for bids. The procedure is recommended. It is intended to discourage someone who has second thoughts about the bid submitted from backing out of the bid. If a certified check or bid bond is submitted, the bidder can still back out; but in doing so, the bidder forfeits the bid security.

1. Lowest Responsible Bidder. The contract must be let to the lowest responsible bidder.⁸ The lowest bidder is not necessarily the lowest responsible bidder. A prior unsatisfactory experience with a prospective contractor is sufficient grounds for rejecting a bid.⁹ Lack of experience or inadequate equipment may also be grounds for rejection.¹⁰ Having rejected the lowest bid, the drainage authority may accept the next lowest bid.¹¹

If the drainage authority wishes more time to consider the bids, it may take the letting under advisement and adjourn, notifying the bidders of its decision by mail. In so doing, the drainage authority should check the specifications for limitations in the length of time that the drainage authority may hold a bidder to its bid.

A bid must be rejected if it is not responsive.¹² That is, if it does not conform to specifications, or if the bidder inserts

contingencies or conditions not allowed, the bid must be rejected. Such a bidder may not be allowed to amend the bid once it is opened if another bidder has submitted a responsive bid.

If no satisfactory bid is received, the drainage authority may reject all bids, with or without giving reasons therefor, and may then re-advertise.¹³

2. Adjusting the Project to Fit the Bids. A contract may be let even if there is only one bid. If that bid, or if all bids, exceed 130% of the estimated construction cost as estimated by the project engineer, no contract may be awarded unless a special re-evaluation procedure is followed.¹⁴ Generally, this involves a petition by any interested person to the drainage authority to have the engineer take another look, claiming that the engineer "made an error in the estimate of the drainage project cost or that the plans and specifications could be changed in a manner materially affecting the cost of the drainage system without interfering with efficiency."

In such case, the engineer's final report is referred back to the engineer and the viewers' report is referred back to the viewers for the necessary adjustments. A petition could also allege that the inordinately high bids are due to inflation which occurred between the time of the engineer's cost estimate was made and the time of awarding the contract. Again, if the petition is granted, the drainage authority would refer the engineer's final report and the viewers' report back to the respective authors for adjustment.

Adjustment in the estimated cost may even be made after the contract has been let and the contractor fails to complete the contract. This would be due to alleged increased costs of construction resulting from inflation due to unavoidable delay not caused by the contractor.¹⁵

A hearing follows any such petition. The plans and specifications may be changed in a manner which would reduce the cost of the project if it can be done without interfering with the efficiency of it. If the bid then falls within 130% of the engineer's estimated cost, the contract may be awarded.¹⁶ The drainage authority also has the power to direct the engineer and viewers to amend their reports to consider the inflationary cost increases.

The procedures outlined above are troublesome. In particular, where the drainage authority directs the viewers to find more benefits in order to make the project feasible.

The recommended procedure, where no bids are received within the 130% limit, is to reject all bids, and, if no petition is received for adjustment of the engineer's cost estimate or the viewers' report within a reasonable time, dismiss the petition as not feasible. If a petition for modification is received, the drainage

authority is, in effect, asked to reopen its order establishing the project. The drainage authority must call a hearing on this petition. However, the drainage authority has discretion in granting or not granting the relief asked for in the petition. If it appears after the hearing that there are insufficient facts alleged in the petition to justify reopening the order establishing, the drainage authority may dismiss the petition to modify the project. The drainage authority's action to revise the order establishing pursuant to a petition to modify, by changing benefits or damages, re-opens the right to appeal the benefits and damages so found.¹⁷

There is no statutory right to appeal from the order granting or denying the relief asked for in the petition to modify. The entire matter could be reviewed by certiorari (see the discussion of certiorari in the section on "Appeals and Other Litigation" which follows in this chapter). The drainage authority should not rescind the order establishing and dismiss the petition for the project until after the time for review by certiorari of its order rejecting the petition to modify the order establishing has run out. If no action is commenced within 60 days after notice of denial is given to the petitioner,¹⁸ the drainage authority may proceed to rescind the order establishing, order the dismissal of the petition, and further order the petitioners to pay the costs.

C. The Construction Contract and Bond

Ordinarily, the engineer prepares the construction contract. The contract itself may be a simple one or two page document because it adopts the plans and specifications prepared by the engineer. An example of a construction contract is provided in Appendix 2N of this chapter. There is no statutory limit on how much time the contractor has to enter into a contract.

If the successful bidder enters into a contract, the bidder must also provide a performance bond. The function of a performance bond is to assure the drainage authority that the contractor will do the work called for by the contract. The bond amount must be at least 75% of the contract price for the work. One hundred percent is recommended. Corporate surety bonds may be readily purchased from independent insurance sales agencies. The drainage authority should insist on receiving a corporate surety performance bond.

Any person who can show damages from the contractor's failure to perform the work under contract may recover from the surety damages incurred at any time prior to the drainage authority's final acceptance of the project. The bond should also assure that the contractor will pay all persons supplying labor and material for use in performing the work. Such persons, laborers, materialman, and subcontractors, probably do not have an ability to file a mechanic's lien because the general contractor does not have a contract with the landowner. The general contractor's contract is

with the drainage authority.¹⁹ If a general contractor fails to pay laborers, materialmen, or subcontractors, they may make a claim in their own name against the performance bond surety - the bonding company.

Every construction contract must include a provision for liquidated damages.²⁰ The liquidated damages provisions are normally found in the plans and specifications.

The function of liquidated damages is to provide the contractor with an incentive to finish the project in a timely manner. Beyond that, liquidated damages are required because it is difficult to prove the amount of damages incurred by the drainage authority when the project is completed late. Liquidated damages are often threatened, but seldom recovered. The problem with liquidated damages is the courts hold uniformly that liquidated damages may not be awarded unless there are some actual damages incurred by the person who has the right to claim liquidated damages.²¹ When a project is late in being completed, the persons who experience the loss are the affected landowners. It has been held that landowners have no right to recover from the contractor or from the contractor's performance bond for loss of profits arising from failure to complete a project on time.²²

1. Contract Changes During Construction. The contract, in the plans and specifications section, should provide that the engineer has the right, with the consent of the drainage authority, to modify the plans and specifications as work progresses and as circumstances require. If additional work is to be done, the contractor is obligated to provide it at the same rate stated in its bid. If a change increases the cost of the project, the engineer must bear in mind that the damages and costs may not exceed the benefits found by the drainage authority. Aggregate changes may not exceed ten percent. No change may be made if it will substantially impair the usefulness of any part of the project or system and none may be made if it will have detrimental environmental effects (so states the statute).²³ As a practical matter, such changes are made by the engineer without a hearing. Minor changes may be made with little notice given to anyone.

2. Guarantee of Tile Work. If the drainage authority receives a request for a guarantee of tile work from a majority of the persons affected by the part of any project which is made up of drain tile, that part of the construction contract must be let separately. Such a request must be made before advertising for the letting of the work has begun. If the tile work is let separately, the contractor must guarantee the tile work installed pursuant to the contract for three years after its completion against any fault or negligence on the part of the contractor. The invitation to bid must make it clear that such a guarantee is required. The contractor's performance bond in such case must contain a special provision guaranteeing the tile work.²⁴

It is noteworthy that the statute requires the contractor only to guarantee the work against any fault or negligence on the part of the contractor. What if the material (the tile itself) fails?²⁵ The contractor's guarantee does not cover that. The drainage authority might have a cause of action against the manufacturer for breach of warranty, express or implied. Such an action could be brought for unreasonable failure of the product - even after three years had expired.

3. Contractor's Default. If a contractor fails to perform the contract according to specifications, the auditor or secretary should mail a notice of the default to the contractor, to the surety on the performance bond, to the engineer, and to the auditors of all affected counties. The notice should specify the default and state that, if the default is not promptly cured and the contract completed, the unfinished portion of the contract will be awarded to another contractor.²⁶

The surety, on receiving such a notice, can be expected to respond. The surety will first contact the contractor to try to determine whether the contractor can or will perform. Often the problem ends there. If the contractor has become insolvent, bankrupt, or otherwise unable to complete the contract, the surety may hire a contractor of its own to complete the job. The auditors or secretary may grant an extension of time to accommodate the surety without convening the drainage authority. If the contract is completed by the surety, the balance owing on the contract should be paid to the surety, less damages incurred by the affected counties from the default.²⁷

Damages incurred may be a matter of dispute. As always, it is difficult for the drainage authority to show damage. It is the landowners who are damaged, but the landowners do not get a chance to make a claim on the bond. The drainage authority cannot make a claim on behalf of the landowners. The only damages likely to be suffered by the drainage authority may come in the form of extra legal and engineering fees submitted by the petitioners' attorney and the project engineer.²⁸

If the surety does not undertake to complete the contract or, having undertaken to do so, does not complete it within the specified time or extended time, the auditors of the affected counties or the secretary for a watershed district project may advertise for bids to complete the contract in the manner provided in the original letting. The drainage authority may recover any increased costs in completing the project from the original contractor's bonding company. Such increased costs are not only the administrative costs involved in reletting (publication, extra engineering, and legal), but also any construction costs in excess of the original contract.

4. Inspection of Drainage Construction and Partial Payments. Part of the job of the project engineer is to inspect the work as it is being completed and to demand that it be done in accordance with the plan, specifications, and contract for construction. The project engineer (monthly) is to submit a report to the drainage authority showing the work completed since the previous report and all materials furnished under the contract.²⁹

The contractor does not get paid until the engineer certifies a preliminary certificate for "work done and approved or for materials delivered." The engineer's certificate must state the value of the work done and the materials furnished according to the contract.

Each preliminary certificate should show the volume in cubic yards of the excavation completed. A duplicate of the engineer's preliminary certificate is delivered to the auditor of each affected county or to the secretary of a watershed district. The affected counties or watershed district must then pay the contractor (based upon the certificate) 90% of the total value of the work done and approved and 90% of the total value of the material furnished and delivered. The contractor is not to cause materials to be delivered until they are needed and until delivery is authorized by the engineer.³⁰

The contractor may, on larger projects exceeding \$50,000, petition to have the 10% of the contract price retained reduced to 6%, provided the contract is one-half or more complete and the contractor is not then in default. When the contractor submits such a petition, the auditor or secretary sets a time and location for a hearing on that petition before the drainage authority. Notice is given by the auditor or secretary to the engineer, to the attorney for the petitioners, to the surety on the contractor's performance bond, and to the auditors of the affected counties. At the hearing, if the drainage authority determines that the work is more than half done and that the contractor has performed in a satisfactory manner, the drainage authority may release 40% of the retainage, retaining, in effect, 6% of the contract price earned.³¹

5. Extension of Time on Contract. The auditors or secretary may, without convening the drainage authority, extend the time for the performance of a construction contract upon the contractor's application. Notice must be given to the project engineer, to the attorney for the petitioners, and to the auditors of the affected counties in the case of a joint county drainage project. The auditor(s) or secretary may grant an extension if sufficient reasons are shown. The granting of an extension does not necessarily mean that no liquidated damages may be sought. If the time for completing the contract expired before the extension was granted, there may still be liquidated damages sought and

collected. If the extension expires, liquidated damages may again be sought.³²

When a project takes more than one season to complete, the contractor may, after the first year's work is completed and accepted by the engineer, apply for a reduction in the amount of the performance bond in order to reduce the renewal premiums thereon. There are some limits in the amount that the bond can be reduced. The drainage authority may reduce the performance bond after a hearing, with notice to the project engineer, the attorney for the petitioners, and the auditor of each affected county. The bond may not be reduced by more than 35% of the amount already paid to the contractor along with other limitations.³³

D. Final Acceptance of Project

When the project engineer determines that the project is complete, the engineer makes a final report showing the contract price, the amount paid on the partial payment certificates, the unpaid balance, and a summary of the work done. The auditor (or secretary of board of managers), upon receipt of that report, is required to set a time and place for hearing on the report. Notice is given by publication or by mail to all owners of affected property at least ten days before the hearing. The notice must state that the report is filed, the time and location for the hearing, and that any party objecting to the final acceptance of the project may appear and be heard.³⁴ An example of such a notice is found in Appendix 20 of this chapter.

The proceedings at such a hearing are intended to give any person who has a complaint about the work to be heard thereon. Typical complaints aired at such a hearing are the contractor damaged crops in excess of that allowed by the viewers for damages, the contractor failed to bury the stumps and brush deep enough to permit agricultural operations over the top, or the contractor failed to properly install the side inlets thereby not allowing the water to drain into the open ditch through the berm. Usually some or all of the complaints have some merit. There is a question, then, as to who will pay the landowner. There is no legal authority for the drainage authority to pay for such losses. Doing so will, in effect, amends the viewers' report in the amount of damages to be paid.

One way of handling complaints against the contractor is to have the contractor pay the damaged landowner. The drainage authority can, upon recommendation of the engineer, reimburse the contractor with a change order provided the limits in increasing the construction costs do not impose an obstacle.³⁵ This may be the proper way to handle these situations if the damages are determined to be no fault of the contractor. The contractor must, however, be responsible for any faulty performance, such as failure to bury brush or to install drain pipes through the berm. If the

contractor fails to make settlement with the landowner, the landowner may commence action against the contractor's bond. The landowner has, in such case, no cause of action against the drainage authority.³⁶

The final acceptance hearing is also the time and place at which inquiry should be made by the drainage authority as to whether all laborers, materialmen, and subcontractors and payroll tax authorities have been paid. The drainage authority may demand to see proof of payment. The drainage authority should also demand that the contractor produce waivers of suppliers of materials and subcontractors who might otherwise file claims on the bond. A suggested form of waiver is provided in Appendix 2P of this chapter.

If there are significant complaints by landowners about the contractor's performance, or if there is doubt about whether all persons entitled have been paid, the drainage authority may adjourn the hearing to another date certain. This would give the contractor the opportunity to correct the complaints and to provide the proof of payments requested. No new notice for the resumption of the continued hearing need be given.

When the drainage authority is satisfied that the work is complete and that all complaints have been dealt with, and everyone entitled has been paid, the drainage authority may order payment of the balance due the contractor. If there is a question about whether liquidated damages are due, the drainage authority may waive them; if not waived, the drainage authority may deduct them. In any case, an order should be made by the drainage authority directing the auditor to pay the balance due on the contract, after accepting the project as having been performed in accordance with specifications.

After the drainage authority makes its final acceptance order, the engineer has one more responsibility. The engineer is to revise the plan, profiles, and design of structures to show the drainage project as actually constructed on the original tracings. Such revised engineer's final report is to be filed with the presiding auditor. The auditor is required to forward a copy of the revised engineer's final report to the director, Division of Waters, DNR.³⁷

The legal effect of final acceptance is discharge of the contractor and the performance bond. That is, no one will successfully be able to make a claim against the performance bond of the contractor after the contractor has been discharged, except in those instances where the contractor has been required to guarantee the tile work for three years. In such case, any claim against the bond would be limited to failure of the tile work due to the fault or negligence of the contractor.

The same can probably be said about the engineer's bond. The bond is conditioned on the payment of "any person or the drainage authority for damages and injuries resulting from negligence of the engineer while the engineer is acting in the proceedings or construction and . . . that the engineer will diligently and honestly perform the engineer's duties." It would seem that once the project has been accepted, the engineer is no longer acting in the proceedings or construction. The engineer's job is complete and the bond is discharged. There are no reported cases on the subject, but a plain reading of the statute compels that conclusion.³⁸

Endnotes

1. M.S. § 103E.505, Subd. 1.
2. M.S. §§ 375.21 and 471.345. § 375.21, Subd. 1, provides, in relevant part, "When required by the dollar limitations of M.S. § 471.345, a contract for work or labor... shall be made by the county board only after advertising for bids or proposals in a qualified newspaper of the county. (Emphasis added).
3. M.S. § 103E.705, Subd.5.
4. M.S. § 375.21, Subd. 1.
5. M.S. § 103E.505, Subd. 3.
6. M.S. § 471.345, Subd. 1.
7. M.S. § 103D.811, Subd. 2.
8. M.S. § 103E.505, Subd. 5.
9. **Kelling v. Edwards**, 116 Minn. 491, 134 N.W.2d 221 (1912).
10. **Kelling v. Edwards**, supra.
11. **Den Mar Construction Co. v. American Insurance Co.**, 290 N.W.2d 737 (1979).
12. M.S. § 103E.505, Subd. 4
13. M.S. § 103E.505, Subd. 3(5).
14. The procedures are similar whether it is a county, joint county or watershed district project. See M.S. §§ 103E.511 and 103D.801.
15. M.S. § 103E.505, Subd. 3(2).
16. M.S. § 103E.505, Subd. 6.
17. M.S. § 103E.511, Subd. 5(f).
18. M.S. § 606.01.
19. M.S. § 514.011, Subd. 1.
20. M.S. § 103E.501, Subd. 3.
21. Citation forthcoming.

22. **Grams v. Murphy**, 103 Minn. 219, 114 N.W. 753 (1908). Apparently, this is still good law since this case has never been overturned.

23. M.S. § 103E.501, Subd. 4.

24. M.S. § 103E.501, Subd. 2.

25. While M.S. § 103E.121 imposes on the director certain duties respecting quality assurance of drain tile made and sold in Minnesota, the mandate is currently ignored.

26. M.S. § 103E.551.

27. M.S. § 103E.551, Subd. 2.

28. M.S. § 103E.551, Subd. 2.

29. M.S. § 103E.525, Subd. 2.

30. M.S. § 103E.531, Subd. 3.

31. M.S. § 103E.535.

32. M.S. § 103E.541.

33. M.S. § 103E.545.

34. M.S. § 103E.555.

35. The total increase in costs may not exceed 10% of the original contract price; benefits may not exceed the sum of construction costs and damages. M.S. § 103E.501, Subd. 4.

36. **Grams v. Murphy**, 103 Minn. 219, 114 N.W. 753 (1908). Aggrieved landowners suit against bond is limited to damages resulting directly from contractor's failure to complete the contract. Landowners may not recover for loss of use of land attributable only to delay in completion of the contract.

37. M.S. § 103E.295.

38. M.S. § 106A.241, Subd. 2.

VIII. APPEALS AND OTHER LITIGATION

A. General

Drainage proceedings are administrative proceedings. The drainage authority sits in a quasi-judicial capacity. It receives evidence, draws conclusions therefrom, and makes orders. Everything the drainage authority does is reviewable by the state district courts. There may be instances where the activities of a drainage authority conflict with those of a federal agency. In such case, the matter may find its way into the United States District Courts.¹ Even the failure of a drainage authority to act is reviewable by the state district courts.

The purpose of this chapter will be to discuss the types of judicial proceedings available to review certain grievances, the standards of review applicable, and to a limited extent, the procedures involved.

B. Appeals from Orders

1. **Dismissing.** In the continuum of a drainage proceeding, there are just two points at which a drainage authority may, on its own volition, dismiss a petition for a project. The first is at the preliminary hearing level. At that level, an order for dismissal is appealable; an order for a detailed survey is not.² If a public drainage project is going to fail because of its impracticality or because it is environmentally suspect, it should fail at the preliminary hearing level, before viewers are appointed and before the detailed survey is completed. The drainage authority, if in doubt, may continue the preliminary hearing, and order the engineer to gather more information bearing on the questionable aspects of the project. At the reconvened hearing, the engineer's preliminary report and the commissioner's preliminary advisory report should provide sufficient factual basis to proceed or to dismiss. An order for dismissal, as any other order, must be based upon reliable, documentable facts, which are set forth in the findings of the drainage authority, and which support its order dismissing.

The other point at which the drainage authority may dismiss a petition is at the final hearing. The most common ground for dismissal at the final hearing stage is the failure of the benefits found by the viewers to exceed the total of the damages and costs. The lack of public benefit and utility and the failure to meet the environmental and land use criteria of M.S. § 103E.015 are also grounds for dismissal.³ The grounds for dismissal at the final hearing are so broad that, if a drainage authority is not satisfied that the establishment of the project will be in the public interest, almost always sufficient factual bases can be developed to justify dismissal. An order dismissing at the final hearing is appealable (as is an order establishing).

2. Voluntary Dismissal. A petition may also be dismissed by voluntary action of the petitioners.⁴ Voluntary dismissal by petitioners, while seeming to be simple on its face, can be problematic. It is discussed here because a voluntary dismissal is judicially reviewable.

Theoretically, dismissal under M.S. § 103E.231 may occur at any time prior to the establishment of the project by an action of a majority of the petitioners who own at least 60 percent of the area owned by all of the petitioners as described in the petition.⁵ The problem is not in determining whether the dismissed petition contains a majority of the petitioners for the project. It is in determining whether they own at least 60% of the area owned by all of the petitioners described in the project petition. If the petition is an old one (pre-1987), the petition probably does not describe any land in the petition. In a post-1987 proceeding, the petition should describe the 40-acre tracts and government lots traversed. Query: Does the statute mean that the petitioners who signed the dismissal petition own at least 60% of the acres encompassed by the 40's and government lots traversed - or is it 60% of the land proposed to be drained as described in the petition (if it is so described)? There are no court cases on the subject. The statute is hopelessly vague. One can only be fairly sure that the statutory test is met when all of the original petitioners for the project sign the petition for dismissal. Even then, because of deaths and intervening changes in ownership, one cannot be sure that the statutory standards for dismissal are met.

Another problem with voluntary dismissal is this: the statute calls for payment of costs before the dismissal becomes effective. Petitioners for the project who are not in favor of dismissal are not likely to voluntarily pay their portion of the costs. If the costs do not get paid first, then the petition may not be dismissed. It is a "catch 22" situation. If the drainage authority makes an order dismissing, based upon the petition for dismissal signed by less than all the original petitioners for the project, it would seem that such a petition would be vulnerable upon review. This kind of dismissal order is not appealable, but it is reviewable by certiorari discussed in greater detail below. It is recommended that M.S. § 103E.231 never be used unless all of the original petitioners are still alive, still own the land used to establish jurisdiction, and they sign the dismissal petition. Everything said above about dismissal petitions applies, likewise, to petitions for delay under Subd. 2. of this same section.

3. Establishing. The order establishing, which comes out of the final hearing, is appealable by a statutory appeal from an order under M.S. § 103E.095. It is the only affirmative order in the entire process that is appealable.

4. Refusing to Establish. M.S. § 103E.095 says that "A party may appeal an order . . . (which) refuses to establish a drainage

project. . . ." There is, in fact, no statutory provision for such an order. At the preliminary hearing, the drainage authority must either dismiss or order a detailed survey. At the final hearing, the drainage authority must either dismiss or make an order establishing.⁶ However, if the drainage authority makes an order refusing to establish (probably an illegal order), it is appealable.⁷ What if the drainage authority does nothing at all? In that case, there is no order from which to appeal. The drainage authority's inaction would, nonetheless, be reviewable by an action for a Mandamus or Certiorari in the state district court.

5. Redetermination of Benefits. An order redetermining the benefits on a system is regarded, for purposes of appeal, as a final order, and is appealable under M.S. § 103E.095.⁸

6. Post-Establishment Modification. What is contemplated here is the situation in which the lowest bid came in at more than 30% above the engineer's estimated costs. The drainage authority may, on petition of an interested landowner, reopen the order establishing, to have the engineer's detailed report and the viewers' report reconsidered. A hearing is held. The drainage authority makes an order. Presumably, the drainage authority either rejects the petition and refuses to reopen, or it grants the relief asked for in the petition, reopens, and orders the viewers' report and the engineer's final report reconsidered. The latter may call for modification of plans and specifications to reduce the cost of the project.

Then, upon resubmission of the reports by the viewers and by the engineer, the drainage authority makes a new order. If now the project can be done because one or more bids does not exceed the revised engineer's estimate by more than 30%, a new order establishing is made. The statute (M.S. § 103E.511) simply says that a party may appeal under M.S. § 103E.091, which is an appeal from benefits and damages. If the viewers' report was adjusted, perhaps that is appropriate. What about an appeal from the amended establishment order? Perhaps the regular statutory appeal (M.S. § 103E.095) would work. There is precedent for the use of certiorari to review such an order.⁹

It is recommended that a drainage authority never use M.S. § 103E.511 to jerry-rig the project to fit the bids. The preferred procedure is to reject all bids, reopen the establishment order to make adjustment in the project to cut costs, review for changes in benefits and damages caused by the modifications, and readvertise. If still no bids are received within the 30% excess limit, the order establishing should be rescinded and the petition dismissed.

7. Assessment Order. In a Repair proceeding, if the engineer determines that land drains into the system which has not been assessed therefor, the engineer reports this to the drainage authority. The drainage authority then notifies the property

owners whose lands are alleged to be draining into the system without having been assessed therefor. A hearing is held. The function of the hearing is evidently just to allow the landowners to confirm or deny that their property drains into the system in question. If the drainage authority is not convinced that the newly identified landowners do not receive benefits, viewers are appointed. The viewers report to the drainage authority and another hearing is held. Following that hearing, the drainage authority makes an order identifying the property and determining the amount of benefits allocable to that land from the original construction of the system. It is from that order that a landowner may appeal. It is an appeal from an order determining benefits and damages under M.S. § 103E.091, not an appeal from an order dismissing or establishing under M.S. § 103E.095.

Appeals from orders are tried to the court (judge), not to a jury. The trial judge examines the record to determine the legality of the order, and may receive new evidence in court to supplement information otherwise available. If there is no transcript of the proceedings at the various hearings, the record consists of the auditor's or secretary's file. The findings made by the drainage authority are given special credence. They are deemed to be correct unless the court can find that the order appealed from was arbitrary, unlawful, or is not supported by the evidence.

8. Who Represents the Drainage Authority? The petitioners' attorney represents the respondents (petitioners) if an order establishing is appealed. Appellants will have to hire their own attorney at their own expense. There are no provisions for reimbursing appellants from the drainage account or from any other source, whether they win or lose. Respondents, on the other hand, can charge attorney's fees to the project. The drainage authority, being a quasi-judicial body, must never take an advocate's role in a statutory appeal. Legal counsel for the drainage authority is similarly constrained.

Having said that, it must be pointed out that in the case of an appeal from a dismissal, the petitioners' attorney will represent appellants and the drainage authority's legal counsel represents the drainage authority -- unless the drainage authority's attorney can persuade one or more attorneys for the opponents of the project to defend the appeal. The drainage authority is a nominal party. If appellants succeed in overturning the order for dismissal, they can charge the attorney's fees to the project. Opponents represented by private counsel will have to pay their own attorney's fees, whether they win or lose. The role of the drainage authority's attorney at all times is to make the drainage authority look reasonable.

C. Appeals from Benefits and Damages Determinations

In an appeal from an order determining benefits, damages, or fees and expenses allowed, the aggrieved party may appeal by statutory appeal governed by M.S. § 103E.091. The appeal notice must be filed in the auditor's or secretary's office where the order is filed, within 30 days after the filing of the order.

In the case of an appeal from an order determining benefits, damages, fees and expenses, a jury trial is allowed.¹⁰ Where there is more than one appeal pending in the same proceeding, the cases may be consolidated for trial. The trial may, at the request of the person appealing, be held in the district court in the county where the affected land is located, even though the order appealed from is filed in the office of the auditor of another county or with the secretary of a watershed district. The court administrator of the district court where the appeal is first filed shall transfer the papers and documents on file in that court administrator's office to the court administrator where the trial is to be held.

After a determination on appeal, the court administrator of the district court that tried the case certifies the order or verdict to the court administrator of the district court in the county where the drainage proceedings were filed.

An appeal involving benefits, damages, and expenses is to be given precedence over all other civil court matters except an appeal from an order establishing.¹¹ If the person appealing loses the appeal, the court may order the person appealing to pay all costs of the trial. Costs do not include attorney's fees.

The court administrator of the district court where the appeal is filed must file a certified copy of the final determination of the appeal with the auditor of the affected counties or with the secretary of the watershed district. Such judicial determination stands in the place thereafter of the original determination made by the drainage authority. If, after all appeals have been determined, the benefits do not exceed damages and costs, the project cannot go forward, and the drainage authority may be obliged to rescind its establishment order and to dismiss the petition.

The trials on benefits and damages are de novo, meaning that evidence bearing upon the issues is presented in the district court. The case is not reviewed on the record made in the drainage proceedings. There is no record other than the findings. Benefits and damages are determined as of the establishment order. The landowner has the burden of showing that the viewers' report and assessment are incorrect. Absent evidence to the contrary, the viewers' report and assessment will be presumed correct.¹²

In an appeal from benefits, damages, fees and expenses, the petitioners' attorney functions as a respondent's attorney to support and advocate the determination of the viewers as adopted by the drainage authority. In so doing, the petitioners' attorney nominally represents the drainage authority. This puts the petitioners' attorney in a conflict of interest position. One or more of the appellants may be petitioners. In such case, the petitioners' attorney may have to take a position which is adverse to persons who were clients as petitioners. Appellants will have to hire their own attorney at their own expense. There is no provision for reimbursement from the drainage fund whether they win or lose.

The respondent's attorney (a.k.a. petitioners' attorney) will bill the project for fees in defending the appeals. The petitioners' attorney always gets paid. The attorney for the drainage authority does not get involved in this type of appeal.

D. Other Litigation

1. **Injunctions.** An injunction may be sought in the district court to stop the drainage authority from doing something that is claimed to be unlawful. For example, an injunctive proceeding could be used to restrain the use of an existing system as an outlet for another private or public system. There is no statutory review provided for an order of the drainage authority permitting such use. An owner of lands benefitted by the receiving system would have standing to have the matter reviewed by commencing an action in the district court for an injunction - a court order restraining the proponents from executing their plan. In such case, the persons seeking an injunction would hire their own counsel. The proponents of the use of the outlet may already have an attorney if the outletting system is a public one. In such case, the attorney for the drainage authority does not get directly involved. In one case, discontented landowners sought by injunction to restrain the collection of assessments after the ditch had been established. This was an action against a county. The Minnesota Supreme Court held that a drainage proceeding could not be attacked in that manner. In such case, the attorney for the drainage authority was involved in defending the county.¹³

2. **Mandamus.** The purpose of an action for mandamus is to require a lower tribunal, board, or official to act in a matter in which it has no discretion. Where the statute requires the drainage authority to take certain action, a writ of mandamus (i.e., a court order) can be obtained from the district court requiring the drainage authority to act. If, for example, a drainage authority has failed to maintain a public drainage system, the landowners have an absolute right to require the drainage authority to act. In such case, they may commence an action against the drainage authority. Such an action takes the form of a lawsuit in the state district court. The merits of the proceeding are usually

determined on motion early in the proceedings. If the case is tried on its merits, it is tried to the court and not to a jury. The attorney for the drainage authority would be required to defend the drainage authority.

3. **Certiorari.** There are numerous decisions made by the drainage authority for which there is no statutory appeal provided. Any decision made which is not otherwise reviewable by a statutory appeal may be reviewed upon an action for certiorari.¹⁴

Administrative decisions may be reviewed by certiorari as a matter of right. The case, if it is tried on its merits, is tried to the judge and not to a jury. The attorney for the drainage authority in such case will defend the drainage authority. Since most decisions of the drainage authority can be reviewed upon statutory appeal, the use of certiorari is now quite limited.¹⁵

Certiorari could be used in an instance where the drainage authority, pursuant to a voluntary petition to dismiss under M.S. § 103E.231, dismissed (or refused to dismiss) a petition. There is no statutory appeal from such action or inaction. By the use of a writ of certiorari, the aggrieved landowner(s) could have the drainage authority's recognition or nonrecognition of the voluntary dismissal petition reviewed. Certiorari may be used to review only final determinations of rights, and not anticipated wrongs.¹⁶ The plaintiff must put up a bond for costs.¹⁷

The scope of review by certiorari is more limited than in a statutory appeal. Review by certiorari is not de novo. The court can only reverse an erroneous decision of the drainage authority and remand it for purposes of proceeding under correct theory. Findings of fact may be interfered with only if they are arbitrary, capricious, or unreasonable.¹⁸ Questions of law appearing on the face of the record only may be reviewed.¹⁹

4. **Criminal.** The drainage code has one section in it calling for criminal penalties for certain acts. These would be misdemeanors and would include such things as the unauthorized use of a public system as an outlet, the intentional obstruction of a drainage system, or the altering of engineer's markings or stakes.²⁰ A misdemeanor calls for a maximum penalty of a \$700 fine and/or 90 days in the county jail. Only the most aggravated of situations should be prosecuted as crimes. The unauthorized use of an outlet may be dealt with in several ways within the drainage code without resorting to criminal action. The obstruction of a drainage system or the altering of engineer's markings or stakes is another matter. If malicious intent can be shown, vis-a-vis accidental or negligent conduct, such actions are readily prosecutable and should be prosecuted. The county attorney, acting in a prosecutorial capacity, should prosecute the case. In so doing, the county attorney officially represents the state of Minnesota. The

drainage authority is, in effect, the victim and, in that sense, the county attorney also represents the drainage authority.

Endnotes

1. See, for example, a case involving the U.S. Army Corps of Engineers. **Minnesota v. Hoffman**, 543 F.2d 1198 (8th Cir. 1976).
2. Appeals from orders are governed by M.S. § 103E.095.
3. M.S. § 103E.341.
4. M.S. § 103E.231.
5. M.S. § 103E.231.
6. M.S. § 103E.095.
7. M.S. § 103E.095.
8. M.S. § 103E.401, Subd. 4. For example, **In the Matter of Douglas County Joint County Ditch No. 4**, 419 N.W.2d 639 (Minn.App. 1988).
9. **Hagen v. County of Martin**, 91 N.W.2d 657 (1958).
10. M.S. § 103E.095, Subd. 4(a).
11. M.S. § 103E.015, Subd. 3.
12. **Kenney v. Nelson**, 116 Minn. 424, 133 N.W. 1010 (1912); **In the Matter of Branch A-38 of Joint Ditch No. 204, Martin and Faribault Counties**, 406 N.W.2d 524 (1987).
13. **Larson v. Freeborn County**, 267 Minn. 383, 121 N.W.2d 771 (1964).
14. M.S. § 606.06.
15. **Aastad v. Board of County Commissioners of Chippewa County**, 260 Minn. 357, 110 N.W.2d 19 (1961); **Webb v. Lukas**, 125 Minn. 403, 147 N.W. 273 (1914).
16. **Molski v. Martin County**, 248 Minn. 503, 80 N.W.2d 637 (1957).
17. M.S. § 606.03.
18. **Ellerbrock v. Board of Education**, 269 N.W.2d 858 (1978).
19. **Ellerbrock**, supra.
20. M.S. § 103E.081.

IX. FUNDING, COLLECTION, AND PAYMENT OF DRAINAGE SYSTEM COSTS

A. General

Each drainage system is an entity unto itself. Each project, except a Repair, is an entity unto itself until payment has been made for it. Each project becomes part of the system it is tributary to or it improves. Sometimes arbitrary judgments of allocation of costs, interest earned, and Repair funds levied will have to be made. Ideally, there should be two accounts for each project. Some counties have several hundred drainage systems (i.e., New Systems, Improvements, and Laterals) and the bookkeeping is myriad.

Projects can cost hundreds of thousands of dollars. Drainage authorities find themselves in the world of high finance. This section will discuss the funding and accounting mechanisms of public drainage.

B. Definitions

- **Drainage Bonds.** County general obligation bonds (pledging the full faith and credit of the county) are issued to pay the cost of establishing and constructing the drainage project. The term of the bonds is not to exceed 23 years, payable annually or semiannually.¹
- **Temporary drainage bonds.** County general obligation bonds, maturing in two years or less, may be paid at any time before maturity. They are issued to finance ongoing construction activity where there is insufficient funds on hand to pay ongoing obligations, pending issuance of the drainage bonds.²
- **Definitive drainage bonds.** County general obligation bonds issued for the specific purpose of replacing temporary drainage bonds, numbered, and maturing serially at times and in amounts to allow the principal and interest to be paid when due by collection of assessments levied for drainage systems financed by the temporary bond issue.³
- **Drainage funding bonds.** General obligation bonds issued for the specific purpose of covering a shortfall of funds in a drainage purpose system account or common drainage redemption fund to meet current principal and interest obligations and those due within one year.⁴
- **Drainage system account (sometimes called ditch special revenue fund).** A separate set of accounts kept by the auditor for each drainage system. Each project, except Repairs, has its own set of drainage system accounts

recording cash, special assessments, receivables (current and deferred), liabilities, deferred revenue and fund balance as well as other operating statement accounts recording revenues, expenditures, and other financing and uses. Payments from the drainage system's special revenue fund include all costs of establishment and construction. Deposits in this account include all money from the sale of bonds and bond premiums and all funds received from liens, interest, assessments, and other sources.⁵

- **Drainage system Repair fund.** A separate account maintained by some auditors for each system that segregates assessments made for Repairs and from which Repair expenses are paid. The state auditor's office encourages the practice. There are statutory limits to the amount of money that may be in the Repair fund.⁶

C. Drainage Lien Statement

1. The Establishment Order. Paying for the drainage project begins with the final order. The final order does more than just establish the system. Properly drafted, the order should do at least three or four additional things:

- Determine the length of time (number of annual installments) in which the assessment may be paid. There are some statutory limitations. No bond may be issued payable over more than 23 years.⁷
- State the interest rate to be borne by the lien. It may not exceed the rate set by the state court administrator for judgments (see M.S. § 103E.611, Subd. 2). If drainage bonds are to be issued to finance the construction, interest must be established at a rate which does not exceed the bond sale rate plus one percent (see M.S. § 475.55). The two statutory limitations could be in conflict in some economic circumstances. For example, suppose the bonds cannot be sold at the annually adjusted rate established by the state court administrator. Legally, the bonds could not be issued.
- Adopt the viewers' report and the assessment of benefits and damages therein stated. The viewers' report thus adopted determines the property liability for the costs and expenses of establishing and constructing the project.
- Fix the share of the cost of establishment and construction to be borne by each respective county if the project is a joint county one.

The auditor prepares the drainage lien statement after the project bids are let and the costs of same are known. The amount of the costs assessable to each tract must be in direct proportion to the amount of benefits allocated to that tract by the viewers. The costs so assessed may not exceed the benefits allocated. The auditor's tabular lien statement, and any supplemental lien statements, must be recorded in the office of the county recorder. See an example of an auditor's tabular lien statement in Appendix 2Q of this chapter. The county recorder then records to each tract in the tract indexes in the county recorder's office the assessment levied against each parcel. The recording of the drainage assessment is notice to all the world that the county has a claim against the property. When a Redetermination of Benefits is established, it is recommended that the drainage authority's order and tabular statement that gives the owner's name, legal description, redetermined benefits, and redetermined damages be recorded in the county recorder's office and there tracted to each parcel affected. Recording will give the public notice of the potential for a drainage assessment on newly included property.

2. Nature of Drainage Lien. The drainage lien is a first and paramount lien, superior over all mortgages, charges, and encumbrances, regardless of time of filing.⁸ It has the priority status of real estate taxes. Drainage liens against the property are payable to the treasurer of the county in 20 or less equal annual installments. The first installment is due on or before November 1st after the drainage lien statement is recorded, and each subsequent installment is due on or before November 1st of each year afterward until the principal is entirely paid.⁹ Drainage liens may be prepaid.

Interest is calculated from the date the drainage lien was recorded until August 15th next, and after that, from year to year, ending August 15th. Interest is due and payable after November 1st of each year.¹⁰

Public lands and entities pay drainage assessments too. Municipalities pay through their own tax revenues. If a municipality fails to pay, the county may assess all of the various parcels of property within the municipality that are liable to its taxation.¹¹

County state aid roads, state trunk highways, state property, and railroad and utility property all pay assessments. The state appropriates funds annually to pay for drainage assessments. Assessments on wildlife lands are paid from the state's Game and Fish Fund.¹²

When a lien is satisfied, as typically it is when property is sold, the auditor may issue an individual ditch release to be recorded in the county recorder's office. The auditor will charge for this

service. All drainage liens that are not so released are released in a blanket ditch release when the lien has run its course.

3. Apportionment of Liens. Dozens of times each year every auditor is faced with having to apportion liens among parcels when a tract or tracts of land are subdivided. The statutes provide a procedure which involves notice to all affected parties and that a hearing be held.¹³ The procedure contemplates a petitioner asking to have a lien apportioned or allocated among the respective parcels. The flaw in the statute is that no one wants to be the petitioner. This leaves the auditor in a difficult situation. The auditor must make an allocation of liens to the respective tax statements of the subdivided property. Without a petition, the auditor has no authority to initiate the apportionment.

On the assumption that anything can be done when the affected parties agree to it, a non-statutory procedure has come into use that is much more effective and efficient than that contemplated by statute. The auditor, observing the need to allocate a drainage lien, prepares an agreement wherein the auditor proposes an allocation. The agreement is mailed to the owners of all parcels involved along with the auditor's cover letter explaining the need to allocate the lien and the proposed allocation. Usually the parties will sign the agreement. An example of such an apportionment agreement is provided in Appendix 2R of this chapter.

4. Apportionment Among Counties. For joint county proceedings, the drainage authority must determine (and order) the percentage of the cost of the drainage project to be paid by each affected county. The cost is to be apportioned in accordance with the benefits received, unless the drainage authority adopts some other preferred method. The apportionment among counties should be determined in the final order. If the drainage authority fails to do so, an auditor of an affected county may petition the drainage authority for such a determination. Thereafter, the cost of establishment and construction of the project and all Repair costs are to be apportioned in accordance with the apportionment order. There is no appeal from such a determination. However, the matter may be reopened at any time by the drainage authority, when it is deemed necessary to modify the order, as for example, when additional lands have been brought into the system by a Redetermination of Benefits or otherwise.¹⁴

5. Drainage Bond Issues. The drainage code mentions four different kinds of bonds (debt instruments) that may be issued by the county to pay for the cost of establishment and construction of a project. First of all, it should be said that not every project requires the sale of bonds. The drainage system account may have enough funds in it to pay for the project. Failing that, the drainage system account may borrow excess funds from other drainage system accounts or from county general revenue.¹⁵ The state auditor's office takes the position that all loans to and from one

drainage system account to another should be run through the general fund. Interest on such borrowed funds is computed at the rate of 7% per year for the time the money is actually needed and is paid from the assessments of the drainage systems or from the later sale of drainage funding bonds.¹⁶

All drainage bonds are of the general obligation variety. That means that the full faith and credit of the drainage authority is pledged in support of payment of interest and principal coming due on the bonds. The drainage authority, through the county, in effect, uses its taxing authority to assure bondholders.

The drainage code speaks in terms of four different varieties of bonds:

- Temporary drainage bonds are used to finance ongoing construction when the project takes more than a year to complete. The bonds have a two year maturity or less and may be called at any time without a premium. That is, the county could sell the regular "permanent" drainage bonds and pay off the temporary bonds (the county could replace the temporary bonds with definitive drainage bonds).
- Definitive drainage bonds are issued solely for the purpose of replacing the temporary bonds. The only difference between a definitive drainage bond and a regular drainage bond (hereinafter discussed) is that the definitive bond is designed to replace a numerically corresponding temporary drainage bond.
- Drainage bonds are the "garden variety" permanent general obligation bond used to pay the cost of establishing and constructing the project when temporary drainage bonds were not used.
- Drainage funding bonds are used to cover a cash flow shortfall in one or more systems. They should, by their nature, be of relatively short term, and no more than two to five years in maturity. A stacking of drainage funding bonds of longer maturity could indicate serious problems in the auditor's drainage system accounts.

Bonds are paid by the assessments against the property benefitted in a drainage system. The terms of the permanent bonds should be calculated so as to correspond to the cash flow generated by the assessments. While practices vary, the permanent drainage bonds are usually callable on notice. That means that the county can pay them off early, sometimes by issuing another bond issue when interest rates have become more favorable.

The drainage authority should have a bonding consultant to assist in the bonding process. Quite often, small projects can be combined into a single drainage bond issue.¹⁷ The technical aspects of arranging the bond sale are handled by the bond consultant. The bond consultant works closely with the county auditors who provide the financial information that goes into the prospectus accompanying the bond sale. The bond consultant solicits bids from investment bankers whom the consultant knows will be interested in marketing this type of issue.

At the letting, the bond consultant helps the drainage authority to decide which bid is the most favorable to the drainage authority. The successful bidder then buys the entire issue and markets it to the public at retail. There is a significant demand for county general obligation bonds at all times because of their relative safety and because they are exempt from federal and state income tax.

The bond consultant arranges for bond counsel. The bond counsel issues the legal opinion that renders the bonds salable.

D. Accounting

1. Auditor's Duties. The county auditor is the keeper of the financial records. The auditor is charged by statute to keep a separate set of accounts for each drainage system. Each drainage system is regarded as a separate entity for accounting purposes, with a full set of financial accounts. The proceeds of the sale of bonds and all interest, lien payments, assessments, and other sources of proceeds (such as outlet charges, liquidated damages, and bond forfeitures) are deposited in the drainage system cash account and entered in its expenditure accounts. All expenses of establishment and construction of the system or project are paid from that drainage system account.

There is statutory authority for the maintenance of yet another account for each system called a drainage system Repair fund.¹⁸ The purpose of the drainage system Repair fund is to segregate funds that are levied for Repairs from other funds accumulated in the drainage system account. The state auditor encourages the use of drainage system Repair funds. There are limits on the amount of money that may be maintained in the funds. A drainage system may consist of a number of projects. Repairs are charged to the entire system. Repair assessments levied against the entire system should not be maintained in one of the project drainage system accounts or even in the original (the first established project) drainage system account. Such funds are more appropriately maintained in a separate account. It is recommended that county auditors routinely maintain drainage system Repair funds in accordance with M.S. § 103E.735. The financial statements for drainage systems are required to be included in the county's comprehensive financial statements which are published annually.

2. Maintenance Levies and Liens. Once a year the auditor should prepare a financial report showing the financial condition of all drainage system accounts and, if applicable, drainage system Repair funds. The report should be presented at an annual drainage system maintenance levy hearing. Notice of the hearing should be published as a legal notice.

At the hearing, each system should be considered as to whether or not any Repair work is anticipated in the next 18 months. The auditor should have prepared a minimum levy recommendation which would bring all the systems into a positive fund balance condition. If this practice is scrupulously followed, the accounts may be maintained in a positive condition by annual assessments. One year assessments do not have to be recorded as liens, thereby eliminating a great deal of work and avoiding the extra entries on the real estate records in the county recorder's office.

When a lien is required, the principal amount of future levies should be entered in that drainage system's account called "special assessments receivable - deferred," and also in the "deferred revenue" account. As each year's levy is added to the tax roles, these two accounts are reduced by the amount of principal. A lien is recorded and a copy placed in the ditch lien record. After all the parcels have paid in full, a blanket ditch lien release is prepared and recorded.

An annual review of drainage system accounts should be done in late summer, probably in August of each year. A ditch maintenance levy hearing should be convened with notice by publication. The county board will have sufficient time to set the maintenance levies for the following tax year. The auditor should prepare a report for the county board showing the financial condition of all ditches. The ditch inspector should be consulted prior to the hearing and should be present at the hearing (authority for such an annual hearing is found at M.S. §§ 103E.705 and 103E.735).

The auditor should then present a report at the hearing. Each ditch should be considered to determine if any Repair work is anticipated in the following 18 months. The auditor should, then, make a minimum levy recommendation, sufficient to bring all drainage systems into a positive fund balance condition. If this practice is scrupulously followed, one year assessments can be made, thereby avoiding the extra paperwork involved in multi-year assessments involving ditch liens.

The ditch inspector for each ditch should make a recommendation for assessments to maintain a balance in each ditch account and to pay for anticipated Repairs. In the event that such assessment levy is collectible for more than one year, a lien must be made up and recorded in the office of the county recorder. Recording liens causes extra work for both offices. Therefore, a one year assessment is favored.

3. Investment of Excess Funds. It is recommended that whenever it is anticipated that a given drainage system will have cash on hand of \$1,000 or more for a period of 90 days, the funds shall be invested in interest bearing deposits on behalf of the drainage system. Funds should be invested for a period not longer than 91 days to maintain liquidity. At the end of each 91 day investment, the interest earned should be credited to each drainage system account for which funds were invested.

4. Loans. If a drainage system account becomes insolvent, the drainage authority may borrow funds from any other drainage system account under its jurisdiction, or from the county general revenue fund (a watershed district may loan funds from its administrative funds). Borrowing from one drainage account to fund another is rarely done in practice. Interest on the loan is computed for the time that the money is actually needed and at the rate per year charged on drainage liens and assessments - presumably on the most current assessment on the insolvent system.¹⁹ Another provision, M.S. § 103E.635, Subd. 11, allows the drainage authority to use funds from county revenue to make payments on drainage bonds. In such case, the interest is computed at the rate of 7% for the time the money is actually used. There seems to be a conflict in the rate of interest to be used. The county may evidently take its choice.

When a drainage system is insolvent to the extent of \$1,000, the county board, in the case of a county drainage system, or one of the county boards in the case of a joint county drainage system, should make a loan to the fund. The county auditor does not have authority to make such a loan. It is the county auditor's duty to call attention to the need for a loan. It is recommended that such loans be reviewed at least two times per year shortly after May 15th and November 15th when tax payments are received. At those times, loans should be repaid, if possible. Again, a computer spreadsheet should be printed to show the loan balances for the assistance of the state auditor. In August of each year when assessments are set at a public hearing for the following year, sufficient assessments should be levied to pay off all loans and to build up a Repair fund.

E. Funding of Watershed District and Projects

1. Assessments and Levies. Watershed districts do not have the power to tax. Watershed districts are dependent upon the county's power to levy assessments on the real property of the county. Also, watershed districts do not have the power to issue bonds to pay for drainage projects. Except for contractual participation by state and federal governments, all funds available to a watershed district are levied and collected by the respective county boards.²⁰

Even administrative expenses of watershed districts are levied by the counties, upon certification of need being provided to the county auditor(s). County levies of **ad valorem** assessments for administration of watershed districts are not subject to the levy limitations under which counties labor.²¹

2. Accounting. The board of managers of a watershed district is required to maintain several separate funds for district purposes:

- **Organizational expense fund.** The counties may levy a one-time levy of 0.01596 percent of taxable market value of property within the watershed district for organizational expense and preparation of a watershed management plan.²² The fund may not exceed \$60,000.
- **Administrative fund.** This is an **ad valorem** levy not exceeding 0.02418 percent of taxable market value, or \$125,000, whichever is less, to be used for general administrative expense.²³
- **Bond fund.** A watershed district may issue bonds, secured by property owned by it, proceeds to be used to buy more property. These funds are not available for drainage projects per se, but may be involved in water management.²⁴
- **Construction fund.** This fund is the equivalent of the **drainage system account** in the drainage code.²⁵ Each system and each project (except Repairs) must have one.
- **Preliminary fund.** Funds authorized to be used on proposed works of the watershed district. Funds are borrowed from the counties by court order.²⁶
- **Repair and maintenance funds.** Each system is to have a Repair and maintenance fund, funded in the same manner as under the drainage code.²⁷
- **Survey and data acquisition fund.** This fund may be established and used to pay for making necessary surveys and for acquisition of data. Watershed districts may cause a county(ies) to levy up to 0.02418 percent of taxable market value of the watershed district once every five years, and the balance of the fund is not to exceed \$50,000. Survey costs are recoverable as costs when a project is constructed.²⁸

Endnotes

1. M.S. § 103E.635.
2. M.S. § 103E.635.
3. M.S. § 103E.635, Subd. 6.
4. M.S. § 103E.641.
5. M.S. §§ 103E.651 and 103E.655.
6. M.S. § 103E.735.
7. M.S. § 103E.635, Subd. 4(1).
8. M.S. § 103E.605.
9. M.S. § 103E.611, Subd. 1.
10. M.S. § 103E.611, Subd. 2.
11. M.S. § 103E.615, Subd. 1.
12. M.S. § 103E.615, Subd. 6.
13. M.S. § 103E.631.
14. M.S. § 103E.345.
15. M.S. § 103E.655, Subd. 2.
16. M.S. § 103E.635, Subd. 11.
17. M.S. § 103E.635, Subd. 2.
18. M.S. § 103E.735.
19. M.S. § 103E.655, Subd. 2.
20. M.S. § 103D.901.
21. M.S. § 103D.915, Subd. 2.
22. M.S. § 103D.905, Subd. 2.
23. Id., Subd. 3.
24. Id., Subd. 4.
25. Id., Subd. 5, M.S. § 103E.651, Subd. 2.

26. M.S. § 103E.905, Subds. 6 and 921.

27. Id., Subd. 7, M.S. § 103E.731.

28. M.S. § 103D.905, Subd. 8.

APPENDIX 2A

DRAINAGE LAWS UNIQUE TO THE SEVEN-COUNTY METROPOLITAN AREA

Special and general laws have been passed solely to address metropolitan public drainage issues. They are briefly discussed here for the benefit of metropolitan drainage authorities.

Special Laws

Special legislation has been enacted that provides five metropolitan watershed districts authority to levy ad valorem property taxes to establish "water maintenance and Repair" funds. The legislation authorizes the use of these funds for Repair/maintenance work in both natural and artificial watercourses, including public drainage systems. The legislation has made it possible for the following five watershed districts to finance limited system maintenance without the need to levy special assessments:

<u>Watershed District</u>	<u>Legal Citation</u>
Minnehaha Creek	Chapter 187, Laws of 1974
Nine Mile Creek and Riley-Purgatory-Bluff Creek	Chapter 501, Laws of 1980
Ramsey-Washington Metro	Chapter 502, Laws of 1984 (Sec. 3-5)
Coon Creek	Chapter 291, Laws of 1991 (Art. 4, Sec. 18)

General Laws

The Metropolitan Surface Water Management Act (M.S. §§ 103B.201 to 103B.251 - the act) authorizes metropolitan watershed management organizations (WMOs) to accept the transfer of county or joint county drainage systems, and to construct all New Systems and Improvements of existing systems. The act further authorizes WMOs to use the powers of M.S. c. 103E (i.e., the drainage code), 103D (watershed law), or the act itself in carrying out projects on public drainage systems. The act contains procedures for financing projects with ad valorem property taxes. The act does not, however, spell out the steps to be followed in making a transition from 103E to 103D or 103B for the management of a drainage system. It is likely that some WMOs will attempt to make this management transition soon, even without further statutory guidance, to take advantage of the ad valorem financing mechanism in M.S. c. 103B.

A provision of the Watershed Law (M.S. § 103D.621) authorizes metropolitan watershed districts to use the authorities of Chapter 429 (Local Improvements, Special Assessments) to Repair or improve any drainage system transferred from a county to a district, if

they obtain the concurrence of the affected cities and townships. The legislation was intended to streamline drainage proceedings in urban areas, but has seen little, if any, application.

APPENDIX 2B



STATE OF MINNESOTA

DEPARTMENT OF REVENUE

**Mail Station 3340
St. Paul, MN 55146-3340**

December 5, 1988

TO: ALL COUNTY ASSESSORS

RE: VALUATION AND CLASSIFICATION OF ALL CRP AND RIM LANDS

During the past few months we have received a number of inquiries from county assessors questioning how properties enrolled in CRP and RIM programs should be valued. There are two distinctly different types of conservation reserve programs, perpetual and temporary. Lands enrolled in perpetual easements are only found in the RIM program and make up a very small percentage of total enrolled lands. All CRP contracts are temporary easements for 10-year periods.

Perpetual easements are restrictions which permanently attach to the property. Once a perpetual easement is entered into, it becomes an irrevocable covenant on that property and cannot be removed. All RIM easements which are not perpetual are temporary easements. As the name implies, temporary easements are temporary restrictions on the land which run for either 10 or 20 year periods.

VALUATION OF CRP AND RIM LANDS

Because of the various types of farm programs, we are recommending that they be valued differently based upon the type of easement.

TEMPORARY EASEMENTS. Because of the temporary nature of these easements, we are unable to predict what, if any, impact they will have on land values. For the present we are recommending that you maintain the same values on CRP and RIM lands enrolled under temporary easements that you have on similar properties not subject to the easements. As always, the final answer on how these properties should be valued will be evidenced by market activities.

PERPETUAL EASEMENTS. Once a perpetual easement has been entered into, the property is left to revert to its natural state. Because of the permanence of this agreement, we are of the opinion that a valuation adjustment is warranted. Land should always be valued at the highest and best use to which it may be legally put. Because the legal uses of the land have been greatly diminished, we are recommending that you adjust the value of all lands enrolled in a perpetual easement to a value representative of what the land will eventually become when left unattended. In other words, if a property that is presently valued as tillable farm land is enrolled in a perpetual easement that prohibits farming, we are of the opinion that it would be appropriate to change the value of the land to the level of wild lands in their natural state.

County Assessors
December 5, 1988
Page Two

CLASSIFICATION OF CRP AND RIM LANDS

We are recommending that you continue to classify all lands enrolled in CRP and RIM programs as agricultural. It is our opinion that the legislature's intent was to include all lands enrolled in state or federal farm programs within the definition of agricultural land. We will be seeking additional clarification on this issue during the 1989 legislative session.

Because the question of how CRP and RIM lands should be valued is an ongoing one, we are asking for your assistance in making us aware of what is happening in the market. If any sales take place in your county that you feel are representative of CRP and RIM land sales, please mail the information to this office. The information should contain the sale price including financing terms, the number of acres included (both in and out of the CRP or RIM program), recent sales history of the property if it exists and information on the selling price of similar properties. We will also require information on the type of easement that was entered into, terms of payment for that easement, whether the easement is temporary or permanent and what type of restrictions have been placed upon the property.

If you have any additional questions or concerns on the valuation or classification of CRP and RIM lands, please feel free to contact us.

Best regards,



MICHAEL P. WANDMACHER, Director
Local Government Services Division

(612) 642-0477

MPW:JFH:vh



STATE OF MINNESOTA

DEPARTMENT OF REVENUE

Mail Station 3340
St. Paul, Minnesota 55146-3340
(612) 296-0205

September 1, 1991

TO: ALL COUNTY ASSESSORS

RE: VALUATION OF RESTORED AND PRESERVED WETLANDS

Laws 1991, Chapter 354 (the "wetlands bill") (M.S. 273.11, Subd. 1 and 11) contain provisions clarifying valuation procedures for wetlands restored by government or non-profit organizations, or preserved under the terms of easements to the federal, state, or local government. This letter is to advise you of these provisions in detail and to provide guidelines for their implementation in the 1992 assessment.

What properties are covered by the law?

The new law applies to taxable wetlands that have been either:

- 1) Restored (through plugging of tile lines or similar action) by the federal, state, or local government, or by a nonprofit organization, or
- 2) Preserved as wetlands under the terms of a temporary or perpetual easement by the federal or state government (ie, CRP, RIM, Water Bank, Fish and Wildlife Service easement, etc.).

"Wetlands" are defined broadly under this law to include wet meadows, woody swamps, and other wetland types not exempt under section 272.02. Therefore, whether or not the wetland has been either restored by a government or nonprofit agency, or preserved under an easement to the government, should be the deciding factor in determining whether or not the wetland is eligible for valuation under this law.

The provisions of this law apply only to the actual acreage of wetland that has been restored, or to the actual acreage of land protected by easements.

The property owner does not have to apply for valuation under this law, and no special landowner eligibility requirements (ie, homestead status) apply.

How should eligible properties be valued under this law?

Wetlands that meet either the restoration or easement criteria are to be valued at their "wetland value." Wetland value is defined in the law as

... the market value of wetlands in any potential use in which the wetland character is not permanently altered. Wetland value shall not reflect potential uses of the wetland that would violate the terms of any existing conservation easement, or any one-time payment received by the owner under a state or federal conservation easement. Wetland value shall reflect any potential income consistent with a property's wetland character, including but not limited to lease payments for hunting or other recreational uses.

Wetland value in general is the price a property would bring in an arms'- length sale to a buyer intending to maintain the property as a wetland.

Wetland value should reflect any market value influences consistent with a property's permanent wetland character. These may include:

- The value of any available opportunities to lease the wetland for recreational uses such as waterfowl hunting.
- Any value attributable to agricultural uses that do not involve draining, filling, or otherwise permanently altering the wetland, such as haying or grazing when conditions permit.

Wetland value should not reflect any potential uses of the property that would permanently alter its wetland character, such as draining, filling, and/or any other activity that would violate the terms of any existing protective easement on the property.

Wetland value should not reflect the value of any one-time payments made to landowners at the time they enter into easement agreements, such as payments under the state RIM program. These payments are received by the landowner originally entering into the easement agreement and would not increase the property's market value in any subsequent sale.

For wetlands subject to easements that are accompanied by ongoing annual compensation payments that may in some cases be assumed by a subsequent buyer (such as wetlands enrolled in the federal CRP program), wetland value may reflect this income stream to the wetland. However, any value adjustments made on this basis must be


Valuation of Preserved and Restored Wetlands
September 1, 1991
Page 3

well-supported by comparable sales of other enrolled properties and accurately reflect the remaining flow of payments to be received by the particular property.

The law providing for "wetland valuation" of restored and preserved wetlands (M.S. 273.11, subd. 11) is reprinted in full on the attached page.

If you have any additional questions about this law or how it should be implemented, please feel free to contact us.

Very truly yours,



GERALD D. GARSKI, Acting Director
Local Government Services Division

Laws 1991, Chapter 354, Article 10, Section 8:

Minnesota Statutes 1990, section 273.11, is amended by adding a subdivision to read:

Subd. 11. [VALUATION OF RESTORED OR PRESERVED WETLAND.] Wetlands restored by the federal, state, or local government, or by a nonprofit organization, or preserved under the terms of a temporary or perpetual easement by the federal or state government, must be valued by assessors at their wetland value. "Wetland value" in this subdivision means the market value of wetlands in any potential use in which the wetland character is not permanently altered. Wetland value shall not reflect potential uses of the wetland that would violate the terms of any existing conservation easement, or any one-time payment received by the wetland owner under the terms of a state or federal conservation easement. Wetland value shall reflect any potential income consistent with a property's wetland character, including but not limited to lease payments for hunting or other recreational uses. The commissioner of revenue shall issue a bulletin advising assessors of the provisions of this section by October 1, 1991.

For purposes of this subdivision, "wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following attributes:

- (1) have a predominance of hydric soils;
- (2) are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and
- (3) under normal circumstances support a prevalence of such vegetation.

APPENDIX 2C

PROPOSED AUDITOR'S FEE SCHEDULE

Upon a motion by Commissioner _____ and seconded by Commissioner _____, it was moved to adopt the following schedule of fees for services rendered in county and joint county drainage proceedings on new construction and improvement proceedings:

The basis for which the percentages will apply will be on the Total Cost of Construction as reported on the Auditor's Tabular Lien Statement.

1% charge on cost of ditch up to \$50,000

1/2% charge on cost of ditch from \$50,000 to \$200,000

1/4% charge on cost of ditch from \$200,000 and over

The minimum charge for any new construction or improvement proceedings is \$200 and also that the following schedule of county auditor's fees for services rendered in making a Repair Lien, Maintenance Levy, or Redetermination of Benefits for county and joint county drainage systems is hereby fixed as follows:

\$2.00 each for first 100 descriptions

\$1.00 each for 101 to 200

\$.75 each over 200

The chairperson declared the motion _____
upon vote of _____.

APPENDIX 2D

LEGAL REQUIREMENTS FOR EACH TYPE OF PETITION

	<u>NUMBER OR PERCENTAGE OF SIGNATURES</u>	<u>WHERE FILED</u>	<u>BOND REQUIRED</u>
NEW DRAINAGE SYSTEM	a) Majority of landowners of property that drainage system passes over OR b) Property owners owning at least 60% of area proposed system passes over	1) County Auditor (if more than 1 County, Auditor of County with greater area of property that project passes over)	At least \$10,000.00
IMPROVEMENT OF DRAINAGE SYSTEM	a) At least 26% of owners of property affected by proposed improvement OR b) At least 26% of the owners of the property that the proposed improvement passes over OR c) Owners of at least 26% of the property area affected by the proposed improvement OR d) The owners of at least 26% of the property area that the proposed improvement passes over	1) County Auditor (if more than 1 County, Auditor of County with greater area of property that project passes over) 2) Managers of Watershed District if area within Watershed District	At least \$10,000.00
IMPROVEMENT OF OUTLETS	a) By Board of affected County OR b) By at least 26% of owners of adjoining overflowed property OR c) By the owners of at least 26% of area of the overflowed property	1) County Auditor 2) If more than 1 County, Auditor of County with greatest affected area 3) Managers of Watershed District if area within Watershed District	At least \$10,000.00
LATERALS	a) At least 26% of the owners of property OR b) By the owners of at least 26% of the area of the property that the lateral passes over	1) County Auditor OR 2) Auditor of the County with the largest property area to be passed over by the lateral OR 3) Managers of the Watershed District if area within Watershed District	At least \$10,000.00

**IMPOUNDING AND
DIVERSION OF
DRAINAGE SYSTEM
WATERS**

A person, public or municipal corporation, governmental subdivision, state or a department or agency of state, Commissioner of Natural Resources, United States or any of its agencies

Petition to drainage authority

\$10,000.00 except no bond required for petition by State, state agency or department, Commissioner of Natural Resources, the United States or any of its agencies or a municipality

**REDETERMINATION
OF BENEFITS**

a) Drainage authority
OR

b) More than 50% of the owners benefited or damaged by drainage system

Petition to drainage authority

None

**USE OF DRAINAGE
SYSTEM AS OUTLET**

A person

Petition to drainage authority

None

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**REPAIR OF
DRAINAGE SYSTEM
BY PETITION**

a) Individual or any entity interested in or affected by drainage system

1) County Auditor

None

**CONSOLIDATION OR
DIVISION OF
DRAINAGE SYSTEM**

Any person interested in or affected by the drainage system

1) County Auditor

None

2) If system under jurisdiction of Watershed Board filed with Secretary of Board

**ABANDONMENT OF
DRAINAGE SYSTEM**

At least 51% of the property owners assessed for the construction of drainage system of by the owners of not less than 51% of the area of the property assessed for system

Auditor

None

APPENDIX 2E

PETITION FOR A NEW SYSTEM

BEFORE THE DRAINAGE AUTHORITY OF

(Watershed District, County, or Joint County)

FOR THE ESTABLISHMENT OF A NEW DRAINAGE SYSTEM

TO THE _____ (Auditor/Secretary) OF THE
DRAINAGE AUTHORITY.

The Petitioners hereon respectfully represent:

1. That they, collectively, represent a majority of the owners of the property that the proposed drainage project described herein passes over or that they collectively own at least sixty percent of the area of the land over which the proposed drainage project passes, measured in both cases by 40 acre tracts or government lots.

2. Petitioners propose a drainage system, the general course of which, commencing at the lowest elevation and terminating at the highest elevation(s), is described as follows: (Here describe first the main watercourse indicating whether open ditch or tile to the upper reaches of the project and then describe all branches tributary thereto from lowest to highest elevation of the bottom of the water source which are to be a part of the New System.)

3. The proposed New System is necessary because: (Here describe the land to be drained, the need therefor, and the feasibility of the project.)

4. The proposed New System will benefit and be useful to the public and will promote the public health.

5. The petitioners will pay all costs of the proceedings if the proceedings are dismissed or the contract for the construction of the proposed drainage system is not awarded.

6. The petitioners provide herewith a corporate surety bond in the face amount of \$10,000 payable to the drainage authority, said bond conditioned to pay the costs incurred if the proceedings are dismissed or a contract is not awarded to construct the drainage system proposed in this petition. Petitioners covenant that they will not allow the costs incurred to exceed the amount of the bond and that they will cause additional bond to be filed if it appears that the costs will exceed the bond submitted herewith.

7. We, the following petitioners, request that the drainage authority proceed as authorized by law toward the construction of a new drainage system as proposed herein.

8. I HAVE BEEN INFORMED, AND I UNDERSTAND THAT I MAY NOT WITHDRAW AS A PETITIONER AT ANY TIME AFTER THIS PETITION IS FILED. I ALSO UNDERSTAND THAT IF THE PROPOSED DRAINAGE PROJECT IS NOT CONSTRUCTED, I AM, AND EACH OTHER PETITIONER IS, LIABLE TO THE DRAINAGE AUTHORITY FOR ALL OF THE COSTS INCURRED INCLUDING ENGINEERING, LEGAL, AND AUDITOR'S FEES.

(All signatories to the petition must indicate the capacity in which they sign, i.e. owner, co-owner, corporate official, or general partner. Each owner may represent only one 40-acre tract or government lot. Each signature should indicate the legal description of the 40-acre tract or government lot that entitles that signer to be a petitioner. In the case of a partnership, only one general partner need sign. In the case of a corporation, only one corporate official need sign. In the case of co-ownership, all co-owners must sign. In the case of a trust, all trustees must sign. Signature pages are attached hereto. Use as many as needed. Be sure all signature blocks are fully completed. If you are unsure of who must sign or how, please contact the petitioners' attorney - named below.)

This petition is prepared by:

(name of attorney)

(office address)

(phone number)

Petitioners' Attorney

In re Petition for _____
Tract description _____
Ownership (check one)
____ Individual
____ Partner. Name of Partnership _____
____ Co-owner. How many _____
____ Corporation. Name of corporation _____
____ Trust. Name of Trust _____
____ How many trustees _____

signature	title	date	_____
signature	title	date	_____
signature	title	date	_____
signature	title	date	_____

In re Petition for _____
Tract description _____
ownership (check one)
____ Individual
____ Partner. Name of Partnership _____
____ Co-owner. How many _____
____ Corporation. Name of corporation _____
____ Trust. Name of Trust _____
____ How many trustees _____

signature	title	date	_____
signature	title	date	_____
signature	title	date	_____
signature	title	date	_____

I, _____, county attorney or attorney for the drainage authority, do hereby state that I have examined the foregoing petition and the petitioners' bond and that I find that the petition and bond meet the requirements of M.S. c. 103E. I hereby refer the petition to the drainage authority.

Dated this _____ day of _____, 19____.

County Attorney or Attorney
for Drainage Authority

APPENDIX 2F

**RESOLUTION OF DRAINAGE AUTHORITY
FOR REDETERMINATION OF BENEFITS**

RESOLUTION

WHEREAS, it appears that the original benefits or damages determined in (here state the systems involved including any improvements thereto where benefits and damages were determined) do not reflect reasonable present day land values; and

WHEREAS, it appears that the present day land values of land benefitted or damaged have changed; and

(If appropriate)

WHEREAS more than 50% of the owners of the property benefitted or damaged by the system have petitioned the drainage authority for correction of an error that was made at the time of the proceedings that established the drainage system,

NOW, THEREFORE, BE IT RESOLVED that the drainage authority hereby ordains that a Redetermination of Benefits and Damages pursuant to M.S. § 103E.351 is appropriate and that the same shall be carried out.

RESOLVED FURTHER that the following named persons are appointed as viewers to redetermine and report the benefits and damages and the benefitted and damaged areas to the drainage authority as provided by law.

RESOLVED FURTHER that the redetermined benefits and damages and benefitted and damaged areas shall hereafter be used in place of the original benefits and damages and benefitted and damaged areas in all subsequent proceedings relating to the aforementioned drainage system.

APPENDIX 2G

PETITION FOR USE OF A DRAINAGE SYSTEM AS AN OUTLET

SYSTEM PROPOSED TO BE USED:

TO THE DRAINAGE AUTHORITY HAVING JURISDICTION OF THE SYSTEM
PROPOSED TO BE USED AS AN OUTLET:

I, (we) the undersigned petitioner(s) represent to the
drainage authority that:

1. I (we) propose to construct a (New System), (Lateral),
(private system) which will outlet into the above described system
at the hereinafter particularly described location:

2. I (we) represent that the proposed (New System),
(Lateral), (private system) will carry approximately _____ acres
of watershed to outlet into your system.

3. I (we) represent that the proposed (New System),
(Lateral), (private system) will be constructed over the following
described lands (here describe by 40-acre tracts or government lots
all parcels over which the proposed new construction will pass
beginning at the lowest elevation and ending at the highest
elevation(s). (Indicate which part of the proposed system will be
open ditch and which will be drain tile. Attach a map of the
proposed system if you have one.)

4. I (we) represent that the following parcels will be
benefitted and the amount of each parcel benefitted is set forth
opposite that parcel. (Describe and list names and addresses of
all owners of all parcels by 40-acre tract or government lot that
you expect to be benefitted by the proposed outlet.)

WHEREFORE, I (we), the petitioners hereinafter signed, do ask
the drainage authority for authorization to use the above mentioned
system as an outlet for our proposed drainage project.
(If the proposed project is a public one, one or more petitioners
in the public drainage proceedings may sign this petition. If the
proposed project is a private system, any one landowner having a
stake in the proposed project may sign.

Dated this _____ day of _____, 19____.

Petitioner

Petitioner

Capacity in which I sign:

Capacity in which I sign:

APPENDIX 2H

SAMPLE CORPORATE FIDELITY BOND

CONTINUATION CERTIFICATE

The Western Casualty and Surety Company

HOME OFFICE—FORT SCOTT, KANSAS



THE WESTERN CASUALTY AND SURETY COMPANY, hereinafter called the Company, hereby continues in force its Public Official Bond Bond No. 458820 in the sum of five thousand dollars and no/100 - - - - - Dollars (\$5,000.00), on behalf of William Sayre & State of Minnesota in favor of Faribault County, MN for the (extended) term beginning on the 3rd day of February, 1982 and ending on the 3rd day of February, 1983, subject to all the covenants and conditions of said Bond.

This Continuation is executed upon the express condition that the Company's liability under said Bond and this and all continuations thereof shall not be cumulative and shall in no event exceed the sum of five thousand dollars and no/100 - - - - - Dollars (\$5,000.00).

IN WITNESS WHEREOF, the Company has caused this instrument to be signed by its attorney-in-fact and its corporate seal to be hereon affixed this 21st day of December, 1981

THE WESTERN CASUALTY AND SURETY COMPANY

By Judy R. Vandeputte
Attorney-in-Fact

Judy R. Vandeputte

PUBLIC OFFICIAL BOND



Bond No. 458820

THE WESTERN CASUALTY AND SURETY COMPANY

FORT SCOTT, KANSAS

A STOCK INSURANCE COMPANY

Principal **William Sayre**
 Obligee **Faribault County, Minnesota**
 Effective **February 3, 1977**

Know all Men by these Presents, That we William Sayre
 of Fairmont in the State of Minnesota
 as Principal, and THE WESTERN CASUALTY AND SURETY COMPANY, of Fort Scott, Kansas, a corporation duly organized and
 existing under and by virtue of the laws of the State of Kansas, as surety, are held and firmly bound unto
Faribault County, Minn., as obligee, in the full and just sum of Five Thousand and No/100
(\$ 5,000.00) Dollars, lawful money of the United States, for the payment of which well
 and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
 these presents:

SIGNED AND SEALED this 3rd day of February A.D. 1977.

WHEREAS, the said Principal has been duly elected or appointed Civil Engineer

for the term beginning February 3, 1977
 and ending February 3, 1978

NOW THEREFORE, the condition of the above obligation is such, that if the above Principal shall well and faithfully perform
 all the duties of his said office as required by law, then this obligation to be null and void; otherwise to be and remain in full force
 and virtue.

Witness:

Beverly Spitzer

William Sayre
 Principal.

Countersigned

THE WESTERN CASUALTY AND SURETY COMPANY,

By: [Signature]
 Minnesota Agent

By: Douglas L. Kinney
 Douglas L. Kinney - Attorney-in-fact

PRINCIPAL'S ACKNOWLEDGMENT

STATE OF Minnesota
 COUNTY OF Faribault } ss

Before me, a Notary Public this 4th day March, A.D. 1977
 personally appeared the said William Sayre
 to me known and known to me to be the individual described in and who executed the foregoing bond, and he acknowledged to me
 that he executed the same.

ELSIE OLSON,
 NOTARY PUBLIC, Faribault County, Minn.
 My Commission Expires 1-1-1978

[Signature]

APPENDIX 2I

RESOLUTION SETTING PRELIMINARY HEARING

RESOLUTION

WHEREAS, a petition for the _____ of _____ has been filed with the drainage authority in the office of _____; and,

WHEREAS, the drainage authority has determined that the petition is facially adequate; and,

WHEREAS, the drainage authority has appointed a project engineer and such engineer has filed the preliminary survey report required by law; and,

WHEREAS, a copy of said preliminary survey report has been mailed by the county auditor/secretary of the drainage authority to the director, Division of Waters, Department of Natural Resources,

NOW, THEREFORE, IT IS HEREBY ORDERED that a hearing shall be held upon the aforementioned petition on the _____ day of _____, 19____, at _____ in the _____ noon at _____ (location) for the purpose of considering the adequacy of the petition, examining the engineer's preliminary survey report, and hearing the advisory report of the commissioner of natural resources.

RESOLVED FURTHER that the auditor/secretary of the drainage authority shall mail notice to the petitioners and to the owners of all property within the watershed likely to be assessed and to all political subdivisions likely to be affected.

(Optional)

IT IS FURTHER ORDERED that the notice of preliminary hearing shall be published at least one time in a legal newspaper in each county in which is located a part of the area to be affected by the project.

RESOLVED FURTHER that a copy of the notice of hearing shall be mailed by the auditor/secretary of the drainage authority to the director, Division of Waters, Department of Natural Resources.

APPENDIX 2J

ORDER SETTING PRELIMINARY HEARING

BEFORE THE DRAINAGE AUTHORITY OF _____
(Watershed District, County, or Joint County)
FOR THE _____
(Establishment or Improvement)
OF _____
(Indicate Numerical Designation of System)

A petition having been filed for a drainage project in the _____ (Improvement or establishment) of the above described system or part thereof and the drainage authority having appointed a project engineer and such engineer having filed the engineer's preliminary survey report with the county auditor/secretary of the drainage authority as required by law,

NOTICE IS HEREBY GIVEN that a hearing will be held before the drainage authority on the _____ day of _____, 19____, in the _____ noon at _____ (location) for the purpose of further considering the petition, examining the engineer's preliminary survey report, and hearing the report of the commissioner of natural resources on the preliminary plan. All interested persons may attend and be heard thereon.

The petition, engineer's preliminary survey report, and the report of the commissioner of natural Resources may be examined prior to the hearing by any interested person on request at the office of the county auditor/secretary of the drainage authority located at _____ during regular office hours between 8:30 a.m. and 4:30 p.m. Monday through Friday except holidays.

Dated this _____ day of _____, 1991.

(county auditor/
secretary of drainage authority)

(NOTE that the hearing date must be set at a time not more than 30 days after the date of the order of the drainage authority. Notice must be given not less than ten days before the hearing is to be held.)

APPENDIX 2K

FINDINGS AND ORDER FOR DISMISSAL
IN THE MATTER OF THE PROPOSED
IMPROVEMENT OF COUNTY DITCH NUMBER 20

The above entitled matter came on for a continued preliminary hearing on March 30, 1989 at 1:30 p.m. at the V.F.W. Clubrooms in Blue Earth, Minnesota. Present were all members of the County Board of Commissioners sitting as a drainage authority respecting County Ditch No. 20. Also present were attorney, Joseph R. Gadola, representing a group of 21 petitioners who had signed a Petition to dismiss the proceedings pursuant to M.S. § 106A.231. Most, if not all, of the said petitioners to dismiss were also present.

The attorney for the original petitioners for the improvement of County Ditch No. 20 and Branch J. thereof was not present. Proponents of the improvement who were present were Kenneth Soost and Henry Soost. No other persons identified themselves as being in favor of the continuation of proceedings toward establishment of the proposed improvement.

Drainage authority chairman, Charles Pingry convened the meeting at 1:30 p.m.. After brief comments by the county auditor and the county attorney respecting the present status of the proceedings, Commissioner Pingry invited persons present in the room to make their comments respecting the proposed improvement. Attorney Joseph R. Gadola spoke on behalf of the proponents for dismissal. Civil Engineer, Bruce Firkins, of Bolton and Menk spoke in response to the drainage authority's request for additional information. Various persons in the audience spoke in opposition

to or in favor of the proposed improvement.

Based upon the unsworn statements of persons present at this continued hearing and at prior hearings, based upon the engineer's report and the unsworn statements of the engineer and based upon the report of the Commissioner of the Department of Natural Resources and upon all files and records herein, the Faribault County Board of County Commissioners sitting as a drainage authority makes the following:

FINDINGS OF FACT

1. The proposed improvement would affect approximately 4000 acres out of the entire watershed of County Ditch No. 20 which is about 14,000 acres.

2. The cost of the proposed improvement including engineering and legal costs is likely to exceed \$750,000.00.

3. The engineer's estimate of costs does not include the damages that would have to be paid to landowners for taking of lands by proposed open ditch improvement and for triangulation, which cost is estimated by the drainage authority to exceed \$120,000.00. The average per acre cost of the proposed improvement is expected by the drainage authority to be no less than \$250.00 per acre, an amount which the drainage authority finds to be excessive in relation to present day market values of agricultural land in the community.

4. The lower portion of County Ditch No. 20 must first be repaired in order to adequately handle the increased peak flows of water resulting from the proposed improvement. The cost of such

repair is estimated by the engineer to be up to \$400,000.00, such costs to be spread over the entire ditch system. Unless such repair is made the outlet for this proposed improvement is not adequate.

5. There is concern expressed by the engineer and by the Commissioner of Natural Resources that there may be excessive downstream flooding on County Ditch No. 3 and beyond as a result of the increased peak flows which may be caused by the proposed improvement.

6. There are available to land owners in the watershed other suitable means of making economic use of their property such as for example the Federal Conservation Reserve Program, the State Reinvest in Minnesota Program, and the Minnesota Department of Natural Resources Acquisition of Wetlands program.

7. Of the original thirty-three petitioners, twenty-seven survive. Only four of the living petitioners have indicated their desire not to dismiss the proceedings. Two petitioners have been adjudged bankrupt and no longer own affected real estate.

NOW THEREFORE, the Board of County Commissioners sitting as a drainage authority concludes:


1. That the proposed improvement of County Ditch No. 20 and Branch J is not feasible.

2. The proposed improvement of County Ditch No. 20 and Branch J is not of public benefit or utility.

IT IS THEREFORE ORDERED that the Petition for improvement of

County Ditch 20 and Branch J. thereof filed with the County Auditor on August 21, 1981 IS HEREBY DISMISSED pursuant to M.S. § 106A.261 Subd. 4.

Dated this 4th day of APRIL, 1989.



Charles Pingry
Chairman of the Drainage
Authority



Palmer N. Eckhardt,
County Auditor

EXCERPT FOR THE MINUTES

Commissioner Klingbeil moved to take from the table Commissioner Brown's Motion to dismiss the Petition for the improvement of the main tile of County Ditch No. 20 and Branch J. thereof, said Motion having been tabled on March 30, 1989. Motion to take from the table was seconded and passed unanimously.

Commissioner Brown moved to amend his original motion to dismiss by substituting therefore the following:

Moved to adopt the proposed Findings and Order prepared by the Faribault County Attorney in their entirety and that the Chairman and the Auditor be instructed to sign the same and that the Auditor be instructed to incorporate said Findings and Order in their entirety in the minutes of this meeting. Said Motion was seconded by Johnson and upon voice vote was passed unanimously.

APPENDIX 2L

**RESOLUTION OF DRAINAGE AUTHORITY DIRECTING
ENGINEER TO PROCEED WITH DETAILED SURVEY AND
FOR THE APPOINTMENT OF VIEWERS**

Mr./Ms. Chairperson, with respect to (designate project), it appearing that the engineer's preliminary survey report meets all statutory criteria, I move to adopt the engineer's preliminary survey report with only the following changes: (Here outline minor changes in course or construction which the engineer will approve without further investigation.) The engineer should be directed to proceed with a detailed survey and that viewers be appointed.

APPENDIX 2M

RESOLUTION

Re: County Ditch No. 94

WHEREAS, the County Board of Commissioners, sitting as a drainage authority, on September 5, 1991, determined by voice vote to establish a new drainage system to be designated as County Ditch No. 94 upon Petition of James V. Smith, Roland Osmundson, and others; and

WHEREAS, the final hearing was concluded on September 5, 1991, and the County Board directed the petitioners' attorney to prepare a detailed findings and a proposed order for later consideration; and

WHEREAS, petitioners' counsel, Michael D. Johnson, has prepared and the Board has reviewed at its regular meeting on October 1, 1991, proposed detailed Findings and Order prepared by counsel and reviewed by Arvid Wendland as counsel for the drainage authority, privately retained;

NOW, THEREFORE, IT IS HEREBY RESOLVED,

1. That the proposed Findings presented by petitioners' counsel are adopted as hereinafter modified.

2. That the assessment for the establishment and construction of County Ditch No. 94 shall be made payable in annual installments over ten years and that the Order shall so indicate; and

3. That the Chairperson is authorized and directed to sign the detailed Findings and Order as so prepared and modified.

The foregoing Resolution was adopted on a voice vote, three in favor, one against, the Chairperson abstaining.

DETAILED FINDINGS AND ORDER
BY THE DRAINAGE AUTHORITY OF _____
FOR THE ESTABLISHMENT OF PROJECT DESIGNATED AS _____

The drainage authority, having completed its deliberation, its examination of all files and records herein, its hearing of all interested persons, and its consideration of all reports makes the following:

FINDINGS

1. The engineer's detailed survey report and the viewers' report have been made, and all other proceedings have been completed as required by law.
2. The reports made or amended herein are complete and correct.
3. The damages and benefits of the proposed project have been properly determined.
4. The estimated benefits are greater than the total estimated cost, including damages.
5. The proposed drainage project will be of public utility and benefit and will promote the public health.
6. The proposed drainage project is practicable.
7. (Any other factual statements that support establishment.)

IT IS, THEREFORE, ORDERED:

1. That the viewers' report (as amended) on file herein and the assessment of benefits and damages therein stated is hereby adopted.
2. The engineer's detailed survey report (as amended) is hereby adopted.
3. The drainage project as described in the engineer's detailed survey report (as amended) is hereby established.
4. The interest rate to be borne by the ditch lien shall be _____%, (not to exceed 1% higher than the average rate payable on the bonds as sold).
5. Assessments for the project shall be paid in _____ annual assessments (not to exceed 23).

6. (Only in the case of a joint county project.) _____
County shall be responsible for _____% of the construction and
Repair costs and _____ County shall be responsible for
_____ % of same.

Dated this _____ day of _____, 1991.

(vice) Chairperson of Drainage Authority

Authorized by resolution of the drainage authority on the _____
day of _____, 19____.

APPENDIX 2N

SAMPLE CONSTRUCTION CONTRACT

AGREEMENT

THIS AGREEMENT, made and signed this 31ST day of October, 1984,
by and between FARIBAULT COUNTY hereinafter called the
"Owner" and SORENSEN BROTHERS, INC.
hereinafter called the "Contractor".

THIS AGREEMENT WITNESSETH, that the Owner and the Contractor, for the con-
sideration hereinafter stated, agree as follows:

ARTICLE 1. The Contractor hereby covenants and agrees to perform and execute
all the provisions of the plans and specifications indicated below under Article 4,
as approved by the Owner for: SCHEDULE 3: Reinforced Concrete Pipe Delivered
to Line of Ditch; for the
Improvement of Branch A to County Ditch No. 25
Faribault County, Minnesota
and to do everything required by this agreement and the contract documents.

ARTICLE 2. The Contractor agrees that the work contemplated by this contract
shall be fully and satisfactorily completed on, or before

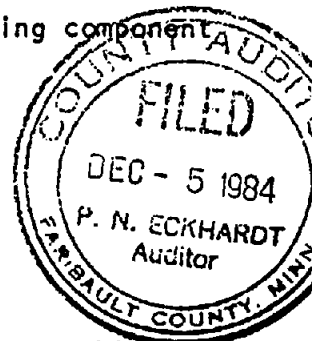
December 31, 1985.

ARTICLE 3. The Owner agrees to pay and the Contractor agrees to receive and
accept payment in accordance with the prices bid for the unit or lump sum items
as set forth in the conformed copy of Proposal hereto attached, which prices shall
conform to those in the accepted Contractor's proposal on file in the office of
the Owner, the aggregate of which prices, based on the approximate schedule of
quantities, is estimated to be \$ 69,388.52.

Monthly and final payment shall be made as provided in the General Conditions.

ARTICLE 4. The Contract Documents shall consist of the following component
parts:

1. Advertisement for Bids.
2. Information for Bidders.
3. The Proposal.
4. General Conditions.
5. Supplemental General Conditions.
6. Specifications.
7. Special Provisions.
8. Plans and drawings which are attached to the Specifications or which
are identified as Sheets 1 to 5 for: Improvement of Branch A of
County Ditch No. 25, Faribault County, MN
9. Performance Bond.
10. This Agreement.
11. Engineers' Reports



This Agreement, together with the documents hereinabove mentioned, form the Contract, and all documents are as fully a part of the contract as if attached hereto or herein repeated.

IN WITNESS WHEREOF, the parties to this agreement have hereunto set their hands and seals as of the day and year first above written:

IN THE PRESENCE OF:

Renssela Omsund

Marilyn Stensland
(As to the Owner)

FARIBAULT COUNTY
Owner

By Paul Beyer
Chairman of County Board

Salmon K. Elshardt
County Auditor

R. B. Sorenson

Cliff Anderson
(As to the Contractor)

SORENSEN BROTHERS, INC.
Contractor

P.O. Box 246 - Albert Lea, MN 56007
Contractor's Address

By R. Rudy Sorenson
Agent or Officer

This Agreement and the Engineer's Reports, Plans and Specifications referred to herein are hereby approved by:

Harold H. Haugh
Harold H. Haugh
Engineer in Charge

John H. Frundt
John H. Frundt
Attorney for Petitioners

Arvid Wendland
Arvid Wendland
Faribault County Attorney

QUANTITIES OF WORK

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT PRICE	AMOUNT
<u>SCHEDULE 3: REINFORCED CONCRETE PIPE (RCP) DELIVERED TO LINE OF DITCH</u>				
1.	42" RCP-Class 4	400 lf	\$ <u>40.83</u>	\$ <u>16,332.00</u>
2.	42" RCP-Class 3	1000 lf	\$ <u>34.32</u>	\$ <u>34,320.00</u>
3.	42" RCP-Class 2	250 lf	\$ <u>31.72</u>	\$ <u>7930.00</u>
4.	42" RCP bends (45°)	3 ea	\$ <u>637.78</u>	\$ <u>1913.34</u>
5.	42" RCP apron	1 ea	\$ <u>351.18</u>	\$ <u>351.18</u>
*6.	24" RCP-Class 4	600 lf	\$ <u>14.00</u>	\$ <u>8400.00</u>
*7.	24" RCP apron	1 ea	\$ <u>142.00</u>	\$ <u>142.00</u>
TOTAL BID, SCHEDULE 3:.....\$				<u>69,388.52</u>

*24" RCP may be deleted from contract at option of Owner.

(Transfer Total to BID SUMMARY in front of this set of specifications on page BP 2. Note under remarks if bids are tied.)

REMARKS:

Respectfully submitted,

Sorenson Bros. Inc.

By: R. R. Sorenson U.P.

Address: P.O. Box 246

Albert Lea, Mn. 56007

Phone Number: 373-6122

SEABOARD SURETY COMPANY

HOME OFFICE: NEW YORK, N. Y.

Bond No. 942577-84

PERFORMANCE AND PAYMENT BOND

Know All Men By These Presents;

That, we SORENSEN BROS., INC.
of Albert Lea, Minnesota, as Principal,
and SEABOARD SURETY COMPANY, a New York corporation, having its principal office and
place of business in the City of New York, New York, as Surety, are held and firmly bound unto
Faribault County, Minnesota, as Obligee,
in the sum of Sixty Nine Thousand Three Hundred Eighty Eight Dollars
and 52/100-----
(\$69,388.52), for the payment whereof Principal and Surety bind themselves, their
heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these
presents.

Signed, Sealed and Dated this 9th day of October, 19 84.

WHEREAS, the Principal has entered into a certain written contract dated the 9th
day of October, 19 84, with the Obligee for
Schedule #3 - Reinforced Concrete Pipe - Faribault County
Ditch #25 - Improvement of Branch "A" - Furnish Only.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the
Principal shall faithfully perform said contract according to its terms, covenants and conditions
and shall promptly pay all persons supplying labor or material to the Principal for use in the
prosecution of the work under said contract, then this obligation shall be void; otherwise it shall
remain in full force and effect.

Subject to the named Obligee's priority, all persons who have supplied labor or material
directly to the Principal for use in the prosecution of the work under said contract shall have a
direct right of action under this bond.

ACKNOWLEDGMENT OF PRINCIPAL
For Individual or Co-Partnership

STATE OF _____ }
COUNTY OF _____ } ss.

On this _____ day of _____, 19____, came before me personally _____ to me well known to be the same person who executed the foregoing bond, and each severally acknowledged the same to be his own free act and deed.

Notary Public, _____ County,

SURETY ACKNOWLEDGMENT

STATE OF Minnesota }
COUNTY OF Dakota } ss.

On this 9th day of October, 1984, before me appeared Litton E. S. Field

to me personally known, who, being duly sworn, did say that he is the Attorney-in-fact of the Seaboard Surety Company

that the seal affixed to the foregoing instrument is the corporate seal of said corporation; that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors, and said Litton E. S. Field acknowledged said instrument to be the free act and deed of said corporation.



Joan K. Lehmann
Notary Public,

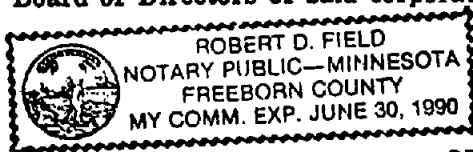
ACKNOWLEDGMENT OF PRINCIPAL
For Corporation

STATE OF Minnesota }
COUNTY OF Freeborn } ss.

On this 9th day of October, 1984, before me personally came R. Randy Sorensen

to me known, who, being by me duly sworn, did depose and say; that he resides in Albert Lea, Minn. that he is the Vice President of the Sorensen Bros., Inc.

the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.



Robert D. Field
Notary Public

Certified Copy

SEABOARD SURETY COMPANY

A 4899

No. 1188

New York, New York

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That SEABOARD SURETY COMPANY, a corporation of the State of New York, has made, constituted and appointed and by these presents does make, constitute and appoint Litton E. S. Field or R. L. Domler or F. E. Launstein or Howard R. Bryden or M. A. Jones or Litton E. S. Field, Jr. or Gary McBride or Robert E. Daudt

of St. Paul, Minnesota its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf insurance policies, surety bonds, undertakings and other instruments of similar nature as follows: Without Limitations

Such insurance policies, surety bonds, undertakings and instruments for said purposes, when duly executed by the aforesaid Attorney-in-Fact, shall be binding upon the said Company as fully and to the same extent as if signed by the duly authorized officers of the Company and sealed with its corporate seal; and all the acts of said Attorney-in-Fact, pursuant to the authority hereby given, are hereby ratified and confirmed.

This appointment is made pursuant to the following By-Laws which were duly adopted by the Board of Directors of the said Company on December 8th, 1927, with Amendments to and including January 15, 1982 and are still in full force and effect:

ARTICLE VII. SECTION 1.

"Policies, bonds, recognizances, stipulations, consents of surety, underwriting undertakings and instruments relating thereto.

Insurance policies, bonds, recognizances, stipulations, consents of surety and underwriting undertakings of the Company, and releases, agreements and other writings relating in any way thereto or to any claim or loss thereunder, shall be signed in the name and on behalf of the Company

(a) by the Chairman of the Board, the President, a Vice-President or a Resident Vice-President and by the Secretary, an Assistant Secretary, a Resident Secretary or a Resident Assistant Secretary; or (b) by an Attorney-in-Fact for the Company appointed and authorized by the Chairman of the Board, the President or a Vice-President to make such signature; or (c) by such other officers or representatives as the Board may from time to time determine.

The seal of the Company shall if appropriate be affixed thereto by any such officer, Attorney-in-Fact or representative."

IN WITNESS WHEREOF, SEABOARD SURETY COMPANY has caused these presents to be signed by one of its Vice Presidents, and its corporate seal to be hereunto affixed and duly attested by one of its Assistant Secretaries, this 11th day of July, 1984.



Attest:

(Seal)

Margaret Cooper
Assistant Secretary

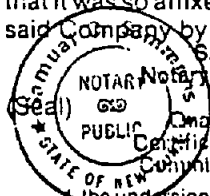
SEABOARD SURETY COMPANY,

By

Thomas P. Gorke
Vice-President

STATE OF NEW YORK
COUNTY OF NEW YORK ss.:

On this 11th day of July, 1984, before me personally appeared Thomas P. Gorke a Vice-President of SEABOARD SURETY COMPANY, with whom I am personally acquainted, who, being by me duly sworn, said that he resides in the State of New Jersey; that he is a Vice-President of SEABOARD SURETY COMPANY, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of the said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto as Vice-President of said Company by like authority.



SAMUEL C. SIMMONS
Notary Public, State of New York
No. 41-9010312
Qualified in Queens County
Certificate Filed in New York County
Commission Expires March 30, 1986

Samuel C. Simmons
Notary Public

C E R T I F I C A T E

The undersigned Assistant Secretary of SEABOARD SURETY COMPANY do hereby certify that the original Power of Attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this Certificate and I do further certify that the Vice-President who executed the said Power of Attorney was one of the Officers authorized by the Board of Directors to appoint an attorney-in-fact as provided in Article VII, Section 1, of the By-Laws of SEABOARD SURETY COMPANY.

This Certificate may be signed and sealed by facsimile under and by authority of the following resolution of the Executive Committee of the Board of Directors of SEABOARD SURETY COMPANY at a meeting duly called and held on the 25th day of March 1970.

"RESOLVED: (2) That the use of a printed facsimile of the corporate seal of the Company and of the signature of an Assistant Secretary on any certification of the correctness of a copy of an instrument executed by the President or a Vice-President pursuant to Article VII, Section 1, of the By-Laws appointing and authorizing an attorney-in-fact to sign in the name and on behalf of the Company surety bonds, underwriting undertakings or instruments described in said Article VII, Section 1, with like effect as if such seal and such signature had been manually affixed and made, here authorized and approved."

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Company to these presents this 9th day of October, 1984.



2N. 6

Karen Savory
Assistant Secretary

APPENDIX 20

NOTICE OF FINAL ACCEPTANCE HEARING

IN THE MATTER OF:

The project for the _____ of
_____ County Ditch No. _____
or _____ Watershed District
Ditch No. _____.

TO ALL INTERESTED PERSONS

NOTICE IS HEREBY GIVEN that the project engineer in the above entitled matter has reported to the drainage authority that the contractor has completed the project according to the contract, plans, and specifications prepared by the project engineer and that said project engineer has issued to the contractor a certificate in accordance therewith; that the drainage authority will meet in open session on the _____ day of _____, 19____, at _____ o'clock in the _____ noon to hear and consider the report and certificate of said engineer. Any person having an interest in land that is affected by the project may object to the acceptance of the contract as completed and may appear and be heard thereon.

Dated this _____ day of _____, 19____.

(County Auditor or Secretary
of Board of Managers)

APPENDIX 2P

WAIVER OF CLAIM ON BOND

IN THE MATTER OF THE PROJECT
FOR THE _____ OF _____
DITCH NO. _____

I, the undersigned, on behalf of _____,
having furnished labor and/or materials described below, do hereby
state that I have been paid therefor or that I have received
satisfactory assurance of future payment and that I do hereby waive
my right to make a claim on the contractor's performance bond in
the above entitled drainage project, and I do hereby consent to the
drainage authority's final acceptance of the project. In so doing,
I understand that I cannot file a mechanic's lien on any of the
property traversed by the project. I further understand that the
drainage authority does not guarantee that I will be paid for the
labor and/or materials provided to the project by me once the
project has been accepted and the performance bond discharged.

Dated this _____ day of _____, 19____.

(Name of Supplier or
Subcontractor, by _____,
its _____)

State of Minnesota, }
COUNTY OF _____ } ss.

I, _____, County Auditor of the County of _____, State of Minnesota, do hereby certify that the foregoing lien statement has been prepared from the files and records of my office in proceedings for establishment and construction of _____ Ditch No. _____; that the statement of costs is a full statement of the total costs of said drainage system, including the estimated cost of all items required to complete the same; that the foregoing statements are true and correct according to the files and records of my office.

WITNESS My hand and official seal this _____ day of _____, 19 _____

County Auditor,

County, Minnesota.

Ditch No. _____

**Auditor's Tabular
Lien Statement
Original Construction**

Office of Register of Deeds,

County, _____
State of Minnesota.

I hereby certify that the within instrument was filed in my office for record on the _____ day of _____, 19 _____ at _____ o'clock _____ M., and was duly recorded in Book _____ of _____ on page _____

Register of Deeds

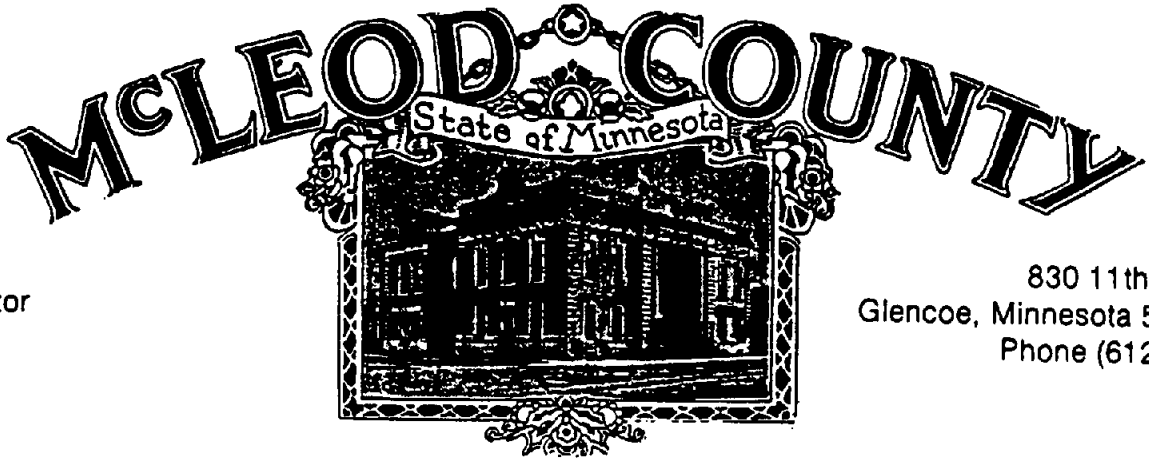
Filed this _____ day of _____, A. D. 19 _____

By _____
County Auditor
Deputy

REGISTER

APPENDIX 2R

AUDITOR'S ALLOCATION OF DRAINAGE LIENS



Edward Ide
County Auditor

830 11th Street East
Glencoe, Minnesota 55336-2270
Phone (612) 864-5551

Date _____

Dear Landowner:

A parcel of land in which you have an interest has existing ditch benefits on it. These benefits were established years ago by ditch viewers and were adopted by the Drainage Authority. A legal instrument conveying interest in the parcel has caused the parcel to be split. I am requesting that you, the parties to the transaction, agree among yourselves as to how these benefits, and in some cases also damages and assessments, should be split. Please fill out the enclosed form, sign it, have it notarized, and return it to this office. This notice is being sent to all parties to the transaction.

In the event that the parties to the transaction are unable to agree upon and return the form to this office within 30 days, I will be forced to establish the figures in the only other manner prescribed in the law, Minnesota Statutes 106A.631. A copy of the statute is on the back of this letter. A public hearing will be held before the Drainage Authority. All costs involved in that hearing must be paid by yourselves. These costs may include:

1. Mileage and Per Diem for Drainage Authority
2. Per Diem and related costs of Viewers
3. Publication and/or Mailing
4. Recording costs involved

Please make a serious attempt to resolve this issue among yourselves to avoid the added costs of the public hearing process.

Sincerely,

Edward Ide
McLeod County Auditor

106A.631 APPORTIONMENT OF LIENS.

Subdivision 1. Petition. A person who has an interest in property that has a drainage lien attached to it may petition the drainage authority to apportion the lien among specified portions of the tract if the payments of principal and interest on the property are not in default.

Subd. 2. Notice. When the petition is filed, the drainage authority shall, by order, set a time and location for a hearing on the petition. The drainage authority shall give notice of the hearing by personal service to the auditor, the occupants of the tract, and on all parties having an interest in the tract as shown by the records in the county recorder's office. The service must be made at least ten days before the hearing. If personal service cannot be made to all interested persons, notice may be given by publication. The petitioner shall pay the costs for service or publication.

Subd. 3. Hearing. The drainage authority shall hear all related evidence and, by order, apportion the lien. A certified copy of the order must be recorded in the county recorder's office and filed with the auditor.

History: 1985 c 172 s 73

CHAPTER 3

ENGINEERING AND ENVIRONMENTAL REVIEW

I. INTRODUCTION

A. Overview

Drainage engineering practice and state agency review of drainage proceedings needs to be standardized and improved. Drainage engineers are inconsistent from location to location throughout the state in the way they are collecting and reporting information on drainage proposals. Development of engineering and environmental data to support a drainage project can be very expensive for the proponents. Drainage authorities are demanding reliable cost estimates, in which reliability is proportional to the amount of data collected. State agency reviewers, on the other hand, are asking for more and more data and at earlier times in the life of the process. Therefore, the question needs to be asked - how much data is enough?

State agency staff, primarily Department of Natural Resources' (DNR) staff, have a valid need for certain types of information to enable them to adequately review a drainage proposal while representing the interests of the public. More importantly, drainage authorities base their decisions on engineering and environmental data provided in engineer's reports. All too often, engineer's reports on proposed drainage projects lack the required information. The drainage engineer, however, seldom knows all the types of information which the reviewer needs. The result is incomplete agency advisory reports to the drainage authorities. There appears to exist a lack of communication and understanding among all parties involved in the Minnesota public drainage process. The situation needs to be improved.

The objective of this chapter is to provide drainage authorities, engineers, state agency reviewers, and other interested parties guidance on engineering and environmental analyses and review requirements of the drainage code. Specific goals of this chapter are as follows:

- establish a framework for surveys and engineering and environmental investigations of proposed drainage systems so that information developed and reported is consistent and sufficient for review purposes;
- standardize the state agency review process of engineering documents pertaining to the development of public drainage systems in Minnesota;

- emphasize the critical role of the review of environmental issues in public drainage proceedings; and
- provide a forum for enhanced communication among the public and all professional disciplines associated with public drainage in Minnesota.

B. Drainage Authorities

Drainage systems in Minnesota may be found under the jurisdiction of any one of several drainage authorities. The most common agencies are:

- county board of commissioners;
- joint county authorities; or
- watershed district board of managers

In addition, some drainage systems are connected to federal agencies such as the Soil Conservation Service or the U.S. Army Corps of Engineers. These systems will not be discussed within the context of this chapter. Specific information on requirements affecting federally sponsored drainage systems can be obtained by seeking the advice of the U. S. Army Corps of Engineers or the Soil Conservation Service.

County drainage systems that are located totally within one county are administered by the county board of commissioners. These systems are the most common in Minnesota and are covered under M.S. c. 103E (i.e., the drainage code). Joint county ditches are systems located in two or more counties. They were, at one time, known as judicial ditches (e.g., J.D. No. 56). The administration of these systems is now carried out by an appointed joint county ditch authority. M.S. § 103E.235 covers establishment of these multi-county systems.

Watershed districts are formed in many areas of Minnesota and are operated under M.S. c. 103D. Watershed districts become the drainage authority for a drainage system through two primary avenues. The most common is automatic jurisdiction for new drainage systems or through the improvement process. The other way is by voluntary transfer of the system from a county board or joint county ditch authority. The mechanics of the actual drainage proceeding are not specified in M.S. c. 103D - this statute directs the watershed district to follow the procedures for drainage proceedings found in M.S. c. 103E. Therefore, the material in this chapter will be focused on the language found in M.S. c. 103E.

There is one significant difference between the administration of drainage law under watershed districts as opposed to counties.

Watershed districts technically can only require submittal of one engineer's report and hold one hearing on the matter. Whereas, M.S. c. 103E calls for an engineer's preliminary survey report (hereinafter referred to as in common usage as the "engineer's preliminary report") and an engineer's final detailed survey report (hereinafter referred to as in common usage as "engineer's final report"). As will be shown, the contents of both reports are not significantly different. They are also consistent with the requirements of watershed law for the engineer's report. Therefore, no further distinction will be made between the two entities. However, to avoid confusion between the requirements of either entity, it is recommended that M.S. c. 103E be followed under all conditions.

II. ENVIRONMENTAL REVIEW

Proposed drainage projects are being increasingly subjected to scrutiny by environmental interests. The increasing role of environmental forces in modifying drainage practices is not without justification. It would be a considerable effort to document the impact caused by drainage systems to valuable environmental resources, such as loss of wetland acreage or damage to fisheries from sediment deposition. Due to various forms of legislative action at both the state and federal level, environmental interests now have more direct input to drainage project development.

A major current flaw with the drainage process in Minnesota is not the lack of environmental input, but the timing of it. Input of environmental interests into the development of a drainage project should be at the beginning of the process, not during the final hearing or even the preliminary hearing. This is the reason that the environmental review section in this chapter was placed ahead of all other engineering issues.

The authority for review of environmental and land use issues in the drainage code exists primarily under M.S. § 103E.015 ("Considerations Before Work is Done"). The title of this section of the statutes clearly suggests the early involvement of responsible environmental interests of the state and federal government in the drainage process. M.S. § 103E.015 mandates that the drainage authority consider at least nine criteria relating to land use and the environment, as follows:

- private and public benefits and costs of the proposed drainage project;

(Any discussion of benefits and costs must not be limited to financial considerations only. This discussion should be more global in nature, addressing such non-quantifiable factors as environmental costs, social costs, cultural costs, etc.)

- the present and anticipated agricultural land acreage availability and use in the drainage project or system;

(Discussion of this item should be specific and avoid generalities. An attempt should be made to quantify acreage, even if it is only an estimate. At a minimum, the engineer's preliminary report should approximate the number of acres (or percent) of land in farm production, set aside programs, wetlands, wooded acres, roads, farmsteads, and other land use categories for existing and anticipated conditions. The change from present to anticipated conditions should be consistent with the engineer's estimate of benefits that are likely to accrue from the proposed drainage project.)

- the present and anticipated land use within the drainage project or system;
- flooding characteristics of property in the drainage project or system and downstream for 5-, 10-, 25-, and 50-year flood events;

(This section should identify the particular drainage problem (e.g., high ground water, spring flooding, crop damage from summer storms, inadequate outlet, etc.). The engineer should estimate the number of acres directly affected by the identified drainage problems.)

- the waters to be drained and alternative measures to conserve, allocate, and use the waters including storage and retention of drainage waters;

(The engineer should discuss the merits of preserving and enhancing the existing wetlands for flood water impoundment, including the benefit of being able to reduce the size of downstream ditches or tile. All real alternatives evaluated and dismissed during the design period should be identified and discussed. Avoid traditional "boilerplate" language relating to alternatives.)

- the effect on water quality of constructing the proposed drainage project;

(Water quality issues pertinent to drainage projects would include the before and after erosion potential. With a well-designed project (i.e., piped inlets, grade control structures, vegetated areas, etc.), it should be possible to make the assertion that the erosion potential for an improvement project (as opposed to a New System) will be less after project completion. Other water quality items that should be discussed

include non-point source pollution potential and the value of existing or enhanced wetlands as nutrient traps and the impact to the wetlands.

- fish and wildlife resources affected by the proposed drainage project;

(Fisheries impacts include sedimentation along downstream areas after construction, blockage of fish movement due to grade control structures, and excessive water velocities created by hydraulic structures. Wildlife may be impacted by potential land use changes, including the destruction of prairie and wooded habitat. The grass buffer strip requirement for drainage systems should not be suggested as providing adequate mitigation for the destruction of other wildlife habitat.)

- shallow ground water availability, distribution, and use in the drainage project or system; and

(Where shallow ground water conditions exist, either on a sustained or a seasonal basis, it is possible for a drainage project to have significant impact on normally experienced water levels. As with any other affected resource, all impacts should be discussed and possible alternatives evaluated.)

- the overall environmental impact of all the above criteria.

(All potential negative impacts of the proposed drainage project should be clearly identified and discussed for the benefit of the decision makers - the drainage authority.)

These criteria will be referred to frequently in the remaining sections of this chapter. It should be noted that these criteria encompass much more than engineering related concerns. They are intended to provide a framework for evaluating all project impacts, including engineering, social, economic and environmental issues. The engineer should immediately review these criteria and assess their impact on a proposed drainage project as soon as possible after the project is initiated by petition. Responsible federal and state fisheries, wildlife, and water management personnel should be made aware of the existence, magnitude, and scope of the proposed drainage project as soon as possible after its inception. Their continued involvement and input should be sought for the duration of the project as required. See chapter 5 for a listing of federal and state resource management and regulatory agencies.

It is easier and less costly to make adjustments to a proposed drainage design at the beginning of the project, rather than at the final hearing. Many a troubled project would have gone much smoother if proper input was provided early in the process. It is an uninformed person who believes that environmental concerns can be bypassed or simply ignored. The environmental and land use criteria alluded to throughout this manual are now part of DNR's statutory responsibility to analyze during its review of all proposed drainage projects.

Although not legislatively mandated, it is recommended that the engineer begin work on a proposed project by developing a rough conceptual or feasibility study as soon as possible. This study can then be used to define the project's magnitude and scope, and it can be used to brief appropriate federal and state officials. It will also be a useful document for defining the overall drainage problem for the engineer, the drainage authority, and the petitioners. This would be a good opportunity to identify all possible alternatives for alleviating the drainage problem generating the petition (see the discussion on "Alternatives to Drainage" found in section II of chapter 2 of this manual).

There is a great need for innovative alternatives to traditional solutions for drainage problems. Sometimes the problem is more complex than just removal of unwanted water. Erosion of topsoil, sedimentation in downstream channels (particularly fish habitat), transport of nutrients, prevention of fish migration, and destruction of wildlife habitat could result from the proposed project. Project proponents would be at odds with environmental interests, particularly for new drainage system proposals. Compromise of all competing value systems has to be the answer. The potential for success for a drainage proposal is greatly enhanced if the above recommendations for early environmental coordination are followed.

III. PRELIMINARY SURVEY AND ENGINEER'S PRELIMINARY REPORT

A. General

Proposed drainage projects require a survey and investigation of site conditions and the study of historical data to determine project feasibility for use in the design of a drainage project. The extent of investigation required for each project depends on the engineer's experience in the area and the amount of data already available.

Where the project is small, and the problems and their solutions are obvious, the extent of survey may be limited. Larger or complex projects will require a more extensive survey and analysis. In either case, there is a specified minimum amount of information that needs to be collected under the drainage code (see M.S. § 103E.245, Subds. 1 and 2). However, the engineer is ultimately

responsible for deciding the kind and intensity of surveys and investigations which are needed for planning, design, and evaluation of the drainage project which will meet the objectives of the petitioners.

The engineer's preliminary report is prepared in response to a petition for a drainage project. The petition, within the present context, is for the establishment of a New System, or for an Improvement, Lateral, Improvement of Outlet or an Impounding and Diversion of Drainage System Waters for an existing system. Petitions for Repairs generate different survey and report requirements and are discussed separately in the section of this chapter relating to Repairs of drainage systems. If the petition falls under the authority of an established watershed district, the statute stipulates that all proceedings must follow the drainage code. Regardless of the governing authority, county, joint county, or watershed district, the preliminary survey and investigation requirements are equivalent.

B. Preliminary Survey: Objectives And Limitations

The engineer commences the preliminary survey after receiving the drainage authority's order issued in response to a petition for the drainage project. However, an initial task is to clearly identify the objectives of the project. These objectives are usually articulated in:

- the petition and order expressing the goals and objectives of the petitioners and drainage authority; and
- appropriate legislation expressing the goals and objectives of the public.

With the risk of appearing to be all-inclusive, the following objectives and tasks are presented for consideration by the engineer in organizing the preliminary survey:

- carefully examine the drainage petition and order:
 - determine the extent of the area needing drainage;
 - determine the type of improvements required (e.g., flood prevention, surface drainage, or subsurface drainage); and
 - determine the adequacy of the outlet(s) for the needed drainage.
- ensure that the plan of improvement will meet the requirements of the drainage code and other environmental and water-related legislation and rules:

- determine whether the proposed drainage project is necessary and feasible with reference to the established environmental and land use criteria found in M.S. § 103E.015, Subd. 1;
- determine whether the proposed drainage project affects areas that have been designated as public water;
- determine whether the proposed drainage project will require any local, state or federal permits; and
- determine whether the proposed project is in compliance with a watershed district's overall plan (if applicable), a county water plan (greater Minnesota), a water management organization (WMO) plan (7-county Twin Cities Metro area), if available, and zoning regulations or standards adopted by a local government unit (see section II.B.4 of chapter 2 which discusses the requirements of the Minnesota Wetland Conservation Act, adopted in 1991, which requires mitigation for impacts to most wetlands).
- ensure that applicable federal laws are considered in the drainage plan including Section 404 and "Farm Bill" implications as discussed in detail in Chapter 2, section 11.B.2.
- ensure that the drainage plan will result in a practicable and feasible project from an economic point of view:
 - develop an estimate of all private and public costs associated with the project;
 - develop an estimate of all benefits resulting from the proposed project; and
 - make a comparison of the costs and benefits and prepare recommendations to the drainage authority for the course of action to follow.

When preparing an outline for a particular preliminary survey, the needs for future, more intensive surveys and reports should be kept in mind. Quite often, a little extra work on a preliminary survey will save a lot of time later when making the detailed survey and final report/design. In addition, reviewing agencies require information that has historically been reserved for the final survey and report. Therefore, it is recommended that the preliminary survey be substantially complete.

C. Preliminary Survey: Recommended Procedure

1. **General Requirements.** The following tasks are considered to be the minimum requirements or common elements for all types of drainage projects. Modifications may be needed for a specific project under consideration:

- Assemble and evaluate existing data. Use of existing data, such as maps, plans, aerial photographs, surveys, and records of previous drainage proceedings, saves considerable time in the investigation of drainage projects. If the project is for an Improvement or Lateral, then the ditch records (hearing findings, plans, correspondence, etc.) for the existing drainage system must be reviewed. All data should be evaluated to determine if it is accurate, current, and applicable to the project area. Limitations on use of the data should be specified.
- Prepare a map of the project area. U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle maps make excellent base maps upon which the following information should be shown:
 - the terminus and course of each drain and whether it is ditch or tile, and the location of other proposed drainage works;
 - the location and nature of the outlet;
 - the watershed of the proposed drainage project and the subwatershed of main branches, if any, including the location of existing bridges and culverts;
 - all property affected, with the names of the known owners ("affected" property includes all lands which could possibly benefit or receive damages because of the proposed project);
 - all utilities, public roads, and railways affected;
 - the outline of any lake basin, wetland, public water body, or public lands affected (a reminder again that it is critical, by now, for the engineer to have contacted appropriate local, state, and federal officials, as each governmental level will have its own respective regulatory jurisdictions for these water bodies and related land areas);

- other physical characteristics of the watershed necessary to understand the proposed drainage project and the affected drainage systems; and
 - the area to be acquired to maintain a grass strip as required by M.S. § 103E.021 (this information is best depicted on plan and cross section drawings attached to the map of the project area).
- Obtain or develop a generalized soil and (simple) land use map of the project area. Many counties are in the process, or have completed, a soil survey report prepared by the Soil Conservation Service. Land use maps can be obtained from county zoning or planning personnel and the Agricultural Stabilization and Conservation Service.
 - Develop a tentative plan of improvement and determine the approximate locations of proposed ditches and tile lines.
 - Conduct all field surveys and soil investigations based upon specific project requirements. At a minimum, the local county soil survey report should be reviewed. A brief description of the predominant soils should be included in the engineer's preliminary report, along with a discussion of the need for, and impacts of, drainage improvements on soil erosion and crop production.
 - Assess the adequacy of the outlet(s) for any proposed drainage improvements (discussed in section V of this chapter).
 - Evaluate the scope and impact to nearby water basins, wetlands, or watercourses.
 - Evaluate the environmental and land use criteria outlined in M.S. § 103E.015, Subd. 1 (these criteria were discussed and itemized previously in the environmental review section of this chapter).
 - Evaluate the public utility, benefit, or welfare in accordance with the requirements of the statutes (M.S. § 103E.015, Subd. 2).
 - Develop an itemized cost estimate for the proposed improvements.
 - Estimate public costs, including increased downstream flooding and sedimentation.

- Develop an estimate of benefits expected to accrue following completion of the proposed project.
- Compare costs and benefits.

2. Surface Drainage Project Requirements. In addition to the common elements of all projects, surface drainage projects have additional specific needs:

- Topographic surveys showing all physical features, both natural (e.g., rivers, ridges, etc.) and constructed features (e.g., roads, railroads, channels, dikes, etc.) which affect the design of the drainage system.
- Determination of land use and cropping patterns.
- Precipitation and runoff investigations (i.e., hydrology).
- Profiles and cross sections of all proposed drainage lines. The profiles should show design gradelines and channel dimensions (bottom width and side slopes). The cross sections must be taken at 100 foot intervals for the engineer's final survey and report, with elevations based on mean sea level datum, if practical (M.S. § 103E.271, Subd. 2). Depending on the existing topographic conditions, practicality may allow this cross section interval to be widened, based on the judgement of the engineer.
- Bridge and culvert dimensions and elevations along the course of the proposed drainage system.
- Locations of all utilities (e.g., power, telephone, cable TV, etc.) which would be affected by construction of the drainage project.
- Right-of-way acreage requirements, including that acreage for the required grass strips (required by M.S. § 103E.021).

3. Subsurface Drainage Project Requirements. In addition to the investigations common to all drainage projects, additional information will be necessary where a need has been indicated for subsurface drainage. Subsurface drainage investigations involve most of the items pertinent to surface drainage, plus more detailed information on soil, subsoil and ground water conditions. Surveys and investigations usually required for subsurface drainage include:

- Topographic surveys:
 - detailed topographic surveys; and
 - partial or strip topography
- Soils investigations:
 - standard soil survey maps; and
 - data on salinity and alkalinity
- Subsurface explorations:
 - logs of soil and subsoil materials; and
 - hydraulic conductivity measurements
- Ground water investigations:
 - position of water table relative to ground surface;
 - water table fluctuations; and
 - salinity of ground water
- Irrigation practices and requirements (where applicable):
 - quality of irrigation water;
 - frequency and type of irrigation;
 - amount of water applied during each irrigation application;
 - leaching requirement and deep percolation losses;
 - field ditch losses; and
 - source of water supply
- Investigations of existing subsurface drainage systems, including alignment, grade, and size of tile.

D. Engineer's Preliminary Report

The engineer's preliminary report provides a format for the engineer to report to the drainage authority the results of the preliminary survey and investigation of the proposed drainage

project. As required by state law, "...the report must give sufficient information, in detail, to inform the drainage authority on issues related to feasibility, and show changes necessary to make the proposed plan practicable and feasible including extensions, laterals, and other work" (M.S. § 103E.245, Subd. 4). The engineer must make a feasibility assessment of the proposed project to the drainage authority in the engineer's preliminary report. This feasibility assessment must also inform the drainage authority of the project impacts in regard to the environmental and land use criteria specified in M.S. § 103E.015, Subd. 1. The engineer's preliminary report should also include preliminary plans for the proposed project showing all major project features including:

- a project area map showing the drainage system's location and alignment, drainage area boundaries, environmental attributes of the area (wetlands, public waters, etc.), and other features (for consistency, it is recommended that drainage system ditches be labeled in the following hierarchical fashion: main - lateral - branch, i.e., branches outlet into laterals, and laterals outlet into mains.)
- plan and profile drawings of the proposed drainage system showing all grades, channel dimensions, bridge and culvert locations and sizes, and all critical elevations;
- design water surface profile, including head loss at each crossing shown on plan and profile drawings;
- cross sections of the proposed drainage system showing both the existing and proposed channel geometry;
- details of specific structures or other facilities necessary to make the project function properly; and
- all drawings bound into the preliminary plans contain the date of survey and are titled "Preliminary."

Legislative mandate requires that certain project features must be shown on the preliminary plans and discussed in the engineer's preliminary report. These mandates can be found in M.S. §§ 103E.245, Subd. 4; 103E.285, Subds. 2, 3, and 4; and 103D.711, Subd. 2. These items have been summarized previously in this chapter.

It is important at this point to emphasize two special features of the engineer's preliminary report. The first of these features is a detailed analysis of outlet adequacy. The drainage authority must make a finding at the preliminary hearing that the outlet is adequate in order to proceed with the project. This finding is

ultimately based on the engineer's analysis of the outlet and the engineer's conclusions as to its adequacy. There is no similar requirement for the final hearing. Therefore, outlet adequacy must be fully addressed in the engineer's preliminary report.

A second feature of importance is the engineer's assessment of estimated benefits. The estimated benefits should closely correlate with the documented soils information, existing drainage (both natural and artificial), acreage currently flooded, and anticipated land use. It is inconsistent to arrive at benefits to property from the proposed project while, at the same time, citing no land use changes. Specific features of these project-induced land use changes should be documented in the report (e.g., conversion of pasture into cropland, etc.).

Finally, the engineer's preliminary report should contain a tabulation of hydraulic data on the proposed improvements, a tabulation of required right-of-way, an itemized project cost estimate, and a copy of the petition for the drainage project. Appendix 3A to this chapter provides a suggested organizational format and outline for the engineer's preliminary report. Appendices 3B through 3E to this chapter provide suggested sample formats for presenting hydraulic data, right-of-way requirements, and itemized cost estimates.

The engineer's preliminary report is reviewed and utilized for decision making purposes by different agencies with different levels of interest and expertise. Technical reviews by the DNR or the U. S. Army Corps of Engineers are made by individuals with high levels of technical expertise. These reviewers require detailed documentation within the report to support the proposed drainage system design. The drainage authority, however, is usually composed of lay personnel, whose purpose is to arrive at a decision on the desirability and feasibility of proposed drainage projects, without necessarily getting too concerned with technical details.

Information must therefore be presented to the drainage authority in as concise a manner as possible. To accomplish this, it is recommended that the engineer provide an executive summary at the front of the engineer's preliminary report. The executive summary should contain a brief description of the project, an overview of benefits, land requirements, a brief outline of pertinent project data, anticipated environmental impacts, permit requirements and a summary of project costs.

The engineer's preliminary report, as supported by the preliminary survey and investigation, is an extremely important document in the establishment or improvement of a public drainage system. It serves as the basis for project review by the commissioner of the DNR and other local, state, or federal permitting agencies. In many instances, a necessary outcome of these reviews is the granting of various types of permits. For this review to be

effective, the engineer's preliminary report must be complete. More importantly, however, the engineer's preliminary report serves as a major decision making tool for the drainage authority.

E. Engineering and Environmental Study Costs

At this point in a drainage proceeding, substantial financial commitments may have been incurred in developing the preliminary survey and the engineer's preliminary report. The engineer is cautioned to keep the drainage authority informed as to the magnitude of costs accrued at various points throughout the drainage study process. At no time can these costs exceed the amount of the bond provided by the petitioners.

F. DNR Review

As required by M.S. § 103E.255, the commissioner must file a preliminary advisory report with the drainage authority before the date of the preliminary hearing. The primary focus of the DNR review is the adequacy of the engineer's assessment of environmental and land use considerations, the project impacts on public waters and wetlands subject to the Wetlands Conservation Act of 1991 and the adequacy of the outlet. The commissioner's preliminary advisory report should specify additional investigations that should be completed and documented in the engineer's final report, if any. An amended preliminary engineer's report may be recommended if the commissioner does not consider the engineer's evaluation of the adequacy of the outlet is sufficient. Finally, the commissioner's preliminary advisory report should comment on applicable permit requirements for the proposed project.

IV. DETAILED SURVEY AND ENGINEER'S FINAL REPORT

A. General

After the engineer's preliminary report has been filed with the drainage authority (as required by M.S. §§ 103E.251 or 103D.711), a copy is sent to the director, Division of Waters, DNR for review. The DNR will then issue a commissioner's preliminary advisory report to the drainage authority which addresses the adequacy of the engineer's preliminary report. The drainage authority then conducts a hearing on the engineer's preliminary report. The commissioner's preliminary advisory report is reviewed at this hearing and public testimony is taken. Provided that the project is not dismissed, the drainage authority may then order the engineer to perform a detailed survey and prepare a detailed survey report (i.e., again referred to hereinafter as the "engineer's final report").

B. Detailed Survey

There are two basic purposes of a detailed survey:

- to provide additional detailed information necessary for the staking and construction of the project; and
- to collect such additional information as is needed to address problems raised during the preliminary hearing, to modify the preliminary plan as directed by the drainage authority, or to evaluate and address concerns raised by the commissioner's preliminary advisory report.

When the order for a detailed survey is given, the engineer should follow the preliminary hearing order for the final project location survey. The statutes are quite explicit with respect to the amount of surveying that needs to be performed. For example, cross sections are to be surveyed at 100 foot intervals, and they must be stated in reference to mean sea level datum, if practical (see M.S. § 103E.271, Subd. 2). The drainage code implies that there is latitude for the engineer to exercise professional judgement and experience in establishing the level of the detailed survey. Many times it is more "practical" to take cross sections at intervals greater than 100 feet (i.e., 200 feet) if the topography is flat and unchanging.

From the standpoint of project construction, sufficient detail must be provided so that the contractor can construct the project with minimal ambiguity. In addition, a system of benchmarks for both vertical and horizontal control must be established along the project alignment at no greater than one mile intervals for future construction staking convenience. These construction-related tasks are most easily accomplished during the final survey.

Sometimes a project alignment or outlet is significantly changed during the preliminary hearing. Realignment may also come about due to right-of-way problems, mitigation of potential damage to wetlands, or for other reasons. Changes made in the project during the preliminary hearing often result in a substantial additional work during the final survey.

There is some difference of opinion among experienced engineers with respect to the level of detail that should be used when collecting information during the preliminary survey stage versus the final survey. If insufficient detail is taken during the preliminary survey, much of the previous work will be retraced during the final survey, resulting in extra costs. However, if the preliminary survey is too detailed, much of the work will be wasted if substantial project changes are made during the hearing process. At the same time, regulatory and reviewing agencies have been requesting additional field data during the preliminary survey

stage. It is recommended that the preliminary survey be made as complete as possible. This means doing much of the work to the standards demanded during the final survey. Again, it falls back on the engineer to select the appropriate level of detail at the preliminary survey stage to provide accurate estimates of the proposed project's cost, to satisfy reviewing agencies, and at the same time minimize surveying costs of the project.

(Note: Caution must be exercised during the preliminary survey to ensure that costs do not exceed the petitioner's surety bond. As the preliminary survey becomes more detailed in nature, the engineer must keep the petitioners' attorney and the drainage authority informed about cumulative costs - including an estimate of costs yet to be incurred.)

During the final survey, the engineer is given greater flexibility in deviating from the alignment decreed in the preliminary hearing, if necessary, to drain property likely to be assessed into the proposed drainage project. Such changes may include:

- additional ditches and/or tile that are necessary;
- outlet extensions; or
- additional outlets.

Additional concerns relative to the detailed survey need to be addressed at this time. It is highly likely that the final survey will become part of the permanent record of the proceedings for years to come. Original survey notes and the drawings prepared from them will become permanent records if the project is constructed. Therefore, the engineer must be sure that the survey work is accurate and of high quality. Benchmark locations should be shown on the plans, and their description and elevations should be tabulated. A final design water surface profile and ditch and tile gradelines, reflecting all changes, should be shown as part of the final profile drawings.

C. Engineer's Final Report

The drainage code is quite explicit about the minimum contents of the engineer's final report (see M.S. § 103E.285). The engineer's final report should essentially include all the information in the engineer's preliminary report, and additional information obtained during the detailed survey. In addition, the engineer's final report should consider recommendations contained in the commissioner's preliminary advisory report and preliminary hearing testimony, and the likely conditions of any required permits for the project.

An item that should be dropped from the engineer's final report is the engineer's discussion of economic benefits. By the final

hearing, the viewers will have completed a separate report on benefits and damages to the drainage authority. Any separate attempt by the engineer to address benefits would be both confusing and redundant.

The engineer's final report should be as accurate and error free as possible, for a number of reasons. First, after this report is filed with the drainage authority, it is then submitted to the commissioner of DNR for a second review. The commissioner then files a final advisory report with the drainage authority.

A second reason for an accurate engineer's final report is that it will be part of the public record for the drainage system. Information may need to be extracted from the report for future litigation, drainage system maintenance or Repair, or improvements. If the information contained in the engineer's final report is to be relied upon, and it will, then the report must be factual, accurate, and complete.

Since the engineer's final report is a modification and extension of the engineer's preliminary report, it may follow the same basic format. Appendix 3A to this chapter, which is a suggested outline for the engineer's preliminary report, may also be used as an outline for the detailed survey and the engineer's final report. However, as was previously recommended, discussion of economic benefits from the engineer's perspective should be excluded from the final report.

D. DNR Review

M.S. § 103E.301 gives the DNR two primary tasks during the review of the engineer's final report. First, the commissioner's final advisory report must make findings as to whether the engineer's final report is adequate. During its review, the DNR should try to answer the following questions:

- Will the project adequately drain the affected properties?
- Has the engineer fully evaluated the adequacy of the outlet?
- Has the engineer fully documented the environmental and land use impacts of the proposed project?
- Has the engineer identified all regulatory concerns?
- Has the engineer evaluated alternatives and included steps to minimize negative impacts of the proposed project?

If the answer to all of the above questions is yes, then the commissioner's final advisory report should state that the engineer's final report is adequate. The engineer's report will likely be found inadequate if the engineer attempts to minimize or gloss over negative impacts of the proposed project.

The second major component of the commissioner's final advisory report is a finding as to whether the proposed drainage project is of public benefit or utility under the environmental and land use criteria. The commissioner's final advisory report may find the engineer's final report is adequate yet also recommend that the drainage authority not proceed with the proposed project as planned. In this instance, the commissioner will have found that the public costs identified by the engineer (e.g., destruction of wildlife habitat) exceed the public and private benefits of the proposed project.

V. ADEQUACY OF OUTLET

A. General

The drainage code requires that the drainage authority make a determination of outlet adequacy for all new drainage system projects and modifications to existing drainage systems. The earliest opportunity for making this determination is during the preliminary hearing on the engineer's preliminary report. Therefore, the determination of outlet adequacy is mandated early in the process (see M.S. § 103E.261, Subd. 5(4)). The basis for the drainage authority's determination is information contained in the engineer's preliminary report, the commissioner's preliminary advisory report, and other testimony which may be presented at the preliminary hearing. As noted previously in the section on the engineer's preliminary report and the engineer's final report, the engineer must address "the character of the outlet and whether it is sufficient" (see M.S. § 103E.245, Subd. 4(3)).

Presently, the drainage code has no provisions for making an outlet adequacy determination for Repairs to existing drainage systems. Existing drainage systems are expected to be maintained to their original hydraulic condition, with the presumption being that the current outlet was originally determined to be adequate. Therefore, any Repair would merely restore the system to its original state, and restore its function as originally intended.

B. Definition Of An Adequate Outlet

The outlet is hereinafter defined as the terminal point of the drainage system under consideration. The extent of the outlet includes whatever downstream reaches that might be impacted by increased discharges from the proposed project. The outlet may consist of a river, creek, lake, pond, or another public drainage system. Thus, outlets may be classified as natural or artificial

(i.e., a public drainage system). This classification is important because of specified or documented hydraulic requirements for artificial channel outlets.

One of the most important considerations in all drainage planning is to determine the adequacy of the outlet for the proposed drainage system. If the outlet is determined to be inadequate, it must be made adequate, an alternative outlet must be found, or the project must be abandoned. The overall feasibility of a drainage project is greatly affected by the requirement for an adequate outlet.

Generally, new drainage activities or modifications to an existing drainage system will increase the peak discharge for the more frequently recurring storms or runoff events. The increase will vary according to the ratio of the system's capacity after the modification as compared to its capacity before the modification. The effect which this increase in peak discharge has on stages of water levels in the outlet depends upon several factors. These factors include the relationship of the size, shape, and hydrologic characteristics of the project area improved, as compared to the size, shape, and hydrologic characteristics of the watershed of the outlet above the point of discharge of the proposed system (see Figure 3-1 below). Since public drainage systems are normally designed for the more frequent runoff events (i.e., the 5-year or 10-year return period), larger, less frequent events (e.g., the 50-year or 100-year return period), generally exceed system hydraulic design capacity and cause the hydrologic response of the proposed project's drainage area to regress toward pre-project conditions. Any official concept of outlet adequacy should therefore be viewed within a range of hydrologic events (i.e., project design storm up to the 100-year flood).

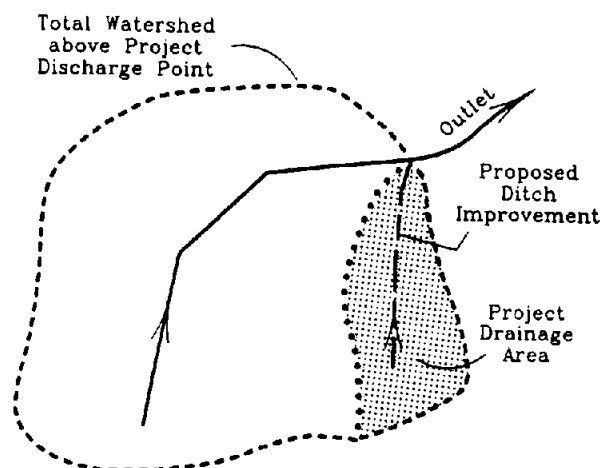


Figure 3-1

The definition of what is an adequate outlet depends on several factors and individual viewpoints. From the perspective of the petitioners, an adequate outlet must be one that will drain the project area effectively. On the other hand, an individual residing at the outlet or immediately downstream from the outlet may be more concerned about increased frequency and higher flood stages along the course of the outlet channel. This situation essentially mandates the question - will the outlet handle post-project outflow without increased downstream damages in comparison to pre-project conditions? In making an assessment of outlet adequacy, the engineer must address all of these concerns.

C. Basic Requirements Of An Adequate Outlet

In determining the adequacy of outlets for drainage systems, the following basic requirements must be met:

1. The design flow from the proposed project's drainage area will discharge at a stage (elevation) equal to or less than that required for adequate drainage of the land in the project:

- A stage-discharge relationship of the outlet channel should be determined from gaging records, by computing normal depth or by developing water surface profiles.
- A frequency-discharge-stage relationship of the outlet channel should be determined by using commonly accepted hydrological frequency assessment procedures. The stage in the outlet for post-project hydrologic conditions should not exceed the hydraulic gradient (water surface profile) at the lower end of the proposed drainage system. This stage comparison should be done at the same frequency for both the outlet and the project drainage system using the project design frequency (e.g., 10-year event).
- If the outlet consists of a pond, lake, or reservoir, the design water surface at the outlet of the proposed drainage system should be at or above the normal water surface elevation of the water body.
- The elevation of the water surface at normal low flow in the outlet should permit any needed subsurface drainage to be discharged. The hydraulic gradeline for low water flow, from the outlet through the system of mains and laterals to the uppermost subsurface drain in the project, should be determined to ensure that all needed drains can be discharged above it.

2. There should not be excessive scour or deposition of sediment in the outlet channel or water body:

- The drainage channel should be designed such that sediment delivery to the outlet is minimized using grade control strategies in accordance with generally accepted engineering practice.
- If the proposed drainage system's hydraulic gradient is significantly higher than that of the outlet, an outlet structure should be provided to accomplish the required dissipation of hydraulic head. Such a structure should be designed in accordance with generally accepted engineering practice.

3. The capacity of the outlet must be such that the discharge from the project, after the proposed project is constructed, will not result in stage increases in the outlet that will cause flood damages downstream:

- Available watershed district overall plans or county local water plans should be reviewed to ascertain past flooding problems along the outlet channel. Additionally, previous unsuccessful attempts at drainage improvements along the outlet channel should be evaluated to determine the extent of past flooding problems.
- Increased damages may arise due to increased frequency of recurrence of flood events. Existing downstream land use activities along the course of the outlet should be analyzed for increased damage potential due to more frequent exposure to flood events. Such land use activities could include buildings, bridges, culverts, roads, farm land, and other similar uses. The reader should take note again of the environmental and land use criteria found in M.S. § 103E.015, Subd. 1, wherein it stipulates that the drainage authority must consider the impacts of the project on, "flooding characteristics" of property in the drainage project or system and downstream for the 5-, 10-, 25- and 50-year flood events. A recommended method for showing increased flooding frequency is to plot before and after project discharges on probability graph paper (an example is shown as Figure 3-2 on page 3.28).
- Current State of Minnesota floodplain management standards that numerous local governmental units have adopted utilize the 100-year flood event as a base flood condition. When a community has an adopted floodplain ordinance (not all have), these standards generally allow a 0.5 foot stage increase due to an

encroachment or improvement in the designated floodplain (except where damage potential exists). If damage potential exists, then a reduced, and in some cases, no stage increase criterion is used. The 0.5 foot allowable stage increase may already be accounted for by local adoption of a community designated floodway. The engineer must evaluate the outlet for pre-project and post-project 100-year flood discharges/stages and check for compliance with the state floodplain standards found in local governmental ordinance. If the proposed project increases the flood damage potential, then the affected land use(s) would have to be protected (i.e., flood proofing, floodwalls/levees, etc.) or the proposed drainage project would have to be redesigned. If the proposed project will increase an adopted 100-year flood profile, then the drainage authority will be responsible for providing the necessary data to amend the flood insurance study and community ordinance.

- The engineer should make an assessment of all damages arising from the proposed project and include the estimate of the cost to mitigate these damages as part of the overall project costs in the engineer's preliminary report. Any increased damage potential downstream of the outlet which cannot be mitigated should be identified by the engineer and utilized by the viewers in making their determination of project benefits and damages.
- If the outlet for the proposed drainage system is another public drainage system, then the hydraulic capacity of the outlet drainage system and its structures must not be adversely affected such as to hamper its intended design and function.
 - An existing outlet drainage system may have ample excess hydraulic capacity to accommodate increased outflow from the proposed project. If so, then this capacity must be analyzed and documented by the engineer. Appropriate hydraulic calculations should be presented to support this determination.
 - If the public drainage system outlet for the proposed project is determined to be inadequate, then the engineer must so report and recommend appropriate remedies, with the support of hydraulic analyses.

D. Methods Of Outlet Analysis

Depending upon the magnitude of the proposed drainage project, there are several hydrologic and hydraulic methods of analysis available to the engineer for developing the assessment of outlet adequacy. The engineer should always use methods of analysis which are generally accepted as good state-of-the-art engineering practice. The methods of analysis outlined herein are considered to represent good engineering practice.

Each engineering approach involves various levels of effort, field survey requirements, and cost. Smaller drainage projects, whose outlet impacts will be minimal, may only warrant a basic, less expensive engineering analysis. Larger projects could require substantial analyses of outlet conditions and could represent a significant portion of the engineering budget. The engineer must consider the potential significance of outlet impact and downstream damages. When selecting the analytical approach for larger projects, it is recommended that the engineer coordinate the selected outlet analysis approach with the DNR, Division of Waters, at the earliest practical time during project development. In this way, the project sponsors and the drainage authority will have sufficient time to incorporate an adequate level of outlet analysis in the project engineering budget and also be kept informed of ongoing project costs.

1. Field Survey Data. All hydrologic and hydraulic analyses will require some level of field survey information reflecting existing outlet conditions. An office review of aerial photographs of the outlet and USGS 7-1/2 minute topographic maps will indicate locations where field survey data should be collected. Depending on the anticipated significance of outlet impact, the following information is considered a minimum requirement for a field survey:

- outlet channel cross sections at the point of project discharge, as well as selected locations upstream and downstream;
- geometry and critical elevations of bridges, culverts, dams, and other structures within the affected reach of the outlet;
- critical elevations of buildings and adjacent land uses, and the elevation of the onset of flooding along the potentially impacted reach of the outlet; and
- all historical highwater marks in the vicinity of the outlet.

(Note: The suggested information should be collected as far downstream along the outlet as there may exist a potential impact from the proposed project. Since

the collection of field survey information can be an expensive item of the engineering budget, the engineer should coordinate the scope of this work with the DNR, Division of Waters, before commencement of the field survey. All field survey information should be documented in the engineer's preliminary report).

2. Outlet Hydrology. All outlet analyses should provide an estimate of the discharge-frequency relationship for both the "with" and "without" project condition. Depending on the magnitude and potential significance of the proposed project's impact, required information may vary from simple stage-discharge relationships to full runoff hydrographs. In a few instances, a USGS gaging station may be conveniently located close to the proposed project's outlet. Gaging station records may vary from recording only peak stages and discharges to providing a continuous daily discharge record. This is considered to be the best available hydrologic information. Such information can provide a direct relationship between discharge, stage, and duration of the hydrograph.

However, most proposed drainage projects are not conveniently located adjacent to or near a gaging station. In such cases, approximate methods incorporating regional hydrological analyses are available. These methods only provide peak discharge-frequency information. This information is then converted to stage-frequency relationships via channel hydraulic calculations, to be discussed later. Regionalized hydrological relationships that are commonly accepted for drainage system design in Minnesota include the following publications (publication "references" are found in Appendix 3F):

- USGS "Techniques for Estimating the Magnitude and Frequency of Floods in Minnesota" (Ref.1);
- Minnesota Department of Transportation (MDOT) "Drainage Manual" (Ref. 2) and its regional runoff/discharge curves (currently being updated); and
- SCS "Hydrology Guide for Minnesota" (Ref. 3), which incorporates rainfall-frequency and peak runoff related by the curve number concept.

In general, the SCS Hydrology Guide is preferred for outlet analysis because it provides an estimate of both peak discharge and time to peak. The timing of the arrival of peak discharges at the outlet can be critical in assessing the impact of a drainage project. The SCS Hydrology Guide is also the only method of the three listed which can be used for determining the impacts of the proposed project. Use of the USGS regression equations and the MDOT drainage curves is generally limited to design purposes only.

The above methodologies are usually adequate for most drainage projects in Minnesota. However, some projects may be of such a magnitude that a hydrograph analysis may be warranted. Hydrograph analysis is usually appropriate where the duration and timing of the peak discharges of the outlet channel and the proposed drainage system is critical to outlet adequacy. This type of analysis usually involves the development of a rainfall-runoff hydrograph model for both the project drainage area and the total watershed of the outlet above the point of project discharge. Commonly accepted computer models for this type of analysis include the U.S. Army Corps of Engineer's HEC-1 Flood Hydrograph Package (Ref. 4) and the Soil Conservation Service's TR-20 Model (Ref. 5). This type of approach to outlet analysis does represent a significant engineering cost to the project and is only recommended where the proposed project is large and the outlet damage potential is considered to be significant. The need for this approach should be coordinated with the DNR, Division of Waters, early in the project development phase.

3. Outlet Hydraulic Analysis. The outlet hydraulic analysis should provide a reliable relationship between peak discharges over a range of frequencies and stages (see section V.C.3 of this chapter). A stage-frequency relationship can then be developed for pre-project and post-project conditions. The difference between these two stage relationships can be used to assess the adequacy of the outlet to accommodate the increased peak discharges, if any, associated with the proposed project. In addition, the two stage-frequency relationships will provide a basis for assessing increased damages along the outlet, if any.

There are several analytical techniques for developing a stage-discharge-frequency relationship (rating curve). If a gaging station exists near the outlet of the proposed project, an outlet rating curve may already be available. It may also be possible to transpose an existing rating curve from a nearby gaging station to the proposed drainage system's point of discharge by an elevation-correction relationship.

If an existing gaging station's rating curve does not exist for the outlet, then an engineering hydraulic analysis of the outlet channel is required. When significant damage potential exists along the outlet channel, it is recommended that water surface profiles be calculated for a range of discharges, including the project design frequency and the range of flood events discussed in section V.C.3 of this chapter. Commonly accepted hydraulic models for calculating water surface profiles include the U.S. Army Corps of Engineers' HEC-2 (Ref. 6), the Soil Conservation Service's WSP-2 (Ref. 7), and the USGS's WSPRO (Ref. 8) models. All of these models not only calculate water surface profiles efficiently, but also analyze culverts, bridges, and roadway overtopping.

For smaller drainage projects, where it can be assumed that damages at the outlet will be insignificant, less sophisticated hydraulic analyses may be appropriate. The standard approach for this type of analysis would be a normal depth calculation using Manning's Equation. Where downstream culverts and bridges may be affected, hydraulic analyses of these structures may be required. The engineering standard for culvert analysis is the Federal Highway Administration's HEC 5 (Ref. 9) nomograph methodology. A computer program version of HEC 5 is also available (called HY8). It is recommended that normal depth be calculated for a range of discharges, including the project design frequency and the range of discharges discussed earlier.

E. Documentation Of Outlet Adequacy

The engineer must make a determination of outlet adequacy in the engineer's preliminary report (see M.S. § 103E.245, Subd. 4 (3)). This determination must be supported by an acceptable engineering analysis of pre-project and post-project outlet conditions. A special section of the engineer's preliminary report must be provided to include a complete discussion of the analysis, results, assessment of potential damages, and recommendations concerning outlet adequacy.

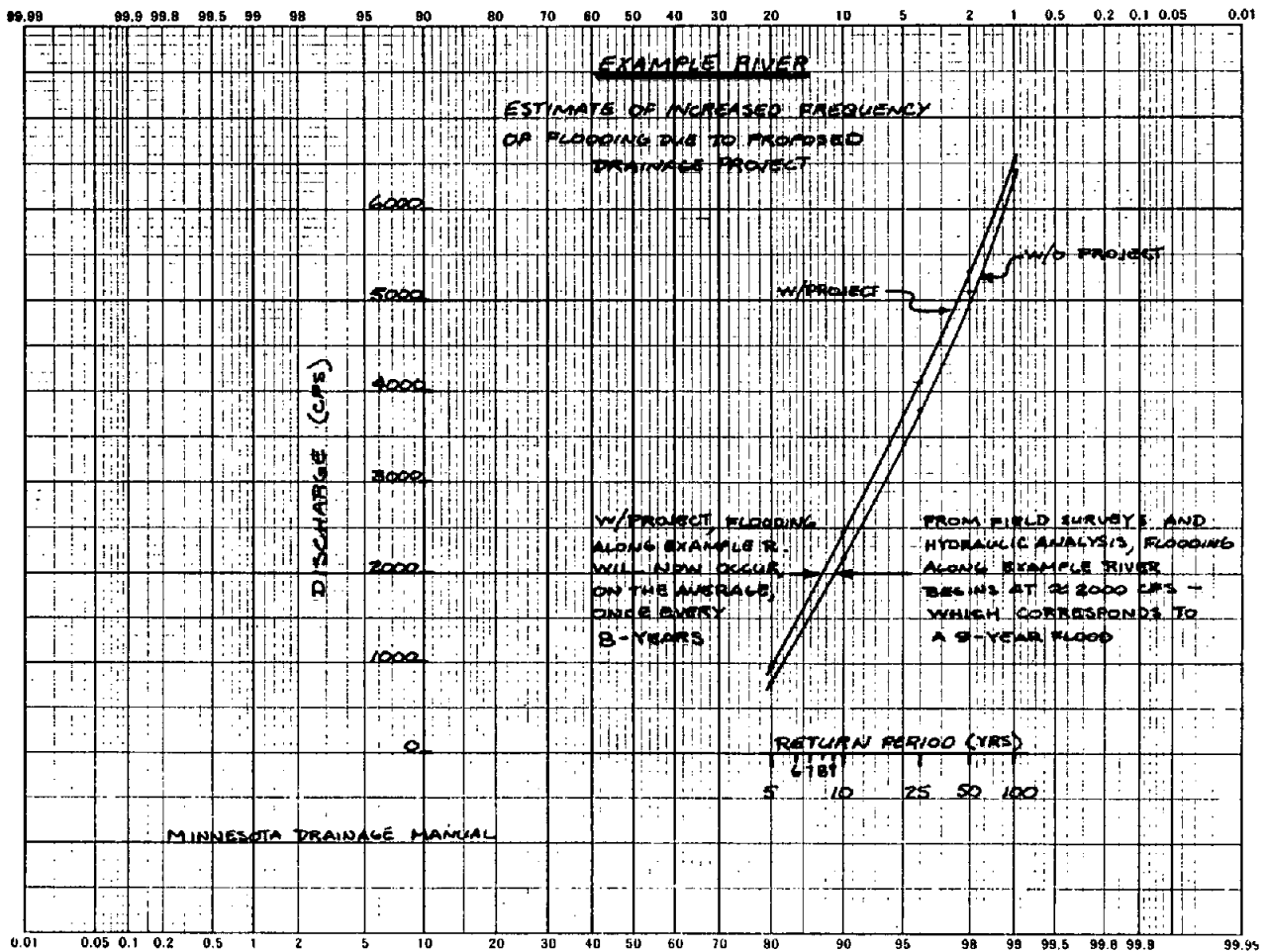
As indicated previously, all critical field survey data pertaining to the outlet and its relationship to the proposed drainage project should be documented in the engineer's preliminary report. Typical outlet channel cross sections should be shown on the preliminary plans, along with historical highwater elevations. All structures, facilities, or other land uses along the outlet channel which could be adversely affected by the project should be shown, along with their critical floor and/or ground elevations.

If damage potential along the outlet is significant, the water surface profiles for the design frequency event and all other critical flood events should be shown on a profile drawing of the outlet channel adversely affected. At a minimum, the engineer should document pre-project and post-project outlet channel hydraulic conditions in the engineer's preliminary/final report, with a tabulation of supporting calculated data (either normal depth or water surface profile calculations). This data, along with other field data collected, will enable an adequate review by DNR staff and other agencies. A suggested format for reporting outlet channel hydraulic data is shown on the following page.

Peak Discharges, Example River (cfs) At Station 1

<u>Return Period (in yrs.)</u>	<u>Without Project</u>	<u>With Project</u>	<u>Percent Increase</u>	<u>Change in Stage due to Project</u>
5	780	950	22	0.70 ft
10	2170	2460	13	0.55 ft
25	3805	4095	8	0.40 ft
50	5090	5315	4	0.30 ft
100	6340	6510	3	0.05 ft

Figure 3-2



VI. NEW SYSTEMS OR IMPROVEMENTS TO EXISTING DRAINAGE SYSTEMS

A. General

For the purpose of this section, new construction or modifications to existing systems refer to the following types of projects (the establishment proceedings for these types of projects are discussed in greater detail in Chapter 2):

1. New System (see M.S. § 103E.212). This type of project involves the establishment of a public drainage system with a new benefiting area where none had previously existed. The establishment may or may not involve a construction project. The establishment process does involve documenting the starting point, the general course, and the terminus of the proposed system. Acquisition of required right-of-way, adequate to accommodate the channel, ditch, or tile (existing or to be constructed) and the grass strip, is a required part of the proceeding. In addition, viewers are directed to determine the benefiting area for the New System.

2. Improvement (see M.S. § 103E.215). Improvement projects involve the reconstruction or significant alteration of an established public drainage system having a benefiting area on record. Improvement means tiling, enlarging, extending, straightening, or deepening of the established and previously constructed system. Improvement also means replacing an established public open ditch with a tile, or an established public tile with an open ditch. An existing drainage system may only be extended downstream via an improvement proceeding to a more adequate outlet, and then only for one mile. Extensions in an upstream direction from the existing system constitute a Lateral and will be discussed later.

Generally, an Improvement project provides for the upgrading and enhancement of the existing system's hydraulic capacity and drainage ability. Viewers are appointed in order to revise the benefitted area and the amount of benefits per acre.

3. Improvement of Outlet (see M.S. § 103E.221). This proceeding can be used when an overflow of an existing drainage system or watercourse is caused by construction (or proposed construction) of a tributary drainage system (either public or private). It involves a reconstruction of the overflowed drainage system or constructing diversion channels which will relieve the injured parties. Property benefiting from this proceeding can be identified and documented by appointed viewers (who may need the assistance of an engineer).

4. Laterals (see M.S. § 103E.225). A Lateral is any drainage construction by branch or extension of an established public

drainage system. It often provides a connection or outlet for property already assessed benefits by the existing system. If the property is not currently being assessed benefits to the existing system, then authority has to be obtained to use the existing system as an outlet, in accordance with M.S. § 103E.401. An outlet fee or some other type of compensation is usually assessed to the proposed Lateral.

5. Impounding and Diversion of Drainage System Waters (see M.S. § 103E.227). Although its objective is not drainage, this type of proceeding is mentioned herein only because it has the potential to impact an established public drainage system. The purpose of this proceeding is to conserve and make beneficial use of water within a given drainage system. It corresponds to criteria number five of the statutory environmental and land use considerations found in M.S. § 103E.015. The impoundment and diversion structure will generally alter the normal functioning of the drainage system on which it is constructed and, therefore, the petitioners for this type of proceeding must obtain flowage easements or other rights-of-way from owners of land to be affected. However, the statutory recognition for this type of alternative function on a drainage system opens the door to some innovative projects. The inclusion of a water conservation facility within a public drainage project can lead to many alternative solutions to drainage problems.

B. Engineering Requirements

Practically all types of new construction or modifications to existing drainage systems require preliminary and final surveys and engineer's reports. Sections III and IV in this chapter provide guidance to the engineer in conducting the required surveys and preparing the necessary reports. There are specific engineering requirements for the different types of projects that are addressed in this section. The engineering requirements discussed in the following paragraphs should be documented in both the engineer's preliminary report and the engineer's final report, as text or tabulated data, and/or graphical representations on the preliminary plans:

1. Ditch/Channel Hydraulic Design. The engineer is responsible for recommending a drainage system design that will relieve the project area of damaging water, while at the same time, being non-erosive and non-harmful to adjacent and downstream interests. The magnitude and frequency of the design discharge is a function of developing sufficient benefits to exceed the costs of the project. Standard engineering practice in Minnesota has generally favored a 2-year to 10-year return period design discharge.

Once the appropriate design discharge is selected by the engineer, the channel dimensions, slope, and hydraulic properties are calculated by an appropriate method, such as Manning's Equation (normal depth). For medium to large size projects, a design water

surface profile should be developed from the project outlet to the upper end of the system. Water surface profiles are commonly calculated using computer programs such as the U.S. Army Corps of Engineers' HEC-2, the Soil Conservation Service's WSP-2, or the U.S. Geological Survey WSPRO models. These methods use the standard step solution procedure. For prismatic channels, very good direct step methods are available for programmable calculators.

Velocities, flow depths, and soil types should be checked at all critical points in and along the course of the system to insure that erosion potential is within control, and that the maximum water surface profile does not adversely hamper the project drainage function. "The Minnesota Drainage Guide," published by the Soil Conservation Service (Ref. 10), contains a set of criteria relating to non-erosive velocities for general soil types. If the results are not acceptable, the system's design variables (depth and width) should be adjusted until conditions are satisfactory.

In addition to the selected design discharge, the proposed system must be evaluated for its flooding characteristics for: 1) the 5-, 10-, 25-, and 50-year flood events (see M.S. § 103E.015, Subd. 1 (4)); and 2) the 100-year flood event, when a local government's floodplain ordinance comes into play. For documentation purposes, the design water surface profile should be shown on the preliminary profile drawings. Normal depth calculation results, for various flood events, and for all design reaches within the system, can be recorded in tabular form in the engineer's report(s). A suggested format for such a table is included in this chapter as Appendix 3B.

2. Bridge/Culvert Hydraulic Design. Centerline structures (bridges and culverts) are required at many points along a drainage system. The proper design discharge for these structures is a function of the type of crossing (county road, township road, private crossing, etc.), and the upstream damage potential (buildings, grain storage, etc.).

The engineer must select a design discharge which is most appropriate for the condition of a specific centerline structure's location. This generally involves a risk assessment of upstream damage potential, balanced against structure costs. Commonly used design discharges are as follows:

<u>Type of Road</u>	<u>Design Discharge</u>
Private road	10-year
Township road	10- to 25-year
County road (gravel)	20- to 25-year
County road (asphalt)	25- to 50-year
State highway	50- to 100-year

(Note: 100-year or greater protection may be required when a road or highway is the primary/only access into a developed area and inundation would result in the disorderly functioning of the area).

The engineer must also check to see that the proposed structure will adequately pass the proposed drainage system's design flow without adversely affecting the drainage system's functional performance. Other hydraulic design items of concern are maximum culvert velocity (erosion and scour potential) and headwater-tailwater conditions (stage increase).

There are several methods available for the hydraulic analysis of bridges and culverts. The Federal Highway Administration has two publications: "Hydraulic Design Series No. 1" (Ref. 11), for bridges; and "Hydraulic Design Series No. 5," for culverts. These publications should be consulted for details. Computerized versions of these two publications are currently available: WSPRO for bridges, and HY8 for culverts. The program WSPRO also does double duty as a water surface profile calculation routine. Bridge and culvert hydraulic design results should be documented in tabular form in the engineer's report(s). A suggested format for such a table is included in this chapter as Appendix 3C.

3. Field and Tributary Inlets. Field or tributary inlets can be classified as open or piped. Open inlets are simply an open cut inlet to the ditch. Anytime that open inlets are used, the engineer must consider erosion protection measures. Piped inlets are used to deliver inflow to the drainage system when there is an excessive drop in elevation from the field or natural ground level to the ditch bottom. They are also used in conjunction with flap gates (flood gates) to prevent backflow from the ditch system onto adjacent property when water level stages in the ditch are higher than the natural topography. Pipe sizes are usually based on contributing drainage area.

Field or tributary inlets are located as needed along the drainage system. The decision to use piped and flap gate inlets should be based on a water surface profile and backflow history. Ditch inlets are sometimes shown on the preliminary plan and profile drawings. This can be cumbersome and misleading at times because inlet locations are usually field sited during construction. However, a tabulation of inlet pipe quantities should be included in the engineer's report(s) as part of the itemized cost estimate.

4. Miscellaneous Structures. Specific project requirements may dictate the use of special purpose structures. These include:

- drop structures, used for grade control and to provide erosion protection;

- outlet structures, used to provide a smooth hydraulic transition for the design discharge from the project terminal point to the designated outlet, usually at a much lower elevation;
- rock riprap, used for erosion control in locations of high velocity;
- detention structures, used in conjunction with a storage area to detain flood flows by metering through a restrictive structure;
- water level control structures, check dams, stoplog devices, and other similar structures, used for maintaining the water level in designated areas such as lakes, wetlands, and public waters; and
- Sediment basins, primarily used during construction, to trap sediment before entering a lake or stream.

Hydraulic design of these structures is of a specialized nature and will not be discussed herein. It is recommended that the engineer consult any of a number of fine references such as King's "Handbook of Hydraulics" (Ref. 12), "Open-Channel Hydraulics" by Chow (Ref. 13), and publications of the federal government put out by the Soil Conservation Service, the U.S. Army Corps of Engineers, the Federal Highway Administration, and the Bureau of Reclamation.

5. Channel Geometry. Channel dimensions are generally a function of hydraulic design requirements. However, side slopes for the trapezoidal shaped ditch can be dictated by other factors. Soil slope stability considerations may dictate flatter side slopes to prevent sloughing. An acceptable design side slope, which is consistent with soil stability, can be determined by a geotechnical analysis of soil boring samples taken along the ditch alignment.

However, the engineer can base the design of the side slope on past experience in the area with acceptable risk. This is a commonly accepted practice in Minnesota. Slope stability can also be enhanced by spreading the ditch excavation spoil in a thin layer along the ditch bank or by leaving a berm.

Other factors affecting the design ditch side slope include:

- the amount of right-of-way necessary (economic);
- ease of maintenance for tractors and mowers;
- minimization of snow blockage (early spring opening);
- vehicle recovery zone safety; and

- regional practices

6. **Grass Buffer Strip.** The drainage code requires in M.S. § 103E.021, Subd. 1, that:

"In any proceeding to establish, construct, improve, or do any work affecting a public drainage system under any law that appoints viewers to assess benefits and damages, the authority having jurisdiction over the proceeding shall order spoil banks to be spread consistent with the plan and function of the drainage system. The authority shall order that permanent grass, other than a noxious weed, be planted on the banks and on a strip 16 1/2 feet in width or to the crown of the leveled spoil bank, whichever is greater, on each side of the top edge of the channel of the ditch. The acreage and additional property required for the planting must be acquired by the authority having jurisdiction."

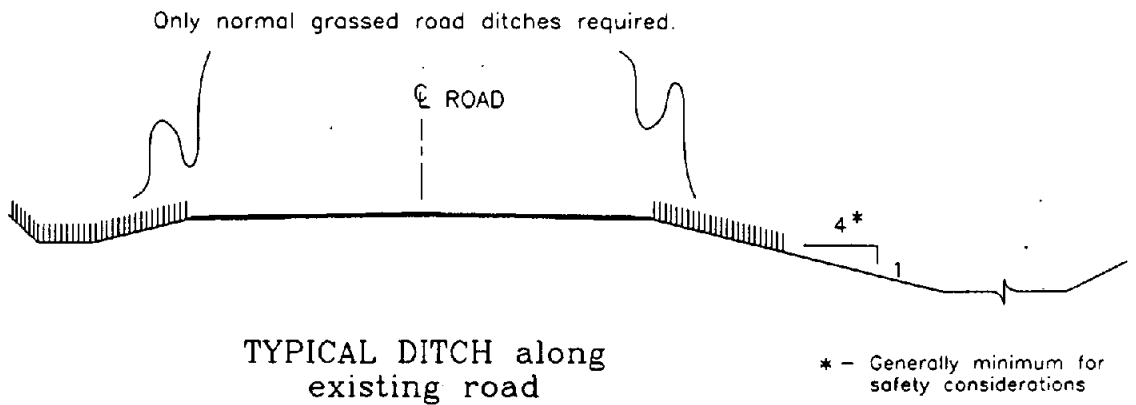
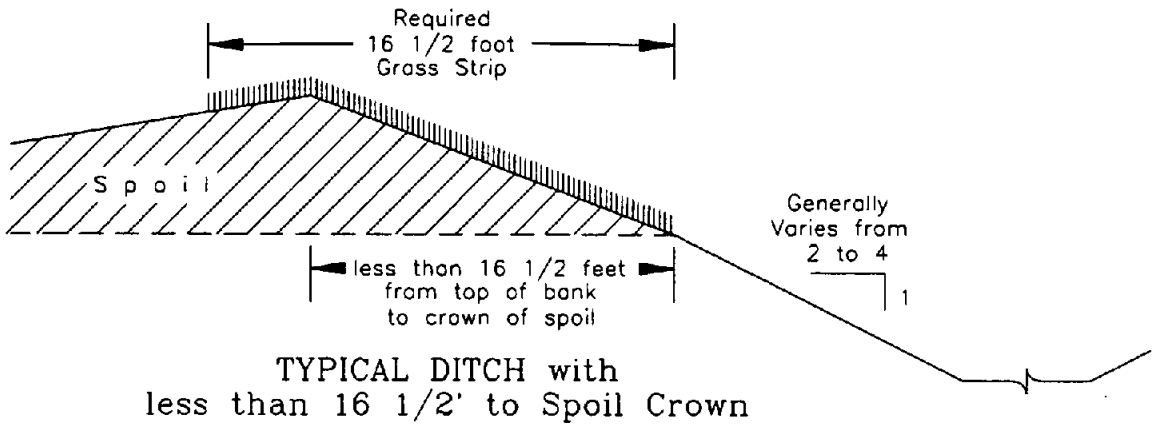
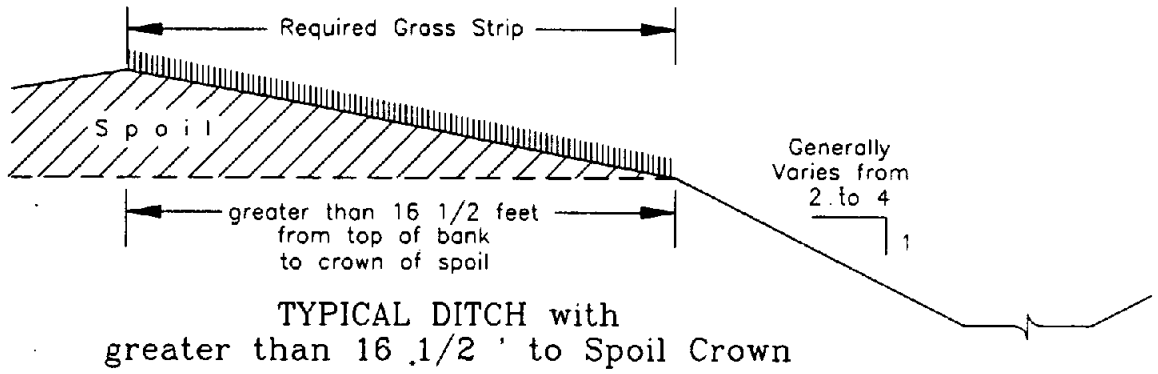
The above requirement applies whenever viewers are appointed for new ditch construction or modifications to existing drainage systems discussed in this section. Since some Repair proceedings require viewers to assess benefits and damages, these projects also must provide for the grass buffer strip.

Figure 3-3 on the following page illustrates the grass buffer strip requirement mandated by the drainage code. The top and middle portions of this figure represent a typical open field public ditch commonly found along property lines or some other location. The top portion of Figure 3-3 illustrates that more than 16 1/2 feet of grassed strip is mandated because the grass buffer strip must go to 16 1/2 feet from the top of the ditch bank, or to the crown of spoil bank, whichever is the greater of the two. In the middle example, the top of bank to crown of spoil is less than the minimum of 16 1/2 feet; the grass buffer strip must therefore extend beyond the crown of spoil to get the required 16 1/2 foot width.

When a road is located adjacent to an open ditch, the situation becomes less clear, as shown in the bottom illustration of Figure 3-3. The field side of the ditch offers no problems. However, where would one place a grass buffer strip on the roadway side? Developing a grassed strip between the ditch bank and the road would necessitate either moving the road (highly impractical) or moving the ditch 16 1/2 feet to the left (expensive due to added right-of-way and excavation). The intent of the grassed buffer strip provision is to minimize wind-blown topsoil from entering the ditch by trapping it in the grass. The grass strip also serves to prevent agricultural encroachment and minimizing soil from being washed into the ditch. The roadway and its road ditch tend to

Figure 3-3

GRASS BUFFER STRIP REQUIREMENT
(M.S. c 103E.021)



provide the same protection as the grassed strip. Therefore, no grassed strip need be required along the roadway side of the open ditch.

VII. REPAIR/MAINTENANCE OF DRAINAGE SYSTEMS

A. General

All drainage systems deteriorate with time, but at varying rates. Deterioration is due to a number of factors, including siltation (sedimentation), overgrowth of vegetation, erosion of the ditch bottom and side slopes, sloughing due to soil instability, and human activity (e.g., agricultural encroachment). The objective of the drainage authority and a good Repair (or maintenance) program is to keep the drainage system functioning as originally intended. If sufficient periodic maintenance is performed on the system by the drainage authority, this objective will be met. Unfortunately, most drainage systems are not sufficiently maintained, and the result is a reduction of drainage efficiency through unchecked deterioration. Eventually, a minor or major Repair of the system is required, and in some instances, an Improvement may be warranted.

The statutory definition of a Repair, found in M.S. § 103E.701, Subd. 1, is:

"to restore all or a part of a drainage system as nearly as practicable to the same condition as originally constructed and subsequently improved, including resloping of ditches and leveling of waste banks if necessary to prevent further deterioration, realignment to original construction if necessary to restore the effectiveness of the drainage system, and routine operations that may be required to remove obstructions and maintain the efficiency of the drainage system."

As noted in the above definition of a Repair, resloping is allowed as part of a Repair proceeding. Resloping (i.e., constructing to a flatter side slope) is commonly justified because of its ability to preclude future Repairs due to soil instability. The resloped ditch is also easier to maintain.

As an additional reminder, persons proposing any activity (including maintenance or Repair of drainage systems) that may involve work affecting a Navigable Water of the U.S., or a discharge of dredged or fill material into any wetland or water area, should contact the U.S. Army Corps of Engineers to determine if their project will require a COE's permit. These activities may also impact on a landowner's receipt of benefits under the 1985 Food Securities Act, as amended. A more detailed discussion of these issues can be found in section II.B.2 of chapter 2.

B. Determination Of As Built Condition (Original Grade)

Since by definition a Repair is the restoration to the "as constructed drainage system condition", the engineer is often placed in the position of determining that condition. Unauthorized construction beyond the as constructed drainage system condition can affect adjacent natural resources, such as public waters and wetlands. Consequently, since the DNR administers these resources, the commissioner has a duty to monitor these types of Repairs. The reader should refer to section IV.G.4 of chapter 2, which contains a discussion describing when mitigation must be provided if a Repair would impact "significant habitat or protected vegetation."

There is no single best method for establishing the as constructed condition. Original construction plans are seldom complete; they frequently reference an assumed benchmark elevation which may have been destroyed. "As-built" construction plans may not exist. Generally, the actual grade(s) constructed do not match those shown on the construction plans, and as-built or "record" drawings were seldom completed. Therefore, establishment of the original grade line becomes a matter of professional judgement. The drainage authority is ultimately responsible for making this determination, after consultation with their engineer. However, if the Repair may affect a public water, M.S. § 103E.701, Subd. 2, stipulates that the commissioner of DNR must be given an opportunity to review the decision of the drainage authority before construction commences. If the commissioner disagrees with the drainage authority, then a 3-member panel, consisting of the engineer, a representative of the DNR, and a local soil and water conservation district technician will make a recommendation to the drainage authority.

An accepted method of determining the depth of original construction uses a combination of soil borings and field surveys, plus any other available data. The procedure involves taking soil borings in the ditch bottom at periodic locations along the ditch alignment. The depth at which the soil horizon changes suddenly to a parent base material (e.g., clay) is usually sufficient evidence of the original grade. The overlying soils have been deposited via siltation during years of inactive maintenance. The original grade, as determined by these soil borings (i.e., "the clay line"), should then be tied together by field survey, and the elevations recorded, based on a common mean sea level datum.

C. Routine Repair/Maintenance Of Drainage Systems

Routine maintenance involves spot cleaning of isolated sediment deposits, vegetation removal, and bridge or culvert cleaning. This type of work is minor in nature. The drainage authority can perform this routine work without the advice of an appointed engineer. In lieu of an engineer, the drainage authority is usually advised on these matters by an appointed ditch committee of

area land owners, or by an appointed drainage inspector (to be distinguished from the engineer).

The drainage system is required by law to be regularly inspected for maintenance requirements by the ditch committee or drainage inspector. This inspection must include grass strip maintenance (if acquired during a previous establishment, Improvement or Repair proceeding), as well as maintenance of the ditch and associated in-channel structures. An inspection report must be filed with the drainage authority in writing, and it must report maintenance requirements and suggest appropriate remedial measures with associated costs. If the recommended maintenance costs are less than the greater of \$50,000 or \$1,000 per mile, in any given year, the work may be accomplished by force account (i.e., hired labor and equipment) without a bid letting for a contract. However, it is a common and recommended practice for the drainage authority to obtain quotes from three or more contractors.

D. Minor Repair Of Drainage Systems

Minor Repair is defined to include more extensive cleaning of continuous sediment deposits in the ditch bottom, fixing of isolated side slope damage due to sloughing, fixing damage to culverts and other structures, and removing large trees from the channel. This type of work is required less frequently on drainage systems and usually results from an inadequate routine maintenance program.

Minor Repair requirements are usually brought to the attention of the drainage authority by an inspection and report of the appointed ditch committee or drainage inspector, or through a contact by an affected property owner. Again, if the cost of the Repair in one year is less than the greater of \$50,000, or \$1,000 per mile, the drainage authority may order the work done without an engineer's survey and report. If the drainage authority solicits the advice of an engineer, then the engineer should make a limited survey of the drainage system to determine the extent of the Repair required, and assess the overall condition of the drainage system and determine the original grade or depth of the ditch. This survey should include at a minimum:

- a review of original records on file with the drainage authority;
- a ditch centerline elevation survey to establish the existing ditch profile;
- a number of shallow soil borings along the ditch alignment at strategic locations;
- an estimate of the original ditch grade and profile;

- documentation of all cases of slope failure; and
- documentation of all structure repair requirements.

Upon completing this survey, the engineer must make a written report to the drainage authority. This limited Repair report may be in letter form, but it should include the following information at a minimum:

- assessment of the general condition of the drainage system and its ability to perform its original function;
- location and description of required Repair work along the alignment of the drainage system;
- plan and profile of the ditch, including:
 - the existing profile of the ditch bottom;
 - the estimated original profile (grade) of ditch bottom;
 - the invert elevations of all centerline structures; and
 - benchmark locations and elevations, measured from a single mean sea level datum.
- an estimated cost to complete the required Repairs; and
- a recommendation that either:
 - the Repair work is of a minor nature and that the work should be accomplished;
 - the Repair work is of a major nature and that further investigations are recommended to be authorized; or
 - the work is beyond the scope of a Repair and that an Improvement is required.

If the minor Repair work is authorized by the drainage authority, this work may be accomplished by one of the following procedures:

- When Repair costs are less than the greater of \$50,000 or \$1,000 per mile, in any given year, the work may be accomplished by force account (i.e. hired labor and equipment) without bidding or a contract; or

- When Repair costs exceed the greater of \$50,000 or \$1,000 per mile, in any given year an engineer should prepare construction plans and specifications, and competitive bids must be sought from qualified contractors to do the work.

E. Major Repair Of Drainage Systems

Major Repair is defined to include extensive Repair work and would most likely be initiated by a petition of affected land owners. The scope of major Repair work generally covers the entire drainage system and involves reconstruction of the drainage system to the original as constructed grade line, and/or resloping of ditch side slopes.

Because resloping usually results in flatter side slopes, additional right-of-way will likely be required. If this is the case, the drainage code requires that viewers be appointed to assess and report on benefits and damages (see M.S. § 103E.715, Subd. 6). Therefore, grass buffer strips must also be included as part of the major Repair project, as required by M.S. § 103E.021. Grass buffer strip requirements are discussed under section VI.B.6 of this chapter.

Upon receipt of a petition for a major Repair of a drainage system, the drainage authority must appoint an engineer to examine the ditch and make a Repair report. The statutory requirements for the scope of the survey and report are less restrictive than that for an Improvement proceeding. However, the drainage code does require that the engineer's Repair report must document:

- the necessary Repair(s);
- the estimated cost of Repair;
- all details, plans, and specifications necessary to prepare and award a contract for the Repair; and
- a map showing all public and private main ditches and drains that drain into the drainage system, all property affected or otherwise benefitted by the drainage system, and the names of the property owners, to the extent practicable.

Although the scope of the engineer's Repair report is limited, it still must contain sufficient information to be useful as a decision making tool for the drainage authority, and it must be presented at a hearing on the proceeding, as required by law (M.S. § 103E.715, Subds. 2, 3, and 4). The content of the engineer's Repair report is, therefore, left up to the judgement of the engineer. Sections III and IV of this chapter may be used as guidance in developing the scope of a major Repair survey and

report. Because of the nature of a Repair project, hydrologic and hydraulic design is not required (the original design has already been established). In addition, the only alternatives available are to do nothing, or proceed with a Repair of lesser magnitude. However, the costs of the project must still be less than the benefits.

Generally, there is not a requirement that the engineer's Repair report be reviewed by the commissioner of DNR or the commissioner's staff. However, M.S. § 103E.701, Subd. 2, requires the drainage authority to notify the commissioner if the Repair is located in or would affect public water. The DNR may become involved in the proceeding if there is a dispute over the original "as constructed condition" (i.e., if public waters may be affected). If the DNR becomes involved, because of one or more of these issues, then the engineer's Repair report may have to be more detailed in nature. The engineer should still coordinate with DNR personnel early in the Repair proceeding, even if it appears likely DNR will not become involved.

F. Bridges And Culverts

The drainage code provides that private bridges and culverts on a public drainage system must be maintained by the drainage authority. Highway bridges and culverts, however, are a maintenance responsibility of the respective road authority (township, county, state, or federal government body).

If, during a major Repair proceeding, the engineer determines that an existing bridge or culvert along the system lacks sufficient hydraulic capacity because additional lands now drain into the system (which were not originally part of the benefitted area), the engineer shall make a report on the hydraulic capacity of bridges and culverts to the drainage authority (see M.S. §§ 103E.721, Subd. 1, and 103E.741). The guidance provided in section VI.B.2 of this chapter should be followed in conducting this evaluation and in presenting the results.

VIII. REDETERMINATION OF BENEFITS

The Redetermination of Benefits provisions of the drainage code allow the drainage authority to reevaluate benefits and damages in order to reflect present day land values or to add or remove benefitted or damaged lands. The proceeding can occur with or without a project. If it occurs with a project (Repair or Improvement), the engineer's task will be as described in sections IV or VII of this chapter. If the Redetermination of Benefits occurs without a project, then the engineer's only task will be to work with the viewers and provide them with required technical information.

The engineer must develop a map of the entire area potentially benefitted. The map must show all public and private main ditches and drains that drain into the drainage system, all property affected or otherwise benefitted by the drainage system, and the names of property owners to the extent practicable. The viewers will use this map and refer to it as an exhibit at the hearing.

It should be noted that, since a Redetermination of Benefits proceeding involves the appointment of viewers or appraisers, a grass buffer strip must be provided for in accordance with M.S. § 103E.021. This usually results in the acquisition of right-of-way along one or both sides of the existing ditch.

IX. CONSOLIDATION OF DRAINAGE SYSTEMS

After benefits and damages have been determined for the drainage system, the drainage authority may combine two or more systems, or divide one system into two or more systems. The purpose of this proceeding is for more efficient administration. The consolidation proceeding may occur with or without a project. If the proceeding occurs with a project (Repair or Improvement), then the engineer's task will remain as described in sections IV or VII of this chapter. If the proceeding occurs without a project, then the engineer's only task will be to provide maps and technical advice.

X. CONSTRUCTION PLANS AND SPECIFICATIONS

After all the hearings for a proposed drainage project are completed, and the drainage authority has issued an order and findings of fact to establish the project, the engineer is normally directed to develop complete construction plans and specifications. The plans and specifications shall be of sufficient detail that a contractor will be able to build the project with little difficulty. The plans and specifications must be signed by a professional engineer licensed to practice in the State of Minnesota. The specifications shall contain a technical section for controlling pollution of the air and water along the construction site.

XI. CONSTRUCTION

The contractor is responsible to complete the drainage project in accordance with the plans and specifications developed by the engineer. The engineer does not generally supervise construction activities. Rather, the contractor is generally free to choose the appropriate means to complete the job in compliance with the plans and specifications.

The engineer should periodically check the grade, alignment, side slopes, and other aspects of the proposed project during construction. It should be much easier to correct deviations from the plans and specifications during construction, rather than

afterwards. Additionally, M.S. § 103E.295 requires the engineer to "revise the plan, profiles, and design of structures to show the drainage project as actually constructed on the original tracings."

Finally, the engineer will likely be responsible to make sure that all provisions are satisfied for any required permit for the proposed project. The engineer has an ethical, if not legal, responsibility to ensure that the contractor complies with all provisions of the approved permit(s). The engineer should therefore immediately inform the contractor of any suspected violations of permit requirements. The permitting authority should be contacted if the engineer and contractor cannot mutually find a corrective course of action.

XII. RECORD DRAWINGS

All maps, plats, charts, drawings, plans, specifications, and other documents that have been filed, received in evidence, or used in conjunction with a drainage proceeding or during construction are subject to the provisions on public records. These documents must:

- be uniform;
- have each sheet bound and marked to identify the proceeding by the drainage project and system number;
- show the name of the person preparing the sheet;
- show the date the sheet was prepared; and
- conform to any rules and standards that may be prescribed by the director, Division of Waters, DNR.

In addition to the above, the engineer should index all drawings. All changes made during construction that reflect on the project features should be noted on the original set of drawings. In addition, a permanent project benchmark system should be established at strategic points throughout the project. In this way, future Repair investigations will be limited and less costly. After all changes have been shown on the drawings, the drawings then become "record drawings and are permanently maintained by the drainage authority." The drainage authority (auditor or secretary of a watershed district, as appropriate) must forward a copy of the record drawings to the director, Division of Waters, DNR (see M.S. § 103E.295).

APPENDIX 3A

SUGGESTED OUTLINE FOR ENGINEER'S PRELIMINARY REPORT

- i Executive Summary
- I. Project Identification and Introduction:
 - A. Project Identification
 - B. Existing Conditions and Background Data
- II. Recommended Solution to Correct Existing Drainage Problems
- III. Evaluation of Alternative Solutions
- IV. Compatibility with Existing Plans and State Law:
 - A. Drainage Law - Section 103E
 - B. Watershed Law - Section 103D (if applicable)
 - C. Permit Requirements:
 - 1. Local;
 - 2. State; and
 - 3. Federal.
 - D. Conformance with Existing Water Management Plans:
 - 1. Watershed District's Overall Plan (if applicable);
 - 2. City/County Water Management Plan; and
 - 3. Other Plans (i.e., land use, shoreland, floodplain, etc.).
 - E. Federal Farm Bill Implications
 - F. Other Requirements of Law
- V. Evaluation of Social, Economic, and Environmental Impact of the Project (address the specific requirements of M.S. § 103E.015, Subd. 1).
- VI. Evaluation of Public Utility, Benefit, or Welfare of the Project (address the specific requirements of M.S. § 103E.015, Subd. 2).

VII. Detailed Description of Proposed Improvements:

- A. General Information
- B. Project Hydrology
- C. Analysis of Outlet Conditions and Adequacy
- D. Hydraulic Design of Proposed Drainage Improvements:
 - 1. Channel Design;
 - 2. Hydraulic Design of Bridges and Culverts;
 - 3. Hydraulic Design of Erosion Control Structures;
 - 4. Hydraulic Design of Water Control Structures; and
 - 5. Hydraulic Design of Tributary and Field Inlets.
- E. Right-of-Way

VIII. Project Economic Analysis and Financing

IX. Project Feasibility

X. Engineer's Findings and Recommendations

Exhibit A - Preliminary Plans

Exhibit B - Tabulation of Right-of-Way Requirements

Exhibit C - Project Itemized Cost Estimate

Exhibit D - Petition for Improvement (or Establishment)

In addition to the above, the engineer's preliminary report should present hydraulic data in the form of tables in conjunction with the associated text discussion.

APPENDIX 3B

HYDRAULIC COMPUTATIONS

10-Year Storm (Design Storm)

Design Reach From	Design Reach To	Drainage area sq. mi.	Run-Off (Design-10 yr.) cfs	Bottom Width ft.	Side Slope H:V	Channel Slope ft./ft.	Man- ning's N	Section Area sq. ft.	Depth ft.	Velocity ft./sec.
0+00	41+40	24.50	495	10	4:1	.000636	.035	203.12	5.98	2.44
41+40	94+10	24.20	490	10	4:1	.0005	.035	220.52	6.28	2.22
94+10	146+92	23.35	485	10	4:1	.0005	.035	218.84	6.25	2.22
146+92	198+87	22.30	470	10	4:1	.0005	.035	213.76	6.17	2.20
198+87	251+39	20.90	455	10	4:1	.0005	.035	208.65	6.08	2.18
251+39	303+58	19.40	435	10	4:1	.0005	.035	201.77	5.96	2.16
303+58	357+48	18.10	420	10	4:1	.0005	.035	196.56	5.87	2.14
357+48	408+56	16.75	400	18	4:1	.0005	.035	176.11	4.76	2.27
408+56	460+85	15.75	385	14	4:1	.0006159	.035	171.70	5.03	2.24
460+85	513+68	14.45	370	18	4:1	.00065	.035	164.96	4.55	2.24
513+68	566+00	12.45	340	18	4:1	.000508	.035	169.76	4.64	2.00

Table 2 - Hydraulic Computations other than the Design Run-Off:

Design Reach From	Design Reach To	Run-Off 25-Year	Depth ft.	Velocity ft./sec.	Run-Off 50-Year	Depth ft.	Velocity ft./sec.	Run-Off 100-Year	Depth ft.	Velocity ft./sec.
0+00	41+40	555	6.29	2.51	695	6.93	2.66	835	7.50	2.78
41+40	94+10	550	6.60	2.29	690	7.28	2.43	830	7.87	2.54
94+10	146+92	545	6.57	2.28	680	7.23	2.42	815	7.81	2.53
146+92	198+87	530	6.50	2.27	660	7.14	2.40	790	7.71	2.51
198+87	251+39	510	6.39	2.24	640	7.04	2.38	770	7.62	2.49
251+39	303+58	490	6.28	2.22	615	6.93	2.36	740	7.50	2.47
303+58	357+48	470	6.17	2.20	590	6.80	2.33	710	7.37	2.44
357+48	408+56	450	5.03	2.34	565	5.61	2.49	670	6.08	2.60
408+56	460+85	435	5.32	2.32	545	5.90	2.46	655	6.41	2.58
460+85	513+68	415	4.82	2.31	520	5.37	2.45	625	5.86	2.58
513+68	566+30	385	4.93	2.07	480	5.47	2.20	575	5.97	2.30

APPENDIX 3C

HYDRAULIC DATA FOR STRUCTURES

Table No. 3 - Hydraulic Data for Structures

Structure Location	Proposed Structure	Ditch Design (10-Year) Hydraulics			Structure Design Hydraulics				Remarks
		Q (cfs)	Stage Increase (ft.)	Headwater Elevation	Frequency	Q (cfs)	Stage Increase (ft.)	Headwater Elevation	
41+40	Bridge, Single Span = 30.4 ft. W.A. = 280.4 sq. ft.	490	0.07	882.70	50-year	690	0.15	883.73	Existing Structure on C.R. 85. No change.
146+92	2-10'11" x 7'1" SPPA W.A. = 120.0 sq. ft.	470	0.61	888.70	25-year	530	0.75	889.17	Reset and extend existing 2-10'11" x 7'1" SPPA on Twp. Rd.
198+87	2-10'11" x 7'1" SPPA W.A. = 120.0 sq. ft.	455	0.59	891.19	25-year	510	0.65	891.56	Reset and extend existing 2-10'11" x 7'1" SPPA on Twp. Rd.
251+39	Bridge, Single Span = 28.4 ft. W.A. = 201.0 sq. ft.	435	0.04	893.17	50-year	615	0.12	894.22	Existing Structure on C.R. 811. No change.
303+58	Bridge, Single Span = 29.5 ft. W.A. = 248.0 sq. ft.	420	0.04	895.68	25-year	470	0.04	895.99	Existing Structure on Twp. Rd. No change.
357+48	2-10'3" x 6'9" SPPA W.A. = 108 sq. ft.	400	0.38	898.54	25-year	450	0.56	899.02	Existing Structure on Twp. Rd. No change.

Table No. 4 - Recommended Future Replacement Structures for Existing Bridges

Structure Location	Existing Structure	Recommended Future Replacement Structure	Invert Elevation	Design Frequency	Q (cfs)	Stage Increase (ft.)	Headwater Elevation	Structure Velocity (fps)	Remarks
41+40 (CR 85)	Bridge, Single Span = 30.4 ft. W.A. = 280.4 sq. ft.	1-15'10" x 9'10" SPPA W.A. = 121 sq. ft.	W. Inv. = 876.64 E. Inv. = 876.70	50-year	690	1.10	884.65	7.13	Provide riprap for erosion control.
251+39 (CR 811)	Bridge, Single Span = 28.4 ft. W.A. = 201.0 sq. ft.	1-15'4" x 9'3" SPPA W.A. = 107 sq. ft.	W. Inv. = 887.15 E. Inv. = 887.19	50-year	615	1.13	895.20	6.76	No riprap required.
303+58 (Twp. Rd.)	Bridge, Single Span = 29.5 ft. W.A. = 248.0 sq. ft.	2-10'3" x 6'9" SPPA W.A. = 108 sq. ft.	W. Inv. = 889.74 E. Inv. = 889.80	25-year	470	0.7	896.63	4.35	No riprap required.

APPENDIX 3D

REQUIRED RIGHT-OF-WAY

Tract Description	<u>Ditch Right-of-Way</u>		<u>Spoil Bank Right-of-Way</u>	
	Distance from Ditch Centerline (ft.)	Required Permanent Right-of-Way (Acres)	Distance from Ditch Centerline (ft.)	Required Temporary Right-of-Way (Acres)
Popple Grove Township Township 142 North, Range 42 West				
<u>MAIN</u>				
NE 1/4 SE 1/4, Sec. 23	50S, Sta. 0+00 to 11+00	1.26	85S	0.88
NE 1/4 SE 1/4, Sec. 23	30N, Sta. 0+00 to 11+00	0.76	0N	0.00
SE 1/4 NE 1/4, Sec. 23	50N, Sta. 0+00 to 11+00 (20N of quarter line)	0.51	85 (55N of quarter line)	0.88
SE 1/4 NE 1/4, Sec. 23	50N, 50S	0.60	85N, 85S	0.42
SW 1/4 NE 1/4, Sec. 23	50N, 50S	2.07	85N, 85S	1.45
NW 1/4 SE 1/4, Sec. 23	45SE, 45NW	2.54	80SE, 80NW	1.98
1/4 SW 1/4, Sec. 23	45SE, 45NW	0.43	80SE, 80NW	0.34
SE 1/4 SW 1/4, Sec. 23	50SE, 50NW	4.09	85SE, 85NW	2.86
SE 1/4 SW 1/4, Sec. 23	120N of Hwy. G (75' existing)	0.34	170N of Hwy. G	0.38
NE 1/4 NW 1/4, Sec. 26	115S of Hwy. G (75' existing)	0.03	165S of Hwy. G	0.04
NW 1/4 NW 1/4, Sec. 26	115S of Hwy. G (75' existing)	1.21	165S of Hwy. G	1.52
Total		13.84		10.75
<u>BRANCH 1</u>				
SE 1/4 SW 1/4, Sec. 23	120N of Hwy. G (75' existing)	0.04	170N of Hwy. G	0.04
SW 1/4 SW 1/4, Sec. 23	110N of Hwy. G (75' existing)	1.06	160N of Hwy. G	1.52
Total		1.10		1.56
TOTAL RIGHT-OF-WAY REQUIRED		14.94		12.31

APPENDIX 3E

COST ESTIMATE

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total*</u>
1.	Unclassified Excavation	c.y.	460,230	\$0.60	276,140
2.	Levee Embankment	1.s.	1	65,000.00	65,000
3.	36" Dia. Corrugated Metal Pipe (14 gal.)	1.f.	40	30.00	1,200
4.	24" Dia. Corrugated Metal Pipe (16 gal.)	1.f.	40	17.00	680
5.	18" Dia. Corrugated Metal Pipe (16 ga.)	1.f.	1,620	15.00	24,300
6.	15" Dia. Corrugated Metal Pipe (16 ga.)	1.f.	4,250	12.00	51,000
7.	18" Dia. Steel Flap Gate	ea.	22	105.00	2,310
8.	15" Dia. Steel Flap Gate	ea.	68	90.00	6,120
9.	Seeding (Ditch and Levees)	ac.	206	150.00	30,900
10.	Tree/Brush Removal	1.s.	1	5,000.00	5,000
11.	Rock Riprap	c.y.	400	40.00	16,000
12.	Miscellaneous Channel Work in Levee Reach	1.s.	1	2,000.00	2,000
	Construction Cost				480,650
	Contingencies				48,065
	Engineering				80,000
	Legal and Admin.				20,000
	Bond Sale Costs				5,000

*Amounts rounded to nearest \$5.00.

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total*</u>
	Utility Relocation				\$10,000
	Ditch Right-of-Way Downstream from Levee Reach				
	Permanent Ditch Right-of-Way 97.90 acres @ \$800/acre				78,320
	Spoil Bank Right-of-Way 191.30 acres @ \$50/acre				9,565
	Ditch Right-of-Way through Levee Reach (Sections 7 and 8, Green Meadow Township)				
	Permanent Ditch Right-of-Way 84.78 acres @ \$600/acre				50,870
	Ditch Right-of-Way Upstream of Levee Reach (Sections 9 and 10, Green Meadow Township)				
	Permanent Ditch Right-of-Way 65.12 acres @ \$200/acre				13,025
	Spoil Bank Right-of-Way 3.47 acres @ \$50/acre				<u>175</u>
	TOTAL PROJECT COSTS				\$795,670

*Amounts rounded to nearest \$5.00.

APPENDIX 3F

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CHAPTER 4

VIEWING/APPRAISING

I. INTRODUCTION

A. Overview

The assignment of benefits and damages is probably the most controversial part of drainage proceedings. Viewing, as this process is called, not only determines if a drainage project is financially feasible, but also provides a formula for distributing construction costs as well as future maintenance costs of a drainage project.

This chapter will provide additional information on how drainage law has evolved, especially the viewing aspects of drainage. An attempt will be made to provide a standardized methodology that can be applied to any drainage project. Ditch participants need to know up front that all drainage projects are unique in one way or another. This is especially true in viewing. Each project will have special circumstances that the viewers will need to consider. The overall goal of the chapter is to improve viewing on drainage projects by educating people appointed as viewers, standardize methodologies for viewing, and hopefully, reduce the conflicts and court battles that develop over the viewing aspects of drainage projects.

B. History of Viewing

The best way to understand how viewing has evolved is to chronologically review the old drainage statutes. During the first legislative session in 1858, a drainage law was passed and it seems that the legislature has been working on drainage issues ever since. Chapter 73 of the General Laws of Minnesota, 1858, was entitled, "An Act to Regulate and Encourage the Drainage of Lands" (emphasis added). Most of this first drainage statute had to do with how to allocate costs of simple drainage projects. This statute read in part that a drainage corporation has the authority to "...collect a pro rata assessment on the lands to be benefitted, but in no case shall any tax be levied on lands ... which are not improved nor benefitted by such drains."

This first statute gave no details on how to determine benefits, but appeared to imply that only those forty acre tracts of land ("40's") that had the ditch pass through, or were immediately drained by the ditch, be assigned a benefit. The assessment for a drainage project typically amounted to the total cost divided by the number of 40's the ditch passed through. This first drainage law also gave the benefitted landowners exclusive use of the ditch.

Early viewing followed attitudes of the time. Wetlands were an impediment to progress. Surface water was a common enemy, which an owner, in the necessary and proper improvement of the land, may get rid of in the best way possible. Early drainage corporations had the right-of-way to cross all lands whenever a majority of the owners consented. Payment of damages was negotiated or, when that failed, Section 10 of the first drainage statute stated that "...damages shall be determined by the verdict of a jury in an action brought in any court of record."

As ditches got more involved, the legislature continued to make additions to the drainage statutes. In Chapter 27 of the 1866 General Laws of Minnesota, a "Jury of 6 men qualified to be jurors, examined and certified benefits or damages which result from the opening of said ditches." Section 8 of this statute read in part, "...if after taking all circumstances into consideration, the jury shall be satisfied that the opening of such ditches is necessary or advantageous they shall so certify in writing ... the amount of damages which in their opinion will be just compensation to the owner of the land for the opening of such ditches."

In 1877, the legislature established the township supervisors as the ditch authority rather than a jury. Here again the statute gave very little guidance on how benefits or damages were determined. General Laws of Minnesota of 1877, Chapter 91, Section 3, read in part, "township supervisors have power to hear and decide ... personally examine all lands liable to be affected ... make out a list of the same and assess the amounts of benefits or injury to each tract of land..." Section 6 read in part, "if the supervisors shall be of the opinion that the drain will be a damage to the lands through which it is to pass, then they shall assess the amount of damages to be paid to the owner thereof, and after payment of the amount so assessed the person making application may enter upon said land and construct necessary ditch or drains."

Section 10 of this statute contained the first language dealing with improvements or utilizing existing ditches as outlets. This section read in part, "Whenever any persons may desire to drain their lands by the construction of a new ditch connecting with a drain previously constructed, they shall be entitled to the benefits of the provisions of this Act, by the supervisors estimating the benefits that would accrue to or the damages likely to be sustained by the persons through whose lands the same may pass in order to communicate with such old ditch, provided however that if the volume of water discharged by such new ditch or drain is too great for the old ditch to carry off without causing an overflow of adjoining lands, it shall be the duty of the persons constructing such new ditch to widen, deepen and enlarge the capacity of the old ditch so as to make it sufficient size of the flow of such increased volume of water at the ordinary stages thereof and in the case of failure or refusal to do so they shall

be liable from time to time for all damages he or they may sustain in consequence thereof with 10% (additional charge)."

This 1877 law contained several other interesting sections. In Section 11, it stated that all costs for bridges or highways would be paid by ditch applicants to township specifications, but railroad crossings were to be paid by the railroads. Section 13 set the pay for supervisors at \$1.50 per day to be paid by ditch applicants.

As ditch systems grew, township supervisors really could not address the inter-township questions that arose. The 1883 General Laws of Minnesota, Chapter 108, set up county boards as ditch authorities. This major rewrite of the drainage statute contains much of the language that is in the present drainage law. Section 2 gave county boards the authority to, "...appoint viewers consisting of three resident freeholders of the county not interested in the construction of the proposed work and not of kin to any parties interested therein."

The viewers then proceeded with a surveyor, who was required to be a civil engineer, to develop the alignment and design the ditch. The viewers were required by this statute to "...set apart and apportion to each parcel of land and to each corporate road or railroad...a share of said work in proportion to the benefits which will result to each from such improvements. Viewers shall actually describe as the same is described on the county tax duplicate, each parcel of land to be assessed for the construction of said ditch, giving the number of acres in each tract assessed and the estimated number of acres benefitted, the amount each tract is benefitted by the construction and the amount each tract is assessed therefor. They shall also ascertain and give the names of the owners of the lands that are assessed and also report if the ditch is of public utility."

Under this statute, viewers basically ran ditch projects. Viewers picked alignments, designed and determined costs, and then apportioned those costs to benefitted properties. This 1883 statute gave some of the first guidance to viewers. Section 3 read in part, "When a public ditch is located wholly or partly in the bed of a private ditch already or partially constructed, the viewers shall make an estimate of the number of cubic yards of earth already excavated and the cost of the same on each tract of land and deduct the same from assessments on these tracts." Section 4 of this statute gave the first guidance on assessing benefits to tracts of land not located adjacent to the ditch. Section 4 read, "All lands benefitted by a public ditch shall be assessed in proportion to the benefits for the construction thereof, whether it passes through said lands or not and the viewers in estimating the benefits to lands not traversed shall not consider what benefits such lands will receive after some other ditch or ditches shall be constructed but only the benefits that

will be received by reasons of the construction of the public ditch as it affords an outlet for the drainage of such lands."

This is the first time that viewers were really authorized to assign benefits to tracts of land located off the ditch. This section implies that the way to view areas off the ditch is to as an example: establish the value of a tract of land with proper drainage installed (\$1000/acre current day values), then subtract the landowner's costs to drain the land (\$400/acre) and the present value of the tract as is (\$200/acre), and this gives the actual benefit provided by the ditch of \$400/acre ($\$1,000 - \$400 - \$200 = \$400/\text{acre benefit}$).

Under the 1883 drainage law, viewers could alter the ditch alignment as they saw fit. They determined all damages sustained by reason of the construction of the ditch. Viewers determined if the proposed ditch was of public benefit or utility. This statute also established "reviewers" who reviewed the work of viewers; interestingly, this provision was repealed quickly. The 1883 law also kept township supervisors in the picture by setting them up as ditch overseers to ensure ditches stayed in good repair. The 1883 law set the pay of the surveyor or engineer at \$4/day and increased the viewers pay to \$2/day.

By 1887, more of the decisions on ditches was shifted from viewers to the county boards. In Chapter 97 of 1887 General Laws of Minnesota, the county boards were given the power to determine, "...when same shall be conducive to the public health, convenience or welfare, public benefits or utility to cause to be constructed as hereinafter provided any drain, ditch or watercourse within said county." After the county board made this determination, they appointed three viewers to determine the alignment and design and to allocate costs with the help of the engineer.

The 1887 drainage law gave a little more guidance on assigning benefits to roads and railroads. Section 4 read, in part, "...when any ditch established under this act drains either in whole or in part any public or corporate road or railroad or benefits any such roads so that the roadbed or traveled track will be made better by the construction of such ditch..., viewers shall estimate benefits." This statute in Section 22 contained the first references to assessing state lands. This section read, "All lands owned by this state and all lands owned by any land company or railroad company benefitted by such ditch shall pay the same as owners of taxable land."

In Chapter 98, 1887 General Laws of Minnesota, the legislature set up the procedures for "Formation and Organizations of Drainage Districts." These districts were first proposed by James J. Hill, owner of St. Paul, Minneapolis, and Manitoba Railroad. These drainage districts were mostly formed in the Red River Valley. It was through these districts that the idea of setting up viewing

based on the proximity of the tract of land to the ditch was first proposed.

There was very little change to drainage law between 1887 and 1925. In 1925, the drainage law was changed to set up joint county boards or district courts to administer drainage proceedings involving more than one county. This statute separated out the duties of the engineer from the viewers. The present duties of the engineer were set out in Sections 4 and 7 of Chapter 415, General Laws of Minnesota of 1925. These sections gave the responsibility for determining practicality and feasibility to the engineer instead of viewers. Section 17 of this statute set out the duties of the viewers and stated that they could do their viewing "with or without the engineer." Section 20 gave authority to viewers to assign an outlet fee to municipalities if ditches provided an outlet for storm water or, "...improved public health in the area of the city."

Section 24 of this statute expanded somewhat the viewing language. It read in part, "...all lands...benefitted in whole or in part, by the construction of any public drainage system under the provisions of this act shall be assessable for the costs of the construction thereof...whether such benefits result directly from the construction of said system...or as the same affords an outlet for drainage or prevents the overflow or otherwise directly benefits such land...provided that in all cases where land is assessed for an outlet and the lateral connecting the same with the main ditch or branch thereof is not constructed at the time of construction of the system, such land shall be assessed only for the estimated benefits less the estimated costs of connecting the same with said system."

In the period from 1925 through about 1977, there was very little change in language in the drainage statute dealing with viewing. During this period, there was a significant reversal of public policy on drainage. The state drainage commission was replaced with the office of State Drainage Commissioner. This office was later dissolved and its duties and powers transferred to the Division of Drainage and Waters of the newly established Department of Conservation. By these actions, the state was no longer promoting drainage and began trying to preserve wetlands.

In the 1955 General Laws of Minnesota, Chapter 681 contained some of the first language on environmental considerations. This statute mandated county boards in determining present or future public utility, benefit, or welfare of a proposed system to give consideration to the conservation of soil, water, forests, wild animals and related natural resources and to other public interests affected. This change in policy was not reflected in any way in the viewing sections. Viewers continued to determine benefits for wetlands drained and the county board was supposed to look at wetland protection. The drainage of wetlands typically won out.

In 1977, there were statutory changes in how viewers were supposed to view state owned lands used for conservation purposes, mostly wildlife management areas. This section is similar to the language of M.S. § 103E.025 that will be discussed later. In the past, some viewers have not followed these procedures and they have assigned benefits to wildlife management areas the same as adjoining privately owned land.

In 1985 and 1987, several changes were incorporated into the drainage statute when the drainage law was recodified. Several of these changes affected viewing. These changes arguably expanded the area to which benefits could be assigned, to include more areas where an outlet is being proposed by the project or to make an outlet more accessible. This is the first time that the terminology of "benefits to all property within the watershed" appears in the drainage statute. As will be discussed later, great care must be exercised in applying the current statute to ensure that questions of constitutionality of benefits are considered. Even under the existing statute, viewers should only assign benefits to areas that are improved by the ditch. Viewers must not arbitrarily assign benefits to every tract of land in the watershed.

II. PROCEDURES REQUIRING VIEWING

There presently are 11 types of projects discussed within the present drainage law that require some action by viewers. Viewers are responsible for determining benefits and damages for drainage projects. Benefits, as used in this context, can mean more than the particular tract actually being directly benefitted. Often viewing can include assessing of an indirect benefit or charge. The 11 types of projects requiring viewing are listed below and are enumerated upon in items 1 - 11 that follow:

- New Systems
- Improvements
- Improvement of Outlets
- Laterals
- Redetermination of Benefits
- Outlet Fees for Municipalities
- Resloping, Leveling, Erosion Control
- Violation of Grass Strip Provision
- Inclusion of Additional Land
- Removal of Property
- Apportionment of Liens

1. New Systems. New Systems are somewhat self-explanatory. The assessments of benefits and extent of damages will be discussed in greater detail later in this chapter.

2. Improvements. Improvement of existing drainage systems means the tiling, enlarging, extending, straightening or deepening of an established system. Viewers for Improvement proceedings need to determine the benefits and damages caused by the Improvement only, (over and above the existing conditions and assessments). It is important to discuss with the engineer the benefits that could be received to properties if a somewhat non-functioning ditch is repaired versus benefits provided if an old system is improved.

Viewers need to look at where the Improvement is located within the system. The viewers need to consider whether the Improvement is necessary because of the need for increased drainage throughout the whole watershed, or is it for the benefit of specific properties. The benefits may only be assigned to parcels near the portion of the drainage system improved or the proposed project may serve as an Improvement for all areas located above the proposed work.

Benefits determined for the Improvement are to pay for the Improvement construction only. Viewers need to also review what, if any, damages are caused to properties along the Improvement and downstream of the project because of increased flooding or taking of additional properties for right-of-way by the Improvement. Damages paid downstream of the project will be discussed later in this chapter. Viewers need to consider the properties already assigned benefits and they are advised to update the benefits assigned to the original system so that they reflect current day land values. If the old viewing is not updated, the new areas will pay a disproportionate share of future Repair costs. Once the lien for the construction has been filed, it may be feasible to redetermine benefits on the whole system to make sure that areas that are utilizing the drainage system are paying fair assessments towards the upkeep of the system.

3. Improvement of Outlets. Improvement of Outlet proceedings can be similar to Improvement proceedings. One difference is that in an Improvement proceeding the Improvement is limited to within one mile downstream of the existing outlet, whereas, in an Improvement of Outlet proceeding, there is no limit on how far downstream the project can go. In an Improvement of Outlet proceeding, the statute indicates that the viewers shall determine and report the benefits to all property benefitting from the improved outlet, including property drained, or to be drained, by the existing drainage system or a proposed drainage project.

4. Laterals. Viewing for the construction of Laterals is similar to New Systems. Viewers need to first determine if the area to be drained by the proposed Lateral has been assessed benefits in the existing system. If the area contains tracts of land previously assessed benefits, then the benefit for the Lateral can only reflect the improved drainage associated with the Lateral. If areas benefitted by the Lateral were not originally assessed, then these lands should be viewed the same as a New System and an outlet

fee would need to be determined. Upon completion of the Lateral, benefits determined have to be combined in an equitable way with the benefits of the pre-existing drainage system (e.g., a Redetermination of Benefits) so that the Lateral is not paying a disproportionate share of the future Repair costs for the whole system.

5. Redetermination of Benefits. The process of Redetermination of Benefits is used when the original benefits do not reflect current day land values or when areas not assessed into the system are presently receiving benefits or utilizing the system. Another case for a Redetermination of Benefits might be when areas that were assessed benefits for expected improvements to a drainage system are no longer able to be constructed. This would apply to wetland areas now regulated by federal or state laws (see section II.B.2 of chapter 2 for specific information). Redetermination of Benefits should really be viewed similar to New Systems. Viewers need to determine benefits as if no drainage system existed. This process is most often used to correct problems with old outdated viewers' reports. This procedure can be used with or without an actual project being proposed, but is most often used in conjunction with major Repairs.

6. Outlet Fees for Municipalities. The proceedings for determining the outlet fees for municipalities has long been debated. Many municipalities outlet storm sewer systems into public drainage systems. The methods applied to determining benefits in municipalities normally are not the same as for agricultural land. Later in this section a discussion is included that shows how to fairly assess benefits to municipalities.

7. Resloping, Leveling and Erosion Control. Within Repair proceedings, there is a process for assessing benefits and damages for Repair work where the drainage authority wants to reslope existing ditch banks, level spoil piles, install erosion control structures, or remove trees. It is rare that benefits are ever assessed, but often damages are paid through these proceedings. In Repair proceedings where additional right-of-way is needed for the placement of erosion control structures, grass strips, or the flattening of sideslopes, the landowner should be compensated. These damage payments have to be consistent with the present land valuations. Viewers need to make sure landowners have not already been paid for these damages or right-of-way in earlier proceedings.

8. Violation of Grass Strip Provision. There is a special process for assessing an additional charge against lands where the landowner has violated the grass strip provision. This process is contained in M.S. § 103E.728, Subd. 2. In this process, the benefit previously assigned to the property is increased by a formula that reflects the Repair costs per mile of the system. Drainage authorities should actively attempt to get compliance with

grass strip provisions rather than rely on this procedure to penalize people for noncompliance.

9. Inclusion of Additional Land. Also, within Repair proceedings, there is a process to assess benefitting lands that were not previously assessed benefits. This process is contained in M.S. § 103E.741. This type of viewing is a simplified process similar to Redetermination of Benefits or Laterals. Typically this type of process is done under the petition process for outletting into an existing system covered under M.S. § 103E.401. Under M.S. § 103E.401, the drainage authority establishes an outlet fee and the benefits to be assigned to the tract(s) of land to be utilizing the outlet of the existing system.

10. Removal of Property. A somewhat different procedure for viewers is found in the abandonment proceedings in M.S. § 103E.811. In this section, if a petition is filed for abandonment of a system and anyone assessed benefits in earlier proceedings objects to the abandonment, viewers get appointed to review the abandonment. Under this section, it is the viewers' duty to examine the property of the objecting landowner(s) and determine if the objecting landowner's property receives a benefit from the ditch in its current state. If the viewers determine that the property is benefitted by the ditch, then the abandonment petition is denied.

11. Apportionment of Liens. Apportionment of liens is a process whereby existing assessments against a tract of land are divided up following some type of subdividing of the tract. Most often this function is handled by the county auditor (see section IX.C.3 of chapter 2). In some cases, viewers may be called to determine how to divide up liens against subdivided lands.

III. APPOINTMENT AND QUALIFICATIONS OF VIEWERS

The drainage code gives very little guidance on the appointment of viewers. The statute basically states that the viewers shall consist of three disinterested residents of the state qualified to assess benefits and damages. The statute does not give any guidance on what qualifications viewers need to have. In general, viewers should have the physical and mental health to do field work as needed. Viewers need to have knowledge of agriculture, topography, residential developments, and soils found typically in the project area. They must be able to read and understand soils maps, aerial photos, and engineering and survey data. Viewers should also have strength of convictions and be able to present their findings in an orderly and concise manner. An ideal team of viewers would have knowledge of rural/urban appraisal techniques, soil science, and drainage.

Drainage authorities need to exercise great care in appointing qualified and articulate viewers. The outcome of any proceeding will be affected by the quality of their work. Viewing has led to

more appeals to district court than any other part of the drainage code. A viewer who testifies in court may be required to demonstrate enough education and experience so that he or she can qualify as an expert witness before being allowed to state an opinion. By following procedures set out in this manual, it is hoped that viewing procedures can be improved.

The compensation for viewers has historically been low. The compensation is established by the drainage authority. The statute specifies that viewers be paid on a per diem basis. It is expected that the reimbursement for viewing may be increased due to the amount of work that is necessary to develop a quality product.

IV. ASSESSMENT OF DRAINAGE BENEFITS

This section will attempt to provide a general overview of the types of properties which may be found to benefit from a drainage system. This discussion on the procedures and considerations is intended to give guidance to those appointed to determine benefit values. Consideration of other factors not provided herein may be necessary as each drainage system is unique.

Within the watershed that drains to the areas where a project is located, the viewers may also assess outlet benefits or what really amounts to a charge on: 1) property that is responsible for increased sedimentation in downstream areas of the watershed; or 2) property that is responsible for increased drainage system maintenance or increased drainage system capacity because the natural drainage on the property has been altered or modified to accelerate the drainage of water from the property. This will be discussed in greater detail later in this chapter, and is subject to the Cautionary Statement found in the beginning of section IV. B of this chapter.

A. Special Properties

There are a number of different types of special properties that viewers will encounter when performing their duties. Some of these types of properties, and how viewing should be done on them, will be discussed in this section. Viewers are strongly encouraged to discuss potential assessments against these special properties with the proper authority administering the lands prior to the filing of the viewers' report.

1. Federal, State and Municipal Lands.

- **Federal or Tribal Lands.** Federal or tribal lands are not specifically addressed within Minnesota drainage statutes, although it has been determined that states or municipalities cannot tax the federal government. Therefore, it appears that no assessments should be made against the federal government or tribal lands.

- **State Lands.** The assessments against state lands used for various purposes receive differing treatment under the drainage code. Under M.S. § 103E.315, Subd. 1, properties owned by the state must have benefits reported in the same manner as taxable land subject to the provisions of M.S. § 103E.025. This section deals with state lands or water areas used for conservation purposes. Therefore, state lands held for other purposes (e.g., university lands), have no special statutory considerations. For determining benefits on conservation properties, M.S. § 103E.025, Subd. 3, states that proper consideration must be given to the value of the area for the purpose it is held or used by the state.

There is no specific direction in the statute, but under today's viewing practices, state lands or water areas used for conservation, which are maintained in a native state, probably will have little or no benefit from a drainage system. The exceptions to this may be to food plot areas, areas where the drainage system provides an outlet to wetland areas for water level control, or where drainage improvements to a property have accelerated the drainage of water to the benefit of the property.

Other state properties, including forfeited land or university properties, where agricultural practices are applied, should be viewed the same as lands under private ownership. State properties for highway department purposes, etc., may be considered for the increased sedimentation or accelerated drainage, or may be receiving benefits for improved embankment drainage.

There is a special type of state-held land called Consolidated Conservation Lands, or Con Con Lands. Con Con Lands date back to 1929 and 1930 when the Minnesota Legislature was requested to financially assist counties in northwest Minnesota who had accumulated large debts through massive drainage projects that were attempted in the early 1900's. Within the established Con Con area, all lands that were tax forfeit became Con Con Lands to be managed by the Department of Natural Resources for wildlife, forestry, water, soils and protection of rare and distinctive plant species. These lands are located in Marshall, Roseau, Beltrami, Koochiching, Aitkin, Mahnomon, and Lake of the Woods Counties. Land commissioners from these counties could provide additional information on Con Con Lands.

Under M.S. § 84A.55, the control and administration of these Con Con Lands lies with the commissioner of the

Department of Natural Resources. Under Subd. 9, the commissioner of DNR must review any drainage projects affecting Con Con Lands. If the commissioner finds that the proposed project will benefit the Con Con Land for the purposes they are held, then the commissioner shall authorize the assessments in the amount found appropriate. Any project affecting these Con Con Lands should be closely coordinated with the appropriate staff of the DNR.

- **Municipalities.** Assessments within municipalities may include all properties within the municipality whether owned by the municipality or by private parties. Thus, an assessment can be made to individual properties within a municipality or against the municipality as a whole. Discussion on considerations for assessing outlet charges will be covered later in this section.

2. Public Roads. Determining benefits to public roads has to be one of the least consistent procedures in viewing. Since roads are not bought and sold, and no income is ever produced, it is very difficult to prove direct benefits to roads other than possibly decreased maintenance or decreased bridge construction/replacement costs. It is generally accepted by highway engineers that any decreased construction or maintenance cost is minimal because of the difference in design criteria between roads and agricultural drainage systems. It may, therefore, be more justifiable to make assessments against roads based upon the accelerated drainage considerations. These considerations will be discussed later in this section.

The cost of bridge maintenance or replacement is the responsibility of the road authority. Generally, the actual cost of this work is assessed against the road authority by the auditor, rather than viewers including the cost as part of the road benefit.

3. Railways and Other Utilities. Benefit considerations on railway property may be similar to those for roads. No statutory language exists which discusses the bridge costs associated with railway property. Benefits to utilities may be difficult to establish. If no designated land rights held by the utility are benefitted, it seems that there would be no benefit to the utility. Properties owned by utilities should be considered for benefits the same as those owned by any other landowner. This consideration may be for any intensification of allowed land use facilitated by the project or for accelerated drainage. The benefit would often be for reduced flooding or embankment protection or both.

4. Wetlands. Because of the numerous changes that are occurring with wetland legislation on both the state and federal level, it is extremely important that viewers determine what, if any, wetland areas regulated by a state or federal agency exist within the

project watershed. After the wetland areas are identified, viewers must take into consideration what, if any, restrictions or consequences of drainage of wetlands apply to the individual tracts. Once the restrictions that apply to the drainage of wetland areas are determined, viewers should take into consideration how the restrictions affect the typical benefits assessed to these areas. If, for example, a wetland area is prohibited from being drained by the Department of Natural Resources, viewers should not assess benefits as if it could be drained and farmed. The reader is strongly urged to review the detailed discussion of the impacts of wetland determinations for several federal and state programs that is located in section II of chapter 2.

B. Extent and Basis of Benefits

The drainage code gives very little detailed guidance on how to determine benefits. M.S. § 103E.315, Subd. 5, states, "The viewers shall determine the amount of benefits to all property within the watershed, whether the property is benefitted immediately or the project can become an outlet, makes an outlet more accessible or otherwise directly benefits the property."

This language describes the properties to be considered in determining the benefits of a drainage project. The first statement refers to all property within the watershed. M.S. § 103E.401 ("Use of drainage system as an outlet"), Subd. 2, explains that an existing public or private drainage system that drains property that has not been assessed for benefits to the existing system may not be used for an outlet for a project that drains these non-assessed lands without obtaining express authority from the proper ditch authority. This is applicable to any system regardless of the actual physical connection. It appears that the statute considers that benefits may be found to any property within the watershed which would be improved through construction of additional public or private drainage systems. This statute continues to state that the drainage system only has to make the outlet available or more accessible to these properties to allow consideration of benefits.

Just because a property within a watershed has wetland characteristics, it does not automatically mean that it will benefit from a drainage system. Permanent restrictive covenants, federal or state wetland legislation, or excessive construction costs that make the area impractical to drain may dictate that no benefits should be assessed.

CAUTIONARY STATEMENT

The following sections concerning assessment of benefits are intended to describe the apparent intent of M.S. § 103E.315. Some of the language is relatively new, and many of the enumerated assessable items have not been challenged and upheld in the courts. It is possible and likely that some of these methods will be challenged on constitutional grounds and it is possible that some of these methods may be ruled unconstitutional.

The general rule in Minnesota is that assessments for special benefits to real estate can only be made based on an increase in market value; that is... "what a willing buyer would pay a willing seller for the property before, and then after, the improvement has been constructed." Rhodenbaugh v. City of Bayport, 450 N.W.2d 608, 613 (Minn. App. 1990), Doesdel v. City of Ham Lake, 414 N.W.2d 751 (Minn. App. 1987). In addition, assessment of an entire watershed or for an outlet is questionable because of Seidlitz v. Faribault County, 237 Minn. 358, 55 N.W.2d 308 (1952), which held that actual direct benefits to a parcel, and not just an eventual outlet, were necessary before a drainage assessment could be allowed. Seidlitz has been followed in In the Matter of Douglas, etc., 419 N.W.2d 639 (Minn. App. 1988).

At this writing, it is not clear whether some of the assessment provisions of M.S. § 103E.315 could withstand a challenge on constitutional grounds, especially those relating to indirect benefits. A drainage authority and its viewers are strongly urged to consult with their attorney on these precise questions before making broad watershed-wide assessments for benefits. There have been district court decisions invalidating an entire system's assessments on constitutional grounds, and some care may avoid such a negative result.

Please bear these precautionary remarks in mind while reading the following.

1. Direct Benefits. Benefits to properties attributable to the construction of public drainage systems will be called Direct Benefits.

The market value concept has generally been the method used to determine benefits from drainage projects. This method involves, at a minimum, extracting and analyzing direct sales data of competitive properties from the marketplace (referred to as the direct sales analysis approach). As in all appraisal practice, other approaches to determine market value should be considered. A suggested approach for agricultural property uses the Universal Standards for Professional Appraisal Practices. This requires consideration of the "cost" and "income" approaches to determining value, in addition to the direct sales analysis approach. Due to the fact that the value of improvements to property such as

buildings are not generally considered in drainage benefits, the cost approach is probably not applicable.

- **Increase in Current Market Value.** The market value concept (and primarily the use of direct sales of competitive properties approach) to determining value is historical and is the method used to determine most appraised property values. One disadvantage of the market value approach is that it does not consider the long-term benefit, but only considers market value for a specific point in time. For viewing purposes, a detailed appraisal of each individual parcel using all three approaches to determining market value has usually been shortened by using only market extracted land sales data, broken down by various soil types and land conditions. Similar soil types and conditions are grouped into a number of land categories. The market value for each land category is then determined for the existing condition [before project]. Viewers, then, with or without the engineer, anticipate the condition of the soils after project construction and estimate the market value of category acres in a fully improved condition. Consideration is then given to the private or additional costs necessary to obtain the fully drained state. The benefit amount is the difference between the value in the improved condition minus the private improvement costs.

Example: Sample County Ditch No. 1

Poorly drained pasture has a market value of \$350 per acre for pasturing or conservation/wildlife purposes. Well drained agricultural lands in full production tile have a market value of \$1200 per acre. Lateral drainage tile system construction is estimated at \$400 per acre:

Market Value Improved Condition	\$1200
Beginning Market Value	350
Benefit Without Improvement Cost	850
Private Improvement Cost	400
Net Benefit from Project	\$ 450/acre

- **Increase in Potential for Agricultural Production.** The statute allows that benefits may be based upon an increase in the potential for agricultural production as a result of constructing the project. This constitutes the use of an income method approach to determination of benefits, similar to the income approach that may be used in determining market value as discussed above. The process begins similar to the direct sales/market extraction approach for determining

market value in that it is necessary to develop before and after project values and then consider additional costs. The difference in values is then capitalized over a period of time. Again, similar soil types and land conditions are generally categorized to simplify the viewing procedure.

To utilize the income method, a viewer must get production cost and income information. Good sources for production information may be the USDA, ASCS or SCS, crop insurance adjusters, the county extension service, local assessors, crop equivalency ratings, or farm management reports. This information is then applied to develop the estimated income value in the before and after project conditions.

Example: Sample County Ditch Number 2

Typical pasture/wild hay land before the project provides marginal pasture or wild hay ground:

Production	1.5 ton wild hay/acre
Value	\$40 per ton (\$60/acre)
Production Cost	\$28 per acre
Before Project Income	\$60 - \$28 = \$32/year/acre

Well drained agricultural land in full production:

Production	100 bushel corn/acre
Value	\$2/bushel (\$200/acre)
Production Cost	\$95/acre
After Project Income	\$200 - \$95 = \$105/acre

Lateral drainage tile system construction estimated at \$400 per acre with 20 year depreciation:

Increase in Annual Income (per acre)	\$105 - \$32 = \$73
Private Improvement Cost (per acre)	\$20
Annual Maintenance Cost (per acre)	<u>\$ 3</u>
Net Increase (per acre)	\$50

Capitalized at 9% for 20 years = \$456.40/acre

Production costs in this example do not include land costs or equipment ownership and are based upon an average management. Production computations should be based upon an average production of the various agricultural commodities produced within the watershed of the drainage project. The value of the agricultural commodity should be determined upon long term commodity pricing rather than current cash or support prices.

The capitalization rate set by the viewers may be adjusted to reflect the long-term investment rates.

- **Increased Value Due to Different Land Use.** This approach may be applied in situations where the highest and best use of a property may change because of a drainage project. In this situation, the property's market value would increase due to a change in use that is otherwise legal, practical and feasible. This type of market value change would most likely occur if an area drained was now to be utilized for commercial or residential use instead of agricultural use. The benefit can be computed by using some of the same techniques used previously for determining the market value. This is done by establishing the after project market value of improved sites from direct sales data, and then using a land development method of determining the costs of the site improvements (i.e., platting, roads, sewer/water, drainage system improvements, etc.). Benefits due to the drainage system are determined by subtracting the costs of site improvements and the pre-project site market values from the market value of the improved site(s).

2. **Indirect Benefits.** Please refer to the CAUTIONARY STATEMENT above, at the beginning of this subsection. Benefits from a proposed drainage project that provides an outlet will be called indirect benefits. Indirect benefits may be assessed if a drainage project provides an outlet to an existing drainage system and benefits the property drained by the existing system, or provides an outlet to a municipality for its storm drainage or its sanitary treatment pond discharge. Indirect benefits can also be assessed for property that is responsible for increased sedimentation in downstream areas and property that is responsible for increased system maintenance or increased drainage system capacity because natural drainage on the property has been altered or modified to accelerate the drainage of water from the property. Indirect benefits will be discussed in greater detail later in this chapter.

- **Benefits for Proposed Drainage Project as Outlet.** Benefits for a proposed drainage system that serves as an outlet is what we have considered to be indirect benefits. This means that the construction of a drainage project furnishes or improves an outlet for the drainage from property. If the proposed drainage project furnishes an outlet to an existing drainage system and benefits the property drained by the existing system, the viewers shall equitably determine and assess each property or the system as a whole.

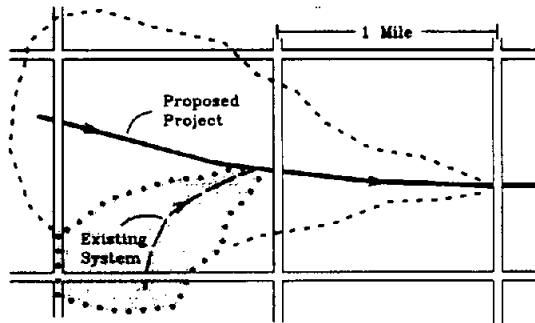
When viewing is done for an improved outlet for an existing system, the viewers should consider the need

for the improved outlet. If the existing system contributes to overflow of lands adjacent to the proposed project only, and the existing system within its design has no overflow adjacent to itself, a single amount as an outlet benefit or charge may be the most appropriate method of assessing benefits to the existing system. If the outlet more directly impacts certain property benefitted by the existing system, the viewers may choose to determine the benefits to each tract or lot drained by the existing system based upon direct and/or increased sedimentation and accelerated drainage considerations.

To determine the amount of benefit to be assessed against an existing system, the viewers should determine the proposed project's total length and the proposed project length which will be used as an outlet for the existing system, and the watershed area for the existing system to the proposed system. The viewers should compare the total watershed or discharge of the existing system to the proposed project and the increased construction and maintenance costs associated with containing the discharge from the existing system.

-- See example on next page --

Example: Sample County Ditch Number 3



Total project length	- 2 miles
Length of proposed project used as outlet to existing system	- 1 mile *
Total watershed	- 1000 acres
Existing system watershed	- 250 acres

*[1/2 the proposed project's length]

Benefit determination:

Ratio of existing system drainage area to proposed project's drainage area	- .25 or 25% (250 acres/1000 acres)
Length of proposed project's length used as outlet for existing system	- .50 or 50% (1 mile/2 miles)

By multiplying the two percentages (ratios) from the table immediately above, the outlet benefit is figured as 12.5% of the estimated proposed project cost. This figure may be adjusted to reflect other considerations, such as the existing system's design, and its need for an outlet, etc. If the viewers assess a single amount, the auditor will distribute amounts in proportion to the existing drainage system.

- **Increased Sedimentation/Accelerated Drainage.** Within the watershed that drains to the area where a project is located, the viewers may assess outlet benefits on property that is responsible for increased sedimentation in downstream areas of the watershed. Here again not everyone in the watershed is necessarily assessed. This type of procedure is similar to assessments in municipalities for storm water management:

- **Increased Sedimentation.** This benefit would best be described as an "inverse damage" charged against the property(ies) responsible for increased project maintenance. As upland areas contribute to this maintenance requirement, it seems only fair that they pay to remove the sediment which they contribute. The Soil Conservation Service has information on the soil losses which occur within each area. This information should be a key element in determining this benefit value. The amount of soil loss generally accepted as tolerable is 5 tons/acre/year. Basing a benefit value (charge) upon the removal of the quantity of annual soil loss which is delivered to and retained within the drainage system over a given period of time gives the value of this benefit. Computer programs, such as PCA's AGNPS model, is available to determine the amount of sediment delivered to the drainage system in any watershed. This modeling process may be more detailed than necessary for most projects, so other methods of estimating the sediment quantities may be used. The percentage of sediment retained in the drainage system can be estimated by comparing typical soil losses in the area served by the drainage system and maintenance records of material removed during normal maintenance and repairs. It is recommended that a figure of around 5% in the system be used. The Soil Conservation Service can be of assistance in making this evaluation.

Example: Sample County Ditch Number 4

5 tons/acre/year soil loss
Soil weight =125 pounds per cubic
foot
5% of sediment retained in system
25 year project life

- Step 1:** 5 tons/acre/year x 2000 lbs/ton =
10,000 lbs/acre/year = 80 cubic feet/acre/year
(10,000 ÷ 125 = 80).
- Step 2:** 80 cubic feet/acre/year x 5% (.05) =
4 cubic feet/acre/year of eroded soil retained in
system.
- Step 3:** 4 cubic feet/acre/year x 25 years =
100 cubic feet ÷ 27 cubic feet/cubic
yards = 3.7 cubic yards.
- Step 4:** 3.7 cubic yards at an estimated removal
cost \$1.00/cubic yard = \$3.70 per acre
benefit.

- **Accelerated Drainage.** This procedure may best be described in considering a Redetermination of Benefits proceeding, where the original drainage system was designed to drain only a limited portion of the watershed (e.g., the wetlands). Additional property can be assessed if it is responsible for increased drainage system maintenance or increased drainage system capacity, because the natural drainage pattern has been altered or modified to accelerate the drainage of water.

The alterations may include the installation of drain tile or ditches in wet areas or the conversion of natural areas or native prairie to a different land use that causes accelerated runoff. Property owners who have preserved natural areas, not developed wetland areas, or have installed erosion control practices should not be assessed for this indirect benefit if their practices basically control runoff and erosion equivalent to the natural condition.

To determine a value for this type of benefit, it is necessary to determine which lands have been altered to accelerate the drainage of water. Existing natural areas, native prairie, and undrained wetlands would not be subject to this benefit if, in the viewers' opinion, they have established that these lands will remain in a natural state (e.g., by public ownership (e.g., parks, wildlife areas, etc.), restrictive covenants, etc.). Areas assessed direct benefits for the project, which may be subject to further drainage improvements not specified in the initial ditch proceeding, and additional lands within the watershed that contribute water and sediment but are not assessed direct benefits, would be subject to this benefit.

The amount of increased runoff will dictate the amount of this benefit. To find this value, one should compare the estimated cost of constructing a drainage system and its maintenance for the "without" and "with" accelerated drainage condition. An estimate of the construction costs for the without accelerated drainage condition would consider only the discharges from within a watershed where all upland areas are in a natural or native prairie condition and where the wetland areas previously assessed have had only an outlet provided.

The next step would be to design an enlarged system to accommodate drainage from this watershed for the "with" accelerated drainage condition, where all upland properties and wetlands are in normal crop rotation or other improved uses. The difference between these two estimates would be attributed to the accelerated drainage and should be assessed against the property responsible for this accelerated drainage/additional cost. This assessment is not added to the benefits already determined using other procedures outlined in this chapter. The assessment for accelerated drainage would only apply to lands within the watershed which, after project construction, will not remain in a natural or native prairie condition. Viewers must work closely with the ditch engineer to utilize this methodology or consult with someone knowledgeable in hydrology.

**Example: Sample County Ditch Number 5
Redetermination of Benefits**

Watershed size (with 100 acre WMA = 30 acre wetland/70 acres native prairie)	= 1000 acres
Wetland area assessed in previous proceeding	= .270 acres
Design rainfall	= 3 inches
Ditch length	= 1 mile
"Without" Accelerated Drainage Discharge	= 163 cubic feet per second (cfs)
"With" Accelerated Drainage (Full row crops on 900 acres within the watershed)	= 260 cfs

**Step 1: Design ditch for Without Accelerated
Drainage Condition:**

- 163 cfs, 4' bottom, 2:1
sideslopes, 5.2' depth required,
14,670 cubic yards @ \$.70/cubic
yard = \$10,269 cost of excavation/
grass strip.

**Step 2: Design ditch for With Accelerated
Drainage Condition:**

- 260 cfs, 4' bottom, 2:1 sideslopes,
6.2' depth required, 20,730 cubic

yards @ \$.70/cubic yard = \$14,511
cost of excavation/grass strip.

Step 3: Determine added ditch cost for Accelerated Drainage Condition:

- \$14,511.00 - \$10,269.00 = \$4,242.00.

Step 4: Determine cost per acre for the 900 acres in watershed that have been altered:

- \$4,242 ÷ 900 = \$4.75/acre*

* (In this example, no accelerated drainage benefits are attributable to the 100 acre wildlife management area (WMA))

This accelerated drainage charge (of \$4.75 per acre) is only applied to areas in the watershed that have not received any other type of benefit assessment. To determine the charge per acre, you need to include within your calculation all acres converted, including those acres previously assessed.

- **Drainage System As Outlet For Municipality.** An outlet charge assessed against a municipality may be addressed under the same approach as an outlet for an existing drainage system. The major consideration should be the increased cost and maintenance due to the increased drainage system capacity required to accommodate the accelerated drainage from within the municipality. The watershed size comparison is probably not the right criteria to use to evaluate the municipality's portion of the estimated project costs as the runoff percentages for developed lands is much greater than that of agricultural land. A hydrological comparison would be more appropriate in determining additional design requirements and construction costs. The municipality's growth and development potential should also be used in determining the benefit value.

V. EXTENT OF DAMAGES

Damages to be paid may include acquisition or encumbering of property for the right-of-way necessary for the open channel and the grass strip seeding area. Normally, right-of-way is not taken for tile systems. Values for the right-of-way for the open channel should be, at a minimum, equal to the fair market value of similar lands. Additional consideration should be made for the potential

diminished value of a farm due to severing of a field by an open channel. The grass strip seeding area may have a lesser damage value as it may still serve a useful function. Hay can be taken from the seeding area or it can be used to reduce end rows or provide a field access road. Damages for the grass strip seeding area, therefore, should be the difference between the market value of agricultural land and its value as a grassed area.

Crop damages may be paid for the temporary use of property during construction. Depending upon the type of construction, this damage may occur for a period longer than just during construction. Such damage may include the reduced productive value of the area covered by the leveling of the spoil banks. Damages paid for diminished productivity or land value from increased overflow should be considered if the outlet for the drainage project is within an area which may have increased flooding or overflow.

VI. VIEWERS' REPORT/PROPERTY OWNERS' REPORT

A. Preparation Of Viewers' Report. The viewers' report is the listing of all of the facts and findings of the team of viewers. This report is the forerunner to the property owners' report to be prepared by the auditor or secretary of the watershed district. In all practicality, the viewers' report should provide most of the information required in the property owners' report, as the auditor/secretary will be unable to prepare a report without this information being provided by the viewers.

As required by M.S. § 103E.321, the viewers' report must show, in tabular form, each lot, 40 acre tract, and fraction of a lot or tract under separate ownership that is benefitted or damaged, and include:

- a description of the lot or tract, under separate ownership that is benefitted or damaged;
- the name(s) of the owner(s) as they appear on the current tax records of the county and their addresses;
- the number of acres in each tract or lot;
- the number and value of acres added to a tract or lot by the proposed drainage of public waters;
- the damage, if any, to riparian rights;
- the damages paid for the permanent grass strip under M.S. § 103E.021;
- the total number and value of acres added to a tract or lot by the proposed drainage of public water, wetlands, and other areas not currently being cultivated;

- the number of acres and amounts of benefits being assessed for drainage of areas which before the drainage benefits could be realized would require a permit to; work in public waters under M.S. § 103G.245; or to excavate or fill a navigable water body under United States Code, Title 33, Section 404, or a permit to discharge into waters of the United States under United States Code, Title 33, Section 1344;
- the number of acres and amount of benefits being assessed for drainage of areas that would be considered conversion of a wetland under United States Code, Title 16, Section 3821, if the area was placed in agricultural production;
- the amount of right-of-way acreage required; and
- the amount that each tract or lot will be benefitted or damaged.

Although no standard form for listing of this information is available, the format of the form in Appendix 4A of this chapter provides columns for listing of all of the required information.

In addition to the tabular information noted above, M.S. § 103E.321, Subd. 2 (a), requires the viewers to prepare a benefit and damages statement. This is similar to the narrative section of any standard appraisal report, except that this narrative only describes the procedure used for similar tracts or lots within the watershed of the project. This may be a single tract or an entire section. If differing types of property are encountered within the watershed for which no single area can be considered similar to the other areas, a narrative describing the procedure used to determine the benefits and damages to more than one tract should be completed.

The benefit and damage statement must describe:

- The existing land use, property value, and economic productivity. To describe the existing land use in a new project or an improvement, the viewers will describe the current use, property value, and economic productivity. In a Redetermination of Benefits, the viewers must determine the condition of the property at the time of the original proceedings.
- The potential land use, property value, and economic productivity after the drainage project is constructed. Similarly, the considerations must be between the

before and after project comparison. With a Redetermination of Benefits, the comparison should be with the existing project operating in its as-constructed condition.

- The benefits and damages from the proposed drainage project. These values may be described on a per-acre basis, and they are not necessarily the total benefits and damages from the proposed project, as these totals are listed on the tabular pages.

B. Disagreement of Viewers. If the viewers are unable to agree upon certain issues, each viewer shall file a separate report stating their findings for the unresolved issue(s). If this occurs, problems can be anticipated during any subsequent appeal.

C. Filing Viewers' Report. When the viewers have completed their duties, they shall file the viewers' report with the auditor of each county affected by the proposed project. Included with the viewers' report, the viewers must file a detailed statement showing the actual time the viewers were engaged in this effort and the costs incurred. It may be wise for the viewers to meet with the drainage authority when they file their report. At this meeting, the viewers can review their findings and answer any questions that the drainage authority may have prior to the public hearing.

D. Property Owners' Report. After the viewers have filed their report with the drainage authority, the auditor/watershed district secretary must, within 30 days, make the property owners' report. In all probability, the viewers will be required to assist the auditor or secretary in completing this report, as it requires somewhat different information than the viewers' report, and this information is only available from the viewers. The report must contain:

- The name and address of the property owners.
- Each lot or tract and its area that is benefitted or damaged. This is different than the viewers' report in that it requires listing the area benefitted or damaged specifically.
- The total number and value of acres added to a tract or lot by the proposed drainage of public waters, wetlands, and other areas not currently being cultivated. It is assumed that the intent of this item is to identify acres which will be converted to a different use and not for acquisition of riparian rights.
- The number of acres and amount of benefits being assessed for drainage of areas, which before the

drainage benefits could be realized, would require a permit to work in public waters and replacement as mitigation under M.S. § 103G.245, to excavate or fill a navigable water body under United States Code, Title 33, Section 403, or a permit to discharge into waters of the United States under United States Code, Title 33, Section 1344. These are wetlands identified by the DNR or COE which are assessed benefits.

- The number of acres and amount of benefits being assessed for drainage of areas that would be considered conversion of a wetland under United States Code, Title 16, Section 3821, if the area was placed in agricultural production. These are wetlands identified by the SCS which, if altered, could jeopardize participation in federal farm programs.
- The damage, if any, to riparian rights.
- The amount of right-of-way acreage required.
- The amount that each tract or lot will be benefitted or damage.
- The net damages or benefits to each property owner. Net benefits are the total benefit or damage adjusted to indicate a system inefficiency or a proximity consideration given by the viewers.
- The estimated cost to be assessed to the property owner based on the cost of the drainage project in the engineer's final report. This is the property owner's percentage of total benefit multiplied by the total estimated project cost. It may be beneficial to also break this down into an estimated annual cost. The annual cost, during a Redetermination of Benefits, may be based upon the anticipated annual maintenance budget.
- A copy of the benefits and damages statement under M.S. § 103E.321, Subd. 2(a), relating to the property owner.

The auditor or secretary must mail to each owner of property affected a copy of this report. As the report can be very large, mailing only the benefit and damage statement and the pages of the tabular report which contain information on the affected property owner's tract or lot meets the mailing requirement. Copies of the complete report should be available at the auditor's or secretary's office and at the final hearing.

VII. HEARINGS

It may be advisable for the viewers to meet with the county board(s) or board of managers of the watershed district when they submit their report. A review of the viewers' report by these individuals will provide information on the procedures and findings of the viewers. The county board members or the board of managers will be able to ask questions and be better prepared for the public hearing.

The viewers may wish to revisit the project area prior to the public hearing so they are familiar with the watershed and its current condition, as things may have changed from the time the field investigation was completed. The viewers should have adequate documentation with them at the hearing so they can answer specific questions that may arise. No one is expected to remember all details, so they may look at the documentation, if needed. The viewers should also know that, unless some additional information or conditions within the project area is provided, the report submitted is their opinion of what benefits and damages will result from the project.

APPENDIX 4A

VIEWS' REPORT -

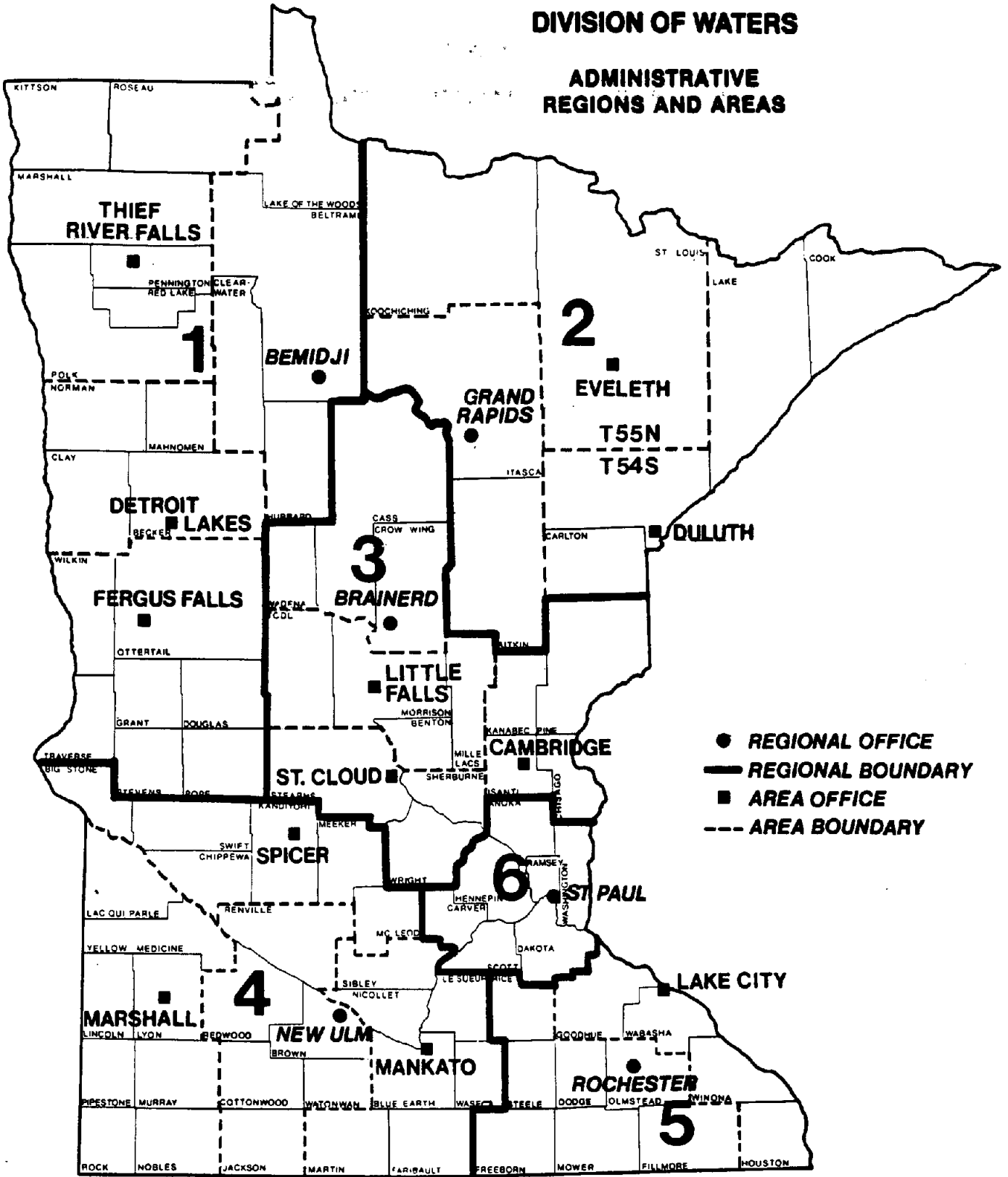
SUGGESTED FORMAT FOR LISTING REQUIRED INFORMATION

NAME	PARCEL DESCRIPTION	TOTAL ACRES IN TRACT	TOTAL BENEFITS	EFFICIENT RATE	NET BENEFITS	COST PER ESTIMATED 50000 ANNUAL REPAIR ASSESSMENT	1988 REDETERMINATION OF BENEFITS				BENEFITS				ACRES UNDER N.S. 105.42	ACRES WHICH CAN BE CROP US CODE TO CROP 33-134 14, SEE 3021	ACRES REQUIRED SEEDING	CROP DAMAGE FOR COST.	
							"A"	"B"	"C"	"D"	"A"	"B"	"C"	"D"					
TAM JACOBSON	ROUTE 4, BOX 190	48.00	484.00	1.00	484.00	82.81	21.24	1	498.00	2	432.00	8	32.00	10	2748.00	11	44.00	0.76	458.00
	ROUTE 4, BOX 190	39.40	2712.00	1.00	2712.00	462.89	119.00	2	818.00	9	2034.00	23	92.00	10	15.00			0.03	
	ROUTE 4, BOX 190	40.00	2942.00	1.00	2942.00	501.38	128.90	3	1224.00	13	2738.00	24	94.00	50	73.00				
	ROUTE 4, BOX 190	49.00	4238.00	1.00	4238.00	722.96	185.87												
	ROUTE 4, BOX 190	2.15	8.00	1.00	8.00	1.37	0.33												
	ROUTE 4, BOX 190	3.14	12.00	1.00	12.00	2.05	0.53												
	ROUTE 4, BOX 190	2.70	230.00	1.00	230.00	39.25	10.09												
	ROUTE 4, BOX 190	34.84	9442.00	0.33	3384.70	342.07	87.94	12	6328.00	2	816.00	9	2034.00	16	44.00	2950	4375.00	4.44	221.67
	ROUTE 4, BOX 190	21.40	1450.00	0.50	825.00	0.46	0.17											2.80	146.35
	ROUTE 4, BOX 190	31.74	2524.00	1.00	2524.00	237.95	61.18	1	498.00	9	2034.00	21	84.00	2320	3823.00			3.84	193.13
	ROUTE 4, BOX 190	4.50	20.00	1.00	20.00	3.41	0.88												
	ROUTE 4, BOX 190	33.36	3378.00	1.00	3378.00	576.55	149.23	2	816.00	11	2404.00	19	74.00	200	300.00			0.20	15.15
	ROUTE 4, BOX 190	3.50	234.00	1.00	234.00	24.79	4.37	2	816.00	12	2712.00	15	44.00	590	855.00			0.99	44.70
	ROUTE 4, BOX 190	29.80	3388.00	1.00	3388.00	347.49	145.95												
	ROUTE 4, BOX 190	3.00	12.00	1.00	12.00	2.03	0.53												
	ROUTE 4, BOX 190	8.00	476.00	1.00	476.00	81.24	20.89	2	432.00	6	24.00								
	ROUTE 4, BOX 190	8.34	230.00	0.50	119.00	3.44	0.94	1	224.00	3	12.00	220	330.00						
	ROUTE 4, BOX 190	18.00	278.00	1.00	278.00	47.55	12.20	1	224.00	13	32.00								
	ROUTE 4, BOX 190	44.00	4934.00	0.50	2467.00	233.94	60.14	3	1432.00	7	1382.00	22	84.00	2470	3765.00			3.74	187.12
	ROUTE 4, BOX 190	34.50	2778.00	1.00	2778.00	423.70	109.44	1	498.00	11	2884.00	21	84.00	1990	1433.00			1.85	82.53
	ROUTE 4, BOX 190	44.00	2308.00	0.55	1304.20	234.31	58.23	1	498.00	8	1808.00	23	92.00	390	585.00			0.59	29.35
	ROUTE 4, BOX 190	31.00	7188.00	0.65	2471.50	321.17	82.57	3	1224.00	11	2884.00	23	104.00	1340	2010.00			2.83	140.32
	ROUTE 4, BOX 190	1.72	1498.00	0.50	749.00	127.57	32.82	7	4976.00	1	498.00	8	1808.00	19	74.00	1280	1728.00	1.94	96.97
	ROUTE 4, BOX 190	7.09	629.00	0.50	314.50	34.53	9.39	1	498.00	1	498.00	3	24.00						
	ROUTE 4, BOX 190	4.00	142.00	0.65	417.50	71.22	18.31	1	498.00	2	452.00	2	4.00	150	223.00			0.23	11.23
	ROUTE 4, BOX 190	4.00	844.00	0.65	561.50	84.99	21.72	1	498.00	2	452.00	1	4.00	150	223.00			0.23	11.23
	ROUTE 4, BOX 190	4.00	1500.00	0.50	750.00	116.44	29.99	2	1088.00	1	498.00								
	ROUTE 4, BOX 190	34.00	1872.00	0.65	1224.80	209.90	53.96												
	ROUTE 4, BOX 190	34.00	3374.00	0.65	2224.40	308.09	79.21	3	1224.00	10	2360.00	23	92.00	1170	1753.00			1.77	88.44
	ROUTE 4, BOX 190	34.00	10374.00	0.50	5187.00	816.12	208.28	17	9248.00	2	816.00	15	44.00	1220	1830.00			1.85	92.42
	ROUTE 4, BOX 190	3.00	2770.00	0.50	1385.00	232.12	59.48	3	2728.00										
	ROUTE 4, BOX 190	28.00	2088.00	1.00	2088.00	472.72	124.75	2	1088.00	4	944.00	20	84.00						
	ROUTE 4, BOX 190	14.50	500.00	1.00	500.00	85.34	21.94												
	ROUTE 4, BOX 190	30.00	1894.00	1.00	1894.00	323.61	83.20	8	1888.00	8	1888.00	22	84.00						
	ROUTE 4, BOX 190	30.00	2610.00	1.00	2610.00	443.47	114.53	1	944.00	7	1382.00	19	74.00						
	ROUTE 4, BOX 190	40.00	4298.00	1.00	4298.00	684.45	179.05	2	816.00	13	3370.00	23	92.00	490	733.00			0.74	37.12
	ROUTE 4, BOX 190	40.00	1440.00	1.00	1440.00	108.23	27.84	6	1324.00	6	1324.00	26	104.00	1840	2790.00			2.82	140.91
	ROUTE 4, BOX 190	40.00	2374.00	1.00	2374.00	307.05	78.94	10	2348.00	10	2348.00	29	114.00	1300	1950.00			1.77	85.40
	ROUTE 4, BOX 190	33.25	1650.00	0.50	825.00	140.81	34.20	7	1382.00	7	1382.00	17	48.00						
	TOTAL NET BENEFITS		27549.65	30000.00	12854.62														

CHAPTER 5
SUPPORTING INFORMATION/APPENDICES

DIVISION OF WATERS

ADMINISTRATIVE REGIONS AND AREAS



revised 3/91

REGION 1 (& Bemidji Area)

Regional Hydrologist
DNR-Division of Waters
2115 Birchmont Beach Road N.E.
Bemidji, MN 56601
(218) 755-3973

Detroit Lakes Area

Area Hydrologist
DNR-Division of Waters
P.O. Box 823
Detroit Lakes, MN 56501
(218) 847-1579

Fergus Falls Area

Area Hydrologist
DNR-Division of Waters
1221 Fir Avenue East
Fergus Falls, MN 56537
(218) 739-7576

Thief River Falls Area

Area Hydrologist
DNR-Division of Waters
123 Main Avenue N.
Thief River Falls, MN 56701
(218) 681-7789

REGION 2 (& Grand Rapids Area)

Regional Hydrologist
DNR-Division of Waters
1201 East Highway 2
Grand Rapids, MN 55744
(218) 327-4416

Duluth Area

Area Hydrologist
DNR-Division of Waters
5351 North Shore Drive
Duluth, Mn 55804
(218) 723-4786

Eveleth Area

Area Hydrologist
DNR-Division of Waters
2005 Highway 37
Eveleth, MN 55734
(218) 749-9610

REGION 3 (& Brainerd Area)

Regional Hydrologist
DNR-Division of Waters
1601 Minnesota Drive
Brainerd, MN 56401
(218) 828-2605

Little Falls Area

Area Hydrologist
DNR-Division of Waters
Route 4
Little Falls, MN 56345
(612) 632-2430

Cambridge Area

Area Hydrologist
DNR-Division of Waters
915 South Highway 65
Cambridge, MN 55008
(612) 689-2832

St. Cloud Area

Area Hydrologist
DNR-Division of Waters
3725 12th Street No.
P.O. Box 370
St. Cloud, MN 56302
(612) 255-4278

REGION 4 (& New Ulm Area)

Regional Hydrologist
DNR-Division of Waters
Box 756, Highway 15 South
New Ulm, MN 56073
(507) 354-2196

Spicer Area

Area Hydrologist
DNR-Division of Waters
P.O. Box 457
10590 Co. Rd. 8 N.E.
Spicer, MN 56288
(612) 796-6271

Mankato Area

Area Hydrologist
DNR-Division of Waters
Nichols Office Center
Suite 180, 410 Jackson St.
Mankato, MN 56001
(507) 389-2151

Marshall Area

Area Hydrologist
DNR-Division of Waters
Box 111, 1400 E. Lyon
Marshall, MN 56258
(507) 537-7258

REGION 5

Regional Hydrologist
DNR-Division of Waters
P.O. Box 6247
Rochester, MN 55903
(507) 285-7430

Lake City Area

Area Hydrologist
DNR-Division of Waters
Route 2, Box 230
Lake City, MN 55041
(612) 345-3331

REGION 6

Regional Hydrologist
DNR-Division of Waters
1200 Warner Road
St. Paul, MN 55106
(612) 772-7910

CENTRAL OFFICE

DNR-Division of Waters
500 Lafayette Road
DNR Building
St. Paul, MN 55155-4032
(612) 296-4800

SECTION OF WILDLIFE Regional and Area Wildlife Managers

5-91

REGION I

Jim Breyer
Regional Wildlife Manager
2115 Birchmont Beach Rd. NE.
Bemidji, 56601
218-755-3958

George Davis
P.O. Box 183
Karlstad, 56732
218-436-2427

Jim Schneeweis
1201 E. Hwy. 2
Grand Rapids 55744
218-327-4428

Frank Swendsen
Forestry Office, Rt. 8
Intl. Falls, 56649
218-286-5434

REGION II

Jerome Janacek
Regional Wildlife Manager
Reg. Hdqtrs., 1201 E. Hwy 2
Grand Rapids, 55744
218-327-4413

Gordon Forester
123 Main Ave. N.,
Thief River Falls 56701
218-681-7790

Roseau River WMA
Stan Wood
218-463-1557

Jeff Dittrich
Box 1001,
Baudette 56623
218-634-1705

Thief Lake WMA
Paul Telander
218-222-3747

Red Lake WMA
(VACANT)
218-783-6861

Fred Thunhorst
1429 Grant-McMahan Blvd.
Ely 55731
218-365-7280

Jeff Lightfoot
DNR, 2005 Hwy 37
Eveleth, 55734
218-749-7748

Terry Wolfe
203 W. Fletcher St.
Crookston, 56716
218-281-3287

Steve Caron
2114 Bemidji Ave.
Bemidji, 56601
218-755-2964

Earl Johnson
P.O. Box 823
Detroit Lakes, 56501
218-847-1579

Doug Wells
1221 Fir Ave. E.
Fergus Falls, 56537
218-739-7576

Ald Larson
Rt. 3, Box 1A
Glenwood, 56334
612-634-4573

Kevin Kotts
701 1/2 Iowa Ave.
Morris 56267
612-589-1030

Rob Naplin
& Fisheries Station
P.O. Box 271
Park Rapids, 56470
218-732-8452

Dennis Hanson
1601 Minnesota Dr.
Brainerd, 56401
218-828-2555

Gary Johnson
Rt. 4, Box 19A
Little Falls, 56345
612-632-6677

Mike Maurer
DOT Bldg. 3725 - 12 St. N.
Box 370, St. Cloud, 56301
612-255-4279

Dave Soehren
Appleton Civic Center
323 Schlieman Ave.
Appleton, 56208
612-289-2493

LeRoy Dahlke
1025 19th Ave. S.W.
Suite 1
Willmar, 56201
612-231-5163

Steve Merchant
National Guard Armory
Madison 56256
612-598-7641

Robert Meyer
1400 E. Lyon
Marshall, 56258
507-537-6250

Perry Loegering
2431 26th St.
Slayton, 56172
507-836-6919

Talcot Lake WMA /
Roy Peterson
507-468-2248

Don Schultz
231 E. 2nd St.
Redwood Falls, 56283
507-637-2320

Randy Markl
Rt. 2, Box 245
Windom, 56101
507-831-2465

Vacant
Nichols Office Ctr, Suite 180
Mankato 56001
507-389-6713

Paul Bremer
230 N. 4th
Gaylord, 55334
612-237-5274

Dave Dickey
932 Second Street NW
Aitkin 56431
218-927-6915

Mille Lacs WMA
Dick Tuaszynski
612-532-3537

Lee Henness
P.O. Box 398
Hinckley, 55037
612-384-6148

Dave Pauly
915 South Hwy. 65
Cambridge, 55008
612-689-2832

REGION III

Henry Wulf
Regional Wildlife Mgr.
1601 Minnesota Dr.
Brainerd, 56401
218-828-2615

Roger Johnson & Tim Wallace (AWM)
Carlos Avery Game Farm
Forest Lake 55025
612-296-5200

Carlos Avery WMA
Lloyd Knudson
612-296-5290

Dennis Simon
329 Pine St., Box 97
Nicollet, 56076
507-225-3572

Jon Parker
118 S. Fuller St.
Shakopee 55379
612-445-9393

Whitewater WMA
Jon Cole
507-932-4133

Nick Gulden
411 Exchange Bldg.
Winona, 55987
507-457-5486

Jack Heather
2300 Silver Creek Rd. NE
Rochester, 55901
507-285-7435

Jeanine Vorland
285 - 18th St. SE
Owatonna 55060
507-455-5841

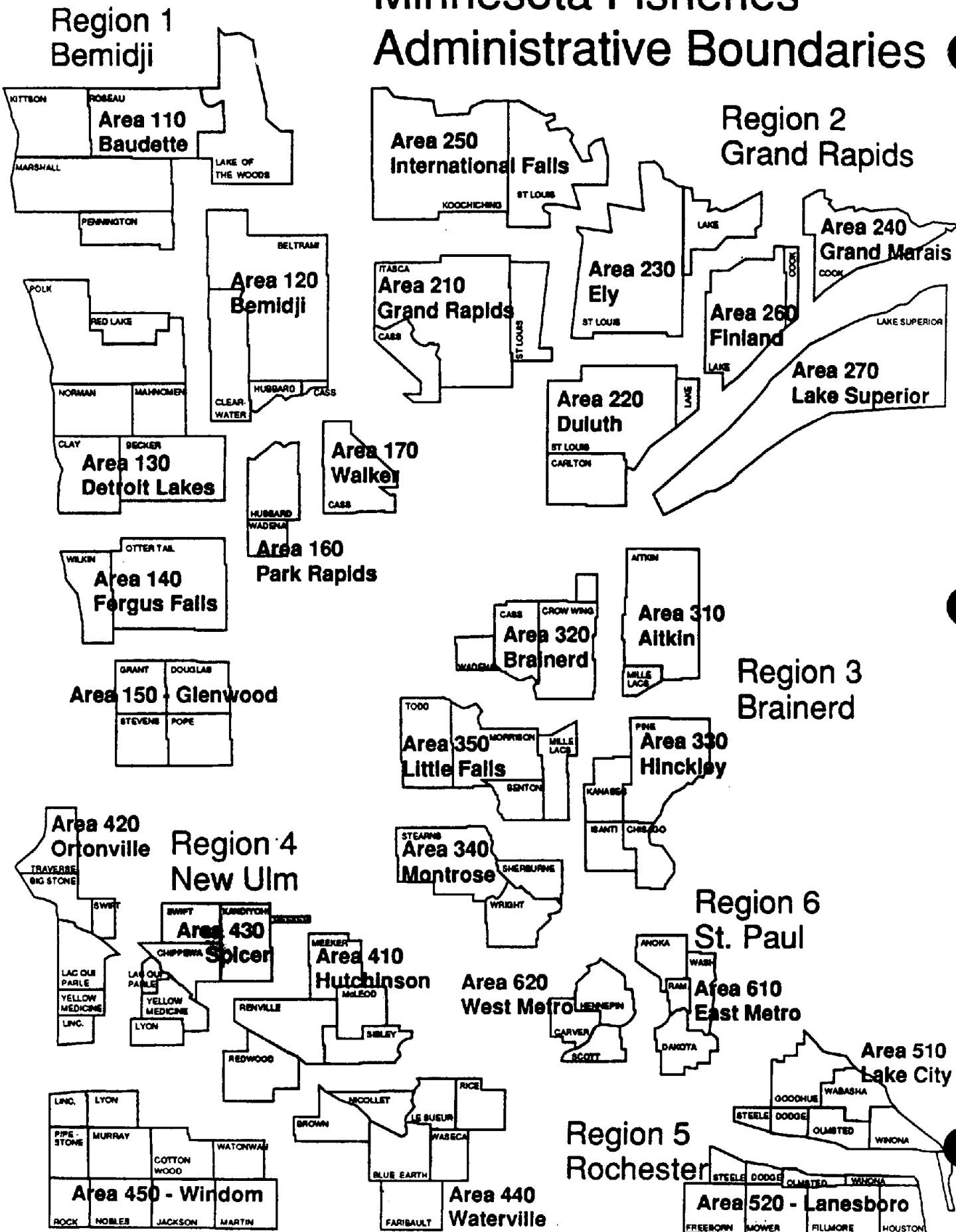
REGION IV

Larry Nelson
Regional Wildlife Manager
Box 756, New Ulm, 56073
507-359-6000

REGION V

Howard Shepperd
Regional Wildlife Mgr.
2300 Silver Creek Rd. NE
Rochester, MN 55901
507-285-7435

Minnesota Fisheries Administrative Boundaries



Department of Natural Resources
Section of Fisheries
Box 12, 500 Lafayette Road
St. Paul, MN 55155-4012
(612) 296-3325

REGION 1

Regional Fisheries Manager
2115 Birchmont Beach Road, N.E.
Bemidji, MN 56601
(218) 755-3959

Area 110

Area Fisheries Supervisor
Route 1, Box 1001
Baudette, MN 56623
(218) 634-2522

AREA 120

Area Fisheries Supervisor
2114 Bemidji Avenue
Bemidji, MN 56601
(218) 755-2974

AREA 130

Area Fisheries Supervisor
P.O. Box 823
Detroit Lakes, MN 56501
(218) 847-1579

AREA 140

Area Fisheries Supervisor
1221 Fir Avenue E.
Fergus Falls, MN 56537
(218) 739-7576

AREA 150

Area Fisheries Supervisor
1110 North Lakeshore Drive
Glenwood, MN 56334
(612) 634-4573

AREA 160

Area Fisheries Supervisor
301 South Grove Avenue
Park Rapids, MN 56470
(218) 732-4153

AREA 170

Area Fisheries Supervisor
P.O. Box 38
Walker, MN 56484
(218) 547-1683

REGION 2

Regional Fisheries Manager
1201 E. Highway 2
Grand Rapids, MN 55744
(218) 327-4415

AREA 210

Area Fisheries Supervisor
1201 E. Highway 2
Grand Rapids, MN 55744
(218) 327-4430

AREA 220

Area Fisheries Supervisor
5351 North Shore Drive
Duluth, MN 55804
(218) 723-4785

AREA 230

Area Fisheries Supervisor
1429 Grant McMahan Blvd.
Ely, MN 55731
(218) 363-7280

AREA 240

Area Fisheries Supervisor
P.O. Box 146
Grand Marais, MN 55604
(218) 387-2535

AREA 250

Area Fisheries Supervisor
P.O. Box 8, Route 8
International Falls, MN 56649
(218) 286-5220

AREA 260

Area Fisheries Supervisor
P.O. Box 546
Pinland, MN 55603
(218) 353-7591

AREA 270

Area Fisheries Supervisor
5351 North Shore Drive
Duluth, MN 55804
(218) 723-4785

REGION 3

Regional Fisheries Manager
1601 Minnesota Drive
Brainerd, MN 56401
(218) 828-2624

AREA 310

Area Fisheries Supervisor
116 - 2nd Avenue N.E.
Aitkin, MN 56431
(218) 927-3751

AREA 320

Area Fisheries Supervisor
1601 Minnesota Drive
Brainerd, MN 56401
(218) 828-2552

AREA 330

Area Fisheries Supervisor
Box 398
Hinckley, MN 55037
(612) 384-6147

AREA 340

Area Fisheries Supervisor
Route 1, Box 175
Montrose, MN 55363
(612) 675-3301

AREA 350

Area Fisheries Supervisor
Route 4
Little Falls, MN 56345
(612) 632-6675

REGION 4

Regional Fisheries Manager
P.O. Box 756, Hwy 15 South
New Ulm, MN 56073
(507) 354-2196

AREA 410

Area Fisheries Supervisor
R. R. 3, Box 85A
Hutchinson, MN 55350
(612) 587-2717

AREA 420

Area Fisheries Supervisor
R. R. 2, Box 172A
Ortonville, MN 56278
(612) 839-2656

AREA 430

Area Fisheries Supervisor
P.O. Box 457
Spicer, MN 56288
(612) 796-2161

AREA 440

Area Fisheries Supervisor
P.O. Box 86
Waterville, MN 56096
(507) 362-4223

AREA 450

Area Fisheries Supervisor
Rt. 2, Box 245
Windom, MN 56101
(507) 831-3394

REGION 5

Regional Fisheries Manager
2300 Silver Creek Road, N. E.
Rochester, MN 55904
(507) 285-7427

AREA 510

Area Fisheries Supervisor
P.O. Box 69
Lake City, MN 55041
(612) 345-3365

AREA 520

Area Fisheries Supervisor
Route 2, Box 85
Lanesboro, MN 55949
(507) 467-2442

REGION 6

Regional Fisheries Manager
1200 Warner Road
St. Paul, MN 55106
(612) 772-7950

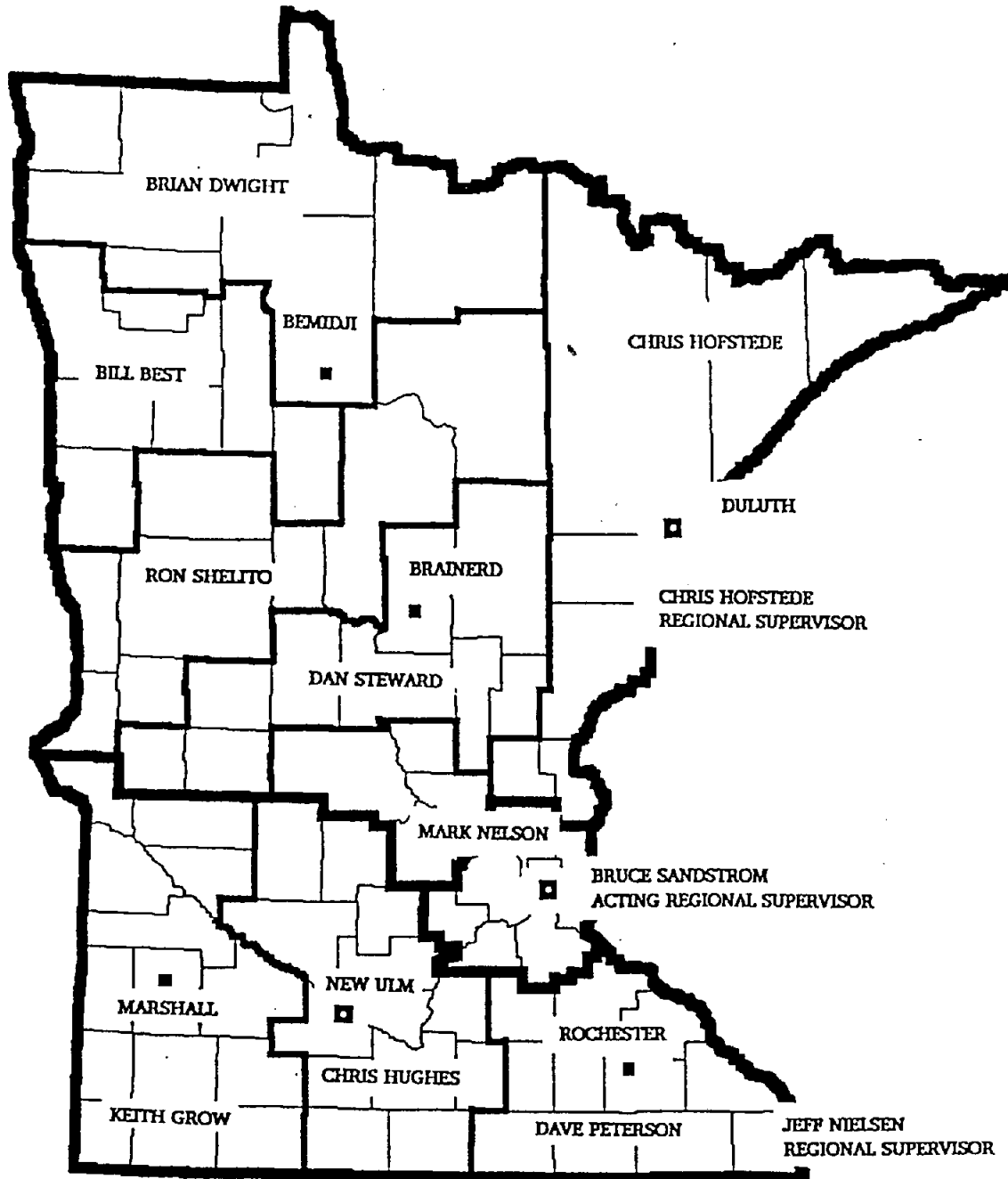
AREA 610

Area Fisheries Supervisor
1200 Warner Road
St. Paul, MN 55106
(612) 772-7950





AREA 620

Area Fisheries Supervisor
1200 Warner Road
St. Paul, MN 55106
(612) 772-7950

BWSR Administrative Regions & Work Areas



Minnesota Board of Water and Soil Resources
February 1, 1992

-  REGIONAL BOUNDARY
-  AREA BOUNDARY
-  REGIONAL HEADQUARTERS
-  FIELD OFFICE

**BOARD OF WATER AND SOIL RESOURCES
FIELD OFFICES**

METRO REGIONAL OFFICE - ST. PAUL

155 South Wabasha Street
Suite 104
St. Paul, MN 55107

Bruce Sandstrom, Acting Regional Supervisor (612) 297-4958
Mark Nelson, Board Conservationist (612) 297-1894

NORTHERN REGIONAL OFFICE - DULUTH

394 South Lake Avenue
Room 403
Duluth, MN 55802

Chris Hofstede, Regional Supervisor (218) 723-4572
Jim Lemmerman, Board Forester (218) 723-4923
Gail Watczak, Secretary (218) 723-4572

BEMIDJI OFFICE

1106 Paul Bunyan Drive NE
Bemidji, MN 56601

Brian Dwight, Board Conservationist (218) 755-3963
Bill Best, Board Conservationist (218) 755-4176
Debbie Crotteau, Secretary (218) 755-3963

BRAINERD OFFICE

503 Washington Street
Brainerd, MN 56401

Ron Shelito, Board Conservationist (218) 828-2604
Dan Steward, Board Conservationist (218) 828-2598
Vicky Erbele, Secretary (218) 828-2383

SOUTHERN REGIONAL OFFICE - NEW ULM

Box 756
New Ulm, MN 56073

Jeff Nielsen, Regional Supervisor (507) 359-6075
Chris Hughes, Board Conservationist (507) 359-6076
Mary Mueller, Board Conservationist (507) 359-6079
Sara Johnson, Accounting Coordinator (507) 359-6077
Carla Swanson, Secretary (507) 359-6074

ROCHESTER OFFICE

1200 South Broadway
100 Friedel Building
Rochester, MN 55904

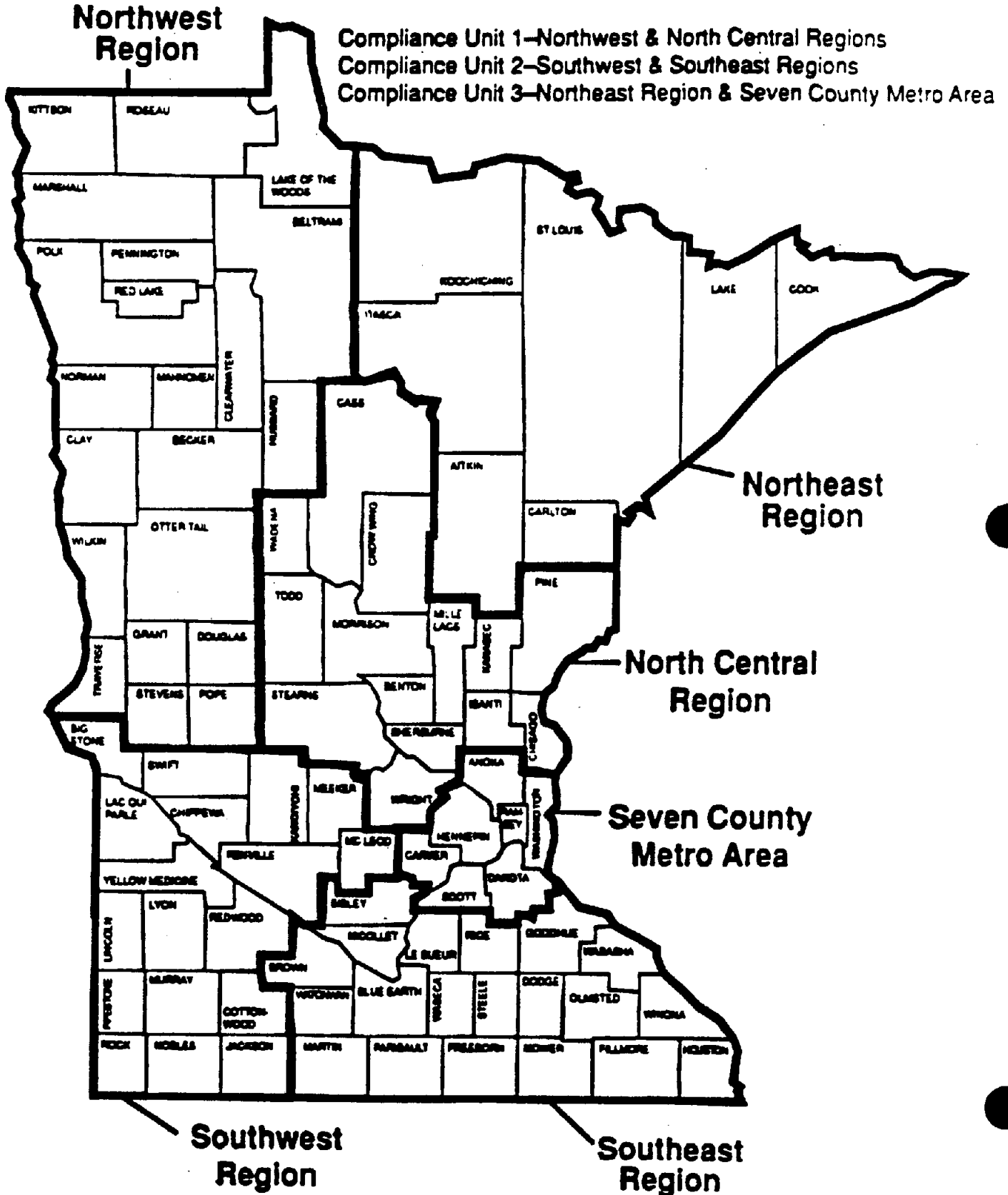
Dave Peterson, Board Conservationist (507) 285-7458

MARSHALL OFFICE

1400 East Lyon Street
Box 267
Marshall, MN 56258

Keith Grow, Board Conservationist (507) 537-7260
Brad Matlack, Technician (507) 537-6067
Darrell Apelgrain, Engineer (507) 537-6060
Roxie Serreyn, Secretary (507) 537-6060

MPCA REGIONS



REGIONAL OFFICES

August 1991

REGION I - DULUTH - Northeast Office

Wayne Golly, Regional Director		Duluth Government Center
Heidi Bauman	Steve Leppala	Room 704
Robert Beresford	Dan Logelin	320 West Second Street
Jeff Cooley	Tim Musick	Duluth, MN 55802
Brian Fredrickson	Angela Schaeffbauer	(218) 723-4660
Peggy Haglin	Sheri Steinward	FAX (218) 723-4727
Sarah Hylden		

COUNTIES: AITKIN, CARLTON, COOK, ITASCA, KOOCHICHING, LAKE, ST. LOUIS

REGION II - BRAINERD - North Central Office

Larry Shaw, Director of Regional Offices		1601 Minnesota Drive
Don Adams	Randy Hukreide	Brainerd, MN 56401
John Archambo	Stan Kalinoski	(218) 828-2492
Herschel Blasing	Missy Mailhot	FAX (218) 828-2594
Mike Dinndorf	Shirley Peterson	
Jim Hodgson	Cecelia Stetson	

COUNTIES: BENTON, CASS, CHISAGO, CROW WING, ISANTI, KANABEC, MILLE LACS, MORRISON, PINE, SHERBURNE, STEARNS, TODD, WADENA, WRIGHT

III - DETROIT LAKES - Northwest Office

Doug Bellefeuille	Arlen Furseth	Lake Avenue Plaza
Sheri Berg	Willis Mattison	714 Lake Avenue
Kristin Coe-Mikkelson	Bruce Paakh	Suite 220
Jim Coerneya	Jim Ziegler	Detroit Lakes, MN 56501
John Frederick		(218) 847-1519
		FAX (218) 846-0719

COUNTIES: BECKER, BELTRAMI, CLAY, CLEARWATER, DOUGLAS, GRANT, HUBBARD, KITTSOON, LAKE OF THE WOODS, MAHONOMEN, MARSHALL, NORMAN, OTTER TAIL, PENNINGTON, POLK, POPE, RED LAKE, ROSEAU, STEVENS, TRAVERSE, WILKIN

IV - MARSHALL - Southwest Office

Mark Jacobs, Regional Director		109 South Fifth Street
Theresa Gilbertson	Craig Schafer	Marshall, MN 56258
Kellie Keohne	Sharri Van de Wiele	(507) 537-7146
Nancy Mortland	Debra Wagner	FAX (507) 537-6001
Muriel Runholt	Gary Zick	

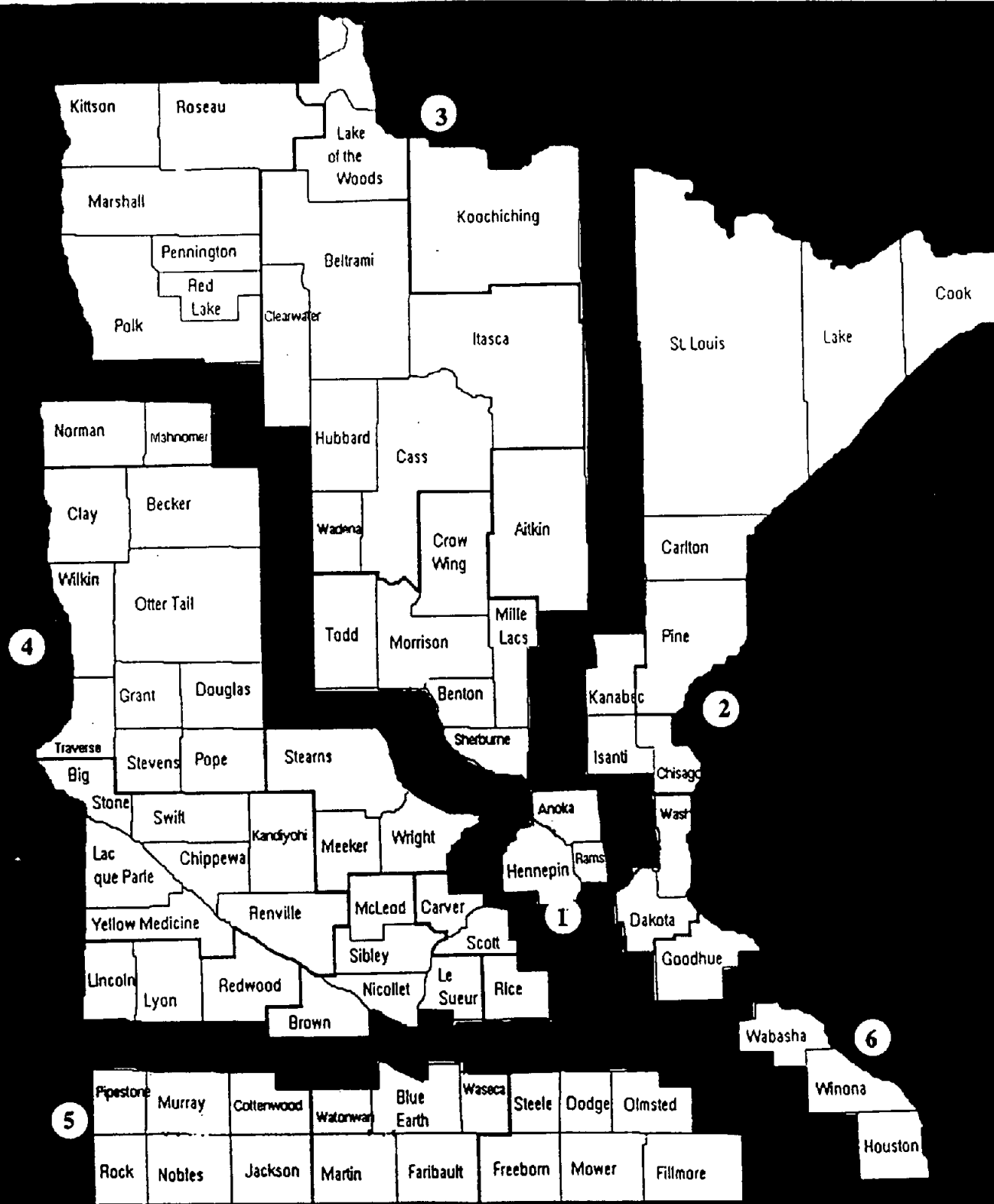
COUNTIES: BIG STONE, CHIPPEWA, COTTONWOOD, JACKSON, KANDIYOHI, LAC QUI PARLE, LINCOLN, LYON, MCLEOD, MEEKER, MURRAY, NOBLES, PIPESTONE, REDWOOD, RENVILLE, ROCK, SWIFT, YELLOW MEDICINE

REGION V - ROCHESTER - Southeast Office

Larry Landherr, Regional Director		2116 Campus Drive South East
Marshall Cole	Ellen Snyder	Rochester, MN 55904
Lee Ganske	Wendy Turri	(507) 285-7343
April Melancon	Carol Van de Velde	FAX (507) 280-5513
Mike Rose	Edward Weir	

COUNTIES: BROWN, BLUE EARTH, DODGE, FARIBAULT, FILLMORE, FREEBORN, GOODHUE, HOUSTON, LESUEUR, MARTIN, MOWER, NICOLLET, OLSTED, RICE, SIBLEY, STEELE, WABASHA, WASECA, WATONWAN, WINONA

METRO COUNTIES: ANOKA, CARVER, DAKOTA, HENNEPIN, RAMSEY, SCOTT, WASHINGTON



CORPS OF ENGINEERS, ST. PAUL DISTRICT REGULATORY CONTACTS

AREA 1 --Ramsey and Extreme Southern Hennepin (612) 220-0362
 --Anoka, Northern Hennepin (612) 220-0360

AREA 2 (612) 220-0355

AREA 3 (612) 220-0358 or 220-0370

AREA 4 (612) 220-0363 or 220-0372

AREA 5 (612) 220-0362

AREA 6 (608) 784-8236 (La Crosse, Wis.)

GENERAL INFORMATION (612) 220-0375

FREQUENTLY USED TELEPHONE NUMBERS AND ADDRESSES

U.S. Department of Agriculture
SOIL CONSERVATION SERVICE
600 Farm Credit Services Building
375 Jackson Street
St. Paul, Mn. 55101-1854
612-290-3675

U.S. Department of Agriculture
**AGRICULTURAL STABILIZATION AND
CONSERVATION SERVICE**
400 Farm Credit Services Building
375 Jackson Street
St. Paul, Mn. 55101-1852
612-290-3651

U.S. Department of Defense
Department of the Army
CORPS OF ENGINEERS
1421 U.S. Post Office and Custom House
St. Paul, Mn. 55101-9808
612-220-0200

U.S. Department of Interior
U.S. GEOLOGICAL SURVEY
St. Paul District Office
702 U.S. Post Office Building
St. Paul, Mn. 55101
612-229-2621

U.S. Fish & Wildlife Service
DEPARTMENT OF INTERIOR
Twin Cities Field Office
4101 East 80th Street
Bloomington, MN 55425-1665
612-725-3548

State of Minnesota
DEPARTMENT OF AGRICULTURE
90 West Plato Boulevard
St. Paul, Mn. 55107
612-297-2200

State of Minnesota
DEPARTMENT OF HEALTH
717 Delaware Street SE
Minneapolis, Mn. 55414
612-623-5000

State of Minnesota
**DEPARTMENT OF NATURAL
RESOURCES**
500 Lafayette Road
St. Paul, Mn. 55155-4001
612-296-6157

State of Minnesota
POLLUTION CONTROL AGENCY
520 Lafayette Road
St. Paul, Mn. 55155
612-296-6300

UNIVERSITY OF MINNESOTA
Information - 612-625-5000

STATE OF MINNESOTA
Information - 612-296-6013



EXECUTIVE ORDER 91-3
DIRECTING STATE DEPARTMENTS AND AGENCIES
TO FOLLOW A "NO-NET LOSS" POLICY
IN REGARD TO WETLANDS

I, Arne H. Carlson, GOVERNOR OF THE STATE OF MINNESOTA, by virtue of the authority vested in me by the Constitution and the applicable statutes, do hereby issue this Executive Order:

WHEREAS, wetlands provide economic as well as ecological benefits to the state by protecting and preserving water supplies; by providing for natural storage and retention of flood waters; by serving as transition zones between dry land and lakes and rivers, thereby retarding soil erosion; by functioning as nature's biological filters, assimilating nutrients; by providing essential habitats for fish and wildlife; by providing for groundwater recharge; by providing low flow augmentation for rivers and streams; by providing aesthetic and recreational opportunities; by providing outdoor educational resources; and by adding to Minnesota's ecological diversity; and

WHEREAS, over eighty percent of the state's original prairie pothole wetlands has been drained and over sixty percent of the state's total original wetland base has been drained, filled or otherwise diminished; and

WHEREAS, the loss of wetlands in the state, both urban and rural, is continuing in excess of 5,000 acres per year; and

WHEREAS, the continued loss of wetlands harms the economic and environmental welfare of the state; and

WHEREAS, it is in the public interest to protect the functions and values of wetlands; and

WHEREAS, the state, through public agencies and units of government, must provide leadership in the stewardship of wetlands for all projects on the lands and waters entrusted to the state by the public;

NOW, THEREFORE, I hereby order that:

- A. All responsible departments and agencies of the State of Minnesota shall protect, enhance, and restore Minnesota's wetlands to the fullest extent of their authority;
- B. All responsible departments and agencies of the State of Minnesota shall operate to the fullest extent of their authority under the strict concept of "NO-NET LOSS" of wetlands of the state in regard to projects under their jurisdiction;
- C. All responsible departments and agencies of the State of Minnesota shall survey and categorize all wetlands on land being acquired by or donated to the state and on public lands threatened by development activities. Acquisition decisions and subsequent management plans shall mitigate ecological impacts as a result of development activities;

- D. All responsible departments and agencies of the State of Minnesota shall be guided by the following prioritized criteria in the implementation of this "NO-NET LOSS" executive order;
- 1) AVOID the impact altogether by not taking a certain action or actions;
 - 2) MINIMIZE the impact by limiting the degree or magnitude of the action by using appropriate technologies or by taking affirmative steps to avoid or reduce the impact;
 - 3) MITIGATE all functional values of the wetlands that have been diminished.

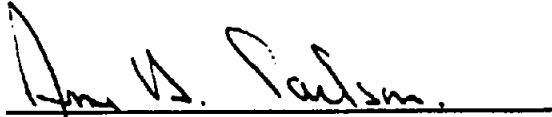
Mitigation must, in order of importance, be accomplished by: first, restoration of drained or diminished wetlands; second, enhancement of existing wetlands; and last, creation of new wetlands;

- E. The head of each department or agency shall, by appropriate means, ensure that all staff are advised of this order and shall by January 1 of each year report to the Commissioner of Natural Resources on efforts to comply with this order; and
- F. The Commissioner of Natural Resources shall, by March 1 of each year, report to the Governor and the chairs of the Senate and House environment committees a composite report on implementation of the order and the status of Minnesota's wetlands.

In addition, I hereby encourage all local units of government to adopt "NO-NET LOSS" wetlands resolutions guiding public actions within their jurisdiction.

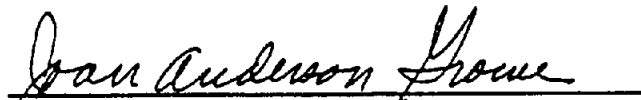
Pursuant to Minnesota Statutes 1990, Section 4.035, this Order shall be effective fifteen (15) days after publication in the State Register and filing with the Secretary of State and shall remain in effect until rescinded by proper authority or it expires in accordance with Minnesota Statutes 1990, Section 4.035, Subdivision 3.

IN TESTIMONY WHEREOF I have set my hand this 17th day of January, 1991.



ARNE H. CARLSON
Governor


Filed According to Law:



JOAN ANDERSON GROWE
Secretary of State

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED

JAN 17 1991



Secretary of State

APPENDIX 5B

(SUMMARY)
WETLAND CONSERVATION ACT OF 1991

Written By: David Weirens
Association of Minnesota
Counties

The 1991 Minnesota Legislature enacted into law the Wetland Conservation Act of 1991 (Act). This Act will place constraints on drainage projects conducted in accordance with Minnesota Statutes 103E.

The Act is composed of eleven Articles as follows: 1. Policy; 2. Wetland Prioritization and Planning; 3. Permanent Wetland Preserves; 4. Wetland Preservation Areas; 5. Wetland Establishment and Restorative Program; 6. Regulation of Wetland Activities; 7. Interim Wetland Program; 10. Miscellaneous Sections; and 11. Appropriations. The Board of Water and Soil Resources (BWSR) is the lead state agency for implementing the Act. At the local level; city councils or county boards are responsible outside of the seven-county metropolitan area, and city councils, town boards or watershed management organizations in the seven-county metropolitan area.

The Act has defined a wetland as follows:

"lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following three attributes:

- 1) have a predominance of hydric soils;
- 2) are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and
- 3) under normal circumstances support a prevalence of such vegetation."

Additionally the bill requires the establishment and use of a public value system. BWSR will be developing rules, in consultation with the Department of Natural Resources (DNR), to establish criteria to determine the public value of wetlands. The rules must consider the public benefit and use of the wetlands and include criteria for water quality, floodwater retention, public recreation, commercial uses and other public uses.

An individual initiating a drainage project will need to be aware of the regulations in the Act. The relevancy of these regulations depends on whether or not the project falls under one of the 24 exemptions included in the Act. Exemptions relevant to drainage are as follows:

1. activities in type 1 wetlands on agricultural land, except for bottomland hardwood type 1 wetlands;

2. activities in a type 2 wetland on agricultural land two acres in size or less;
3. activities necessary to repair and maintain existing public and private drainage systems as long as wetlands that have been in existence for more than 20 years are not drained;
4. ditch improvement projects that have received official approval by a governing body or government agency, within five years before July 1, 1993;
5. activities in a wetland on agricultural land enrolled in the Federal Food, Agricultural, Conservation, and Trade Act of 1990;
6. activities in a wetland created solely as a result of beaver dam construction, blockage of culverts through roadways maintained by a public or private entity, or action by public entities that were taken for a purpose other than creating the wetland;
7. activities in a wetland restored for conservation purposes under a contract or easement providing the landowner with the right to drain the restored wetland;
8. activities authorized under, and conducted in accordance with, an applicable general permit issued by the United States Army Corps of Engineers under Section 404 of the Federal Clean Water Act; and
9. activities in a wetland that has received a commenced drainage determination provided for by the Federal Food Security Act of 1985, that was made to the county agricultural stabilization and conservation service office prior to September 19, 1988, and a ruling and any subsequent appeals or reviews have determined that drainage of the wetland had been commenced prior to December 23, 1985.

In addition to the above discussed exemptions, the definition of a repair has been modified to allow for:

1. the restoration or enhancement of wetlands;
2. wetland replacement; and
3. the realignment of a drainage system to prevent drainage of a wetland.

This provision is intended to allow more flexibility in drainage projects to reduce or eliminate impacts to wetlands.

All drainage projects, that affect wetlands that do not fall under the exemptions, will be required to replace the wetland values lost as a result of the project. Wetland replacement plans will have to

be prepared, by the petitioner, to detail how the lost wetland values will be replaced. Local governments will be responsible for review and approval of wetland replacement plans. There is also a process to appeal the decision of a local government.

Wetland replacement must be guided by the following principles in descending order of priority:

1. avoid the direct or indirect impact;
2. minimize the impact by limiting the wetland activity;
3. rectify the impact by repairing, rehabilitating, or restoring the affected wetland environment;
4. reducing or eliminating the impact over time by preservation and maintenance operations during the life of the activity; and
5. compensating for the impact by replacing or providing substitute wetland resources.

Additional wetland replacement regulations are:

- replacement must be within the same watershed or county as the impacted wetland;
- if the wetland is in a cultivated field, the replacement must be accomplished through restoration only;
- replacement of wetlands on agricultural land must be in the ratio of one acre of replaced wetland for each acre of impacted wetland, the ratio on non-agricultural land must be 2 to 1; and
- provides compensation equal to 50 percent of the township fair market value of agricultural property for denial of a wetland replacement plan.

The rules to implement the public value system and wetland replacement are not scheduled to be adopted until July 1, 1993. Interim regulations have been established to be in effect from January 1, 1992 until July 1, 1993.

The interim regulations prohibit the state or a local unit of government from permitting the draining, burning or filling of a wetland, with some important exemptions. The exemptions previously discussed in this section apply in the interim, drainage system improvements that have received approval within five years of January 1, 1992, activities for which the local soil and water conservation district or other local permitting authority certifies

that any wetland impact will be replaced, and individuals enrolled or participating in the Federal Food, Agricultural, Conservation, and Trade Act of 1990.

Under these interim regulations, there is no permitting per se, just certification of wetland replacement with DNR enforcement authority.

In addition to the regulations, there are several programs to provide incentives to landowners to protect wetlands and to establish or restore wetlands.

1. **Permanent Wetland Preserves.** Allows BWSR to acquire permanent easements on land containing type 1, 2, or 3 wetlands, as defined in U.S. Fish and Wildlife Service Circular No. 39 (1971 edition). The property rights acquired must be consistent with RIM. The non-metropolitan county payment rate is 50 percent of the township fair market value of agricultural property. The metropolitan rate is 20 percent. The easement may include up to four acres of upland for each acre of wetland. The payment rate for upland is 90 percent (cropped land) and 60 percent (non-cropped land) of the township fair market value of agricultural property.
2. **Wetland Preservation Areas.** Wetland owners may apply to the county for designation of a wetland preservation area. A wetland preservation area can be designated only in a high priority wetland area identified in a comprehensive local water plan, and located within a high priority wetland region designated by BWSR. This designation provides for a property tax exemption for the wetland area. The State will reimburse all local taxing districts other than school districts for lost revenue.
3. **Wetland Establishment and Restoration Program.** As in Wetland Preservation Areas, this program only applies to property within high priority wetland regions, and high priority wetland areas. This is a program whereby counties, watershed management organizations and watershed districts will assist landowners in establishing and restoring wetlands. As the law reads, these local governments will have to assist the landowner in processing the application, holding public hearings, surveying, design engineering, the actual construction work, and an easement payment to the landowner.

The BWSR will be establishing a cost-share program to provide up to the lesser of \$20,000 or 50 percent of the costs of the program, including the costs of engineering, establishment of restoration, and compensation. The language in the Act implies that the local government will pay all costs beyond the cost share. BWSR is allowed to write rules to implement this program.

Several other initiatives in the Act may also affect drainage in Minnesota. BWSR and DNR, with the appropriate federal agencies, are required to develop a plan to simplify and coordinate state and federal regulatory procedures. There is a provision for special peatland protection measures within certain areas in the northern Minnesota counties of Beltrami, Cass, Koochiching, Lake, Lake of the Woods, Roseau and St. Louis. The DNR is allowed to adopt rules to regulate the discharge of dredged and fill material to obtain approval from the U.S. Environmental Protection Agency to administer the permit program under Section 404 of the Federal Clean Water Act. The Department of Revenue is required to develop guidelines by October 1, 1991 to value wetlands restored by the federal, state, or local government, or by a non profit organization, or preserved under the terms of a temporary or perpetual easement by the federal or state government. Assessors are to use these guidelines when valuing wetlands for property taxation purposes.

Finally, BWSR and the DNR are required to annually report, to the Legislature, on the status of implementation of state laws and programs relating to wetlands, the quality, quantity, types, and public value of wetlands, and changes in the above.

This has not been a complete discussion of the Wetland Conservation Act of 1990, only an overview of major provisions, as they apply to drainage. Extensive rulemaking will be required by BWSR and DNR to fully flesh out the numerous programs created by this comprehensive legislation. Updates of this manual will contain additional information as the Act is implemented.

APPENDIX 5C

**EXCERPTS FROM MINNESOTA STATUTE CHAPTER 103D
WATERSHED DISTRICTS ACTING AS DRAINAGE AUTHORITY
(LAWS OF 1990)**

103D.621 DRAINAGE IMPROVEMENTS.

Subdivision 1. **Findings.** The legislature finds that because of urban growth and development in the metropolitan area problems arise for the improvement and repair of drainage systems which were originally established for the benefit of land used for agriculture. The procedure for improvement and repair of drainage systems now in the metropolitan area should be simplified to more adequately and economically improve and repair drainage systems.

Subd. 2. **Definitions.** (a) The terms in this section have the meanings given them in this subdivision.

(b) "Drainage system" has the meaning given in section 103E.005, subdivision 12.

(c) "Watershed district" means any watershed district established under this chapter, wholly or partially in a metropolitan county.

(d) "Metropolitan county" means any one of the following counties: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington.

(e) "Metropolitan area" means the combined area of the metropolitan counties.

Subd. 3. **Drainage improvements.** With the concurrence of the governing bodies of the cities and the town boards of the towns where the drainage system is located, the managers of a watershed district where there is a drainage system may improve and repair any drainage system transferred to the watershed district under section 103D.625 by conforming to sections 429.031; 429.041, subdivisions 1 and 2; 429.051; 429.061; and 429.071.

Subd. 4. **Alternative power.** With the concurrence of the governing bodies of the cities and the town boards of the towns where the drainage system is located, the managers may improve and repair a drainage system under the power granted to them in this chapter.

Subd. 5. **Appeal.** A person aggrieved by an order for improvement or repair by the managers or by an assessment may appeal as provided in sections 103D.535 and 103D.541.

HIST: 1990 c 391 art 4 s 48

103D.625 DRAINAGE SYSTEMS WITHIN WATERSHED DISTRICT.

Subdivision 1. **Watershed district assumption of drainage system.** (a) The managers shall take over a joint county or county drainage system within the watershed district and the right to repair and maintain the drainage system if directed by a joint county drainage authority or a county board. The transfer may be initiated by:

- (1) the joint county drainage authority or county board;
- (2) a petition from a person interested in the drainage system; or
- (3) the managers.

(b) The transfer may not be made until the joint county drainage authority or county board has held a hearing on the transfer. Notice of the proposed transfer with the time and place of hearing must be given by two weeks' published notice in a legal newspaper of general circulation in the area where the transfer is to occur. All interested persons may appear and be heard.

(c) After the hearing, the joint county drainage authority or county board shall order the watershed district to take over the joint county or county drainage system, unless it appears that the takeover would not serve the purpose of this chapter and would not be for the public welfare or be in the public interest.

Subd. 2. Drainage systems are works of watershed district. A joint county or county drainage system that is taken over in whole or in part is part of the works of the watershed district to the extent taken over.

Subd. 3. Procedure for repair or improvement. After the transfer is ordered, all proceedings for repair and maintenance must conform to chapter 103E.

Subd. 4. Construction or improvement. Construction of new drainage systems or improvements of existing drainage systems in the watershed district must be initiated by filing a petition with the managers. The proceedings for the construction or improvement of drainage systems in the watershed district must conform to chapter 103E.

HIST: 1990 c 391 art 4 s 49

APPENDIX 5D

MINNESOTA STATUTE - CHAPTER 103E

"THE DRAINAGE CODE"

(LAWS OF 1990)

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103E.021 Ditches must be planted with permanent grass.
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103E.035 Defective notice.
103E.041 Personal service in lieu of other methods of notice.
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103E.051 Defective proceedings.
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- 103E.501 Contract and bond.
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103E.005 DEFINITIONS.

Subdivision 1. **Applicability.** The definitions in this section apply to this chapter.

Subd. 2. **Affected.** "Affected" means benefited or damaged by a drainage system or project.

Subd. 3. **Auditor.** "Auditor" means the auditor of the county where the petition for a drainage project was properly filed.

Subd. 4. **Board.** "Board" means the board of

commissioners of the county where the drainage system or project is located.

Subd. 5. **Commissioner.** "Commissioner" means the commissioner of natural resources.

Subd. 6. **Director.** "Director" means the director of the division of waters in the department of natural resources.

Subd. 7. **Dismissal of proceedings.** "Dismissal of proceedings" means that the petition and proceedings related to the petition are dismissed.

Subd. 8. **Ditch.** "Ditch" means an open channel to conduct the flow of water.

Subd. 9. **Drainage authority.** "Drainage authority" means the board or joint county drainage authority having jurisdiction over a drainage system or project.

Subd. 10. **Drainage lien.** "Drainage lien" means a lien recorded on property for the costs of drainage proceedings and construction and interest on the lien, as provided under this chapter.

Subd. 11. **Drainage project.** "Drainage project" means a new drainage system, an improvement of a drainage system, an improvement of an outlet, or a lateral.

Subd. 12. **Drainage system.** "Drainage system" means a system of ditch or tile, or both, to drain property, including laterals, improvements, and improvements of outlets, established and constructed by a drainage authority. "Drainage system" includes the improvement of a natural waterway used in the construction of a drainage system and any part of a flood control plan proposed by the United States or its agencies in the drainage system.

Subd. 13. **Engineer.** "Engineer" means the engineer for a drainage project appointed by the drainage authority under section 103E.241, subdivision 1.

Subd. 14. **Established.** "Established" means the drainage authority has made the order to construct the drainage project.

Subd. 15. **Lateral.** "Lateral" means any drainage construction by branch or extension, or a system of branches and extensions, or a drain that connects or provides an outlet to property with an established drainage system.

Subd. 16. **Municipality.** "Municipality" means a statutory or home rule charter city or a town having urban powers under section 368.01, subdivision 1 or 1a.

Subd. 17. **Notice by mail.** "Notice by mail" means a notice mailed and addressed to each person entitled to receive the notice, if the address is known to the auditor or can be determined by the county treasurer of the county where the affected property is located.

Subd. 18. **Owner.** "Owner" means an owner of property or a buyer of property under a contract for deed.

Subd. 19. **Passes over.** "Passes over" means in

reference to property that has a drainage project or system, the 40-acre tracts or government lots or property that is bordered by, touched by, or underneath the path of the proposed drainage project.

Subd. 20. **Person.** "Person" means an individual, firm, partnership, association, or private corporation.

Subd. 21. **Political subdivisions.** "Political subdivisions" means statutory and home rule charter cities, counties, towns, school districts, and other political subdivisions.

Subd. 22. **Proceeding.** "Proceeding" means a procedure under this chapter for or related to drainage that begins with filing a petition and ends by dismissal or establishment of a drainage project.

Subd. 23. **Property.** "Property" means real property.

Subd. 24. **Publication.** "Publication" means a notice published at least once a week for three successive weeks in a legal newspaper in general circulation in each county affected by the notice.

Subd. 25. **Public health.** "Public health" includes an act or thing that tends to improve the general sanitary condition of the community by drainage, relieving low wetland or stagnant and unhealthful conditions, or preventing the overflow of any property that produces or tends to produce unhealthful conditions.

Subd. 26. **Public waters.** "Public waters" has the meaning given in section 103G.005, subdivision 15.

Subd. 27. **Public welfare or public benefit.** "Public welfare" or "public benefit" includes an act or thing that tends to improve or benefit the general public, either as a whole or as to any particular community or part, including works contemplated by this chapter, that drain or protect roads from overflow, protect property from overflow, or reclaim and render property suitable for cultivation that is normally wet and needing drainage or subject to overflow.

Subd. 28. **Road.** "Road" means any road used by the public for transportation purposes.

HIST: 1990 c 391 art 5 s 1

GENERAL PROVISIONS

103E.011 DRAINAGE AUTHORITY POWERS.

Subdivision 1. **Generally.** The drainage authority may make orders to:

- (1) construct and maintain drainage systems;
- (2) deepen, widen, straighten, or change the channel or bed of a natural waterway that is part of the drainage system or is located at the outlet of a drainage system;
- (3) extend a drainage system into or through a municipality for a suitable outlet; and

(4) construct necessary dikes, dams, and control structures and power appliances, pumps, and pumping machinery as provided by law.

Subd. 2. **Drainage of waterbasins and watercourses.** A drainage authority may not drain a water body or begin work or activity regulated by the public waters work permit requirement under section 103G.245 in a watercourse until the commissioner determines that the water body or watercourse is not public waters. If a water body or watercourse is determined to be public waters, the drainage proceedings are subject to section 103G.215 relating to replacing public waters and the water bank program.

Subd. 3. **Permission of commissioner for work in public waters; application.** (a) The drainage authority must receive permission from the commissioner to:

- (1) remove, construct, or alter a dam affecting public waters;
 - (2) establish, raise, or lower the level of public waters;
- or

(3) drain any portion of a public water.

(b) The petitioners for a proposed drainage project or the drainage authority may apply to the commissioner for permission to do work in public waters or for the determination of public waters status of a water body or watercourse.

Subd. 4. **Flood control.** The drainage authority may construct necessary dams, structures, and improvements and maintain them to impound and release flood water to prevent damage. The dams, structures, and improvements may be constructed with or without a drainage project. For a water body or watercourse that is not public waters the drainage authority may:

- (1) lower or establish the level of water in the water body or watercourse to control flood waters;
- (2) build structures and improvements to maintain a water body or watercourse for flood control or other public purposes; and
- (3) construct dikes or dams in a water body to maintain water at the level designated by the drainage authority and to drain part of the water body.

HIST: 1990 c 391 art 5 s 2

103E.015 CONSIDERATIONS BEFORE DRAINAGE WORK IS DONE.

Subdivision 1. **Environmental and land use criteria.** Before establishing a drainage project the drainage authority must consider:

- (1) private and public benefits and costs of the proposed drainage project;
- (2) the present and anticipated agricultural land acreage availability and use in the drainage project or system;
- (3) the present and anticipated land use within the

drainage project or system;

(4) flooding characteristics of property in the drainage project or system and downstream for 5-, 10-, 25-, and 50-year flood events;

(5) the waters to be drained and alternative measures to conserve, allocate, and use the waters including storage and retention of drainage waters;

(6) the effect on water quality of constructing the proposed drainage project;

(7) fish and wildlife resources affected by the proposed drainage project;

(8) shallow groundwater availability, distribution, and use in the drainage project or system; and

(9) the overall environmental impact of all the above criteria.

Subd. 2. **Determining public utility, benefit, or welfare.** In any proceeding to establish a drainage project, or in the construction of or other work affecting a public drainage system under any law, the drainage authority or other authority having jurisdiction over the proceeding must give proper consideration to conservation of soil, water, forests, wild animals, and related natural resources, and to other public interests affected, together with other material matters as provided by law in determining whether the project will be of public utility, benefit, or welfare.

HIST: 1990 c 391 art 5 s 3

103E.021 DITCHES MUST BE PLANTED WITH PERMANENT GRASS.

Subdivision 1. **Spoil banks must be spread and grass planted.** In any proceeding to establish, construct, improve, or do any work affecting a public drainage system under any law that appoints viewers to assess benefits and damages, the authority having jurisdiction over the proceeding shall order spoil banks to be spread consistent with the plan and function of the drainage system. The authority shall order that permanent grass, other than a noxious weed, be planted on the banks and on a strip 16-1/2 feet in width or to the crown of the leveled spoil bank, whichever is the greater, on each side of the top edge of the channel of the ditch. The acreage and additional property required for the planting must be acquired by the authority having jurisdiction.

Subd. 2. **Reseeding and harvesting grass.** The authority having jurisdiction over the repair and maintenance of the drainage system shall supervise all necessary reseeding. The permanent grass must be maintained in the same manner as other drainage system repairs. Harvest of the grass from the grass strip in a manner not harmful to the grass or the drainage system is the privilege of the fee owner or assigns. The county drainage inspector shall establish rules for the fee owner and assigns to harvest the grass.

Subd. 3. Agricultural practices prohibited.

Agricultural practices, other than those required for the maintenance of a permanent growth of grass, are not permitted on any portion of the property acquired for planting.

Subd. 4. Compliance work by drainage authority. If a property owner does not bring an area into compliance with this section as provided in the compliance notice, the inspection committee or drainage inspector must notify the drainage authority. If a property owner does not bring an area into compliance after being notified under section 103E.705, subdivision 2, the drainage authority must issue an order to have the work performed to bring the property into compliance. After the work is completed, the drainage authority must send a statement of the expenses incurred to bring the property into compliance to the auditor of the county where the property is located and to the property owner.

Subd. 5. Collection of compliance expenses. (a) The amount of the expenses to bring an area into compliance with this section is a lien in favor of the drainage authority against the property where the expenses were incurred. The auditor must certify the expenses and enter the amount in the same manner as other drainage liens on the tax list for the following year. The amount must be collected in the same manner as real estate taxes for the property. The provisions of law relating to the collection of real estate taxes shall be used to enforce payment of amounts due under this section. The auditor must include a notice of collection of compliance expenses with the tax statement.

(b) The amounts collected under this subdivision must be deposited in the drainage system account.

HIST: 1990 c 391 art 5 s 4

103E.025 PROCEDURE FOR DRAINAGE PROJECT THAT AFFECTS STATE LAND OR WATER AREA USED FOR CONSERVATION.

Subdivision 1. Areas subject to this section. If a land or water area owned by the state and held or used to protect or propagate wild animals, provide hunting or fishing for the public, or for any other purpose relating to the conservation, development, or use of soil, water, forests, wild animals, or related natural resources will be affected by any public project or proceeding for drainage under any law, all procedures relating to the project or proceeding are subject to this section, if applicable.

Subd. 2. Conditions to take or damage state land and water areas. (a) Any part of the state land or water area may be taken or damaged for a public project after payment of just compensation as provided by law and under the provisions of this subdivision.

(b) The authority having jurisdiction of the drainage project or proceeding shall first find and determine that there

is public necessity for the taking or damage that is greater than the public interest in the purposes for which the affected land and water areas are held or used by the state.

(c) In determining the compensation to be paid for the taking or damage, the authority must give proper consideration to the value of the land and water area for the purposes it is held or used by the state and other material elements of value.

(d) Public waters may not be taken, damaged, or impaired except as otherwise expressly authorized by law, and a provision of any other law for the protection or conservation of public waters may not be abridged or superseded by this subdivision.

Subd. 3. **Considerations in determining benefits.** In determining benefits to the state land or water area in any proceeding to levy assessments or offset benefits against damages, proper consideration must be given to the value of the area for the purpose it is held or used by the state, with other material elements of value.

Subd. 4. **Amounts paid to state.** Any amounts paid to the state for taking or damaging the state land or water area in a proceeding must be credited to the proper account for acquisition, development, or maintenance of the areas, and the amount is appropriated to the commissioner for those purposes to remain available until expended.

Subd. 5. **Money to pay assessments.** Assessments for benefits made against the state land or water area in a proceeding must be paid out of money appropriated and available to pay assessments as provided by law.

HIST: 1990 c 391 art 5 s 5

103E.031 CONNECTION WITH DRAINS IN ADJOINING STATES.

Subdivision 1. **Procedure.** If it is necessary to construct a drainage project at or near the boundary between this state and another state or country and the work cannot be done in a proper manner without extending the drainage project into the adjoining state or country, the drainage authority may join with the board or tribunal of the adjoining state or country having jurisdiction to plan and construct public drainage systems. The drainage authority in this state may enter into contracts or arrangements with the board or tribunal of the adjoining state or country to construct the drainage project. The proceeding and construction related to property in this state and, as applicable, the drainage authority in relation to the joint drainage work, are governed by this chapter.

Subd. 2. **Payment of costs.** The adjoining county or district in another state or country must pay its proper share of the necessary costs of the construction of any drainage work including damages. If the benefits to property in the adjoining state or country are not sufficient to pay all the costs of construction of the drainage project in that state or country,

including damages, the drainage authority may authorize or direct the affected counties to contribute sufficient funds to complete the construction of the drainage project in the adjoining state or country, if the construction will be of sufficient benefit to the affected property in this state to warrant the contribution.

HIST: 1990 c 391 art 5 s 6

103E.035 DEFECTIVE NOTICE.

If notice is required under this chapter and proper notice has been given to some parties but the notice is defective or not given to other parties, the drainage authority has jurisdiction of all parties that received proper notice. The proceedings may be continued by order of the drainage authority for the time necessary to publish, post, or mail a new notice. The new notice needs only be given to those not properly notified by the first notice.

HIST: 1990 c 391 art 5 s 7

103E.041 PERSONAL SERVICE IN LIEU OF OTHER METHODS OF NOTICE.

If notice is to be given under this chapter, personal service at least ten days before the date of hearing may be given in lieu of the manner provided. The notice must be served in the manner provided for the service of summons in a civil action in district court.

HIST: 1990 c 391 art 5 s 8

103E.043 INFORMAL MEETINGS.

A drainage authority may hold informal meetings in addition to the meetings and hearings required in this chapter to inform persons affected by the drainage system about the drainage proceedings and provide a forum for informal discussions.

HIST: 1990 c 391 art 5 s 9

103E.045 FAILURE OF DRAINAGE AUTHORITY TO ATTEND HEARINGS.

If an order has been made and notice for a hearing given under this chapter, and the drainage authority does not appear at the time and place specified for any reason, the auditor shall continue the hearing to a date set by the auditor. The auditor shall notify the drainage authority of the continuance and the date of hearing. The jurisdiction is continued until the date set by the auditor.

HIST: 1990 c 391 art 5 s 10

103E.051 DEFECTIVE PROCEEDINGS.

(a) A party may not take advantage of an error in a drainage proceeding or an informality, error, or defect appearing in the record of the proceeding or construction,

unless the party complaining is directly affected. The modification of the benefits or damages to any property, or the enjoining of collection of any assessment, does not affect any other property or the collection of any assessment on other property.

(b) If a drainage project has been established and a contract awarded in good faith, without collusion, and at a reasonable price:

(1) a defect or lack of notice in awarding, making, or executing the contract does not affect the enforcement of an assessment; and

(2) if the contract is performed in good faith in whole or in part, a defect does not invalidate the contract.

HIST: 1990 c 391 art 5 s 11

103E.055 REIMBURSEMENT OF COST OF FORMER SURVEYS WHEN USED LATER.

If after a proceeding has begun a survey has been made and a proceeding to establish a drainage project has been dismissed or the drainage project has not been established, and if all or a part of the former survey is used by the engineer for a drainage proceeding in the same area, the amount saved in the subsequent proceedings must be paid to the proper parties according to this section. If the parties who paid the expense of the former survey make a petition, the drainage authority shall:

(1) determine the amount of benefit that was derived by the subsequent proceedings from the former survey;

(2) order the amount of the benefit to be paid to the proper parties; and

(3) charge the amount paid as a cost of the subsequent drainage proceeding.

HIST: 1990 c 391 art 5 s 12

103E.061 RIGHT OF ENTRY.

In proceedings under this chapter, the engineer, the engineer's assistants, the viewers, and the viewers' assistants may enter any property to make a survey, locate a drain, examine the property, or estimate the benefits and damages.

HIST: 1990 c 391 art 5 s 13

103E.065 DRAINAGE INSPECTORS.

In counties where constructed drainage systems have an aggregate cost of more than \$50,000, the board shall appoint a competent person as county drainage inspector. The inspector may be the county highway engineer. The inspector shall examine the drainage systems designated by the board. The board shall specify the appointment period and compensation.

HIST: 1990 c 391 art 5 s 14

103E.071 COUNTY ATTORNEY.

The county attorney shall represent the county in all drainage proceedings and related matters without special compensation. A county attorney, the county attorney's assistant, or any attorney associated with the county attorney in business, may not otherwise appear in any drainage proceeding for any interested person.

HIST: 1990 c 391 art 5 s 15

103E.075 OBSTRUCTION OF DRAINAGE SYSTEM.

Subdivision 1. **Notification to responsible party.** If the board determines that a drainage system has been obstructed, including by the installation of bridges or culverts of insufficient hydraulic capacity, the board shall notify the person or public authority responsible for the obstruction as soon as possible and direct the responsible party to remove the obstruction or show the board why the obstruction should not be removed. The board must set a time and location in the notice for the responsible person to appear before the board.

Subd. 2. **Obstruction on private property.** If the obstruction is on private property, the owner is responsible for the obstruction unless the owner proves otherwise. The owner must be notified by certified mail at least ten days before the hearing.

Subd. 3. **Obstruction hearing.** The board shall hear all interested parties and if the board determines that the drainage system has been obstructed by a person or public authority, the board shall order the obstruction removed by the responsible party within a reasonable time set in the order. If the obstruction is not removed by the prescribed time, the board shall have the obstruction removed and the auditor shall make a statement of the removal cost. The statement must be filed in the county recorder's office as a lien on the property where the obstruction is located or against the responsible party. The lien must be enforced and collected as liens for drainage repairs under this chapter, except that a lien may not be filed against private property if the board determines that the owner of the property is not responsible for the obstruction. The lien may be enforced against the responsible party by civil action.

HIST: 1990 c 391 art 5 s 16

103E.081 CRIMES RELATED TO DRAINAGE SYSTEMS; PENALTIES.

Subdivision 1. **Unauthorized drain outletting into drainage system.** A person may not cause or construct a drain that outlets into a lawfully constructed drainage system except as provided in this chapter.

Subd. 2. **Obstruction or damage of a drainage system.** A person may not willfully obstruct or damage a drainage project or system.

Subd. 3. **Altering engineer's marking of stakes.** A person may not willfully change the location or alter markings of stakes set by the engineer in a drainage project or system.

Subd. 4. **Penalty.** Violation of this section is a misdemeanor.

HIST: 1990 c 391 art 5 s 17

103E.085 ENFORCEMENT.

Subdivision 1. **Warrants and arrests.** An enforcement officer, as defined in section 97A.015, subdivision 18, may execute and serve warrants, and arrest persons detected in actual violation of sections 103E.005 to 103E.811 as provided in sections 97A.205 and 97A.211.

Subd. 2. **Prosecution.** The county attorney shall prosecute all criminal actions arising under this chapter.

HIST: 1990 c 391 art 5 s 18

103E.091 APPEALS.

Subdivision 1. **Grounds for appeal.** A party may appeal to the district court from a recorded order of a drainage authority made in a drainage proceeding that determines:

- (1) the amount of benefits;
- (2) the amount of damages;
- (3) fees or expenses allowed; or

(4) whether the environmental and land use requirements and criteria of section 103E.015, subdivision 1, are met.

Subd. 2. **Procedure for appeals related to benefits and damages.** (a) A person who appeals the amount of benefits or damages may include benefits and damages affecting property not owned by the appellant. Notice of the appeal must be served to the auditor and to the owner or occupant of property included in the appeal or to the attorney representing the property owner in the proceedings.

(b) The appellant must file a notice of appeal with the auditor within 30 days after the order to be appealed is filed. The notice must state the particular benefits or damages appealed and the basis for the appeal. Within 30 days after the notice is filed, the auditor must file the original notice with the court administrator of the district court.

Subd. 3. **Procedure for appeal related to allowance of fees or expenses.** An appeal related to the allowance of fees or expenses may be to the district court of any county where the affected property is located. The appeal must be made within 30 days after the order allowing or disallowing the claim and is governed as applicable by the provisions of subdivision 4.

Subd. 4. **Appeal trial.** (a) The issues in the appeal are entitled to a trial by a jury in the district court of the county where the drainage proceeding was pending.

(b) At the request of the appellant, the trial must be held at the district court of the county where the affected property

is located. The court administrator of the district court where the appeal is first filed shall make, certify, and file with the court administrator of the district court of the county where the trial is transferred, a transcript of the papers and documents on file in the court administrator's office in the proceedings related to the matters of the appeal. After the final determination of the appeal, the court administrator of the district court that tried the appeal shall certify and return the verdict to the district court of the county where the drainage proceedings were filed.

(c) The appeal shall take precedence over all other civil court matters. If there is more than one appeal to be tried in one county, the court may, on its own motion or the motion of an interested party, consolidate two or more appeals and try them together, but the rights of the appellants must be determined separately. If the appellant does not prevail, the cost of the trial must be paid by the appellant.

(d) The court administrator of the district court where the appeal is filed shall file a certified copy of the final determination of the appeal with the auditor of the affected counties.

Subd. 5. **Effect of determination.** For all appeals, the amount awarded by the jury as a determination of the issue appealed shall replace the amount that was appealed.

HIST: 1990 c 391 art 5 s 19

103E.095 APPEAL FROM ORDERS DISMISSING OR ESTABLISHING DRAINAGE SYSTEMS.

Subdivision 1. **Notice of appeal.** A party may appeal an order made by the board that dismisses drainage proceedings or establishes or refuses to establish a drainage project to the district court of the county where the drainage proceedings are pending. The appellant must serve notice of the appeal to the auditor within 30 days after the order is filed. After notice of the appeal is served, the appeal may be brought to trial by the appellant or the drainage authority after notifying the other party at least ten days before the trial date.

Subd. 2. **Trial.** The appeal must be tried by the court without a jury. The court shall examine the entire drainage proceeding and related matters and receive evidence to determine whether the findings made by the board can be sustained. At the trial the findings made by the board are prima facie evidence of the matters stated in the findings, and the board's order is prima facie reasonable. If the court finds that the order appealed is lawful and reasonable, it shall be affirmed. If the court finds that the order appealed is arbitrary, unlawful, or not supported by the evidence, it shall make an order, justified by the court record, to take the place of the appealed order, or remand the order to the board for further proceedings. After the appeal has been determined by

the court, the board shall proceed in conformity with the court order.

Subd. 3. **Determination of benefits and damages after court order.** If the order establishing a drainage project is appealed, the trial of appeals related to benefits or damages in the drainage proceeding must be stayed until the establishment appeal is determined. If the order establishing the drainage project is affirmed, appeals related to benefits and damages must then be tried.

Subd. 4. **Procedure if appeal order establishes drainage project.** If an order refusing to establish a drainage project is appealed, and the court, by order, establishes the drainage project, the auditor shall give notice by publication of the filed order. The notice is sufficient if it refers to the drainage project or system by number or other descriptive designation, states the meaning of the order, and states the date the court order was filed. A person may appeal the establishment order to the district court as provided in this section.

Subd. 5. **Appeal of appellate order.** A party aggrieved by a final order or judgment rendered on appeal to the district court may appeal as in other civil cases. The appeal must be made and perfected within 30 days after the filing of the order or entry of judgment.

HIST: 1990 c 391 art 5 s 20

103E.097 PAYMENT OF ATTORNEY FEES ON APPEAL.

If the commissioner of natural resources is a party making an appeal under section 103E.091 or 103E.095 and the commissioner does not prevail on the issues appealed, the court may award attorney fees to the party prevailing on the appeal. If more than one issue is appealed and the commissioner prevails on some issues and does not prevail on others, the court shall determine the amount of the attorney fee to be awarded.

HIST: 1990 c 391 art 5 s 21

103E.101 DRAINAGE PROCEEDING AND CONSTRUCTION RECORDS.

Subdivision 1. **Documents are public records.** All maps, plats, charts, drawings, plans, specifications, and other documents that have been filed, received in evidence, or used in connection with a drainage proceeding or construction are subject to the provisions on public records in section 15.17.

Subd. 2. **Record requirements.** All maps, plats, profiles, plans, and specifications prepared and used in relation to a proceeding must:

- (1) be uniform;
- (2) have each sheet bound and marked to identify the proceeding by the drainage project and system number;
- (3) show the name of the person preparing the sheet;
- (4) show the date the sheet was prepared; and

(5) conform to rules and standards prescribed by the director of the division of waters.

Subd. 3. **Index of proceedings and records.** The auditor shall keep all orders, exhibits, maps, charts, profiles, plats, plans, specifications, and records of the proceedings. These records may not be removed except when the board makes a written order to remove them. The auditor shall keep an accurate index of the proceedings and related documents in a bound book.

Subd. 4. **Engineer's documents.** All original plats, profiles, records, and field books made by the engineer during the proceedings or the construction of a drainage project are public records and the property of the drainage authority. These public records must be filed with the auditor under the direction of the drainage authority when construction is completed or when the engineer stops acting for the drainage project, whichever is earlier.

Subd. 5. **Filing and storage facilities.** County boards shall provide the auditor with necessary filing and storage facilities to protect the files and records of all proceedings. The county boards may provide for the copying and filing of the documents and records of proceedings by photographic devices as provided for public records under section 15.17. In the event of loss of the originals, the photographic copies are originals after authentication by the auditor.

Subd. 6. **Records are prima facie evidence.** The record of proceedings under this chapter and of orders made by the drainage authority or the district court in the proceedings, or a certified copy of a record or order, is prima facie evidence of the facts stated in the record or order and of the regularity of all proceedings prior to the making of the order.
HIST: 1990 c 391 art 5 s 22

103E.105 ADVICE ABOUT DRAINAGE QUESTIONS.

The director shall provide advice to a drainage authority or engineer, upon request, about engineering questions or problems in connection with a drainage project or drainage system.

HIST: 1990 c 391 art 5 s 23

103E.111 FIELD SURVEYS AND INVESTIGATIONS BY DIRECTOR.

Subdivision 1. **Authorization.** If a field survey or investigation of a drainage project or drainage system is determined to be necessary by the director or is requested in writing by the drainage authority, the director may conduct the survey or investigation.

Subd. 2. **Costs if requested by drainage authority.** If the field survey or investigation is made at the request of a drainage authority, the cost must be reported to the drainage

authority and paid by the drainage authority as a drainage project or drainage system expense.

HIST: 1990 c 391 art 5 s 24

103E.115 HYDROLOGICAL AND DRAINAGE INFORMATION.

(a) The director may prepare and publish: (1) runoff data; (2) information about the capacity of drain tile and ditches; (3) specifications for drain tile, ditches, and ditch construction; and (4) standard procedural forms for public ditch proceedings.

(b) The director may furnish the information to engineers and drainage authorities for their advice and information.

HIST: 1990 c 391 art 5 s 25

103E.121 DRAIN TILE MANUFACTURING STUDIES.

Subdivision 1. **Drain tile investigations.** The director may:

(1) investigate the methods used in the manufacture of drain tile;

(2) determine the causes of drain tile failure; and

(3) conduct research and experimentation to improve the quality of drain tile.

Subd. 2. **Manufacturing investigations and tests.** The director may make inspections and tests of manufacturing processes and materials used and the resultant product of a manufacturing plant in the state where drain tile is made and sold to drainage authorities or the general public. The director, or an authorized agent of the director, must have free access to manufacturing plants of drain tile sold in this state for inspections and tests.

Subd. 3. **Distribution of information.** The results of inspections and tests must be made public for drainage authorities, engineers, tile manufacturers, and others interested in the use of drain tile.

HIST: 1990 c 391 art 5 s 26

PETITIONS FOR DRAINAGE PROJECTS

103E.202 PETITIONS.

Subdivision 1. **Applicability.** This section applies to a petition for a drainage project and a petition for repair.

Subd. 2. **Signatures on petition.** (a) A petition must be signed by a requisite number of owners of 40-acre tracts or government lots and property that the drainage project described in the petition passes over, or by the property owners of the required percentage of the property area determined by the total and percentage of area of 40-acre tracts or government lots that the proposed drainage project passes over, excluding areas in and holders of easements for utilities and roads. A petition may be signed by the commissioner of transportation or by a political subdivision if the property is in their jurisdiction

and is passed over by the proposed drainage project.

(b) Each separate parcel of property counts as one signature but the petition must be signed by all owners of the parcel to count as a signature. The signature of each entity regardless of the number of parcels of property owned counts as one signature on the petition.

(c) Paragraph (a) does not apply to a petition for an improvement of an outlet.

Subd. 3. **Withdrawal of a petitioner.** After a petition has been filed, a petitioner may not withdraw from the petition except with the written consent of all other petitioners on the filed petition.

Subd. 4. **Filing petition and bond.** A petition for a drainage project and a bond must be filed with the auditor. If a drainage system is within two or more counties, the petition must be filed with the auditor of the county with the greatest area of property that the proposed drainage project passes over.

Subd. 5. **Petitioners' bond.** One or more petitioners must file a bond with the petition for at least \$10,000 that is payable to the county where the petition is filed, or for a petition for a proposed joint county drainage system or a petition for a drainage project affecting a joint county drainage system, the bond must be payable to all of the counties named in the petition. The bond must have adequate surety and be approved by the county attorney where the petition is filed. The bond must be conditioned to pay the costs incurred if the proceedings are dismissed or a contract is not awarded to construct the drainage system proposed in the petition.

Subd. 6. **Expenses not to exceed bond.** The costs incurred before the proposed drainage project is established may not exceed the amount of the petitioners' bond. A claim for expenses greater than the amount of the bond may not be paid unless an additional bond is filed. If the drainage authority determines that the cost of the proceeding will be greater than the petitioners' bond before the proposed drainage project is established, the drainage authority must require an additional bond to cover all costs to be filed within a prescribed time. The proceeding must be stopped until the additional bond prescribed by the drainage authority is filed. If the additional bond is not filed within the time prescribed, the proceeding must be dismissed.

HIST: 1990 c 391 art 5 s 27

103E.212 NEW DRAINAGE SYSTEM PROJECTS.

Subdivision 1. **Procedure.** To establish a new drainage system under this chapter, the petitioners and drainage authority must proceed according to this section and the provisions applicable to establishment of drainage projects.

Subd. 2. **Signatures on petition.** The petition for a new drainage system must be signed by a majority of the owners

of the property that the proposed drainage system described in the petition passes over, or by the property owners of at least 60 percent of the area that the proposed new drainage system passes over.

Subd. 3. **Petition requirements.** The petition must:

- (1) describe the 40-acre tracts or government lots and property where the proposed new drainage system passes over, including names and addresses of the property owners from records in the county assessor's office;
- (2) describe the starting point, the general course, and the terminus of the proposed drainage system;
- (3) state why the proposed drainage system is necessary;
- (4) state that the proposed drainage system will benefit and be useful to the public and will promote public health; and
- (5) state that the petitioners will pay all costs of the proceedings if the proceedings are dismissed or the contract for the construction of the proposed drainage system is not awarded.

HIST: 1990 c 391 art 5 s 28

103E.215 IMPROVEMENT OF DRAINAGE SYSTEM.

Subdivision 1. **Procedure.** The procedure in this section must be used to improve an established and constructed drainage system.

Subd. 2. **Definition.** In this section "improvement" means the tiling, enlarging, extending, straightening, or deepening of an established and constructed drainage system including construction of ditches to reline or replace tile and construction of tile to replace a ditch.

Subd. 3. **Limit of extension.** An improvement may only extend a drainage system downstream to a more adequate outlet and the extension may not exceed one mile.

Subd. 4. **Petition.** (a) A petition must be signed by:

- (1) at least 26 percent of the owners of the property affected by the proposed improvement;
- (2) at least 26 percent of the owners of property that the proposed improvement passes over;
- (3) the owners of at least 26 percent of the property area affected by the proposed improvement; or
- (4) the owners of at least 26 percent of the property area that the proposed improvement passes over.

(b) The petition must be filed with the auditor or, for a drainage system in more than one county, with the auditor of the county having the largest area of property the improvement would be located on.

(c) The petition must:

- (1) designate the drainage system proposed to be improved by number or another description that identifies the drainage system;
- (2) state that the drainage system has insufficient capacity or needs enlarging or extending to furnish sufficient

capacity or a better outlet;

(3) describe the starting point, general course, and terminus of any extension;

(4) describe the improvement, including the names and addresses of owners of the 40-acre tracts or government lots and property that the improvement passes over;

(5) state that the proposed improvement will be of public utility and promote the public health; and

(6) contain an agreement by the petitioners that they will pay all costs and expenses that may be incurred if the improvement proceedings are dismissed.

Subd. 5. Subsequent proceedings. When a petition and the bond required by section 103E.202 are filed, the auditor shall present the petition to the board at its next meeting or, for a joint county drainage system, to the joint county drainage authority within ten days after the petition is filed. The drainage authority shall appoint an engineer to examine the drainage system and make an improvement report. The improvement proceedings must be conducted under this chapter as provided for the original proceedings for the establishment of a drainage project. The benefits and damages determined must be as a result of the proposed improvement. Assessments for the repair of the improvement must be based on the benefits determined for the improvement.

Subd. 6. Petition for separable part of the drainage system needing repair. (a) If the existing drainage system needs repair and the petition for the improvement is for a separable part only of the existing drainage system, the engineer may include in the detailed survey report a statement showing the proportionate estimated cost of the proposed improvement required to repair the separable part of the existing system and the estimated proportionate cost of the added work required for the improvement. The notice of hearing on the detailed survey report must be given by publication and mailing to all persons owning property affected by the existing drainage system. The hearing may be held at the same time and location as the establishment hearing for the improvement.

(b) At the hearing, if the drainage authority determines that only a separable portion of the existing drainage system will be improved and that the portion needs repair, the drainage authority shall determine and assess, by order, the proportionate cost of the improvement that would be required to repair the separable portion of the drainage system to be improved. The order must direct that:

(1) the repair portion is allocated as repairs and assessed against all property benefited by the entire drainage system, as provided by section 103E.731; and

(2) the balance of the cost of the improvement is assessed in addition to the repair assessment against the property benefited by the improvement.

103E.221 IMPROVEMENT OF OUTLETS.

Subdivision 1. Conditions for improvement of outlets.

If a public or private proposed drainage project or existing drainage system has waters draining into an existing drainage system, watercourse, or body of water, and the construction or proposed construction of the drainage project causes an overflow of the existing drainage system, watercourse, or body of water on adjoining property, an affected county or the owners of the overflowed property may start outlet improvement proceedings under this section.

Subd. 2. Petition. (a) A petition must be signed by the board of an affected county, by at least 26 percent of the owners of adjoining overflowed property, or by the owners of at least 26 percent of the area of the overflowed property. The petition must:

(1) describe the property that has been or is likely to be overflowed including the names and addresses of the property owners from records in the county assessor's office;

(2) state in general terms by number or otherwise the drainage systems that have caused or are likely to cause the overflow;

(3) describe the location of the overflowed drainage system, watercourse, or body of water and the outlet;

(4) show the necessity of the improvement by enlarging the system or controlling the waters by off-take ditches, additional outlets, or otherwise;

(5) show that the outlet improvement will protect the adjoining property from overflow;

(6) state that the improvement will be of public benefit and utility and improve the public health; and

(7) state that the petitioners will pay all costs incurred if the proceedings are dismissed or a contract for construction of the outlet improvement is not awarded.

(b) The petitioners, except for a petition made by the board, shall give the required bond.

Subd. 3. Filing of petition. The petition shall be filed with the county auditor. If the board makes the petition, it must be addressed to the drainage authority and filed with the auditor. If part of the improvement or the overflowed property is located in more than one county, the petition must be filed with the auditor of the county with the greatest affected area.

Subd. 4. Jurisdiction of drainage authority. After the petition is filed, the board or joint county drainage authority where the petition is filed has jurisdiction of the petition, the improvement, the affected property, and all proceedings for the establishment and construction of the outlet improvement and the assessment of property benefited by the

outlet improvement, as provided for establishment and construction of a drainage project under this chapter.

Subd. 5. **Preliminary survey report requirements.** In the preliminary survey report, the engineer shall show the existing or proposed drainage projects or systems that cause the overflow, the property drained or to be drained by the drainage project, and the names of affected property owners.

Subd. 6. **Benefited property to be determined by viewers.** If, after the preliminary survey report hearing, a detailed survey is ordered and viewers are appointed, the viewers shall determine and report the benefits to all property from the outlet improvement including property drained or to be drained by the existing drainage system and proposed drainage project.

HIST: 1990 c 391 art 5 s 30

103E.225 LATERALS.

Subdivision 1. **Petition.** (a) Persons that own property in the vicinity of an existing drainage system may petition for a lateral that connects their property with the drainage system. The petition must be signed by at least 26 percent of the owners of the property or by the owners of at least 26 percent of the area of the property that the lateral passes over. The petition must be filed with the auditor, or for property in more than one county, the petition must be filed with the auditor of the county with the largest property area to be passed over by the lateral. The petition must:

(1) describe in general terms the starting point, general course, and terminus of the proposed lateral;

(2) describe the property traversed by the lateral including the names and addresses of the property owners from records in the county assessor's office;

(3) state the necessity to construct the lateral;

(4) state that, if constructed, the lateral will be of public benefit and utility and promote the public health;

(5) request that the lateral be constructed and connected with the drainage system; and

(6) provide that the petitioners will pay all costs incurred if the proceedings are dismissed or if a contract for the construction of the lateral is not awarded.

(b) The petitioners shall give the bond required by section 103E.202, subdivision 5.

Subd. 2. **Establishment procedure.** After the petition is filed, the procedure to establish and construct the lateral is the same as that provided in this chapter to establish a drainage project.

Subd. 3. **Authority necessary for property not assessed.** A lateral may not be constructed to drain property that is not assessed benefits for the existing drainage system until express authority for the use of the existing drainage system as

an outlet for the lateral has been obtained under section 103E.401.

HIST: 1990 c 391 art 5 s 31

103E.227 IMPOUNDING AND DIVERSION OF DRAINAGE SYSTEM WATERS.

Subdivision 1. **Petition.** (a) To conserve and make more adequate use of our water resources, a person, public or municipal corporation, governmental subdivision, the state or a department or agency of the state, the commissioner of natural resources, and the United States or any of its agencies, may petition for the installation of dams or other control works in drainage ditch systems to impound or divert waters for beneficial use. The petition must be directed to the drainage authority where the drainage system is located.

(b) The petition must contain the location of the installation, plans, and specifications for the proposed structure and a map of the areas likely to be affected by the impoundment or diversion.

(c) The petitioner shall agree to be responsible for the cost of installation and construction of the structure.

(d) The petition must also be accompanied by a public waters work permit or a water use permit from the commissioner of natural resources if required under chapter 103G.

Subd. 2. **Bond.** (a) Upon filing the petition, the petitioners shall file a bond as provided in section 103E.202.

(b) A bond is not required if the petition is filed by the state, a state agency or department, the commissioner of natural resources, the United States or any of its agencies, or a municipality.

Subd. 3. **Procedure to establish project.** (a) After receiving the petition, bond, and permit, if required, the drainage authority must appoint an engineer to investigate the effect of the proposed installation and file a report of findings.

(b) After filing of the engineer's report, notice must be given and a public hearing held as provided in section 103E.261.

(c) If from the hearing it appears from the engineer's report and other evidence presented that the installation will be of a public or private benefit and that it will not impair the utility of the ditch or deprive affected land owners of its benefit, the drainage authority shall make an order modifying the drainage system and issue a permit authorizing its installation.

Subd. 4. **Flowage easements required.** Before installing or constructing an impoundment or diversion, the petitioner shall obtain rights-of-way and flowage easements from owners of land to be affected by it.

Subd. 5. **Assessment of maintenance and repair costs.** The order of the drainage authority modifying the drainage

system must provide that construction and later maintenance and repairs of the drainage system modification and installation must be done by the petitioner without assessment of the cost to the property owners previously within the drainage system.

HIST: 1990 c 391 art 5 s 32

103E.231 DISMISSAL OR DELAY OF PROCEEDINGS BY PETITIONERS.

Subdivision 1. **Dismissal.** (a) A proceeding under this chapter may be dismissed by a majority of the petitioners if they own at least 60 percent of the area owned by all of the petitioners as described in the petition.

(b) The proceeding may be dismissed at any time before the proposed drainage project is established after payment of the cost of the proceeding. If the costs cannot be collected, each and all petitioners are liable for unpaid assessments. The drainage authority shall determine and assess the cost of the proceeding against the persons liable. After the proceeding is dismissed any other action on the proposed drainage project must begin with a new petition.

Subd. 2. **Delay.** The drainage authority may delay drainage proceedings and drainage project construction under this chapter if a majority of the petitioners petition for a delay and the drainage authority holds a hearing on the petition. The delay may be for a period determined by the drainage authority. The drainage authority shall determine the cost of the proceedings up to the time the proceedings are delayed and when the costs are to be paid. The costs may include interest on the costs due.

HIST: 1990 c 391 art 5 s 33

103E.235 DRAINAGE SYSTEM IN TWO OR MORE COUNTIES.

Subdivision 1. **Designation.** A petition for a proposed drainage project in two or more counties must be designated as a joint county drainage system with a number assigned by the auditor of the county with the largest area of property in the drainage system.

Subd. 2. **Joint county drainage authority.** The board where a petition for a proposed joint county drainage project is filed shall notify the board of each county where property is affected by the drainage system and request the boards to meet jointly and consider the petition. The boards shall select five of their members at the meeting to be the drainage authority. At least one member must be from each board. The drainage authority shall be known as the joint county drainage authority with a joint county drainage project or system number. A vacancy in the membership of the joint county drainage authority must be filled by joint action of the boards.

Subd. 3. **Transfer of drainage systems to watershed districts not affected.** This section does not affect the

transfer of a drainage system to the board of managers of a watershed district under chapter 103D.

HIST: 1990 c 391 art 5 s 34

103E.238 COUNTY ATTORNEY REVIEW OF PETITION AND BOND.

The county attorney must review each petition and bond filed with the county to determine if it meets the requirement of the proceedings for which it is intended. The county attorney must review the petition and bond within 30 days after it is filed. The county attorney must:

- (1) refer the petition and bond back to the petitioners if it does not meet the requirements, with the county attorney's opinion describing the deficiencies of the petition; or
- (2) refer the petition to the drainage authority.

HIST: 1990 c 391 art 5 s 35

PRELIMINARY SURVEY AND HEARING

103E.241 ENGINEER.

Subdivision 1. **Appointment.** Within 30 days after receiving a petition and bond from the county attorney, the drainage authority shall, by order, appoint an engineer to make a preliminary survey within a prescribed time. The engineer must be the county highway engineer of a county where the affected property is located or a professional engineer registered under state law. The engineer is the engineer for the drainage project throughout the proceeding and construction unless otherwise ordered. Each appointed engineer must file an oath and bond. The engineer may be removed by the drainage authority at any time. If the engineer position is vacant, the drainage authority shall appoint another engineer as soon as possible.

Subd. 2. **Oath; bond.** An appointed engineer must subscribe to an oath to faithfully perform the assigned duties in the best manner possible and file a bond with the auditor. Within ten days after being appointed, the drainage authority shall set an amount of at least \$5,000 for the bond. The bond must have adequate surety and be payable to the county where the petition is filed, or for a proposed joint county drainage project to all counties in the petition. The bond must be conditioned to pay any person or the drainage authority for damages and injuries resulting from negligence of the engineer while the engineer is acting in the proceedings or construction and provide that the engineer will diligently and honestly perform the engineer's duties. The bond is subject to approval by the auditor. The aggregate liability of the surety for all damages may not exceed the amount of the bond.

Subd. 3. **Assistants; compensation.** The engineer may appoint assistant engineers and hire help necessary to complete the engineer's duties. The engineer is responsible for the

assistant engineers and may remove them. The compensation of the engineer, assistant engineers, and other employees is provided by section 103E.645.

Subd. 4. **Engineer's reports.** The engineer shall make an expense report every two weeks after the beginning of the engineer's work until the construction contract is awarded. The report must show costs incurred by the engineer and expenses incurred under the engineer's direction relating to the proceeding, and include the names of the engineer, engineer assistants, and employees and the time each was employed, and every item of expense incurred by the engineer. The engineer must file this report with the auditor as soon as possible and may not incur expenses for the proceeding greater than the petitioners' bond.

Subd. 5. **Consulting engineer.** After the engineer is appointed and before construction of the drainage project is finished, the drainage authority may employ an engineer as a consulting engineer for the proceeding and construction. A consulting engineer shall advise the engineer and drainage authority on engineering matters and problems that may arise related to the proceeding and construction of the drainage project. The drainage authority shall determine the compensation for the consulting engineer.

HIST: 1990 c 391 art 5 s 36

103E.245 PRELIMINARY SURVEY AND PRELIMINARY SURVEY REPORT.

Subdivision 1. **Survey.** The engineer shall proceed promptly to:

- (1) examine the petition and order;
- (2) make a preliminary survey of the area likely to be affected by the proposed drainage project to enable the engineer to determine whether the proposed drainage project is necessary and feasible with reference to the environmental and land use criteria in section 103E.015, subdivision 1;
- (3) examine and gather information related to determining whether the proposed drainage project substantially affects areas that are public waters; and
- (4) if the proposed drainage project requires construction of an open channel, examine the nature and capacity of the outlet and any necessary extension.

Subd. 2. **Limitation of survey.** The engineer shall restrict the preliminary survey to the drainage area described in the petition, except that to secure an outlet the engineer may run levels necessary to determine the distance for the proper fall of the water. The preliminary survey must consider the impact of the proposed drainage project on the environmental and land use criteria in section 103E.015, subdivision 1. The drainage authority may have other areas surveyed after:

- (1) giving notice by mail of a hearing to survey additional

areas, to be held at least ten days after the notice is mailed, to the petitioners and persons liable on the petitioners' bond;

(2) holding the hearing;

(3) obtaining consent of the persons liable on the petitioners' bond; and

(4) ordering the additional area surveyed by the engineer.

Subd. 3. **Adoption of federal project.** The engineer may approve and include as a part of the report, a project of the United States relating to drainage or flood control that is within the proposed drainage project area, and may accept data, plats, plans, or information relating to the project furnished by United States engineers. The engineer does not need to make the preliminary survey if the material furnished by the United States is sufficient for the engineer to make the preliminary survey report.

Subd. 4. **Preliminary survey report.** The engineer shall report the proposed drainage project plan or recommend a different practical plan. The report must give sufficient information, in detail, to inform the drainage authority on issues related to feasibility, and show changes necessary to make the proposed plan practicable and feasible including extensions, laterals, and other work. If the engineer finds the proposed drainage project in the petition is feasible and complies with the environmental and land use criteria in section 103E.015, subdivision 1, the engineer shall include in the preliminary survey report a preliminary plan of the drainage project showing the proposed ditches, tile, laterals, and other improvements, the outlet of the project, the watershed of the drainage project or system, and the property likely to be affected and its known owners. The plan must show:

(1) the elevation of the outlet and the controlling elevations of the property likely to be affected referenced to standard sea level datum, if practical;

(2) the probable size and character of the ditches and laterals necessary to make the plan practicable and feasible;

(3) the character of the outlet and whether it is sufficient;

(4) the probable cost of the drains and improvements shown on the plan;

(5) all other information and data necessary to disclose the practicability, necessity, and feasibility of the proposed drainage project;

(6) consideration of the drainage project under the environmental and land use criteria in section 103E.015, subdivision 1; and

(7) other information as ordered by the drainage authority.

HIST: 1990 c 391 art 5 s 37

103E.251 FILING PRELIMINARY SURVEY REPORT.

The engineer shall file the completed preliminary survey report in duplicate with the auditor. The auditor shall send one copy of the report to the director. If the proposed drainage project involves a joint county drainage project or system, a copy of the report must be filed with the auditor of each affected county.

HIST: 1990 c 391 art 5 s 38

103E.255 COMMISSIONER'S PRELIMINARY ADVISORY REPORT.

The commissioner shall make a preliminary advisory report to the drainage authority with an opinion about the adequacy of the preliminary survey report. The commissioner shall state any additional investigation and evaluation that should be done relating to public waters that may be affected and environmental and land use criteria in section 103E.015, subdivision 1, and cite specific portions of the preliminary survey report that are determined inadequate. The commissioner shall file an initial preliminary advisory report with the auditor before the date of the preliminary hearing. The commissioner may request additional time for review and evaluation of the preliminary survey report if additional time is necessary for proper evaluation. A request for additional time for filing the commissioner's preliminary advisory report may not be made more than five days after the date of the notice by the auditor that a date is to be set for the preliminary hearing. An extension of time may not exceed two weeks after the date of the request.

HIST: 1990 c 391 art 5 s 39

103E.261 PRELIMINARY HEARING.

Subdivision 1. **Notice.** When the preliminary survey report is filed, the auditor shall promptly notify the drainage authority. The drainage authority in consultation with the auditor shall set a time, by order, not more than 30 days after the date of the order, for a hearing on the preliminary survey report. At least ten days before the hearing, the drainage authority after consulting with the auditor shall give notice by mail of the time and location of the hearing to the petitioners, owners of property, and political subdivisions likely to be affected by the proposed drainage project in the preliminary survey report.

Subd. 2. **Hearing.** The engineer shall attend the preliminary hearing and provide necessary information. The petitioners and all other interested parties may appear and be heard. The commissioner's advisory report on the preliminary plan must be publicly read and included in the record of proceedings.

Subd. 3. **Sufficiency of petition.** (a) The drainage authority shall first examine the petition and determine if it meets the legal requirements.

(b) If the petition does not meet the legal requirements of this chapter, the hearing shall be adjourned until a specified date by which the petitioners must resubmit the petition. The petition must be referred back to the petitioners who, by unanimous action, may amend the petition. The petitioners may obtain signatures of additional property owners as added petitioners.

(c) When the hearing is reconvened, if the petition is not resubmitted or does not meet the legal requirements, the proceedings must be dismissed.

Subd. 4. **Dismissal.** (a) The drainage authority shall dismiss the proceedings if it determines that:

- (1) the proposed drainage project is not feasible;
- (2) the adverse environmental impact is greater than the public benefit and utility after considering the environmental and land use criteria in section 103E.015, subdivision 1, and the engineer has not reported a plan to make the proposed drainage project feasible and acceptable;
- (3) the proposed drainage project is not of public benefit or utility; or
- (4) the outlet is not adequate.

(b) If the proceedings are dismissed, any other action on the proposed drainage project must begin with a new petition.

Subd. 5. **Findings and order.** (a) The drainage authority shall state, by order, its findings and any changes that must be made in the proposed drainage project from those outlined in the petition, including changes necessary to minimize or mitigate adverse impact on the environment, if it determines that:

- (1) the proposed drainage project outlined in the petition, or modified and recommended by the engineer, is feasible;
- (2) there is necessity for the proposed drainage project;
- (3) the proposed drainage project will be of public benefit and promote the public health, after considering the environmental and land use criteria in section 103E.015, subdivision 1; and
- (4) the outlet is adequate.

(b) Changes may be stated by describing them in general terms or filing a map that outlines the changes in the proposed drainage project with the order. The order and accompanying documents must be filed with the auditor.

Subd. 6. **Outlet is existing drainage system.** If the outlet is an existing drainage system, the drainage authority may determine that the outlet is adequate and obtain permission to use the existing drainage system as an outlet. The drainage authority shall assign a number to the proposed drainage project and proceed under section 103E.401 to act in behalf of the proposed drainage project.

Subd. 7. **Effect of findings.** (a) For all further proceedings, the order modifies the petition and the order must

be considered with the petition.

(b) The findings and order of the drainage authority at the preliminary hearing are conclusive only for the signatures and legal requirements of the petition, the nature and extent of the proposed plan, and the need for a detailed survey, and only for the persons or parties shown by the preliminary survey report as likely to be affected by the proposed drainage project. All questions related to the practicability and necessity of the proposed drainage project are subject to additional investigation and consideration at the final hearing.

HIST: 1990 c 391 art 5 s 40

DETAILED SURVEY AND VIEWING

103E.265 ORDER FOR DETAILED SURVEY AND DETAILED SURVEY REPORT.

Subdivision 1. **Order.** When the preliminary hearing order is filed with the auditor, the drainage authority shall order the engineer to make a detailed survey with plans and specifications for the proposed drainage project and submit a detailed survey report to the drainage authority as soon as possible.

Subd. 2. **Waiver.** The drainage authority may waive the detailed survey order and the detailed survey if it determines that adequate data, plans, and specifications have been furnished by a United States engineer.

HIST: 1990 c 391 art 5 s 41

103E.271 DETAILED SURVEY.

Subdivision 1. **Survey and examination.** When an order for a detailed survey is filed, the engineer shall proceed to survey the lines of the proposed drainage project in the preliminary hearing order, and survey and examine affected property.

Subd. 2. **Survey requirements.** All drainage lines must be surveyed in 100-foot stations and elevations must be based on standard sea level datum, if practical. Bench marks must be established on permanent objects along the drainage line, not more than one mile apart. Field notes made by the engineer must be entered in bound field books and preserved by the engineer until they are filed with the auditor.

HIST: 1990 c 391 art 5 s 42

103E.275 ENGINEER'S VARIANCE FROM DRAINAGE AUTHORITY ORDER.

(a) In planning a proposed drainage project, the engineer may vary from the starting point and the line and plan described by the preliminary hearing order if necessary to drain the property likely to be assessed in the proposed drainage project.

(b) The engineer may:

(1) survey and recommend the location of additional necessary ditches and tile;

(2) where better results will be accomplished and more desirable outlets secured, provide for the extension of the outlet; and

(3) provide for different parts of the drainage to flow in different directions with more than one outlet.

(c) The open ditches do not have to connect if they drain the area to be affected in the petition. The variance must be reported with similar information in the detailed survey report.

HIST: 1990 c 391 art 5 s 43

103E.281 SOIL SURVEY.

The engineer shall make a soil survey if: (1) the drainage authority orders a soil survey; (2) the commissioner requests a soil survey; or (3) the engineer determines a soil survey is necessary. The soil survey must show the nature and character of the soil in the proposed drainage project area and include the engineer's findings from the soil survey. The report on the soil survey must be included in the detailed survey report or reported and filed separately before the final hearing.

HIST: 1990 c 391 art 5 s 44

103E.285 DETAILED SURVEY REPORT.

Subdivision 1. **Report and information required.** The engineer shall prepare a detailed survey report that includes the data and information in this section.

Subd. 2. **Map.** A complete map of the proposed drainage project and drainage system must be drawn to scale, showing:

(1) the terminus and course of each drain and whether it is ditch or tile, and the location of other proposed drainage works;

(2) the location and situation of the outlet;

(3) the watershed of the proposed drainage project and the subwatershed of main branches, if any, with the location of existing highway bridges and culverts;

(4) all property affected, with the names of the known owners;

(5) public roads and railways affected;

(6) the outline of any lake basin, wetland, or public water body affected;

(7) other physical characteristics of the watershed necessary to understand the proposed drainage project and the affected drainage system; and

(8) the area to be acquired to maintain a grass strip under section 103E.021.

Subd. 3. **Profile of drainage lines.** A profile of all proposed drainage lines must be presented showing, graphically, the elevation of the ground and gradient at each 100-foot

station, and the station number at each section line and at each property line. The profile must show information necessary to understand it, including, in the case of an open ditch, the bottom width and side slope and, in the case of a tiled ditch, the size of tile.

Subd. 4. Bridge and culvert plans. Plans for private bridges and culverts to be constructed by and as a part of the proposed drainage project and plans for other works to be constructed for the proposed drainage project must be presented. A list must be made that shows the required minimum hydraulic capacity of bridges and culverts at railways and highways that cross ditches, and at other prospective ditch crossings where bridges and culverts are not specified to be constructed as part of the proposed drainage project. Plans and estimates of the cost of highway bridges and culverts must be prepared for the viewers to determine benefits and damages.

Subd. 5. Tabular statement of excavation, construction, and cost. A tabular statement must be prepared showing:

- (1) the number of cubic yards of excavation, linear feet of tile, and average depth on each tile line;
- (2) the bridges, culverts, and works to be constructed under the plans for the drainage project; and
- (3) the estimated unit cost of each item, a summary of the total cost, and an estimate of the total cost of completing the proposed drainage project that includes supervision and other costs.

Subd. 6. Right-of-way acreage. The acreage must be shown that will be taken for ditch right-of-way on each government lot, 40-acre tract, or fraction of a lot or tract under separate ownership. The ditch right-of-way must include the area to be taken to maintain a grass strip under section 103E.021.

Subd. 7. Drain tile specifications. Specifications for drain tile must be given that comply with the requirements of the American Society for Testing Materials standard specifications for drain tile, except where the engineer requires tile of a special, higher quality for certain tile depths or soil conditions.

Subd. 8. Soil survey report. If required under section 103E.281, the report on the soil survey must be included in the detailed survey report or submitted and filed separately before the final hearing.

Subd. 9. Recommendation for division of work. If construction of the proposed drainage project would be more economical, the engineer may recommend:

- (1) that the work be divided into sections and contracted separately;
- (2) that the ditch and tile work or tile and labor on the project be contracted separately; or
- (3) the time and manner for the work to be completed.

Subd. 10. **Other information on practicability and necessity of drainage project.** Other data and information to inform the drainage authority of the practicability and necessity of the proposed drainage project must be made available including a comprehensive examination and the recommendation by the engineer regarding the environmental and land use criteria in section 103E.015, subdivision 1.

Subd. 11. **Outlet in another state.** If an outlet is only practical in an adjoining state, the engineer shall describe the right-of-way needed and the cost of obtaining the right-of-way and constructing the outlet.

Subd. 12. **Completion.** The engineer shall prepare the detailed survey and complete the detailed survey report, in duplicate, as specified in this section.

HIST: 1990 c 391 art 5 s 45

103E.291 FILING DETAILED SURVEY REPORT.

The engineer must file the detailed survey report with the auditor where the proceedings are pending and the auditor must deliver a copy of the detailed survey report to the commissioner. The engineer must also file copies of the detailed survey report with the auditors of any affected counties.

HIST: 1990 c 391 art 5 s 46

103E.295 REVISION OF ENGINEER'S DETAILED SURVEY REPORT AFTER ACCEPTANCE.

After the final acceptance of the proposed drainage project, the engineer shall revise the plan, profiles, and designs of structures to show the drainage project as actually constructed on the original tracings. The engineer shall file the revised detailed survey report with the auditor. The auditor shall forward the original or a copy to the director as a permanent record.

HIST: 1990 c 391 art 5 s 47

103E.301 COMMISSIONER'S FINAL ADVISORY REPORT.

(a) The commissioner shall examine the detailed survey report and within 30 days of receipt make a final advisory report to the drainage authority. The final advisory report must state whether the commissioner:

(1) finds the detailed survey report is incomplete and not in accordance with the provisions of this chapter, specifying the incomplete or nonconforming provisions;

(2) approves the detailed survey report as an acceptable plan to drain the property affected;

(3) does not approve the plan and recommendations for changes;

(4) finds the proposed drainage project is not of public benefit or utility under the environmental and land use criteria

in section 103E.015, subdivision 1, specifying the facts and evidence supporting the findings; or

(5) finds a soil survey is needed, and, if it is, makes a request to the engineer to make a soil survey.

(b) The commissioner shall direct the final advisory report to the drainage authority and file it with the auditor.

HIST: 1990 c 391 art 5 s 48

103E.305 VIEWERS' APPOINTMENT AND QUALIFICATION.

Subdivision 1. **Appointment.** When the order for a detailed survey is made, the drainage authority shall, by order, appoint viewers consisting of three disinterested residents of the state qualified to assess benefits and damages. The drainage authority may establish qualifications for viewers.

Subd. 2. **Auditor's order for first meeting.** Within five days after the detailed survey report is filed, the auditor shall, by order, designate the time and location for the first meeting of the viewers and issue a copy to the viewers of the auditor's order and a certified copy of the order appointing the viewers.

Subd. 3. **First meeting.** At the first meeting and before beginning their duties, the viewers shall subscribe to an oath to faithfully perform their duties. If an appointed viewer does not qualify for any reason, the auditor shall designate another qualified person to take the disqualified viewer's place.

HIST: 1990 c 391 art 5 s 49

103E.311 VIEWERS' DUTIES.

The viewers, with or without the engineer, shall determine the benefits and damages to all property affected by the proposed drainage project and make a viewers' report.

HIST: 1990 c 391 art 5 s 50

103E.315 ASSESSMENT OF DRAINAGE BENEFITS AND DAMAGES.

Subdivision 1. **State land.** Property owned by the state must have benefits and damages reported in the same manner as taxable lands subject to the provisions relating to conservation areas in section 103E.025.

Subd. 2. **Government property.** The viewers shall report the benefits and damages to the state, counties, and municipalities from the proposed drainage project. The property within the jurisdiction of a municipality, whether owned by the municipality or by private parties, may be assessed as benefits and damages to the municipality.

Subd. 3. **Public roads.** If a public road or street is benefited or damaged, the state, county, or political subdivision that is the governmental unit with the legal duty of maintaining the road or street, must be assessed benefits or damages to the road or street, except that benefits and damages for bridges and culverts must be assessed to the governmental

unit that has the legal duty to construct and maintain the bridge or culvert under section 103E.525.

Subd. 4. **Railway and other utilities.** The viewers shall report the benefits and damages to railways and other utilities, including benefits and damages to property used for railway or other utility purposes.

Subd. 5. **Extent and basis of benefits.** (a) The viewers shall determine the amount of benefits to all property within the watershed, whether the property is benefited immediately by the construction of the proposed drainage project or the proposed drainage project can become an outlet for drainage, makes an outlet more accessible, or otherwise directly benefits the property. The benefits may be based on:

(1) an increase in the current market value of property as a result of constructing the project;

(2) an increase in the potential for agricultural production as a result of constructing the project; or

(3) an increased value of the property as a result of a potential different land use.

(b) Benefits and damages may be assessed only against the property benefited or damaged or an easement interest in property for the exclusive use of the surface of the property.

Subd. 6. **Benefits for proposed drainage project as outlet.** (a) If the proposed drainage project furnishes an outlet to an existing drainage system and benefits the property drained by the existing system, the viewers shall equitably determine and assess:

(1) the benefits of the proposed drainage project to each tract or lot drained by the existing drainage system;

(2) a single amount as an outlet benefit to the existing drainage system; or

(3) benefits on a watershed acre basis.

(b) Assessments that conform with the provisions in this subdivision are valid. If a single sum is assessed as an outlet benefit, the lien for the assessment must be prorated on all property benefited by the existing drainage system in proportion to the benefits determined for the existing drainage system.

(c) Within the watershed that drains to the area where a project is located, the viewers may assess outlet benefits on:

(1) property that is responsible for increased sedimentation in downstream areas of the watershed; and

(2) property that is responsible for increased drainage system maintenance or increased drainage system capacity because the natural drainage on the property has been altered or modified to accelerate the drainage of water from the property.

Subd. 7. **Benefits for project that increases drainage capacity.** If part of a drainage project increases drainage capacity and the increased capacity is necessary due to increased drainage in the project watershed rather than increased drainage in a specific area, the viewers may assess

benefits on property in the project watershed on a pro rata basis.

Subd. 8. **Extent of damages.** Damages to be paid may include:

(1) the fair market value of the property required for the channel of an open ditch and the permanent grass strip under section 103E.021;

(2) the diminished value of a farm due to severing a field by an open ditch;

(3) loss of crop production during drainage project construction; and

(4) the diminished productivity or land value from increased overflow.

HIST: 1990 c 391 art 5 s 51

103E.321 VIEWERS' REPORT.

Subdivision 1. **Requirements.** The viewers' report must show, in tabular form, for each lot, 40-acre tract, and fraction of a lot or tract under separate ownership that is benefited or damaged:

(1) a description of the lot or tract, under separate ownership, that is benefited or damaged;

(2) the names of the owners as they appear on the current tax records of the county and their addresses;

(3) the number of acres in each tract or lot;

(4) the number and value of acres added to a tract or lot by the proposed drainage of public waters;

(5) the damage, if any, to riparian rights;

(6) the damages paid for the permanent grass strip under section 103E.021.

(7) the total number and value of acres added to a tract or lot by the proposed drainage of public waters, wetlands, and other areas not currently being cultivated;

(8) the number of acres and amount of benefits being assessed for drainage of areas which before the drainage benefits could be realized would require a public waters work permit to work in public waters under section 103G.245 to excavate or fill a navigable water body under United States Code, title 33, section 403, or a permit to discharge into waters of the United States under United States Code, title 33, section 1344;

(9) the number of acres and amount of benefits being assessed for drainage of areas that would be considered conversion of a wetland under United States Code, title 16, section 3821, if the area was placed in agricultural production;

(10) the amount of right-of-way acreage required; and

(11) the amount that each tract or lot will be benefited or damaged.

Subd. 2. **Benefits and damages statement.** (a) The viewers' report must include a benefits and damages statement

that shows for each property owner how the benefits or damages for similar tracts or lots were determined. For similar tracts or lots the report must describe:

(1) the existing land use, property value, and economic productivity;

(2) the potential land use, property value, and economic productivity after the drainage project is constructed; and

(3) the benefits or damages from the proposed drainage project.

(b) The soil and water conservation districts and county assessors shall cooperate with viewers to provide information required under paragraph (a).

Subd. 3. **Disagreement of viewers.** If the viewers are unable to agree, each viewer shall separately state findings on the disputed issue. A majority of the viewers may perform the required duties under this chapter.

Subd. 4. **Filing.** When the viewers complete their duties, they shall file the viewers' report with the auditor of each affected county. A detailed statement must be filed with the viewers' report showing the actual time the viewers were engaged and the costs incurred. The viewers shall perform their duties and complete the viewers' report as soon as possible after their first meeting.

HIST: 1990 c 391 art 5 s 52

103E.323 PROPERTY OWNERS' REPORT.

Subdivision 1. **Report.** Within 30 days after the viewers' report is filed, the auditor must make a property owners' report from the information in the viewers' report showing for each property owner benefited or damaged by the proposed drainage project:

(1) the name and address of the property owner;

(2) each lot or tract and its area that is benefited or damaged;

(3) the total number and value of acres added to a tract or lot by the proposed drainage of public waters, wetlands, and other areas not currently being cultivated;

(4) the number of acres and amount of benefits being assessed for drainage of areas which before the drainage benefits could be realized would require a public waters work permit to work in public waters under section 103G.245 to excavate or fill a navigable water body under United States Code, title 33, section 403, or a permit to discharge into waters of the United States under United States Code, title 33, section 1344;

(5) the number of acres and amount of benefits being assessed for drainage of areas that would be considered conversion of a wetland under United States Code, title 16, section 3821, if the area was placed in agricultural production;

(6) the damage, if any, to riparian rights;

- (7) the amount of right-of-way acreage required;
- (8) the amount that each tract or lot will be benefited or damaged;
- (9) the net damages or benefits to each property owner;
- (10) the estimated cost to be assessed to the property owner based on the cost of the drainage project in the engineer's detailed survey report; and
- (11) a copy of the benefits and damages statement under section 103E.321, subdivision 2, paragraph (a), relating to the property owner.

Subd. 2. **Mailing.** The auditor must mail a copy of the property owners' report to each owner of property affected by the proposed drainage project, and may prepare and file an affidavit of mailing.

HIST: 1990 c 391 art 5 s 53

FINAL HEARING

103E.325 FINAL HEARING NOTICE.

Subdivision 1. **Time.** Promptly after the filing of the viewers' report and the commissioner's final advisory report, the drainage authority after consulting with the auditor shall set a time and location for the final hearing on the petition, the detailed survey report, and the viewers' report. The hearing must be set 25 to 50 days after the date of the final hearing notice.

Subd. 2. **Notice.** (a) The final hearing notice must state:

- (1) that the petition is pending;
- (2) that the detailed survey report is filed;
- (3) that the viewers' report is filed;
- (4) the time and place set for the final hearing;
- (5) a brief description of the proposed drainage project and affected drainage system, giving in general terms the starting point, terminus, and general course of the main ditch and branches;
- (6) a description of property benefited and damaged, and the names of the owners of the property; and
- (7) the municipal and other corporations affected by the proposed drainage project as shown by the detailed survey report and viewers' report.

(b) Names may be listed in a narrative form and property affected may be separately listed in narrative form by governmental sections or otherwise.

(c) For a joint county proceeding, separate notice may be prepared for each county affected, showing the portion of the proposed drainage project and the names and descriptions of affected property in the county.

Subd. 3. **Method of notice.** The auditor shall notify the drainage authority, auditors of affected counties, and all

interested persons of the time and location of the final hearing by publication, posting, and mail. A printed copy of the final hearing notice for each affected county must be posted at least three weeks before the date of the final hearing at the front door of the courthouse in each county. Within one week after the first publication of the notice, the auditor shall give notice by mail of the time and location of the final hearing to the commissioner, all property owners, and others affected by the proposed drainage project and listed in the detailed survey report and the viewers' report.

Subd. 4. **Defective notice.** If the final hearing notice is not given or is not legally given, the auditor shall properly publish, post, and mail the notice or provide the notice under the provisions to cure defective notice in section 103E.035.

HIST: 1990 c 391 art 5 s' 54

103E.331 JURISDICTION OF PROPERTY BY DRAINAGE AUTHORITY.

After the final hearing notice is given, the drainage authority has jurisdiction of all property described in the detailed survey report and viewers' report, of the persons and municipalities named in the reports, and of persons having an interest in a mortgage, lien, or encumbrance against property described in the reports.

HIST: 1990 c 391 art 5 s 55

103E.335 PROCEEDINGS AT THE FINAL HEARING.

Subdivision 1. **Consideration of petition and reports.**
At the time and location for the final hearing specified in the notice, or after the hearing adjourns, the drainage authority shall consider the petition for the drainage project, with all matters pertaining to the detailed survey report, the viewers' report, and the commissioner's final advisory report. The drainage authority shall hear and consider the testimony presented by all interested parties. The engineer or the engineer's assistant and at least one viewer shall be present. The director may appear and be heard. If the director does not appear personally, the final advisory report shall be read during the hearing. The final hearing may be adjourned and reconvened as is necessary.

Subd. 2. **Changes in drainage plan.** If the drainage authority determines that the general plan reported by the engineer may be improved by changes, or that the viewers have made an inequitable assessment of benefits or damages to any property, the drainage authority may amend the detailed survey report or the viewers' report, and make necessary and proper findings in relation to the reports. The drainage authority may resubmit matters to the engineer or to the viewers for immediate consideration. The engineer or viewers shall proceed promptly to reconsider the resubmitted matters and shall make and file

the amended findings and reports. The amended reports are a part of the original reports.

Subd. 3. **Reexamination.** If the drainage authority determines that property not included in the notice should be included and assessed or that the engineer or viewers, or both, should reexamine the proposed drainage project or the property benefited or damaged by the system, the drainage authority may resubmit the reports to the engineer and viewers. If a report is resubmitted, the final hearing may be continued as is necessary to make the reexamination and reexamination report. If the reexamination report includes property not included in the original report, the drainage authority may, by order, adjourn the hearing and direct the auditor to serve or publish, post, and mail a final hearing notice with reference to all property not included in the previous notice. The jurisdiction of the drainage authority continues in the property given proper notice, and new or additional notice is not required for that property.

HIST: 1990 c 391 art 5 s 56

103E.341 DRAINAGE AUTHORITY FINAL ORDER.

Subdivision 1. **Dismissal of proceedings.** The drainage authority must dismiss the proceedings and petition, by order, if it determines that:

- (1) the benefits of the proposed drainage project are less than the total cost, including damages awarded;
- (2) the proposed drainage project will not be of public benefit and utility; or
- (3) the proposed drainage project is not practicable after considering the environmental and land use criteria in section 103E.015, subdivision 1.

Subd. 2. **Establishment of proposed drainage project.**

(a) The drainage authority shall establish, by order, a proposed drainage project if it determines that:

- (1) the detailed survey report and viewers' report have been made and other proceedings have been completed under this chapter;
- (2) the reports made or amended are complete and correct;
- (3) the damages and benefits have been properly determined;
- (4) the estimated benefits are greater than the total estimated cost, including damages;
- (5) the proposed drainage project will be of public utility and benefit, and will promote the public health; and
- (6) the proposed drainage project is practicable.

(b) The order must contain the drainage authority's findings, adopt and confirm the viewers' report as made or amended, and establish the proposed drainage project as reported and amended.

HIST: 1990 c 391 art 5 s 57

103E.345 APPORTIONMENT OF COST FOR JOINT COUNTY DRAINAGE SYSTEMS.

For joint county proceedings, the auditor where the petition is filed shall file a certified copy of the viewers' report with the auditor of each affected county within 20 days after the date of the final order establishing the system. When the final order to establish the drainage project is made, the drainage authority shall determine and order the percentage of the cost of the drainage project to be paid by each affected county. The cost shall be in proportion to the benefits received, unless there is a contrary reason. An auditor of an affected county may petition the drainage authority after the final order is made to determine and order the percentage of costs to be paid by the affected counties. The drainage authority shall hold a hearing five days after giving written notice to the auditor of each affected county. After giving the notice to the auditors of the affected counties, the drainage authority may, at any time that it is necessary, modify an order or make an additional order to allocate the cost among the affected counties.

HIST: 1990 c 391 art 5 s 58

REDETERMINATION OF BENEFITS

103E.351 REDETERMINATION OF BENEFITS AND DAMAGES.

Subdivision 1. **Conditions to redetermine benefits and damages; appointment of viewers.** If the drainage authority determines that the original benefits or damages determined in a drainage proceeding do not reflect reasonable present day land values or that the benefited or damaged areas have changed, or if more than 50 percent of the owners of property benefited or damaged by a drainage system petition for correction of an error that was made at the time of the proceedings that established the drainage system, the drainage authority may appoint three viewers to redetermine and report the benefits and damages and the benefited and damaged areas.

Subd. 2. **Hearing and procedure.** (a) The redetermination of benefits and damages shall proceed as provided for viewers and the viewers' report in sections 103E.311 to 103E.321.

(b) The auditor must prepare a property owners' report from the viewers' report. A copy of the property owners' report must be mailed to each owner of property affected by the drainage system.

(c) The drainage authority shall hold a final hearing on the report and confirm the benefits and damages and benefited and damaged areas. The final hearing shall proceed as provided under sections 103E.325, 103E.335, and 103E.341, except that the hearing shall be held within 30 days after the property owners' report is mailed.

Subd. 3. **Redetermined benefits and damages replace original benefits and damages.** The redetermined benefits and damages and benefited and damaged areas must be used in place of the original benefits and damages and benefited and damaged areas in all subsequent proceedings relating to the drainage system.

Subd. 4. **Appeal.** A person aggrieved by the redetermination of benefits and damages and benefited and damaged areas may appeal from the order confirming the benefits and damages and benefited and damaged areas under section 103E.091.

HIST: 1990 c 391 art 5 s 59

OUTLETS FOR DRAINAGE SYSTEMS

103E.401 USE OF DRAINAGE SYSTEM AS AN OUTLET.

Subdivision 1. **Commissioner must recognize drainage outlet proceedings when purchasing wetlands.** If the commissioner purchases wetlands under section 97A.145, the commissioner must recognize that when a majority of landowners or owners of a majority of the land in the watershed petition for a drainage outlet, the state should not interfere with or unnecessarily delay the drainage proceedings if the proceedings are conducted according to this chapter.

Subd. 2. **Express authority necessary.** After the construction of a drainage project, a public or private drainage system that drains property not assessed for benefits for the established drainage system may not be constructed to use the established drainage system as an outlet without obtaining express authority from the drainage authority having jurisdiction over the drainage system proposed to be used as the outlet. This section is applicable to the construction of a public or private drainage system that outlets water into an established drainage system regardless of the actual physical connection.

Subd. 3. **Petition.** A person seeking authority to use an established drainage system as an outlet must petition the drainage authority. When the petition is filed, the drainage authority in consultation with the auditor shall set a time and location for a hearing on the petition and shall give notice by mail and notice by publication of the hearing. The auditor must be paid a fee of \$5 plus 30 cents for each notice mailed in excess of ten.

Subd. 4. **Hearing.** At the hearing the drainage authority shall consider the capacity of the outlet drainage system. If express authority is given to use the drainage system as an outlet, the drainage authority shall state, by order, the terms and conditions for use of the established drainage system as an outlet and shall set the amount to be paid as an outlet fee. The order must describe the property to be

benefited by the drainage system and must state the amount of benefits to the property for the outlet. The property benefited is liable for assessments levied after that time in the drainage system, on the basis of the benefits as if the benefits had been determined in the order establishing the drainage system.

Subd. 5. Private drainage system may not be constructed without payment of outlet fee. A private drainage system may not be constructed to use the established drainage system as an outlet until the outlet fee, set by order, is paid by the petitioner to the county treasurer where the petitioner's property is located.

Subd. 6. Payment of outlet fee. The outlet fee for a proposed drainage project is a part of the cost of the proposed drainage project and is to be paid by assessment against the property benefited by the proposed drainage project, under section 103E.601, and credited to the established drainage system account.

Subd. 7. Unauthorized outlet into drainage system.

(a) The drainage authority must notify an owner of property where an unauthorized outlet into a drainage system is located and direct the property owner to block the outlet or otherwise make the outlet ineffective by a specified time. The outlet must be blocked and remain ineffective until:

(1) an outlet fee is paid, which is determined by the drainage authority based on the benefits received by the property for the period the unauthorized outlet was operational; and

(2) the drainage authority approves a petition for the outlet and establishes the outlet fee.

(b) If a property owner does not block or make the outlet ineffective after being notified, the drainage authority must issue an order to have the work performed to bring the outlet into compliance. After the work is completed, the drainage authority must send a statement to the auditor of the county where the property is located and to the property owner where the unauthorized outlet is located, containing the expenses incurred to bring the outlet into compliance and the outlet fee based on the benefits received by the property during the period the unauthorized outlet was operational.

Subd. 8. Collection of unauthorized outlet compliance expenses. (a) The amount of the expenses and outlet fee is a lien in favor of the drainage authority against the property where the unauthorized outlet is located. The auditor must certify the expenses and outlet fee and enter the amount in the same manner as other drainage liens on the tax list for the following year. The amount must be collected in the same manner as real estate taxes for the property. The provisions of law relating to the collection of real estate taxes shall be used to enforce payment of amounts due under this section. The auditor must include a notice of collection of unauthorized outlet

compliance expenses with the tax statement.

(b) The amounts collected under this subdivision must be deposited in the drainage system account.

HIST: 1990 c 391 art 5 s 60

103E.405 OUTLETS IN ADJOINING STATES.

In any drainage proceeding, at the hearing on the detailed survey report and viewers' report, if the drainage authority determines that a proper outlet for the drainage system does not exist except through property in an adjoining state, the drainage authority may adjourn the hearing. If the hearing is adjourned the drainage authority shall require the auditor or, for a joint county drainage system, the auditors of affected counties to procure an option to acquire the needed right-of-way at an expense not exceeding the estimated cost specified in the detailed survey report. The order establishing the drainage project may not be made until the option is procured. If the option is procured and the drainage project established, the option shall be exercised and the cost of the right-of-way shall be paid as a part of the cost of the drainage project.

HIST: 1990 c 391 art 5 s 61

103E.411 DRAINAGE SYSTEM AS OUTLET FOR MUNICIPALITY.

Subdivision 1. **Petition.** A municipality may use a drainage system as an outlet for its municipal drainage system or the overflow from the system under the provisions of this section. The municipality must petition to the drainage authority to use the drainage system. The petition must:

(1) show the necessity for the use of the drainage system as an outlet;

(2) show that the use of the drainage system will be of public benefit and utility and promote the public health;

(3) be accompanied by a plat showing the location of the drainage system and the location of the municipal drainage system; and

(4) be accompanied by specifications showing the plan of connection from the municipal drainage system to the drainage system.

Subd. 2. **Approval by pollution control agency.** The plan for connecting the municipal drainage system to the drainage system must be approved by the pollution control agency.

Subd. 3. **Filing; notice.** (a) If proceedings to establish the drainage project to be used as an outlet are pending, the petition must be filed with the auditor. The municipal drainage system petition must be presented to the drainage authority at the final hearing to consider the detailed survey report and viewers' report. Notice of the municipal drainage system petition must be included in the final hearing notice.

(b) If the drainage system to be used as an outlet is

established, the municipal drainage system petition must be filed with the auditor. When the petition is filed, the drainage authority in consultation with the auditor shall, by order, set a time and place for hearing on the petition. Notice of the hearing must be given by publication and by mailed notice to the auditor of each affected county.

Subd. 4. **Hearing and order.** (a) At the hearing the drainage authority may receive all evidence of interested parties for or against the granting of the petition. The drainage authority, by order, may authorize the municipality to use the drainage system as an outlet, subject to the conditions that are necessary and proper to protect the rights of the parties and safeguard the interests of the general public, if the drainage authority determines:

(1) that a necessity exists for the use of the drainage system as an outlet for the municipal drainage system or the overflow from the system;

(2) that use of the drainage system will be of public utility and promote the public health; and

(3) that the proposed connection conforms to the requirements of the pollution control agency and provides for the construction and use of proper disposal works.

(b) The drainage authority must, by order, make the municipality a party to the drainage proceedings and determine the benefits from using the drainage project or system as an outlet.

Subd. 5. **Benefits and assessments if drainage system is established.** If the drainage system is established, the drainage authority must determine the amount the municipality must pay for the privilege of using the drainage system as an outlet. The amount must be paid to the affected counties and credited to the account of the drainage system used as an outlet. The municipality is liable for all subsequent liens and assessments for the repair and maintenance of the drainage system in proportion to the benefits, as though the benefits were determined in the order establishing the drainage system.
HIST: 1990 c 391 art 5 s 62

CONSTRUCTION OF DRAINAGE PROJECT

103E.501 CONTRACT AND BOND.

Subdivision 1. **Preparation.** The county attorney, the engineer, and the attorney for the petitioners shall prepare the contract and bond. The contract and bond must include the provisions required by this chapter and section 574.26 for bonds given by contractors for public works and must be conditioned as provided by section 574.26 for the better security of the contracting counties and parties performing labor and furnishing material in performance of the contract. The prepared contract and bond must be attached and provided to the contractor for

execution.

Subd. 2. **Contractor's bond.** The contractor shall file a bond with the auditor for an amount not less than 75 percent of the contract price of the work. The bond must have adequate surety and be approved by the auditor. The bond must provide that the surety for the bond is liable for all damages resulting from a failure to perform work under the contract, whether the work is resold or not, and that any person or political subdivision showing damages from the failure to perform work under the contract may maintain an action against the bond in their own names. Actions may be successive in favor of all persons injured, but the aggregate liability of the surety for all the damages may not exceed the amount of the bond. The surety is liable for the tile work guaranteed by the contractor. The contractor is considered a public officer and the bond an official bond within the meaning of section 574.24 construing the official bonds of public officers as security to all persons and providing for actions on the bonds by a party that is damaged.

Subd. 3. **Contract.** The contract must contain a specific description of the work to be done, either expressly or by reference to the plans and specifications, and must provide that the work must be done and completed as provided in the plans and specifications and subject to the inspection and approval of the engineer. The contract must provide that time is of the essence of the contract, and that if there is a failure to perform the work according to the terms of the contract within the time given in the original contract or as extended, the contractors shall forfeit and pay the affected counties an amount stated in the contract as liquidated damages. The amount must be fixed by the auditor for each day that the failure of performance continues.

Subd. 4. **Contract provisions for changes during construction.** The contract must give the engineer the right, with the consent of the drainage authority, to modify the detailed survey report, plans, and specifications as the work proceeds and as circumstances require. The contract must provide that the increased cost resulting from the changes will be paid by the drainage authority to the contractor at a rate not greater than the amount for similar work in the contract. A change may not be made that will substantially impair the usefulness of any part of the drainage project or system, substantially alter its original character, or increase its total cost by more than ten percent of the total original contract price. A change may not be made that will cause the cost to exceed the total estimated benefits found by the drainage authority or that will cause any detrimental effects to the public interest under section 103E.015, subdivision 1.

Subd. 5. **Contract with federal unit.** If any portion of the work is to be done by the United States or an agency of

the United States, a bond or contract is not necessary for that portion of the work, except that a contract must be made if the United States or its agencies require a contract with the local governmental units. The contract must contain the terms, conditions, provisions, and guaranties required by the United States or its agencies to proceed with the work.

Subd. 6. Guaranty of tile work. If tile is used to construct any part of the drainage project, a majority of the persons affected may file a written request with the auditor to contract the tile work separately. The request must be filed before advertising for the sale of the work has begun. If the request is properly made, the tile work must be contracted separately. The contractor must guarantee the tile work under the contract for three years after its completion against any fault or negligence on the part of the contractor. The advertisement for bids must include this requirement.

Subd. 7. Modification of contract by agreement. This chapter does not prevent the persons with property affected by the construction of a drainage project from uniting in a written agreement with the contractor and the surety of the contractor's bond to modify the contract as to the manner or time when any portion of the drainage project is constructed, if the modification is recommended, in writing, by the engineer and approved by the drainage authority.

HIST: 1990 c 391 art 5 s 63

103E.505 AWARDING THE CONSTRUCTION CONTRACT.

Subdivision 1. Auditors and drainage authority to proceed. Thirty days after the order establishing a drainage project is filed, the auditor and the drainage authority or, for a joint county drainage project, a majority of the auditors of the affected counties shall proceed to award the contract to construct the drainage project.

Subd. 2. Pending appeal of benefits and damages. If an appeal regarding the determination of benefits and damages is made within 30 days after the order establishing the drainage project has been filed, a contract may not be awarded until the appeal has been determined, unless the drainage authority orders the contract awarded. The auditor of an affected county or an interested person may request the drainage authority to make the order. If the request is not made by an affected auditor, the auditors of affected counties must be given notice five days before the hearing on the request.

Subd. 3. Notice of contract awarding. The auditor of an affected county shall give notice of the awarding of the contract by publication in a newspaper in the county. The notice must state the time and location for awarding the contract. For a joint county drainage project the auditors shall award the contract at the office of the auditor where the proceedings are pending. If the estimated cost of construction

is more than \$3,000, the auditor must also place a notice in a drainage construction trade newspaper. The trade newspaper notice must state:

- (1) the time and location for awarding the contract;
- (2) the approximate amount of work and its estimated cost;
- (3) that bids may be for the work as one job, or in sections, or separately, for bridges, ditches and open work, tile, or tile construction work, if required or advisable;
- (4) that each bid must be accompanied by a certified check or a bond furnished by an approved surety corporation payable to the auditors of affected counties for ten percent of the bid, as security that the bidder will enter into a contract and give a bond as required by section 103E.501; and
- (5) that the drainage authority reserves the right to reject any and all bids.

Subd. 4. Engineer shall attend awarding of contract.

The engineer shall attend the meeting to award the contract. A bid may not be accepted without the engineer's approval of the bidder's compliance with plans and specifications.

Subd. 5. How contract may be awarded. The contract may be awarded in one job, in sections, or separately for labor and material and must be let to the lowest responsible bidder.

Subd. 6. Bids exceeding 130 percent of estimated cost not accepted. Bids that in the aggregate exceed the total estimated cost of construction by more than 30 percent may not be accepted.

Subd. 7. Affected counties contract through auditor.

The chair of the drainage authority and the auditor of each affected county shall contract, in the names of their respective counties, to construct the drainage project in the time and manner and according to the plans and specifications and the contract provisions in this chapter.

Subd. 8. Work done by federal government. If any of the drainage work is to be done by the United States or its agencies, a notice of awarding that contract does not need to be published and a contract for that construction is not necessary. Affected municipalities may contract or arrange with the United States or its agencies for cooperation or assistance in constructing, maintaining, and operating the drainage project and system, for control of waters in the district, or for making a survey and investigation or reports on the drainage project or system. The municipalities may provide required guaranty and protection to the United States or its agencies.

HIST: 1990 c 391 art 5 s 64

103E.511 PROCEDURE IF CONTRACT IS NOT AWARDED DUE TO BIDS OR COSTS.

Subdivision 1. Conditions to use procedure in this section. The procedure in this section may be used if, after a drainage system is established:

(1) the only bids received are for more than 30 percent in excess of the engineer's estimated cost, or in excess of the benefits, less damages and other costs; or

(2) a contract is awarded, but due to unavoidable delays not caused by the contractor, the contract cannot be completed for an amount equal to or less than the benefits, less damages and other costs.

Subd. 2. Petition after cost estimate error or change to lower cost. A person interested in the drainage project may petition the drainage authority if the person determines that the engineer made an error in the estimate of the drainage project cost or that the plans and specifications could be changed in a manner materially affecting the cost of the drainage system without interfering with efficiency. The petition must state the person's determinations and request that the detailed survey report and viewers' report be referred back to the engineer and to the viewers for additional consideration.

Subd. 3. Petition after excessive cost due to inflation. (a) A person interested in the drainage project may petition the drainage authority for an order to reconsider the detailed survey report and viewers' report if the person determines:

(1) that bids were received only for a price more than 30 percent in excess of the detailed survey report estimate because inflation increased the construction cost between the time of the detailed survey cost estimate and the time of awarding the contract; or

(2) that after the contract was awarded there was unavoidable delay not caused by the contractor, and between the time of awarding the contract and completion of construction inflation increased construction costs resulting in the contract not being completed for an amount equal to or less than the assessed benefits.

(b) The person may request in the petition that the drainage authority reconsider the original cost estimate in the detailed survey report and viewers' report and adjust the cost estimate consistent with the increased construction cost.

Subd. 4. Hearing ordered after receipt of petition. After receiving a petition, the drainage authority shall order a hearing. The order must designate the time and place of the hearing and direct the auditor to give notice by publication.

Subd. 5. Hearing on cost petition. (a) At the hearing the drainage authority shall consider the petition and hear all interested parties.

(b) The drainage authority may, by order, authorize the engineer to amend the detailed survey report, if the drainage authority determines that:

(1) the detailed survey report cost estimate was erroneous and should be corrected;

(2) the plans and specifications could be changed in a

manner materially affecting the cost of the drainage project without interfering with efficiency; and

(3) with the correction or modification a contract could be awarded within the 30 percent limitation and equal to or less than benefits.

(c) If the drainage authority determines that the amended changes affect the amount of benefits or damages to any property or that the benefits should be reexamined because of inflated land values or inflated construction costs, it shall refer the viewers' report to the viewers to reexamine the benefits and damages.

(d) The drainage authority may, by order, direct the engineer and viewers to amend their detailed survey report and viewers' report to consider the inflationary cost increases if the drainage authority determines that:

(1) bids were not received; or

(2) because of inflationary construction cost increases, construction under the awarded contract cannot be completed for 30 percent or less over the detailed survey cost estimate or in excess of the benefits, less damages and other costs.

(e) The drainage authority may continue the hearing to give the engineer or viewers additional time to amend the reports. The jurisdiction of the drainage authority continues at the adjourned hearing.

(f) The drainage authority has full authority to consider the amended reports and make findings and orders. A party may appeal to the district court under section 103E.091, subdivision 1.

HIST: 1990 c 391 art 5 s 65

103E.515 DAMAGES, PAYMENT.

The board of each county where the damaged property is located must order the awarded damages to be paid, less any assessment against the property, before the property is entered for construction of the drainage project. If a county or a municipality that is awarded damages requests it, the assessment may not be deducted. If there is an appeal, the damages may not be paid until the final determination. If it is not clear who is entitled to the damages, the board may pay the damages to the court administrator of the district court of the county. The court shall direct the court administrator, by order, to pay the parties entitled to the damages.

HIST: 1990 c 391 art 5 s 66

103E.521 SUPERVISION OF CONSTRUCTION.

The drainage authority shall require the engineer to supervise and inspect the construction under contract. The drainage authority shall cause the contracts under this chapter to be performed properly.

HIST: 1990 c 391 art 5 s 67

**103E.525 CONSTRUCTION AND MAINTENANCE OF BRIDGES AND
CULVERTS.**

Subdivision 1. **Hydraulic capacity.** A public or private bridge or culvert may not be constructed or maintained across or in a drainage system with less hydraulic capacity than specified in the detailed survey report, except with the written approval of the director of the division of waters. If the detailed survey report does not specify the hydraulic capacity, a public or private bridge or culvert in or across a drainage system ditch may not be constructed without the director's approval of the hydraulic capacity.

Subd. 2. **Road authority responsible for construction.** Bridges and culverts on public roads required by the construction or improvement of a drainage project or system must be constructed and maintained by the road authority responsible for keeping the road in repair, except as provided in this section.

Subd. 3. **Notice; charging cost.** The auditor shall notify the state and each railroad company, corporation, or political subdivision that they are to construct a required bridge or culvert on a road or right-of-way under their jurisdiction, within a reasonable time as stated in the notice. If the work is not done within the prescribed time, the drainage authority may order the bridge or culvert constructed as part of the drainage project construction. The cost must be deducted from the damages awarded to the corporation or collected from it as an assessment for benefits. If the detailed survey report or viewers' report shows that the construction of the bridge or culvert is necessary, the drainage authority may, by order, retain an amount to secure the construction of the bridge or culvert from amounts to be paid to a railroad, corporation, or political subdivision.

Subd. 4. **Construction on line between two cities paid equally.** The costs of constructing a bridge or culvert that is required by construction of a drainage project on a public road that is not a state trunk highway on the line between two statutory or home rule charter cities, whether in the same county or not, must be paid jointly, in equal shares, by the cities. The cities shall pay jointly, in equal shares, for the cost of maintaining the bridge or culvert.

Subd. 5. **Construction on town and county lines.** The cost of constructing and maintaining bridges and culverts on a town or county road across a drainage system ditch constructed along the boundary line between towns or counties, with excavated material deposited on the boundary line or within 33 feet of the line, must be paid equally by the town or county where the bridge or culvert is located and the other town or county adjoining the boundary.

HIST: 1990 c 391 art 5 s 68

103E.526 CONSTRUCTION OF ROAD INSTEAD OF BRIDGE OR CULVERT.

If the drainage authority finds that constructing a private road would be more cost-effective or practical than constructing a bridge or culvert, the drainage authority may order that a private road be constructed. The private road must be constructed and maintained in the same manner as a bridge or culvert. The private road must be constructed in a manner suitable for farm vehicles but may not have a right-of-way wider than 33 feet. The drainage authority has jurisdiction over the land required for the private road and the road is part of the drainage system.

HIST: 1990 c 391 art 5 s 69

103E.53 RULES TO STANDARDIZE FORMS.

The director may adopt rules to standardize the forms and sizes of maps, plats, drawings, and specifications in drainage proceedings. The director must require the permanent grass strips acquired under section 103E.021 to be shown on the maps and maintain an inventory of all permanent grass strips acquired by drainage authorities.

HIST: 1990 c 391 art 5 s 70

103E.531 INSPECTION OF DRAINAGE CONSTRUCTION AND PARTIAL PAYMENTS.

Subdivision 1. **Inspection and report.** The engineer shall inspect and require the work as it is being completed to be done in accordance with the plans, specifications, and contract for construction. Each month during the work, the engineer shall report to the drainage authority, in writing, showing the work completed since the previous report and all materials furnished under the contract.

Subd. 2. **Preliminary certificate.** The engineer shall issue with the monthly report a preliminary certificate for work done and approved or materials delivered. The certificate must contain the station numbers of the work covered by the certificate and the total value of all work done and the materials furnished according to the contract. For each ditch section, the certificate must show the actual volume, in cubic yards, of the excavation completed. For joint county drainage systems the certificate must also show the percentage of the total value to be paid by each county in the proportion fixed by the drainage authority order. Each certificate must show that a loss will not occur as a result of a partial payment. A duplicate of the certificate must be delivered to the auditor of each affected county.

Subd. 3. **Partial payment.** The affected counties must pay the contractor, based on the certificate, 90 percent of the total value of work done and approved and 90 percent of the total value of material furnished and delivered. The materials

may only be delivered as required in the course of construction and authorized by the engineer.

HIST: 1990 c 391 art 5 s 71

103E.535 PARTIAL PAYMENT OF RETAINED CONTRACT AMOUNTS.

Subdivision 1. Petition for partial payment of retained value. If a single contract exceeds \$50,000, and the contract, exclusive of materials furnished and not installed, is one-half or more complete and the contractor is not in default, the contractor may file a verified petition with the auditor stating these facts and requesting that an order be made to pay 40 percent of the retained value of work and material.

Subd. 2. Notice of hearing. When the petition is filed, the auditor shall set a time and location for a hearing on the petition before the drainage authority. At least five days before the date of hearing, the auditor shall give notice by mail of the date and location of hearing to the engineer, the attorney for the petitioners, the surety of the contractor's bond, and auditors of the affected counties.

Subd. 3. Hearing. At the hearing the drainage authority shall hear all parties interested. If the drainage authority determines that the facts in the petition are correct, the work has been performed in a satisfactory manner, and a portion of the retained percentage may be released without endangering the interests of affected counties, the drainage authority shall state the findings and may order not more than 40 percent of the retained value of work and material to be paid.

HIST: 1990 c 391 art 5 s 72

103E.541 EXTENSION OF TIME ON CONTRACTS.

The auditors of affected counties may extend the time for the performance of a contract as provided in this section. The contractor may apply, in writing, for an extension of the contract. Notice of the application must be given to: (1) the engineer and the attorney for the petitioners; and (2) for a joint county drainage project, to the auditors of the affected counties. The auditors may grant an extension if sufficient reasons are shown. The extension does not affect a claim for liquidated damages that may arise after the original time expires and before an extension or a claim that may arise after the time for the extension expires.

HIST: 1990 c 391 art 5 s 73

103E.545 REDUCTION OF CONTRACTOR'S BOND.

Subdivision 1. Application to drainage authority. The contractor, at the end of each season's work and before the contract is completed, may make a verified application to the drainage authority to reduce the contractor's bond and file the application with the auditor. The application must state:

- (1) the work certified as completed by the engineer;

- (2) the value of the certified work;
- (3) the amount of money received by the contractor and the amount retained by the drainage authority;
- (4) the amount unpaid by the contractor for labor or material furnished on the contract; and
- (5) a request for an order to reduce the amount of the contractor's bond.

The application must be filed with the auditor.

Subd. 2. Notice of hearing. When an application is filed, the auditor, by order, shall set the time and location for a hearing on the application. Ten days before the hearing, notice of the hearing must be published in each affected county and notice by mail given to the engineer, the attorney for the petitioners, and the auditor of each affected county. The contractor must pay the cost of publishing the hearing notice.

Subd. 3. Hearing; reduction of bond. The drainage authority may, by order, reduce the contractor's bond if it determines that the contractor is not in default and that a loss will not result from reducing the bond. The bond may be reduced to an amount sufficient to protect the affected counties from loss and damage, but the reduction:

- (1) may not be more than 35 percent of the amount already paid to the contractor;
- (2) may not affect the remaining amount of the bond;
- (3) does not affect liability incurred on the bond before the reduction; and
- (4) does not affect a provision for a three-year guaranty of tile work.

HIST: 1990 c 391 art 5 s 74

103E.551 CONTRACTOR'S DEFAULT.

Subdivision 1. Notice. If a contractor defaults in the performance of the contract, the auditor shall mail a notice of the default to the contractor, the surety of the contractor's bond, the engineer, and the auditors of the affected counties. The notice must specify the default and state that if the default is not promptly removed and the contract completed, the unfinished portion of the contract will be awarded to another contractor.

Subd. 2. Completion of contract by surety. If the surety of the contractor's bond promptly proceeds with the completion of the contract, the affected auditors may grant an extension of time. If the contract is completed by the surety, the balance due on the contract must be paid to the surety, less damages incurred by the affected counties from the default.

Subd. 3. Awarding of contract; recovery on bond. If the surety of the contractor's bond does not undertake the completion of the contract or does not complete the contract within the time specified or extended, auditors of the affected counties shall advertise for bids to complete the contract in

the manner provided in the original awarding of contracts. The drainage authority may recover the increased amounts paid to a subsequent contractor after reselling the work, and damages incurred by affected counties, from the first contractor's bond.
HIST: 1990 c 391 art 5 s 75

103E.555 ACCEPTANCE OF CONTRACT.

Subdivision 1. **Engineer's report and notice.** When a contract is completed, the engineer shall make a report to the drainage authority showing the contract price, the amount paid on certificates, the unpaid balance, and the work that is completed under the contract. When the report is filed, the auditor shall set a time and location for a hearing on the report. The auditor shall give notice of the hearing by publication or notice by mail at least ten days before the hearing to the owners of affected property. The notice must state that the report is filed, the time and location for the hearing, and that a party objecting to the acceptance of the contract may appear and be heard.

Subd. 2. **Hearing.** At the hearing the drainage authority may, by order, direct payment of the balance due if it determines that the contract has been completed in accordance with the plans and specifications. If good cause is shown, the drainage authority may waive any part of the liquidated damages accruing under the contract. When the order is filed, the auditor shall draw a warrant on the treasurer of the county for the balance due on the contract. For a joint county drainage project or system the auditor shall make an order to the auditors of the affected counties to pay for their proportionate shares of the balance due on the contract. After receiving the order, the auditor of each affected county shall draw a warrant on the treasurer of the county for the amount specified in the order.

HIST: 1990 c 391 art 5 s 76

FUNDING, COLLECTION, AND PAYMENT OF DRAINAGE SYSTEM COSTS

103E.601 DRAINAGE LIEN STATEMENT.

Subdivision 1. **Determination of property liability.** When the contract for the construction of a drainage project is awarded, the auditor of an affected county shall make a statement showing the total cost of the drainage project with the estimated cost of all items required to complete the work. The cost must be prorated to each tract of property affected in direct proportion to the benefits. The cost, less any damages, is the amount of liability for each tract for the drainage project. The property liability must be shown in the tabular statement as provided in subdivision 2, opposite the property owner's name and description of each tract of property. The amount of liability on a tract of property for establishment and

construction of a drainage project may not exceed the benefits determined in the proceedings that accrue to the tract.

Subd. 2. **Drainage lien statement.** The auditor of each affected county shall make a lien statement in tabular form showing:

(1) the names of the property owners, corporate entities, or political subdivisions of the county benefited or damaged by the construction of the drainage project in the viewers' report as approved by the final order for establishment;

(2) the description of the property in the viewers' report, and the total number of acres in each tract according to the county tax lists;

(3) the number of acres benefited or damaged in each tract shown in the viewers' report;

(4) the amount of benefits and damages to each tract of property as stated in the viewers' report and confirmed by the final order that established the drainage project unless the order is appealed and a different amount is set; and

(5) the amount each tract of property will be liable for and must pay to the county for the establishment and construction of the drainage project.

Subd. 3. **Supplemental drainage lien statement.** If any items of the cost of the drainage project have been omitted from the original drainage lien statement, a supplemental drainage lien statement with the omitted items must be made and recorded in the same manner provided for a drainage lien statement. The total amount of the original drainage lien and any supplemental drainage liens may not exceed the benefits.

Subd. 4. **Recording drainage lien statement.** The lien against property in the drainage lien statement and supplemental drainage lien statements must be certified by the auditor and recorded on each tract by the county recorder of the county where the tract is located. The county recorder's fees for recording must be paid if allowed by the board. The drainage lien statement and any supplemental drainage lien statements, after recording, must be returned and preserved by the auditor.

HIST: 1990 c 391 art 5 s 77

103E.605 EFFECT OF FILED DRAINAGE LIEN.

The amount recorded from the drainage lien statement and supplemental drainage lien statement that each tract of property will be liable for, and the interest allowed on that amount, is a drainage lien on the property. The drainage lien is a first and paramount lien until fully paid, and has priority over all mortgages, charges, encumbrances, and other liens, unless the board subordinates the drainage lien to liens of record. The recording of the drainage lien, drainage lien statement, or a supplemental drainage lien statement is notice to all parties of the existence of the drainage lien.

HIST: 1990 c 391 art 5 s 78

103E.611 PAYMENT OF DRAINAGE LIENS AND INTEREST.

Subdivision 1. Payment of drainage lien principal.

(a) Drainage liens against property benefited under this chapter are payable to the treasurer of the county in 20 or less equal annual installments. The first installment of the principal is due on or before November 1 after the drainage lien statement is recorded, and each subsequent installment is due on or before November 1 of each year afterwards until the principal is paid.

(b) The drainage authority may, by order, direct the drainage lien to be paid by 1/15 of the principal on or before five years from November 1 after the lien statement is recorded, and 1/15 on or before November 1 of each year afterwards until the principal is paid.

(c) The drainage authority may order that the drainage lien must be paid by one or two installments, notwithstanding paragraphs (a) and (b), if the principal amount of a lien against a lot or tract of property or against a county or municipality is less than \$50.

Subd. 2. Interest. (a) Interest is an additional drainage lien on all property until paid. The interest rate on the drainage lien principal from the date the drainage lien statement is recorded must be set by the board but may not exceed the rate determined by the state court administrator for judgments under section 549.09.

(b) Before the tax lists for the year are given to the county treasurer, the auditor shall compute the interest on the unpaid balance of the drainage lien at the rate set by the board. The amount of interest must be computed on the entire unpaid principal from the date the drainage lien was recorded to August 15 of the next calendar year, and afterwards from August 15 to August 15 of each year.

(c) Interest is due and payable after November 1 of each year the drainage lien principal or interest is due and unpaid.

Subd. 3. Collection of payments. Interest and any installment due must be entered on the tax lists for the year. The installment and interest must be collected in the same manner as real estate taxes for that year by collecting one-half of the total of the installment and interest with and as a part of the real estate taxes.

Subd. 4. Prepayment of interest. Interest may be paid at any time, computed to the date of payment, except that after the interest is entered on the tax lists for the year, it is due as entered, without a reduction for prepayment.

Subd. 5. Payment of drainage liens with bonds. The board may direct the county treasurer to accept any outstanding bond that is a legal obligation of the county under this chapter issued on account of a drainage lien in payment of drainage liens under the provisions of this chapter. The bonds must be accepted at their par value plus accrued interest.

Subd. 6. Drainage lien record. The auditor shall

keep a drainage lien record for each drainage project and system showing the amount of the drainage lien remaining unpaid against each tract of property.

Subd. 7. Collection and enforcement of drainage liens.

The provisions of law that exist relating to the collection of real estate taxes are adopted to enforce payment of drainage liens. If there is a default, a penalty may not be added to an installment of principal and interest, but each defaulted payment, principal, and interest draws interest from the date of default until paid at the rate determined by the state court administrator for judgments under section 549.09.

HIST: 1990 c 391 art 5 s 79

103E.615 ENFORCEMENT OF ASSESSMENTS.

Subdivision 1. Municipalities. Assessments filed for benefits to a municipality are a liability of the municipality and are due and payable with interest in installments on November 1 of each year as provided in section 103E.611. If the installments and interest are not paid on or before November 1, the amount due with interest added as provided in section 103E.611 must be extended by the county auditor against all property in the municipality that is liable to taxation. A levy must be made and the amount due must be paid and collected in the same manner and time as other taxes.

Subd. 2. County or state-aid road. If a public road benefited is a county or state-aid road, the assessment filed is against the county and must be paid out of the road and bridge fund of the county.

Subd. 3. State trunk highway. An assessment against the state for benefits to trunk highways is chargeable to and payable out of the trunk highway fund. The commissioner of transportation shall pay assessments from the trunk highway fund after receipt of a certified copy of the assessment against the state for benefits to a trunk highway.

Subd. 4. Assessment for vacated town roads. If a town is assessed for benefits to a town road in a drainage project proceeding under this chapter and the town road is later vacated by the town board under section 164.07, the town board may petition the drainage authority to cancel the assessment. The drainage authority may cancel the assessment if it finds that the town road for which benefits are assessed has been vacated under section 164.07.

Subd. 5. State property. State property, including rural credit property, is assessable for benefits received. The assessment must be paid by the state from funds appropriated and available for drainage assessments after the state officer having jurisdiction over the assessed property certifies the assessment to the commissioner of finance.

Subd. 6. Assessments on wildlife lands to be paid from wildlife acquisition fund. An assessment against state land

acquired for wildlife habitat shall be paid from the game and fish fund as provided in section 97A.071, subdivision 4.

Subd. 7. **Railroad and utility property.** Property owned by a railroad or other utility corporation benefited by a drainage project is liable for the assessments of benefits on the property as other taxable property. From the date the drainage lien is recorded, the amount of the assessment with interest is a lien against all property of the corporation within the county. Upon default the assessment may be collected by civil action or the drainage lien may be foreclosed by action in the same manner as provided by law for the foreclosure of mortgage liens. The county where the drainage lien is filed has the right of action against the corporation to enforce and collect the assessment.

HIST: 1990 c 391 art 5 s 80

103E.621 SATISFACTION OF LIENS.

When a drainage lien with the accumulated interest is fully paid, the auditor shall issue a certificate of payment with the auditor's official seal and record the certificate with the county recorder. The recorded certificate releases and discharges the drainage lien. The auditor may collect 25 cents for each description in the certificate. The auditor's fee and the fee of the county recorder must be paid from the account for the drainage system.

HIST: 1990 c 391 art 5 s 81

103E.625 SUBDIVISION BY PLATTING MUST HAVE LIENS APPORTIONED.

A tract of property with a drainage lien that is subdivided by platting is not complete and the plat may not be recorded until the drainage liens against the tracts are apportioned and the apportionment is filed with the county recorder of the county where the tract is located.

HIST: 1990 c 391 art 5 s 82

103E.631 APPORTIONMENT OF LIENS.

Subdivision 1. **Petition.** A person who has an interest in property that has a drainage lien attached to it may petition the drainage authority to apportion the lien among specified portions of the tract if the payments of principal and interest on the property are not in default.

Subd. 2. **Notice.** When the petition is filed, the drainage authority shall, by order, set a time and location for a hearing on the petition. The drainage authority shall give notice of the hearing by personal service to the auditor, the occupants of the tract, and all parties having an interest in the tract as shown by the records in the county recorder's office. The service must be made at least ten days before the hearing. If personal service cannot be made to all interested

persons, notice may be given by publication. The petitioner shall pay the costs for service or publication.

Subd. 3. **Hearing.** The drainage authority shall hear all related evidence and, by order, apportion the lien. A certified copy of the order must be recorded in the county recorder's office and filed with the auditor.

HIST: 1990 c 391 art 5 s 83

103E.635 DRAINAGE BOND ISSUES.

Subdivision 1. **Authority.** After the contract for the construction of a drainage project is awarded, the board of an affected county may issue the bonds of the county in an amount necessary to pay the cost of establishing and constructing the drainage project.

Subd. 2. **Single issue for two or more drainage systems.** The board may include two or more drainage systems in a single drainage bond issue. The total amount of the drainage bond issue may not exceed the total cost, including expenses, to be assessed to pay for the drainage systems. The total cost to be assessed must be determined or estimated by the board when the drainage bonds are issued.

Subd. 3. **Security and source of payment.** The drainage bonds must be issued in accordance with chapter 475 and must pledge the full faith, credit, and resources of the county for the prompt payment of the principal and interest of the drainage bonds. The drainage bonds are primarily payable from the funds of the drainage systems financed by the bonds or from the common drainage bond redemption fund of the county. The common drainage bond redemption fund may be created by resolution of the county board as a debt redemption fund for the payment of drainage bonds issued under this chapter.

Subd. 4. **Payment period and interest on drainage bonds.**

(a) The board shall determine, by resolution:

(1) the time of payment for the drainage bonds, not to exceed 23 years from their date of issue;

(2) the rates of interest for the drainage bonds, with the net average rate of interest over the term of the bonds not to exceed the rate established under section 475.55; and

(3) whether the drainage bonds are payable annually or semiannually.

(b) The board shall determine the years and amounts of principal maturities that are necessary by the anticipated collections of the drainage systems assessments, without regard to any limitations on the maturities imposed by section 475.54.

Subd. 5. **Temporary drainage bonds maturing in two years or less.** The board may issue and sell temporary drainage bonds under this subdivision maturing not more than two years after their date of issue, instead of bonds as provided under subdivision 4. The county shall issue and sell definitive drainage bonds before the maturity of bonds issued under this

subdivision and use the proceeds to pay for the temporary drainage bonds and interest to the extent that the temporary bonds are not paid for by assessments collected or other available funds. The holders of temporary drainage bonds and the taxpayers of the county have and may enforce by mandamus or other appropriate proceedings:

(1) all rights respecting the levy and collection of assessments sufficient to pay the cost of drainage proceedings and construction financed by the temporary drainage bonds that are granted by law to holders of other drainage bonds, except the right to require levies to be collected before the temporary drainage bonds mature; and

(2) the right to require the offering of definitive drainage bonds for sale, or to require the issuance of definitive drainage bonds in exchange for the temporary drainage bonds, on a par for par basis, bearing interest at the rate established under section 475.55 if the definitive drainage bonds have not been sold and delivered before the maturity of the temporary drainage bonds.

Subd. 6. Definitive drainage bonds. The definitive drainage bonds issued in exchange for an issue of temporary drainage bonds must be numbered and mature serially at times and in amounts to allow the principal and interest to be paid when due by the collection of assessments levied for the drainage systems financed by the temporary bond issue. The definitive bonds are subject to redemption and prepayment on any interest payment date when the county notifies the definitive bondholders who have registered their names and addresses with the county treasurer. The bondholders must be notified by mail 30 days before the interest payment date. The definitive bonds must be delivered in order of their serial numbers, lowest numbers first, to the holders of the temporary drainage bonds in order of the serial numbers of the bonds held by them.

Subd. 7. Sale of definitive drainage bonds. The board must sell and negotiate the definitive drainage bonds for at least their par value. The definitive bonds must be sold in accordance with section 475.60.

Subd. 8. County investment, purchase, and selling of temporary drainage bonds. (a) Funds of the issuing county may be invested in temporary drainage bonds under sections 471.56 and 475.66, except that the temporary drainage bonds may be:

(1) purchased by the county when the temporary drainage bonds are initially issued;

(2) purchased only out of funds that the board determines will not be required for other purposes before the temporary drainage bonds mature; and

(3) resold before the temporary drainage bonds mature only if there is an unforeseen emergency.

(b) If a temporary drainage bond purchase is made from money held in a sinking fund for other bonds of the county, the

holders of the other bonds may enforce the county's obligation to sell definitive bonds at or before the maturity of the temporary drainage bonds, or exchange the other bonds, in the same manner as holders of the temporary drainage bonds.

Subd. 9. Delivery of bonds as drainage work proceeds.

The board may provide in the contract for the sale of drainage bonds, temporary drainage bonds, and definitive drainage bonds, that the bonds are delivered as the drainage work proceeds and the money is needed, and that interest is paid only from the date of delivery.

Subd. 10. Bond recital. Each drainage bond, temporary drainage bond, and definitive drainage bond must contain a recital that it is issued by authority of and in strict accordance with this chapter. The recital is conclusive in favor of the holders of the bonds as against the county, that the drainage project has been properly established, that property within the county is subject to assessment for benefits in an amount not less than the amount of the bonds, and that all proceedings and construction relative to the drainage systems financed by the bonds have been or will be made according to law.

Subd. 11. How bonds may be paid. The board may pay drainage bonds, temporary drainage bonds, and definitive drainage bonds issued under this chapter from any available funds in the county treasury if the money in the common drainage bond redemption fund or in the drainage fund for the issued bonds is insufficient. The county treasury funds that money is transferred from must be reimbursed, with interest at a rate of seven percent per year for the time the money is actually needed, from assessments on the drainage systems or from the sale of drainage funding bonds.

HIST: 1990 c 391 art 5 s 84

103E.641 DRAINAGE FUNDING BONDS.

Subdivision 1. Authority. The board may issue drainage funding bonds under the conditions and terms in this section.

Subd. 2. Conditions for issuance. Drainage funding bonds may be issued if:

(1) money in a drainage system account or in the common drainage bond redemption fund will not be sufficient to pay the principal and interest of the drainage bonds payable from the funds and becoming due within one year afterwards; or

(2) the county has paid any of the principal or interest on any of its drainage bonds from county funds other than the fund from which the bonds are payable, or by the issuance of county warrants issued and outstanding.

Subd. 3. Auditor's certificate. (a) Before drainage funding bonds are authorized or issued under this section, the county auditor shall first sign and seal a certificate and present the certificate to the board. The board shall enter the

certificate in its records. The certificate must state in detail, for each of the several drainage systems:

(1) the amount that will be required to pay an existing shortage under subdivision 2; and

(2) the probable amount that will be required to pay the principal and interest of the county's outstanding drainage bonds that become due within one year afterwards.

(b) The certificate is conclusive evidence that the county has authority to issue bonds under the provisions of this section in an amount that does not exceed the aggregate amount specified in the auditor's certificate.

Subd. 4. **Issuance of bonds.** When the auditor's certificate is entered in the board's records, the board may issue and sell, from time to time, county drainage funding bonds for the same drainage purposes as the funds listed in the certificate were used. The bonds must be designated drainage funding bonds. The board shall authorize issuance of the drainage funding bonds by resolution. The drainage funding bonds must be sold, issued, bear interest, and obligate the county as provided in section 103E.635 for drainage bonds. The drainage funding bonds must mature serially in annual installments that are payable within 15 years.

Subd. 5. **Application of bond proceeds.** The proceeds of drainage funding bonds that are paid into the treasury must be applied to the purpose for which they are issued.

Subd. 6. **County bond obligation.** Drainage funding bonds are general obligations of the county but are not included in determining the county's net indebtedness under any law.

HIST: 1990 c 391 art 5 s 85

103E.645 ALLOWANCE AND PAYMENT OF FEES AND EXPENSES.

Subdivision 1. **Fees and expenses.** The fees and expenses in this section are allowed and must be paid for services provided under this chapter.

Subd. 2. **Engineer, engineer's assistants, and other employees.** The compensation of the engineer, the engineer's assistants, and other employees is on a per diem basis and must be set by order of the drainage authority. The order setting compensation must provide for payment of the actual and necessary expenses of the engineer, the engineer's assistants, and other employees, including the cost of the engineer's bond.

Subd. 3. **Viewers.** Each viewer may be paid for every necessary day the viewer is engaged on a per diem basis and for the viewer's actual and necessary expenses. The compensation must be set by the drainage authority.

Subd. 4. **Board members.** Each member of the board may be paid a per diem under section 375.055, subdivision 1, and actual and necessary expenses incurred while actually employed in drainage proceedings or construction, or in the inspection of any drainage system if the board member is appointed to a

committee for that purpose.

Subd. 5. **Auditor, attorney for the petitioners, and other county officials.** The county auditor and the attorney for the petitioners must each be paid reasonable compensation for services actually provided as determined by the drainage authority. The fees and compensation of all county officials in drainage proceedings and construction are in addition to other fees and compensation allowed by law.

Subd. 6. **Petitioners' bond.** The cost of the petitioners' bond must be allowed and paid.

Subd. 7. **Payment.** The fees and expenses provided for in this chapter for a drainage project or system in one county must be audited, allowed, and paid by order of the board or for a drainage project or system in more than one county must be audited, allowed, and paid by order of the drainage authority after ten days' written notice to each affected county. The notice must be given by the auditor to the auditors of affected counties. The notice must state the time and location of the hearing and that all bills on file with the auditor at the date of the notice must be presented for hearing and allowance.

HIST: 1990 c 391 art 5 s 86

103E.651 DRAINAGE SYSTEM ACCOUNT.

Subdivision 1. **Funds for drainage system costs.** The board shall provide funds to pay the costs of drainage projects and systems.

Subd. 2. **Drainage system account.** The auditor shall keep a separate account for each drainage system. The account must be credited with all money from the sale of bonds and bond premiums and all money received from interest, liens, assessments, and other sources for the drainage system. The account must be debited with every item of expense made for the drainage system.

Subd. 3. **Investment of surplus funds.** If a drainage system account or the common drainage bond redemption fund has a surplus over the amount required for payment of obligations presently due and payable from the account or fund, the board may invest any part of the surplus in bonds or certificates of indebtedness of the United States or of the state.

Subd. 4. **Dormant drainage system account transferred to general revenue fund.** If a surplus has existed in a drainage system account for a period of 20 years or more and there have not been any expenditures from the account during the period, the board, by a unanimous resolution, may transfer the surplus remaining in the drainage system account to the general revenue fund of the county.

HIST: 1990 c 391 art 5 s 87

103E.655 PAYMENT OF DRAINAGE SYSTEM COSTS.

Subdivision 1. **Payment made from drainage system account.** The costs for a drainage project proceeding and construction must be paid from the drainage system account by drawing on the account.

Subd. 2. **Insufficient funds; transfer from other accounts.** If money is not available in the drainage system account on which the warrant is drawn, the board may, by unanimous resolution, transfer funds from any other drainage system account under its jurisdiction or from the county general revenue fund to the drainage system account. If the board transfers money from another account or fund to a drainage system account, the money plus interest must be reimbursed from the proceeds of the drainage system that received the transfer. The interest must be computed for the time the money is actually needed at the same rate per year charged on drainage liens and assessments.

Subd. 3. **Warrant on account with insufficient funds; interest on warrant.** If a warrant is issued by the auditor under this chapter and there is not enough money in the drainage system account to pay the warrant when it is presented, the county treasurer shall endorse the warrant "Not paid for want of funds" with the date and treasurer's signature. Interest on the warrant must be at the rate of six percent per year and paid annually from available funds until the warrant is called in and paid by the treasurer. Interest may not be paid on a warrant after money is available to the treasurer to pay the warrants. The warrant is a general obligation of the county issuing the warrant.

HIST: 1990 c 391 art 5 s 88

103E.661 EXAMINATION AND ESTABLISHMENT OF DRAINAGE SYSTEM ACCOUNTS BY STATE AUDITOR.

Subdivision 1. **State auditor must examine accounts upon application.** A county may apply, by resolution, to the state auditor to examine the accounts and records of any or all drainage systems in the county.

Subd. 2. **Establishment of accounts.** The auditor must establish a system of accounts for each drainage system applied for in the county.

Subd. 3. **Payment of expenses.** The compensation and travel and hotel expenses of the examining accountant must be audited, allowed, and paid into the state treasury by the board. The money must be credited to the general fund. The county auditor shall apportion the expenses among the drainage systems in the county.

HIST: 1990 c 391 art 5 s 89

PROCEDURE TO REPAIR DRAINAGE SYSTEMS

103E.701 REPAIRS.

Subdivision 1. **Definition.** The term "repair," as used in this section, means to restore all or a part of a drainage system as nearly as practicable to the same condition as originally constructed and subsequently improved, including resloping of ditches and leveling of waste banks if necessary to prevent further deterioration, realignment to original construction if necessary to restore the effectiveness of the drainage system, and routine operations that may be required to remove obstructions and maintain the efficiency of the drainage system.

Subd. 2. **Repairs affecting public waters.** Before a repair is ordered, the drainage authority must notify the commissioner if the repair may affect public waters. If the commissioner disagrees with the repair depth, the engineer, a representative appointed by the director, and a soil and water conservation district technician must jointly determine the repair depth using soil borings, field surveys, and other available data or appropriate methods. Costs for determining the repair depth beyond the initial meeting must be shared equally by the drainage system and the commissioner. The determined repair depth must be recommended to the drainage authority. The drainage authority may accept the joint recommendation and proceed with the repair.

Subd. 3. **Repair of town ditches.** The town board has the power of a drainage authority to repair a town drainage system located within the town.

Subd. 4. **Bridges and culverts.** (a) Highway bridges and culverts constructed on a drainage system established on or after March 25, 1947, must be maintained by the road authority charged with the duty of maintenance under section 103E.525.

(b) Private bridges or culverts constructed as a part of a drainage system established by proceedings that began on or after March 25, 1947, must be maintained by the drainage authority as part of the drainage system. Private bridges or culverts constructed as a part of a drainage system established by proceedings that began before March 25, 1947, may be maintained, repaired, or rebuilt and any portion paid for as part of the drainage system by the drainage authority.

(c) For a repair of a drainage system that has had redetermination of benefits under section 103E.351, the drainage authority may repair or rebuild existing bridges or culverts on town and home rule charter and statutory city roads constructed as part of the drainage system and any portion of the cost may be paid by the drainage system.

Subd. 5. **Construction of road instead of bridge or culvert.** In a repair proceeding under sections 103E.701 to 103E.745, if the drainage authority finds that constructing a

private road is more cost-effective or practical than constructing a bridge or culvert, a drainage authority may order a private road to be constructed under section 103E.526, instead of a bridge or culvert.

HIST: 1990 c 391 art 5 s 90

103E.705 REPAIR PROCEDURE.

Subdivision 1. **Inspection.** After the construction of a drainage system has been completed, the drainage authority shall maintain the drainage system that is located in its jurisdiction including grass strips under section 103E.021 and provide the repairs necessary to make the drainage system efficient. The drainage authority shall have the drainage system inspected on a regular basis by an inspection committee of the drainage authority or a drainage inspector appointed by the drainage authority.

Subd. 2. **Grass strip inspection and compliance notice.**

(a) The drainage authority having jurisdiction over a drainage system must inspect the drainage system for violations of section 103E.021. If an inspection committee of the drainage authority or a drainage inspector determines that permanent grass strips are not being maintained in compliance with section 103E.021, a compliance notice must be sent to the property owner.

(b) The notice must state:

- (1) the date the ditch was inspected;
- (2) the persons making the inspection;
- (3) that spoil banks are to be spread in a manner consistent with the plan and function of the drainage system and the drainage system has acquired a grass strip 16-1/2 feet in width or to the crown of the spoil bank, whichever is greater;
- (4) the violations of section 103E.021;
- (5) the measures that must be taken by the property owner to comply with section 103E.021 and the date when the property must be in compliance; and
- (6) that if the property owner does not comply by the date specified, the drainage authority will perform the work necessary to bring the area into compliance with section 103E.021 and charge the cost of the work to the property owner.

(c) If a property owner does not bring an area into compliance with section 103E.021 as provided in the compliance notice, the inspection committee or drainage inspector must notify the drainage authority.

(d) This subdivision applies to property acquired under section 103E.021.

Subd. 3. **Drainage inspection report.** For each drainage system that the board designates and requires the drainage inspector to examine, the drainage inspector shall make a drainage inspection report in writing to the board after examining a drainage system, designating portions that need repair or maintenance of grass strips and the location and

nature of the repair or maintenance. The board shall consider the drainage inspection report at its next meeting and may repair all or any part of the drainage system as provided under this chapter. The grass strips must be maintained in compliance with section 103E.021.

Subd. 4. **Inspection report to drainage authority.** If the inspection committee or drainage inspector reports, in writing, to the drainage authority that maintenance of grass strips or repairs are necessary on a drainage system and the report is approved by the drainage authority, the maintenance or repairs must be made under this section.

Subd. 5. **Repairs less than \$50,000.** If the drainage authority finds that the estimated cost of repairs and maintenance of one drainage system for one year will be less than the greater of \$50,000 or \$1,000 per mile of open ditch in the ditch system, it may have the repair work done by hired labor and equipment without advertising for bids or entering into a contract for the repair work.

Subd. 6. **Annual repair assessment levy limits.** The drainage authority may give notice of and hold a hearing on the repair levy before ordering the levy of an assessment for repairs. In one calendar year the drainage authority may not levy an assessment for repairs or maintenance on one drainage system for more than 20 percent of the benefits of the drainage system, \$1,000 per mile of open ditch in the ditch system, or \$50,000, whichever is greater, except for a repair made after a disaster as provided under subdivision 7 or under the petition procedure.

Subd. 7. **Repair and construction after disaster.** The drainage authority may repair and reconstruct the drainage system without advertising for bids and without regard to the \$1,000 per mile of open ditch or \$50,000 limitation if:

(1) a drainage system is destroyed or impaired by floods, natural disaster, or unforeseen circumstances;

(2) the area where the drainage system is located has been declared a disaster area by the President of the United States and federal funds are available for repair or reconstruction; and

(3) the public interests would be damaged by repair or reconstruction being delayed.

HIST: 1990 c 391 art 5 s 91

103E.711 COST APPORTIONMENT FOR JOINT COUNTY DRAINAGE SYSTEMS.

Subdivision 1. **Repair cost statement.** For a joint county drainage system the auditor of a county that has made repairs may present a repair cost statement at the end of each year, or other convenient period after completion, to each affected county. The repair cost statement must show the nature and cost of the repairs to the drainage system and must be based

on the original apportionment of cost following the establishment of the drainage system. If a board approves the repair costs, the amount of the statement must be paid to the county submitting the statement.

Subd. 2. **Repair cost statement not paid.** (a) If a county does not pay the amount of the repair cost statement, the board of an affected county may petition the joint county drainage authority. The petition must:

- (1) show the nature and necessity of the repairs made to the drainage system in the county during the period;
- (2) show the cost of the repairs; and
- (3) request the drainage authority to apportion the costs, by order, among the affected counties.

(b) When the petition is filed, the drainage authority shall, by order, set a time and location for a hearing to apportion the costs, and direct the auditor to give notice of the hearing to each affected county by publication and notice by mail to its auditor. At or before the hearing, the auditor of each affected county, except the petitioner, shall file with the drainage authority a statement showing:

- (1) all repairs made to the drainage system in that county, not previously reimbursed;
- (2) the nature and necessity of the repairs; and
- (3) the cost of the repairs.

(c) The drainage authority has jurisdiction over the affected counties and shall hear all interested parties. The drainage authority shall determine which repairs were necessary and reasonable and proper costs. For the allowed repairs the drainage authority shall balance the accounts among the affected counties, by charging each county with its proportionate share of the cost of all repairs made and crediting each county with the amount paid for the repairs. The drainage authority shall order a just reimbursement among the affected counties. A certified copy of the order must be filed by the auditor with the auditors of affected counties, and the boards shall make the required reimbursement.

HIST: 1990 c 391 art 5 s 92

103E.715 PROCEDURE FOR REPAIR BY PETITION.

Subdivision 1. **Repair petition.** An individual or an entity interested in or affected by a drainage system may file a petition to repair the drainage system. The petition must state that the drainage system needs repair. The auditor shall present the petition to the board at its next meeting or, for a joint county drainage system, to the drainage authority within ten days after the petition is filed.

Subd. 2. **Engineer's repair report.** If the drainage authority determines that the drainage system needs repair, the drainage authority shall appoint an engineer to examine the drainage system and make a repair report. The report must show

the necessary repairs, the estimated cost of the repairs, and all details, plans, and specifications necessary to prepare and award a contract for the repairs. The drainage authority may give notice and order a hearing on the petition before appointing the engineer.

Subd. 3. **Notice of hearing.** When the repair report is filed, the auditor shall promptly notify the drainage authority. The drainage authority in consultation with the auditor shall set a time, by order, not more than 30 days after the date of the order for a hearing on the repair report. At least ten days before the hearing, the auditor shall give notice by mail of the time and location of the hearing to the petitioners, owners of property, and political subdivisions likely to be affected by the repair in the repair report.

Subd. 4. **Hearing on repair report.** (a) The drainage authority shall make findings and order the repair to be made if:

(1) the drainage authority determines from the repair report and the evidence presented that the repairs recommended are necessary for the best interests of the affected property owners; or

(2) the repair petition is signed by the owners of at least 26 percent of the property area affected by and assessed for the original construction of the drainage system, and the drainage authority determines that the drainage system is in need of repair so that it no longer serves its original purpose and the cost of the repair will not exceed the total benefits determined in the original drainage system proceeding.

(b) The order must direct the auditor and the chair of the board or, for a joint county drainage system, the auditors of the affected counties to proceed and prepare and award a contract for the repair of the drainage system. The contract must be for the repair described in the repair report and as determined necessary by the drainage authority, and be prepared in the manner provided in this chapter for the original drainage system construction.

Subd. 5. **Apportionment of repair cost for joint county drainage system.** For the repair of a joint county drainage system, the drainage authority shall, by order, apportion the repair cost among affected counties in the same manner required in the original construction of the drainage system.

Subd. 6. **Repair by resloping ditches, leveling waste banks, installing erosion control, and removing trees.** (a) For a drainage system that is to be repaired by resloping ditches, leveling waste banks, installing erosion control measures, or removing trees, before ordering the repair, the drainage authority must appoint viewers to assess and report on damages and benefits if it determines that:

(1) the resloping, leveling, installing erosion control measures, or tree removal will require the taking of any property not contemplated and included in the original

proceeding for the establishment of the drainage system;

(2) any waste bank leveling will directly benefit property where the bank leveling is specified; and

(3) the installation of erosion control measures will aid the long-term efficiency of the drainage system.

(b) The viewers shall assess and report damages and benefits as provided by sections 103E.315 and 103E.321. The drainage authority shall hear and determine the damages and benefits as provided in sections 103E.325, 103E.335, and 103E.341. The hearing shall be held within 30 days after the property owners' report is mailed. Damages must be paid as provided by section 103E.325 as a part of the cost of the repair, and benefits must be added to the benefits previously determined as the basis for the pro rata assessment for the repair of the drainage system for the repair proceeding only.

HIST: 1990 c 391 art 5 s 93

103E.721 REPLACEMENT AND HYDRAULIC CAPACITY OF BRIDGES AND CULVERTS.

Subdivision 1. **Report on hydraulic capacity.** If the engineer determines in a drainage system repair proceeding that because of added property under section 103E.741 or otherwise, a bridge constructed or replaced or culvert installed or replaced as a part of a drainage system provides inadequate hydraulic capacity for the efficient operation of the drainage system to serve its original purpose, the engineer shall make a hydraulic capacity report to the drainage authority. The hydraulic capacity report must include plans and specifications for the recommended replacement of bridges and culverts, the necessary details to make and award a contract, and the estimated cost.

Subd. 2. **Notice.** When the hydraulic capacity report is filed, the auditor shall promptly notify the drainage authority. The drainage authority in consultation with the auditor shall, by order, set a time not more than 30 days after the date of the order, for a hearing on the report. At least ten days before the hearing, the auditor shall give notice by mail of the time and location of the hearing to the petitioners, owners of property, and political subdivisions likely to be affected by the repair proposed in the repair report. The notice may be given in conjunction with and as a part of the repair report notice, but the notice must specifically state that increasing the hydraulic capacity will be considered by the drainage authority at the hearing.

Subd. 3. **Report hearing.** At the hearing on the hydraulic capacity report, the drainage authority shall hear all interested parties. If the drainage authority finds that existing bridges and culverts provide insufficient hydraulic capacity for the efficient operation of the drainage system as originally constructed or subsequently improved, the drainage authority shall make findings accordingly, and may order that

the hydraulic capacity be increased by constructing bridges or installing culverts of a sufficient capacity. The drainage authority shall determine and include in the order the type and plans for the replacement bridges or culverts. The order must direct the state, political subdivision, railroad company, or other entity to construct bridges or culverts required by the order for its road or right-of-way within a reasonable time stated in the order. The auditor shall notify the state, political subdivision, railroad company, or other entity to construct the bridges and culverts in accordance with the order.

Subd. 4. Construction not completed within specified time. If the work is not done within the time specified, the drainage authority may order the bridges and culverts built and the cost collected as an assessment for benefits.

Subd. 5. Request for culvert or bridge to be installed as part of repair. If a political subdivision, railroad company, or other entity, at the hearing or when notified to construct a bridge or install a culvert, requests that the bridge or culvert be installed as part of the repair of the drainage system, the drainage authority may, by order, direct the cost of the construction and installation be assessed and collected from the political subdivision, railroad company, or other entity in the manner provided by section 103E.731.

HIST: 1990 c 391 art 5 s 94

103E.725 COST OF REPAIR.

All fees and costs incurred for proceedings relating to the repair of a drainage system, including inspections, engineering, viewing, and publications, are costs of the repair and must be assessed against the property and entities benefited.

HIST: 1990 c 391 art 5 s 95

103E.728 APPORTIONMENT OF REPAIR COSTS.

Subdivision 1. Generally. The cost of repairing a drainage system shall be apportioned pro rata on all property and entities that have been assessed benefits for the drainage system except as provided in this section.

Subd. 2. Additional assessment for agricultural practices on grass strip. (a) The drainage authority may, after notice and hearing, charge an additional assessment on property that has agricultural practices on or otherwise violates provisions related to the permanent grass strip acquired under section 103E.021.

(b) The drainage authority may determine the cost of the repair per mile of open ditch on the ditch system. Property that is in violation of the grass requirement shall be assessed a cost of 20 percent of the repair cost per open ditch mile multiplied by the length of open ditch in miles on the property in violation.

(c) After the amount of the additional assessment is

determined and applied to the repair cost, the balance of the repair cost may be apportioned pro rata as provided in subdivision 1.

Subd. 3. **Soil loss violations.** The drainage authority after notice and hearing may make special assessments on property that is in violation of a county soil loss ordinance. HIST: 1990 c 391 art 5 s 96

103E.731 ASSESSMENT; BONDS.

Subdivision 1. **Repair cost of assessments.** If there is not enough money in the drainage system account to make a repair, the board shall assess the costs of the repairs on all property and entities that have been assessed benefits for the drainage system.

Subd. 2. **Number of installments.** The assessments may be paid in annual installments specified in the assessment order. If the assessments are not more than 50 percent of the original cost of the drainage system, the installments may not exceed ten. If the assessments are greater than 50 percent of the original cost of the drainage system, the board may order the assessments to be paid in 15 or less installments.

Subd. 3. **Interest on assessments.** If the order provides for payment in installments, interest on unpaid assessments from the date of the order for assessments must be set by the board in the order. The interest rate may not exceed seven percent per year and must be collected with each installment.

Subd. 4. **Collection of assessments.** If the assessment is not payable in installments, a lien does not need to be filed, and the assessment, plus interest from the date of the order to August 15 of the next calendar year, must be entered on the tax lists for the year. The assessment and interest are due and payable with and as a part of the real estate taxes for the year. If an assessment is levied and payable in installments, the auditor shall file for the record in the county recorder's office an additional tabular statement in substance as provided in section 103E.601, and all the provisions of sections 103E.605, 103E.611, and 103E.615 relating to collection and payment must apply to the assessment. Upon the filing of the tabular statement, the installment and interest are due and payable and must be entered on the tax lists and collected in the same manner as the original lien.

Subd. 5. **Conditions to sell bonds for repair.** If a contract for drainage system repair has been entered into under this chapter or the repair has been ordered to be constructed by hired labor and equipment, and the board has ordered the assessments to be paid in installments, the board may issue and sell bonds, as provided by section 103E.635.

Subd. 6. **Repair of state drainage system when no benefits were assessed.** For the repair of a drainage system

established by the state where benefits were not assessed to the property, the drainage authority shall proceed to appoint viewers to determine the benefits resulting from the repair and collect assessments for the repair as provided in this chapter.
HIST: 1990 c 391 art 5 s 97

103E.735 DRAINAGE SYSTEM REPAIR FUND.

Subdivision 1. **Authority and limits of fund.** To create a repair fund for a drainage system to be used only for repairs, the drainage authority may apportion and assess an amount against all property and entities assessed for benefits in proceedings for establishment of the drainage system, including property not originally assessed and subsequently found to be benefited according to law. The fund may not exceed 20 percent of the assessed benefits of the drainage system or \$40,000, whichever is greater. If the account in a fund for a drainage system exceeds the larger of 20 percent of the assessed benefits of the drainage system or \$40,000, assessments for the fund may not be made until the account is less than the larger of 20 percent of the assessed benefits or \$40,000. Assessments must be made pro rata according to the determined benefits. Assessments may be made payable, by order, in equal annual installments. The auditor shall file a tabular statement as provided in section 103E.731, subdivision 4, with the county recorder. Assessments must be collected as provided in section 103E.731.

Subd. 2. **Transfer of drainage system.** If a drainage system within the county has been taken over by a watershed district, or if responsibility for repair and maintenance of the drainage system has been assumed by any other governing body, the board may transfer any remaining surplus of the drainage system repair fund to the repair fund of the watershed district or to the appropriate fund of any existing governing body having responsibility for repair and maintenance of the drainage system.
HIST: 1990 c 391 art 5 s 98

103E.741 INCLUSION OF PROPERTY THAT HAS NOT BEEN ASSESSED BENEFITS.

Subdivision 1. **Consideration by engineer.** In a proceeding to repair a drainage system, if the engineer determines or is made aware that property that was not assessed for benefits for construction of the drainage system has been drained into the drainage system or has otherwise benefited from the drainage system, the engineer shall submit a map with the repair report. The map must show all public and private main ditches and drains that drain into the drainage system, all property affected or otherwise benefited by the drainage system, and the names of the property owners to the extent practicable. The property owners must be notified of the hearing on the repair report at least ten days before the hearing. The auditor

must give notice of the time and location of the hearing by mail.

Subd. 2. **Appointment of viewers.** At the hearing on the repair report, if the drainage authority determines that property not assessed for benefits for the construction of the drainage system has been benefited by the drainage system, the drainage authority shall appoint viewers as provided by section 103E.305 before the repair contract is awarded. The viewers shall determine the benefits to all property and entities benefited by the original construction of the drainage system and not assessed for benefits arising from its construction. The viewers shall make a viewers' repair report to the drainage authority as provided by section 103E.315. When the viewers' repair report is filed, the auditor shall give notice of a hearing as required by section 103E.325 and the drainage authority has jurisdiction of each tract of property described in the viewers' report as provided in section 103E.331.

Subd. 3. **Viewers' repair report hearing.** At the hearing on the viewers' repair report, the drainage authority shall hear all interested parties and determine the benefits to property and entities benefited by the original construction of the drainage system and not assessed for benefits.

Subd. 4. **Appeal of assessment order.** A person may appeal from the order determining the assessments as provided by section 103E.091.

Subd. 5. **Property benefited in hearing order included in future proceedings.** For the repair of the drainage system under this section that included the property that was not assessed and in all future proceedings relating to repairing, cleaning, improving, or altering the drainage system, the property benefited in the viewers' report hearing is part of the property benefited by the drainage system and must be assessed, in the same manner provided for the assessment of the property originally assessed for and included in the drainage system.

HIST: 1990 c 391 art 5 s 99

103E.745 COST OF REPAIR EXCEEDING BENEFITS IN ANOKA COUNTY.

If the cost of the repair of a drainage system exceeds the benefits determined in the original proceedings for the establishment of the drainage system, the requirements of section 103E.215 for improvements of drainage systems apply if:

- (1) the repair will result in the drainage of 100 or more acres of public waters in Anoka county;
- (2) the public waters have existed for 15 or more years;
- (3) the drainage system has not been substantially repaired for more than 25 years; and
- (4) the physical repair was not started before July 1, 1980.

HIST: 1990 c 391 art 5 s 100

CONSOLIDATION, DIVISION, AND ABANDONMENT OF DRAINAGE SYSTEMS

103E.801 CONSOLIDATION OR DIVISION OF DRAINAGE SYSTEMS.

Subdivision 1. Authority to consolidate or divide.

After the benefited area of a drainage system has been redetermined by the drainage authority under section 103E.351 or in connection with drainage proceedings, the drainage authority may divide one system into two or more separate systems, consolidate two or more systems, transfer part of one system to another, or attach a part of a system that has been abandoned as provided in section 103E.805 or 103E.811 to another system to provide for the efficient administration of the system consistent with the redetermination of the benefited area.

Subd. 2. Initiation of action. The consolidation or division may be initiated by the drainage authority on its own motion or by any party interested in or affected by the drainage system filing a petition. If the system is under the jurisdiction of a drainage authority, the petition must be filed with the auditor. If the system is under the jurisdiction of a watershed board, the petition must be filed with the secretary of the board.

Subd. 3. Hearing. (a) When a drainage authority or watershed board directs by resolution or a petition is filed, the drainage authority in consultation with the auditor or secretary shall set a time and location for a hearing. The auditor or secretary shall give notice by publication to all persons interested in the drainage system. The drainage authority may consolidate or divide drainage systems, by order, if it determines that the division of one system into two or more separate systems, the consolidation of two or more systems, the transfer of part of one system to another, or the attachment of a previously abandoned part of a system to another system:

(1) is consistent with the redetermination of the benefited areas of the drainage system;

(2) would provide for the efficient administration of the drainage system; and

(3) would be fair and equitable.

(b) An order to consolidate or divide drainage systems does not release property from a drainage lien or assessment filed for costs incurred on account of a drainage system before the date of the order.

HIST: 1990 c 391 art 5 s 101

103E.805 REMOVAL OF PROPERTY FROM AND PARTIAL ABANDONMENT OF A DRAINAGE SYSTEM.

Subdivision 1. Petition. After the construction of a drainage system, the owner of benefited property may petition the drainage authority to remove property from the drainage system or abandon any part of the drainage system that is not of public benefit and utility and does not serve a substantial

useful purpose to property remaining in the system if:

(1) waters are diverted from property assessed for benefits so that the drainage from the property does not use or affect the drainage system; or

(2) a dam authorized by law is constructed in the drainage system so that the property above the dam cannot use or receive benefits from the drainage system.

Subd. 2. **Filing.** If the drainage system is under the jurisdiction of a drainage authority, the petition must be filed with the auditor. If the system is under the jurisdiction of a watershed district, the petition must be filed with the secretary of the district.

Subd. 3. **Hearing.** (a) When the petition is filed, the drainage authority in consultation with the auditor or the secretary shall set a time and location for a hearing on the partial abandonment petition and shall give notice by publication of the hearing to all persons interested in the drainage system.

(b) At the hearing, the drainage authority shall make findings and shall direct, by order, that the petitioners' property be removed from the drainage system if the drainage authority determines:

(1) that the waters from the petitioners' property have been diverted from the drainage system, or that a dam has been lawfully constructed and the property cannot use the drainage system;

(2) that the property is not benefited by the drainage system and does not use or affect the drainage system; and

(3) that removing the property from the drainage system will not prejudice the property owners and property remaining in the system.

(c) The drainage authority shall make findings and direct, by order, that part of the drainage system be abandoned if the drainage authority determines that part of the drainage system does not serve a substantial useful purpose to any property remaining in the system and is not of a substantial public benefit and utility.

Subd. 4. **Effect of removing property from drainage system.** The property that has been removed from the drainage system is not affected by the drainage system at any later proceeding for the repair or improvement of the drainage system and a drainage lien or assessment for repairs or improvements may not be made against the property that has been removed on or after the date of the order.

Subd. 5. **Liens and assessments on property removed or abandoned.** An order under this section does not release the property from a drainage lien filed on account of the drainage system before the date of the order. An order under this section does not release the property from any assessment or a drainage lien filed on or after the date of the order for costs

incurred on account of the drainage system before the date of the order.

HIST: 1990 c 391 art 5 s 102

103E.811 ABANDONMENT OF DRAINAGE SYSTEM.

Subdivision 1. **Drainage lien payment period must expire.** After the period originally fixed or subsequently extended to pay the assessment of the drainage liens expires, a drainage system may be abandoned as provided in this section.

Subd. 2. **Petitioners.** A petition must be signed by at least 51 percent of the property owners assessed for the construction of the drainage system or by the owners of not less than 51 percent of the area of the property assessed for the drainage system. For the purpose of the petition, the county is the resident owner of all tax-forfeited property held by the state and assessed benefits for the drainage system, and the board may execute the petition for the county as an owner.

Subd. 3. **Petition.** The petition must designate the drainage system proposed to be abandoned and show that the drainage system is not of public benefit and utility because the agricultural property that used the drainage system has been generally abandoned or because the drainage system has ceased to function and its restoration is not practical.

Subd. 4. **Filing petition; jurisdiction.** If all property assessed for benefits in the drainage system is in one county, the petition must be filed with the auditor unless the petition is signed by the board, in which case the petition must be made to the district court of the county and filed with the court administrator. If property assessed for benefits is in two or more counties, the petition must be filed with the auditor. When the petition is filed, the drainage authority in consultation with the auditor, or the court administrator with the approval of the court, shall set a time and location for a hearing on the petition. The auditor or court administrator shall give notice by publication of the time and location of the abandonment hearing to all persons interested. The drainage authority or the district court where the petition is properly filed has jurisdiction of the petition.

Subd. 5. **Abandonment hearing.** (a) At the hearing, the drainage authority or court shall examine the petition and determine whether it is sufficient and shall hear all interested parties.

(b) If a property owner assessed benefits for the drainage system appears and makes a written objection to the abandonment of the drainage system, the drainage authority or court shall appoint three disinterested persons as viewers to examine the property and report to the drainage authority or court. The hearing must be adjourned to make the examination and report and a date must be set to reconvene. The viewers, if appointed, shall proceed to examine the property of the objecting owner and

report as soon as possible to the drainage authority or court with the description and situation of the property and whether the drainage system drains or otherwise affects the property.

(c) When the hearing is reconvened, the drainage authority or court shall consider the viewers' report and all evidence offered, and:

(1) if the drainage authority determines that the drainage system serves any useful purpose to any property or the general public, the petition for abandonment must be denied; or

(2) if the drainage authority determines that the drainage system does not serve any useful purpose to any affected property and is not of public benefit and utility, the drainage authority or court shall make findings and shall, by order, abandon the drainage system.

Subd. 6. **Effect of abandonment.** After abandonment of a drainage system, a repair petition for the drainage system may not be accepted and the responsibility of the drainage authority for the maintenance of the drainage system ends.

HIST: 1990 c 391 art 5 s 103