Minnesota Public Drainage Manual

Chapter 4 – I-VII. Viewing and Appraising

I. A. Overview

Drainage projects must be financially feasible to be constructed. Projects also require money to cover the cost of design, property acquisition, construction, and future maintenance of the system. A process for determining the benefits and damages that a drainage system generates is called "viewing". Viewing, 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. The assignment of benefits and damages is probably the most controversial part of drainage proceedings.

There are ten (10) types of drainage proceedings that require the appointment of viewers to determine benefits or award damages. Viewers are also used to recommend an outlet fee when a person petitions to use the drainage system as an outlet (Minn. Stat. § 103E.401). Reference to the procedures for viewers based on these different types of proceedings is provided below:

Drainage Projects

1. New Drainage System Projects (Section II, 1.);
2. Improvement of Drainage System (Section II, 2.);
3 Improvement of Outlets (Section II, 3.); and
4. Laterals (Section II, 4.).

Drainage Proceedings

5. Redetermination of Benefits and Damages (Section II, 5.);
6. Repair by Resloping Ditches, Incorporating Multistage Ditch Cross-Sections, Leveling Spoil Banks, Installing Erosion Control, or Removing Trees (Section II, 6.);
7. Inclusion of Property That Has Not Been Assessed Benefits (Section II, 7.);
8. Abandonment of Drainage System (Section II, 8.);
9. Incremental Acquisition of Grass Strips (Section II, 9.); and
10. Drainage System Transfer (Section II, 10.).

II. Procedures Requiring Viewing

Ten types of drainage proceedings require the appointment of viewers to determine benefits or award damages:

Drainage Projects

1. New Drainage System Projects;
2. Improvement of Drainage System;
3. Improvement of Outlets; and
4. Laterals.

Drainage Proceedings

5. Redetermination of Benefits and Damages;
6. Repair by Resloping Ditches, Incorporating Multistage Ditch Cross-Section, Leveling Spoil Banks,
Installing Erosion Control, or Removing Trees;
7. Inclusion of Property That Has Not Been Assessed Benefits;
8. Abandonment of a Drainage System;
9. Incremental Acquisition of Grass Buffers; and
10. Drainage Systems Transfers.

In addition, viewers are often used to recommend an outlet fee under Minn. Stat. § 103E.401 when a person petitions to use the drainage system as an outlet.1

1. New Drainage System Projects
The determination of benefits and extent of damages by viewers for new drainage system projects by viewers is discussed in greater detail in Section IV.

2. Improvement of Drainage System
Improvement of existing drainage systems means the tiling, enlarging, extending, straightening, or deepening of an established and constructed system.2 Viewers appointed for improvement proceedings must determine the benefits received as a result of the improvement above and over the benefits determined to have been received when the existing drainage system was established.3 Consequently, viewers may assess benefits to properties found to receive benefits from the improvement that were not found to be benefited when the existing drainage system was established.4 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 whether it is only for the benefit of specific properties. The benefits may be assigned to parcels near the portion of the drainage system improved or the proposed project may serve as an improvement for all benefitted areas located above the proposed improvement work. If a project includes an impoundment or diversion of some or all flows, benefits may occur downstream from the improvement.5 It is important for the viewers to discuss with the engineer the benefits that could be received by properties if a drainage system is repaired versus benefits created by the drainage system improvement. The associated costs for repair or maintenance are often referred to as “separable maintenance” costs, which are assessed to all benefited lands in the drainage system, while the improvement costs are assessed only to the lands benefited by the improvement.

Viewers must also determine the damages caused by the improvement over and above the damages caused and presumably awarded at the time the existing drainage system was established.6 Damages may be awarded to properties an improvement passes over and to downstream properties, if the project increases the likelihood of flooding or causes some other identifiable and quantifiable damage. (Minn. Stat. § 103E.315, subd. 8(1) & 4). Damages may include the acquisition of additional property for right-of-way, buffer strips, best management practices, or structures. (Minn. Stat. § 103E.315, subd. 8(1)).

Drainage authorities are advised to appoint viewers to conduct a redetermination of benefits concurrently with preparation of the viewers’ report for the improvement because an improvement of a portion of an existing drainage system inherently changes the original benefits or damages determined
for the existing drainage system. If the old viewing is not updated, the determination of improvement benefits and damages will result in two, disproportionate benefits rolls. New areas will pay a disproportionate share of future repair costs.

3. Improvement of Outlets

Minn. Stat. § 103E.221 is a remedial statute for landowners downstream of an existing or proposed public or private drainage system. If a proposed public drainage project, a proposed private drainage project, or an existing public drainage system utilizes an existing public drainage system, watercourse, or body of water as its outlet and the construction or proposed construction of the project or system causes an overflow of the existing public drainage system, watercourse, or body of water on adjoining property, an affected county or the owners of the overflowed property may initiate, by petition, outlet improvement proceedings under Minn. Stat. § 103E.221.

The determination of benefits received and awarding of damages for improvement of outlet proceedings can be similar to improvement proceedings. One difference is that in improvement proceedings, 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 may go.

In an improvement of outlet proceeding, the drainage code indicates that the viewers shall determine and report the benefits to all property benefitting from the improved outlet, including property drained by the existing drainage system or to be drained by a proposed drainage project. The determination of benefits must be based on an independent determination as it is conceivable that lands lying in the upper reaches of the existing or proposed drainage system will not benefit from the outlet improvement in the same proportion as they benefit from the construction of the existing or proposed drainage system.

4. Laterals

A lateral is a branch or extension, system of branches and extensions, or a drain that connects property or provides an outlet to an established drainage system.

Viewing for the construction of laterals is similar to new drainage 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 drainage 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 (i.e., through 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 and Damages

The redetermination of benefits process is used when 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. It may be implied without making specific findings that the benefited or damaged areas of a drainage system have changed when the
drainage authority is petitioned for and approves one of the following projects: a drainage system is improved; an outlet is improved; or a lateral is constructed. Benefits and damages should be redetermined concurrent with such proceedings.

The redetermination of benefits process is also used 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.

A redetermination of benefits should be viewed similar to determining benefits for a new drainage system. In order to bring benefits in line with current land use practices and land values, viewers need to determine benefits from scratch—as if no drainage system previously existed.

The redetermination of benefits process is most often used to correct problems with outdated viewers’ reports. It may be initiated by the drainage authority upon determining that the factors warranting a redetermination exist, with or without any other action (i.e. repair or improvement) being proposed. Most often, however, redeterminations are initiated in conjunction with necessary maintenance, major repairs, or the establishment of the buffer strip.

6. Repair by Resloping Ditches, Incorporating Multistage Ditch Cross-Sections, Leveling Spoil Banks, Installing Erosion Control, or Removing Trees

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, incorporate multi-stage ditch cross-sections, level spoil piles, install erosion control structures, or remove trees beyond the area originally damaged or occupied by construction or subsequent improvement of the drainage system. It is rare that benefits are ever assessed because such actions are not likely to change the benefits of the drainage system; damages, however, are often 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. Damages are determined in the same manner as required for drainage system improvements. The drainage authority must define the area and nature of additional damages and ensure that the land has already been paid damages in earlier proceedings.

7. Inclusion of Property That Has Not Been Assessed Benefits

In repair proceedings, 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 showing 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. The property owners are then notified of the hearing on the repair report. If, at the hearing on the repair report, the drainage authority finds 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 to determine benefits for the property not assessed benefits for the construction of the drainage system.

The viewing for this type of proceeding is targeted at determining drainage benefits to the lands not previously assessed. Benefits are determined in the same manner as required for drainage system
improvements. Similar to proceedings to improve a portion of a drainage system, benefits determinations to include previously unassessed property inherently changes the original benefits determined for the existing drainage system. Again, drainage authorities are advised to consider whether a redetermination of benefits for the entire system is necessary. If the old viewing is not updated, the benefits for the newly included property will result in two, disproportionate benefits rolls. New areas will pay a disproportionate share of future repair costs.

8. Abandonment of Drainage System
A proceeding to abandon a drainage system may be initiated by 51 percent of the assessed property owners or owners of 51 percent of the area assessed for the drainage system proposed for abandonment. The petition must 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.

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. 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. The viewers submit a report to the drainage authority as soon as possible with the description and situation of the property and whether the drainage system drains or otherwise affects the property. If the drainage authority determines that the drainage system serves any useful purpose to any property or the general public, then the abandonment petition must be denied. Despite the objections, abandonment may be approved if the drainage authority determines that the project no longer serves any useful purpose and is not of public benefit and utility.

9. Incremental Acquisition of Grass Strips
A drainage authority may acquire grass buffer areas in an independent proceeding. Notwithstanding other provisions of the drainage code, a drainage authority may acquire and implement permanent buffer strips of perennial vegetation or side inlet controls adjacent to a public drainage ditch, where necessary to control erosion and sedimentation, improve water quality, or maintain the efficiency of the drainage system. In such a proceeding the drainage authority may determine damages on its own or appoint viewers to perform the damage determination.

10. Drainage System Transfer
All or part of a drainage system may be transferred from the jurisdiction of a drainage authority to a water management authority. In a process similar to that for a drainage system abandonment, a property owner assessed benefits for the drainage system may object to the transfer of the drainage system. If a written objection is filed, the drainage authority must appoint a technical panel to examine the drainage system, the property, and the proposed transfer. The technical panel must include a viewer. The technical panel’s report must include a determination of damages, if any, resulting from the proposed drainage system transfer.

FOOTNOTES
1 See Minn. Stat. § 103E.401, subd. 6 (2015).
III. Appointment of Viewers

Summary

Viewers play a crucial role in the public drainage system project, as such, drainage authorities should exercise care in appointing qualified and articulate viewers. The outcome of a proceeding will be
affected by the quality of the viewers’ work and their ability to communicate the basis of benefits and damages, in addition to viewing methodology, to the public. A viewer is to be capable of providing testimony to a jury expressing an opinion on benefits and damages. (Section III)

It is at the conclusion of the preliminary hearing, when the detailed survey report is order, that viewers are appointed by order of the drainage authority. Minn. Stat. § 103E.305, subd 1 (2015) reads, “[T]he drainage authority shall, by order, appoint viewers consisting of three (3) disinterested residents of the state qualified to assess benefits and damages. The drainage authority may establish qualifications for viewers.” The process of when the viewers commence their duties and the timing of their observations is discussed in Section III, A.

Viewers are required to be residents of Minnesota and must be disinterested from the proceedings. A list of general qualities that may aid the drainage authority in selecting a “qualified” viewer (Section III, B) and what it means to be a disinterested resident (Section III, B.1) is provided in referenced sections. One source of viewers is the Minnesota Viewers Association, which is an educational organization that provides training and guidance to persons interested in becoming viewers or currently serving as viewers.

Introduction
Drainage authorities should exercise care in appointing qualified and articulate viewers. The outcome of any proceeding will be affected by the quality of the viewers’ work and their ability to communicate the basis of benefits and damages, along with the viewing methodology, to the public.

On appeal of benefits and damages to the district court, the trial before the jury is de novo, meaning, the jury takes a new and fresh look at the evidence without regard to the proceedings before the drainage authority. A viewer, whether appointed in the original proceedings or engaged as a witness in an appeal, should be capable of providing testimony to a jury expressing an opinion on benefits and damages. Though correct on its face as to the drainage proceeding, the viewers’ report may not solely be relied on for the purposes of proving benefits and damages to the jury at trial. 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.

There are only two instances in the drainage code where the drainage authority may determine benefits or damages on its own, without appointing viewers:

1. For damage determinations during “incremental” establishment of grass strips; and
2. For outlet petitions.

In all other cases, viewers must be appointed:

1. For benefits and damages determinations for drainage projects - new drainage system projects, improvements of drainage systems, improvements of outlets, and laterals - “the drainage authority shall, by order, appoint viewers consisting of three disinterested residents of the state qualified to assess benefits and damages.”
2. For benefits and damages resulting from alternative repair configurations, “the drainage authority must appoint viewers to assess and report on damages and benefits.”
3. In a proceeding to repair a drainage system or for the inclusion of property not previously assessed for benefits, “the drainage authority shall appoint viewers as provided by section
before the 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.”

4. Redetermination of benefits, “shall proceed as provided for viewers and the viewers’ report in sections 103E.311 to 103E.321.”

5. If a property owner assessed benefits for a drainage system appears at a hearing for abandonment of that drainage system and makes a written objection, the drainage authority “shall appoint three disinterested persons as viewers to examine the property and report to the drainage authority . . . .”

6. If a property owner assessed benefits for a drainage system appears at a hearing for the transfer of part or all of a drainage system to a water management authority, the drainage authority must appoint a technical panel comprised, at a minimum, of a representative of the drainage authority, a representative of the DNR Commissioner, a representative of the SWCD, a representative of the BWSR, and a viewer, to “examine the drainage system, the property, and the proposed transfer and report to the drainage authority . . . .” The technical panel reports to the drainage authority on the merits of the objections raised and also determines the extent to which the transfer of the drainage system will damage or take property.

For more information on the procedures that require viewing, see Section II.

FOOTNOTES

31 See In re Judicial Ditch No. 14 of Martin Cnty., 138 N.W. 675, 677 (Minn. 1912) (holding that reference by counsel to the viewers’ report in an appeal of benefits and damages constitutes an error and that the viewers’ report is not proper evidence for consideration by the jury).
32 See, e.g., In re Judicial Ditch No. 2, 175 N.W. 102, 103 (Minn. 1919) (upholding trial court’s receipt of testimony of viewers regarding value of lands based on finding that viewers had been farmers in the same area of the state and had general knowledge of the valued of lands).
33 See Minn. Stat. § 103E.021, subd. 6 (2015) (“Damages shall be determined by the drainage authority, or viewers, appointed by the drainage authority, according to section 103E.315, subdivision 8.”).
34 See Minn. Stat. § 103E.401, subd. 4 (2015) (“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.”); Minn. Stat. § 103E.411, subd. 4(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.”); Minn. Stat. § 103E.411, subd. 5 (2015) (“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.”).
36 See Minn. Stat. § 103E.715, subd. 6(a) (2015).
37 Minn. Stat. § 103E.741, subd. 2 (2015).
38 Minn. Stat. § 103E.351, subd. 2(a) (2015).
39 Minn. Stat. § 103E.811, subd. 5(b) (2015).
40 Minn. Stat. § 103E.812, subd. 5(b) (2015).
41 Minn. Stat. § 103E.812, subd. 5(b) (2015).
A. Procedures for Appointing Viewers

The drainage code gives very little guidance on the appointment and qualification of viewers. The statute reads, “[T]he 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.”

At the conclusion of the preliminary hearing, the detailed survey report is ordered and viewers are appointed by order of the drainage authority. It is not uncommon for viewers to begin their duties immediately after their appointment because of the length of time the viewing process takes. A strict reading of the drainage code, however, specifies that the viewers’ first meeting does not take place until after the engineer’s detailed survey report is filed and that the viewers do not begin their duties until after the first meeting. The timing is important to ensure that the viewers are determining benefits and damages based upon the conditions created by the engineer’s recommended project as finally designed and not on assumed or anticipated conditions. In anticipation of the final survey report, consultation with the engineer, although not required, is common and recommended when viewers are determining benefited and damaged areas. Though it is reasonable that the viewers can begin to assemble data and make observations relevant to their final determinations, it is not recommended that the viewers complete and file the viewers’ report until after the engineer has completed the detailed survey report.

Within five days after the detailed survey report is filed, the auditor shall execute an order designating the time and location for the first meeting of the viewers. A copy of the Auditor’s Order and a certified copy of the drainage authority’s order appointing the viewers must be sent to the viewers.

A sample auditor’s order is found in Template A.

At the first meeting, the viewers must subscribe to an oath to faithfully perform their duties. The auditor has the authority to designate another qualified person to take the place of a viewer that the auditor determines does not qualify for any reason.

A sample viewers’ oath is found in Template B.

FOOTNOTES
43 See Minn. Stat. § 103E.305, subd. 1 (2015) (requiring the drainage authority to appoint viewers when the order for a detailed survey is made); Minn. Stat. § 103E.265, subd. 1 (2015) (requiring the drainage authority to order the engineer to make a detailed survey after the preliminary hearing order is filed with the auditor).
44 See Minn. Stat. § 103E.305, subd. 2 & 3 (2015).
45 Minn. Stat. § 103E.305, subd. 2 (2015).
46 Minn. Stat. § 103E.305, subd. 2 (2015).
47 Minn. Stat. § 103E.305, subd. 3 (2015).
48 Minn. Stat. § 103E.305, subd. 3 (2015).
B. Description of Viewer Qualifications

The statute provides no guidance on what qualifications viewers should have, other than that the viewers must be residents of Minnesota and must be disinterested from the proceedings. Generally speaking, the following qualities aid the drainage authority in determining whether a select viewer is “qualified”:

The viewer should have the practical understanding of:

- Drainage;
- Rural and urban appraisal methods;
- How to read and interpret soil maps;
- How to review aerial photographs;
- How to read engineering and survey data;
- How to interpret data related to hydrology and hydraulic capacity of drainage systems;
- Agricultural production;
- Residential development;
- Conservation programs; and
- State and federal statutes.

In addition to those qualities, viewers should have the physical and mental health to do field work as needed, the ability to use modern technology to aid them in completing the viewing process; and the strength of convictions to be able to present findings in an orderly, detailed, and concise manner.

1. Disinterested Residents of Minnesota

The drainage code does not expressly prohibit a drainage authority employee, such as a county or watershed district drainage inspector, or county commissioner or watershed district board member from serving as a viewer. However, the statute does specify that viewers must be “disinterested residents of the state qualified to assess benefits and damages.” Consequently, the question would be open as to whether a drainage authority employee or board member is truly “disinterested.” The board member would be making recommendations and reports to the full board. For county drainage authorities, the county is usually either a benefited or damaged property and therefore it may be improper for a county employee to recommend benefits and damages on a drainage system that impacts county property.

2. Accredited Members of Minnesota Viewers Association

One source of viewers is the Minnesota Viewers Association, an educational organization that provides training and guidance to persons interested in becoming viewers or currently serving as viewers. The Association provides quarterly training seminars and an accreditation process to those viewers who attend a minimum of two seminars a year. More information on the Minnesota Viewers Association can be found on the web at www.mndrainageviewers.org.

Footnotes

IV. Assessment of Drainage Benefits

Summary

Viewers are equipped with the engineer’s preliminary report which identifies the watershed by a legal description and provides a rough estimate of the size of the area affected by the proposed drainage system. Topographical maps are frequently used and are helpful. Information regarding existing private tile systems, open ditches or other ditches should be included in the preliminary report. In addition to the details provided in the engineer’s report, viewers should meet with each landowner in the area to discuss the potential effect of drainage systems on their land. Methodologies that may be applied by viewers when determining benefit values include:

- Market-Value Based Benefits (Section IV, B.);
- Charge-Based Benefits (Section IV, C.);
- Protection Benefits (Section IV, D.); and
- Improvement to an Outlet Benefits (Section IV, E.1.).

Special types of properties that viewers may encounter when performing their duties and with which further information is provided include that for:

- Federal or Tribal Lands (Section IV, A.1.);
- State Lands or Water Areas Used for Conservation (Section IV, A.2.);
- Other State Lands (Section IV, A.3.);
- Consolidated Conservation Lands (Section IV, A.4.);
- Municipalities (Section IV, A.5.);
- Water Management Authority (Section IV, A.6.);
- Public Roads (Section IV, A.7.);
- Railways and Other Utilities (Section IV, A.8.).

Viewers are encouraged to discuss potential assessments against these types of properties with the proper authority administering the lands prior to the filing of the viewers’ report (Section IV, A.).

Market-Value Based methods justify the imposition of an assessment based on the increase in the market value of the property driven by the drainage project. The increase in market value may derive from an increase in the current market value of the property as a result of constructing the project, an increase in the potential for agricultural production as a result of constructing the project, or an increase value of property as a result of a potential different lands use. See Section IV, B. for more information.

Charge-Based Benefits are based on a theory authorized by the legislature that is different from the Market-Based Benefits; this basis for assessing benefits is found in Minn. Stat § 103E.315, subds. 6 and 7. Charge-Based benefits determined in accordance with Minn. Stat. § 103E.315, subd. 6(a) and (b) are assigned to the existing upstream drainage system based on the increased burden that the upstream system places on the downstream drainage project or system. Minn. Stat. § 103E.315, subd. 7 provides
additional authority to the viewers for the situation where part of a drainage project increases drainage system capacity that is necessary due to increased drainage in the project watershed, but not in a specific area. These methodologies are described further in Section IV, C.

Protection benefits, such as the diversion of flood waters away from property can be deemed as “benefit” of a drainage system project under Minn. Stat. 103E. Minnesota Courts recognize the imposition of “protection benefits” on three justifications: (1) property protected from flood risk is valued higher in the market place; (2) the drainage authority has the power and corresponding responsibility to control flood waters; and (3) the diversion of flood waters is within the plain meaning of the word “benefit.” (Section IV, D.).

Where an existing drainage system, watercourse, or body of water does not have the capacity to channelize upland drainage waters for a public or private proposed drainage project, or even an existing drainage system, improvement of outlet proceedings may be used. In such proceedings, benefits are allocated to all lands on the system contributing water. Benefit considerations for improvements to an outlet are discussed in further detail in Section IV, E.1.

Introduction

This section guides viewers on methods for determining benefit values and promotes understanding for drainage authorities and landowners of how benefits may be evaluated. However, consideration of factors not provided herein may be necessary as each drainage system and property is unique.

Paragraph A of this section provides an overview of special types of properties that might be found to benefit from a drainage system and describes viewing considerations for those unique circumstances.

Paragraph B of this section describes the Market-Based Approach to determining benefits for properties within the watershed, which justifies the assessment on benefited parcels based upon the increase in the market value the drainage project creates.

Within the watershed that drains to a drainage system 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 increasing drainage system maintenance or the need for drainage system capacity because the natural drainage on the property has been altered or modified to accelerate the drainage of water from that property. This is discussed in Paragraph C of this Section and is referred to as the Charge-Based Approach.

Footnotes

50 The term “benefit,” as used in the drainage code, is unique because it refers equally to the market-value benefit a drainage system might provide to a property and to the burden-carrying benefit a drainage system might provide. A drainage benefit, though it forms the basis for drainage assessments to pay the costs of constructing, inspecting and maintaining a drainage system, may be based on an increase in property value or on the cost of carrying a burden to the ditch created by a property. A detailed description on a benefits theory is found in Paragraphs B, C, and D of this Section.

A. Determining Benefits for Tribal, Government, or Public Lands

There are a number of different types of properties viewers encounter when performing their duties. This section discusses viewing considerations and determining benefits values for federal lands, tribal lands, state lands, water areas used for conservation and other conservation lands, municipalities, public
roads, railways, and other utilities. Viewers are strongly encouraged to discuss potential assessments against these types of properties with the proper authority administering the lands prior to the filing of the viewers' report.

1. Federal or Tribal Lands

Benefits of drainage systems to federal or tribal lands are not specifically addressed within Minnesota’s drainage code. However, states and municipalities cannot levy a tax against the federal government or its property without express permission of Congress. Unless Congress authorizes states or municipalities to levy taxes on its property for benefits of drainage systems, it appears that no assessments should be made against the federal government or tribal lands.

2. State Lands or Water Areas Used for Conservation

State lands and water areas used for conservation purposes require proper consideration of the value of the area for the purpose it is held or used by the state, along with other material elements of value. These include state land 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. In one matter, the Minnesota Supreme Court held that the state could be assessed benefits in an order establishing a drainage system that incorporates a control structure to stabilize the water level of a lake and permit drainage of that portion of the lake when desired by the state for conservation and ecological purposes.

While there is no specific direction in the drainage code, state lands or water areas used for conservation and maintained in a native state, probably will have little or no benefit from a drainage system. This determination should consider potential benefits based upon the type and use of the property, including:

1. The Department utilizes a drainage system to outlet water into a public ditch from agricultural cropland it manages;
2. The Department leases the land for commercial purposes such as agriculture, agro-forestry, aquaculture, wild rice paddies, peat mining, or mineral extraction, and the lessee utilizes a drainage system to outlet water into a public ditch from the leased lands;
3. The Department petitions for a drainage project;
4. The Department outlets water from state-owned lands into a public ditch from an impoundment that is designed and used exclusively for wildlife management purposes;
5. Timber production is improved by the project; or
6. Wildlife habitat is improved by the project.

3. Other State Lands

State properties must have benefits reported in the same manner as other taxable lands. For example, State University lands or forfeited lands have no special statutory considerations for determining benefits and should be viewed the same as lands under private ownership.

4. Consolidated Conservation Lands

Consolidated Conservation Lands, also known as “Con-Con lands,” are located in the counties of Aitkin, Beltrami, Koochiching, Lake of the Woods, Mahnomen, Marshall, and Roseau and became state-owned through tax forfeiture in 1929, 1931, and 1933. In an effort to make these lands suitable for agricultural production, the counties issued bonds for massive drainage projects in the early 1900’s. The
unsuitability of the land for farming and the Great Depression contributed to abandonment of these lands and their resultant tax delinquency. To address the default on bond payments and avoid bankruptcy, the State agreed to take on the drainage debts in exchange for 1.6 million acres of Con-Con lands. These lands are governed by Minn. Stat. § Chapter 84A. The challenge with Con-Con lands is that many parcels within and adjacent Con-Con areas remain in private ownership and rely upon the drainage systems to provide an outlet for beneficial drainage. Additionally, much of the Con-Con areas are open to public hunting and recreation and the drainage systems within the Con-Con areas are necessary to provide transportation infrastructure (along the spoil banks) and to provide drainage for several beneficial public uses.

Control and administration of Con-Con lands lies with the Commissioner of the Department of Natural Resources (“DNR”). If the DNR Commissioner finds that a proposed drainage project will benefit Con-Con lands for the purposes they are held, the DNR Commissioner may make necessary investigations, surveys, undertake projects for drainage, and may also cooperate in the construction, repair, or improvement of a ditch or ditch system undertaken by a county or other public agency. The DNR Commissioner’s cooperation may include joining in the petition for the project, consenting to or approving it on any conditions the DNR Commissioner determines.

When the DNR Commissioner cooperates in construction, repair, or improvement of a drainage system, the DNR Commissioner holds almost total discretion in deciding how much should be paid for assessments of Con-Con lands. If the DNR Commissioner decides to pay ditch assessments, it is also within the DNR Commissioner’s discretion whether to permit the assessments to be imposed against those Con-Con lands benefited by the project or to make a lump-sum contribution to the county or other public funds established for payment of the project cost. If assessments are imposed against the benefited Con-Con lands, the DNR Commissioner procures written certificates or other statements filed in the proceedings stating the benefits assigned to each tract of Con-Con lands and must ensure the assessments or contributions do not exceed the value of the benefits the DNR Commissioner assigns. If the DNR Commissioner has not agreed to or consented to the drainage authority’s determination of benefits to Con-Con lands on a drainage system, the state will not be liable for the assessment to Con-Con lands on later repairs.

Minn. Stat. § 84A.55, subd. 9 requires the DNR Commissioner to establish, by rule, before January 1, 1986, criteria for determining benefits to state-owned lands held or used to protect or propagate wildlife, provide hunting or fishing for the public, or serve other purposes relating to conservation, development, or use of soil, water, forests, wild animals, or related natural resources. These rules are published in Minn. R. § 6115.1500 through 6116.1550.

Under the Department’s promulgated rules, inclusion of Con-Con lands within the benefited area of a drainage project or repair requires early coordination with the Department. For the DNR Commissioner to consider participating in a drainage project that would have assessments within Con-Con lands, the drainage authority must, as soon as possible, notify the DNR Commissioner, in writing, with specifics of the project including:

1. The purpose of the project;
2. What kind of project it is;
3. The extent of the project on a map; and
4. Copies of all written documents, including any petition and engineer’s report that have been filed or used in connection with the drainage project proceedings, as they are available.65

After receiving notification and all documentation, the DNR Commissioner must complete an investigation to determine whether the proposed drainage project benefits state-owned lands for the purposes for which they were established and whether any state-owned lands are impacted positively or negatively by the project.66

A drainage project has a positive impact to state-owned lands when it allows the Department or the Department’s lessee to continue to use or enhance its ability to use drainage to achieve management purposes.67 The following criteria evidence that the Department uses drainage to achieve a management purpose:

1. The Department utilizes a drainage system to outlet water into a ditch from agricultural cropland it manages;
2. The Department leases the land for commercial purposes such as agriculture, agro-forestry, aquaculture, wild rice paddies, peat mining, or mineral extraction, and the lessee utilizes a drainage system to outlet water into a ditch from the leased lands;
3. The Department petitions for a drainage project;
4. The Department outlets water from state-owned lands into a ditch from an impoundment that is designed and used exclusively for wildlife management purposes;
5. Timber production is improved by the project; or
6. Wildlife habitat is improved by the project.68

Conversely, a drainage project has a negative impact to Con-Con lands when it adversely affects the management of the land for its intended purposes.69 The following criteria evidence that a drainage project negatively impacts state-owned lands:

1. The drainage project degrades public waters, public waters wetlands, or wetlands on state-owned lands;
2. The drainage project causes direct physical disturbance to rare species or significant natural communities through project activities such as, but not limited to, ditching and depositing soils;
3. The drainage project causes an alteration of the hydrology that disturbs rare species, natural communities, or peatland features;
4. The drainage project causes an alteration of the hydrology that degrades designated peatland scientific and natural areas;
5. The drainage project restricts management options for state-owned lands; or
6. The drainage project results in the reduction or elimination of access to state-owned lands.70

Following its investigation, the DNR Commissioner will complete an analysis of each 40-by-40 acre parcel held by the State to determine if the positive impacts of the project outweigh the negative impacts of the project to each parcel.71 This investigation must be completed and returned to the drainage authority within 60 days of receiving all required notifications about the project.72 The report of the investigation returned to the drainage authority must state whether the commissioner will participate in the project and state the reasons for the DNR Commissioner’s decision.73

For repairs, after the DNR Commissioner conducts its investigation of positive and negative impacts and following consultation with the drainage authority, the DNR Commissioner will prepare a table showing
the benefits of the repair to each 40 acre parcel based upon an analysis that will be conducted by hydrologists, foresters, wildlife managers, and plant ecologists.\textsuperscript{74} If the DNR Commissioner determines Con-Con lands will experience a net benefit from the repair, the DNR Commissioner must authorize the imposition of assessments on those lands in any amount the commissioner determines or authorize a lump sum contribution to the county or other public funds established for the payment of the cost of the project.\textsuperscript{75}

If the total cost of a proposed drainage repair is less than $20,000 and the DNR Commissioner has previously determined the benefits to the Con-Con lands within the drainage system, the DNR Commissioner may, without investigating, authorize the imposition of assessments for the proposed repair proportionate to the overall benefits to the Con-Con lands as previously determined by the DNR Commissioner.\textsuperscript{76}

In addition to authorizing the imposition of assessments on Con-Con lands the DNR Commissioner finds to be net benefited by a project, the DNR Commissioner may also set conditions to modify the project before approving or joining a petition and may identify conditions that must be satisfied or modifications that must be made to ensure a benefit to Con-Con lands before cooperating in a project by joining in the petition or consenting to or approving it.\textsuperscript{77}

5. Municipalities
Benefits accruing to property within a municipality must bear the burden of the cost of a drainage project in the same proportion as other benefited property.\textsuperscript{78} Hence, the guidelines found in Paragraph B of this section on Market-Based assessments and Paragraph C of this section on Charge-Based assessments are also applicable and helpful in determining benefits to municipalities. Property within the boundaries of a municipality benefited by a drainage system may be assessed against individual parcels or as a lump sum against the municipality as a whole.\textsuperscript{79}

Benefit assessed against a municipality may be addressed under the same approach as an outlet for an existing drainage system. The major consideration should be value of the outlet to the municipality. The benefit may be found for the drainage system being a part of the storm sewer system or as an outlet for the construction of the city’s separate system. 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 some types of developed lands is much greater than that of agricultural land. A hydrological comparison would be more appropriate in determining additional design requirements, construction costs, and project benefits. The municipality’s growth and development potential should also be used when determining the benefit value.

In a redetermination of benefits, viewers should consider the loss of benefit to properties affected by the increased flow. With benefits being a market-value increase, not a cost, the impact of increased flow may be greater in proportion than the direct cost to increase capacity. Benefits should equate a proper share of the total value so project cost and maintenance are prorated correctly.

6. Water Management Authority
Benefits to a water management authority to which a portion of a drainage system has been transferred under \textbf{Minn. Stat. § 103E.812} may be awarded similar to a municipality.\textsuperscript{80}
7. Public Roads

Viewers must assess benefits and award damages to the government unit with the legal duty of maintaining the road or street – the road authority – when a drainage system benefits or damages the public road or street. Benefits of a drainage system for a road are primarily related to improved drainage and stability of the road embankment and reduced flooding of the roadway, both of which reduce road maintenance and improve road usability.

Current viewing practice for road benefits is not consistent throughout the state. In some areas, there had been agreements or an understanding between the viewing practices and the road authorities; however, at least one court has held that the viewers may not only consider and determine the benefits that will be derived from the drainage of the highway, but may also consider the improvement or betterment of the highway by reason of the construction of bridges provided for in the engineer’s plans and specifications. Damages, on the other hand, may be awarded for the cost of construction and maintenance of the bridges required by the engineer’s plans.

8. Railways and Other Utilities

The viewers must report the benefits and damages to railways and other utilities, including benefits and damages to property used for railway or other utility purposes.

Benefit considerations on railway property may be similar to those for roads.

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.

FOOTNOTES

51 See McCulloch v. Maryland, 17 U.S. 316, 317 (1819) (“The states have no power, by taxation or otherwise, to retard, impede, burden, or in any manner control the operations of the constitutional laws enacted by congress to carry into effect the powers vested in the national government.”).
52 Minn. Stat. § 103E.025, subd. 3 (2015).
54 Winter v. Dist. Ct., 208 N.W.2d 725, 730 (Minn. 1973).
55 Minn. R. 6115.1520, subp. 3 (2008).
58 Minn. Stat. § 84A.55, subd. 9 (2015).
59 Minn. Stat. § 84A.55, subd. 9 (2015).
61 Minn. Stat. § 84A.55, subd. 9 (2015).
64 The drainage code defines “drainage project” to mean “a new drainage system, an improvement of a drainage system, and improvement of an outlet, or a lateral.” Minn. Stat. § 103E.005, subd. 11. Under the drainage code, a “repair” is not a drainage project. See id. In contract, the rules promulgated by the Department for determining
benefits of Con-Con lands define “drainage project” to mean “a new drainage system, an improvement of a drainage system, and improvement of an outlet, a lateral, a repair, or a redetermination of benefits involving state-owned lands in consolidated conservation areas administered under Minnesota Statutes, chapter 84A, where: A. the drainage authority will make assessments to state-owned lands; or B. the DNR Commissioner will be asked or must consider whether to participate in the project through assessments or lump sum, by joining the petition, by consent, or by approval.” Minn. R. 6115.1510, subp. 6 (2008) (emphasis added). Reference to “drainage project” in this subparagraph 4 of this Section IV of Chapter 4 is to the definition promulgated by the Department in Minnesota Rule part 6115.1510, subpart 6.

66 Minn. R. 6115.1520, subp. 2 (2008).
67 Minn. R. 6115.1520, subp. 3 (2008).
68 Minn. R. 6115.1520, subp. 3 (2008).
69 Minn. R. 6115.1520, subp. 4 (2008).
70 Minn. R. 6115.1520, subp. 4 (2008).
71 Minn. R. 6115.1530, subp. 1 (2008).
72 Minn. R. 6115.1540 (2008).
73 Minn. R. 6115.1540 (2008).
74 Minn. R. 6115.1530, subp. 1a (2008).
75 Minn. R. 6115.1530, subp. 1a (2008).
76 Minn. R. 6115.1530, subp. 2 (2008).
77 Minn. R. 6115.1530, subp. 1 (2008).
78 See, e.g., Nostdal v. Watonwan Cnty., 22 N.W.2d 461, 468 (Minn. 1946) (“[U]nder the drainage law, if a township or other municipality derives benefits by reason of the improvement, the viewers will assess the benefits so accruing, and it must bear that burden in the same proportion as other benefited property.”).
80 See Minn. Stat. § 103E.005, subd. 6 (2015) (“For purposes of sections 103E.315, 103E.611, and 103E.615, municipality includes a water management authority to which a portion of a drainage system is transferred under section 103E.812.”).
81 Minn. Stat. § 103E.315, subd. 3 (2015).
82 See Town of Lisbon v. Yellow Medicine & Lac Qui Parle Cnties., 172 N.W. 125, 127 (Minn. 1919) (“If the construction of such bridges will constitute an improvement to the highway, roadbed, or traveled track, or render the same more permanent, then the same should be considered a benefit to the extent of such betterment, and assessed accordingly.”).
83 Town of Lisbon v. Yellow Medicine & Lac Qui Parle Cnties., 172 N.W. 125, 127 (Minn. 1919).

B. Market-Value Based Benefits

Public or private artificial drainage systems may not drain property into an established drainage system unless express authority has been granted by the drainage authority and that property has been assessed benefits for use of the drainage system as an outlet.85 This prohibition applies to any system, regardless of whether it is physically connected to the drainage system.86 Minn. Stat. §103E.315, subd. 5(a) contemplates an assessment of benefits to any property within the watershed which is or could be improved through construction of additional public or private drainage systems. Minn. Stat. § 103E.315, subd. 5(a) expressly authorizes assessing benefits to properties that are immediately benefited by the drainage project or properties for which the drainage project can become a beneficial outlet or make an outlet more available.87
The drainage code gives little detailed guidance on how to determine benefits:

The viewers shall determine the amount of benefits to all property within the watershed, whether the property is benefitted 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 different land use.88

These Market-Value Based methods justify the imposition of an assessment based on the increase in the market value of the property driven by the drainage project. Case law assists in filling in some of the rules that guide the determination of benefits under the Market-Value Based approach.

When determining special assessments under the authority found in Minn. Stat. § 103E.315, subd. 5(a), the public body must consider the increase in market value of the benefited land and can only make assessments where the market value of land will be increased greater than the cost of the assessment.89 This principal raises two limitations to the assessment of benefits that sometimes arises when the Market-Value Based approach is used.

First, flat-rate assessments violate Minn. Stat. § 103E.315, subd. 5(a) and state and federal constitutional provisions because flat-rate assessments are not based on the actual benefit the drainage system provides.90

Second, not every parcel in the watershed that drains water to the outlet is necessarily benefited—“surface water sooner or later finds its way into some outlet.”91 Some tracts of land may be so much higher in elevation than other tracts of land downstream that the tracts do not need the aid of artificial drainage in order to either drain water from the tract or to drain the water at a beneficial rate. The Minnesota Supreme Court characterizes such a situation as this: “Where a landowner, with such aid as he can obtain from the application of the [reasonable use doctrine] may dispose of his surface water as freely before the construction of the drain as after, it is difficult to see how he has sustained any benefit from the construction of the ditch.”92 In such cases, the property may not be assessed for benefits merely because it is in the general drainage basin of the ditch and its water ultimately finds its way into the drainage system.

Application of the “reasonable use” rule principles to the determination of benefits is not easy. In the realm of private drainage, a landowner in Minnesota has the property right to remove excess waters from his or her property as long as such a task can be accomplished without violating the “reasonable use” rule principles. The rule reads as follows:

In effecting a reasonable use of his land for a legitimate purpose, a landowner, acting in good faith, may drain his land of surface waters and cast them as a burden upon the land of another, although such drainage carries with it some waters which would otherwise have never gone that
way, but would have remained on the land until they were absorbed by the soil or evaporated in the air, if:

1. There is a reasonable necessity for such drainage;
2. Reasonable care is taken to avoid unnecessary injury to the land receiving the burden;
3. The utility or benefit accruing to the land drained reasonably outweighs the gravity of the harm resulting to the land receiving the burden; and
4. Where practicable, it is accomplished by reasonably improving and aiding the normal and natural system of drainage according to its reasonable carrying capacity, or if, in the absence of a practicable natural drain, a reasonable and feasible artificial drainage system is adopted.

Another restriction on the market-value benefit to property of a drainage project is the presence of wetlands or other conservation lands. Viewers should determine what wetland or other conservation land areas are regulated by a state or federal agency or under public or private easement within the watershed. For example, public water wetlands may not be drained without a permit from the Department of Natural Resources, which is unlikely to be granted. Wetlands located on agricultural property that is burdened by a U.S. Fish and Wildlife Service waterfowl production area easement may also not be drained for the construction of a new drainage system. The inability to drain these wetlands should be taken into account when viewers determine benefits to a parcel as those acres will not be improved by the project. A detailed discussion on how wetland regulations impact drainage can be found in Section II, Paragraph B of Chapter 2.

This Section of the manual addresses three Market-Value Based Benefit Methods allowed under Minn. Stat. §103.315, subd. 5: (1) the Increase in Market Value approach; (2) the Increase in Potential for Agricultural Production approach; and (3) the Increase in Value of Property as a Result of a Potential Different Land Use approach. All three approaches to benefits are based on the increase in the value of land benefited by the proposed project or redetermined drainage system.

1. Increase in Current Market Value
The Increase in Current Market Value approach uses direct sales of comparable properties to determine value. This is the historical method used to determine most appraised property values.

For viewing purposes, a detailed appraisal of each individual parcel using all three approaches to determining market value has usually been shortened by using a mass appraisal process (described in Standard 6 of the Uniform Standards of Professional Appraisal Practice) and necessary market extracted sales data, broken down by various topography, soil types and land conditions. Similar land types and conditions are grouped into a number of land categories (e.g. A, B, C, D, etc. – benefit classifications). The market value for each land category is then determined for the existing condition before construction of the proposed drainage 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 and in the pre-project condition, less the private improvement costs.
**Example: Sample County Ditch No. 1**

Poorly drained pasture has a market value of $1250 per acre for pasturing or native grass hay purposes. Well drained agricultural lands with private tile have a market value of $4000 per acre. Lateral drainage tile system construction is estimated at $800 per acre:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Value Improved Condition</td>
<td>$4,000</td>
</tr>
<tr>
<td>Beginning Market Value</td>
<td>$1,250</td>
</tr>
<tr>
<td>Benefit without Improvement Cost</td>
<td>$2,750</td>
</tr>
<tr>
<td>Private Improvement Cost</td>
<td>$800</td>
</tr>
<tr>
<td>Net Benefit from Project</td>
<td>$1,950/acre</td>
</tr>
</tbody>
</table>

One difficulty with the Increase in Current Market Value approach finding and analyzing pure market sales of the various before and after land classes. With current regulation, an existing wetland that sells for recreational use cannot be drained and converted into agricultural use; therefore, comparing the values of these two different uses will not produce a true difference in value. Similarly, in today’s market, most agricultural use lands have had some alterations that have affected the sale value. A sales pairing analysis can require a large number of sales and may indicate only an estimated range of value for each benefit class.

As property sales are the determining factor in establishing value, the market provides the information to estimate benefit values. A sales analysis can establish the maximum market and benefit values for a parcel. Under the rule of substitution, the value of a parcel to be improved should not exceed the sale value of a parcel with similar improvements completed.

With the lack of pure sales, a viewer must analyze the information available from the area sales. Each sale may contain acres that are classified within some or all of the identified benefit class. For instance, a parcel selling for $6,500 per acre may have individual acres valued from “A” acres at $4,000 to well drained and tiled “C” acres at $8,500. The actual sale price only indicates the weighted average of the values for each acre combined.

2. Increase in Potential for Agricultural Production

The drainage code allows assessment of benefits based upon an increase in the potential for agricultural production as a result of constructing the project. This is an income method approach to assessing benefits. The process begins similar to the Increase in Current Market Value approach 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 topography, 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, FSA, NRCS, 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 No. 2**

Subject parcel is typical pasture/wild hay land before the project and provides marginal pasture or wild hay ground:
The income value of well-drained agricultural land in full production:

<table>
<thead>
<tr>
<th>Production</th>
<th>1.5-ton wild hay/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wild Hay Value</td>
<td>$40 per ton ($60/acre)</td>
</tr>
<tr>
<td>Production Costs</td>
<td>$28 per acre</td>
</tr>
<tr>
<td>Before Project Income</td>
<td>$32/year/acre</td>
</tr>
</tbody>
</table>

Installation of a lateral drainage tile system estimated at $800 per acre with 25-year depreciation schedule:

| Annual Income/Acre Increase | $190-32=$158/acre/year |
| Private Improvement Costs/Acre/Year | $32 |
| Annual Maintenance Cost/Acre | $3 |
| Net Increase | $123 per acre |
| Capitalized at 4% for 25 years | $1,921.52 |

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 is a factor of the market. It is determined with consideration of income and sales values. The capitalization rate must be adjusted to reflect the long-term investment rates.

The cost approach to value is not generally used in the determination of benefits and damages. One of the purposes of the determination of benefits is to establish the financial feasibility of a drainage project. This is that the benefits are greater than the cost, not a direct allocation of project costs. Costs are prorated based upon the share of total benefits.

3. Increase in Value of Property as a Result of a Potential 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 Increase to Market Value approach. 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).
More information on the three methods of determining market values, appraisal practices, and the drainage code viewing and appraisal application process are available through the Minnesota Viewers Association or Real Estate Appraiser classes.

FOOTNOTES

84 See Minn. Stat. § 103E.315, subd. 5(a) (2015).
85 Minn. Stat. § 103E.401, subd. 2 (2015).
86 Seidlitz v. Faribault Cnty., 55 N.W.2d 308, 312 (Minn. 1952).
88 Minn. Stat. § 103E.315, subd. 5(a) (2015).
91 Seidlitz v. Faribault Cnty., 55 N.W.2d 308, 312 (Minn. 1952).
92 Seidlitz v. Faribault Cnty., 55 N.W.2d 308, 312 (Minn. 1952).
93 See Enderson v. Kelehan, 32 N.W.2d 286, 289 (Minn. 1948) (citing Sheehan v. Flynn, 61 N.W. 462 466 (Minn. 1894)).
94 It is important to distinguish between the limitations U.S. Fish and Wildlife Service waterfowl production area easements place on construction of a new drainage system from any limitation asserted to repair an existing drainage system. If the waterfowl production area easement is acquired after the drainage system is established, the U.S. Fish and Wildlife Service only acquires those property rights the landowner held to convey. The landowner cannot convey the rights other benefited landowners hold in the maintenance of the drainage system. Therefore, the waterfowl production area easements do not limit future repairs or maintenance of existing drainage systems. Minn. Stat. § 103E.315, subd. 5(a)(2) (2015).

C. Charge-Based Benefits

Another basis for assessing benefits is commonly referred to as “Charge-Based Benefits” and are found in Minn. Stat. § 103E.315, subds. 6 and 7. These benefits are based on an approach different from the market-based benefits described in Paragraph B of this Section.

Charge-based benefits were historically assessed based upon calculation of a charge to the upstream system based on the burden that the upstream system placed on the drainage system downstream. That charge was allocated to properties using the upstream system as an outlet based on the benefit received. After the Minnesota Supreme Court decisions related to the constitutional limits of special assessments under Minn. Stat. § 103E.315, subd. 5(a) were issued, the Minnesota Legislature amended the drainage code to authorize charge-based authority under Minn. Stat. § 103E.315, subds. 6 & 7 (2015). Unlike the Market-Based Benefits approach, Charge-Based authority found in the 1987 amendments to Minn. Stat. § 103E.315, subds. 6 & 7 is not limited by an incremental increase in market value. However, the statutory language in Minn. Stat. § 103E.315, subds. 6 (c) expressly requires that the Charge-Based assessment for the applicable situation must be for "increased sedimentation" or "because the natural drainage on the property has been altered or modified to accelerate the drainage of water from the property. Because Charge-Based authority in Minn. Stat. § 103E.315, subd. 6(c) requires a finding of use or benefit from increased sedimentation or accelerated water caused by altered or modified drainage, viewers and drainage authorities using this authority should seek consultation from an engineer and a lawyer.
Take, for example, a landowner who has improved his or her property with artificial drainage and cast the drained waters as a burden upon downstream landowners in the watershed. After the private artificial drainage improvements were constructed, a drainage system is established and constructed through the watershed. The landowner’s improvements increased the rate and volume of water flow from their land toward the drainage system, and the drainage system now serves as an outlet for those waters that previously caused damage to downstream landowners.

Charge-Based benefits are determined in accordance with Minn. Stat. § 103E.315, subd. 6(a) and (b) are assigned to the existing upstream drainage system based on the increased burden that the upstream system places on the downstream drainage project / system.\textsuperscript{98} If a single sum is assessed as an outlet benefit, the assessment must be prorated on all upstream properties benefitted by the existing public drainage system in proportion to the benefits already determined for the upstream public drainage system.\textsuperscript{99} Minn. Stat. § 103E.315, subd. 6(c) is not tied to the situation where an existing public drainage system outlets into a proposed drainage project. Rather, subd. 6(c) provides authority for the viewers to assess outlet benefits on property that is responsible for increased sedimentation downstream, and on property that is responsible for increased drainage system maintenance or increased drainage system capacity, due to accelerated drainage of water from the property.

Minn. Stat. § 103E.315, subd. 7 provides additional authority to the viewers for the situation where part of a drainage project increases drainage system capacity that is necessary due to increased drainage in the project watershed, but not in a specific area. For this situation, the viewers may assess benefits on property in the project watershed on a pro rata basis in relation to the necessary increased drainage system capacity.

1. Benefits for a Proposed Drainage Project as Outlet

Minn. Stat. § 103E.315, subd. 6(a) describes how benefits may be assessed for a proposed drainage project that serves as an outlet to an existing drainage system:

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.\textsuperscript{99}

Section 103E.315, subdivision 6(b) also describes the basis upon which benefits for a proposed drainage project that serves as an outlet to an existing drainage system may be assessed:

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.\textsuperscript{101}
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, or the benefits of the existing system do not include all lands within that project’s watershed, 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, 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. The proportionate share of benefits associated with the outlet should be equal in valuation with the benefits determined for the improved outlet.

**Example: Sample County Ditch Number 3**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Project Length</strong></td>
<td>2 miles</td>
</tr>
<tr>
<td><strong>Length of Proposed Project Used as Outlet</strong></td>
<td>1 mile</td>
</tr>
<tr>
<td><strong>Total Watershed</strong></td>
<td>1,000 acres</td>
</tr>
<tr>
<td><strong>Existing System Watershed</strong></td>
<td>250 acres</td>
</tr>
<tr>
<td><strong>Benefit Determination:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Existing/Proposed Drainage Area Ratio</strong></td>
<td>250/1000 = 25%</td>
</tr>
<tr>
<td><strong>Percent of Proposed Used as Outlet</strong></td>
<td>1 mile/2 miles = 50%</td>
</tr>
</tbody>
</table>

By multiplying the two percentages (ratios) from the table immediately above, the outlet benefit is figured as 12.5% of the estimated proposed project benefit. 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.
2. Benefits for Existing System that Increases Sedimentation in Downstream Areas of the Watershed

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.

This benefit would best be described as an “inverse damage” charged against the properties 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 NRCS 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 MPCA’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 percent in the system be used. The NRCS can be of assistance in making this evaluation.

Example: Sample County Ditch Number 4

| Soil Loss | 5 tons/acre/year |
| Soil Weight | 125 lbs/ ft.³ |
| Percent of Sediment Retained in System | 5% |
| Project Life | 25 years |

**Step One:**  
5 tons/acre/year x 2,000 lbs/ton = 10,000 lbs/acre/year  
10,000 lbs/acre/year = 80 ft.³/acre/year  

**Step Two:**  
80 ft.³/acre/year x 5% = 4 ft.³/acre/year  

4 ft.³ per acre, per year of eroded soil is retained in the system.

**Step Three:**  
4 ft.³/acre/year x 25 years = 100 ft.³/acre  
100 ft.³/acre + 27 ft.³/ yds.³= 3.7 yds.³

**Step Four:**  
3.7 yds.³ at an estimated removal cost of $2.00/ yd.³ amounts to $7.40 per acre of cost.

3. Benefits for Existing System that Accelerates Natural 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 formerly natural areas or native prairie to a different land use that has caused 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 charge-based benefit if their practices effectively 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 may not be subject to this benefit if these lands will remain in a natural state (e.g., by public ownership such as parks or wildlife areas, or through other public or private easements or restrictive covenants). Other 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 market-based benefits, may 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 and capacities 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, or loss of benefit. 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 condition, including forest wetland and native prairie. 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**

<table>
<thead>
<tr>
<th>Redetermination of Benefits:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed Size</td>
<td>1,000 acres</td>
</tr>
<tr>
<td>Wetlands Assessed in Previous Proceeding</td>
<td>270 acres</td>
</tr>
<tr>
<td>Design Rainfall</td>
<td>3 inches</td>
</tr>
<tr>
<td>Ditch Length</td>
<td>1 mile</td>
</tr>
<tr>
<td>“Without” Accelerated Drainage Discharge</td>
<td>163 ft.³/second</td>
</tr>
</tbody>
</table>
“With” Accelerated Drainage (Full row crops on 900 acres within watershed) 260 ft.$^3$/second

Step One - Design the Ditch for “Without” Accelerated Drainage Condition:

163 ft.$^3$/second
4 ft. bottom
2:1 side slopes
5.2 ft. depth required
14,670 yd.$^3$ @ $1.50$/yd.$^3$ $22,005$

Step Two - Design the Ditch for “With” Accelerated Drainage Condition:

260 ft.$^3$/second
4 ft. bottom
2:1 side slopes
6.2 ft. depth required
20,730 yd.$^3$ @ $1.50$/yd.$^3$ $31,095$

Step Three – Determine the Added Ditch Cost for Accelerated Drainage Condition:

$31,095 - 22,005 = $9,090$

Step Four – Determine the Cost per Acre for the 900 Acres in the Watershed that have been Altered to Accelerate Drainage:

$9,090 / 900 acres = $10.10/acre

In this example, no accelerated drainage benefits are attributable to the 100-acre wildlife management area.

This accelerated drainage charge (of $10.10 per acre) should be proportionate to the benefit-cost ratio of the drainage system construction and is only applied to areas in the watershed that have not received any other type of direct benefit already considering the change of land use. To determine the charge per acre, you need to include within your calculation all acres converted, including those acres directly benefited.

In a redetermination of benefits, the benefit value charged to the properties having the accelerated runoff may be equal to the existing system. If a drainage system designed to contain a 1-inch runoff from the direct and non-converted upper watershed is reduced to a ¾ inch capacity by the accelerated runoff, the benefits of the existing system will be reduced. This loss of benefit can be the value split among the properties responsible for the loss as the accelerated drainage charge.

**FOOTNOTES**

96 See, e.g., Laws Minnesota Chapter 143, section 53, Drainage Code section 106.531.
98 See *Redekall v. Cnty. of Redwood*, 102 N.W.2d 682 (Minn. 1960); Minn. Stat. §§ 103E.401, subds. 4 & 6 and 103E.315, subds. 6 & 7 (2015).
99 See Minn. Stat. § 103E.315, subd. 6(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.”)
system.”); Redekall v. Cnty. of Redwood, 102 N.W.2d 682 (Minn. 1960).

100 Minn. Stat. § 103E.315, subd. 6(a) (2015).

101 Minn. Stat. § 103E.315, subd. 6(c) (2015).

102 Minn. Stat. § 103E.315, subd. 6(c)(2) (2015).

D. Protection Benefits

The diversion of flood waters away from property can also be deemed a benefit of a drainage system project under the drainage code.103 Minnesota Courts have already recognized three basic justifications for assessing “protection benefits” to properties that, absent the proposed drainage project, would otherwise flood.

First, property that is protected from a flood risk is valued higher in the marketplace than property that is subject to flooding damages. If the proposed project will reduce or eliminate the flood risk to a property, the project will increase the market value of that property.

Second, the drainage authority has the power and corresponding responsibility to control flood waters.104

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 to drain part of the water body.105

Third, the Court of Appeals has also held that the diversion of flood waters is within the plain meaning of the word “benefit.”106

FOOTNOTES


E. Benefit Considerations for Certain Projects and Proceedings

1. Improvement to an Outlet Benefits

Improvement of outlet proceedings are available where an existing drainage system, watercourse, or body of water does not have the capacity to channelize upland drainage waters for a public or private proposed drainage project, or even an existing drainage system.107 For a detailed description of improvement to an outlet proceedings, see Section IV, Paragraph D of Chapter 2.
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 the 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 the 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. These lands should not be assessed benefits.

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. The drainage code for improvement to an outlet proceedings reads:

[T]he 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.¹⁰⁸

The code suggests that the Charge-Based benefits assessment methods discussed in this section of Chapter 4 are most-appropriate for improvement to an outlet benefits.

**FOOTNOTES**
²⁰⁷ See Minn. Stat. § 103E.221, subd. 1 (2015).
²⁰⁸ Minn. Stat. § 103E.221, subd. 6 (2015).

V. Extent of Damages

Summary

“Damages” is the term used for just compensation for drainage system projects. Damages may be awarded for:

1. The fair market value of the property required for the channel of an open ditch and the permanent grass strip under Minn. Stat. § 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. (Section V)

Damages awarded for the following are discussed in more detail in the reference sections provided:

- Easements and Rights-of-Way (Section V, A.);
- Temporary Construction Easements (Section V, B.); and
- Damages for Repairs by Resloping, Incorporating a Multi-Stage Cross-Section, Leveling Spoil Banks, Installing Erosion Control, or Removing Trees (Section V, C.).

Introduction

The drainage code procedures for the establishment of a drainage system invoke the power of eminent domain.¹⁰⁹ In this regard, drainage proceedings are often said to be quasi-condemnation. Through
adoption of the drainage project proceeding final order, the drainage system acquires an easement to construct and maintain the drainage project, for which the proceedings duly award damages to landowners. Therefore, damages for the fair market value of the property required to construct open channels and establish the permanent strip of perennial vegetation required under Minn. Stat. § 103E.021 must be included in the viewers’ report. Other damages may be awarded to compensate for the diminished value of property severed by an open channel, for the loss of crop production during construction of the project, and for the decreased productivity or value of land resulting from increased flow potential across land abutting the drainage project.

The landowners benefited by the drainage system have a vested property right in the drainage system and the drainage authority is obligated to protect that property right through keeping the drainage system in a state of repair.

The right-of-way is a property interest that involves the sharing of property rights between the drainage system and the abutting landowner where the drainage authority is the custodian of and exercises the rights of benefitted property owners under the drainage code. Right-of-way easements include the right to reasonable invasions of the adjoining landowner’s property to complete construction and to perform future repairs or maintenance of the right-of-way. Damages awarded for the right-of-way needed to construct and maintain a drainage project are ordered to be paid only once—prior to entering the damaged property for construction of the project. Damages paid in the final order compensate the abutting landowner for the right-of-way acquired as well as the damages associated with future maintenance and repairs. If a repair is necessary during the crop growing season and can only be accomplished through destroying crops on the abutting property, the drainage authority must compensate the abutting landowner for crop damages caused by the repair and assess those costs to the drainage system.

Before ordering a repair that involves resloping, incorporation of a multi-stage cross-section, leveling spoil banks, installing erosion control measures, or removing trees the drainage authority appoints viewers to assess and report on damages and benefits resulting from the change in the drainage system incorporated by the repair.

This Section covers damages awarded for the right-of-way acquired for the construction and future repairs of a drainage system as well as benefits and damages awarded for repairs involving resloping, incorporation of a multi-stage cross-section, leveling of spoil banks, or installing erosion control measures outside of the right-of-way acquired in the drainage system’s establishment, or the establishment of the strip of perennial vegetation required under Minn. Stat. § 103E.021.

FOOTNOTES
109 See Johnson v. Steele Cnty., 60 N.W.2d 32, 37 (Minn. 1953).
111 See Minn. Stat. § 103E.285, subd. 6 (2015).
112 See Minn. Stat. § 103E.315, subd. 8(2)-(4) (2015).
113 See Fischer v. Town of Albin, 104 N.W.2d 32, 34 (Minn. 1960).
A. Easements and Rights-of-Way

The drainage code expressly states the types of damages awarded in proceedings to establish a new drainage project. Damages to be paid in a drainage project proceeding may be based on:

1. The fair market value of the property required for construction of the channel of open ditch and the permanent strip of perennial vegetation required under Minn. Stat. § 103E.021;117
2. The diminished value of a farm due to severing a field by an open ditch;118
3. The loss of crop production during drainage project construction;119
4. The diminished productivity or land value from increased overflow,120 and
5. Costs to restore a perennial vegetative cover or structural practice existing under a federal or state conservation program adjacent to the permanent drainage system right-of-way and damaged by the drainage project.121

1. Channel of Open Ditch

Damages for the right-of-way for the open channel should be, at a minimum, equal to the fair market value of similar lands.122 Damages may also occur to the lands adjacent to the open channel for the deposition and leveling of the excavated spoils. Additional consideration should be made for the potential diminished value of a farm due to severing of a field by an open channel.

Damages for the construction of tile systems are typically less than damages for open ditch. In most instances, the value of the land after the tile system is installed changes very little. For tile systems, damages account more for the loss in production income from the land during construction and impacts on extended production caused by soil disturbance or compaction, in addition to the burden of future entry for repairs and maintenance.

2. Permanent Strip of Perennial Vegetation

The drainage code requires that in any proceeding to establish, construct, improve, or do any work affecting a drainage system under any law that appoints viewers to assess benefits and damages, the drainage authority must order that a permanent strip of perennial vegetation approved by the drainage authority be established on each side of the ditch.123

The damages awarded for the permanent strip of perennial vegetation may have a lesser value than the fair market value of the property required. This is because the underlying property remains in ownership of the abutting landowner as the acquisition does not restrict all uses of the permanent strip. For example, hay can be taken from the seeding area in a manner not harmful to the vegetation or the drainage systems.124 The permanent strip can be used to reduce end rows or to provide a field access road. Damages for the permanent strip of perennial vegetation, therefore, should be the difference between the market value of agricultural land and its value as a grassed area. This area is also normally within the area of the leveled spoils and is not as productive as undisturbed land.
By November 1, 2018, all open ditch drainage systems were required to have a 16.5 foot minimum width continuous buffer of perennially rooted vegetation. If the drainage system is also public waters, it will require a 50-foot average width, 30-foot minimum width, continuous buffer of perennially rooted vegetation. When damages are determined to acquire or otherwise provide compensation for buffer strips, the viewers and the drainage authority must consider the land use prior to the buffer strip installation in determining the fair market value of the property.

When damages are determined to acquire or otherwise provide compensation for buffer strips or alternative riparian water quality practices previously installed as required by Minn. Stat. § 103F.48, subdivision 3, the viewers and drainage authority shall consider the land use prior to buffer strip or alternative practice installation in determining the fair market value of the property under Paragraph (a), Clause (1).

3. Other Damages

In 1987, the legislature amended the drainage code to add the following types of damages:

1. The diminished value of a farm due to severing a field by an open ditch;
2. Loss of crop production during drainage project construction; and
3. Diminished productivity or land value from increased flow.

While there are no cases on the subject, at least two Minnesota attorney general’s opinions have opined that under the pre-1987 drainage code, a drainage system is not liable for damages arising out of increased overflow potential after the final order of the drainage authority on the subject of damages is final and conclusive.

FOOTNOTES

118 Minn. Stat. § 103E.315, subd. 8(2) (2015).
120 Minn. Stat. § 103E.315, subd. 8(4) (2015).
122 See Minn. Stat. § 103E.315, subd. 8(1) (2015).
124 The drainage inspector must establish rules for the fee owner and assigns to harvest the vegetation. Minn. Stat. § 103E.021, subd. 2 (2015).
127 Minn. Stat. § 103E.315, subd. 8(b) (West 2016).

B. Temporary Construction Easements

Crop damages may be paid for the temporary use of property abutting the drainage system project during its construction. Damages awarded for temporary construction easements are also one-time
payments incorporated into the final order. Depending upon the type of construction, this damage may occur for a period longer than just during construction.

C. Damages for Repairs by Resloping, Incorporating a Multi-Stage Cross-Section, Leveling Spoil Banks, Installing Erosion Control, or Removing Trees

Repairs that are conducted within the footprint of the right-of-way acquired when a drainage system is established and for which no additional right-of-way adjacent to the drainage system is established do not require an award of damages.

Before a drainage system is to be repaired by resloping ditches, incorporating a multistage ditch cross-section, leveling spoil banks, installing erosion control measures, or removing trees, however, the drainage authority must appoint viewers to assess and report to the drainage authority on whether any property will be benefited or damaged by the repair.\textsuperscript{132}

If the resloping, incorporation of a multistage ditch cross-section, spoil bank leveling, installation of erosion control measures, or tree removal requires the taking of property not contemplated and included in the proceeding for the establishment or subsequent improvement of the drainage system, an award of damages must be made for the property taken.\textsuperscript{133} If the spoil bank leveling or tree removal directly benefits property, an assessment of benefits may be ordered in the repair.\textsuperscript{134}

The viewers must assess and report damages and benefits in the same process as the viewers’ report required for new drainage system projects. For a detailed description of the viewers’ report, see Section VI.

Within 30 days of the viewers’ report being filed, the auditor or secretary must make a property owners’ report and mail a copy of the property owners’ report to each owner of property affected by the repair.\textsuperscript{135} For a detailed description of the property owners’ report, see Section VI(D).

Promptly after the viewers’ report has been filed, the drainage authority, in consultation with the auditor or watershed district secretary, must set a time and location for a hearing on the viewers’ report.\textsuperscript{136} The hearing must be held within 30 days of the property owners’ report being mailed.\textsuperscript{137} The hearing is noticed and conducted the same as a final hearing notice. For a detailed description of the final hearing notice and final hearing procedures, see Section VI of Chapter 2.

The final repair order must order damages paid as part of the cost of the repair and any benefits determined from the repair must be added to the benefits previously determined as the basis of the pro rata assessment for the repair of the drainage system for the repair proceeding only.\textsuperscript{138}

\textbf{FOOTNOTES}
\begin{itemize}
\item \textsuperscript{132} See Minn. Stat. § 103E.715, subd. 6 (2015).
\item \textsuperscript{133} Minn. Stat. § 103E.715, subd. 6(a)(1) (2015).
\item \textsuperscript{134} Minn. Stat. § 103E.715, subd. 6(a)(2) (2015).
\item \textsuperscript{135} See Minn. Stat. § 103E.323, subds. 1 & 2 (2015).
\item \textsuperscript{136} See Minn. Stat. § 103E.325, subd. 1 (2015).
\item \textsuperscript{137} Minn. Stat. § 103E.715, subd. 6(b) (2015).
\item \textsuperscript{138} Minn. Stat. § 103E.715, subd. 6(b) (2015).
\end{itemize}
VI. Viewers' Report/Property Owners' Report

Summary

Viewers issue a report as described in Minn. Stat. § 103E.321, which is filed with the auditor or watershed district secretary. The viewers’ report lists facts and findings of the team of viewers and provides elements necessary for the drafting of the property owners’ report. An outline of requirements for the viewers’ report is provided within Section VI, A.

In the case of disagreements between viewers, each viewer shall file a separate report stating their findings for the unresolved issues (Section VI, B.).

Upon the viewers completing their duties, they shall file the viewers’ report with the auditor of each county affected by the proposed project or the secretary of the watershed district. Along with the viewers’ report, viewers must file a detailed statement showing actual time of the viewer’s engagement in the effort and costs incurred. See Section VI, C. for more information.

A property owners’ report must be made by the auditor/watershed district secretary within 30 days after the viewers’ report has been filed. Viewers often assist the auditor or secretary in completing this report. The property owners’ report requires different information than that contained within the viewers’ report; property owners’ report contents are outlined within Section VI, D.

A. Preparation of Viewers’ Report

The viewers’ report lists facts and findings of the team of viewers and provides the elements necessary for creation of the property owners’ report. 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, the following:

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 strip of perennial vegetation under Minn. Stat. § 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 Minn. Stat. § 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. 139
A sample viewers’ report is found in Template A.

In addition to the tabular form noted above, the viewers must also prepare a benefit and damages statement. The benefits and damages statement is similar to the narrative section of a restricted appraisal report, except that, as a mass appraisal, this narrative only describes the procedure used for classifying of and the range of values for the majority of similar tracts or lots within the benefited or damaged area of the project. If differing types of property are encountered within the benefited or damaged area for which no single area can be considered similar to the other areas, the narrative describing the procedure used to determine the benefits and damages should be included. For similar tracts or lots described in the benefits and damages statement, 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.

The drainage code directs that soil and water conservation districts and county assessors to cooperate with viewers to provide information required to complete the benefits and damages statement.

FOOTNOTES

140 Minn. Stat. § 103E.321, subd. 2 (2015).
142 Minn. Stat. § 103E.321, subd. 3 (2015).
143 Minn. Stat. § 103E.321, subd. 3 (2015).

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 issues. Disagreement among the viewers does not halt the process, however, as the drainage code permits a majority of viewers to accomplish any of the duties discussed in this section.

FOOTNOTES

143 Minn. Stat. § 103E.321, subd. 3 (2015).
144 Minn. Stat. § 103E.321, subd. 3 (2015).

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 or the secretary of the watershed district. 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. If the drainage authority is not familiar with the viewing process, the viewers may meet with the drainage authority when they file their report. At this meeting, the viewers can present 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.\footnote{Minn. Stat. § 103E.323, subd. 1 (2015).} It is common that the viewers 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.

For each property owner benefited or damaged by the proposed drainage project, the property owners’ report must show:

1. The name and address of the property owner;
2. Each lot or tract and its area that is benefited or damaged\footnote{Unlike the viewers’ report, the property owners’ report requires the area benefited or damaged to be listed specifically.};
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 Minn. Stat. § 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;\footnote{Net benefits are the total benefit or damage adjusted to indicate a system inefficiency or a proximity consideration given by the viewers.}
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\footnote{Net benefits are the total benefit or damage adjusted to indicate a system inefficiency or a proximity consideration given by the viewers.};
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\footnote{Minn. Stat. § 103E.321, subd. 2, paragraph (a), relating to the property owner.}; and
11. A copy of the benefits and damages statement under Minn. Stat. § 103E.321, subd. 2, paragraph (a), relating to the property owner.\footnote{A sample property owners’ report is found in Template B.}

A sample property owners’ report is found in Template B.

The auditor or secretary must mail a copy of the property owners’ report to each owner of property affected by the proposed drainage project.\footnote{The auditor or secretary should prepare and file an affidavit of mailing, but one is not required by the drainage code.} A sample affidavit of mailing is found in Exhibit C.
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.  


Minn. Stat. § 103E.323, subd. 2 (2015).

Minn. Stat. § 103E.323, subd. 2 (2015).

VII. Maintaining Benefits Records

Summary

When a contract to construct the drainage system is awarded, the auditor or watershed district secretary makes a statement showing the total cost of the project prorated to each tract of property affecting in direct proportion to the benefits. Damages awarded to a tract are subtracted from the costs. The liability (cost less damages) for each tract of property must be documented in tabular form in a drainage lien statement. Recording of benefits and drainage lien statements are further discussed in Section VII, A.

After the drainage system is ordered, the lands affected by the drainage system have a new legal status. The benefit provided by the drainage system becomes a property right that runs with and is binding upon the land, even when ownership of the land transfers. The drainage authorities may consider recording of drainage system easements. This process is discussed in detail within Section VII, B.

Occasionally, a person may want to apportion a lien recorded against property for the purposed of splitting the parcel and transferred it to another owner. Or, if an owner of property subject to a drainage lien wants to plat the property, the apportionment of the drainage lien proceedings must be complete before the plat can be legally recorded. More information on allocation of benefits for parcel splits and transfers is provided in Section VII, C.

A. Recording of Benefits

Once the contract for the construction of a drainage project is awarded, the auditor of an affected county, or the watershed district secretary, proceed with the recording of benefits at the county recorder’s office.

First, the auditor or the watershed district secretary must make a statement showing the total cost of the drainage project with the estimated cost of all items required to complete the work. The costs are then prorated to each tract of property affected in direct proportion to the benefits. Damages awarded to a tract are subtracted from the costs.

The liability (cost less damages) for each tract of property must be documented in tabular form in a drainage lien statement. The drainage lien statement must contain the following:

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.\(^{158}\)

The amount of liability for a tract on the drainage lien statement may not exceed the benefits determined in the proceedings that accrue to the tract.\(^{159}\) The drainage lien statement must be certified by the auditor or watershed district secretary and recorded against each tract by the county recorder where the tract is located.\(^{160}\)

Supplemental drainage lien statements may be recorded in the same manner to cover any items of costs omitted from the original drainage lien statement; however, the total amount of the original lien statement and the supplemental drainage lien statement may not exceed the project benefits.\(^{161}\) A sample Drainage Lien Statement is found in Template A.

**FOOTNOTES**

158 Minn. Stat. § 103E.601, subd. 2(1)-(5) (2015).
161 Minn. Stat. § 103E.601, subd. 3 (2015).

**B. Recording of Drainage System Order and the Marketable Title Act**

A drainage proceeding is one “in rem,” and the order establishing the drainage system has the same final and binding force as a “judgment in rem.”\(^{162}\) After the drainage system is ordered, the lands affected by the drainage system have a new legal status. The benefit provided by the drainage system becomes a property right that runs with and is binding upon the land, even when ownership of the land transfers.\(^{163}\)

Nothing presently found in Minnesota Statutes requires the recording of orders that establish or modify the establishment of drainage systems; rather, the requirement is that all orders related to the drainage system be filed with the county auditor of the county having primary responsibility for administration of the drainage system or the secretary of the watershed district administering the drainage system.\(^{164}\) Limiting the filing requirement to the county auditor or watershed district secretary may cause considerable confusion throughout the State for property buyers who are unfamiliar with agricultural practices or unaware of Minnesota’s laws regarding drainage systems. This confusion may lead to obstruction of open ditches, the construction of structures on top of tile system alignments, and other actions detrimental to the efficient function of drainage systems.

While no court has specifically addressed a challenge to the continued existence of property interests in unrecorded drainage systems, the recording of drainage systems is a responsible action by the drainage authority given a developing body of statutory and case law which threatens the validity of other types
of unrecorded property interests. This process assists in eliminating future confusion and protects the historical rights of the benefited landowners in drainage systems within the county or watershed district. The recording process serves as constructive notice to all owners of property and to the public of the existence of the benefited landowner’s interest in the drainage systems on their property.

The Marketable Title Act provides that, unless an interest in real estate is preserved by filing a sworn notice within 40 years after the creation of the interest, that interest cannot be asserted against a claim of title based upon a source of title that has been of record for at least 40 years.\textsuperscript{165}

One exception to the Marketable Title Act is if the party claiming the interest is in possession of the land.\textsuperscript{166} Minnesota Title Standard No. 61 discusses the degree of possession required under the Marketable Title Act as follows: “The owner of rights under a party wall agreement, right-of-way, utility easement or other easement manifested by actual use or occupancy consistent with the nature of the easement created is considered to be in ‘possession’ of the servient estate.” This statement was cited by the Minnesota Court of Appeals in \textit{Lindbergh v. Fasching}. The Court held: “Whether an easement holder’s use and occupancy of an easement rises to the level of possession required by the Marketable Title Act depends on the nature of the easement and whether it’s use gave adequate notice of its existence and put the prudent person on inquiry.”\textsuperscript{167}

While no court has addressed the application of the Marketable Title Act to the context of drainage systems, providing constructive notice through recording may be important in light of the Minnesota Supreme Court’s holding in \textit{Sterling Township v. Griffin}, a case addressing the application of the Marketable Title Act in the context of unrecorded township road orders which, like drainage system establishment orders, were required to be filed with the county auditor. In \textit{Sterling Township v. Griffin}, the Supreme Court held that filing a township road order only with the county auditor and not with the county recorder means that the township has not complied with the Marketable Title Act and is presumed to have abandoned the road.\textsuperscript{168} The Court reasoned, “it has long been held that the County Auditor’s records do not constitute notice of an interest in land.” The Court went on to find that the Township had not properly maintained the road for many years, so it could not be said that the Township was in possession of the road to escape the Marketable Title Act.

For long neglected ditches or for buried tile mains, the concept of possession sufficient to put an owner on inquiry notice is troubling. An argument can be made that periodic assessment for general maintenance activities, combined with ongoing use of the ditch or tile for agricultural drainage, could be argued as sufficient possession to overcome the Marketable Title Act’s presumption of abandonment. Maintained open ditches and drainage systems for which ongoing maintenance and maintenance expenditures are obvious, sufficient proof of possession is not as much of an issue. In either case, it would be reasonable and responsible action by a drainage authority to take steps to ensure that interests in drainage systems are properly recorded upon properties burdened by the drainage system in order to eliminate any risk of loss under the Marketable Title Act.

There is no specific process in Minnesota Statutes for recording orders establishing or modifying drainage systems. In the absence of a statutory process, the procedure adopted and followed should provide adequate due process protections to the owners of property affected by the recording. Procedures in Minnesota Statutes related to the recording of township roadway systems have been upheld by the Minnesota Courts as providing sufficient due process protections. Therefore, this proposed recording procedure is analogous to that required for recording township roadways.
RECOMMENDED CHECKLIST FOR RECORDING DRAINAGE SYSTEM RIGHT-OF-WAY

Prior to initiating the proceedings, the drainage authority staff should gather the following documents to assist the drainage authority engineer and the drainage authority attorney in preparing for the recording process:

- Final viewers’ report and any amended viewers’ reports;
- Engineer’s final reports;
- Order establishing the drainage system;
- Any supplemental orders establishing the drainage system;
- Additional lateral establishments or modifications;
- Any partial abandonments.

Based on a review of the record documents gathered by the drainage authority staff, the drainage authority engineer should prepare:

- Official watershed maps depicting the location of the open ditch and subsurface drain tile systems claimed by the drainage authority;
- A written description of the drainage system as it exists on the ground.

The map should be of such a scale and contain sufficient information in order to readily identify the property over which a drainage system passes. At a minimum, it would have to include: a legend in order to differentiate whether or not the drainage system was open ditch or tile, along with section, township, and range identifications; the locations of municipal boundaries; and, an administrative section to include information regarding the hearings upon which the map would be adopted and locations for signatures and attestations by the Chair of the Board and Auditor or Secretary.

Once the watershed map and legal description of the drainage system location are gathered, the drainage authority may initiate the proceedings by passing a resolution of intent to hold a public hearing to consider the recording of a drainage system or systems by adopting an official map. The resolution should incorporate the map depicting the location of the drainage system and the written description of the drainage system as it exists on the ground.

A sample Resolution of Intent is found in Template B.

The drainage authority would give notice of the hearing by publication and personal mail to those owners of properties affected by the drainage system at least 30 days before the hearing. A sample Notice of Public Hearing is found in Template C. During the public hearing, the drainage authority would receive testimony of persons interested and make any amendments to the proposed map. Upon resolution of the drainage authority, the drainage authority could adopt the map and direct the recording of individual interests onto the property records of all properties burdened by the system. During the recording process, the drainage authority would have to specifically identify any parcel of property affected in the proceedings which has undergone Torrens registration. For those properties, the drainage authority would have to give the recorder special instructions to add the interest to the Certificate of Title under the exception in Minn. Stat. § 508.25 for public conveyances. To support the recording procedure, and to provide sufficient evidence to justify the claim of interest in the drainage system sought to be recorded, the drainage authority would have to develop a record of proceedings containing, among other things: the order establishing the drainage system; any amendments or
modifications to the order establishing the drainage system; a brief detail of evidence of “possession” to include a maintenance or assessment history for the drainage system; statements from the auditors and/or inspectors regarding work performed on the drainage systems; and summaries of survey data supporting the locations of the drainage systems as indicated on the official map. **Sample affidavits for the County Auditor and County Engineer are found respectively in: Template D-1: Affidavit of Auditor and Template D-2: Affidavit of Engineer.**

It would be beneficial to use the benefits and damages roll created during the most recent redetermination of benefits and damages (or at establishment if the benefits have never been redetermined) to aid the county recorder in identifying each parcel that is contained within the system and against which the drainage system should be recorded. A signed copy of the final resolution adopting the map and legal description of the drainage system, along with a signed copy of the map and the legal description of the easement, should be recorded together.

**FOOTNOTES**

162 See *Lupkes v. Town of Clifton*, 196 N.W. 666, 668 (Minn. 1924).
163 See *Lupkes v. Town of Clifton*, 196 N.W. 666, 668 (Minn. 1924).
164 Minn. Stat. § 103E.101, subd. 3 (2014).
165 Minn. Stat. § 541.023 (2015); *Hersh Props., LLC v. McDonald’s Corp.*, 588 N.W.2d 728, 734–35 (Minn. 1999).
166 Minn. Stat. § 541.023, subd. 6 (2015).
168 244 N.W.2d 129 (Minn. 1976).

C. Allocation of Benefits for Parcel Splits and Transfers

When a contract to construct the drainage system is awarded, the auditor or watershed district secretary makes a statement showing the total cost of the project prorated to each tract of property affected in direct proportion to the benefits.169 The auditor or watershed district secretary then creates a tabular lien statement and records it against all tracts of property affected by the drainage system.170 The drainage lien burdens the entire tract or property listed.

Occasionally, a person may want to apportion a lien recorded against property for the purpose of splitting the parcel and transferring it to another owner. Or, if an owner of property subject to a drainage lien wants to plat the property, the apportionment of the drainage lien proceedings must be complete before the plat can legally be recorded.171

If payments of principal and interest on a property are not in default, a person who holds an interest in that property may petition the drainage authority to apportion to the drainage lien among specified portions of the tract.172 **A sample Petition to Apportion Drainage System Lien is found in Template E.**

After the petition is filed, the drainage authority, by order, sets a time and location for a public hearing on the petition. A sample **Order Setting a Time and Location for a Public Hearing on Petition to Apportion Drainage System Lien** is found in Template F. A sample **Notice of Public Hearing on Petition to Apportion Drainage System Lien** is found in Template G. Notice for this hearing must be given by personal service at least 10 days before the hearing 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.173 This is the only procedure under the drainage code that requires notice of the hearing to be delivered by
personal service.\textsuperscript{174} Personal service is to be accomplished in the same manner as required for service of a summons in a civil action in district court.\textsuperscript{175} The method of personal service varies depending on whether notice is being delivered to an individual, a partnership or association, a corporation, the state, or upon a municipal or other public corporation.\textsuperscript{176} For a full description on how to accomplish personal service, see Rule 4.03 of the Minnesota Rules of Civil Procedure. If personal service cannot be achieved, notice may be given by publication.\textsuperscript{177} All costs of providing notice must be paid by the petitioner.\textsuperscript{178}

At the hearing, the drainage authority shall hear all related evidence and, if warranted, apportion the lien by order.\textsuperscript{179} A certified copy of the order must be recorded in the county recorder’s office and filed with the auditor or watershed district secretary.\textsuperscript{180}

A sample Order approving the petition to apportion a drainage lien is found in Template H.

\textbf{FOOTNOTES}
\textsuperscript{169} See Minn. Stat. § 103E.601, subd. 1 (2015).
\textsuperscript{171} Minn. Stat. § 103E.625 (2015).
\textsuperscript{172} Minn. Stat. § 103E.631, subd. 1 (2015).
\textsuperscript{173} Minn. Stat. § 103E.631, subd. 2 (2015).
\textsuperscript{174} Note that Minn. Stat. § 103E.041 permits personal notice to be used in place of any other notice required by the public drainage code if it is given at least ten days before the hearing. The notice is required to be served in the manner provided for the service of summons in a civil action in district court. Minn. Stat. § 103E.041 (2015).
\textsuperscript{175} See Minn. Stat. § 103E.041 (2015).
\textsuperscript{176} See Minn. R. Civ. P. 4.03.
\textsuperscript{177} Minn. Stat. § 103E.631, subd. 2 (2015).
\textsuperscript{178} Minn. Stat. § 103E.631, subd. 2 (2015).
\textsuperscript{179} Minn. Stat. § 103E.631, subd. 3 (2015).
\textsuperscript{180} Minn. Stat. § 103E.631, subd. 3 (2015).