

## GENERAL POLICY STATEMENT

The Pelican River Watershed District (the “District”) is a political subdivision of the State of Minnesota, established under Minn. Stat. Ch. 103D, cited as the “Watershed Law”. Under the Watershed Law, the District exercises a series of powers to accomplish its statutory purposes. Under Ch. 103D the District’s general statutory purpose is to conserve natural resources through development planning, flood control, and other conservation projects, based upon sound scientific principles. In order to accomplish its stat. purpose, the Board is required to adopt a series of rules, cited as the 2024 Revised Rules of the PRWD (the “Rules”).

The District, as part of the Otter Tail River One Watershed One Plan process, has adopted a Watershed Management Plan (the “Plan”), which contains the framework and guiding principles for the District in carrying out its statutory purposes. It is the District’s intent to implement the Plan’s principles and objectives in these rules.

Land alteration affects the rate, volume, and quality of surface water runoff which ultimately must be accommodated by the existing surface water systems within the District. The District was established in 1965 in response to concerns about regional lake health. Lake health and it’s contributing factors continue to be the primary focus of the District. Additionally, these surface waters have a limited capacity and therefore increases in runoff may result in localized flooding and resource degradation if not controlled.

Land alteration and utilization also can degrade the quality of runoff entering the streams and waterbodies of the District due to non-point source pollution. Lake and stream sedimentation from ongoing erosion processes and construction activities reduces the hydraulic capacity of waterbodies and degrades water quality. Water quality problems already exist in many of the lakes and streams throughout the District.

Projects which increase the rate or volume of stormwater runoff can aggravate existing nuisance flooding problems and contribute to new, potentially regional, ones. Projects which degrade runoff quality can aggravate existing water quality problems and contribute to new ones. Projects which fill floodplain or wetland areas can aggravate existing flooding by reducing flood storage and hydraulic capacity of waterbodies and can degrade water quality by eliminating the filtering capacity of those areas.

In these Rules the District seeks to protect the public health and welfare and the natural resources of the District by providing reasonable regulation of the modification or alteration of the District’s lands and waters to reduce the severity and frequency of flooding and high water; to preserve floodplain and wetland storage capacity; to improve the chemical, physical, and biological quality of surface water; to reduce sedimentation; to preserve waterbodies’ hydraulic and navigational capacity; to preserve natural wetland and shoreland features; and to minimize public expenditures to avoid or correct these problems in the future.

## **RELATION OF WATERSHED DISTRICT TO BECKER COUNTY AND CITY OF DETROIT LAKES**

The District recognizes that the primary control and determination of appropriate land uses is the responsibility of Becker County (the “County”) and the City of Detroit Lakes (the “City”). Accordingly, the District will coordinate permit application reviews involving land development only after it is first demonstrated that the application has been submitted to the County or the City, where the land is located.

It is the intention of the managers to ensure that development of land within the District proceeds in conformity with these Rules, in addition to conforming with the development guides and plans adopted by the County and the City. The District will exercise control over development by its permit program described in these Rules to ensure the maintenance of stormwater management features; protect public waters, wetlands, and groundwater; and protect existing natural topography and vegetative features in order to preserve them for present and future beneficial uses. The District will review and permit projects sponsored or undertaken by other governmental units, and will require permits in accordance with these Rules for governmental projects which have an impact on water resources of the District. These projects include but are not limited to, land development and road, trail, and utility construction. The District desires to serve as technical advisors to the municipal officials in the preparation of local surface water management plans and the review of individual development proposals prior to investment of significant public or private funds.

To promote a coordinated review process between the District and local governments, the District encourages these entities to involve the District early in the planning process. The District's comments do not eliminate the need for permit review and approval if otherwise required under these Rules. The District intends to coordinate with each local government to ensure that property owners and other permit applicants are aware of the permit requirements of both bodies. By coordinating, the District and local governments also can avoid duplication, conflicting requirements, and unnecessary costs for permit applicants and taxpayers.

## **RULE A: DEFINITIONS**

Best Management Practices (BMP): Measures taken to minimize negative effects on the environment including those documented in the Minnesota Stormwater Manual.

BWSR: Minnesota Board of Water and Soil Resources.

Buffer: An area consisting of perennial vegetation, excluding invasive plants and noxious weeds.

Buffer Protection Map: Buffer maps established and maintained by the commissioner of natural resources.

Buffer law: Minnesota Statutes §103F.48, as amended.

Commissioner: Commissioner of the Minnesota Department of Natural Resources.

Conditional Uses: Traditionally non-approved practices that may be allowed, with written approval from the District, to best meet the intent of the rule.

Cultivation farming: Practices that disturb vegetation roots and soil structure or involve vegetation cutting or harvesting that impairs the viability of perennial vegetation.

Direct Watershed: Region draining to a specific lake, stream, or river.

Drainage authority: The public body having jurisdiction over a drainage system under Minnesota Statutes chapter 103E.

Emergency Overflow (EOF): A primary overflow to pass flows above the design capacity around the principal outlet safely downstream without causing flooding.

Emergent Vegetation: Aquatic plants that are rooted in the water but have leaves, stems, or flowers that extend above the water's surface.

Ice Pressure Ridges: the ridge, comprised of soil, sand and/or gravel, often found in the shore impact zone near the ordinary high-water mark of lakes, and caused by wind driven ice or ice expansion.

Impervious Surface: Constructed hard surface (gravel, concrete, asphalt, pavers, etc.) that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development.

Intensive Vegetation Clearing: The removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block.

Landowner: The holder of the fee title, the holder's agents or assigns, any lessee, licensee, or operator of the real property and includes all land occupiers as defined by Minn. Stat. §103F.401, subd. 7 or any other party conducting farming activities on or exercising control over the real property.

Linear Project: A road, trail, or sidewalk project that is not part of a common plan of development.

Low Floor Elevation (LFE): The elevation of the lowest floor of a habitable or uninhabitable structure, which is often the elevation of the basement floor or walk-out level.

Ordinary High Water (OHW): The boundary of public waters and wetlands which is an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes

from predominantly aquatic to predominately terrestrial. For watercourses, the ordinary high-water level is the elevation of the top of the bank of the channel.

Marsh Areas: Wetlands that are frequently or continually inundated with water.

Minnesota Licensed Professional: A professional licensed in the state of Minnesota with the necessary expertise in the fields of hydrology, drainage, flood control, erosion and sediment control, and stormwater pollution control to design and certify stormwater management devices and plans, erosion prevention and sediment control plans, and shoreland alterations including retaining walls. Examples of registered professionals may include professional engineers, professional landscape architects, professional geologists, and professional soil engineers who have the referenced skills.

MPCA: The Minnesota Pollution Control Agency.

Minnesota Stormwater Manual: The MPCA's online manual for design guidance and regulations.

Natural Rock Riprap: Natural course stone, non-concrete, free of debris that may cause siltation or pollution. Stones must average more than 6 inches but less than 30 inches in diameter.

New Development Areas: All construction activity that is not defined as redevelopment and areas where new impervious is being created.

NPDES General Construction Stormwater Permit: The current Minnesota Pollution Control Agency General Permit to Discharge Stormwater Associated with Construction Activity Under the National Pollution Discharge Elimination System State Disposal System Program (NPDES/SDS).

NRCS: U.S. Department of Agriculture, Natural Resource Conservation Service.

Parcel: A unit of real property that has been given a tax identification number maintained by the County.

Public water: As defined at Minnesota Statutes §103G.005, subdivision 15, and included within the public waters inventory as provided in Minnesota Statutes §103G.201.

Redevelopment Areas: Any construction activity where, prior to the start of construction, the areas to be disturbed have 15 percent or more of existing impervious surface(s).

Responsible Party: A party other than a landowner that directly or indirectly controls the condition of riparian land subject to a buffer under the rule.

Riparian protection: A water quality outcome for the adjacent waterbody equivalent to that which would be provided by the otherwise mandated buffer, from a facility or practice owned or operated by a municipal separate storm sewer system (MS4) permittee or subject to a maintenance commitment in favor of that permittee at least as stringent as that required by the MS4 general permit in effect.

Seasonal High-Water Table: The highest known seasonal elevation of groundwater as indicated by redoximorphic features such as mottling within the soil.

Shore Impact Zone (SIZ): land located between the ordinary high water level of a public water and a line parallel to and 1/2 the setback from it (as defined by applicable county or municipal zoning ordinances), except that on property used for agricultural purposes the shore impact zone boundary is a line parallel to and 50 feet from the ordinary high water level.



Shoreland Standards: Local shoreland standards as approved by the Commissioner or, absent such standards, the shoreland model standards and criteria adopted pursuant to Minnesota Statutes §103F.211.

Steep Slopes: Non-bluff lands having average slopes more than 12 percent, as measured over distances of 50 feet measured on the ground.

Stormwater Pollution Prevention Plan (SWPPP): A comprehensive plan developed to manage and reduce the discharge of pollutants in stormwater.

Structure: An above-ground building or other improvement that has substantial features other than a surface.

SWCD: Soil and Water Conservation District.

The District: The Pelican River Watershed District established under the Minnesota Watershed Law, Minnesota Statutes Chapter 103D.

Wetland: Area identified as wetland under Minnesota Statutes section 103G.005, subdivision 19.

## **RULE B: PROCEDURAL REQUIREMENTS**

### **1. APPLICATION AND NOTICE OF INTENT REQUIRED**

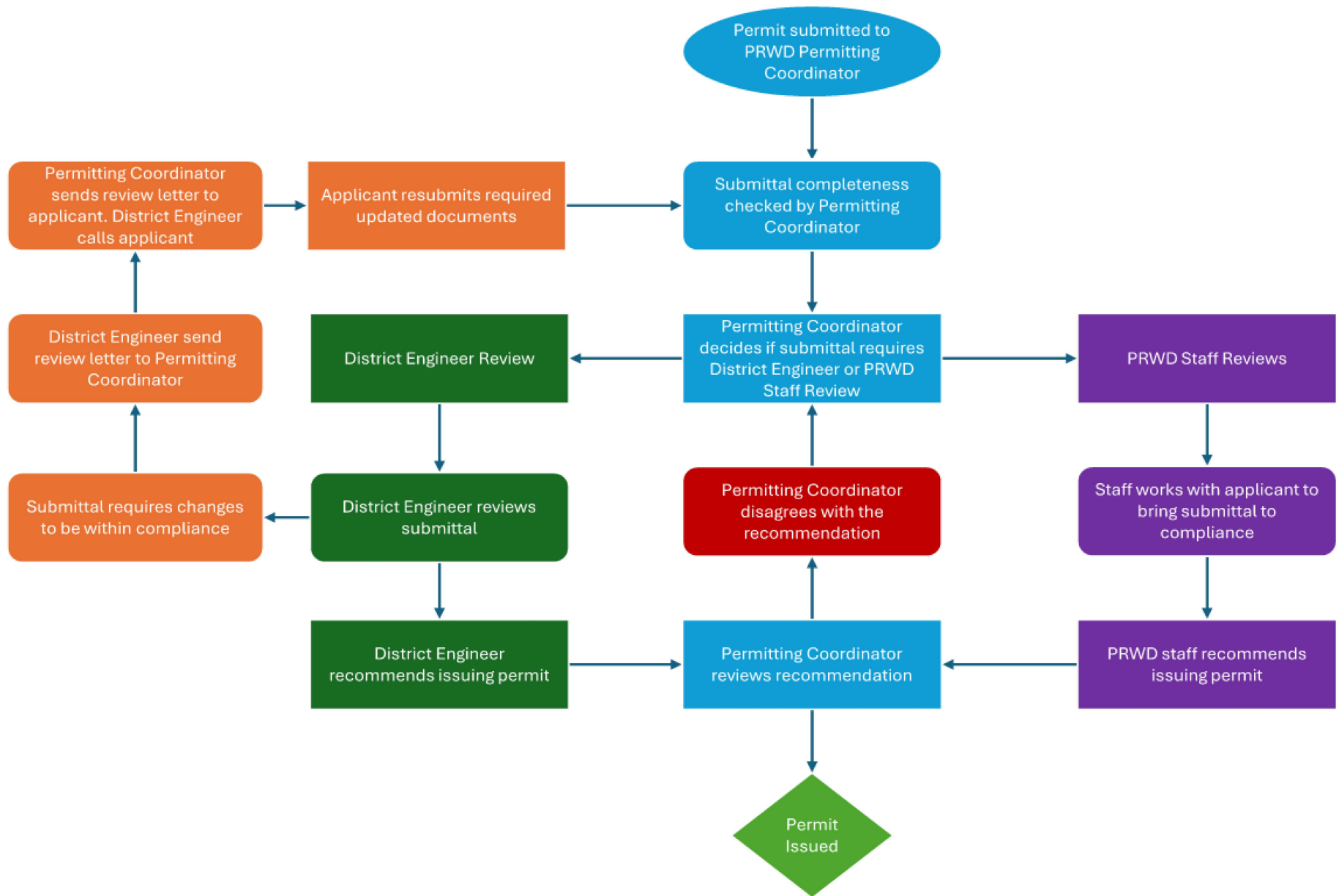
A person undertaking an activity for which a permit is required by these Rules must obtain the required permit prior to commencing the activity that is subject to District regulation. Applications for permits must be submitted to the District in accordance with the procedures described in this rule. Required exhibits are specified for each substantive rule below. Applicants are encouraged to contact District staff before submission of an application to review and discuss application requirements and the applicability of specific rules to a proposed project. When the Rules require a criterion to be met, or a technical or other finding to be made, the District makes the determination except where the rule explicitly states otherwise. The landowner or, in the District's judgment, easement holder, must sign the permit application and will be the permittee or a co-permittee. Pre-application meetings are highly recommended for all applications and a pre-application meeting is required for any project within the Shore Impact Zone.

### **2. FORMS**

A District permit application or notice of intent, and District checklist of permit submittal requirements, must be submitted on the forms provided by the District. Applicants may obtain forms from the District office or website at <http://www.prwd.org/permits>.

### **3. ACTION BY DISTRICT**

The District will act on applications in accordance with timing requirements est. under Minnesota Statutes 15.99. A complete permit application includes all required information, exhibits, and fees. An application will not be considered for approval unless all substantial technical questions have been addressed and all substantial plan revisions resulting from staff review have been completed. Permit decisions will be made by the designated District Staff representative, unless Board action is deemed necessary.



#### **4. ISSUANCE OF PERMITS**

The permit will be issued only after the applicant has satisfied all requirements and conditions for the permit and has paid all required District fees.

#### **5. PERMIT TERM**

Permits are valid for a twelve (12) month period from the date of issuance unless otherwise stated within the permit, or due to it being suspended or revoked. To extend a permit, the permittee must apply to the District in writing, stating the reasons for the extension. A Plan changes, and related project documents, must be included in the extension application. The District must receive this application at least thirty (30) days prior to the permit expiration date. The District may impose different or additional conditions on a renewal or deny the renewal in the event of a material change in circumstances. On the first renewal, a permit will not be subject to change because of a change in these Rules.

#### **6. PERMIT ASSIGNMENT**

A permittee must be assigned when title to the property is transferred or, if the permittee is an easement holder, in conjunction with an assignment of the easement. The District must approve a permit assignment and will do so if the following conditions have been met:

- a) The proposed assignee agrees, in writing, to assume the terms, conditions, and obligations of the permit;
- b) The proposed assignee has the ability to satisfy the terms and conditions of the permit;
- c) The proposed assignee is not changing the project;
- d) There are no violations of the permit conditions; and
- e) The District has received from the proposed assignee a substitute surety, if required, to secure performance of the assigned permit.

Until the assignment is approved, the permittee of record, as well as the current title owner, will be responsible for permit compliance.

#### **7. PERMIT FEES**

The District will charge applicants permit fees in accordance with a schedule that will be maintained and revised from time to time by the Board of Managers to ensure that permit fees cover the District's actual costs of administering and enforcing permits. The current fee schedule may be obtained from the District office or the District website at <http://www.prwd.org/permits>. An applicant must submit the required permit fee to the District at the time it submits its permit application. Permit fees will not be charged to the federal government, the State of Minnesota, or a political subdivision of the State of Minnesota.

#### **8. VARIANCE**

Requests for a variance from a requirement of these Rules must be decided by the Board of Managers under the following conditions:

#### **A. Variance Authorized**

The Board of Managers may hear requests for a variance from the literal provisions of these Rules in instances where their strict enforcement would cause undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant a variance where it is demonstrated that such action will be in keeping with the spirit and intent of these Rules. Requests for variances must be in writing.

#### **B. Standard**

In order to grant a variance, the Board of Managers will determine that:

- a) Special conditions apply to the structure or land under consideration that do not generally apply to other land or structures in the District.
- b) Because of the unique conditions of the property involved, undue hardship to the applicant would result, as distinguished from mere inconvenience, if the strict letter of the Rules was carried out. A hardship cannot be created by the landowner or their contractor. Economic hardship is not grounds for issuing a variance.
- c) The proposed activity for which the variance is sought will not adversely affect the public health, safety, welfare; will not create extraordinary public expense; will not adversely affect water quality, water control, or drainage in the District.
- d) The intent of the Rules is met.

#### **C. Term**

A variance will become void after twelve (12) months after it is granted if not used.

#### **D. Violation**

A violation of any condition set forth in a variance is a violation of the Rules and will automatically terminate the permit.

### **9. ADOPTION OR AMENDMENT**

These Rules of the Pelican River Watershed District shall be adopted or amended in accordance with M.S. Chapter 103D.

### **10. EFFECTIVE DATE**

Upon adoption, rules and amendments of the Rules previously approved by the Board of Managers are hereby rescinded. These Rules are effective upon adoption in accordance with M.S. Chapter 103D.

## **RULE C: STORM WATER MANAGEMENT**

### **1. POLICY**

It is the policy of the District to manage through permitting stormwater and snowmelt runoff on a local, regional, and watershed basis to promote natural infiltration of runoff throughout the District to enhance water quality and minimize adverse natural resource impacts through the following principles:

- Reduce adverse water quality impacts
- Preserve vegetation
- Decrease runoff volume and promote infiltration where suitable
- Prevent soil erosion and sedimentation
- No net increase in peak runoff rates
- Maintain existing flow patterns
- Store stormwater runoff on-site
- Avoid channel erosion

### **2. APPLICABILITY (THRESHOLDS)**

Permits are required for the following activities:

A. **Non-Linear Projects** – Construction or reconstruction of impervious surface resulting in total impervious surface lot coverage (new and existing) of:

- More than 25% residential lot area within the shoreland district.
- More than 25% commercial lot area elsewhere.
- More than 7,000 square feet of lot coverage within the shoreland district.
- More than 1 acre of impervious surface coverage or 50% elsewhere.
- Projects requiring a variance from, or use of allowable mitigation within, the local shoreland zoning ordinance.

B. **Linear Projects** – Projects that create or fully reconstruct more than one (1) acre of impervious surface as part of the same project.

C. Residential subdivision or development of four (4) or more lots.

D. Construction or reconstruction of a private or public paved trail, parking lot, or public water access.

**OR**

E. Projects or common plans of development or sale disturbing fifty (50) acres or more within one (1) mile of, and flow to, a special water or impaired water, a complete application and SWPPP must be submitted to the MPCA at least thirty (30) days prior to the start of construction activity.

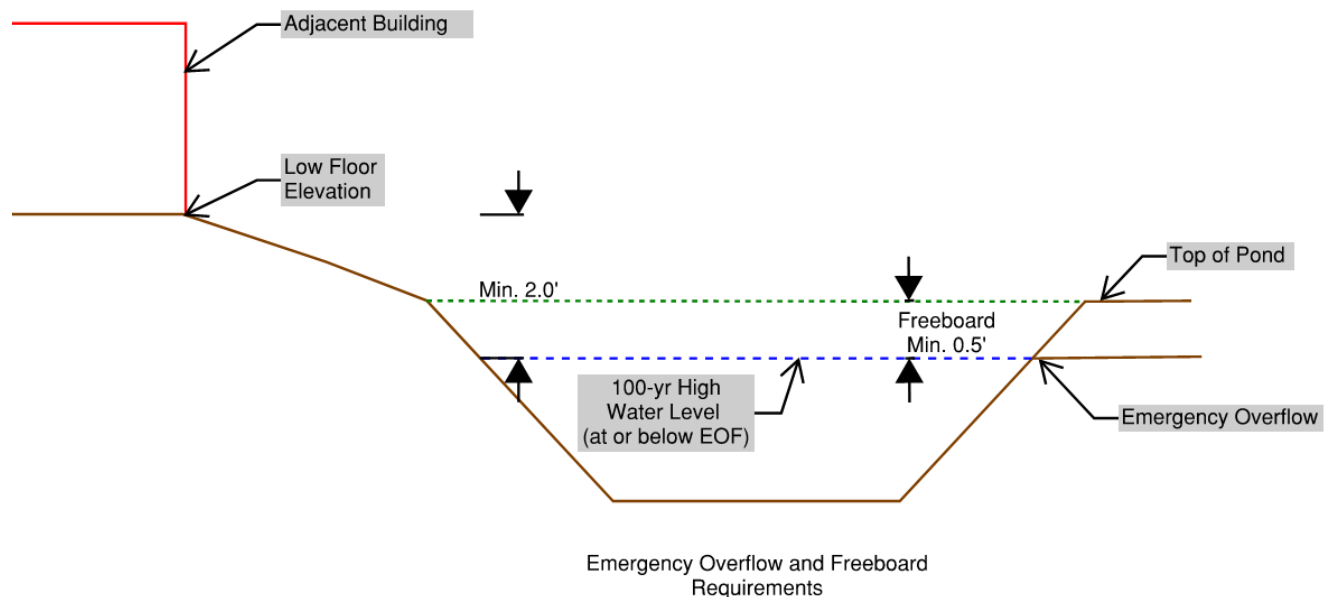
### 3. CRITERIA (STANDARDS)

#### A. Peak Rate

Peak runoff rates will not increase for the 2-, 10-, and 100-year, 24-hour storm events. For individual residential building lots that are not part of a common plan of development, rate control requirements do not apply.

- a) Applicants must use precipitation depths from Atlas 14 using MSE-3 storm distribution.
- b) In determining Curve Numbers for the post-development condition, the Hydrologic Soil Group (HSG) of areas within construction limits must be shifted down one classification for HSG C (Curve Number 80) and HSG B (Curve Number 74) and  $\frac{1}{2}$  classification for HSG A (Curve Number 49) to account for the impacts of grading on soil structure unless the project specifications incorporate soil amendments.
- c) Model output for both existing and proposed conditions is required. The District Engineer may require a copy of the electronic model to be submitted if software used does not provide easily reviewed output reports.
- d) Proposed runoff rates must not exceed existing runoff rates at each discharge point.
- e) Existing drainage patterns must be maintained.

If the site discharges to a landlocked basin or wetland, the 100-year back-to-back event must be modeled and show less than a 0.5-foot increase in the receiving body's HWL. A minimum of two (2) feet of freeboard is required if highwater levels increase adjacent to existing structures, private property, or other infrastructure are impacted or put at greater risk.



## **B. Water Quality (Volume)**

a) The Water Quality Volume (WQV) is determined as follows:

- i. New Development Areas: Capture and retain on site 1.1 inches of runoff from all impervious surfaces on the site.
- ii. Redevelopment Areas: Capture and retain on site 1.1 inches of runoff from the new and/or fully reconstructed impervious surfaces on the site.
- iii. Linear projects: Capture and retain the larger of the following:
  - 1. 0.55 inches of runoff from the new and fully reconstructed impervious surfaces on the site
  - or**
  - 2. 1.1 inches of runoff from the net increase impervious area on the site.

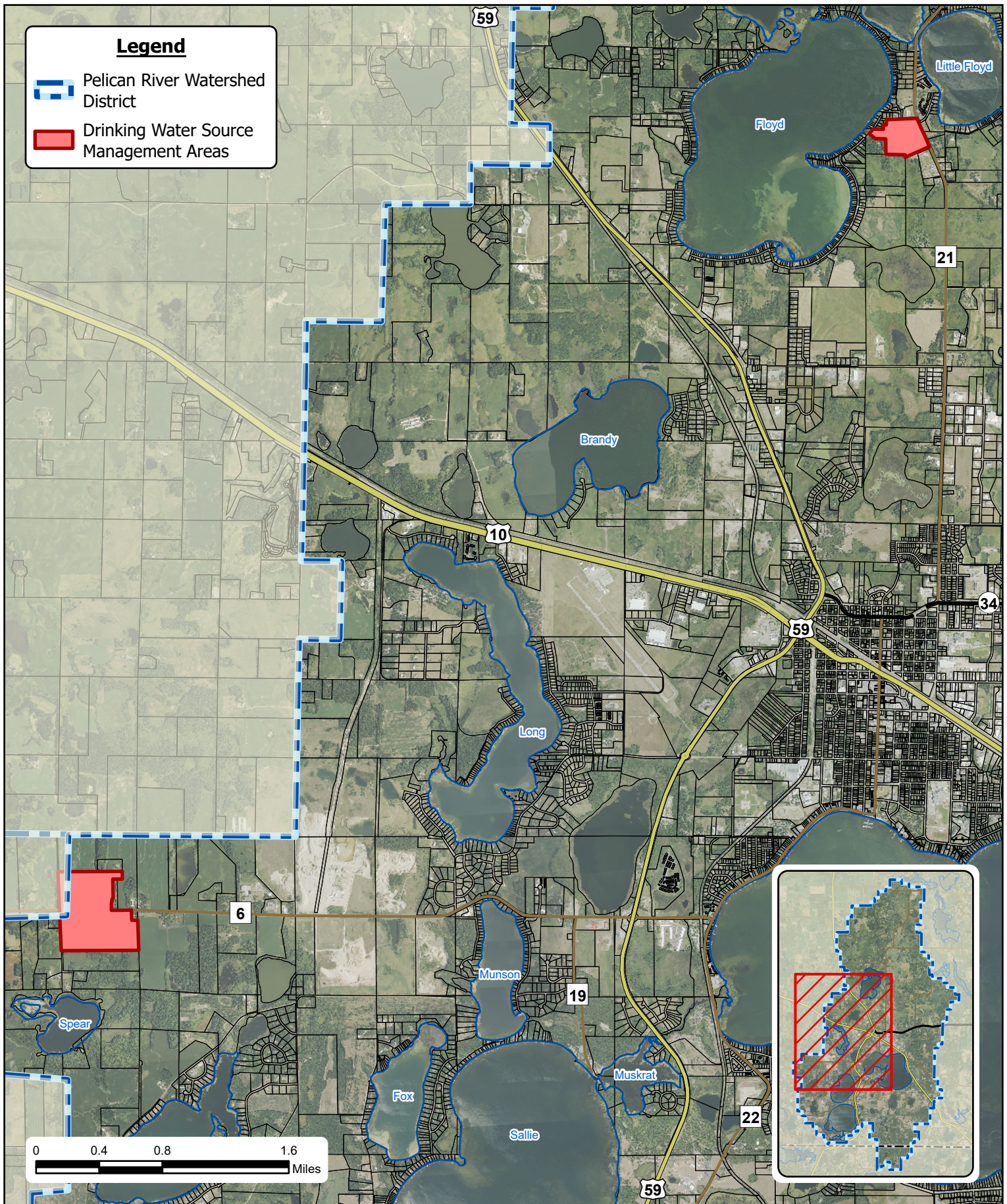
b) Infiltration must be used, if feasible:

- i. Treatment volume within infiltration basins is measured from the bottom of the basin to the lowest outlet.
- ii. Infiltration areas will be designed to drain within forty-eight (48) hours. Infiltration rates follow the current version of the MPCA Stormwater Manual. Field measured infiltration rates will be divided by two (2) for design infiltration rates.
- iii. Soils with infiltration rates higher than 8.3 inches/hour must be amended if infiltration is to be used, otherwise see Section 4 for non-infiltration BMP options.
- iv. Runoff entering an infiltration BMP must be pretreated.
- v. At least one (1) soil boring or test pit completed by a licensed professional is required within the footprint of each proposed infiltration BMP.
- vi. The basin bottom elevation must have three (3) feet of separation above the season high water table.
- vii. Design and placement of infiltration BMPs must follow any and all additional NPDES General Construction Stormwater Permit and Minnesota Stormwater Manual requirements.

c) Infiltration will be considered infeasible if any of the following are present:

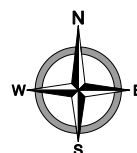
- i. Bedrock within three (3) vertical feet of the bottom of the infiltration basin.
- ii. Seasonal High-Water Levels within three (3) vertical feet of the bottom of the infiltration basin.
- iii. Site has predominantly Hydrological Soil Group D (clay) soils.
- iv. Contaminated soils on site.
- v. Drinking Water Source Management Areas or within 200 feet of public drinking water well.
- vi. Documentation, such as soil borings, well maps, etc., is required upon permit submittal stating why infiltration is infeasible. Final feasibility to be confirmed by District Engineer.





# **PELICAN RIVER WATERSHED DISTRICT BECKER & OTTERTAIL COUNTIES, MINNESOTA**

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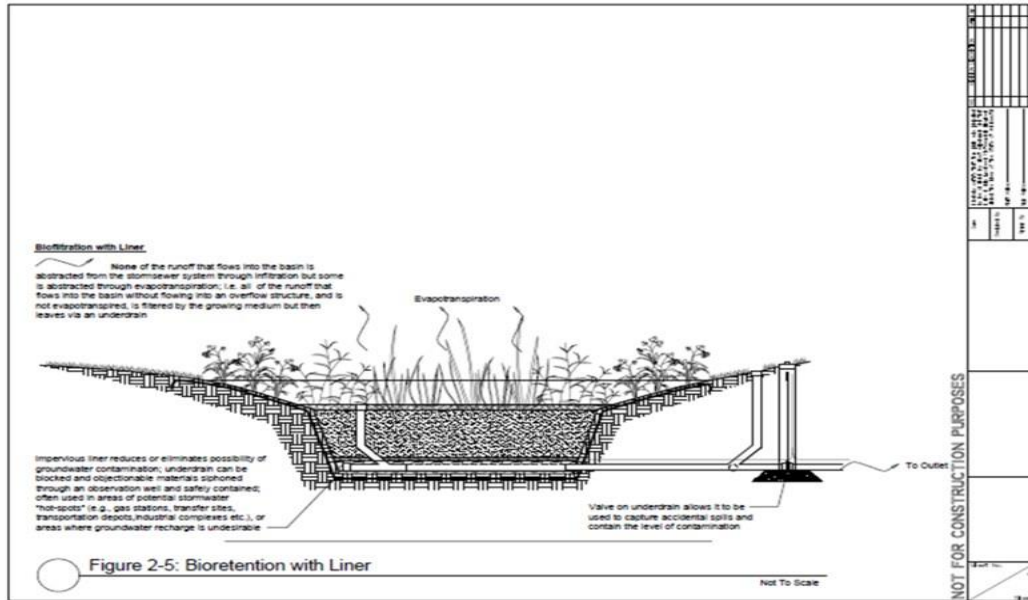


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engineering, inc.

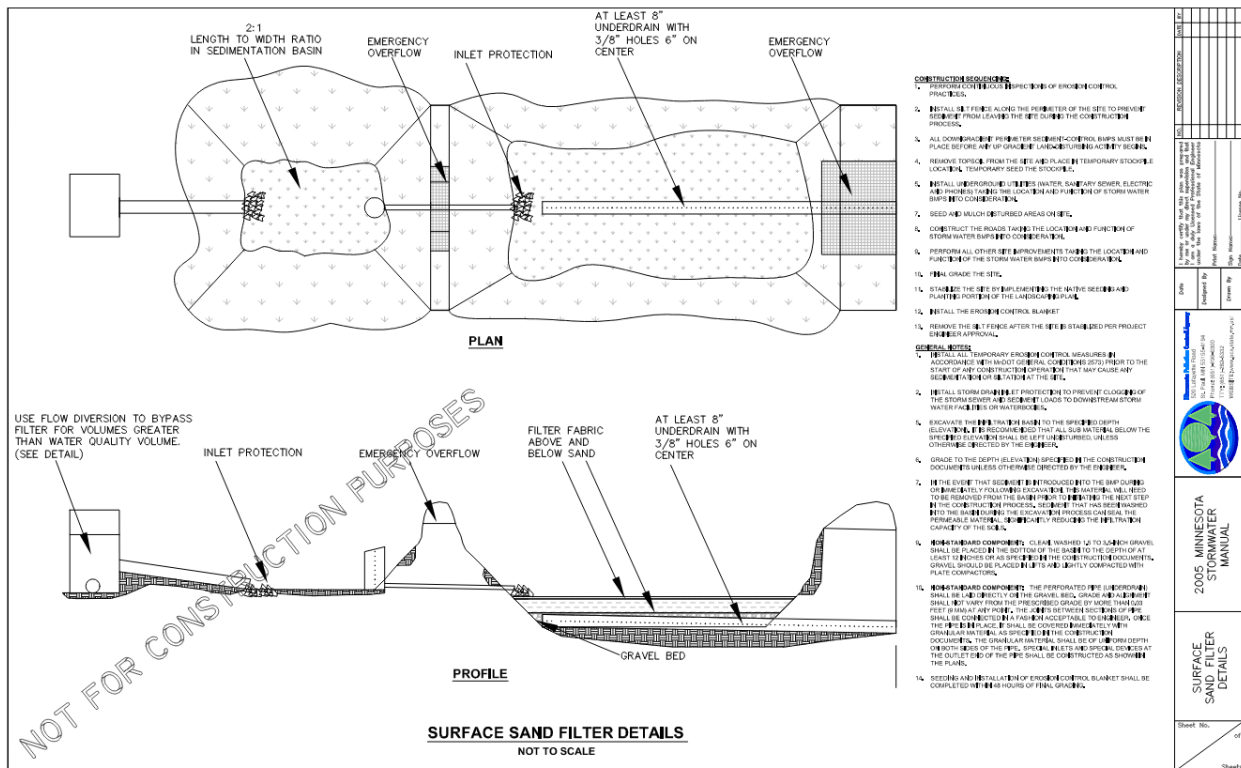


d) If infiltration is infeasible, multiply the Water Quality Volume by the appropriate factor listed below for the chosen BMP:

i. Biofiltration: Water Quality Volume \* 1.5



ii. Filtration: Water Quality Volume \* 2

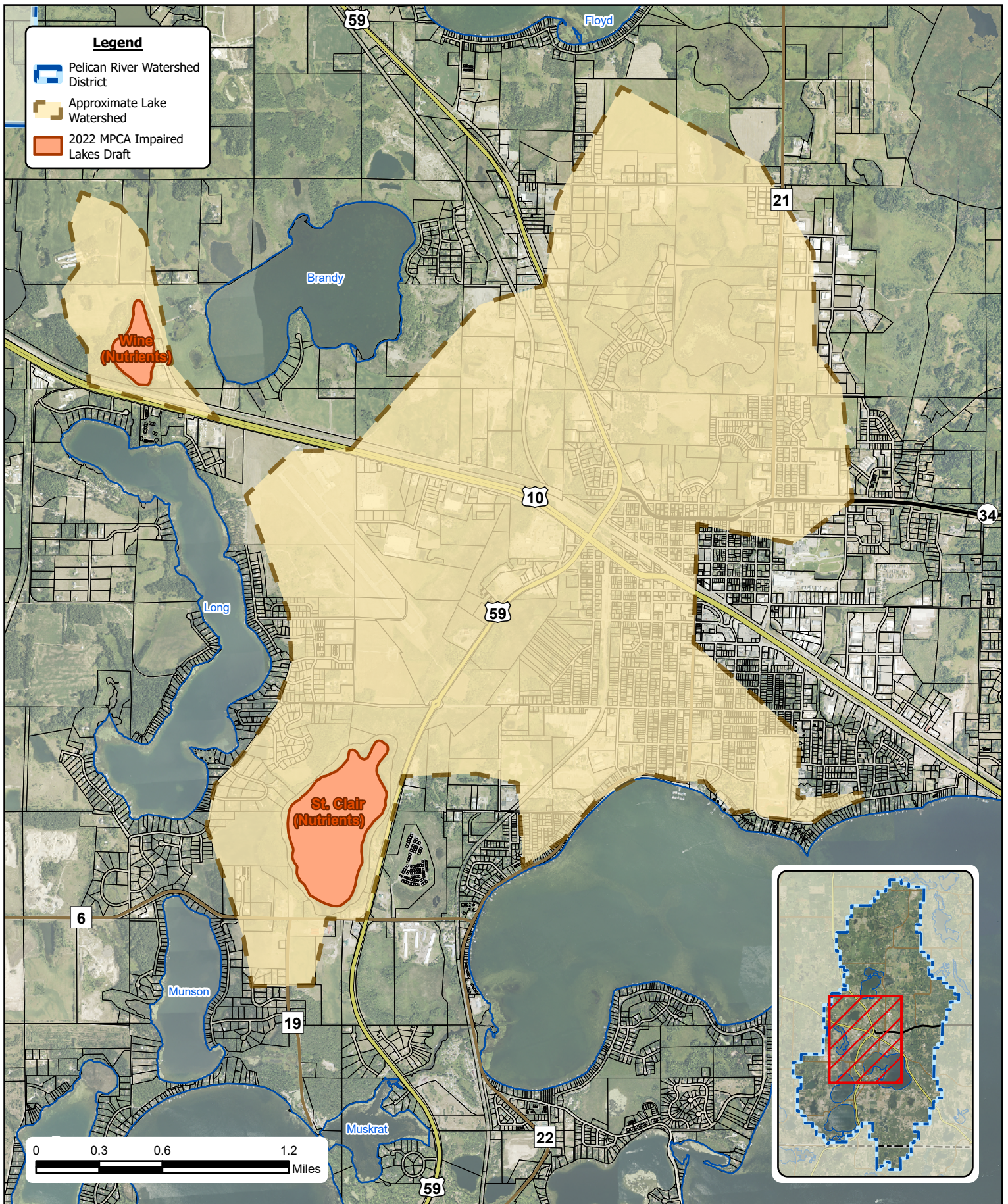


- iii. Wet Ponds as necessary: Water Quality Volume:
  - 1) Permanent pool volume below the pond's runout elevation must have a minimum volume of 1,800 cubic feet per contributing acre or equivalent to the volume produced by a 2.5-inch storm event over the pond's contributing area.
  - 2) Ponds must be designed with a minimum 3:1 length-to-width ratio to prevent short-circuiting. Inlets must be a minimum of 75 feet from the pond's outlet.
- iv. Pretreatment must be provided for all filtration practices but is not necessary for wet ponds.
- v. Design and placement of stormwater BMPs will be done in accordance with the Minnesota Stormwater Manual guidance and requirements.

#### **C. Special Treatment Areas**

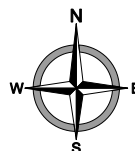
- a) If the project is within the direct watershed of an impaired water for sediments, nutrients, or E. Coli, the Water Quality Volume from Section 3.b. must be multiplied by 1.5 before any other multipliers are applied. As of 2024, Wine Lake and St. Clair Lake meet these impairment criteria.





**IMPARED LAKES EXHIBIT  
PELICAN RIVER WATERSHED DISTRICT  
BECKER & OTTERTAIL COUNTIES, MINNESOTA**

Created By: KMW Date Created: 10/08/24 Date Saved: 10/08/24 Date Exported: 10/08/24  
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Horizontal Datum: NAD 1983 HARN Adj MN Becker Feet Vertical Datum: NAVD1988  
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engineering, inc.



**b) The following language to be reflected in the Rule, pending confirmation with City Staff.**

*Within the City of Detroit Lakes, additional water quality treatment, above the requirements of this Rule, is required in the shoreland district. At a minimum the requirements of this Rule must be met.*

**a) General Standards**

- i. When possible, existing natural drainageways, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.*
- ii. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized as soon as possible, and appropriate facilities or methods used to retain sediment on the site.*
- iii. When development density, topography, soils, and vegetation are not sufficient to adequately handle stormwater runoff, constructed facilities such as settling basins, skimming devices, dikes, waterways, ponds and infiltration may be used. Preference must be given to surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.*

**b) Specific Standards**

- i. Except for Planned Unit Developments specified in Subd. 10 in tiers 2, 3, 4, and 5 impervious surfaces of lots must comply with the standards in Subd. 6.E of this ordinance. 18-25 Return to Index Printed via Website Updated 4/16/2024*
- ii. When constructed facilities are used for stormwater management, documentation must be provided by a qualified individual that they are designed and installed consistent with the Minnesota Stormwater Manual.*
- iii. New constructed stormwater outfalls to public waters must be consistent with Minnesota Rules, part 6115.0231.*

**c) Mitigation**

*Mitigation may be used, as provided by this ordinance, to deviate from certain base performance standards for impervious surface coverage and building height.*

- i. Mitigation for impervious surface coverage may be awarded as follows:*
  - 1) Stormwater Volume Reduction for Impervious Surface Mitigation for residential and Commercial Uses, Commercial Planned Unit Developments and Residential Planned Unit Developments. Impervious surface in excess of the base standard will be mitigated by stormwater volume reduction up to the mitigation limit. Volume reduction shall be by onsite infiltration and/or other volume reduction methods (e.g. rainwater harvesting). The volume is equal to the runoff generated by the 2year, 24-hour storm event (as prescribed by NOAA Atlas 14 Point Precipitation Frequency Estimate) over the impervious surface exceeding the base standard listed in Subd. 6.E. Infiltration systems and/or other volume reduction methods shall be designed, constructed, and maintained in accordance with the Minnesota Stormwater Manual.*

*Certification by a licensed professional engineer or a licensed landscape architect may be required. If this volume reduction standard cannot be met, impervious surface is limited to the base standard listed in Subd. 6.E.*

- 2) *On-site Stormwater Management as presented in this section can be used as mitigation up the mitigation limit in Subd. 6.E, for individual residential lots not included in a new subdivision or PUD greater than one acre on Detroit Lake only.*

*a. For Nonconforming Riparian Lots on Detroit Lake and all nonriparian lots on Detroit Lake, the net increase in 18-26 Return to Index Printed via Website Updated 4/16/2024 impervious surface over the base amount must be mitigated with an onsite stormwater facility (rain garden) that treats a 1.1-inch rainfall as follows:*

- o Up to 2% net increase must be treated on a 2:1 basis.*
- o 2% to 4% must be treated on a 3:1 basis.*
- o Over 4% must be treated on a 4:1 basis.*

*b. For Conforming Riparian Lots on Detroit Lake, the net increase in impervious surface over the base amount must be mitigated as follows:*

- o Up to 2% net increase must be treated with onsite stormwater facilities that treats a 1.1-inch rainfall on a 2:1 basis.*
- o If the net increase is 2% or over, the entire increase must be mitigated with an onsite stormwater facility as listed in (1) above plus a riparian Natural Buffer that is the length of the Shoreline with a minimum depth of 15 feet. An access open area through the Natural Buffer with a maximum width of 6 feet is allowed.*

*ii. Implementation*

*For all of the above noted mitigation measures the landowner must apply for and obtain a Mitigation Permit in addition to all other required permits and pay all fees associated with the application for those permits. The landowner must also sign a Mitigation Measures Maintenance Agreement that will be recorded against the property. Installed mitigation measures will be inspected at the time of installation and at the point of sale. Failure to maintain the agreed upon mitigation measures is a violation of this ordinance and will be treated accordingly.*

#### 4. FLOODPLAIN AND HIGH-WATER LEVEL MANAGEMENT

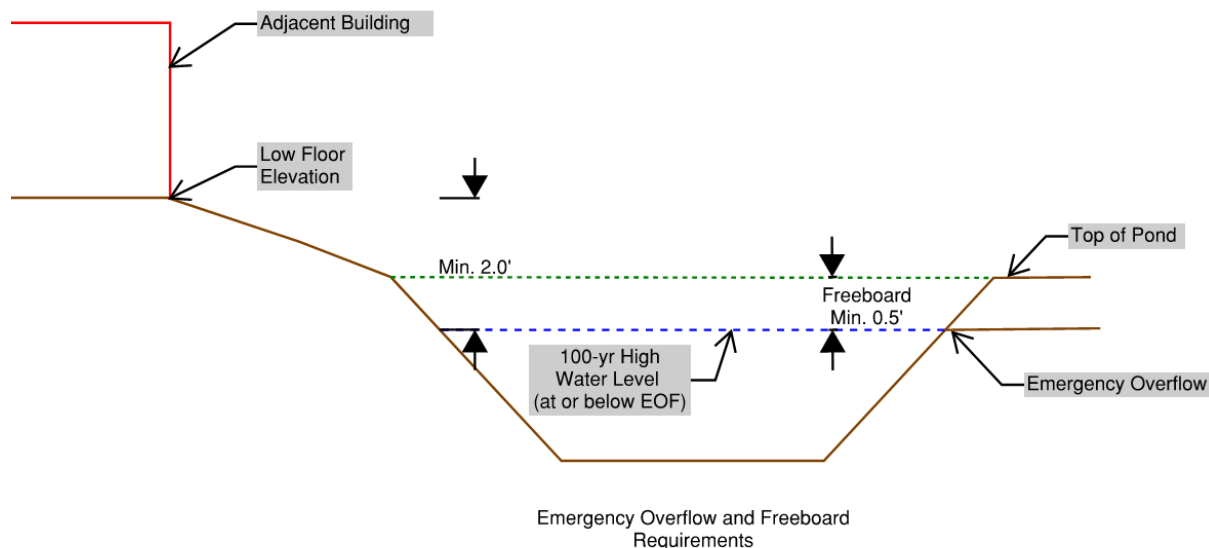
##### A. Criteria for Floodplain Alteration:

- a) Fill within a designated floodway is prohibited.
- b) Fill within the floodplain is prohibited unless compensatory floodplain storage volume is provided within the floodplain of the same water body, and within the permit term. If offsetting storage volume will be provided off-site, it must be created before any floodplain filling by the applicant will be allowed.
- c) Structure or embankments placed within the floodplain must be capable of passing the 100-year flood without increasing the elevation of the 100-year flood profile.
- d) Compensatory floodplain storage volume is not required to extend an existing culvert, modify an existing bridge approach associated with a public linear project, or place spoils adjacent to a public or private drainage channel during channel maintenance, if there is no adverse impact to the 100-year flood elevation.
- e) Compensatory floodplain storage volume is not required for a one-time deposition of up to ten (10) cubic yards of fill, per parcel, if there is no adverse impact to the 100-year flood elevation. For public road authorities, this exemption applies on a per-project, per floodplain basis.
- f) Structures to be built within or adjacent to the 100-year floodplain will have two (2) feet of freeboard between the lowest floor and the 100-year flood profile.

##### i. Figure of Floodway and Floodplains (To be added)

##### B. Onsite High-Water Level Management:

- a) Where 100-year high water levels are driven by local, onsite drainage, rather than floodplain not related to development, all of the following criteria must be met:
  - i. Emergency overflow: at or slightly above 100-year high water level.
  - ii. Top of pond embankment: at least 0.5-feet above 100-year high water level.
  - iii. Low floor: at least 2.0-feet above 100-year high water level.



## **5. EROSION CONTROL**

- A. Natural project site topography and soil conditions must be specifically addressed to reduce erosion and sedimentation during construction and after project completion.
- B. Site erosion and sediment control practices must be consistent with the Minnesota Stormwater Manual, as amended.
- C. The project must be phased to minimize disturbed areas and removal of existing vegetation, until it is necessary for project progress.
- D. The District may require additional erosion and sediment control measures on areas with a slope to a sensitive, impaired, or special water body, stream, public drainage system, or wetland to assure retention of sediment on-site.
- E. The plan must include conditions adequate to protect facilities to be used for post-construction stormwater infiltration.
- F. Required erosion control BMPs must be in-place prior to any site disturbance.
- G. Erosion prevention must be done in accordance with the following:
  - a) Stabilize all exposed soil areas (including stockpiles) with temporary erosion control (seed and mulch or blanket) within fourteen (14) days (or seven (7) days for all projects within one (1) mile of an impaired water) after construction activities in the area have temporarily or permanently ceased.
  - b) Exposed soil areas within the Shore Impact Zone must be stabilized within 24 hours.
  - c) Identify location, type, and quantity of temporary erosion prevention practices.
- H. Sediment control must be done in accordance with the following:
  - a) Sediment control practices will be placed down-gradient before up-gradient land disturbing activities begin.
  - b) Identify the location, type, and quantity of sediment control practices.
  - c) Vehicle tracking practices must be in place to minimize track out of sediment from the construction site. Streets must be cleaned if tracking practices are not adequate to prevent sediment from being tracked onto the street.
- I. Dewatering must be done in accordance with the following:
  - a) Dewatering turbid or sediment laden water to surface waters (wetlands, streams, or lakes) and stormwater conveyances (gutters, catch basins, or ditches) is prohibited.
- J. Inspections and maintenance must be done in accordance with the following:
  - a) Applicant must inspect all erosion prevention and sediment control practices to ensure integrity and effectiveness. Nonfunctional practices must be repaired, replaced, or enhanced the next business day after discovery.
  - b) Plans must include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.



K. Pollution prevention must be done in accordance with the following:

- a) Solid waste must be stored, collected, and disposed of in accordance with state law.
- b) Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds).
- c) Hazardous materials that have potential to leach pollutants must be under cover to minimize contact with stormwater.

L. Final stabilization must be done in accordance with the following:

- a) For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
- b) Grading and landscape plans must include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of eight (8) inches and incorporate amendments to meet the Minnesota Stormwater Manual predevelopment soil type bulk densities.

## **6. MAINTENANCE**

- A. Long term maintenance agreements are required for all permanent stormwater BMPs.
- B. The maintenance agreement will be recorded upon the parcel containing the BMP. Receipt of recording shall be submitted prior to permit issuance.
- C. It is recommended a draft plan be submitted to the District for review prior to recording.

## **7. REQUIRED EXHIBITS**

A. Applicants will be required to submit the following:

- a) A permit application form as detailed in Rule B.
- b) Site plans signed by a Minnesota licensed professional. Site plans must contain sheets that at a minimum address the following:
  - i. Property lines and delineation of lands under ownership of the applicant.
  - ii. Existing and proposed elevation contours, maximum 2-foot interval.
  - iii. Identification and normal and ordinary high-water elevations of waterbodies and stormwater features shown in the plans.
  - iv. Proposed and existing stormwater facilities' location, alignment, and elevation.
  - v. Delineation of on-site wetlands, marshes, shoreland, and floodplain areas.
  - vi. Construction plans and specifications of all proposed stormwater BMPs.
  - vii. Details will be required for all outlet control structures, EOFs, graded swales, and pond cross sections.
  - viii. Details must show all elevation for pipe, weirs, orifices, or any other control devices.
  - ix. SWPPP that at a minimum the items identified in the NPDES construction permit.
  - x. All other projects will require site drawing showing the type, location, and dimensions of all permanent and temporary erosion control BMPs.
- c) Drainage narrative including stormwater model reports as required in relevant sections.

- i. Acceptable computer modeling software must be based on NRCS Technical Release #20 (TR-20).
- d) Soil boring report or test pit documentation identifying SHWT as required in Section 2.3.2.
- e) If infiltration is not being used, justification must be provided.

## **8. EXCEPTIONS**

A. Exemptions from Rule C permitting:

- a) Mill and overlay projects where underlying soils are not disturbed.

## **RULE D: SHORELINE AND STREAMBANK ALTERATIONS**

### **1. POLICY**

It is the policy of the Board of Managers to prevent erosion of shorelines and streambanks, promote the use of natural material and bioengineering in the restoration and maintenance of shorelines, and maintain natural riparian corridors. These activities promote water quality and protect ecological integrity.

### **2. APPLICABILITY**

A permit is required for alteration to the land surface, impervious surface, or vegetation within the Shore Impact Zone, including but not limited to rip-rap, bioengineered shoreline installation, retaining walls, walkways, removal of any trees or woody vegetation, or conversion to turf grass.

### **3. PREAPPLICATION MEETING**

For work within the Shoreline Impact Zone, a preapplication meeting is required prior to submitting a permit application. It is highly recommended that this meeting be completed in person and on-site with the landowner and/or a project representative such as the designer or contractor.

### **4. SHORE IMPACT ZONE ALTERATION CRITERIA**

#### **A. Grading, Filling, Excavation, Or Any Other Land Altering Activities**

Any activity which disturbs soils, shoreline, streambank, or impervious surface within a Shore Impact Zone, regardless of the size, requires a permit and must comply with the following standards:

##### **a) Land Disturbances in the Shore Impact Zone**

Land alterations, regardless of the size, must be designed and implemented to minimize erosion and sediment from entering surface waters during and after construction and implement the following standards:

- i. No net increase in stormwater runoff rate or nutrient or sediment loading to the lake receiving waterbody.
- ii. Exposed bare soil shall be covered with mulch or similar materials within twenty-four (24) hours.
- iii. A permanent vegetation cover shall be established within fourteen (14) days of completion of the project through a re-vegetation plan as approved by the District.
- iv. Temporary erosion and sediment control Best Management Practices must be installed to prevent erosion or sediment loss to public waters or to neighboring properties prior to land disturbing activity.
- v. Alterations to topography are only permitted in the footprint of permitted activities and must not adversely affect adjacent or nearby properties and waterbodies.
- vi. Filling or excavation activities to create walk-out basements shall not be allowed within shore or bluff impact zones.
- vii. Any alterations below the ordinary high water level of public waters shall be authorized by the Commissioner under Minnesota Statutes, Section 103G.245.
- viii. Alterations shall be designed and conducted in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible.

- ix. Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals as approved by the District for continued slope stability and must not create finished slopes of thirty (30) percent or greater.

b) Impervious Surfaces

Impervious surface within the Shore Impact Zone can contribute to an increase in runoff or stormwater pollutants to the lake. Construction or re-construction (changes) to impervious surface is allowed provided that:

- i. The proposed activity meets all local land surface ordinances.
- ii. Stormwater from all new/reconstructed impervious surfaces must be managed consistent with the requirements of Rule C. For single lot, residential projects an applicant may substitute the use of a BMP designed to treat a 2.2-inch event in lieu of submitting numerical modeling.

c) Ice Pressure Ridge Repair

Ice pressure ridges are formed by winter ice expansion pushing up on a shoreline. While these natural features provide a host of ecological benefits there are circumstances that it may be necessary to conduct repair to an existing ridge that has been damaged.

Modification to the ice pressure ridge is permitted according to the following:

- i. Modifications or repairs are only allowed on ice pressure ridges that experienced recent damage from ice action within the past six (6) months. Landowners will need to provide proof of ice ridge formation within the last six months through aeriels or photographs.
- ii. A ridge of no less than eight (8) inches must be maintained parallel to the shore or ice ridge repaired to previous height (whichever is higher). The eight (8) inch difference is measured between the ridge top and three (3) feet landward of the ridge.
- iii. Ice ridge material that is composed of muck, clay, or organic sediment is deposited and stabilized at an upland site above the OHW.
- iv. Ice ridge material that is composed of sand or gravel may be regraded to conform to the original cross-section and alignment of the lakebed, with a finished surface at or below the ordinary high-water level (OHWL) or it may be removed.
- v. Additional excavation or replacement fill material must not occur on the site.
- vi. Erosion control measures shall be installed in accordance with the approved Erosion and Sediment Control Plan. Once grading and excavating activities are completed, the project area shall be vegetated.
- vii. Any unrelated grading, excavating, and/or filling activities may require additional permits.
- viii. A 4-foot wide, lake access walkway may be placed over, but not cut through, the ice ridge.
- ix. Any alteration below the OHWL shall require approval from the DNR.
- x. Project must meet all state, city, and county regulations.

d) Shoreline and Streambank Stabilization

Is allowed only where there is a demonstrated need to stop existing erosion along unstable sensitive topography such as steep slopes, bluffs, rivers, and streams to help

prevent or reduce erosion. Erosion needs to be verified by Department staff either through a site visit or photos.

Stabilizing shoreline erosion and instability is permitted by the following:

- i. Applicant must investigate the use of native plant material and techniques to stabilize shoreline.
  - ii. If native plant material will not be sufficient, the applicant will investigate the use of bio armoring with a combination of natural rock riprap and vegetation plantings.
  - iii. Natural rock riprap alone, free of debris, is only allowed where there is a demonstrated need to stop existing erosion that cannot be accomplished by items i. and ii. above and the following standards are met:
    - 1) Riprap to be used in shoreline erosion protection must be sized appropriately in relation to the erosion potential of the wave or current action of the particular waterbody, but in no case will the riprap rock average less than six (6) inches in diameter or more than thirty (30) inches in diameter. Riprap will be durable, natural stone and of a gradation that will result in a stable shoreline embankment. Stone, granular filter, and geotextile material will conform to standard Minnesota Department of Transportation specifications. Materials used must be free from organic material, soil, clay, debris, trash or any other material that may cause siltation or pollution.
    - 2) Riprap will be placed to conform to the natural alignment of the shoreline and does not obstruct navigation or flow of water.
    - 3) Riprap will consist of coarse stones that are randomly and loosely placed. Panning, walls, or rock of uniform size or placement is prohibited.
    - 4) A transitional layer consisting of graded gravel, at least six (6) inches deep, and an appropriate geotextiles filter fabric will be placed between the existing shoreline and any riprap. The thickness of the riprap layers should be at least 1.25 times the maximum stone diameter. Tow boulders, if used, must be at least fifty (50) percent buried.
    - 5) The finished slope exceeds three (3) feet horizontal to one (1) foot vertical beneath the ordinary high-water level.
    - 6) The landward extent of the riprap is within ten (1) feet of the ordinary high-water level.
    - 7) The height of the riprap extends no higher than three (3) feet above the ordinary high-water level, or one (1) foot above the highest know water level, or one foot above evidence of erosion, whichever is less.
    - 8) Riprap for cosmetic purposes or replace of stable vegetation is not allowed.
    - 9) For rip-rap projects greater than two hundred (200) linear feet of shoreline, a MN DNR permit is required.
- e) Sand Beach Blanket
- Placement of sand beach blanket areas must meet the following standards:
- i. The existing lake bottom must be hard bottom sand or gravel, with no muck or organic layer present, suitable for supporting material.
  - ii. The maximum size of the blanket cannot exceed fifty (50) feet in width (or half width of the lot, whichever is less), maximum ten (10) feet in depth landward from the OHW, and not exceed six (6) inches in thickness.

- 1) Alternatively, the sand blanket may be twenty-five (25) feet wide, or twenty-five percent (25%) of lot width (whichever is less), and fifteen (15) feet landward from the OHW.
  - i. The natural slope must be less than five (5) percent.
  - ii. Material must be clean and washed sand or gravel with no organic materials, silt, loam, or clay.
  - iii. The design must incorporate a berm or stormwater diversion around the beach area on upslope edge to prevent erosion.
  - iv. Replacement and maintenance of the sand blanket requires a permit and expansion of the sand blanket is not allowed. Only one (1) installation of sand or gravel to the same location may be made during a four-year period. After the four (4) years have passed since the last blanketing, the location may receive another sand blanket. More than two (2) applications at an individual project site requires a permit from the MN DNR.
  - v. Sand blankets are not allowed on steep slopes, emergent vegetation, or wetland and marsh areas.
  - vi. Exception. Beaches operated by public entities and available to the public may be maintained in a manner that represents the minimal impact to the environment are exempt from parts i. and v. of this section; however, District permits are still required and must adhere to MN DNR regulations.
  - vii. Use of non-biodegradable fabric is not permissible.
- f) Rain Gardens
- i. A permit approved by the District is required.
  - ii. Constructed rain gardens shall be designed and installed consistent with the Minnesota Stormwater Manual.
  - iii. Set back no less than ten (10) feet from structures with foundations or basements.
  - iv. Set back no less than ten (10) feet from a sewage tank and twenty (20) feet from a septic drain field.
  - v. Shall not be located on slopes twelve (12) percent or greater.
  - vi. Shall not be located within fifty (50) feet of the top of a bluff.
  - vii. Shall not be located within twenty (20) feet of the toe of a bluff.

**B. Vegetation Alteration**

Vegetative alterations may be allowed on riparian lots, in shore and bluff impact zones, or on steep slopes in accordance with the following standards:

- a) Prior to vegetation alterations regulated by this section or prior to establishing a view corridor on a riparian lot, the property owner must contact the District to arrange a site visit and complete an application for vegetation alteration.
- b) The District may require that the property owner clearly mark any proposed view corridor/or any vegetation to be removed from the riparian lot. Additionally, the District may require the property owner to supply information on slope, soil type, property line locations, location of easements, and any other information that may be needed in order for the District to act on a request.

- c) In considering a request for vegetation alterations, including the establishment view/access corridor, the District may take into consideration the predevelopment vegetation, natural openings, surrounding vegetation patterns and densities, previous vegetation alterations, slope, soil type, the locations and extent of adjacent view corridors, adjacent body of water, and other information it deems necessary and pertinent to the request.
- d) Intensive vegetation clearing within the shore and bluff impact zones, or on steep slopes, is prohibited.
- e) Limited clearing and trimming of trees, shrubs, and groundcover in the Shore Impact Zone is permitted to provide a view to the water from the principal dwelling and to accommodate the placement of permitted stairways and landings, access paths, and beach and watercraft access areas in accordance with the following standards:
  - i. The vegetation within the Shore Impact Zone will be maintained to screen structures or other facilities with trees and shrubs so that the structures are at most fifty (50) percent visible as viewed from public waters during the summer months when the leaf canopy is fully developed.
  - ii. Existing shading of water surfaces is preserved.
  - iii. Cutting debris must not be left on the ground.
  - iv. Limited trimming, pruning, and thinning of branches or limbs to protect structures, maintain clearances, or provide limited view corridors are allowed so long as the integrity of the tree is not damaged, or the health of the tree is adversely affected.
  - v. Vegetation removal will not increase erosion or stormwater runoff rate.
- f) A view/lake access corridor, defined as a line of sight on a riparian lot extending from the lakeward side of the principal residence towards the ordinary high-water level of a lake or river, is permitted in accordance with the following standards:
  - i. The total cumulative width of the view corridor must not exceed fifty (50) feet or fifty (50) percent of lot width, whichever is less. If more than fifty (50) feet or twenty (20) percent, whichever is less, has already been cleared, then additional clearing is not allowed.
  - ii. Removal of vegetation shall not be greater than twelve (12) feet in width in any contiguous strip.
  - iii. Any proposed intensive vegetation removal to accommodate the placement of permitted stairways and landings, access paths, and beach and watercraft access areas must be within the view corridor. Only one (1) beach/watercraft access area will be allowed on each residential lot and:
    - (i) must be less than 15-feet landward from the OHW and
    - (ii) must be no wider than twenty-five (25) feet or twenty-five percent (25%) of the lot width, whichever is less.

For the intent of this Rule, if this area or the shoreline has already been cleared, then additional intensive vegetation removal will not be allowed.

- iv. The total amount of tree/shrub removal within the view corridor must not exceed twenty-five (25%) percent of the trees greater the five (5) inches in diameter measured at four and a half (4 ½) feet about the ground and twenty-five (25%) percent of the trees/shrubs less than 5 inches in diameter, in a random pattern.
- v. Work must be conducted in a manner that does not disturb topsoil.

- vi. Stumps may be ground down flush with the ground; however, below ground roots must be left in place as they provide stability on shoreline.
  - vii. Cutting must be conducted by hand.
  - viii. The removal of invasive and noxious species must be verified and approved by District staff.
  - ix. Within the Shore Impact Zone, or on steep slopes or bluffs, dead, diseased, or trees deemed hazardous by District staff, or by a certified arborist, may be removed and replaced at a 1:1 ratio, regardless of size. Trees removed for legal placement of lake access paths or structures must be replaced at a ratio of 2:1. Replacement trees shall be at least one and one half (1.5) inches in diameter, and of a type approved by the District. The replacement tree must be replanted within the SIZ or steep slope or bluff impact zone of the removed tree, as approved by District staff or certified arborist. The District may solicit the review of the trees by an independent arborist, at the property owner's expense.
- g) Planting of native trees, shrubs, establishing vegetated buffers, and maintaining vegetated shorelines is encouraged on all riparian lots within the District as a method to minimize and mitigate the impacts of stormwater runoff, erosion, and nutrient enrichment on the District's water resources.
- i. Planting of native vegetation shall require a permit approved by the District prior to establishment. The District will require a plant list and Operation and Maintenance (O & M) plan with the Permit.
- h) All vegetative alterations are subject to the following conditions:
- i. Exposed bare soil shall be covered with mulch or similar materials within twenty-four (24) hours.
  - ii. A permanent vegetation cover shall be established within fourteen (14) days of completion of the project through a re-vegetation plan as approved by the District.
  - iii. All cutting shall be by hand at ground level. Topsoil shall not be disturbed and the root system must remain in place.
  - iv. Altered areas must be stabilized to acceptable erosion control standards consistent with the Minnesota Stormwater Manual.
  - v. In considering a request for vegetation alterations, including the establishment of a view corridor, the District may take into account the predevelopment vegetation, natural openings, surrounding vegetation patterns and density, previous vegetative alterations, slope, soil type, the location and extent of adjacent view corridors, the adjacent body of water and other information it deems necessary and pertinent to the request.
- i) Violations
- Restoration varies based on the percentage of vegetation coverage (evaluated through aerial coverage of trees and/or shrubs and on-site visual observation) in the SIZ, bluff, impact zone, steep slope area. Restoration mitigation may include an erosion control and stormwater plan, a specified mix of trees, shrubs, and low ground cover of native species and understory consistent with the natural cover of shorelines in the area. Replacement

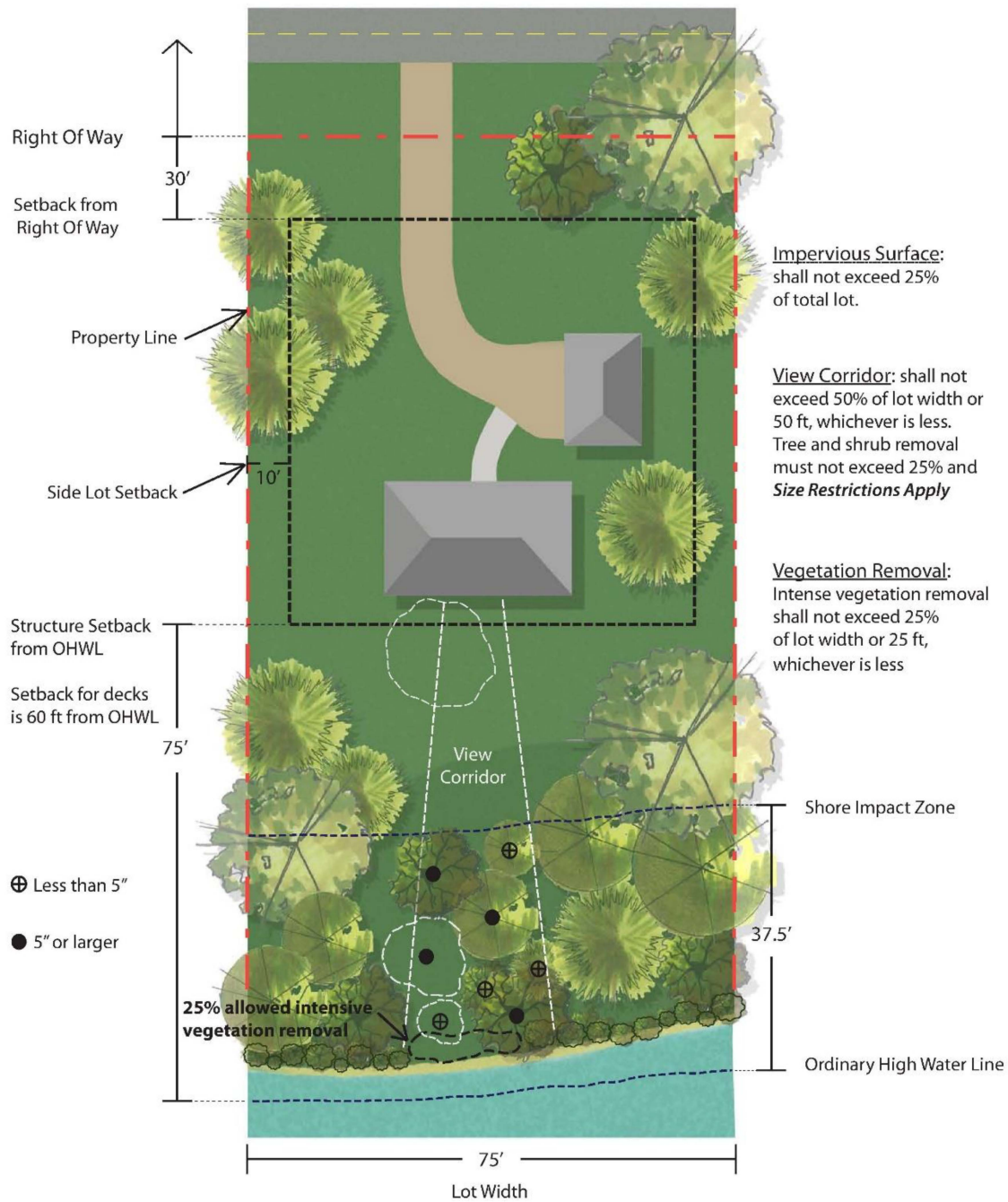


ratios will be up to 2:1 as part of a restoration order, based on applicable density and spacing recommendations.

DRAFT

# Vegetation Management

Sample Lot



### **C. Retaining Walls**

- a) Retaining wall construction within the Shore Impact Zone and Bluff Impact Zone is permitted only for areas of land or slope instability that cannot be corrected by any other means including native plantings, bio-armoring, riprap, or other practices. If an adequate alternative practice to stabilize the slope exists, construction of a retaining wall will not be allowed. If there are no adequate alternatives, the retaining wall is permitted in accordance with the following standards:
  - i. The application provides detailed description of alternatives that were considered and why they were not feasible.
  - ii. The proposed retaining wall construction is permitted by the Mn DNR, as necessary.
  - iii. Stabilization design drawings prepared by a licensed professional showing the wall design and must conform to sound engineering principles.
  - iv. The permit will require that an as-built survey, prepared by a registered land surveyor, be filed with the District.
  - v. The base of the wall must be above the highest known water elevation.
  - vi. The District Engineer may require a geotechnical report, if necessary, to review if soil conditions are suitable for wall construction.
- b) Existing retaining wall reconstruction within the Shore Impact Zone and Bluff Impact Zone is permitted only for areas of land or slope instability that cannot be corrected by any other means. If an adequate alternative practice to stabilize the slope exists, reconstruction is not recommended and will only be permitted in accordance with the following standards:
  - i. The proposed retaining wall reconstruction is permitted by Mn DNR, as necessary.
  - ii. Stabilization design drawings prepared by a licensed professional showing the wall design and must conform to sound engineering principles.
  - iii. The permit will require that an as-built survey, prepared by a registered land surveyor, be filed with the District.
  - iv. The District Engineer may require a geotechnical report, if necessary, to review if soil conditions are suitable for wall construction.
  - v. Upgradient of the reconstructed retaining wall, the applicant provides either:
    - 1) A diversion of stormwater draining toward the retaining wall to an onsite BMP, such as a rain garden, that will treat runoff from the direct drainage area consistent with the provisions of Rule D.4.A.a.i. prior to discharging to the waterbody.

**OR**

- 2) A fifteen (15) foot buffer of native vegetation approved by District staff. Only a four (4) foot wide path for access to the lake may pass through the buffer.
- c) Retaining walls within the Shore Impact Zone are not permitted within the City of Detroit Lakes.

### **5. MAINTENANCE**

- A. Long term maintenance agreements are required for permanent changes to the Shore Impact Zone.

- B. The maintenance agreement must be recorded upon the parcel containing the BMP. Receipt of recording shall be submitted prior to permit issuance.
- C. It is recommended a draft plan be submitted to the District for review prior to recording.

## **6. REQUIRED EXHIBITS**

Applicants for projects that do not trigger a Rule C Stormwater Permit but triggers a Rule D Shoreline and Streambank Alterations must submit the following:

- a) Photographs documenting existing site conditions and need for stabilization. Images must be during growing season and must depict, in profile, bank vegetation and slope condition of the subject and adjacent properties, and the existence of emergent or floating vegetation adjacent to the subject property.
- b) Dimensioned drawings of proposed conditions.
- c) Landmarks, such as houses, buildings, roads, etc., showing dimensions and distance to proposed project.
- d) Permanent and temporary erosion control BMPs locations.
- e) Vegetation removal and plantings list, including quantities, and drawing/map as applicable.
- f) Drawings prepared by a licensed professional showing the wall design for retaining wall projects.

## **7. EXCEPTIONS**

- A. The City of Detroit Lakes Public Beach (West Lake Drive) will conform to MN State Regulations and is exempt from District Rules.

## **RULE E: REGIONAL CONVEYANCE SYSTEMS**

### **1. POLICY**

It is the policy of the Board of Managers to preserve regional conveyance systems within the District, including its natural streams and watercourses, and artificial channels and piped systems. Rule E applies to surface water conveyance systems other than public drainage systems. The purpose of Rule E is to maintain regional conveyance capacity, prevent flooding, preserve water quality and ecological condition, and provide an outlet for drainage for the beneficial use of the public as a whole now and into the future. Rule E does not apply to public drainage systems, as defined in these Rules, which the District manages and maintains through the exercise of its authority under the drainage code (Minnesota Statutes Chapter 103E) and the application of Rule F. It is not the intent of this rule to decide drainage rights or resolve drainage disputes between private landowners.

### **2. REGULATION**

A person may not construct, improve, repair, or alter the hydraulic characteristics of a regional conveyance system that extends across two (2) or more parcels of record not under common ownership, including by placing or altering a utility, bridge, or culvert structure within or under such a system, without first obtaining a permit from the District. Permits are not required to repair or replace an element of a regional conveyance system owned by a government entity when the hydraulic capacity of the system will not change.

### **3. CRITERIA**

The conveyance system owner is responsible for maintenance. In addition, modification of the conveyance system must:

- A. Preserve existing design hydraulic capacity.
- B. Retain existing navigational capacity.
- C. Not adversely affect water quality or downstream flooding characteristics.
- D. Be designed to allow for future erosion, scour, and sedimentation considerations.
- E. Be designed for maintenance access and be maintained in perpetuity to continue to meet the criteria of Section 3. The maintenance responsibility must be memorialized in a document executed by the property owner in a form acceptable to the District and filed for record on the deed. Alternatively, a public permittee may meet its perpetual maintenance obligation by executing a programmatic or project-specific maintenance agreement with the District.

### **4. SUBSURFACE CROSSINGS**

A crossing beneath a regional conveyance system must maintain adequate vertical separation from the bed of the conveyance system. The District will determine adequate separation by reference to applicable guidance and in view of relevant considerations such as soil condition, the potential for upward migration of the utility, and the likelihood that the bed elevation may decrease due to natural processes or human activities. The District also will consider the

feasibility of providing separation and the risks if cover diminishes. Nothing in this paragraph diminishes the crossing owner's responsibility under Section 3, above. The applicant must submit a record drawing of the installed utility.

## **5. REQUIRED EXHIBITS**

The following exhibits must accompany the permit application:

- A. Construction details showing:
  - a) Size and description of conveyance system modification including existing and proposed flow line (invert) elevations. Elevations must be provided in NAVD 88 datum.
  - b) Existing and proposed elevations of utility, bridge, culvert, or other structure.
  - c) End details with flared end sections or other appropriate energy dissipaters.
  - d) Emergency overflow elevation and route.
- B. Narrative describing construction methods and schedule.
- C. Erosion and sediment control plan in accordance with District Rule C.
- D. Computations of watershed area, peak flow rates and elevations, and discussion of potential effects on water levels above and below the project site.

## **6. EXCEPTION**

Criterion 3(a) may be waived if the applicant can demonstrate with supporting hydrologic calculations the need for an increase in discharge rate in order to provide for reasonable surface water management in the upstream area and that the downstream impacts of the increased discharge rate can be reasonably accommodated and will not exceed the existing rate at the municipal boundary.

## **RULE F: PUBLIC DRAINAGE SYSTEMS**

### **1. POLICY**

Rule F applies to work within public drainage systems, as that term is defined in these Rules. The District regulates work in surface water conveyance systems other than public drainage systems through the application of Rule E. It is the policy of the Board of Managers to regulate work within the right-of-way of a public drainage system that has the potential to affect the capacity or function of the public drainage system, or ability to inspect and maintain the system. The purpose of Rule F is to protect the integrity and capacity of public drainage systems consistent with Minnesota Statutes Chapter 103E to prevent regional or localized flooding, preserve water quality, and maintain an outlet for drainage for the beneficial use of the public and benefitted lands now and into the future.

### **2. REGULATION**

- A. Temporary or permanent work in or over a public drainage system, including any modification of the system, requires a permit from the District. The permit is in addition to any formal procedures or District approvals that may be required under Minnesota Statutes Chapter 103E or other drainage law.
- B. A utility may not be placed under a public drainage system without a permit from the District. The design must provide at least five (5) feet of separation between the utility and the as constructed and subsequently improved grade of the public drainage system, unless the District determines that a separation of less than five (5) feet is adequate to protect and manage the system at that location. The applicant must submit a record drawing of the installed utility. The crossing owner will remain responsible should the crossing be found to be an obstruction or subject to future modification or replacement under the Drainage Law.
- C. A pumped dewatering operation must not outlet within two hundred (200) feet of a public drainage system without a permit from the District. A permit application must include a dewatering plan indicating discharge location, maximum flow rates, and outlet stabilization practices. Rate of discharge into the system must not exceed the system's available capacity.

### **3. CRITERIA**

A project constructed subject to Paragraph 2 (a) must:

- A. Comply with applicable orders or findings of the District.
- B. Comply with all federal, state, and District wetland protection rules and regulations.
- C. Demonstrate that such activity will not adversely impact the capacity or function of the public drainage system, or ability to inspect and maintain the public drainage system.
- D. Not create or establish wetlands within the public drainage system right of way without an order to impound the public drainage system under Minnesota Statutes 103E.227.
- E. Provide conveyance at the grade of the ACSIC where work is being completed. If the ACSIC has not been determined, the applicant may request that the District duly determine the ACSIC before acting on the application, or may accept conditions that the District determines adequate to limit the risk that the applicant's work will not be an

obstruction, within the meaning of Minnesota Statutes chapter 103E, when the ACSIC is determined. An applicant that proceeds without determination of the ACSIC bears the risk that the work later is determined to be an obstruction.

- F. Maintain hydraulic capacity and grade under interim project conditions, except where the District, in its judgement, determines that potential interim impacts are adequately mitigated.
- G. Where the open channel is being realigned, provide an access corridor that the District deems adequate at the top of bank of the drainage system, with the following characteristics:
  - a) A minimum 20-feet in width
  - b) Cross-slope (perpendicular to direction of flow) no more than five (5) percent grade.
  - c) Longitudinal slope (parallel to the direction of flow) no more than 1:5 (Vertical to Horizontal).
- H. Provide adequate supporting soils to facilitate equipment access for inspection and maintenance. Provide stable channel and outfall.
- I. Be designed for maintenance access and be maintained in perpetuity to avoid constituting an obstruction and otherwise to continue to meet the criteria of Section 3. The maintenance responsibility must be memorialized in a document executed by the property owner in a form acceptable to the District and filed for record on the deed. Alternatively, a public permittee may meet its perpetual maintenance obligation by executing a programmatic or project-specific maintenance agreement with the District. Public Linear Projects are exempt from the public drainage system easement requirement of Section 3(i).
- J. Identify proposed temporary obstruction or crossings of the public drainage system and specify operational controls to enable unobstructed conveyance of a rainfall or flow condition.

#### **4. REQUIRED EXHIBITS**

The following exhibits must accompany the permit application. Elevations must be provided in NAVD 88 datum.

- A. Map showing location of project, tributary area, and location and name of the public drainage system branches within the project area.
- B. Existing and proposed cross sections and profile of affected area.
- C. Description of bridges or culverts proposed.
- D. Location and sizes of proposed connections to the public drainage system.
- E. Narrative and calculations describing effects on water levels above and below the project site.
- F. Erosion and sediment control plan.
- G. Hydrologic and hydraulic analysis of the proposed project.
- H. Local benchmark in NAVD 88 datum.



## **RULE G: BUFFERS**

### **1. POLICY**

It is the policy of the Pelican River Watershed District Board of Managers to:

- A. Provide public drainage system ditches with vegetated buffers and water quality practices to achieve the following purposes:
  - a) Protect state water resources from erosion and runoff pollution.
  - b) Stabilize soils and banks.
- B. Coordinate closely with the District's landowners, soil and water conservation districts and counties, and utilize local knowledge and data, to achieve the stated purposes in a collaborative, effective and cost- efficient manner.
- C. Integrate District authorities under Minnesota Statutes §103D.341, 103E.021, and 103F.48 to provide for clear procedures to achieve the purposes of the rule.
- D. The District will implement and enforce buffers through the use of Drainage Law (Minnesota Statutes §103E.021 and 103E.351) and when that cannot be accomplished through the use of Administrative Penalty Order (APO) powers granted through Minnesota Statute §103F.48.

### **2. DATA SHARING/MANAGEMENT**

- A. The District may enter into arrangements with an SWCD, a county, the BWSR and other parties with respect to the creation and maintenance of, and access to, data concerning buffers and alternative practices under this rule.
- B. The District will manage all such data in accordance with the Minnesota Data Practices Act and any other applicable laws.

### **3. VEGETATED BUFFER REQUIREMENT**

- A. Except as subsection 4.3 may apply, a landowner must maintain a buffer on land that is adjacent to a public drainage system ditch identified and mapped on the buffer protection map established and maintained by the Commissioner pursuant to the buffer law.
  - a) The buffer must be of a 16.5-foot minimum width. This rule does not apply to the portion of public drainage systems consisting of tile.
  - b) The buffer is measured from the top or crown of bank. Where there is no defined bank, measurement will be from the normal water level. The District will determine normal water level in accordance with BWSR guidance. The District will determine top or crown of bank in the same manner as for measuring the perennially vegetated strip under Minnesota Statutes §103E.021.
- B. The requirement of subsection 4.1 applies to all public drainage ditches within the legal boundary for which the District is the drainage authority.
- C. The requirement of subsection 4.1 does not apply to land that is:
  - a) Enrolled in the federal Conservation Reserve Program.

- b) Used as a public or private water access or recreational use area including stairways, landings, picnic areas, access paths, beach and watercraft access areas, provided the area in such use is limited to what is permitted under shoreland standards or, if no specific standard is prescribed, what is reasonably necessary.
- c) Used as the site of a water-oriented structure in conformance with shoreland standards or, if no specific standard is prescribed, what is reasonably necessary.
- d) Covered by a road, trail, building or other structure.
- e) Regulated by a national pollutant discharge elimination system/state disposal system (NPDES/SDS) municipal separate storm sewer system, construction or industrial permit under Minnesota Rules, chapter 7090, and the adjacent waterbody is provided riparian protection.
- f) Part of a water-inundation cropping system.
- g) In a temporary non-vegetated condition due to drainage tile installation and maintenance, alfalfa or other perennial crop or plant seeding, or a construction or conservation project authorized by a federal, state or local government unit.

#### **4. DRAINAGE SYSTEM ACQUISITION AND COMPENSATION FOR BUFFER**

- A. In accordance with Minnesota Statutes §103F.48, subdivision 10(b), a landowner owning land within the benefited area of and adjacent to a public drainage ditch may request that the District, as the drainage authority, acquire and provide compensation for the buffer strip required under this rule.
- B. The request may be made to use Minnesota Statutes §103E.021, subdivision 6, or by petition pursuant to Minnesota Statutes §103E.715, subdivision 1.
- C. The decision on the request is within the judgment and discretion of the District, unless the request concerns a buffer strip mandated by Minnesota Statutes §103E.021.
- D. If the request is granted or the petition proceeds, the requirements of the buffer strip and the compensation to be paid for its incorporation into the drainage system will be determined in accordance with the statutes referenced in paragraph 5.1 and associated procedures. When the order establishing or incorporating the buffer strip is final, the buffer strip will become a part of the drainage system and thereafter managed by the District in accordance with the drainage code.
- E. On a public drainage ditch that also is a public water subject to a 50-foot average buffer, the drainage system will be required to acquire only the first 16.5 feet of the buffer.
- F. The District, on its own initiative pursuant to Minnesota Statutes §103F.48 and 103E.021, may acquire and provide compensation for buffer strips required under this rule on individual or multiple properties along a public drainage system. The Board of Managers findings and order will be delivered or transmitted to the landowner.
- G. This section does not displace, the terms of Minnesota Statutes chapter 103E requiring or providing for drainage system establishment and acquisition of vegetated buffer strips along public ditches.

#### **5. ACTION FOR NONCOMPLIANCE**

- A. When the District observes potential noncompliance or receives a third-party complaint from a private individual or entity, or from another public agency (such as the SWCD), it will determine the appropriate course of action to confirm compliance status. This may

include communication with the landowner or his/her agents or operators, communication with the shoreland management authority, inspection or other appropriate steps necessary to verify the compliance status of the parcel. On the basis of this coordination, the SWCD may issue a notification of noncompliance to the District. If the SWCD does not transmit such a notification, the District will not pursue a compliance or enforcement action under Minnesota Statutes §103F.48, but may pursue such an action under the authority of Minnesota Statutes §§103E.021 and 103D.341 and section 6 of this rule.

- B. On receipt of an SWCD notification of noncompliance, or if acting solely under authority of Minnesota Statutes §103E.021 or 103D.341, the District will determine first whether sufficient public drainage system easement exists to establish the required vegetative buffer. If a sufficient easement does not exist, the District will attempt to acquire the necessary easements through incremental buffer establishment provided in §103E.021, subd. 6 or through a redetermination of benefits provided in Minnesota Statutes §103E.351 to establish the required buffers. The establishment of the required buffers will occur within 12 months of the determination that inadequate easement exists, and no more than 18 months from the receipt of a SWCD notification of noncompliance or the Watershed District decision to establish the required buffers.
- C. If the District is unable to acquire the necessary easements through incremental buffer establishment provided in §103E.021, subd. 6 or through a redetermination of benefits, or if sufficient easement does exist and an established buffer has been adversely altered, the District will issue a corrective action list and practical schedule for compliance to the landowner or responsible party. The District may inspect the property and will consult with the SWCD, review available information and exercise its technical judgment to determine appropriate and sufficient corrective action and a practical schedule for such action. The District will maintain a record establishing the basis for the corrective action that it requires.
  - a) The District will issue the corrective action list and schedule to the landowner of record. The landowner may be the subject of enforcement liabilities under subsections 7.1 and 7.2. The District may deliver or transmit the list and schedule by any means reasonably determined to reach the landowner, and will document receipt. However, a failure to document receipt will not preclude the District from demonstrating receipt or knowledge in an enforcement proceeding under section 7.0.
  - b) The corrective action list and schedule will identify the parcel of record to which it pertains and the portion of that parcel that is alleged to be noncompliant. It will describe corrective actions to be taken, a schedule of intermediate or final dates for correction, a compliance standard against which it will judge the corrective action, and a statement that failure to respond to this list and schedule will result in an enforcement action. The District will provide a copy of the list and schedule to the BWSR.
  - c) At any time a landowner or responsible party may supply information in support of a request to modify a corrective action or the schedule for its performance. On the basis of any such submittal or at its own discretion, the District may modify the corrective action list or schedule, and deliver or transmit the modified list and

schedule in accordance with paragraph 5.2.1, or may advise the landowner in writing that it is not pursuing further compliance action.

- d) At any time after the District has issued the list and schedule, a landowner, or authorized agent or operator of a landowner or responsible party, may request that the SWCD issue a validation of compliance with respect to property for which the list and schedule has been issued. On District receipt of the validation: (a) the list and schedule will be deemed withdrawn for the purposes of subsection 7.2, and the subject property will not be subject to enforcement under that subsection; and (b) the subject property will not be subject to enforcement under subsection 6.3.
- e) A corrective action list and schedule is not considered a final decision subject to appeal. An objection to a finding of noncompliance, or to any specified corrective action or its schedule, is reserved to the landowner or responsible party and may be addressed in an enforcement proceeding under section 7.0.

## **6. ENFORCEMENT**

- A. Under authority of Minnesota Statutes §103E.021, 103D.545, and 103D.551, the District may seek remedies for noncompliance with section 4.0 against any landowner or responsible party including but not limited to: (a) reimbursement of District compliance costs under Minnesota Statutes §103D.345 and 103E.021 and/or an escrow, surety, Performance Bond or a Letter of Credit for same; (b) administrative compliance order; (c) district court remedy including injunction, restoration or abatement order, authorization for District entry and/or order for cost recovery; and (d) referral to the District attorney for criminal misdemeanor prosecution.
- B. In instances where existing vegetation on the ditch buffer easement has been adversely altered and has not been restored, the District may collect compliance expenses in accordance with Minnesota Statutes §103E.021 from a landowner for noncompliance with the corrective action list and schedule, as provided under paragraphs 6.3.1 and 6.3.2. The District will restore any adversely altered buffer and charge the landowner for the cost of the restoration if the landowner does not complete the requirements of the corrective action list and schedule.
- C. In instances where a ditch buffer easement area cannot be established in a timely manner, the District may issue an administrative order imposing a monetary penalty against a landowner or responsible party for noncompliance with the corrective action list and schedule, as provided under paragraphs 7.3.1 and 7.3.2. The penalty will continue to accrue until the noncompliance is corrected as provided in the corrective action list and schedule.
  - a) The penalty for a landowner on a single parcel that previously has not received an administrative penalty order issued by the District shall be the following:
    - i. \$0 for 11 months after issuance of the corrective action list and schedule.
    - ii. \$50 per parcel per month for the first six (6) months (180 days) following the time period in (a).
    - iii. \$200 per parcel per month after six (6) months (180 days) following the time period in (b).

- b) The penalty for a landowner on a single parcel that previously has received an administrative penalty order issued by the District shall be:
    - i. \$50 per parcel per day for 180 days after issuance of the corrective action list and schedule
    - ii. \$200 per parcel per day for after 180 days following the time period in (a).
- D. The administrative order will state the following:
- a) The facts constituting a violation of the buffer requirements.
  - b) The statute and/or rule that has been violated.
  - c) Prior efforts to work with the landowner to resolve the violation.
  - d) For an administrative penalty order, the amount of the penalty to be imposed, the date the penalty will begin to accrue, and the date when payment of the penalty is due.
  - e) The right of the landowner or responsible party to appeal the order. A copy of the APO must be sent to the SWCD and BWSR.
- E. An administrative order under subsection 7.1 or 7.3 will be issued after a compliance hearing before the District Board of Managers. The landowner and any other responsible parties will receive written notice at least two weeks in advance of the hearing with a statement of the facts alleged to constitute noncompliance and a copy or link to the written record on which District staff intends to rely, which may be supplemented at the hearing. A landowner or responsible party may be represented by counsel, may present and question witnesses, and may present evidence and testimony to the Board of Managers. The District will make a verbatim record of the hearing.
- F. After a hearing noticed and held for consideration of an administrative penalty or other administrative order, the Board of Managers may issue findings and an order imposing any authorized remedy or remedies.
- a) The amount of an administrative penalty will be based on considerations including the extent, gravity and willfulness of the noncompliance; its economic benefit to the landowner or responsible party; the extent of the landowner or responsible party's diligence in addressing it; any noncompliance history; the public costs incurred to address the noncompliance; and other factors as justice may require.
  - b) The Board of Managers findings and order will be delivered or transmitted to the landowner and other responsible parties. An administrative penalty order may be appealed to the BWSR in accordance with Minnesota Statutes §103F.48, subdivision 9, and will become final as provided therein. The District may enforce the order in accordance with Minnesota Statutes §116.072, subdivision 9. Other remedies imposed by administrative order may be appealed in accordance with Minnesota Statutes §103D.537.
  - c) The Board of Managers may forgive an administrative penalty, or any part thereof, on the basis of diligent correction of noncompliance following issuance of the findings and order and such other factors as the Board finds relevant.
- G. Absent a timely appeal pursuant to paragraph 7.6.2, an administrative penalty is due and payable to the District as specified in the administrative penalty order.

- H. Nothing within this rule diminishes or otherwise alters the District's authority under Minnesota Statutes, Chapter 103E with respect to any public drainage system for which it is the drainage authority, or any buffer strip that is an element of that system.

## **7. EFFECT OF RULE**

- A. If any section, provision or portion of this rule is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the rule is not affected thereby.
- B. Any provision of this rule, and any amendment to it, that concerns District authority under Minnesota Statutes §103F.48 is not effective until an adequacy determination has been issued by the BWSR. Authority exercised under Minnesota Statutes Chapter 103D and 103E does not require a BWSR adequacy determination.

## **RULE H: ENFORCEMENT**

### **1. MATTER OF ENFORCEMENT**

In the event of a violation, or potential violation, of a District Rule, permit, order or stipulation, or a provision of Minn. Stat. Chapters 103D or 103E, the District may take action to prevent, correct, or remedy the violation or any harm to water resources resulting from it. Enforcement action includes but is not limited to, injunction, action to compel performance, abatement, or restoration, and prosecution as a criminal misdemeanor in accordance with Minn. Stat. §§ 103D.545 and 103D.551.

### **2. INVESTIGATION OF NONCOMPLIANCE**

The District's Board of Managers, staff, or designated consultants may enter and inspect property in the District related to investigation of permit activities to determine the existence of a violation or potential violation as described in the preceding section.

### **3. PRELIMINARY ADMINISTRATIVE COMPLIANCE ORDER**

The District, including staff and legal consultants, may issue a preliminary administrative compliance order without notice or hearing when it finds a violation or potential violation, and that the violation or potential violation presents a threat to the public health, welfare, and safety, or an adverse effect on water resources. A preliminary administrative compliance order may require that the landowner or responsible contractor cease the land-disturbing activity; apply for an after-the-fact permit; and take corrective or restorative action. A preliminary administrative compliance order is not effective for more than ten (10) days.

### **4. BOARD HEARING – ADMINISTRATIVE COMPLIANCE ORDER**

If a landowner or their agent fails to comply with the preliminary ACO, the Board of Managers may hold a hearing with the alleged violator to discuss the violation. After due notice and a hearing at which evidence may be presented, the Board shall make findings. If the Board of Managers finds a violation, it may issue an administrative compliance order that may require the landowner or responsible contractor to cease land-disturbing activity; apply for an after-the-fact permit; take corrective or restorative action; reimburse the District for costs under Minn. Stat. § 103D.545, subd. 2; and/or be subject to any other remedy within the District's authority. An administrative compliance order may supersede a preliminary administrative compliance order or may be issued without a prior preliminary administrative compliance order.

### **5. LIABILITY FOR ENFORCEMENT COSTS**

To the extent provided for by Minn. Stat. § 103D.545, subd. 2, a landowner, responsible contractor, or equipment operator is liable for investigation and response costs incurred by the District under the Rules, including but not limited to the costs to inspect and monitor compliance, engineering and other technical analysis costs, legal fees and costs, and administrative expenses.

### **6. CONTRACTOR LIABILITY**

Individual, firm, corporation, partnership, association, or other legal entity contracting to perform work subject to one (1) or more projects will be responsible to ascertain that the necessary permit has been obtained and that the work complies with the permit, the Rules, regulations, statutes, and any applicable District orders or stipulations. A contractor that, itself or through a subcontractor, engages in an activity constituting a violation or potential violation is not a responsible contractor for purposes of the Rules.

**BOARD OF MANAGERS**

**PELICAN RIVER WATERSHED DISTRICT**

By Chris Jasken, Secretary

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