

MEMORANDUM
Comfort Lake-Forest Lake Watershed District

To: Board of Managers

Date: May 18, 2016

From: Mike Kinney

Subject: Rules Review – Shoreline Rule

Background/Discussion

Staff was directed by the Board at the last board meeting to return to the May meeting with information regarding other watershed district rules for permitting and enforcing for disturbances in buffer and shoreline areas. Attached is a summary of those organizations that have rules pertaining to this matter in some form.

In addition to the first step of reviewing other shoreline rules, staff would also like to offer additional options that the Board may consider either in combination or individually:

Option 1 – District Shoreline Rule Revisions updated independently or done as part of a complete review of District Rules. If the Board desires to modify the shoreline rules along with other rules as related to the MIDs review, District staff and engineer (see attached memo) recommend that the shoreline rules be updated as part of an overall rule revisions processes to ensure consistency throughout the rules and to save time and costs related to meetings and public hearings as compared to performing the updates independently.

Option 2 – Develop a more robust education and outreach program to all lakeshore residents within the District. This could include working with realtors to identify new lake residents. Education and outreach is often more effective than dealing with after-the-fact violations to Shoreline Rules. Landowners typically want to protect their investment and there is often peer pressure from neighbors if the existing rules are more widely known.

Option 3 Develop an incentive (and/or disincentive) for property owners that are in compliance (and/or noncompliant) with current DNR or other known standards. While less common, there are examples where incentives in the form of small tax credits make a surprisingly large impact on behavior.

Option 4 – Develop increased coordination meetings with all LGUs within the District so as to communicate the desires and expectations of the District as it relates to all permitting and ordinance education and enforcement.

Depending on which option(s) the Board would like to pursue, staff can prepare cost estimates and basic frameworks for any of these Options for the Board to consider at the June meeting. Additionally, DNR staff would be available at a future Board meeting to discuss their experience related to protection and enforcement of the St. Croix Scenic Riverway requirements. Other outside staff may be available to discuss experiences with other programs including local incentive options for shoreland protection.

MEMORANDUM
Comfort Lake-Forest Lake Watershed District

To: Board of Managers **Date:** May 20, 2016
From: Mike Kinney
Subject: Shoreline Rules Evaluation and Comparison for other Watershed Districts

Background/Discussion

As the first step in our review process of Shoreline Alteration Rules, a preliminary summary of watershed shoreline alternation rules was completed (see following pages). In summary, about 50% of the watersheds reviewed regulate shoreline alterations. For those that do regulate shoreline alterations, there is significant variation in the triggers and regulations and many rely on other government entities to regulate. The forms of protection that the watersheds seek through shoreline regulation cover one or more of these categories: bank stability/habitat, preventing sedimentation into the waterbody, and protecting visual/natural environment. Again, this cursory review indicates significant variability in the protection different watersheds seek.

District staff intends to contact other watersheds to better understand the intent of their rules and how they are implemented. As part of that research we hope to gain a better understanding of what types of activities are regulated, how effective the rules are at maintaining natural shorelines, the level of effort needed to have an effective program, and how other watersheds deal with noncompliance and enforcement.

Shoreline Rules Evaluation and Comparison for other Watershed Districts

Minnehaha Creek WD

Rule (Y/N): Yes

Triggers: Improvement or alteration of the shoreline of a water basin or the bank of a watercourse, including but not limited to a bioengineered installation, riprap, a retaining wall, a sand blanket or a boat ramp. Maintenance of an existing riprap or otherwise hardarmored shoreline or streambank that involves the addition of new material or structural change to the improvement.

Removal of native vegetation within the shoreline/streambank stabilization zone shall be limited in accordance with the following provisions:

- i. Clear cutting shall be prohibited except within the access corridor;
- ii. Native vegetation shall be preserved outside of the access corridor as much as practicable and, where removed, shall be replaced with other vegetation that is equally effective in retarding runoff and preventing erosion.

Summary: No person shall install an improvement or alteration of the shoreline of a water basin or the bank of a watercourse. Permits are required for nearly any alteration or improvement to shorelines. Applications must calculate Erosion Intensity, meet multiple general and specific criteria, and include exhibitions and plans. The Shoreline means the ordinary high water level of a water basin and the area waterward thereof. The Stabilization Zone means the area of land paralleling the shoreline or streambank and extending 20 feet inland from all points along the ordinary high-water mark of the shoreline.

Link to rule: [MCWD Shoreline & Streambank Stabilization](#)

Link to permit application: [Shoreline & Streambank Stabilization Permit](#)

Nine Mile Creek WD

Rule (Y/N): Yes

Triggers: No person shall install a shoreline or streambank improvement, including but not limited to riprap, a bioengineered installation or a retaining wall, on a public water without first securing a permit. Planting of vegetation not intended to provide deep soil structure stability does not require a permit. Live plantings incorporated in shoreline bioengineering must be native aquatic vegetation and/or native upland plants. Land-disturbing activity includes but is not limited to demolition of a structure or surface, soil stripping, clearing, grubbing, grading, excavating, filling and the storage of soil or earth materials.

Summary: An applicant for a shoreline alteration permit must demonstrate a need to prevent shoreline erosion or restore eroded shoreline. An applicant must first consider maintenance or restoration of shoreline using bioengineering. Applications must meet multiple general and specific criteria, and include exhibitions and plans. Shoreline means "the lateral measurement along the contour of the ordinary high water mark of waterbodies other than watercourses, and the top of the bank of the channel of watercourses, and the area waterward thereof.

Comments: Rule is generally modeled after that of Minnehaha Creek Watershed District

Link to rule: [NMCWD Rule 7: Shoreline & Streambank Improvements](#)

Link to permit application: [Permit Application](#)

Riley-Purgatory-Bluff Creek WD

Rule (Y/N): Yes

Triggers: A permit is required to install an improvement to stabilize a shoreline or streambank, including but not limited to riprap, a bioengineered installation, a sand blanket or a retaining wall, on any watercourse or a public water. Applicant must demonstrate a need to prevent erosion or restore an eroded shoreline, unless the proposed improvement is part of a public project designed to restore natural shoreline. Stabilization practices must be consistent with the erosion intensity and/or shear stress calculated for the property proposed to be stabilized.

Summary: No person shall install an improvement or alteration of the shoreline of a water basin or the bank of a watercourse. Permits are required for nearly any alteration or improvement to shorelines. Applications must calculate Erosion Intensity, meet multiple general and specific criteria, and include exhibitions and plans. Shoreline means "the lateral measurement along the contour of the ordinary high water mark of waterbodies other than watercourses, and the top of the bank of the channel of watercourses, and the area waterward thereof."

Comments: Rule is generally modeled after that of Minnehaha Creek Watershed District

Link to rule: [Rule F: Shoreline & Streambank Stabilization](#)

Link to permit application: [Permit Application Guide](#)

Pelican River WD

Rule (Y/N): Yes

Triggers: Any of the following activities within the Shore Impact Zone:

- alterations to land, impervious surface, or vegetation (including brush & tree removal);
- additions to impervious surface resulting in total impervious surface (new and existing) in excess of 25% of lot area, or 10,000 square feet in the shoreland zone;
- installation, repair, or replacement of Rip-rap or beach sand blanket;
- Ice ridge leveling or repair;
- and installation, repair, or replacement of retaining walls

Summary: Any activity regulated by the rule, that occurs within the Shore Impact Zone (SIZ) must receive a permit prior to commencing work. The SIZ is the boundary between a lake's Ordinary High Water level (OHW) and one half of the required setback from the Ordinary High Water level set by local ordinance. Setback distances vary depending on the type of waterbody as declared by the Minnesota DNR. These setbacks and OHWs are provided on the WD's website.

Link to rule: [Water Management Rules Section 4.10](#)

Link to permit application: [Permit Information](#)

Prior Lake-Spring Lake WD

Rule (Y/N): Yes

Triggers: A permit is required for an activity that will disturb more than 10,000 square feet (0.23 acre) of land area within a shoreland protection zone. All land disturbing activities, whether or not they require a permit from the District, must be completed in compliance with the standards and criteria of the District's Rules and in conformance with best management practices. Use of fertilizer and pesticides in the shoreland protection zone shall be done so as to minimize runoff into public waters by the use of earth material, vegetation, or both. No person shall conduct land disturbing activities without protecting adjacent property and waterbodies from erosion, sedimentation, flooding or other damage.

Summary: Permits are required for land disturbing activity within the Shoreland Protection Zone, which means "land located within a floodplain, within 1,000 feet of the OHW of a public water or public waters wetland, or within 300 feet of the Prior Lake outlet channel." Land Disturbing Activity means "any change of the land surface to include removing vegetative cover, excavation, fill, grading, stockpiling soil, and the construction of any structure that may cause or contribute to erosion or the movement of sediment into waterbodies." Applications consist of a package of materials including forms, calculations, plans, maps, and exhibits.

Link to rule: [Permit Information & Rules](#)

Link to permit application: [Permits](#)

Browns Creek WD

Rule (Y/N): Yes

Triggers: No person shall disturb the natural shoreline or streambank partially or wholly below the ordinary high water mark of a waterbody, without first securing a permit from the District and posting a surety. Specific criteria exist for bioengineering, rip-rap, retaining walls, and sand blankets. A permit will issue only on a demonstration that erosion is occurring or likely to occur. A Rule 3.0 (Erosion and Sediment Control) permit is not required for agricultural activity, provided that a grass or natural vegetation buffer zone extending one rod (16.5 feet) or the width of an applicable shore impact zone, whichever wider, is maintained along any waterbody, wetland or surface drainage conveyance. Before any disturbance of ground vegetation or contour, or placement of any structure on the ground, a declaration or other instrument incorporating the applicable requirements of Rule 4.0 (Shoreland Buffer shall be recorded with the County.

Summary: Natural shorelines or streambanks shall not be disturbed without a permit. Rule 5.0 is limited to alterations of a shoreline or streambank where erosion of the shoreline or streambank is occurring or likely to occur. The use of bioengineering is encouraged as an alternative to traditional engineered stabilization techniques for its cost advantage, aesthetic superiority and ecological integrity. "Shore impact zone" means land located between the OHWL of a public water and a line parallel to it at a setback of 50 percent of the structure setback applicable under the governing shoreland ordinance. "Streamside zone" is a vegetative buffer zone that extends from the ordinary high-water mark of a watercourse to the interior edge of the middle zone. Rules also require buffer zones, which apply in addition to, and not in place of, any local shoreland ordinance.

Link to rule: [BCWD Rules](#)

Link to permit application: [BCWD Permit Application](#)

Coon Creek WD

Rule (Y/N): Yes

Triggers: Permits for improvements by riparian owners of the beds, banks and shores of lakes, streams, ditches and wetlands is required before such work may be done. This policy, regulation and standards apply to:

1. Land disturbing activities of 1 acre or greater of cumulative impact
2. Work adjacent to lakes or wetlands,
3. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses).

Summary: It is the policy of the District to: regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for preservation and beneficial use.

Link to rule: [CCWD District Rules](#)

Link to permit application: [Grading & Development Permit Application](#); [Ditch Maintenance & Repair Permit Application](#)

Carnelian-Marine-St. Croix WD

Rule (Y/N): Yes

Triggers: No person shall disturb the natural shoreline or streambank partially or wholly below the ordinary high water mark of a waterbody, without first securing a permit from the District and posting a surety. Specific criteria exist for bioengineering, rip-rap, retaining walls, and sand blankets. A permit will issue only on a demonstration that erosion is occurring or likely to occur. A Rule 3.0 (Erosion and Sediment Control) permit is not required for agricultural activity, provided that a grass or natural vegetation buffer zone extending one rod (16.5 feet) or the width of an applicable shore impact zone, whichever wider, is maintained along any waterbody, wetland or surface drainage conveyance. Rule 4.0 (Shoreland Buffer) applies in addition to, and not in place of, any local shoreland ordinance.

Summary: Rule is nearly identical to Browns Creek ordinances. "Shore impact zone" means land located between the OHWL of a public water and a line parallel to it at a setback of 50 percent of the structure setback applicable under the governing shoreland ordinance. "Streamside zone" is a vegetative buffer zone that extends from the ordinary high-water mark of a watercourse to the interior edge of the middle zone.

Link to rule: [CMSC District Rules](#)

Link to permit application: [CMSC Permit Application](#)

Rice Creek WD

Rule (Y/N): No

Triggers: No person may alter or fill land within the floodplain of any lake, stream, wetland, drainage system, major watercourse, or public waters without first obtaining a permit from the District. Shoreline/streambank restoration or stabilization, approved in writing to control erosion and designed to minimize encroachment and alteration of hydraulic forces, does not require a permit under this Rule.

Summary: Rule is limited to alterations in the floodplain. Definition of "Land Disturbing Activity" is sufficiently broad to include unpermitted removal of vegetation near the shoreline. However, the term shoreline is not defined or use in such a way as to allow it to be expanded to such activity.

Link to rule: [RCWD Rules](#)

Link to permit application: [Permit Information & Application](#)

Lower Minnesota River WD

Rule (Y/N): No

Triggers: Shoreline or streambank improvement or alteration partially or wholly below the ordinary high water mark of a lake or wetland, or bankfull height of a stream, shall not result in detrimental effects to the lake, wetland, or stream. Bioengineering techniques should be used to the extent possible. The use of bioengineering is encouraged as an alternative to traditional engineered stabilization. Retaining walls are to be used only when there is no adequate stabilization alternative and in accordance with state law.

Summary: Shoreland ordinances vary according to the shoreland classification for a particular water body. All of the municipalities within the District, with the exception of Mendota Heights, Lilydale, Mendota, and Carver, have DNR-approved shoreland management ordinances. The District requires all government entities within its jurisdiction to identify, rank, and map disturbed shoreland areas. Along these areas the District will promote and encourage protection of non-disturbed shoreland and restoration of disturbed shorelines and streambanks to their natural state, to the maximum extent practical. In addition, the District will discourage the removal of streambank and lakeshore vegetation during and after construction projects.

Link to rule: [LMWD Third Water Management Plan](#)

Link to permit application: N/A

Valley Branch WD

Rule (Y/N): No

Triggers: Upland vegetative buffers will be required adjacent to lakes, streams, and wetlands because they reduce the amount of phosphorus from runoff, prevent shoreline erosion, discourage waterfowl nesting/feeding, and provide additional wildlife habitat. A minimum 35-foot wide buffer strip measured perpendicular to the OHW extending 35 feet inland shall be provided. A mowed access path and shoreline is allowed, but must not exceed 30% of the landowner's shoreline width or 30 feet, whichever is less. Exceptions: For streambank and shoreline stabilization projects, the buffer widths listed are strongly encouraged, but not required.

Summary: Communities within the WD are responsible for: (C) Shoreland and Floodplain Ordinances

Link to rule: [VBWD District Rules](#)

Link to permit application: N/A

Capital Region WD

Rule (Y/N): No

Triggers: N/A

Summary: N/A

Link to rule: [CRWD Watershed Rules](#)

Link to permit application: [Application Information and Materials](#)

Ramsey-Washington Metro WD

Rule (Y/N): No

Triggers: N/A

Summary: N/A

Link to rule: [RMMWD District Rules](#)

Link to permit application: N/A

South Washington WD

Rule (Y/N): No

Triggers: N/A

Summary: N/A

Link to rule: [SWWD District Rules](#)

Link to permit application: N/A

Project Name | District Permitting Program

Date | 5-17-2016

To | Mike Kinney, CLFLWD Administrator

Cc |

From | Greg D. Graske, P.E.

Regarding | Rule Revisions

Background

The Board of Managers has directed EOR to review the MIDS rule framework with the idea of incorporating selected components of MIDS that will help aid in the District administrative process and protect the resources of the District. That review has been completed and there are several rule revisions that could be considered. The District has also recently discussed potential modifications to the shoreline alteration Rule.

Discussion

The comparison of the MIDS standard to the existing CLFLWD rules indicates that there are potential for changes in rules: 1 “Procedural Requirements”, 2 “Stormwater Management”, 3 “Erosion Control”, 10 “Financial Assurances”, 12 “Enforcement” & 13 “Site Inspection” (potential new rule). The potential shoreline rule revisions would directly affect rule 5 “Shoreline & Streambank Alterations”, but may also influence or overlap with rules 3 “Erosion Control”, 4 “Lake, Stream, and Wetland Buffer Requirements” & 7 “Floodplain and Drainage Alterations”. There are also some big picture questions that should be considered and discussed, including:

- when permits are triggered,
- overall stormwater treatment standards, and
- if there should be added flexibility for certain types of projects (road projects, redevelopment, small sites, etc.).

Permitting programs generally evolve over time as clarifications or modifications arise that benefit both the community and/or resources in that community. The rules have been in place since 2008 and with the potential improvements to the rules that MIDS could bring and the potential for modification for the shoreline rules, it would seem appropriate to complete a full review of all of the rules based on the latest science and regulatory changes along with the knowledge that has been gained from the last 8-years of permitting. This process has been initiated as part of the MIDS review – Phase 2 project, presented by Jay Michels.

Recommendation

EOR recommends that the District begin the process to review all of the District Rules and propose modifications to the rules for consideration by the Board of Managers. It is recommended that this process occur over the summer and fall of 2016 with the goal of having fully approved rules prior to the 2017 construction season.