

Vegetation Management Innovative Standards

Part of a series highlighting innovative local government standards intended to help encourage adoption of more protective shoreland standards.



Benefits

- Slows runoff into waterbody and allows ground water recharge
- Infiltrates runoff and filters out nutrients and pollution
- Provides habitat
- Enhances natural lake shore character
- Reduces erosion by anchoring the soil

Types of Approaches

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The ordinance language used in these examples varies significantly depending on complexity of the issue and method of implementation. In straight forward cases, actual ordinance language is provided. In complex examples, the key provisions are summarized. Please contact the planning and zoning staff with the relevant community if you have questions about the specific ordinance provisions.

1. Required Riparian Buffer

Itasca County

A shoreline buffer shall exist in the shore impact zone, consisting of trees, shrubs, and low ground cover of native plants and understory consistent with natural cover of shorelines in the area. Buffer depth from the OWHL shall be:

- General development lakes: 10 feet
- Recreational development lakes: 15 feet
- Natural environment lakes: 50 feet
- Phosphorus sensitive lakes: 50 feet
- Agricultural, urban and tributary rivers: 50 feet
- Forested and transition rivers: 50 feet
- Remote rivers: 50 feet

Ordinance Citation: Section 5.9.1.B.1.

Restoration of the required lake (only) buffer depth is required for the issuance of certain permits, conditional uses, and variances to mitigate the impacts of developments, nonconforming structures, or uses on lake water quality.

Ordinance Citation: Section 19.2.4.I.3.

City of Golden Valley

A buffer is required for all permitted activities. Buffer widths are as follows:

- Streams. 10 feet or 25 percent of the distance between the OHWL and the nearest existing structure, whichever is less.
- Wetlands. Widths from the delineated wetland edge depend on the Minnesota Routine Assessment Methodology (MnRAM) classification system:
 - Preserve: 75 feet average with 50 foot minimum
 - Manage 1: 50 feet average with 30 foot minimum
 - Manage 2 or 3: 25 feet average with 15 foot minimum
- Lakes. 10 feet from the OHWL.
- Stormwater Facilities. From the normal water level, or bottom of a dry basin, up to the top of bank, as determined by the Administrator, and shall be a 10-foot minimum.

A conservation easement is required to protect the buffer area when a property is subdivided or involves a PUD adjacent to a public water or impaired water with an approved TMDL. A copy of this easement is available by request from the DNR.

Ordinance Citation: Section 107-6.(c)

Carnelian-Marine-St. Croix Watershed District

The restoration or permanent protection of a buffer is required for properties which are subdivided, or receive a variance from the setback or impervious surface requirements in their community's shoreland ordinance.

Required buffer widths range from 25 to 100 feet depending on if an existing structure is less than 100 feet from the shoreline at the time of the lot split or variance. A planting or landscaping plan is required to document the intended buffer restoration project when the site is disturbed, consists of more than 10 percent bare soil or turf grass, or contains a significant portion of invasive species based on CMSCWD staff analysis.

A declaration (restrictive covenant or conservation easement) is required to be recorded with the County for the restored or existing buffer. The watershed district reviews and suggests edits to the draft easement to reduce or eliminate associated legal fees associated with the easement. A copy of this easement is available by request from the DNR.

While this is a special permitting arrangement between cities and the watershed district, any city or county could implement this same approach.

Ordinance Citation: Section 4.0 of CMSCWD Rules

2. Shore Recreation Area

Hubbard County

Only one shoreline recreation use area (area within the shore impact zone for residential and resort developments) shall be allowed on each residential lot and it shall not exceed the following dimensions:

Waterbody Classification	Width <i>The maximum distance in feet parallel to shore</i>	Depth <i>The maximum distance in feet perpendicular to shore</i>
Special Protection	10	15
Sensitive Area	10	15
Natural Environment	10	15
Recreational Development	20	15
General Development	30	15
Remote Rivers	10	15

Waterbody Classification	Width <i>The maximum distance in feet parallel to shore</i>	Depth <i>The maximum distance in feet perpendicular to shore</i>
Forested and Transition Rivers	20	15
Agricultural, Urban and Tributary Rivers	30	15

Ordinance Citation: Section 901.2.H.

3. Specifications for Vegetation Removal

Beltrami County

In the shore impact zone, a path no wider than 15 feet may be cleared to the OHWL and shall be stabilized to control erosion within 24 hours of vegetation removal. In addition to the path to the lake, an area at least 10 feet from the OHWL and not to exceed 200 square feet may be cleared. Section 1122.1.C.4.

Outside of the shore impact zone but within the required setback, the removal of 25% (as measured by aerial coverage) of trees, in a random pattern, and 75% (as measured by aerial coverage) of shrubs may be permitted.

Ordinance Citation: Section 1122.1.C.5.

Removal or alteration of vegetation within the OHWL setback requires a shoreland alteration permit.

Ordinance Citation: Section 1122.1.

Douglas County

In shore and bluff impact zones and on steep slopes, limited clearing of trees and shrubs and cutting, pruning and trimming of trees is allowed to provide a view to the water from the principal dwelling site and to accommodate the placement of stairways and landings, picnic areas, access paths, beach and watercraft access areas. This limited clearing cannot exceed twenty-five (25) feet or twenty-five percent (25%) of the shoreline frontage, whichever is the lesser of the two.

Ordinance Citation: Section V.L.2.a.(1.)(b).

A Shoreland alteration permit is required for removal.

Ordinance Citation: Section V.L.2.a.(1.).

Cass County

In Shore Impact Zone – 1, clearing width shall not exceed 20 (twenty) feet of the width of the lot at the OWHL and all cutting shall be done by hand and topsoil is not disturbed.

Ordinance Citation: Section 1128.2.

In Shore Impact Zone – 2, up to 25% of trees may be removed in a random pattern and up to 30% of shrubs.

Ordinance Citation: Section 1128.3.

4. Vegetation Evaluation and Restoration

Beltrami County

Vegetation restoration is required to mitigate impacts on lake water quality and aesthetics of development, nonconforming structures and uses (as a condition to certain permits, conditional uses and variances). Restoration varies based on the percent of vegetation coverage (evaluated through aerial coverage of trees and/or shrubs) in the OHWL setback area. Restoration mitigation may include an erosion control and stormwater plan, a native vegetation buffer width of at least 15 feet, and specified mix of trees, shrubs and ground covers.

Ordinance Citation: Section 1122.2.

Crow Wing County

Riparian buffer mitigation is required based on the results of the Shoreline Rapid Assessment Model. The model evaluates the stability condition of the shoreline and the percent of natural vegetative cover within the OHWL setback area. The evaluation results in a score for the parcel. Different levels of mitigation are required based on the score.

Mitigation is required for variances, any permit for a lot on a natural environment lake, any permit for a riparian lot exceeding 20% impervious coverage, and for conditional use permits where the Planning Commission/Board of Adjustment determines the need for additional protection. Section 11.20.D

Ordinance Citation: Section 11.20.D.

Other communities with similar standards: Cass County (see Appendix D of Shoreland Ordinance)

Washington County

In order to reduce surface run-off and soil erosion, natural vegetation shall be restored as required by the Zoning Administrator after any construction project completed.

Ordinance Citation: Chapter 6, Section 9.1 (3).

5. Phosphorus Fertilizers

Douglas County

Use of fertilizer containing phosphorus is prohibited within fifty (50) feet of the ordinary high water level of a public water (residential shoreland district).

Ordinance Citation: Section V. L. (11).

6. Vegetation Permit

Cass County

A shoreland alteration permit is required to remove any vegetation except for that is dead, diseased or down.

Ordinance Citation: Section 1128.2.

Washington County

Removing trees greater than 6 inches in diameter at DBH within the OWHL setback is prohibited unless the trees are dead, diseased, or pose a documented safety hazard. A certificate of compliance (permit) is required to remove any trees.

Ordinance Citation: Chapter 6, Section 9.1 (1).

Aitkin County

A vegetation alteration permit is required prior to vegetative clearing in the shore impact zone and bluff impact zone and on steep slopes. No clearing is allowed until a plan is submitted and approved consistent with the vegetation alteration provisions.

Ordinance Citation: Section 5.31 B. (2).

7. Vegetation Mitigation

Crow Wing County

To protect water quality and safeguard sensitive areas, on-site vegetative mitigation is required for:

- a. A variances granted to the standards of the Ordinance;
- b. Issuance of a permit for lots located on Natural Environment Lakes
- c. Issuance of any conditional use permit where evaluation and assessment determines the need for additional environmental protection;
- d. A no maintenance shoreline buffer shall be required for the issuance of a permit on riparian lots that exceeds 20% total lot impervious coverage subject to the Shoreline Rapid Assessment Model
- e. Mitigation shall be proportional to the impact of the proposed project
- f. Mitigation shall be determined according to the Shoreline Rapid Assessment Model.

Ordinance Citation: Section 11.20.D.