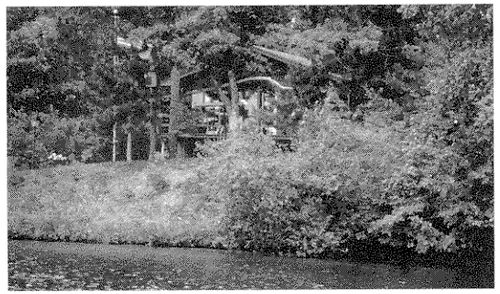
What is a Shoreland Alteration?

Definitions:

1. **Shoreland alteration:** any removal of vegetation other than trees, limbs or branches that are dead, diseased or pose safety hazards. Shoreland grading and filling activities are also considered shoreland alterations.
2. **Shore impact zone:** the area adjacent to the water for a distance equal to one half of the required* structure setback. *(See guidelines at right.)*
3. **Bluff impact zone:** the bluff itself and the area within 20 feet from the top of the bluff.
4. **Steep slope:** land with slopes averaging over 12% when measured at horizontal distances of 50 feet or more.



■ Limited clearing in *shore and bluff impact zones* is allowed if the structure remains adequately screened when viewed from the water. ***May require a permit.***

■ Grading or filling in *shore and bluff impact zones* involving the movement of more than ten cubic yards or material is not allowed without a permit. In shoreland areas, movement of more than 50 cubic yards of material is not allowed without a permit. Local ordinances may be even more restrictive. ***Activities exceeding these thresholds always require permits.***

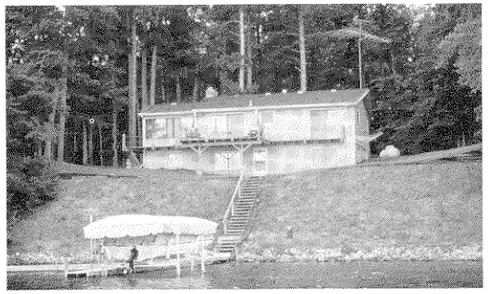
Permits:

Above the Ordinary High Water Level (OHWL): permits obtained from local city or county zoning offices.

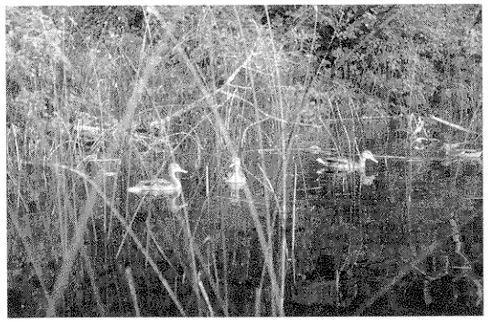
Below the OHWL: permits obtained from regional DNR offices.

Guidelines

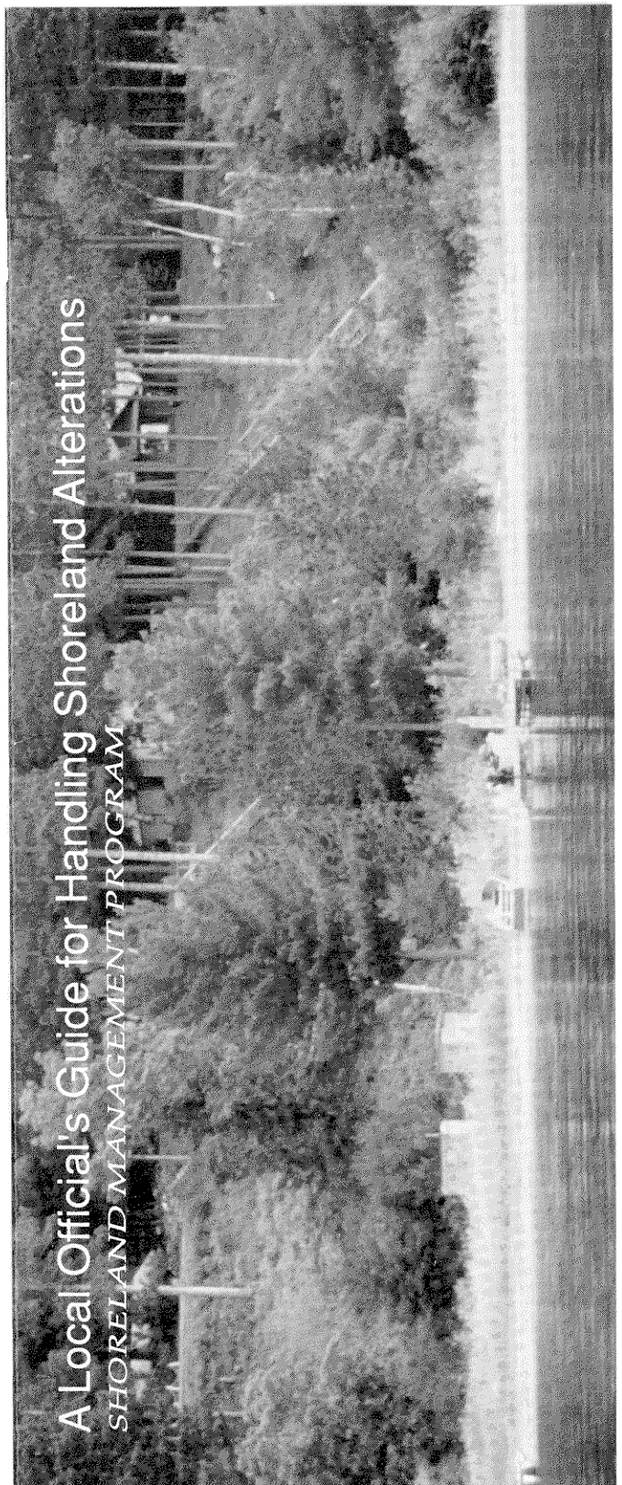
Refer to "Statewide Standards for Management of Shoreland Areas" and "A Guide for Buying and Managing Shoreland."
Call your regional DNR office.



■ Intensive vegetative clearing in *shore and bluff impact zone*s and in areas of steep slope is not allowed. ***Not permitted.***



■ Wetlands are vital for maintaining water quality and ecological diversity. Before altering any wetland, **always check** with your local government, watershed districts, the DNR, the United States Corps of Engineers and officials administering the Wetlands Conservation Act of 1991. ***Always requires a permit or exemption certification.***



A Local Official's Guide for Handling Shoreland Alterations

SHORELAND MANAGEMENT PROGRAM

For more information about who to contact for shoreland permit requirements, call your regional DNR office.

DNR Regional offices

REGION 1
2115 Birchmont Beach Rd. N. E.
Bemidji, MN 56601 - (218) 755-3973

REGION 2
1201 East Highway 2
Grand Rapids, MN 55744 - (218) 327-4416

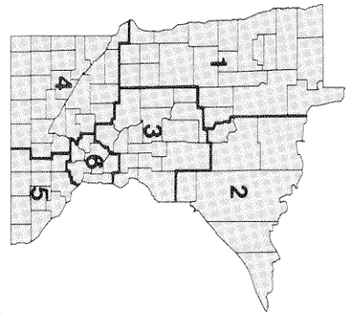
REGION 3
1601 Minnesota Dr.
Brainerd, MN 56401 - (218) 828-2605

REGION 4
Highway 15 South, P.O. Box 756
New Ulm, MN 56073 - (507) 359-6053

REGION 5
2300 Silver Creek Road
Rochester, MN 55906 - (507) 285-7430

REGION 6
1200 Warner Rd.
St. Paul, MN 55106 - (651) 772-7910

CENTRAL OFFICE
DNR Building, 3rd Floor
500 Lafayette Rd.
St. Paul, MN 55155-4032 - (651) 296-4800



This information is available in an alternative format upon request.

SITE RESTORATION GUIDELINES

Identifying Shoreland Alteration Violations

Documentation is the best way to identify that a shoreland alteration has taken place. Documentation may come from any of these sources:

1. "Before and after" photographs. You may want to require a "before" photograph as part of a building permit application. Aerial photos may also be acceptable.
2. USGS topographic maps and soil survey maps.
3. Complaints from property owners and lake-users. (Remember to respect witnesses' wishes to remain anonymous.)

Planning Guidelines for Site Restorations

When reviewing a landowner's site restoration plan, follow these guidelines:

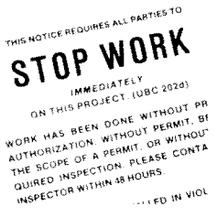
1. Preserve remaining brush and canopy.
2. Use native vegetation, not ornamental.
3. Consider the site's area, slope, exposure and soil type. This information will help determine the type and number of seedings needed to control erosion and to provide adequate screening.
4. When issuing permits, require that provisions are made for long-term maintenance of vegetation and erosion control.

ENFORCEMENT

When a non-permitted alteration is reported or observed, the regulating body should take immediate action by instructing landowners to stop work (until permits are obtained) and to immediately implement necessary erosion control measures.

Requirements should be made that the landowner submit a site restoration and/or landscape plan to the local unit of government.

If the landowner refuses to cooperate with the local governmental unit and refuses to revegetate or restore the shoreland to its earlier conditions, a "stop work" order may be needed. In addition, criminal charges may be brought against the landowner in accordance with the local ordinance.



A "Stop Work" order may be issued if a landowner refuses to acknowledge a shoreland violation and restore or revegetate the damaged property.

*Improperly planned shoreland alterations can potentially damage the ecological, economic, recreational and aesthetic values of the shoreland area and harm water quality. Require that shoreland owners obtain permits **before** a project.*

The Four Phases of Revegetation

NOTE: *When approving a planting project, require the use of native plant species rather than exotic, ornamental species. Native plants are best adapted to site specific conditions, grow well, require less maintenance and blend with the natural shoreline. Suggested plantings vary by region. Always obtain advice from an expert.*

1. Immediate Stabilization Procedures involve installing fast growing grasses necessary for establishing a healthy root structure in the soil. If the site has a steep slope prone to erosion, straw bales and/or fencing can be strategically placed along runoff contours. Mulch and netting are recommended to conserve moisture, prevent surface compaction, reduce runoff and help establish plant cover.

Suggested plantings

Annual Ryegrass	Perennial Ryegrass
Millet	Rye
Oats	Sudan Grass

2. Intermediate Plantings include installing perennial grasses, wild flowers and underbrush species that may have been present before the alteration. Underbrush provides good forage for wildlife.

Suggested plantings	
Common Hazel	Pincherry
Joe-Ryeweed	Pussy Willow
Boneset	Blueflag Iris
	Jewelweed

3. Long Term Plantings include grasses, trees and shrubs whose canopies will protect soils from raindrop impact and whose roots will further stabilize the banks. Transplants should be at least ten feet high. Trees and shrubs provide good shading for cooler water environments for fish habitat.

Suggested plantings	
Burr Oak	Mountain Ash
Nannyberry	Red Splendor Crab
Elderberry	Redtop
Gray Dogwood	Sugar Maple
	White Pine

4. Maintenance includes appropriate pruning and disease protection measures. Planting maintenance should begin from day one to ensure that soil will not wash away seedings until adequate overstory, understory and ground cover is established.

Resources for site planning assistance:

- Soil and Water Conservation Districts
- Soil Conservation Service
- Landscape architects and nurseries that deal with native plant stock
- Private consultants
- Department of Natural Resources

Publications:

Landscaping for Wildlife. Minnesota Bookstore. 1-800-657-3757.

"Critical Area Planting Guide 342." (Seeding mixture information.) Soil Conservation Service.

About buffer (filter) strips:

Buffer strips help to screen and filter the sediments and pollutants transported in runoff from contaminating lakes, rivers and ground water located in a watershed. Buffer strips treat sheet flow best. Channelized and other high-velocity runoff problems should be controlled by a network of other best management practices (BMPs) such as water diversion devices, contouring and terracing.

When used with other BMPs, vegetative buffers' plant root structures help to absorb nutrients, stabilize the shoreline and retain pollutants and eroded silt from reaching the water. Vegetative canopies also aid in preventing soil displacement during rainfall and provide natural wildlife habitat and shaded water for fish populations.

The DNR Information Center phone numbers:
Twin Cities: (651)296-6157
MN Toll Free: 1-888-646-6367 (or 888-MINNDNR)
Telecommunication Device for the Deaf: (651)296-5484
1-800-657-3929 MN Toll Free