



Why Shoreland Vegetation Is Important

Vegetation Management to Protect Water Quality and Habitat



The protection of natural vegetation in shoreland areas, especially along lakes and stream-banks, is critical to the affected landowner and the public. Shoreland management regulations prohibit vegetation clearing in *bluff impact zones* and *shore impact zones* and on *steep slopes* in order to protect the vegetation and soil resources on these vulnerable land areas.

Shoreland vegetation provides numerous benefits, including the following:

- Minimizes the erosive impact of raindrops.
- Reduces the velocity of *runoff*, which is important since high velocity or concentrated runoff can readily erode exposed soils.
- Traps and uses nutrients found in runoff or in the soil profile, which would otherwise degrade the shoreland water quality if they were not removed.
- Binds the soil column to deep vegetation roots to prevent or reduce the likelihood of bank and slope failure.
- Provides fish and wildlife habitat.
- Protects privacy of shoreland residents.
- Provides scenic beauty and helps screen shoreland development, thereby preserving the natural, aesthetic values of shoreland areas.

A limited number of trees and shrubs may be cleared or pruned to accommodate stairways and access paths. However, the applicable standard for such removal is that the screening of structures, vehicles, or other facilities as viewed from the water may not be substantially reduced. The above restrictions do not apply to dead or diseased vegetation, although they may be important for songbirds and other wildlife.

The local zoning office should be contacted for guidance *before* proceeding with any lakeshore alterations or removal of live vegetation.

Glossary of Terms

bluff impact zones: bluff and land located within 20 feet from the top of a bluff.

shore impact zones: land located between the water body and one-half of the structure setback.

steep slopes: land having an average slope greater than 12 percent.

runoff: precipitation or snow melt, which is not intercepted by vegetation, absorbed in soil, or evaporated, that moves over the land surface to streams, lakes, ditches, and depressions in the ground.



These pictures illustrate vegetation management in a shoreland area that is bad (above) and good (below). In the top picture, turf and the absence of a vegetative buffer allow runoff to easily follow the slope to the water. That runoff may cause erosion or carry contaminants or nutrients to the surface water. In contrast, the picture below shows a heavy vegetative buffer protecting the water. Additionally, the presence of emergent vegetation reduces the impacts of wave action on the shoreline.





Management of the Shore Impact Zone

Guidelines to Manage Alterations or Encroachments in the Shore Impact Zone



The shore impact zone is the land located between the ordinary high-water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback.



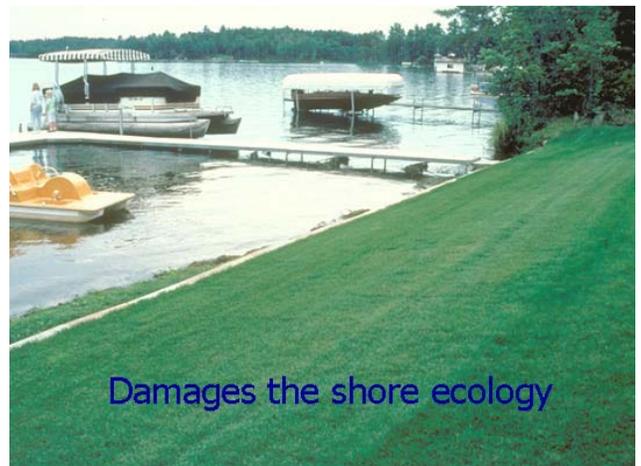
Our lakes, wetlands, and streams need healthy shoreline buffers to reduce and filter runoff and increase infiltration. Therefore, it is critical to limit both alterations to natural shorelines and encroachments into shore impact zones (SIZs). Shoreline alterations should be limited to providing low-impact access to the water and to address erosion-control problems. A natural shoreline is a complex ecosystem that sustains fish and wildlife and protects the entire lake; therefore, natural landscaping with native plants is the preferred method for addressing erosion problems and for restoring a natural buffer within the SIZ.

Effective management of the shore impact zone protects fish and makes anglers happy.

Any encroachment into the shoreland area, especially the SIZ, that includes access (pathways or stairs),

structures, or other land use changes should take into account the visual impacts. A well-designed natural vegetation screen will allow adequate access and use of the shoreland lot, will provide the buffering benefits as described earlier, and will preserve the natural character and beauty of the shoreline for any others recreating on the lake or river.

A necessary part of managing the shoreland areas and SIZs in your community is to promote the restoration of areas that are currently degraded. Natural shorelines are gaining acceptance as people understand that shorelines and SIZs play an important role in protecting their lakes and rivers and that these buffers can bring natural beauty to yards with minimal maintenance.



Damages the shore ecology

(above) This lawn-to-lake setting in the foreground contrasts with the naturally vegetated shore in the background (upper right).

(below) The vegetation on the right reduces the energy of waves, which is a natural solution that does not have the cost or impacts of riprap on the shore to the left.



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