

Proposed Amendment No. 4

**Would add New Section, to be part of new ARTICLE VI OVERLAY DISTRICTS
Subsequent Articles to be renumbered accordingly**

Section xxx Shoreland Protection Overlay District

xxx.1 Purpose

The purpose of the Shoreland Protection Overlay District is to establish regulations for the design of riparian buffers to protect the flowing streams and shorelines of Carroll to reduce and prevent shoreline erosion; protect the water quality of these resources; to protect Carroll's riparian and aquatic ecosystems; and to provide for the environmentally sound use of the town's land resources.

xxx.2 Findings

The residents of Carroll find that shoreland protection and riparian buffers adjacent to flowing waters provide numerous environmental benefits. Shoreland vegetated buffers serve to:

- A. Reduce erosion and control sedimentation;
- B. Restore and maintain the chemical, physical and biological integrity of the water resources;
- C. Provide infiltration of stormwater runoff;
- D. Remove pollutants delivered in stormwater runoff;
- E. Stabilize lake and stream banks;
- F. Maintain base flow of streams;
- G. Contribute food and habitat for the aquatic ecosystem;
- H. Moderate the temperature of near shore waters
- I. Provide and enhance terrestrial wildlife habitat; and,
- J. Enhance scenic value and recreational opportunities

xxx.3 Applicability

The Shoreland Protection Overlay District is an overlay district superimposed over the existing conventional zoning districts of Carroll. It includes within its boundary all lands within 10 feet of the ordinary high water mark of all streams 2nd order or higher.

xxx.4 Prohibited

Within the Shoreland Protection Overlay District there shall be no structures constructed or

placed and no removal of vegetation except as otherwise provided for below.

xxx.5 Permitted

1. A property owner may remove, or may have removed, any dead, diseased, or unsafe trees, limbs, saplings, or shrubs from the waterfront buffer subject to the following conditions:
 - (a) Prevent damage to surrounding healthy trees, limbs, saplings, and shrubs;
 - (b) Minimize damage to ground cover;
 - (c) Prevent soil erosion and sedimentation to the water body;
2. Normal trimming, pruning, and thinning of branches to the extent necessary to maintain the health of the planted area as well to protect structures, maintain clearances, and provide views is permitted provided such activity does not endanger the health of the plant.
3. A water dependent structure, meaning one which is a dock, wharf, pier, breakwater, or other similar structure, or any part thereof, built over, on, or in the waters of the state, may be constructed as approved by NHDES.
4. Hydroelectric facilities, including, but not limited to, dams, dikes, penstocks, and powerhouses, shall be recognized as water dependent, and may be constructed as permitted by NHDES.
5. Public utility lines and associated structures and facilities, public roads, and public water access facilities including boat ramps may be constructed as permitted by NHDES.
6. Public water supply facilities, including water supply intakes, pipes, water treatment facilities, pump stations, and disinfection stations may be constructed as permitted by NHDES.
7. Sewage treatment facilities may be constructed as permitted by NHDES.
8. A permanent 6-foot wide foot path as well as access to any docks, beaches, structures, existing open areas, and the water body, configured in a manner that will not concentrate storm water runoff or contribute to erosion, are allowed.
9. Owners of lots and holders of easements on lots that were legally developed prior to the adoption of this amendment may maintain but not enlarge cleared areas, including but not limited to existing lawns, gardens, landscaped areas, beaches, and rights-of-way for public utilities, public transportation, and public access, and may repair existing utility structures within the waterfront buffer. Conversion to or planting of cleared areas with non-invasive species of ground cover, shrubs, saplings, and trees is encouraged but shall not be required

xxx.6 Additional Requirements

Within the waterfront buffer all of the following additional prohibitions and limitations shall apply:

(1) No chemicals, including pesticides or herbicides of any kind, shall be applied to ground, turf, or established vegetation except if applied by horticultural professionals who have a pesticide application license issued by the department of agriculture or as allowed under special permit issued by the division of pesticide control under rules adopted by the pesticide control board under RSA 541-A, or fertilizers of any kind except those specified in RSA 483-B:9, II(d).

(2) Rocks and stumps and their root systems shall be left intact in the ground unless removal is specifically approved by NHDES in conjunction with a permitted use.

(3) No natural ground cover shall be removed except as necessary for construction of a permitted use or for normal maintenance of a lawfully existing clearing or structure.

Add the following to ARTICLE II Section 202 Definitions:

Ground cover - Any herbaceous plant or any woody seedling or shrub generally less than 3 feet in height. Ground cover shall not include lawns, landscaped areas, gardens, invasive species as listed by the department of agriculture, markets, and food in accordance with RSA 430:53, III, exotic species as designated by rule of the department of environmental services in accordance with RSA 487:24, VII, imported organic or stone mulches, or other artificial materials.

Natural woodland - A forested area consisting of various species of trees, saplings, shrubs, and ground covers in any combination and at any stage of growth.

Ordinary high water mark - The line on the shore, running parallel to the main stem of the river, established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the immediate bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Stream order shall be determined using the New Hampshire hydrography dataset archived by the geographically referenced analysis and information transfer system (GRANIT) at the complex systems research center of the university of New Hampshire, and developed by GRANIT in collaboration with the department of environmental services.