

Table 2.8
Shoreline Protection Overlay SPO District

(A) **Purpose.** The purpose of the Shoreline Protection Overlay District is to preserve and protect water quality scenic beauty and recreational potential which currently exist along water-front land within the Town. It is the objective of this section to promote the establishment and protection of heavily vegetated areas of native vegetation and trees along the Town's water bodies to reduce the impact of stormwater runoff, prevent soil erosion, protect wildlife and fish habitat and maintain water quality. These protected areas shall be known as riparian buffers.

(B) **Areas.**

(1) Primary Shoreline Protection Area. The Primary Shoreline Protection Area shall include riparian buffers defined as the width of land measured horizontally from the mean water level for lakes and from top of bank or top of slope for rivers or streams, for the distance specified below:

- a. Connecticut and Ompompanoosuc Rivers - 100 feet;
- b. Blood Brook from Connecticut River to New Boston Road – 100 feet;
- c. Streams and Lakes on the Shoreline Protection Overlay District Map – 50 feet; or
- d. Streams not shown on the Shoreline Protection Overlay District Map – 25 feet.

(2) Woodland Protection Area. The Woodland Protection Area shall include a buffer defined as the width of land measured horizontally from the mean water level for lakes and from top of bank or top of slope for rivers or streams, for the distance specified below:

- a. Connecticut and Ompompanoosuc Rivers - 200 feet;
- b. Blood Brook from Connecticut River to New Boston Road – 150 feet;
- c. Streams and Lakes on the Shoreline Protection Overlay District Map – 150 feet; or
- d. Streams not shown on the Shoreline Protection Overlay District Map – 75 feet.

(C) **Primary Shoreline Protection Area:**

(1) Prohibited Uses.

- a. Salt storage yards, the outdoor storage of used, discarded, dismantled or salvaged items, vehicles or parts of vehicles, metals, appliances, equipment, debris or other potentially hazardous materials, solid or hazardous waste facilities and underground fuel storage tanks; discharges of liquid waste; land application or land-filling of sludge from wastewater treatment facilities,

industrial processes or other sludge producers; storage of petroleum products, chemicals for industrial processes or as wastes awaiting disposal; storage of road salt or sand/salt mixtures for highway use; industrial activities including industrial wastewater impoundments in pits, ponds or lagoons.

- b. New structures except as allowed under Subsections C and F.

(2) Permitted Uses.

- a. Accessory Use (to a permitted use within existing structure).
- b. Home Day Care (within existing dwelling).
- c. Home Occupation (within existing dwelling).
- d. Accepted Agricultural Practices (AAPs) as defined by the Secretary of Agriculture, Food and Markets in accordance with 24 V.S.A. §4413(d). Written notification, including a sketch plan showing structure setback distances from surface waters shall be submitted to the zoning administrator prior to any construction, as required under AAPs. Such structures shall meet the requirements of this ordinance, unless waived by the Secretary of Agriculture.
- e. Forestry - Accepted Management Practices (AMPs) for silviculture (forestry) as defined by the Commissioner of Forests, Parks, and Recreation, in accordance with the Act 24 V.S.A. §4413(d).
- f. Removal of invasive species and buffer re-establishment projects which use “soft” techniques such as tree revetments and root wads.
- g. Encroachments necessary to rectify a natural catastrophe for the protection of the public health, safety and welfare.

(3) Conditional Uses.

The Development Review Board may authorize the following as conditional uses within riparian buffers subject to the standards and conditions enumerated for each use:

- a. Water-dependent structures and their associated development including docks, bridges, or similar structures, where the Development Review Board finds that the purposes of this Section will be protected through erosion controls, plantings, protection of existing vegetation, and/or other measures.
- b. Clearing of vegetation and filling or excavating of earth materials, only to the extent directly necessitated for the construction or safe operation of a conditional use on the same property and where the Development Review Board finds that:
 - i) There is no practical alternative to the clearing, filling or excavating within the riparian buffer;
 - ii) The purposes of this Section will be protected through erosion controls, plantings, protection of existing vegetation, and/or other measures; and
 - iii) Encroachments are necessary for providing for or improving public facilities.
- c. Public recreation paths located at least ten (10) feet above the ordinary high water mark or measured from the top of bank, whichever is greater.

- d. Stormwater treatment facilities meeting the stormwater treatment practices and sizing criteria set forth in the Vermont Stormwater Management Manuals Volumes I and II as most recently amended. Evidence of an approved permit from the Vermont Agency of Natural Resources for coverage under the applicable permitting requirements shall be required to meet this criterion for encroachment into a riparian buffer.
- e. Roadways or access drives for purposes of crossing a riparian buffer to gain access to land on the opposite side of the buffer, or for purposes of providing safe access to an approved use, in cases where there is no feasible alternative for providing safe access. A roadway crossing or access drive shall occur at a right angle to the stream channel.
- f. Utility lines, including power, telephone, cable, sewer and water, to the extent necessary to cross or encroach into the riparian buffer where there is no feasible alternative for providing or extending utility services.
- g. Outdoor recreation and education facilities provided that any building or structure (including parking and driveways) associated with such use are located outside the riparian buffer.
- h. Enlargement, repair or reconstruction of pre-existing structures within riparian buffers shall be permitted if the Development Review Board determines that the development activity will not decrease the existing structure setback from the waterbody or increase the encroachment within the riparian buffer, and the total building footprint area of the expanded or reconstructed structure is no more than 50% larger than the footprint of the structure lawfully existing on or before the effective date of these regulations.
- i. New accessory structures appurtenant to a pre-existing structure within a riparian buffer shall only be permitted if it is determined that the accessory structures do not result in a decrease of the existing structure setback from the waterbody and the total building footprint area of the new accessory structure is no more than 50% of the footprint of the pre-existing structure.

(D) General Standards - Primary Shoreline Protection Area:

- (1) Except as provided in Subsections (2) and (3) all lands within a riparian buffer shall be left in an undisturbed, vegetated condition.
- (2) Removal of dead trees or trees of immediate threat to human safety as well as reasonable pruning of existing trees is permitted.
- (3) The creation of new lawn areas within riparian buffers is not permitted. Property owners already encroaching on the riparian buffer are encouraged to return mowed areas to their naturally vegetated state. Supplemental planting with appropriate vegetation to restore and enhance the effective filtering and bank stabilization functions of a riparian buffer is encouraged.

(4) Any areas within a riparian buffer that are not vegetated or that are disturbed during construction shall be seeded with a naturalized mix of grasses rather than standard lawn grass, and shall not be mowed more than one (1) time per calendar year after establishment.

(5) If a structure made nonconforming by reason of the adoption of this ordinance is damaged or destroyed over 75% of its market value by floodwater inundation or fluvial erosion, the structure shall not be rebuilt within the riparian buffer unless a variance is obtained in accordance with Section 6.04.

(E) Woodland Protection Area Standards:

(1) Uses. Permitted and Conditional Uses shall be the same as for the underlying zoning district.

(2) Standards for maintaining the woodland buffer.

- a. Within the Woodland Protection Area not more than a maximum of 50% of the basal area of trees, and a maximum of 50% of the total number of saplings, shall be removed for any purpose in a 20-year period. A healthy, well-distributed stand of trees, saplings, shrubs, and groundcovers and their living, undamaged root systems shall be left in place. Replacement planting with native species may be permitted to maintain the 50% level.
- b. Trees, saplings, shrubs, and groundcovers which are removed to clear an opening for building construction, accessory structures, septic systems, roadways, pathways, and parking areas shall be included when computing the percentage limitations under this Subsection.
- c. Within the natural woodland buffer of the protected waterfront under conditions defined in this subsection, the following prohibitions and limitations shall apply:
 - i) Dead, diseased, unsafe, or fallen trees, saplings, shrubs, or groundcovers may be removed. Their removal shall not be used in computing the percentage limitations under this subsection.
 - ii) Stumps and their root systems which are located within the Primary Shoreline Protection Area shall be left intact in the ground, unless removal is specifically approved by the Development Review Board.
 - iii) Dead and living trees that provide dens and nesting places for wildlife are encouraged to be preserved.
 - iv) Planting efforts with noninvasive species that are beneficial to wildlife are encouraged to be undertaken.
 - v) Removal of exotic, non-native species and replacement with native species is encouraged.

(F) **Waivers.**

(1) The Development Review Board may grant a waiver permitting development within the shoreline buffers specified in Table 2.8(B). In granting the waiver, the Development Review Board shall be required to:

- a. Find that due to special circumstances of a particular site, development outside of the buffer areas will adversely affect significant natural or scenic resources, or the rural character, or that there is no other reasonable area on the lot for the proposed development other than within the buffer area;
- b. Find that provisions can be made to provide protection for the water body and its functions, taking into consideration the potential for lateral or horizontal channel adjustment, floodplain requirements; and the potential for erosion based on soil and slope conditions; and
- c. Require reasonable conditions that will, in its judgment, provide protection substantially the same for the waterbody and its functions as if the full setback were to be observed.

(2) The applicant shall submit an application form and a site plan showing existing and proposed development on the lot, the location of the waterbody, the top of bank, top of slope, low flow, and floodplain area. The application shall also include a narrative addressing the criteria in Section (F)(1). The Development Review Board may require a fluvial geomorphic assessment by a qualified consultant.

(3) The Development Review Board shall hear and decide upon requests for waivers permitting development within the shoreline buffers pursuant to the Act [§4414(8)]. The Board shall follow the same hearing procedures as for a conditional use hearing (Section 5.04). A request for a waiver permitting development within the shoreline buffers may also be combined with another hearing for the same development project.

(G) **Definitions.**

For purposes of this section, the following terms shall apply:

Lake - A body of standing water, including a pond, and reservoir that may have natural or artificial water level control. For purposes of this regulation, off-stream reservoirs specifically constructed for the following purposes shall not be considered lakes: snowmaking water storage; golf course irrigation; stormwater management; and, fire suppression.

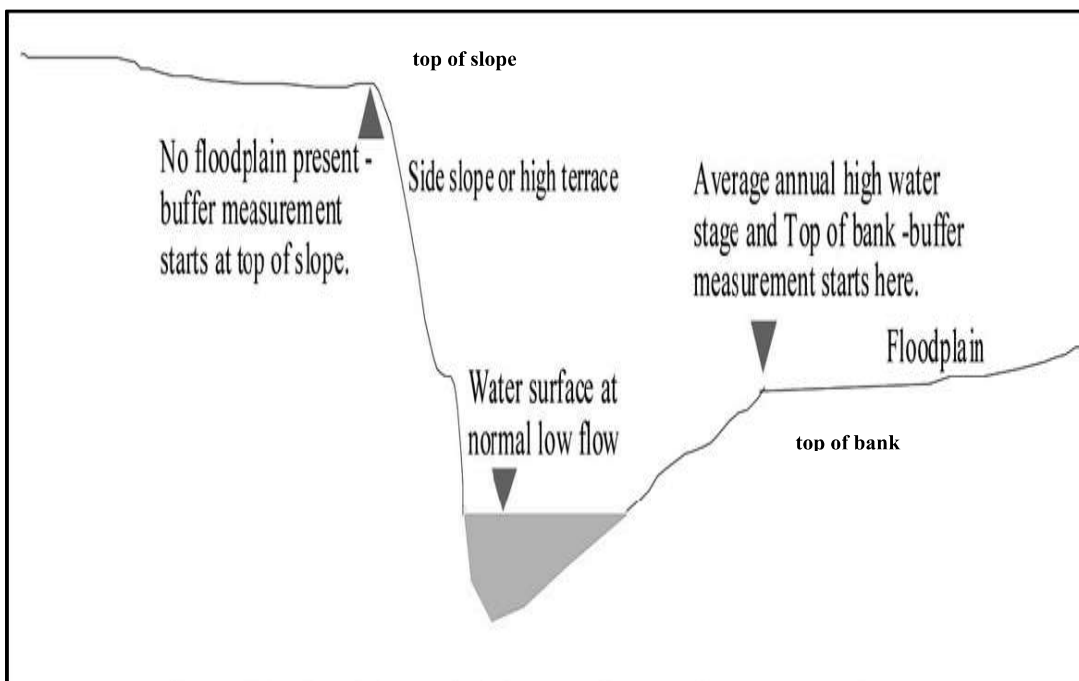
Mean Water Level - The normal summer (June 1 – September 15) water level, measured in feet above sea level, of lakes as determined by an average of water level readings available over time or as established by the Vermont Natural Resources Board.

Riparian Buffer - A riparian buffer is the width of land measured horizontally from the mean water level for lakes and from top of bank or top of slope for streams, to the edge of other land uses or a specified distance.

Stream - The full length and width, including the bed and banks, of any watercourse, including rivers, creeks, brooks, and branches and intermittent watercourses that have a defined channel and evidence of sediment transport, even if such watercourses do not have surface water flow throughout the year or throughout the channel. For purposes of this regulation, constructed drainageways including water bars, swales, and roadside ditches, are not considered streams.

Top of Bank - The point along a streambank where an abrupt change in slope is evident, and where the stream is generally able to overflow the banks and enter the adjacent floodplain during flows at or exceeding the average annual high water stage.

Top of Slope - A break in slopes adjacent to steep-banked streams that have little or no floodplain; or a break in slope where the side slopes adjacent to an incised, or deeply cut channel meet floodplains that have been abandoned or are undergoing abandonment.



Basal Area means the cross-sectional area of a tree measured at a height of 4-1/2 feet above the ground, usually expressed in square feet per acre for a stand of trees.

Disturbed Area means an area in which native vegetation is removed, exposing the underlying soil.

Groundcover means any native herbaceous plant which normally grows to a mature height of four feet or less.

Natural woodland buffer means a forested area consisting of various native species of trees, saplings, shrubs, and groundcovers in any combination and at any stage of growth.

Removal or removed means cut, sawed, pruned, girdled, felled, pushed over, buried, burned, killed, or otherwise destructively altered.

Sapling means any woody plant which normally grows to a mature height greater than 20 feet and has a diameter less than six inches at a point 4-1/2 feet above the ground.

Shrub means any multi-stemmed woody plant which normally grows to a mature height of less than 20 feet.

Tree means any woody plant which normally grows to a mature height greater than 20 feet and which has a diameter of six inches or more at a point 4-1/2 feet above the ground.