

General Comments from the Zoning Board of Adjustment:

- This article should clarify for Bradford's land owners, town officials and anyone else the purpose of the article so that everyone can tell whether or not a regulation is being followed.
- Article number and regulation numbers should follow Bradford's zoning ordinance format.
- **Highlights in the text** are suggestions for "Bradfordizing" the article.

**ARTICLE XIV
SHORELAND PROTECTION OVERLAY DISTRICT**

175-69. Purpose.

The Shoreland Protection Overlay District (SPOD) is an overlay district intended to protect the quality of the Town's surface waters in order to promote public health and safety, maintain wildlife habitat, and conserve and protect shoreline and upland resources. This is accomplished by maintaining and enhancing natural forests and shoreland habitat and buffers. The district is intended to implement and expand upon the provisions of the Comprehensive Shoreland Protection Act, RSA 483-B. The provisions of this article are intended to:

1. Protect the water quality of Lake Massasecum, Lake Todd, Warner River, West Branch of the Warner River, Hoyt Brook, Melvin Brook and the Towns other surface waters by managing stormwater runoff, siltation and sedimentation, and the construction or alteration of buildings and structures in proximity to these resources.
2. Minimize the potential for the pollution of these water bodies;
3. Protect wildlife and fisheries habitats and travelways;
4. Conserve the natural beauty and scenic quality of the shoreland; and
5. Allow uses of the land adjacent to these water bodies that are consistent with these objectives.

175-70. Applicability.

The provisions of the SPOD shall apply to all land within two hundred fifty (250) feet of the **reference line** - **Define what is used to establish the "reference" line.** of Lake Massasecum, Lake Todd, Warner River, West Branch of the Warner River, Hoyt Brook, Melvin Brook and the sections of their tributary streams; and within seventy-five (75) feet of all other perennial brooks, and water bodies. These water bodies are designated on the Bradford Shoreland Protection Overlay District Map, which is based on United States Geological Survey quadrangle maps covering the Town of Bradford.

The provisions of this article apply in addition to any state requirements for shoreland areas or other state approvals or permits. It is the intention of the Town that these provisions be coordinated with state requirements and standards but that these standards shall govern if they are more stringent than state standards.

175-71. Permitted Uses in the SPOD.

- A. Notwithstanding the uses permitted in the underlying zoning district, the following uses shall be allowed without a permit in the SPOD provided they do not alter the surface condition or configuration of the land, do not obstruct or alter the natural flow or infiltration of surface or groundwater, and comply with the regulations of the SPOD:

1. The planting of native or naturalized species and wetland vegetation as identified in “The United States Fish and Wildlife Service National List of Plant Species that Occur in Wetlands: New Hampshire” and other native or non-native, non-invasive vegetation in conjunction with the landscaping of a lot;
 2. The installation and observation of monitoring wells;
 3. Conservation activities;
 4. Accessory agriculture subject to the performance standards of 175-76.1. A and B;
 5. The removal of dead, diseased, unsafe or fallen trees;
 6. The maintenance of existing vegetation including shrubs, lawns, and fields, except as provided in 175-75.1, A.
 7. Forestry in accordance with Performance Standard 175-76. 1.C
 8. A pier or dock, including the replacement or expansion of an existing pier or dock, provided the structure is approved by the appropriate state agency (Otherwise it is considered a conditional use).
 9. The maintenance of an existing pier or dock.
 10. Aquaculture.
- B. The following uses or activities, including any necessary grading, shall be permitted in the SPOD provided that the Zoning Administrator **Nonexistent in Bradford** issues a permit for the activity after the Planning Board, with the advice of the Conservation Commission, determines that: a) appropriate erosion control measures will be used, b) any disturbed area will be restored, and c) the activity will be conducted in a manner that minimizes any impact on the shoreland:
1. The installation of private water supply wells serving a use on the lot;
 2. Water impoundments with a surface area of less than ten thousand (10,000) square feet;
 3. The installation of culverts or rock fords for existing driveways or woods roads in uplands;
 4. Temporary crossings for the maintenance of utility pipes or lines or for other utility structures;
 5. Temporary cofferdams associated with the repair or replacement of existing structures;
 6. The repair or replacement of existing retaining walls;
 7. The control of aquatic weeds by harvesting;
 8. The control of exotic weeds in accordance with RSA 487:17;
 9. The construction of nature trails and paths.
 10. Grading of the site where grading within the SPOD is necessary to accommodate an allowed structure located outside of the SPOD.

C. 72. Conditional Uses in the SPOD.

A. The following uses, including any necessary grading, shall be permitted as conditional uses in the SPOD provided that the use is allowed in the underlying zoning district and a Conditional Use Permit is granted by the Planning Board in accordance with Article VII:

1. The construction of streets, roads, driveways, access ways (but not including any parking areas other than those serving single-family uses), bridge crossings, and utilities including pipelines, power lines, and transmission lines;
2. Commercial agriculture and plant nurseries subject to the performance standards of 175-75.1. A and B;
3. The construction or expansion of a non-residential or multi-unit building or structure;
4. Accessory buildings and structures other than those allowed as permitted uses;
5. Outdoor recreational facilities that do not require the construction of buildings or other structures.

Any increase in impervious surface of a nonconforming footprint within the 150 foot setback will require either the planting of a minimum of a 25 foot wide natural vegetative buffer to the shoreline and/or a rain garden that is a minimum of 10% of the impervious surface area. This is done to decrease the rate of flow and volume of runoff into the watershed. The above methods are recommended, but not limited to these, should equality resilient -meaning? methods be desired.

Any substandard lots with less than one acre in size that doubles its size via lot line adjustment may reduce its road frontage setback by half. ?????What does this mean???

B. The Planning Board shall approve a Conditional Use Permit for a use in the SPOD only if it finds, with the advice of the Conservation Commission, that all of the following standards have been met in addition to the general standards for conditional uses and any performance standards for the particular use:

1. There is no alternative location on the parcel that is outside of the SPOD that is reasonable practical for the proposed use;
2. The amount of soil disturbance will be the minimum necessary for the construction and operation of the facilities as determined by the Planning Board;
3. The location, design, construction, and maintenance of the facilities will minimize any detrimental impact on the adjacent shoreland and waterbody as well as downstream waterbodies, and mitigation activities delete this word will be undertaken to counterbalance any adverse impacts, and delete this word

4. Restoration activities **delete this word** will leave the site, as nearly as possible, in its pre-existing condition and grade at the time of application for the Conditional Use Permit.

175-73. Prohibited Uses in the SPOD.

Any use that is not identified as a permitted use in 175-71 or a conditional use in 175-72 shall be a prohibited use. Notwithstanding this limitation, the erection of a structure or septic system on an existing lot within the SPOD may be permitted by special exception in accordance with the provisions and standards of 175-29.B.

The following uses are deemed to pose a particular threat to the water quality of the adjacent shoreland or waterbody or downstream waterbodies and are prohibited in the SPOD even if they are permitted or are conditional uses in the underlying zoning district:

- a. the establishment or expansion of salt storage yards;
- b. automotive junk or salvage yards;
- c. the storage or handling of hazardous wastes;
- d. the bulk storage of chemicals, petroleum products, or hazardous materials;
- e. use of any fertilizer, pesticide, or herbicide except in conjunction with accessory or commercial agriculture as provided for in 175-75.1. B.;
- f. the processing of excavated materials;
- g. the dumping of snow or ice removed from roads or parking lots;
- h. the disposal, handling, or processing of solid wastes including transfer stations, recycling facilities, and composting facilities;
- i. animal feedlots;
- j. the disposal of septage or other liquid or leachate wastes except for an approved septic system;
- k. construction on upland slopes which exceed 15%;
- l. dumping, spreading or any other application or use of treated soils or sludge from a sewage treatment plant.

175-74. Dimensional Requirements.

All land, buildings, and structures to be used, erected, altered, enlarged, or moved within the SPOD shall be in accordance with the dimensional standards of the underlying zoning district except as modified and required by this section.

Lot Coverage: Buildings shall not cover more than 15% of the area of a lot. No more than a total of 20% of the lot area, including buildings, shall be covered by impervious surfaces.

A. Shoreland Setback of Buildings and Structures

Any new building or structure or any enlargement or modification of an existing building or structure shall be set back from the reference line of the waterbody as follows:

1. Lake Massacum, Lake Todd, Warner River: 125 feet

2. Warner River, West Branch of Warner river and Hoyt Brook, Melvin Brook:
75 feet

3.all other perennial streams: 25 feet

This shoreland setback provision shall not apply to water dependent structures, nor to permitted uses that are specifically listed in 175-71, nor conditional uses that are specifically listed in 175-72 other than principal and accessory buildings and structures. Such a use shall be set back the maximum practical distance from the reference line of the waterbody as determined by the **Zoning Administrator -Delete** or in the case of conditional uses, by the Planning Board in consultation with the Conservation Commission. Septic systems shall be governed by Section B. below.

B. Septic Setbacks

Any new septic system, leach field, or other sewage disposal system shall be set back from the reference line of the waterbody as provided for in Bradford's Rural Residential Zoning or as follows, whichever is greater:

1. Lake Massacecum, Lake Todd, Warner River Melvin Brook: 125 feet
- 2.All other perennial streams: 75 feet

The replacement of an existing septic system, leach field, or other sewage disposal system that is located within the required setback from the reference line of the waterbody shall comply with the required setback unless the **Health Officer/Zoning Administrator/Code Enforcement Officer - Building Inspector?** determines that such a location is not physically possible due to the shape or size of the lot and soil conditions. If the Health Officer/Zoning Administrator/Code Enforcement Officer determines that a replacement system must be located within the required shoreland septic system setback, the system shall be located to provide the maximum setback possible as determined by the **Zoning Administrator - Delete** and shall employ the best available technology.

C. Use of Shoreland in Calculating Lot Area and Density

Land within the SPOD may be used to meet the minimum lot area, minimum lot size, or maximum density provisions of the underlying zoning.

D. Shoreland Frontage

Any single lot that abuts a waterbody in the SPOD shall have a minimum of two hundred (200) feet of shoreland frontage except in zoning districts where a lesser length of frontage or none is specified in the Table of Dimensions. If such a lot contains more than one dwelling unit and is served by on-site sewage disposal, the lot shall have an additional fifty (50) feet of shoreland frontage per dwelling unit.

175-75. Coordination with Other Districts

All land within the SPOD is also subject to the provisions of the underlying zone. Where there is conflict among the provisions of the SPOD, any other applicable overlay district, and the underlying district, the most restrictive or stringent provision shall apply.

175-76. Performance Standards in the SPOD

All buildings and structures shall be erected, altered, enlarged, or moved and all land within the SPOD shall be used in accordance with the following specific performance standards:

A. Natural Woodland for Shoreland Development

The preservation of natural shoreland vegetation is intended to stabilize banks to prevent erosion, maintain wildlife habitats, minimize pollution of the water and preserve the scenic quality of shoreline properties.

Where existing, a natural woodland buffer shall be maintained within one hundred fifty (150) feet of the reference line or for the full width of the SPOD if the district is less than one hundred fifty (150) feet in width. The purpose of this buffer shall be to protect the quality of public waters by minimizing erosion, preventing siltation and turbidity, stabilizing soils, preventing excess nutrients and chemical pollution, maintaining natural water temperatures, maintaining a healthy tree canopy and understory, preserving fish and wildlife habitat, and respecting the overall natural conditions of the protected shoreland.

Where a natural woodland buffer does not exist, a naturally vegetated buffer strip at least fifty (50) feet in width, or the full width of the SPOD if the district is less than fifty (50) feet in width, shall be maintained adjacent to the reference line. Within the buffer strip, naturally occurring vegetation shall be maintained and encouraged. No new lawn, garden, or landscape areas shall be created within the buffer strip but existing lawns may be allowed to remain provided that a twenty-five (25) foot wide strip adjacent to the shore is not mowed and is allowed to reestablish naturally occurring vegetation.

Within the buffer, the following standards shall apply:

1. Selective cutting of trees and other vegetation other than ground cover shall be permitted provided that a healthy, well distributed stand of trees and other vegetation is maintained. No trees over six (6) inches in DBH [nineteen (19) inches in circumference] shall be cut within the natural woodland buffer. Not more than fifty (50) percent of the basal area of trees, nor more than fifty (50) percent of the total number of saplings shall be removed in any twenty (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.

2. Existing vegetation under three (3) feet in height including ground cover shall not be removed except to provide for a single point of access to the shoreline as provided for in G. below, and in case of disease as provided for in 5. below.
3. No cleared opening in the forest canopy shall be created with a projected surface area of greater than two hundred fifty (250) square feet as measured from the outer limits of the tree crown unless a building is allowed within the buffer strip. In such a case, a cleared opening for the building site may be created but the cleared opening shall not extend more than twenty-five (25) feet outward from the building.
4. Stumps and their root systems which are located within fifty (50) feet of the reference line shall be left intact. The removal of stumps and roots in conjunction with beaches or docks may be permitted with the approval of the Conservation Commission based upon a determination that the removal in combination with mitigation activities will not increase the potential for erosion.
5. Dead, diseased, or damaged trees, saplings, or ground covers may be removed with prior approval of the Conservation Commission, in consultation with the Tree Warden. ~~No tree warden-delete~~ The stumps and root systems of the removed trees shall not be disturbed and shall remain in place. If such removal results in the creation of cleared openings, these openings shall be replanted with native species unless existing new growth is present. Dead and living trees that provide dens and nesting places for wildlife are encouraged to be preserved.
6. The application of pesticides, herbicides, and fertilizers within the buffer is prohibited except in conjunction with allowed agricultural activities. In the case of allowed agriculture, no fertilizers, pesticides, or herbicides shall be applied within seventy-five (75) feet of the reference line.

B. Agriculture

In no case shall any soil disturbance or animal grazing occur within seventy-five (75) feet of the reference line. No fertilizers (including manure), pesticides, or herbicides shall be applied within seventy-five (75) feet of the reference line. Any commercial agricultural activity within the SPO (except for aquaculture when approved under 175-60B and by the appropriate state agency) shall be conducted in accordance with a management plan approved by the Merrimack County Natural Resources Conservation Service as demonstrating Best Management Practices.

C. Forestry

Any forestry activity within the SPO shall be conducted in accordance with a forest management plan prepared by a New Hampshire state licensed professional forester

and shall be in accordance with the Basal Area Law RSA 227-J:9 and shall use as guidance for best forest management practices “New Hampshire Best Management Practices for Erosion Control on Timber Harvesting Operations” Department of Resources and Economic Development and University of New Hampshire Cooperative Extension 2016, as amended, Best Management Practices for Forestry: Protecting New Hampshire’s Water Quality 2005 as “Good Forestry in the Granite State” (DRED). In no case shall any harvesting or clearing, except for the removal of dead or diseased trees, occur within fifty (50) feet of the reference line. If there is conflict among the standards, the most restrictive shall apply.

D. Sedimentation and Erosion Control

All activities and the use of buildings, structures, and land within the SPOD shall be designed and operated to minimize the volume and rate of stormwater runoff, the amount of erosion, and the export of sediment from the site, and to prevent the release of surface runoff across exposed mineral soils. All activities shall be carried out in accordance with a stormwater management and erosion control plan that incorporates Best Management Practices and is approved by the Merrimack County Natural Resources Conservation Service.

E. Inspection of Nonconforming Septic Systems

When a property with a septic system that does not conform to the setback requirements of 175-74.B is sold or otherwise transferred, the septic system shall be inspected by the Town’s Code Enforcement Officer and, if inadequate, replaced prior to the transfer of the property. If it is replaced it shall be consistent with the setback requirements in 175-74, unless deemed by the Code Enforcement Officer to be unreasonable due to the site or soil conditions.

F. Access to the Shorefront

One point of access to the shorefront may be developed on any lot. Such access shall be limited to a maximum of twenty (20) feet in width.

G. Docks and Piers In or Over the Water

If otherwise permitted in the District, a maximum of ten (10) percent of the frontage of the lot on the waterbody, but no greater than fifty (50) feet of frontage may be used for a boat dock or ramp (excluding seasonal, temporary docks or ramps). Access to the facility shall be located on soils suitable for such use and shall be designed, constructed, and maintained to minimize erosion. The facility shall comply with all applicable federal, state, and local requirements.