

XV. Water Quality Protection Overlay District

A. Purpose/Authority The surface waters (streams, rivers, lakes, and ponds) and wetlands of New Durham supply drinking water, wildlife habitat, and recreation opportunities for the community. In order to preserve these critically important resources, New Durham shall require conservation and land management practices that minimize environmental degradation and alteration of scenic and rural character.

1. Purpose: The Purposes of the Water Quality Protection Overlay District are to: a. protect public and private water supplies; b. trap sediment and other pollutants in surface and subsurface runoff; c. promote bank stabilization; d. protect riparian wetlands; e. minimize the impact of floods; f. prevent decreases in base flow; g. protect wildlife habitat; and, h. generally maintain water quality. The Water Quality Protection Overlay District ensures areas of restricted development and limited land use adjacent to surface waters and wetlands in New Durham.

2. Authority: This ordinance has been enacted to implement the recommendations of the Town of New Durham Master Plan and is authorized by RSA 674:21, Innovative Land Use Controls and RSA 674:21 (j), Environmental Characteristics Zoning.

B. Applicability/District Boundaries

1. Applicability: The provisions of the Water Quality Protection Overlay District shall apply to all lots of 10 acres or less that are created by standard subdivisions first filed after Town Meeting 2007; and to all lots and open space areas created by Open Space Conservation Subdivision first filed after Town Meeting 2007. This paragraph shall not prevent the Planning Board from adjusting the requirements of this Article as appropriate to accomplish the goals of **Article XVI, Open Space Conservation Subdivision Ordinance**.

a. Riparian Buffer Zone: The Riparian Buffer Zone is an environmental overlay area superimposed over the conventional zoning map of the town. Property owners may initially consult the most recent USGS map of New Durham to determine if their Subdivision project area contains surface waters or wetlands that are likely to fall within the Riparian Buffer Zone. Any question of the applicability of this ordinance may require wetlands delineation by a New Hampshire Certified Wetlands Scientist at the applicant's expense. b. Manmade Features Not Applicable: In this Ordinance, "manmade" shall refer to recent structures or changes to the landscape and shall not include cellar holes, gravel pits, abandoned dams, or other prior manmade alterations that have become, PAGE of 73 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE over time, part of the natural topography. Any of the following features shall be exempt from this ordinance: i. Manmade ditches, swales and stormwater management devices. ii. Manmade sedimentation/detention basins or ponds. iii. Rural use manmade ponds such as agricultural ponds, fire ponds, wildlife ponds, and the like, provided that they meet the NH-DES standards for design and construction.

2. District Boundaries The provisions apply in the following areas of the Town of New Durham: a. Perennial Streams and Rivers, b. Ponds and Lakes that are greater than 3000

square feet and less than 10 acres in size, c. Wetlands that are not identified in list below and that are greater than 3000 square feet, d. Vernal Pools (as verified by a wetland scientist or qualified natural resource professional), e. Seasonal or Intermittent Streams, f. The following wetlands and surface waters of special local significance (Prime Wetlands or candidate, large or uncommon wetlands and headwater streams which are delineated in the Natural Resource Inventory, 2011): i. Cooper Cedar Woods, ii. Davis Crossing Road, Old Bay Road and Mill Road Wetland, iii. Old Route 11 and the Davis Crossing Road Wetland, iv. Wetland off of Drew Road, v. Wetland on northeast side of Route 11, vi. Wetland southwest of Route 11, close to Ridge Road, Valley Road, vii. Wetland on inlet on eastern shore of Merrymeeting Lake, viii. Wetland along southwestern shorelines of Chalk Pond and March's Pond, ix. Wetland at headwaters of the Ela River, x. Wetland north of Caverly Road and southwest of Shaw's Pond, xi. Wetland between Middleton Road, Old Bay Road, xii. Ela River, xiii. Beaver Brook, xiv. Cocheco River, xv. Hayes Brook, xvi. Mad River, xvii. Merrymeeting River, xviii. Peter Brook, xix. Unnamed River (outlet of Coldrain Pond into Club Pond), xx. Goodwin Brook, xxi. Jennings Brook. (See provisions of Article XIV. Shorefront Conservation Overlay District for Great Ponds in excess of 10 acres.) PAGE OF 74 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE

C. Dimensional Requirements

1. Lot Area: The square footage area subject to this ordinance shall be countable toward meeting minimum lot size, lot area and density requirements for new subdivisions in accordance with Article V.B.1, Lot Area Requirements.

2. Riparian Buffer Zone Setback Requirements: Riparian areas are generally defined as those areas that influence or are influenced by aquatic systems. For the purposes of **Article XV. Water Quality Protection Ordinance**, a Riparian Buffer Zone shall be defined as an upland area that is contiguous, and within the buffer setback requirements outlined in Table 8: Buffer Setback Distances in Feet by Resource and Use Category, to a water resource that is considered jurisdictional by the NH Wetland Bureau as defined in RSA 482-A, the boundary of which has been delineated by a Certified Wetland Scientist, and the definition of which shall include vernal pools. a. Table 8: Buffer Setback Distances by Resource and Use Category below identifies the base buffer setback requirements for each identified resource type. Buffer setback distances in Table 8 refer to the total horizontal distance in one direction from a water resource Reference Line. In cases where an area qualifies under more than one resource category, the largest buffer/setback distance shall apply. PAGE of 75 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE b. Table 9: Distance Adjustments for Steep Slope Areas (below) shows how much the naturally vegetated buffer strip must be increased in properties with steep slopes. Steep slope areas will also be considered in determining the width of a vegetated buffer strip. If the vegetated buffer strip designated in Column A of Table 8 contains an area that has a slope of 10% or more for more than 10 linear feet in a direction perpendicular to the edge of a water resource, the width of the vegetated buffer zone will be increased as shown in Table 9.

Table 8: Buffer Setback Distances by Resource and Use Category

Surface Water and Wetlands Resource	Buffer Strip	Buildings	Septic	Impermeable
Perennial Streams & Rivers	35'	75'	100'	50'
Lakes & Ponds < 10 Acres	25'	75'	100'	50'
Wetlands	25'	75'	75'	50'
Vernal Pools	50'	75'	75'	50'
Seasonal or Intermittent Streams	25'	50'	75'	50'
Wetland and Surface Waters of Local Significance	75'	100'	125'	75'
Wetlands Contiguous to Lakes & Ponds > 10 Acres	50'	100'	100'	75'

Buffer Strip = see Article XV.F.1 Buildings = Buildings and Structures Setback Septic = Septic systems Setback Impermeable = Impermeable Surfaces Setback (see Article XV. F.2.) PAGE of 76 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE c. Larger buffer or setback distances may be required on a site-specific basis to protect against water quality degradation and to preserve significant wildlife and botanical habitats. The Town may look to the following documents (or as amended) or other documents for guidance as to the sensitivity of a habitat/resource and for recommendations for protective measures such as enlarged buffers and setbacks: i. Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire, 1997. NH Division of Forests and Lands (DRED) and the Society for the Protection of New Hampshire Forests. ii. Identifying and Protecting New Hampshire's Significant Wildlife Habitat: A Guide for Towns and Conservations Groups, 2001. Kanter, J., R. Suomala, E. Snyder, et al. Nongame and Endangered Wildlife Program of the New Hampshire Fish and Game Department. iii. Threatened and Endangered Plants and Animals in New Hampshire's Forested Habitats, 1998. UNH Cooperative Extension, NH Fish and Game Department, US Fish and Wildlife Service. (All documents available for loan from the New Durham Land Use Office)

D. Permitted Uses The following uses, if otherwise permitted in the underlying zoning district, shall be permitted in the naturally vegetated buffer strip, provided that they shall be conducted according to the applicable provisions. Such uses may include the following:

1. Trails or paths for non-motorized recreational purposes, and for motorized vehicles on snow;
2. Removal of dead, diseased, unsafe, or fallen trees;
3. Construction or placement of sheds, decks or structures which occupy a ground area no greater than 150 square feet in size that are incidental and subordinate to the primary building of the property and do not require the disturbance or improvement of the soil

Table 9: Distance Adjustments for Steep Slope Areas

Slope (%) Naturally Vegetated Buffer Strip (feet)	
0-9.9 %	No additional distance
10-19.9 %	15 additional feet
20-29.9 %	35 additional feet
30-39.9 %	55 additional feet
40 % or more	Buffer to extend up-slope until slope is less than 40% for at least 10

linear feet in a direction perpendicular to the Reference Line

PAGE of 77 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE surface or construction of a sub-surface foundation may be constructed no closer than 20 feet from the water resource reference line; 4. Beaches that were existing prior to the March 2007 Town Meeting on lakes and ponds. New perched beaches may be created on lakes and ponds with the prior permission of the Conservation Commission and the NH-DES.

E. Use Regulations

1. Identification: The subdivision applicant shall be responsible for showing a building envelope on each lot of the subdivision plan. The envelope will designate the outer limits of allowable construction for all buildings on the lot. The subdivision applicant shall be responsible for placing a permanent monument (e.g., iron pin, granite bound) at all points of the lot lines that intersect with the upland limit of the naturally vegetated buffer strip

prior to the start of any construction related activities. These monuments shall be shown on the subdivision plan. The entire length of the upland limit of the naturally vegetated buffer strip shall be marked with highly visible construction tape prior to and for the full duration of construction related activities. The applicant shall also be responsible for affixing tags to trees or other durable objects (metal stakes, etc.), at intervals deemed acceptable by the planning board, along the upland boundary of the naturally vegetated buffer strip, and maintaining said tags as needed to provide evidence of the upland side buffer boundary. Under no circumstance shall the tag interval be required to be closer than 25 feet. Tags shall be obtained from the Town.

2. Enforcement: The Town of New Durham retains the right to inspect any property that is subject to this ordinance for the purposes of determining compliance.

3. Riparian Buffer Zone Reference in Deeds: A description of any applicable portions of the Riparian Buffer Zone shall be included in any deeds subsequently conveying all or a portion of a property, along with a reference to the recording information for any pertinent Plan Number from the Registry of Deeds.

F. Performance Standards All construction, alteration, placement, storage, introduction, or movement of structures or land in the Riparian Buffer Zone shall conform with the following performance standards:

1. Naturally Vegetated Buffer Strip: A Naturally Vegetated Buffer Strip adjacent to surface waters and wetlands to stabilize upland areas to prevent erosion, maintain wildlife habitats, and minimize pollution of the water shall be permanently maintained. All existing vegetation including trees, shrubs, and undergrowth shall be allowed to remain undisturbed within the Naturally Vegetated Buffer Strip, as required in Table 8 and Table 9. Not-with-standing the foregoing, removal or control by non-chemical means of invasive non-native or poisonous plant species shall be allowed in the Naturally Vegetated Buffer Strip. No soil disturbance, removal, or cutting of vegetation or introduction of structures or materials of any kind shall occur within this naturally vegetated buffer, except as may be allowed in Article XV. C or may be granted through a conditional use permit outlined in Article XV. G. PAGE of 78 119 TOWN OF NEW DURHAM ZONING AND LAND USE ORDINANCE The size of the Naturally Vegetated Buffer Strip shall be established according to Table 8 and Table 9 in Article XV. C, and shall extend the entire length of any portion of any water resource occurring within the subject property.

2. Sedimentation and Erosion Control: All activities, construction, and the use of buildings, structures, and land within the Riparian Buffer Zone shall be carried out so as to minimize the volume and rate of stormwater runoff, the amount of erosion, and the export of sediment from the site. No structure or building, impermeable surface such as a paved driveway or parking area nor related topographical alteration shall be located, constructed or occur within the distance from the water resource reference line specified in Table 8 and Table 9 above, except as may be allowed in Article XV. C or may be granted through a conditional use permit outlined in Article XV. G. All such activities shall be conducted in accordance with Best Management Practices for stormwater management outlined in New

Hampshire Stormwater Manual, 2008 (as amended) and in conformance with Article XVII. Stormwater Management and Erosion Control Ordinance.

G. Uses allowed in Riparian Buffer Zone with Conditional Use Permit The New Durham Planning Board will be responsible for reviewing and permitting any Conditional Uses according to the following criteria:

1. The following conditional uses may be permitted as in the Riparian Buffer Zone: a. The construction of streets, roads, access ways, bridge crossings, and utilities including pipelines, power lines, and transmission lines and related structures if essential to the productive use of land not defined as wetlands. b. Outdoor recreational facilities that do not require the construction of buildings. c. Trails and associated structures for use by year-round motorized recreational vehicles.

2. The Planning Board may approve a Conditional Use Permit for a use in the Riparian Buffer Zone only if it finds, with the advice of the New Durham Conservation Commission, that all of the following standards have been met in addition to any performance standards for the particular use:

- a. There is no alternative location on the parcel that is outside the riparian buffer zone that is feasible and reasonable for the proposed use,
 - b. The amount of soil disturbance will be the minimum necessary for the construction and operation of the facilities as determined by the planning board,
 - c. The location, design, construction, and maintenance of the facilities will minimize any detrimental impact on the riparian buffer zone and mitigation activities will be undertaken to counterbalance any adverse impacts,
 - d. Restoration activities will leave the site, as nearly as possible, in its existing condition and grade at the time of application for the conditional use permit,
 - e. The proposed activities would not disturb habitat for rare, threatened, or endangered species or exemplary natural communities, such determination to be made by the New Hampshire Natural Heritage Bureau.
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H. Prohibited Uses Any use that is not identified as a permitted use in this Article shall be a prohibited use in the naturally vegetated buffer strip.