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Town of New Durham Zoning & Land Use Odinance

New Durham Planning Board

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TOWN OF NEW DURHAM ZONING & LAND USE ORDINANCE PROPOSED AMENDMENT #1 WATER QUALITY PROTECTION

ARTICLE V: WATER QUALITY PROTECTION ORDINANCE

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A. AUTHORITY AND PURPOSE

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 which minimize environmental degradation and alteration of scenic and rural character.

The purposes of the Water Quality Protection Ordinance are: to protect public and private water supplies, to trap sediment and other pollutants in surface and subsurface runoff, to promote bank stabilization, to protect riparian wetlands, to minimize the impact of floods, to prevent decreases in base flow, to protect wildlife habitat, and to generally maintain water quality. The Water Quality Protection Ordinance ensures areas of restricted

development and limited land use adjacent to surface waters and wetlands in New Durham.

Riparian areas are generally defined as those areas that influence or are influenced by aquatic systems. For the purposes of the 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 Section B, 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.

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

B. APPLICABILITY

The provisions of the Water Quality Protection Ordinance shall apply to all lots of 10 acres or less that are created by standard subdivision 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; provided this paragraph shall not prevent the Planning Board from adjusting the requirements of this Article as appropriate to accomplish the goals of the Open Space Conservation Subdivision, Article V.

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 a wetlands delineation by a New Hampshire Certified Wetlands Scientist at the applicant's expense. <u>Note:</u> 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 IV B of the New Durham Zoning Ordinance.

The provisions apply in the following areas of the Town of New Durham:

1. Perennial Streams and Rivers

2. Ponds and Lakes that are greater than 3000 square feet and less than 10 acres in size*

3. Wetlands that are not identified in Section B.4 below and that are greater than 3000 square feet.

4. Vernal Pools (as verified by a wetland scientist or qualified natural resource professional)**

5. Seasonal or Intermittent Streams

6. The Following Wetlands and Surface Waters of special local significance (Prime Wetlands or candidates, large or uncommon wetlands and headwater streams)

Cooper Cedar Woods Davis Crossing Road, Old Bay Road and Mill Road Wetland (#1) *** Old Route 11 and the Davis Crossing Road Wetland (#2) Wetland off of Drew Road (#3) Wetland on northeast side of Route 11 (#4) Wetland southwest of Route 11, close to Ridge Road, Valley Road (#5) Wetland on inlet on eastern shore of Merrymeeting Lake (#6) Wetland along southwestern shorelines of Chalk Pond and March's Pond (#8) Wetland at headwaters of the Ela River (#9) Wetland north of Caverly Road and southwest of Shaw's Pond (#10) Wetland in SE between Middleton Road, Old Bay Road (#11) Ela River **Beaver Brook** Cocheco River Hayes Brook Mad River Merrymeeting River Peter Brook Unnamed River (outlet of Coldrain Pond into Club Pond) Goodwin Brook Jennings Brook

*Note - For Great Ponds (10 acres or larger in size) see Article VII.

** Note – For information on verification of Vernal Pools refer to <u>Identification and</u> <u>Documentation of Vernal Pools in New Hampshire</u>. Second Edition (2004). New Hampshire Fish and Game Department Nongame and Endangered Wildlife Program.

***Note – These wetlands are delineated on the map entitled "Significant Wetlands & Surface Waters", prepared by biologist Chris Kane as part of his contract in 2006 to help the Town of New Durham prepare this ordinance.

Riparian Buffer Zone Setback Requirements

Table 1 below identifies the base buffer setback requirements for each identified resource type. Note: Buffer setback distances below refer to the total horizontal distance in one direction from a water resource Reference Line. See definition of Reference Line, Section K. In cases where an area qualifies under more than one resource category, the largest buffer/setback distance shall apply. Table 2 below shows how much the naturally vegetated buffer strip must be increased in properties with steep slopes.

Table 1. Buffer Setback Distances in Feet by Resource and Use Category

A. Naturally Vegetated Buffer Strip (see Section G.1.)

B. Buildings and Structures Setback

C. Septic Systems Setback

D. Impermeable Surfaces Setback (see Definition, Section K.)

A	<u>B</u>	<u>C</u>	<u>D</u>	Surface Water & Wetland Resources
35	75	100	50	Perennial Streams and Rivers
25	75	100	50	Lakes and Ponds (<10 acres)
25	75	75	50	Wetlands
50	75	75	50	Vernal Pools
25	50	75	50	Seasonal or Intermittent Streams
75	100	125	75	Wetlands and Surface Waters of Local Significance
50	100	100	75	Wetlands Contiguous to Lakes and Ponds >10 acres

Note: 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:

•<u>Good Forestry in the Granite State: Recommended Voluntary Forest</u> <u>Management Practices for New Hampshire</u>. 1997. NH Division of Forests and Lands (DRED) and the Society for the Protection of New Hampshire Forests.

•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.

•<u>Threatened and Endangered Plants and Animals in New Hampshire's Forested</u> <u>Habitats.</u> 1998. UNH Cooperative Extension, NH Fish and Game Department, US Fish and Wildlife Service.

Table 2: Distance Adjustments for Steep Slope Areas

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 1 contains an area which 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 2.

Side Slope (percent)	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

C. 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 or structures which occupy a ground area no greater than 150 square feet in size that are incidental and subordinate to the primary structure of the property and do not require the disturbance or improvement of the soil surface or construction of a sub-surface foundation may take place 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

D. EXEMPTIONS

Note: 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, over time, part of the natural topography.

Any of the following features shall be exempt from this ordinance:

- a. Manmade ditches, swales and storm-water management devices.
- b. Manmade sedimentation/detention basins or ponds.
- c.Rural use manmade ponds such as agricultural ponds, fire ponds, wildlife ponds, and the like, provided that they meet the Department of Environmental Services (DES) standards for design and construction.

E. CONDITIONAL USE IN THE RIPARIAN BUFFER ZONE

The New Durham Planning Board will be responsible for reviewing and permitting any Conditional Uses according to the following criteria:

1. The following uses may be permitted as conditional uses 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; and

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.

F. PROHIBITED USES

Any use that is not identified as a permitted use in Sections C or E of this Article shall be a prohibited use in the naturally vegetated buffer strip

G. PERFORMANCE STANDARDS IN THE RIPARIAN ZONE

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 Tables 1A and 2. 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 Section C herein or may be granted through a conditional use permit outlined in Section E herein.

The size of the Naturally Vegetated Buffer Strip shall be established according to Tables 1A and 2 in Section B of this ordinance, 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 storm water 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 Tables 1A and 2 above, except as may be allowed in Section C herein or may be granted through a conditional use permit outlined in Section E herein.

All such activities shall be conducted in accordance with Best Management Practices for storm water management including but not limited to:

1. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and Town Officials, NHDES, January 2004.

2. Innovative Storm-water Treatment Technologies Best Management Practices Manual, NHDES, 2002.

H. SEPARABILITY

If any section, provision, portion, clause or phrase of this article shall be held invalid or unconstitutional by any court or competent authority, such holding shall not affect, impair or invalidate any other section, provision, position, clause or phrase of this ordinance.

I. CONFLICT WITH OTHER REGULATIONS

Where any provision of this article is in conflict with State law or another local ordinance, the more restrictive regulation shall apply.

J. IDENTIFICATION OF BUFFER, ENFORCEMENT AND DEED REFERENCE

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 which 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.

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

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.

K. DEFINITIONS

Building Envelope: An area designated on each lot of a subdivision plan as the area where a dwelling and other buildings may be constructed.

Water Resource: All or a portion of a pond, wetland, lake, perennial stream, seasonal or intermittent stream, river or vernal pool.

Wetland: An area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Vernal Pool: a confined depression in which water is present for at least two continuous months in the spring and/or summer; and which becomes completely dry during a portion of the year (or other documentation proving the absence of adult fish populations) and which contains physical evidence that it is utilized by at least one species of which requires a vernal pool for a portion of breeding (including Spotted Salamander, Jefferson Salamander, Wood Frog, Fairy Shrimp).

Seasonal or Intermittent Stream: Any stream shown as a seasonal or intermittent stream on a USGS 7.5 minute series topographic map. Also any other stream that flows for sufficient time to develop and maintain a defined channel with some sign of regular scouring and/or deposition of soil material, but which might not flow during dry portions of the year.

Reference Line: The ordinary high water mark indicated by the line on the shore or edge of a lake, pond, and in the case of a stream or river running parallel to its main stem, 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. For artificially impounded fresh water bodies with established flowage rights, the Reference Line shall be the limit of the flowage rights, and for water bodies without established flowage rights, the Reference Line shall be determined at full pond by the elevation of the spillway crest. For all other wetlands including marshes, bogs, swamps and vernal pools the reference line shall be the line delineated as the wetland edge by a Certified Wetland Scientist in concurrence with the New Durham Conservation Commission.

Slope: Degree of deviation of a surface from the horizontal, measured as a numerical ratio, as a percent, or in degrees. Expressed as a ratio, the first number is the horizontal distance (run) and the second number is the vertical distance (rise), as 2:1. A 2:1 slope is a 50% slope. Expressed in degrees, the slope is the angle from the horizontal plane, with a 90 degree slope being vertical (maximum) and a 45 degree slope being a 1:1 slope.

Impermeable Surface: Driveways, parking areas, walkways, or other features introduced to a property that are constructed of materials such as concrete, asphalt or stone that essentially prevent the passage of water through them to the soil substrate below.

Attest:

 Chairman, New Durham Planning Board
 Date: