ARTICLE 16: WETLANDS [Amended Entirely 2011]

Section 1601 Purpose and Intent

Purpose: The purpose of this Article is to protect and regulate the use of wetlands, surface waters, and their buffer areas, as defined herein.

Intent: The intent of this Article is to:

- A. Ensure the protection of wetland resources from activities that would adversely affect their functions and values, including but not limited to the following:
 - 1. Prevent damage of property and degradation of surface and ground waters by maintaining the capacity of wetlands to receive stormwater and minimize damage from flooding events.
 - 2. Prevent or minimize soil erosion and the subsequent sedimentation of wetlands and surface waters
 - 3. Prevent the loss of unique and unusual natural areas associated with wetlands and surface waters.
 - 4. Prevent the degradation of surface and ground water quality within and adjacent to wetlands.
 - 5. Prevent the degradation of potential surface and ground drinking water supplies as well as existing aquifers and their recharge areas.
 - 6. Prevent the loss or degradation of wetland wildlife populations and protect their Habitats both within wetlands and the immediate buffer zone of wetlands.
 - 7. Prevent the loss or degradation of a diversity of recreational benefits in wetlands such as hunting, fishing, canoeing, bird watching and hiking.
 - 8. Prevent the loss of the visual and aesthetic qualities of wetlands including their contribution to open space, character, and overall scenic beauty of the landscape.
- B. Ensure the protection of wetland buffer areas from activities that would adversely affect them, including but not limited to the following:
 - 1. Prevent erosion and sedimentation by stabilizing soil adjacent to wetlands and surface waters.
 - 2. Moderate the effects of stormwater runoff into wetlands and surface waters by filtering sediment, nutrients and harmful or toxic substances, and moderating thermal discharges.
 - 3. Protect and maintain wetland wildlife habitat in the buffer zone of wetlands and surface waters.
 - 4. Support and protect native vegetation in the buffer zone of wetlands and surface waters.
 - 5. Reduce disturbances to wetland resources caused by human activity in the buffer zone of wetlands and surface waters.
- C. Prevent the unnecessary expenditure of municipal funds for the purposes of providing and or maintaining essential services and utilities that might be required as a result of the destruction or degradation of wetlands or surface waters.

Section 1602 Definitions

Best Management Practices: As promulgated by the state of New Hampshire, measures or practices used to minimize impacts on wetlands and water resources, such as those used to control erosion, reduce sedimentation or prevent other forms of water quality degradation.

Bog: A wetland distinguished by stunted evergreen trees and shrubs, peat deposits, poor drainage, and/or highly acidic soil or water conditions.

Buffer: A naturally vegetated area adjacent to wetlands or surface waters that in its undisturbed and natural condition is integral to the performance and protection of wetland functions and values and_water quality.

Certified Soil Scientist: A person who, by reason of special knowledge of pedagogical principles acquired by professional education and practical experience, as specified by RSA 310-A: 84(I), is qualified to practice soil science, and who has been duly certified by the State Board of Natural Scientists.

Certified Wetlands Scientist: A person who, by reason of multi-disciplinary expertise in wetland science acquired by professional education and practical experience, as specified by RSA 310-A: 84(II-a), is qualified to practice wetland science, and who has been duly certified by the State Board of Natural Scientists.

Contiguous: Immediately adjacent to, or, in the case of surface water or wetlands, hydrologically connected in a direct and proximal way - i.e. damage or degradation to one resource may cause damage or degradation to the contiguous resource.

Drainageway: Includes all surface water conveyances that transmit surface runoff from single storm events, or flows from highly localized snowmelt, or flows from man-made drainage devices that intercept ground water. Except in the case of drainage devices that intercept ground water, flows along these conveyances are typically very brief. Drainageways may be natural features, such as a hillside swale (depression) or rill (streamlet), or they can be man-made features, such as a ditch or a storm drainpipe.

Dredge: To dig, excavate, or otherwise disturb the contour or integrity of sediments in the bank or bed of a wetland or surface water body.

Ecological Communities: Any naturally occurring group of species inhabiting a common environment, interacting with each other especially through food relationships and relatively independent of other groups.

Exemplary Wetlands: A classification of wetlands based on the wetland assessment conducted by the *Comparative Evaluation of Non-tidal Wetlands in New Hampshire* (1991) or 'NH Method' (13 functions), and on the wetland size and the water resources protection goal in the Effingham master plan (i.e. protection of high quality wetlands; protection of drinking water supplies; protection of rare, endangered, exemplary natural communities; protection against flood damage; protection against sedimentation, nutrients, pollutants in town waters). Exemplary wetlands includes those wetlands that exceed the mean rank score for 23 wetlands assessed during 2005-2007 as part of the wetland inventory project (*Final Report on the 2005-2007 Wetland Inventory & Protection Project of the Town of Effingham*, June 30, 2007; submitted to the New Hampshire State Conservation Committee on Contract # 150615), as depicted on the Town Wetlands Map.

Fill: Any rock, soil, gravel, sand or other such material that has been deposited or caused to be deposited by human activity. To place or deposit materials in or on a wetland, surface water body, bank or otherwise in or on an area within the jurisdiction of the DES.

Fourth Order Stream: Stream order is a descriptor used in a system (developed by Arthur Strahler) to classify streams based on the number of tributaries upstream. Stream order is determined using the New Hampshire hydrography dataset archived by GRANIT (geographically referenced analysis and information transfer system) at the Complex Systems Research Center of the University of New Hampshire. The headwater year-round streams in a watershed are first order streams, their juncture yields second order streams, the juncture of two second order streams yields a third order stream, and the juncture of two third order streams yields a fourth order stream, and so on. Pine River downstream from its juncture with Wilkinson Brook is considered a fourth order stream. Ossipee River is considered a sixth order stream. Fourth order and larger streams are protected under the Comprehensive Shoreland Protection Act (CSPA), as amended.

Hydric Soils: Soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part, as defined by the USDA Soil Conservation Service; National Technical Committee for Hydric Soils.

Hydrophytic Vegetation: Plant adapted for life in water or saturated soils. An individual plant may be referred to as a "hydrophyte." This characteristic is determined using the U.S. Fish and Wildlife Service (USFWS) 1988 list – *National List of Plant Species That Occur in Wetlands*, and methods as described in the US Army Corps of Engineers Wetlands Delineation Manual.

Intermittent Stream: A stream that flows for sufficient time to develop and maintain a defined channel, but which might not flow during dry portions of the year.

Lakes and Ponds: Surface waters of the state subject to the same water quality standards, under state law (RSA 485-A) and administrative rules (Env-Ws 1700).

Marsh: A wetland: a) that is distinguished by the absence of trees and shrubs; b) dominated by soft-stemmed herbaceous plants such as grasses, reeds, and sedges; and c) where the water table is at or above the surface throughout most of the year, but can fluctuate seasonally (A marsh is considered surface water under NH state law).

Natural Communities: Natural communities are groups of plants and animals that recur in predictable patterns across the landscape under similar physical conditions.

Open Space: Undeveloped land that is not built upon or substantially altered by human activity. Such areas may contain, but are not limited to, forests, farmland, fields, floodplains, wetlands, and shorelands. Open space can also encompass scenic vistas, recreational areas and historic sites.

Special Use Permit: A permit that may be granted by the Planning Board for a use not otherwise permitted under the Wetlands Article.

Surface Waters: "Waters of the state," as defined by RSA 482A:4, which have standing or flowing water at or above the surface of the ground for at least part of the year. This includes but is not limited to rivers, streams, lakes, ponds, swamps, vernal pools and bogs.

Swamp: A wetland that is dominated by trees and/or shrubs.

Toxic and Hazardous Materials: Any materials and/or substances that are regulated under the NH Solid Waste Rules, Administrative Rules Env-Ws 100-300 and Env-Ws 2100-2800 administered by the NHDES Waste Management Division.

Vernal Pool: An ephemeral body of water that is typically isolated from other wetlands or surface waters, lacks viable fish population and supports a specialized suite of amphibians and invertebrates. Documentation of the presence of a vernal pool includes but is not limited to direct, on-site evidence of one or more of the following: 1) breeding wood frogs (*Rana sylvatica*); 2) breeding mole (*Ambystomid*) salamanders; 3) fairy shrimp (*Identification and Documentation of Vernal Pools in New_Hampshire*, published by the New Hampshire Fish and Game Department's Nongame and Endangered Wildlife Program).

Wetlands: Wetlands as defined by RSA 482-A:2,X.

Wetland Functions and Values: The capacity of a wetland to perform various services that benefit society and/or the natural ecosystem surrounding the wetland. Wetland functions and values include but are not limited to the following: 1) ecological integrity; 2) wildlife habitat; 3) groundwater recharge/discharge; 4) sediment and toxicant removal and attenuation; 5) floodwater storage and dissipation of erosive forces; 6) water-based recreation; 7) education/scientific research; 8) visual and aesthetic quality.

Wetlands Hydrology: In general terms, permanent or periodic inundation or soil saturation during the growing season_sufficient to create hydric soil conditions in the upper part of the soil and support hydrophytic vegetation.

Section 1603 Wetlands

A. Delineation of Wetland Boundaries

- 1. Wetlands shall be delineated on the basis of hydrophytic vegetation, hydric soils, and wetland hydrology in accordance with the techniques outlined in the *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, (January 1987).
- 2. The hydric soils component of a delineation produced under 1603.A.1. above shall be determined in accordance with the manual, *Field Indicators for Identifying Hydric Soils in New England* (Version 3, June 2004, or later version), published by the New England Interstate Water Pollution Control Commission.
- B. Wetlands Incorrectly Delineated
 - 1. Where it is determined that an area has been incorrectly delineated as a wetland, is subject_to questionable delineation or that an area not so designated was subsequently found to meet the criteria for wetlands designation, the Planning Board shall determine whether the regulations contained herein apply.
 - 2. The Planning Board shall make its judgment under this section upon the determination by a qualified soil or wetland scientist on the basis of additional on-site investigations or other suitable research. This evidence shall be acceptable only presented in written form to the Planning Board. Any investigation or study deemed necessary by the Planning Board shall be conducted at the expense of the landowner, applicant or developer.
 - 3. The Planning Board and Conservation Commission may accept the comments, evidence, or testimony of any other qualified individual, agency or organization as is reasonably offered in the course of its review.

Section 1604 Buffers

A. Wetland Buffers

1. Buffer areas shall be required for all wetlands. All buffers shall be measured at a horizontal distance from the wetland boundary. The width of the wetland buffer shall be as follows:

a.	Wetlands contiguous to surface waters.	100 feet
b.	Isolated wetlands not contiguous to surface waters:	
	i. Wetlands less than 3000 sq. ft. in area	25 feet
	ii. Wetland 3000 sq. ft or greater in area	50 feet

- 2. Wetland buffers shall be retained in their natural condition. Where wetland buffer disturbance has occurred during construction for existing lots of record, where buffer intrusion is necessary to allow reasonable use of the lot, re-grading to original contours and re-vegetation shall be required.
- B. <u>Surface Water Buffers</u>
 - 1. Buffer areas shall be required for all surface water bodies. All buffers shall be measured at a horizontal distance from the mean high water mark for lakes and ponds, and from the "top of bank" for rivers and streams, as defined by the NH Department of Environmental Services. The width of the buffer for surface water bodies shall be as follows:

a.	Exemplary Wetlands	150 feet
b.	Lakes and Ponds of less than ten acres, Marshes, Bogs, Vernal Pools	100 feet
c.	Perennial Streams	100 feet
d.	Intermittent and Seasonal streams	
	i. Streams not contiguous to surface waters	25 feet
	ii. Streams contiguous to surface waters	50 feet

- e. Lakes and Ponds larger than ten acres, Fourth and larger order streams will follow the buffer requirements outlined in the Shoreland Water Quality Protection Act (RSA 483-B).
- 2. Surface water buffers shall be retained in their natural condition except as allowed by RSA 483-B: Comprehensive Shoreland Protection Act. Where surface water buffer disturbance has occurred during construction, re-grading to original contours and re-vegetation shall be required.

Section 1605 Permitted Uses in Wetlands and Wetlands Buffers [Amended 2014]

- A. The maintenance of existing uses, structures, driveways, parking areas, landscaping and septic disposal systems. Such uses shall not include the removal or deposition of materials from or into a wetland without first being granted a Special Use Permit.
- B. Within wetland buffers, if no alternative exists, the construction of driveways accessing one and two-family dwellings.
- C. Timber harvesting and forestry operations which (a) utilize best management practices as described in Best Management Practices for Erosion Control on Timber Harvesting Operation in NH (Best Management Practices for Forestry: Protecting New Hampshire's Water Quality, 2005: <u>http://extension.unh.edu/Forestery/Pubs/BMPBook.pdf</u>); (b) comply with all applicable state laws including but not limited to: obtaining and filing an intent to cut form according to RSA 79:10 and filing a complete 'Notification of Forest Management Activities having Minimum Impact' according to RSA 482-A and RSA 483-B.
- D. The following uses are permitted provided that (a) they are consistent with the purposes and intent of this article; (b) they do not involve the erection or construction of a building or structure; (c) they do not involve the re-contouring of the land; (d) no draining, dredging, filling or change in the flow of water will result; and (e) the activity will not result in the pollution of wetlands, surface water, or ground waters.
 - 1. Except as regulated in section 1607F., agricultural activities and operations, as defined in RSA 21:34a and as governed by RSA 430, provided such activities and operations are in conformance with the most recent best management practices determined by the US Department of Agriculture Natural Resource Conservation Service, the NH Department of Agriculture, and/or UNH Cooperative Extension.
 - 2. Outdoor recreational activities such as hunting, hiking, fishing, swimming and boating.
 - 3. Wildlife or fisheries management activities.
 - 4. Educational activities and scientific research.
 - 5. Conservation of open space.
 - 6. Activities incidental to normal ground maintenance including mowing, trimming of vegetation and removal of dead or diseased vegetation. This shall not include the altering of existing grades or contours of land, or the clearing of vegetation.
 - 7. Installation and maintenance of water wells and their appurtenances.
- E. Shoreland development and maintenance as allowed by RSA 483-B, the Shoreland Water Quality Protection Act, as amended.

F. No person shall conduct other uses without first obtaining a Special Use Permit.

Section 1606 Prohibited Uses in Wetlands and Wetlands Buffers

- A. The establishment or expansion of:
 - 1. Salt storage sheds
 - 2. Automobile junkyards
 - 3. Solid or hazardous waste facilities
- B. The bulk storage of chemicals, petroleum products, or toxic and hazardous materials.
- C. Mining; continuous access of livestock and/or penning of poultry or fowl that does not comply with the manual of Best Management Practices (BMPS) for agriculture in NH as published by NH Department of Agriculture, Markets and Food; clear cutting of forests; application of pesticides and chemicals except low phosphorous, slow-release nitrogen fertilizer, lime or wood ash.

Section 1607 Uses Requiring a Special Use Permit [Amended 2014]

Except as allowed in Section 1605, the following uses in Wetlands and Wetland Buffers require a Special Use Permit:

- A. On pre-existing lots of record; within wetland and buffer zones, where no alternative exists, the construction of one and two-family dwellings, accessory structures, but not closer than fifty feet to a wetland or surface water.
- B. Activities that alter or remove soils or vegetation including, but not necessarily limited to land clearing, dredging, draining or filling.
- C. Activities that alter the natural drainage system resulting in a change in the flow of water, water level or water table.
- D. The construction or alteration of structures, streets, roads, and other access ways including any appurtenances and utility right-of-way easements, including power lines and pipelines.
- E. Water impoundments for the purpose of creating a waterbody for wildlife, on-site detention of stormwater runoff and/or recreational uses, if essential to the productive use of land adjacent to the wetland or wetland buffer area.
- F. Agricultural activities as described in Section 1605 that occur inside of, or within 150 feet of, an Exemplary Wetland.

Section 1608 Standards for Granting a Special Use Permit

Administration

- A. The Planning Board shall be responsible for the administration of the Special Use Permit. The Planning Board shall hold at least one public hearing after public notice, as provided by RSA 676.7. An application shall be referred to the Conservation Commission for review and comment at least 30 days prior to the public hearing. The Planning Board shall act to approve or deny the application within 60 days of the public hearing, unless the applicant and the Planning Board agree to an extension for a set period of time.
- B. Any person found to be in violation of this article shall be subject to the enforcement proceedings of Section 1102 and Section 1609.
- C. Substantial construction must commence within one year of Planning Board approval of the Special Use Permit. If construction is not commenced within this period, the Special Use Permit may be extended for up to one year upon approval of the Planning Board. If construction is not commenced within this extended period the Special Use Permit is null and void.

Application Requirements

- A. Applications for a Special Use Permit shall include the following:
 - 1. Site Plan at a scale of 1"=100' or larger indicating the following:
 - a. Lot or lots of record to be impacted;
 - b. Names and addresses of abutting property owners;
 - c. Wetlands delineation, and name of person(s) performing said and the date(s) that such delineation was performed;
 - d. Shading and computation of each of the wetland, surface water, and buffer area(s) to be impacted;

- e. Soils type(s) (-in accordance with *Site Specific Soil Mapping Standards for New Hampshire and Vermont*, June 1997, as amended) within NCSS mapping standards developed by the USDA Soil Conservation Service in Cooperation with the Soil Society of Northern New England.);
- f. Vegetation types;
- g. Location of all drainageways and surface water bodies in vicinity of project area;
- h. Other significant natural features;
- i. Proposed land use/activities, including storm water management structures as needed.
- 2. Project report including the following:
 - a. USGS topographic map showing location of proposed impact area;
 - b. Photographs mounted on 8.5 x 11" white paper of proposed impact area;
 - c. Description of the ecological communities;
 - d. Effects of the impact on the wetland and its functions;
 - e. Measures taken to minimize the impact;
 - f. Proposed land use/activities, sediment and erosion control plan, and monitoring and mitigation plan as required by the NH Department of Environmental Services.
- 3. The site plan submitted for a subdivision or site plan review application to the Planning Board is acceptable if it meets all of the above requirements.
- 4. The Planning Board may waive the requirements for part of the Special Use Permit if it determines that the requirements are unnecessary because of size, character, or natural conditions of a site. [Adopted 2006]

Minor Adjustments

- A. A Minor Adjustment is a reduction in buffer width over a portion of a property in exchange for an increase in buffer width elsewhere on the same property such that the average buffer width remains as in section 1604. No minor adjustment can decrease buffer width to 25 feet less than the buffer width in section 1604 (never below a 50 feet buffer width).
- B. Each applicant for a minor adjustment must submit documentation that issuance of the adjustment will not result in a reduction in water quality and other functions/values under_this Article. All minor adjustments shall adhere to the following criteria:
 - 1. The width of the buffer shall be reduced by the minimum amount possible, and never more than 25 feet less than the buffer width in section 1604 (never below 50 feet minimum buffer) at any point; and
 - 2. Reductions in the width of the buffer shall be balanced by corresponding increases in the buffer elsewhere on the same property, such that the total area included in the buffer is the same as if it were the width specified in section 1604.

Major Adjustments

- A. A Major Adjustment is:
 - 1. A reduction in buffer width that is not balanced by a corresponding increase in buffer width elsewhere on the same property, or
 - 2. A reduction in buffer width to less than that specified in 1608 C that allows for "buffer averaging".

A property owner may request a major adjustment from the requirements of the buffer by filing a Major Adjustment Application with the Planning Board as set forth below in B. Such requests shall be granted or denied based on the criteria set forth below in C and will be subject to the conditions set forth below in D.

- B. Each applicant for a major adjustment must provide documentation that describes:
 - 1. Existing site conditions, including the status of the protected area;
 - 2. The needs and purpose for the proposed project;
 - 3. Justification for seeking the adjustment, including how buffer encroachment will be minimized to the greatest extent possible;
 - 4. A proposed mitigation plan that offsets the effects of the proposed encroachment during site preparation, construction, and post-construction phases.

- C. A Major Adjustment may be issued if:
 - 1. It can be shown that such proposed use is not in conflict with any and all of the purposes and intentions listed in Section 1601 of this article; or
 - 2. The size, shape, or topography of the property, as of the effective date of this Article, is such that it is not possible to erect a structure without encroaching upon the buffer zone.
- D. Any major adjustment issued will meet the following conditions:
 - 1. The width of the buffer is reduced only by the minimum extent necessary to provide relief;
 - 2. Land-disturbing activities must comply with the requirements of the New Hampshire Shoreland Water Quality Protection Act (RSA 483-B), RSA 485-C: Groundwater Protection Act, other State regulations, such as Fill and Dredge in Wetlands (RSA 482-A) and all applicable best management practices. Such activities shall not impair water quality, as defined by the Federal Clean Water Act and the New Hampshire State regulations (RSA 485: New Hampshire Safe Drinking Water Act);
 - 3. As an additional condition of issuing the adjustment, the Board may require water quality monitoring downstream from the site of land-disturbing activities to ensure that water quality is not impaired.

Section 1609 Enforcement

- A. The Planning Board is hereby authorized and empowered to adopt such procedures and require such reasonable fees as are necessary for the efficient administration of this article.
- B. The applicant is responsible for all costs of special investigative studies determined necessary by the Planning Board.
- C. Upon any well founded information that this article is being violated, the Selectmen or their appointed agent shall notify, in writing, the owner or tenant of the property on which the violation is alleged to occur with a copy of such notification to the Planning Board and Conservation Commission. If appropriate, the Selectmen shall also notify the NH Wetlands Bureau, US Army Corps of Engineers, the U.S. Environmental Protection Agency, or such other State or Federal Agency as may have jurisdiction of the violation.

Section 1610 Special Provision – Exemplary Wetlands

A. By virtue of the "size, unspoiled character, fragile condition, or other relevant factors," and the findings of the 2005-2007 *Wetlands Inventory and Protection Project*, the following wetlands in the town of Effingham are listed as "Exemplary Wetlands" and depicted on the Town Wetlands Map:

Colcord Hill Road – South Leavitt Brook Complex Lower Pine River – Heath Pond Bog Phillips Brook Complex Pine River Complex – Central Province Lake – Northwest South River Marsh Upper South River Watts Wildlife Sanctuary Wilkinson Swamp – Upper Wilkinson Swamp – Lower