

2020 Building Better Together (UDO)

 <p>BUILDING BETTER TOGETHER KEENE NEW HAMPSHIRE</p>	 <p>SIMPLE New regulations will be easy to navigate & will include graphics to outline a clear process, from start to finish.</p>	 <p>EFFICIENT The updated structure will provide a set of clear procedures for development queries, & will create a more streamlined application process – eliminating the need to navigate multiple points of contact.</p>	 <p>THOUGHTFUL Although our regulations have worked in the past, they can be outdated & confusing. This update will help guide us into the future, while protecting the crucial elements that make this a great place to live, work, & play.</p>	<p>Surface Water Protection Overlay District</p> <p>Draft as of 5/13/19</p>
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BACKGROUND:

The Surface Water Protection Overlay District was initially adopted in of August of 2013 with the intent of preserving and protecting the functions and values of wetlands and surface waters as recommended in the 2010 Comprehensive Master Plan. The Surface Water Protection Overlay District includes all land within a certain distance from the edge of surface waters. This land is intended to be in an undisturbed and natural condition and is called a buffer area. This buffer serves to capture, store and absorb rainfall, and act as a natural filter by capturing sediment, nutrients and pollutants from runoff, which can lead to improved water quality. It also provides shoreland stability and shade, which can lower water temperatures allowing water to hold more dissolved oxygen and support aquatic resource habitat.

Initially, a 100 foot buffer surrounding all surface waters in the City was proposed, which was later reduced to 75 feet in the Rural, Conservation and Agriculture Districts and 30 feet in all other districts. This Ordinance requires a conditional use permit from the Planning Board for proposed uses/activities within this buffer area.

In 2015, the Conservation Commission formed a subcommittee to review the Ordinance for inconsistencies and make recommendations for addressing these inconsistencies to City Council. This Subcommittee focused on the list of surface water exemptions, which include the City's tax ditches. For many years, the Natural Resource Conservation Service (NRCS) required that the City maintain these tax ditches, which have become part of the City's open drainage and storm water removal system. Although this requirement is no longer in effect, the City continues to manage and control vegetation along the banks of these tax ditches to ensure they do not become overgrown and to protect against flooding. The subcommittee of the Conservation Commission proposed amendments to the Ordinance in 2016 that would remove Tax Ditches from the list of exempted surface waters, would change the definition of the buffer, and would allow for vegetative maintenance and control of the buffer without the issuance of a conditional use permit. These amendments were presented before the PLD in December of 2016, at which time PLD recommended that the City would review and consider these changes as part of the Land Use Code Update.

The current ordinance is available for review via the following link:

https://library.municode.com/nh/keene/codes/code_of_ordinances?nodeId=PTIICOOR_CH102ZO_ARTXVIS_UWAPR

SUMMARY OF MAJOR CHANGES & REASONS:

- a) Reduced the purpose statement in length in an effort to promote readability without undermining the original intent of the Ordinance.
- b) Amended the definitions section as follows:
 - i. Relocated the Definitions section to the end of the Ordinance, however, the terms may ultimately go into a definitions chapter in the LDC.
 - ii. Removed terms from the Definitions section that are not referenced in the Ordinance (e.g. Basal Area, Stream Bed, Dredge, Hydrologically Connected).
 - iii. Removed the definition for Certified Wetland Scientist.

- iv. Edited the definition for Surface Water by consolidating it into one paragraph.
 - v. At the recommendation of the Surface Water Subcommittee of the Conservation Commission, which proposed draft amendments to this Ordinance in 2016, staff modified the definition of buffer to remove the phrase “in and undisturbed and natural condition.”
- c) Significantly reorganized sections and content, as well as reworded certain sections of the Ordinance to promote readability and understanding without changing its meaning or intent.
 - d) Added language to the Applicability Section to be clear that the provisions of this Ordinance do not apply to renovations or repairs of existing structures that do not result in an expansion of the structure’s footprint into or within the Surface Water Protection Overlay District.
 - e) At the recommendation of the Surface Water Subcommittee of the Conservation Commission, staff amended the list of Exempt Surface Waters as follows:
 - i. Removed from the list - “Septage and manure lagoons”, “Silage Pits”, and “Ditches, streams or waterways that have been constructed or altered to manage drainage and/or flooding and that are under a management, use and maintenance agreement with state and/or federal agencies (commonly referred to as “tax ditches”).”
 - ii. Revised “Man-made sedimentation/detention/retention basins or ponds constructed to manage stormwater from a development project and/or streets, roads and highways.” to say “Man-made ditches and swales, sedimentation/detention/retention basins or ponds legally constructed to collect, convey, treat and/or control stormwater and spring runoff.”
 - f) At the recommendation of the Surface Water Subcommittee of the Conservation Commission, staff amended the list of Permitted Uses in the district – “Maintenance and vegetative control of the buffer area.”
 - g) Removed Open Space from the list of Permitted Uses as the wording is confusing. Staff felt it is apparent that Open Space would be allowed in the buffer, and therefore does not need to be included in the list.
 - h) Revised the language for the section “Sec. 102-1492. - Pre-existing uses and lots.” and relocated it to the list of Permitted Uses. Included a note that the Zoning Administrator shall determine if all of the criteria have been met.
 - i) Removed the requirement in Sec. 102-1494 of the current ordinance that the area of all surface waters be deducted from the calculation for minimum lot size.

REMAINING ISSUES/QUESTIONS

- Should we reconsider what would require a Conditional Use Permit and the process for review? Would it be preferred/possible for administrative review of applications and those that do not meet the standards would need to go to the Planning Board for approval? Staff intends to discuss this question further at the Steering Committee meeting on 5/17/19.
- Should the edits proposed by the Conservation Commission’s subcommittee in 2016 (as noted in the section above) be incorporated in the final draft?

ATTACHMENTS:

- A. Revised Surface Water Protection Overlay District Draft dated 05/13/19

DRAFT SURFACE WATER PROTECTION OVERLAY ZONING DISTRICT

PURPOSE

The purpose of this Ordinance is to:

- a) protect the functions and values of surface waters and, in particular, the buffers associated with these resources, which reduce the rate and volume of runoff;
- b) prevent the loss or degradation of natural stormwater storage, infiltration and conveyance capacity within the city;
- c) prevent water quality deterioration associated with stormwater runoff;
- d) maintain the health and holding capacity of natural surface and ground waters; and,
- e) protect the quality and connectivity of wildlife habitat and corridors.

APPLICABILITY

- a) **General.** All land within the Surface Water Protection Overlay District, as defined in Section X, is subject to the standards set forth in this Article, unless otherwise noted.
- b) **District Definition.** The Surface Water Protection Overlay District is an area of land buffering all surface waters, which include perennial and seasonal streams, lakes, ponds, wetlands and wetland complexes, vernal pools, fens and sloughs. This buffer area is measured on a horizontal plane from either the top of the bank of a stream, or the ordinary high water mark of a river, or the reference line of a lake or pond, or the delineated edge of a wetland or change in soil type.
 1. **Buffer Width.** In the Rural, Agriculture, and Conservation Zoning Districts, the Surface Water Protection Overlay District is a 75-ft wide buffer. In all other zoning districts, this buffer is 30-ft wide.
 - a. **Buffer Reduction.** In specific cases, an applicant may be unable to comply with the terms of this Article and require a reduction in buffer width. This buffer area may be reduced to 30 feet in zoning districts requiring a 75-foot buffer and to 10 feet in zoning districts requiring a 30-foot buffer at the discretion of the Planning Board if the applicant for a Conditional Use Permit provides extraordinary mitigation, replication, and/or restoration of surface waters and wetlands, and/or open space preservation measures.
- c) **Conditional Use Permit.** A Conditional Use Permit issued by the Planning Board may be required as specified in this Article for certain uses and structures within the Surface Water Protection Overlay District.
- d) **Renovations and Repairs.** The provisions of this Article shall not apply to renovations or repairs of existing structures that do not result in an expansion of the structure's footprint into or within the Surface Water Protection Overlay District.

DETERMINATION OF SURFACE WATER BOUNDARIES

- a) In determining the size of a surface water, any portion of the surface water that may be located on an adjacent parcel or in an adjacent municipality shall be included based on best available information.
- b) Roads, drainage culverts, or other man-made features shall not constitute an interruption in the delineation of the size of the surface water.
- c) For all new subdivisions and new or modified site plans, where maps or field investigations indicate that surface water may be present on a proposed development site, the location, area, and limits of all surface waters shall be field determined and delineated by a New Hampshire Certified Wetland Scientist.

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1. Any delineation completed without clear evidence of vegetation, from the current or prior growing season, shall be verified during the subsequent growing season at the owner's expense.
 2. Revisions to surface water delineations and to any required buffer areas shall be submitted to the city as a revision to the original plan. Any proposed development shown on the revised plan shall be modified to bring the plan into compliance with this Article.
- d) The boundaries of any required buffer areas, as specified in this article, shall be marked as such on the site with stakes and flagging, or permanent markers along the buffer perimeter. Such demarcation shall remain in place until all construction is complete and has been inspected and approved by the Community Development Department.
 - e) Where an area is not designated on the plan as a surface water and the Planning Board, after consultation with the Community Development Department and/or the Conservation Commission, believes it to be a surface water, the Planning Board may require the applicant to supply the findings of a New Hampshire Certified Wetland Scientist as to the character of the area, at the expense of the applicant.
 - f) When an area has been designated as surface water and an applicant believes that the area is, in fact, not a surface water area, then the applicant, at their own expense, may supply the findings of a New Hampshire Certified Wetland Scientist attesting to the character of the area. The Planning Board will issue a finding on wetlands identification and may request alternative reports from the applicant, at the expense of the applicant.

EXEMPTIONS

The following surface waters shall not be subject to this Article.

- a) Man-made ditches, swales, sedimentation/detention/retention basins or ponds legally constructed to collect, convey, treat and/or control stormwater and spring runoff
- b) Man-made agricultural/irrigation ponds
- c) Fire ponds and cisterns

PROHIBITED USES

The following are expressly prohibited from the Surface Water Protection Overlay District:

- a) Subsurface wastewater disposal systems
- b) Salt storage including the storage of road salt or sand treated with road salt
- c) Automobile junk yards/salvage yards, service and/or repair shops
- d) Hazardous waste facilities
- e) Bulk storage in amounts greater than those for household or agricultural use of chemicals, petroleum products or hazardous materials
- f) Earth excavation operations as defined in **Article X** of this LDC
- g) Off-site dumping or disposal of snow and ice collected from roadways or parking areas, not including snowplowing of existing roadways
- h) Storage or disposal of solid waste, liquid or leachate waste, animal wastes or byproducts
- i) Landfills, solid waste transfer stations, recycling facilities, incinerators, or composting facilities
- j) Animal feedlot operations

PERMITTED USES

The following are permitted in the Surface Water Protection Overlay District without a Conditional Use Permit, subject to any provisions specified in this Article.

- a) Maintenance and vegetative control of the buffer area.

- b) Agricultural activities and operations as defined in RSA 21-34-a and governed by RSA 430 subject to i) Best Management Practices for agriculture as defined in this Article; ii) compliance with all related state and local laws; and exceptions listed below
- c) Forestry, tree farming, and logging operations, subject to Best Management Practices as defined in this article, and compliance with all related state and local laws
- d) Water impoundments, when required state and/or federal permits have been issued
- e) Ground water withdrawal well for a single residential dwelling or duplex facilities, and wells for the City of Keene drinking water supply
- f) Geothermal heating and cooling systems including but not limited to groundwater wells and subsurface heat exchange installations
- g) Trails constructed and maintained in accordance with best management practices as defined in this article
- h) Wildlife or fisheries management activities
- i) Educational activities and scientific research consistent with the purpose and intent of this article
- j) New residential driveways subject to the following provisions:
 - 1. The driveway serves to access uplands on a lot(s) of record that existed at the time this Article was adopted.
 - 2. The driveway provides access for no more than 2 existing lots on a shared driveway.
 - 3. There is no reasonable alternative location to site the development on the lot that would avoid the disturbance of lands within the Surface Water Protection Overlay District.
 - 4. The driveway is designed to minimize any disruption to lands within the Surface Water Protection Overlay District.
 - 5. All applicable NH Wetlands Bureau permits have been acquired for any proposed disturbance of surface waters regulated by the State.
 - 6. All surface water resources and applicable buffer areas have been delineated by a New Hampshire Certified Wetland Scientist and are shown as part of a driveway permit application.
- k) All normal maintenance of existing roadways and utilities including winter maintenance.
- l) Repair, repaving, replacement, and reconstruction of existing roads, bridges, culverts and drainage systems and utilities.
- m) Construction of compensatory flood storage excavation under **Article X** as long as no part of the compensatory flood storage excavation is within a wetland as defined in this Article and subject to issuance of a floodplain development permit according to **Article X**.
- n) Construction of new or expansion of existing single-family and two-family residential structures and associated accessory structures on lots that legally existed before the adoption of this Article, provided that the following criteria are met. The Zoning Administrator shall be responsible for determining whether these criteria are met.
 - 1. It is not feasible to place the structure on a portion of the lot that is located outside of the Surface Water Protection Overlay District.
 - 2. The structure is set back as far as reasonably possible from the edge of the surface water.
 - 3. Applicable erosion control measures are in place prior to and during construction.
 - 4. Any disturbance to the surrounding buffer area is repaired and restored upon completion of construction.
 - 5. A minimum 30-foot buffer is maintained from surface waters in lots in the Rural, Conservation, and Agriculture Zoning Districts, and a 10-foot buffer is maintained from surface waters in all other zoning districts.

6. Any alteration to a surface water is made in accordance with all applicable state and federal laws, administrative rules, and regulations.

Commented [TK1]: More discussion is needed on whether this section remain in the regulations or not.

CONDITIONAL USE PERMIT

- a) A Conditional Use Permit issued by the Planning Board shall be required for the following when located within the Surface Water Overlay Protection District.
 - 1. Construction of a new structure or expansion of an existing structure, with the exception of those structures specified in Section X of this Article, that expands the footprint of that structure within the Surface Water Protection Overlay District
 - 2. Construction of new driveways for residential use that would disturb or cross lands within the Surface Water Protection Overlay District.
 - 3. Construction of new roads, driveways for non-residential uses, and parking lots
 - 4. Construction of new stormwater management facilities and structures or improvements, including but not limited to, sedimentation/detention/retention ponds, drainage swales, and erosion control devices
 - 5. Construction of compensatory flood storage excavation under Article X which requires the issuance of a wetland permit
- b) A conditional use permit shall not be required for impacts to areas within the District that are under the jurisdiction of the New Hampshire Department of Environmental Services when a state wetlands permit or when a state Shoreland Water Quality Protection Act permit has been issued.
- c) **Criteria for granting a conditional use permit.** The Planning Board shall issue a Conditional Use Permit for the activities described in Section X of this Article if it finds that all of the following criteria have been met.
 - i. The proposed use and/or activity cannot be located in a manner to avoid encroachment into the Surface Water Protection Overlay District.
 - ii. Encroachment into the buffer area has been minimized to the maximum extent possible, including reasonable modification of the scale or design of the proposed use.
 - iii. The nature, design, siting, and scale of the proposed use and the characteristics of the site including but not limited to topography, soils, vegetation, and habitat are such that when taken as a whole, will avoid the potential for adverse impacts to the surface water resource.
 - iv. The buffer area shall be left in a natural state to the maximum extent possible. In issuing a Conditional Use Permit, the Planning Board may establish conditions of approval regarding the preservation of the buffer including the extent to which trees, saplings and ground cover shall be preserved.
 - a. Dead, diseased, unsafe, or fallen trees, saplings, shrubs, or ground cover may be removed.
 - b. Stumps and their root systems shall be left intact in the ground, unless removal is specifically approved in conjunction with a Conditional Use Permit granted by the planning board.
 - c. Exotic, invasive trees, saplings, shrubs, or ground covers, as defined by NHDES, may be removed. The stumps and root balls of exotic, invasive species may also be removed by hand digging and/or hand cutting.
 - d. Preservation of dead and living trees that provide dens and nesting places for wildlife is encouraged. Planting of native species of trees, shrubs, or ground cover that are beneficial to wildlife is encouraged.
 - e. Where there has been disturbance or alteration of this buffer during construction, excavation, or grading, re-vegetation with native species may be required by the planning board.
- (f) The Planning Board may consider the following to determine whether allowing the proposed encroachment will result in an adverse impact on the surface water resource:

Commented [TK2]: This refers to item (n) under permitted uses above

- (1) The size, character, and quality of the surface water and the buffer being encroached upon.
- (2) The location and connectivity of the surface water in relation to other surface waters in the surrounding watershed.
- (3) The nature of the ecological and hydrological functions served by the surface water.
- (4) The nature of the topography, slopes, soils, and vegetation in the buffer that encompasses the surface water.
- (5) The role of the buffer in mitigating soil erosion, sediment and nutrient transport, groundwater recharge, flood storage, and flow dispersion.
- (6) The extent to which the buffer serves as wildlife habitat or travel corridor.
- (7) The rate, timing and volume of stormwater runoff and its potential to influence water quality associated with the affected surface water or any associated downstream surface waters.
- (8) The sensitivity of the surface water and the buffer to disruption from changes in the grade or plant and animal habitat in the buffer zone.

CONDITIONAL USE PERMIT APPLICATION PROCEDURE

- a) All applications for a conditional use permit under this section of the article shall be made to the Planning Board following the procedures set forth in Article X of this LDC as they may be amended.
- b) **Referral to the conservation commission.** Upon receipt by the Community Development Department, all applications for a Conditional Use Permit shall be forwarded to the Conservation Commission a minimum of 5 business days prior to the Commission's next regularly scheduled meeting.
 - i. Upon receipt of a Conditional Use Permit application, the Conservation Commission may conduct an evaluation of the application and provide advisory comments to the Planning Board. Such evaluation shall be based on the Conditional Use Permit criteria set forth in this Article.
- c) Submission requirements for a Conditional Use Permit shall include the location of the buffer area, details showing the proposed encroachment into the Surface Water Protection Overlay District, and any information necessary to demonstrate that the proposed encroachment will not cause adverse impacts to the surface water resource, or design details that demonstrate that proposed mitigation will prevent adverse impacts to the surface water resource.
- d) All information pertaining to delineating the location, area, and limits of surface waters, along with the associated buffers as specified in this Article, shall be clearly shown on the proposed conditions plan and on an existing conditions plan.

DEFINITIONS

For the purposes of the surface water protection overlay district, the following definitions apply:

Alteration means any change or modification of habitat, land, water, or existing structure along surface water resources.

Bank means the transitional slope beginning at the edge of a surface water body, the upper limit of which is defined by a break in slope as defined in Wt. 101.06, N.H. Code of Administrative Rules, as may be amended or updated.

Best management practices means the structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent increases in and/or reduce stormwater volumes and rates of flow, reduce point source and non-point source pollution, and improve stormwater quality, and protection of the environment.

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- (1) With Respect to Forestry: *Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire*, NH Department of Resources and Development, 2004 (or later edition, as may be amended or updated), *Best Management Practices for Forestry: Protecting New Hampshire's Water Quality*, UNH Cooperative Extension, 2006 (or later edition, as may be amended or updated).
- (2) With Respect to Agriculture: *Best Management Wetlands Practices for Agriculture in New Hampshire*, NH Department of Agriculture, July 1993 (or later edition, as may be updated or amended), the *Manual of Best Management Practices for Agriculture in New Hampshire*, NH Department of Agriculture, July 2008 (or later edition, as may be amended or updated).
- (3) With Respect to General Regulations: *Best Management Practices for Urban Stormwater Runoff*, NH Department of Environmental Services, 1996, (or later edition as may be amended or updated.) *Innovative Stormwater Treatment Technologies Best Management Practices Manual*, NH Department of Environmental Services, May 2002, (or later edition as may be amended or updated). Environmental Protection Agency Websites "Construction Site Stormwater Control" and "Post-Construction Stormwater Management in New Development and Redevelopment", <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>.
- (4) With Respect to Golf Courses: *Manual of Best Management Practices for Agriculture in New Hampshire*, NH Department of Agriculture, July 2008 (or later edition, as may be amended or updated), the *Best Management Practices to Control Nonpoint Source Pollution: A Guide for Citizens and Town Officials*, NH Department of Environmental Services, January 2004 (or later edition, as may be amended or updated).
- (5) With Respect to Trails: *Best Management Practices for Erosion Control During Trail Maintenance and Construction*, NH Department of Resources and Economic Development, Division of Parks and Recreation, Bureau of Trails 1994, updated in 2004 (or later edition, as may be amended or updated).

Bog means a wetland area distinguished by stunted evergreen trees and shrubs, peat deposits, poor drainage and/or highly acidic soil and/or water conditions per Wt. 101.10, N.H. Code of Administrative Rules, as may be amended or updated.

Buffer for purposes of this article means an area that is designed to remain vegetated to protect adjacent surface water functions and values from adverse impacts and provide habitat for wildlife. The buffer shall be measured on a horizontal plane from the top of the bank of a stream, or from the ordinary high-water mark of a river, or from the reference line of a lake or pond, or from the delineated edge of a wetland or change in soil type.

Fen means a wetland area distinguished by sedge, reed, shrub or forest, peat deposits, poor drainage, which has neutral pH and moderate to high nutrients.

Intermittent stream means 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 or during long-term periods of drought as defined in Wt. 101.47, N.H. Code of Administrative Rules, as may be amended or updated.

Ordinary high-water mark means the line on the shore, running parallel to the main stem of the river, 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 the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas as defined in RSA 483-B:4 X1a, as may be amended or updated.

Perennial stream means a stream that flows year-round in a defined channel.

Pond means any year round standing body of water one acre or more in area, as measured from the mean annual high water mark.

Reference Line means (a) for natural fresh water bodies without artificial impoundments, the natural mean high water level as determined by the Department of Environmental Services; (b) for artificially impounded fresh water bodies with established flowage rights, the limit of the flowage rights; (c) for water bodies without established flowage

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rights, the waterline at full pond as determined by the elevation of the spillway crest; (d) for rivers, the ordinary high water mark as defined in RSA 483-B:4 XVII, as may be amended or updated.

Slough means wetland channels or series of shallow lakes. Water is stagnant or may flow slowly on a seasonal basis.

Surface water for the purposes of this article, includes perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial. Surface water includes wetlands as defined in RSA 482-A:2.X and NH Code of Administrative Rules Env-wt 100-900 including: Bogs, ephemeral stream, intermittent streams, marshes, surface water bodies, swamp, wetlands, wet meadows. Surface water also includes vernal pools, fens, sloughs, and wetland complexes.

Vernal pool means a seasonal or intermittent pool of water providing essential breeding habitat for certain amphibians and invertebrates and does not support fish. Vernal pool status can be confirmed by but not limited to evidence of breeding by at least one vernal pool indicator species such as wood frogs, spotted salamanders, blue spotted/Jefferson salamanders, and/or the presence of fairy shrimp. Evidence of breeding includes calling wood frogs, salamander spermatophores, egg masses, and/or larvae of wood frogs or salamanders.

Wetlands means those areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation adapted for life in saturated soil conditions.

Wetlands complex means a series of small wetland areas that are hydrologically connected by a common water table.