Proposed Revisions to Section 3.1 Lake Pocotopaug Protection Zone For Discussion Purposes Edited: July <u>3</u>November 6, 2019

A. Purpose

Lake Pocotopaug has experienced a gradual degradation of water quality since about 1970. The watershed area is intensely developed in many areas and is a primary source of storm water runoff that can carry nutrients and pollutants that contribute to the eutrophication of the lake and degradation of its water quality. This Regulation recognizes the concerns raised by and is adopted in an effort to support and carry out <u>some of</u> the goals of the adopted "Lake Pocotopaug Nine Elements Watershed Based Plan".

This Regulation is intended to provide special protection to all land included in the watershed of Lake Pocotopaug and to minimize the negative environmental effects of development within the watershed area.

B. Goals

The goals of this overlay zone are:

- A. To minimize the impervious surfaces and maximize infiltration of stormwater runoff;
- B. To reduce stormwater flow and minimize the likelihood of soils erosion, stream channel instability, flooding, and habitat destruction;
- C. To preserve and/or create vegetative buffers or native plantings to control and filter stormwater runoff;
- D. To minimize disturbance of natural grades and vegetation and utilize existing topography for natural drainage systems;
- E. To contain stormwater runoff on site, wherever possible, to reduce the volume of stormwater runoff before it reaches surface water bodies; and
- F. To prevent and minimize potential groundwater pollution from improper waste disposal, release of hazardous materials, and other sources.

C. Applicability and Scope

The watershed is considered to be the area shown on the official Zoning Map as "Lake Pocotopaug Watershed." The provisions of these regulations shall be in addition to all other requirements of applicable statutes, codes, regulations, and ordinances. All development within the watershed requiring action by the Planning and Zoning Commission shall be subject to a Public Hearing.

This requirements listed in Section D of this regulation shall apply under <u>any</u> the following conditions:

- 1. All new construction,
- 2. Reconstruction (tear-down and rebuilds),
- 3. Any property where impervious coverage is proposed to be increased to beyond 1<u>5</u>0% of the total parcel area,
- 4. Any property where construction activity includes more than <u>4 acre5,000 square feet</u> of disturbance.

D. Requirements

- 1. All areas fronting on Lake Pocotopaug and any of its tributaries (Hales, Christopher, Fawn, Clark, Days, O'Neil, Candle, Hazen, Bill Day, and Unnamed Brooks) require a <u>planted buffer zone of at least 20% of the distance between the primary residential structure and the water way, or five (5) feet, whichever is less twenty-five (25) foot planted buffer starting at the mean high water mark. Provisions may be made for walking paths (not wider than six feet) and dock landings. Property owners should refer to the "Protecting Lake Pocotopaug" documents for best management practices. This buffer should contain native plantings consisting of low and high vegetation. (Views may be maintained by planting low growth bushes and trimming large growth trees.)</u>
- 1.2. All proposed site plans within the watershed shall include provisions for eliminating runoff from the property to the street. This must take into account the topography of the property and any nearby catch basis or other drainage structures.
- 2.3. All applications as required by this Section shall include a Stormwater Management Plan and Data which shall include the following:
 - A. A Narrative report prepared by a licensed engineer indicating:
 - i. Any risk or threat to Lake Pocotopaug or the water resources in the watershed from site development, site improvements, or on-site operations proposed in the application and measures.
 - ii. Methods of assessment and best management practices to prevent and reduce any such risk or threat.
 - iii. Supporting documentation, including calculations and engineering details shall be provided to illustrate the existing and proposed development's compliance with these regulations which shall be designed in accordance with the stormwater management design guidelines of either the "Connecticut Stormwater Quality Manual" or Connecticut DEEP's "Manual for the Best Management Practices for Stormwater Management."
 - B. A Site Plan indicating:
 - i. All relevant data required for the application,
 - ii. Site topography,
 - iii. Location and area of all impervious surfaces on the site,
 - iv. Location and area of all turf cover,
 - v. Location and area of all existing woodland areas,
 - vi. Location and area of all existing and proposed vegetative buffer areas,
 - vii. Location and description of all potential runoff and pollution sources including erosive soils, steep slopes, and impervious surfaces,
 - viii. Location and specifications of all existing and proposed stormwater best management practices.
 - C. An Erosion and Sedimentation Control Bond in accordance with Section 8.5.N shall be submitted for all projects resulting in more than <u>2 acre-5,000 square feet</u> of soil disturbance.
 - D. Seasonal Clearing Activity Limitations The intent of seasonal clearing activity limitations is to limit the amount of exposed soils on site that are susceptible to erosion at any one time,

thereby improving site stability during development and reducing potential for transport of dissolved pollutants and sediments off site. Preservation of existing trees on site also reduces the quantity and maintains the quality of stormwater leaving a site during and after development activities by encouraging interception, infiltration and evapotranspiration of rainfall and surface runoff.

- i. Administrative review and approval shall be required for all clearing activities associated with any development proposal.
- ii. Clearing activity that will result in exposed soils exceeding 500 square feet shall not be permitted from October 1st through April 30th; provided, that:
 - i. The Planning & Zoning Official may approve an exemption to this requirement for the following activities:
 - 1. Routine maintenance and repair of erosion and sediment control measures;
 - Activities located at or waterward of the mean high water mark subject to conditions of approval requiring commencement of clearing activity between October 1st and May 30th for purposes of minimizing surface water disturbance and site inundation by high water or wave action;
 - 3. Activities necessary to address an emergency that presents an unanticipated and imminent threat to public health, safety or the environment that requires immediate action within a time too short to allow full compliance with this section. Upon abatement of the emergency situation, the clearing activity shall be reviewed for consistency with this section and may be subject to additional permit requirements; provided, that the applicant shall make a reasonable attempt to contact the Planning & Zoning Official prior to the activity. When prior notice is not feasible, notification of the action shall be submitted to the Planning & Zoning Official as soon as the emergency is addressed and no later than two business days following such action. Emergency construction does not include development of new permanent protective structures where none previously existed;
 - 4. The proposed activity does not involve the conversion of forest land, is outside critical areas and associated buffers.
 - To ensure compliance with subsection (ii) of this section, the East Hampton Land Use Office shall not issue development permits requiring more than 500 square feet of land disturbance located within the Lake Pocotopaug watershed within two weeks prior to the watershed seasonal closure on October 1st.
 - iii. Soil disturbance associated with an exempt clearing activity shall be minimized to the maximum extent practicable. The Planning & Zoning Official shall have the authority to condition an exempt activity to ensure

that temporary erosion and sediment control measures will be implemented.

- iv. An exemption from the seasonal land clearing requirements of this section does not grant authorization for any work to be done in a manner that does not comply with other provisions of this chapter or other applicable development regulations.
- v. Within the Lake Pocotopaug Watershed Overlay District, clearing activity must conform to the following conditions:
 - Temporary erosion and sediment control shall be installed and inspected prior to any clearing activity. The Planning & Zoning Official shall conduct periodic inspections to ensure the integrity of temporary erosion and sediment controls. Temporary erosion and sediment control measures include, but are not limited to, installation of silt fencing, installation of check dams, covering of excavation piles, and mulching of exposed soils, as specified and in accordance with the 2002 CT E&S Guidelines.
 - 2. Phased Clearing. Construction activities and clearing activities shall be phased to limit the amount of exposed soil that occurs at any one time, if determined to be appropriate by the Planning & Zoning Official, based on site characteristics or constraints including, but not limited to, slopes, proximity to shorelines and wetlands. A phased clearing plan may be required. A phased clearing plan, if required, shall be submitted for review and approval by the Planning & Zoning Official prior to any clearing activity and shall contain a detailed construction schedule or timeline.
 - 3. Soil Stabilization. All disturbed areas shall be provided with soil stabilization within two days of the time of disturbance. The Planning & Zoning Official may approve an exemption to this requirement when a tree canopy area retention plan includes a soil stabilization plan. This plan component must specifically detail erosion and sediment control and stormwater runoff measures that provide runoff control equal to or greater than the protection provided by the standard two-day soil stabilization requirements of this section.

E. Best Management Practices

The following practices and methods shall be incorporated into all stormwater management plans wherever possible:

- 3. Vegetative swales, buffers, filter strips
- 4. Water control berms and level spreaders

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- **5.** Grassed drainage swales wet, or dry
- 6. Maintain or restore pre-development vegetation
- 7. Minimize creation of steep slopes
- 8. Bio-retention structures/residential rain gardens
- 9. Rain water harvesting/rain barrels
- **<u>10.</u>** Dry retention ponds
- **<u>11.</u>** Underground detention galleries
- **12.** Proper location and reduction of impervious surface area on site
- **13.** Disconnect flows from multiple impervious surfaces
- <u>14.</u> Permeable pavement choices
- **15.** Groundwater infiltration systems (curtain drains, dry well galleries, etc)
- **16.** Site grading should be in such a manner so as to prevent any runoff from entering the lake, wetlands, or stream directly an instead directed to areas where it can infiltrate.
- 17. Replanting

F. Prohibited Uses

The following uses are prohibited within the watershed zone because of the potential for negative impacts to Lake Pocotopaug.

- 1. Direct discharge of stormwater into wetlands or waterways.
- 2. Direct discharge of stormwater into existing catch basins and other drainage structures that drain to wetlands and watercourses.
- 3. Underground fuel oil tanks
- 4. Fuel filling stations
- 5. Stockpiling or composting of manure within 200 feet of a wetland or watercourse.