Proposed Shoreland Protection District Related Amendments

to the 2022 Greensboro Zoning Bylaw

Approved by GPC 2/13/2024

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Highlighted For Changes Since 9/5/2023

This document contains only pages on which there are amendments related to the Shoreland Protection District and land adjacent to lakes >10 acres in Greensboro, which is covered by the Town's municipal delegation agreement with the VT Department of Environmental Conservation under the VT Shoreland Protection Act.

Includes changes to: §2.6 Resource Districts, §2.7 Shoreland Protection District, §3.8 Nonconformities §3.9 Protection of Water Resources, Article 8 Shoreland Protection District Regulations.

Key to the Marked Copy:

- Blue text with strikethrough = deleted text
- Red underlined text = new inserted text
- Green text = moved text
 - o Text that appeared in the 2022 bylaw but its location in bylaw has been moved.
 - o green text with strikethrough shows where text was moved from
 - o green underlined text without strikethrough is where text was moved to
 - Note: some moves may show as a deletion (in blue) and an insertion (in red) rather than in green

Highlighting:

- Yellow highlighting shows changes made after the 10/17/23 PC Public Hearing
- Gray highlighting shows text that was moved within the document (often footnotes being moved directly into text)

§ 2.6 Resource Districts

- (A) Description. The Resource Districts encompasse lands with unique and important Greensboro natural resources. These districts include lands in the immediate vicinity of Long Pond, Horse Pond, Mud Pond, and the eastern shore of Eligo Lake. In order to lessen development pressures on these lands and to preserve the natural features and habitats as stated in the Town Plan, twenty-five acres minimum residential density will be required. See boundary description and maps. See the District Maps and Boundary Descriptions for the Resource District and the Eligo Lake Resource District.
- (B) Purpose. The Resource Districts haves been established to protect the unique and important natural resources found in these areas, including Long Pond, and to lessen development pressures on these lands.
 - 1. Permitted Uses:
 - 2. Accessory Dwelling Unit [see §4.2]
 - 3. Accessory Use or Structure
 - 4. Agriculture [see §3.6]
 - 5. Dwelling, Single Family
 - 6. Dwelling, Two Family
 - 6.7. Forestry [see §3.6]
 - 7-8. Home Child Care¹
 - 8.9. Home Occupation [see §4.7]
 - 9.10. Residential Care or Group Home²
 - 10.11. Signs up to 2 sq. ft.

(C) Conditional Uses:

All conditional uses should be conditioned with close adherence to the objectives stated in (A) above.

- 1. Cemetery
- 2. Commercial Use [see §4.4]
- 3. Dwelling, Two Family
- 4.3. Home Business [see §4.5]
- 5.4. Retail Business
- 6.5. Signs larger than 2 sq. ft.
- 6. Telecommunications Facility [see Article 7]
- 7. Onshore shoreland buffer re-establishment & bank stabilization projects [see §8.7]

(E) Dimensional Standards

Minimum Lot Size	twenty-five acres
Minimum Lot Width	500 feet
Minimum Pond Frontage, Long Pond Lots	500 feet
Minimum Setback from Centerline of a Public or Private Road Right-of-Way	50 feet
Minimum Setback from any other lot line	50 feet
Minimum Setback from Public Water Body	See Section 3.9
Minimum Setback Distance from Long Pond, for Structures	300 feet
Maximum Height of Structures	35 feet

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¹ Up to six children

² Up to eight residents

§ 2.7 Shoreland Protection District

- (A) Description. The Shoreland Protection District is comprised of lands contiguous to and in the immediate vicinity of Caspian Lake and the western shore of Eligo Lakes. See the District Maps and Boundary Descriptions for the Caspian Shoreland Protection District and the Eligo Shoreland Protection District. See Article 8 for additional regulations governing this district.
- (B) Purpose. The Shoreland Protection District is established to:
 - O Protect surface water resources on Caspian and Eligo Lakes.
 - ⊕1. Preserve vegetation and natural cover of the shores adjacent to Caspian Lake and the western shore of Eligo Lake (as defined by Zoning Maps) in order to protect surface water resources and prevent pollution;
 - €2. Recognize the extreme vulnerability of lakeshore properties to erosion;
 - ●3. Preserve or improve the natural stability of shoreline;
 - €4. Prevent degradation of water quality;
 - ⊕5. Preserve the undeveloped wooded vegetation views both to and from the lakes and to avoid problems resulting from continued development of the lakeshores which would cause natural and scenic resource degradation-; and
 - 6. Retain the mix of residential/summer homes as well as the recreation uses traditional to these lakes while it protectings wildlife habitats, and conservinges both the natural scenic beauty that currently exists along the shorelands, as well as and conserving the open fields and undeveloped forest viewsheds within the Town of Greensboro.

(C) Permitted Uses:

- 1. Accessory Dwelling Unit [see §4.2]
- 2. Accessory Use or Structure
- 3. Agriculture [see §3.6]
- 4. Dwelling, Single Family
- 4.5. Dwelling, Two Family
- 5.6. Forestry & Silviculture [see § 3.6]
- 6.7. Home Child Care¹
- 7.8. Home Occupation [see §4.7]
- 8.9. Residential Care or Group Home²

(D) Conditional Uses:

The DRB must find that the district's purposes will be protected through erosion controls, supplemental planting, protection of existing vegetation, and/or other measures.

- 1. Boathouse <u>[see §8.7]</u>
- 2. Cemetery
- 3. Essential Service
- 4. Public Building
- 5. Recreational Facility
- 6. Nonconforming structure
- 5.7. Onshore shoreland buffer re-establishment & bank stabilization projects [see §8.7]

¹ Up to six children

² Up to eight residents

(E) Dimensional Standards

Minimum Lot Size	one acre
Minimum Lot Width and Minimum Shoreline Frontage	100 feet
Minimum Lot Depth	200 feet
Minimum Setback from Centerline of a Public or Private Road Right-of-Way	50 feet
Minimum Setback from any other lot line	20 feet
Minimum Setback from Lakes (Eligo and Caspian) except Boat Houses	150 feet
Minimum Setback from Lakes (Eligo and Caspian) for Boat Houses	25 feet
Maximum Height of a Single Family Dwelling	30 feet
Maximum Height of Boathouse	<u>15 feet</u>
Maximum Height of Accessory Dwelling Units & All Other Structures within 150' of	20 feet
the <u>L</u> lake	
Maximum Height of All Other Structures Beyond 150' of the Lake	30 feet
Maximum Height of Boathouse	15 feet
Height is measured from average finished grade at the outer building wall to	
the ridgeline.	
• No portion of a structure within 50 feet of the lake shall increase in height.	

1. No portion of any structure within 50 feet of the Lake shall be increased in height.

2. Maximum Size of Houses:

A newly constructed house Single Family Dwelling shall not exceed 2500 square, feet of total habitable floor area.⁴

An addition to an existing house shall not increase the house size beyond 2500 sq. feet of total habitable floor area.³

A rebuilt house shall not exceed 2500 square. feet of total habitable floor area, or the preexisting total habitable floor area square footage, whichever is greater.

³Boat Houses are not required to meet this setback.

⁴ Excluding garage and/or accessory apartment

6.

- (B) **Agricultural Practices & Farm Structures.** This Bylaw shall not regulate accepted required agricultural practices, as defined by the Secretary of Agriculture, Food, and Markets, including the construction of farm structures. No municipal permit for a farm structure shall be required; however, a person shall notify the Town of the intent to build a farm structure and shall abide by setbacks approved by the Secretary of Agriculture, Food, and Markets.
- (C) Silvicultural Practices and Forestry Operations. This Bylaw shall not regulate accepted silvicultural practices, as those practices are defined by the Commissioner of Forest, Parks, and Recreation under Title 10, §1021(f) and §1259(f), and Title 6 §4810. Landowners and loggers should follow the best management practices, as contained in the guide "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont." Per 24 V.S.A. §4413(d), this Bylaw shall not regulate forestry operations as defined in 10 V.S.A. §2602.

§ 3.7 Lots in Two Districts

Where a district boundary line divides a lot of record-at the time such line is adopted, a use established in one district may not extend more than fifty feet into a district in which it is not permitted.

§ 3.8 Nonconformities

- (A) **Nonconforming structures.** Any legal structure or part thereof, which is not in compliance with the provisions of this Bylaw concerning setback, height, size, or other structural requirements (including such things as parking, lighting, buffers, and lowest floor elevation in floodplain zoning) shall be deemed a Nonconforming Structure. Legal Nonconforming Structures exist as a result of construction prior to adoption of Bylaws, or construction under an earlier set of less restrictive Bylaws. Any Nonconforming Structure <u>outside the Special Flood Hazard Area</u> may be allowed to exist indefinitely, but shall be subject to the following provisions:
 - 1. A Nonconforming Structure shall not be moved, altered, extended, or enlarged in a manner which will increase the existing degree of nonconformance.
 - 2. Subject to Conditional Use approval by the Development Review Board (DRB)-, a Nonconforming Structure may be restored or reconstructed provided that the Nonconforming Structure is not located in the Special Flood Hazard Area; such reconstruction shall not increase the degree of non-conformance of the original structure.
 - 3. The phrase 'shall not increase the degree of nonconformance' shall be interpreted to mean that the portion of the structure which is nonconforming shall not increase in size (or decrease in the event of failing to meet minimum standards such as parking and lighting). Examples of the application of this provision include but are not limited to Therefore:
 - (a) The portion of a structure's footprint that lies within a setback area shall not be enlarged.

- (b) Portions above the maximum height cannot be expanded;
- (c) A nonconforming deck or porch cannot be enclosed;
- (d) Where parking is deficient the number or size of spaces cannot be reduced—etc.
- 4. In the Shoreland Protection District,
 - (a) Nonconforming Structures will also adhere to the regulations which are described in Article 8, the Lake Shoreland Protection District Regulations. section of this Bylaw See Article 8
 - (b) In the Shoreland Buffer Zone, a structure's setback from a delineated feature (such as, but not limited to, a lot line, road, or waterbody) will be measured by the distance to the closest point of the Area of Encroachment.
 - (c) In applying 3.8(A)(3) above in the Shoreland Buffer Zone, "Area of Encroachment" will replace "footprint".
 - 4.(d) Enclosing a nonconforming deck or porch in the Shoreland Buffer Zone does not increase the Area of Encroachment. However, it may increase the degree of nonconformance with other structural requirements including, but not limited to, height or habitable floor area restrictions.
- 5. Nothing in this section shall be deemed to prevent normal maintenance and repair of a Nonconforming Structure provided that such action does not increase the degree of nonconformance.
- 6. The DRB may permit the alteration or expansion of a Nonconforming Structure for the sole purpose of compliance with mandated environmental, safety, health, or energy codes as long as the proposed project also conforms with the provisions of this Bylaw.
- (B) **Nonconforming uses.** Use of land that does not conform to the present Bylaw but did conform to all applicable laws, ordinances, and regulations prior to the enactment of the present Bylaw, including a use improperly authorized as a result of error by the Administrative Officer (AO), shall be deemed a Nonconforming Use. Any such use may be continued indefinitely, but shall be subject to the following provisions:
 - 1. The Nonconforming Use shall not be changed to another nonconforming use without approval by the DRB, and then only to a use that, in the opinion of the DRB, is of the same or of a more conforming nature. When making such a determination, the DRB shall- consult with the AO.
 - 2. The Nonconforming Use shall not be re-established if such use has been discontinued for a period of at least two years, or has been changed to, or replaced by, a conforming use. Intent to resume a Nonconforming Use shall not confer the right to do so.
 - 3. The Nonconforming Use shall not be expanded, extended, moved, or enlarged unless the DRB finds that such expansion, extension, movement, or enlargement does not increase the degree of nonconformance.

§ 3.9 Protection of Water Resources

Rivers & Streams

- (A) **Purpose.** The purpose of this section is to prevent undue or human caused soil erosion, improve water quality, help maintain a healthy ecosystem, increase public safety, and help prevent or minimize property loss adjacent to water bodies caused by natural occurrences.
- (B) Waters Regulated By This Bylaw. The water bodies regulated by this Section §3.9Bylaw, and required setback and buffer distances, are listed in Table 3.1 below. For Caspian Lake and the western shore of Eligo Lakes, see Article 8, the Lake Shoreland Protection District Regulations Bylaw Article 8. The width of Shoreland Buffer Zone shall exceed the listed buffer if it includes a Bluff or Steep Slope. In that case, the Shoreland Buffer shall include the entire Bluff or Steep Slope and all land located up to 25 feet from the top of the Bluff or Steep Slope.

TABLE 3.1 Regulated Water Bodies, Setbacks and Buffers

Lakes & Ponds	Setback Distance	Buffer Distance
Long Pond	300'	<u>150'100'</u>
Horse & Mud Ponds	<u>150'100'</u>	<u>150'100'</u>
Little Eligo Lake	<u>150'100'</u>	<u>150'100'</u>
Eastern shore of Eligo Lake	<u>300'</u>	<u>150'</u>

Setback Distance-

Buffer Distance

	From All Rivers And Streams	From All Rivers And Streams
Lamoille River Cemetery Brook Esdon Brook Greensboro Brook Mud Pond Brook Paine Brook Porter Brook Sawmill Brook Skunk Hollow Brook Tate Brook Withers Brook Withers Brook Wright Brook Stanley Brook Unnamed perennial streams (any water course which has water present, flowing or frozen, all year long)	50'	50'

(C) Regulations.

1. Setbacks from Affected Waters. All structures, roads, driveways, and any other I impervious

Surface shall be set back as required in Table 3.1.

2. Vegetation Buffer

- (a) Within the buffer area (excepting Long Pond, see below), existing healthy trees, shrubs, and ground cover shall be maintained and enhanced by selective cutting, pruning, and appropriate planting;
- (b) No trees may be cut or brush cleared within the buffer 100' of Long Pond without the permission of the Development Review Board, Board, who will grant such permission only if necessary for the health or safety of plants, animals, or the pond itself. Aesthetic or financial considerations will not receive an exemption from this provision. This restriction does not apply to the state fishing access;
- (c) In the event that the area within the vegetation buffer has already been disturbed and has an existing use, including, but not limited to, a field, lawn, powerline, or access, such use may be maintained but shall not be expanded. New lawns shall not extend into the buffer;
- (d) Dead or dangerous trees may be removed. Stumps of trees cut within the vegetation buffer shall be left in the ground.
- (e) Planting and/or seeding shall be allowed in the vegetation buffer area. However, the use of fertilizers is prohibited within the buffer.
- (f) All new plantings shall be of non-invasive species.
- (g) The creation of beaches shall be prohibited (per state regulation).
- 3. **Measurement.** The vegetation buffer in this section of the bylaw shall be measured as follows:
 - (a) For <u>lakes and ponds</u> the measurement shall be horizontally from the <u>visually evident M</u>mean <u>Wwater mark Level</u> to the closest point of the development in question;
 - (b) For named and unnamed streams the measurement shall be horizontally from the top of bank.
- 4. **Natural Berm on Lakes and Ponds.** On the shorelines of Lakes and pPonds, there shall be no cutting into, disturbance of, or removal of any natural berm separating the lakeshore property from the lake or pond itself. The provisions within #2 above ('Vegetation Buffer') shall apply to Natural Berms.
- 5. Shorelines and Streambank Stability. Per state regulation, no activities shall be allowed which may contribute, either temporarily or permanently, to the destabilization of the existing shoreline or streambank. Prior to beginning an activity that may have an impact beyond the shoreline or streambank at mean water level, a permit must be obtained from the Water Quality Watershed Management Division of the Dept. of Environmental Conservation. Projects requiring a permit include, but are not limited to, the construction or maintenance of a boat access, retaining wall, boathouse, pier, or permanent dock. Seasonal docks are generally not subject to approval.
- 6. Access Footpaths Through the Vegetation Buffer. Creation and maintenance of one (1) footpath per parcel to provide water access is allowed and does not require a permit. The footpath shall not exceed 5 feet in width including stairs, landings, and platforms and shall be constructed according to Shoreland Best Management Practices to prevent erosion, control runoff, and absorb

- water.³ See §8.7A for Access Footpath requirements and permitting for additional Access Footpaths. Paths intended to provide access to a water body regulated by this Bylaw are permitted under the following conditions:
- (a) Paths may be no greater than five feet wide and must have appropriate waterbars to prevent erosion as deemed necessary by the Administrative Officer (AO);
- (b) No path shall be paved or consist of blocks, stone or other impervious surface.
- 8. 7. Wetlands. There are a number of Class II wetlands in Greensboro. The State of Vermont requires a 50' buffer zone around these wetlands.
 - Any development or clearing projects within a Class I or Class II wetland or associated wetland buffer (100' and 50' respectively) shall only occur in compliance with the Vermont Wetlands Rules. A state permit from the Watershed Management Division of the Department of Environmental Conservation may be required. The Greensboro Wetlands Map can be viewed at the Ttown offices.
 - 8. Regulations for Lakes Greater than 10 Acres. The provisions of this subsection §3.9(C)(8) apply within the Protected Shoreland Area of Long Pond, Horse Pond, Mud Pond, Little Eligo Lake and the eastern shore of Eligo Lake. The Protected Shoreland Area includes all lands within 250 feet from the Mean Water Level. The Shoreland Buffer Zone for each Lake includes all lands within 150 feet from the Mean Water Level. Development on the above Lakes shall comply with the provisions of Article 8 subsections §8.3 through §8.10 with the following exceptions:
 - a. All new Impervious Surface must be located a minimum of 300 feet from the mean water level on Long Pond and the eastern shore of Eligo Lake except as otherwise expressly allowed under Article 8 or under a state permit.
 - b. No Boat Houses will be allowed on the shoreland of Long Pond, Horse Pond, Mud Pond, Little Eligo Lake and the eastern shore of Eligo Lake.

§ 3.10 Structures and Uses per Lot

No lot shall have more than one primary use or structure unless it can meet density and setback requirements for each such use or structure unless specifically allowed by this Bylaw. Second and subsequent principal uses (even if otherwise permitted) require a Conditional Use permit.

§ 3.11 Wastewater and Potable Water Systems

The State of Vermont has 'universal jurisdiction' over sewage and water systems. State regulations as contained in the "Wastewater System and Potable Water Supply Rule" shall be followed.

³ See Vermont Department of Environmental Conservation's Shoreland Best Management Practices publications, such as: <u>Planning Pathways, Infiltration Steps, Water Bars & Open-top Culverts.</u> See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp.

<u>Article 8 - Lake Shoreland Protection District Regulations</u>

§ 8.1 Applicability

The regulations requirements of Article 8 shall apply to all land in the Town of Greensboro defined as the Shoreland Protection District in Section 8.4 below, which is comprised of lands contiguous to and in the immediate vicinity of Caspian Lake and the western shore of Eligo Lake. See Maps and Boundary Descriptions for the Caspian Shoreland Protection District and the Eligo Shoreland Protection District in the Appendix. In addition to the regulation of Land Development, this article provides standards for the creation of Impervious Surface and Cleared Area, the removal of vegetation, and the minimization of damage to lakes and shorelands caused by erosion.

Authority

Article 8 of this Bylaw is adopted by the Town of Greensboro under authority of 24 V.S.A. § 4424, 24 V.S.A. § 4302(c)(5)(B), 24 V.S.A. § 4411(b)(3), 24 V.S.A. § 4414 (1)(D) &(G), 10 V.S.A. § 1422, and 10 V.S.A. § 1425.

§ 8.2 Purpose

See §2.7(B) of this Bylaw for the purposes of the Shoreland Protection District.

The purpose of this Article is:

- A. To protect the natural features and functions of the Town's shorelands and conserve undeveloped wooded vegetation adjacent to the Town's lakes and ponds.
- B. To promote the protection of naturally vegetated areas and the re-vegetation of native plants and trees along water bodies within the Town to reduce the impact of stormwater runoff, prevent soil erosion, protect wildlife and fish habitat and maintain water quality.
- C. To encourage low impact development stormwater management site design, site development, building design and landscape design techniques that infiltrate, filter, store, evaporate and detain stormwater where it falls.
- D. To limit and properly manage Development in areas that are generally unsuitable for Development or use due to erosion, limiting soil conditions, Steep Slopes, Bluffs, or other major physical constraints.
- E. To allow for compatible forms of shoreland Development that will preserve shoreland vegetation, encourage re-vegetation, protect wetlands and terrestrial and aquatic wildlife habitats, and conserve the scenic beauty and recreational potential that currently exists along shorelands within the Town of Greensboro.

§ 8.3 Applicability

The requirements of Article 8 shall apply to all land in the Town of Greensboro defined as the Shoreland Protection District in Section 8.4 below.

§8.4 Definitions²

The definitions of the following terms pertain to shoreland protection provisions in Article 8 and §3.9 applying to Lakes greater than 10 acres in the Town of Greensboro. For purposes of this Article, the following terms shall apply: Each term that is defined in Section §8.3 of this bylaw will be capitalized throughout Article 8 and §3.9.

Access Footp-Path: A narrow path for pedestrians.

Area of Encroachment: The total area which a structure covers within the Shoreland Buffer Zone when viewed from overhead. The area is measured in square feet in a horizontal plane and includes the structure's footprint plus roofs and roof overhangs and any appendages including, but not limited to, porches, decks, balconies, landings and steps, cantilevered spaces beyond a structure's footprint, attached garages and storage spaces, and adjacent patios.

Boat House. A <u>structure building</u> at or near the <u>Shoreline high water mark</u> used <u>only</u> for <u>the storage</u> of boats, and related items. Boat House includes any structure which was approved and issued a zoning permit as a Boat House under this or any prior bylaw, and any structure at or near the Shoreline (other than a Single-Family Dwelling) a substantial portion of which has been or is being used for the storage of boats and related items.

Bluff. A high steep bank usually formed by erosion.

Cleared Area: An area where naturally occurring Vegetative Cover, soil, tree canopy, or Duff has been permanently removed or altered. Cleared Area includes but is not limited to grass lawns, gardens, landscaped areas, Impervious Surfaces, and area that has been cleared for wastewater or potable water supply systems. These areas are inferior to naturally occurring Vegetative Cover in absorbing runoff, preventing erosion, and providing wildlife habitat. Areas of Vegetative Cover that have been managed according to the requirements of §8.5(B) Vegetation Protection Standards will not be counted as Cleared Area.

Development. Any human-made change to improved or unimproved real estate, including but not limited to the construction, re-construction, conversion, structural alteration, relocation, or enlargement of any building or other structure, or of any filling, grading, paving, excavation, earth moving, tree, shrub or ground cover removal, storage of equipment or materials, or the extension of use of land.

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² Each term that is defined in Section §8.34 of this bylaw will be capitalized throughout the document.

Duff: Leaf litter plus small fragments of plants and organic debris that provide a spongy substrate that absorbs the energy of falling water and allows runoff to infiltrate the soil.

Enlargement: Any increase in the size of a structure including but not limited to any increase in volume, height, habitable living area, footprint, or Area of Encroachment.

Exterior Structural Alteration: A change in the dimensions or location, or a rearrangement or reconfiguration of a structure's roof or any exterior wall including, but not limited to, an increase in height, addition of dormers, change in roof slope, or the enclosure of a porch or deck. Exterior Structural Alteration does not include normal repair and maintenance.

Floor Area for Boat Houses: The total gross area of all floors of a building expressed in square feet, measured from the outside surfaces of exterior walls.

Impervious Surface. Any manmade surfaces from which precipitation runs off rather than infiltrates. Impervious Surface includes any A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to Development. Examples include <u>paved and unpaved roads</u>, roofstops, out buildings, decks, <u>footpaths</u>, patios, parking areas, <u>and concrete</u>, or asphalt driveways, <u>and any Impervious Surface associated with wastewater or potable water supply systems</u>.

Lake³. For purposes of the Shoreland Protection District regulations in Article 8 and the regulations for other water resources in §3.9, the term Lake means a lake or pond greater than 10 acres this Bylaw the following waterbodies in the Town of Greensboro: are defined as Lakes: Caspian and Eligo Caspian Lake, Eligo Lake, Long Pond, Horse & Mud Ponds, and Little Eligo Lake. The phrase "from the Lake" means "from the Mean Water Level of the Lake".

Mean Water Level. The normal summer (June 1 – September 15) water level, measured in feet above sea level, of Lakes as determined by an average of water level readings available over time or as established by the Agency of Natural Resources.

Mitigation. An action required of a shoreland property owner designed to compensate for lost Shoreland Buffer or increased Impervious Surface or Cleared Area See §8.4(G) and Figures 9B8C and 8D of this bylaw. Examples include, but are not limited to, planting appropriate non-invasive native vegetation according to Shoreland Best Management Practices, runoff capture, infiltration features, rain barrels, more shoreland vegetation, or other similar approaches.

Natural Berm: A natural rise of land along a lake, built by centuries of ice pressure pushing the land up in winter, and then partially eroded by snow melt, rain and wave action in the spring and summer. A Berm is stabilized by the roots of trees and shrubs.

Natural Ground Cover. Any herbaceous plant, woody seedling or shrub less than three feet in height. Natural Ground Cover shall also include naturally occurring leaf or needle litter, stumps, decaying woody debris, stones, and boulders. Natural Ground Cover shall not include lawns, landscaped areas,

³ A <u>Llake</u> is defined in Vermont state statutes as a body of standing water, including ponds and reservoirs, that may have natural or artificial water level control. Artificial off-stream ponds entirely on one owner's property and reservoirs specifically constructed for snowmaking, water storage, golf course irrigation, stormwater management, and fire suppression shall not be considered lakes.

gardens, invasive species, exotic species, imported organic or stone mulches, or <u>any other</u> artificial materials.

Nonconforming Use or Structure. Use of land or a structure or a part of a structure that does not conform to the present Bylaw but did conform to all applicable laws, ordinances, and regulations prior to the enactment of the present Bylaw, including a use improperly authorized as a result of error by the Administrative Officer.

Project Site: The area of the proposed Development including any areas that will be cleared or disturbed, whether permanently or temporarily, during construction.

Protected Shoreland Area: All land located within 250 feet of the Mean Water Level of any Lake greater than 10 acres in the Town of Greensboro. (See the definition of Lakes.) Includes the Shoreland Buffer Zone. See Figure 8A.

Reconstruction: Rebuilding an existing or previously existing structure or any portion thereof, whether or not in the same location and with the same dimensions.

Relocation (of structures): Moving or reorienting a structure from its existing location or orientation to another.

Revegetation. Establishment of Vegetative Cover in a previously Cleared Area to restore the area to its naturally vegetated state exemplified by nearby undisturbed areas. Revegetated areas include a natural multilayered mix of trees, understory trees, shrubs, and Ground Cover and a variety of plant species that are native, non-invasive, and naturally occurring in the local shoreland area. In Revegetated areas, the Duff layer is allowed to naturally restore over time. Turf grass is not an appropriate choice for Revegetation.⁴

Shoreland Best Management Practices. Approved activities, maintenance procedures, and other practices to prevent or reduce the effects of Impervious Surface or Cleared Area on water quality and natural resources as most recently issued by the Vermont Department of Environmental Conservation.⁵

Shoreland Protection District. The Shoreland Protection District is comprised of lands contiguous to and in the immediate vicinity of Caspian and Eligo Lakes. These lands were previously known as the Lakeshore Districts. See Maps and Boundary Descriptions for the Caspian Shoreland Protection District and the Eligo Shoreland Protection District in the Appendix. The Shoreland Protection District incorporates the Shoreland Buffer Resource Zone. [See Figure 4A.]

Shoreland Buffer. The land abutting a Lake <u>or pond</u> consisting of trees, shrubs, Natural Ground Cover and an understory of plants that functions to filter runoff, control sediment and nutrient movement, control erosion and provide fish and wildlife habitat.

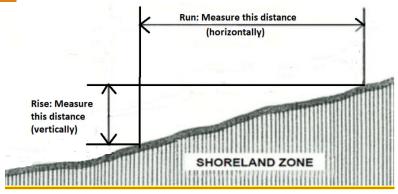
⁵ See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp and https://dec.vermont.gov/watershed/lakes-ponds/permit/shoreland/appresources/shoreland-bmps.

⁴ See Vermont Department of Environmental Conservation's Shoreland Best Management Practices publications: *Lakeshore Buffers* and *Restore Natural Plant Communities*. See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lakewise/bmp.

Shoreland Buffer Resource Zone. In the Protected Shoreland Area, Tthe width of land measured horizontally from the Mean Water Level at least 150100 feet from all Lakes greater than 10 acres in the Town of Greensboro. The Shoreland Buffer Resource Zone may exceed 150100 feet if it includes a Bluff and/or a Steep Slope as defined in this Section. In that case, the Shoreland Buffer Resource Zone shall include the entire Bluff and/or Steep Slope and all land located up to 25 feet from the top of the Bluff and/or Steep Slope. See Figure 8A.4A.

Special Flood Hazard Area: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated a Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/AI-30, AR/AE, AR/AO, AR/AH, AR/A, VO or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

Slope. The distance the land rises vertically ("Rise") over a horizontal distance ("Run") expressed as a percentage. Horizontal distance is the distance between two points measured at a zero percent Slope; Run is not measured as the distance along the ground. Slope is measured perpendicular to elevation contours.



Steep Slope. Shoreland having slope slopes equal to or greater than 15%.

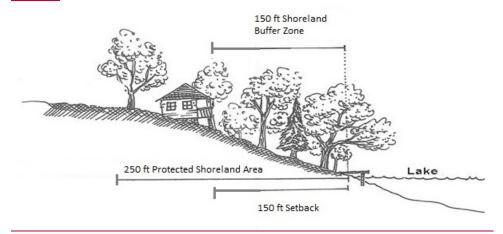
Vegetative Cover. Mixed vegetation within the Protected Shoreland Area consisting of trees, shrubs, groundcover, and Duff. Vegetative Cover shall not mean grass lawns, noxious weeds weeds designated by the Secretary of Agriculture, Food and Markets, or nuisance plants such as poison ivy and poison oak-designated by the Secretary of Natural Resources.⁶

§ 8.4 General Standards in the Shoreland Protection District

In the Shoreland Protection District, the Protected Shoreland Area includes all lands within 250 feet from the Mean Water Level and includes the Shoreland Buffer Zone, which is defined as all lands within 150 feet of the Mean Water Level. See Figure 8A. Land in the Protected Shoreland Area is characterized as either Cleared Area or Vegetative Cover. Cleared Area includes Impervious Surfaces.

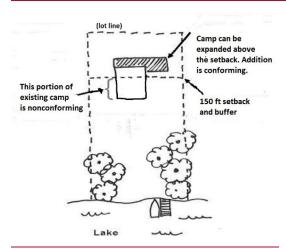
⁶ https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/Shoreland/lp NoxiousNuisancePlants.pdf

Figure 8A. Protected Shoreland Area and Shoreland Buffer Zone in the Shoreland Protection District



(A) Shoreline Setback. Any areas proposed to be cleared or covered with I impervious Surface must be located at least 150 feet from the Mmean Wwater Llevel except as otherwise expressly allowed under Article 8 or under a state permit. for boathouses and shoreline stabilization measures permitted under a Lake Encroachment Permit from the Vermont Agency of Natural Resources and that implement Vermont Shoreland Best Management Practices. See Figure 8B.

Figure 8B. Example: Conforming Expansion of a Structure

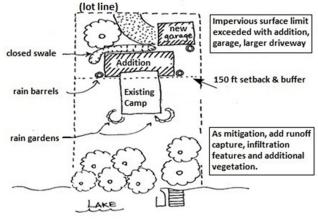


(B) 5.—Steep Slopes. Any Development as defined in §8.3 and §9.2, including creation of Cleared Area or areas proposed to be cleared or covered with I impervious Ssurface, grading, or fill, -must be on a Project Site with have a sSlope of less than 15% (as determined based on the most currently available lidar data from the state or by a current topographic survey of the Pproject Ssite prepared and stamped by a licensed Vermont surveyor). Grading and fill shall not create slopes of greater than 15%. DRB variance and conditional use approval is required for Development on a Slope greater than 15% or Development which creates slopes of greater than 15%; if approved, the DRB will

require , or the applicant to must submit plans prepared by a qualified professional engineer demonstrating that the sSlope will be stabilized with minimal potential for erosion and minimal negative impacts to water quality. The qualified professional preparing the plan must certify in writing to the DRB that the plan was installed as proposed; any discrepancies and their impact on erosion and water quality shall be noted. Negative impacts shall be rectified by the landowner.

(C) 6.—Impervious Surface. The amount of I mpervious Surface must not exceed 15% of the total area on the parcel within 250 feet of the L lake. DRB variance and conditional use approval is required for the creation of Impervious Surface that will result in greater than 15% Impervious Surface after the proposed development is completed; or if approved, the DRB shall require the applicant tomust submit plans prepared by a qualified professional engineer demonstrating that stormwater runoff will be managed with minimal potential for erosion and minimal negative impacts to water quality. The qualified professional preparing the plan must certify in writing to the DRB that the plan was installed as proposed; any discrepancies and their impact on erosion and water quality shall be noted. Negative impacts shall be rectified by the landowner. See Figure 8C.

Figure 8C. Example of Plan to Compensate when Impervious Surface Limit is Exceeded



7.

(D) Cleared Area/Vegetative Cover. Cleared Area must cover no more than 40% and Vegetative Cover must be maintained on at least 60% of the area on the parcel within 250 feet of the Lake. Vegetative Cover that is not managed in accordance with the Vegetation Protection Standards in §8.5(B) of this bylaw will be counted as Cleared Area. If the total Cleared Area within 250 feet of the Lake (including existing and proposed new Cleared Area) would be more than 40%, the landowner shall be required to Revegetate an area greater than or equal to the smaller of the size of the proposed new Cleared Area or the amount by which total Cleared Area exceeds 40% in order to bring the lot into closer compliance with this provision. When proposed new Cleared Area is within 150 feet of

⁷ Qualified professional shall be qualified by holding a professional engineering license, the Vermont ANR Natural Shoreland Erosion Control Certification, the Certified Professionals in Erosion and Sediment Control (CPESC) designation, or equivalent experience.

the Lake, the area of Revegetation shall, at a minimum, be equal to the size of the new Cleared Area and shall be located within 150 feet of the Lake or else supplementary measures shall be required under §8.4(G)(2). Revegetation is discussed in §8.3 and §8.4(G). The Revegetation plan shall be approved by either the DRB or the AO, according to whether DRB or AO approval for the application is required by these bylaws; specific requirements will be determined per site based on existing conditions. The AO must certify in writing that the plan was installed as approved; such certification will be included in the record of the application.

- (D) <u>Vegetative Cover. Vegetative cover must be maintained on at least 60% of the total area within 250 feet of the lake and the applicant must implement Vermont Shoreland Best Management Practices to provide erosion control, bank stability and wildlife habitat functionally equivalent to that which would be provided by clearing less than 40% of the land. Vegetative cover must be managed in accordance with the Vermont Shoreland Protection Act, per section 8.5 of this bylaw.</u>
- (E) When a permit is required in this district, the applicant shall be required to demonstrate that the conditions of §8.4(B, C, and D) are met. The application shall require the landowner to provide the current percent Slope of the Project Site. For projects within 250' of the Lake, the application will require the landowner to provide the percent of Impervious Surface and percent of Cleared Area on the parcel within 250' of the Lake, both currently existing and after the proposed project is completed but before Mitigation is implemented. The applicant shall provide data to assist in the verification of site conditions. If either the AO or the DRB has uncertainty about the data presented or if conflicting evidence has been presented to either the AO or the DRB, the consideration of the application shall be suspended until the AO or DRB obtains an independent assessment by a qualified professional satisfactory to the DRB and paid for by the applicant as allowed per §5.12.
- (F) Management of Vegetative Cover in the Protected Shoreland Area shall comply with the provisions of Section §8.5 of this bylaw.
- (G) Mitigation. Mitigation is an action required of a shoreland landowner to compensate for the adverse impacts of increased Cleared Area and Impervious Surface to bring the lot into closer compliance with Development standards in the Protected Shoreland Area. The Mitigation plan shall be approved by either the DRB or the AO, according to whether DRB or AO approval for the application is required by these bylaws. Mitigation measures will be determined per site based on existing conditions taking into account considerations including, but not limited to, the amount of Cleared Area in the Shoreland Buffer Zone, the width of existing vegetation along the shoreline, and evidence of existing erosion and channelized stormwater runoff.
 - 1. Revegetation: The primary Mitigation measure shall be the Revegetation of existing Cleared Area. Preferred Revegetation locations are along the shoreline, on Slopes greater than 15%, and contiguous with existing Vegetative Cover. See Figure 8D of this bylaw. Revegetation is defined in §8.3 and can be accomplished by any or all of the following:
 - (a) Planting appropriate non-invasive native vegetation naturally occurring in the local shoreland area to create a natural multilayered mix of trees, shrubs, groundcover, and duff with a variety of species and using Shoreland Best Management Practices.8
 - (b) Establishing no-mow zones where the landowner stops mowing and maintaining lawn area to allow the area to return to non-invasive native Vegetative Cover over time.

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⁸ See Shoreland Best Management Practices publications: *Lakeshore Buffers* and *Restore Natural Plant Communities*. See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp.

- (c) Removal of non-conforming accessory structures and Revegetation of the area.
- 2. Supplemental Mitigation measures may also include but are not limited to:
 - (a) Stormwater runoff capture using infiltration features, rain barrels, rain gardens, vegetated swales, or other similar approaches (see Figure 8C).
 - (b) Improvements to existing pathways to reduce stormwater runoff and erosion through use of Shoreland Best Management Practices such as permeable pathway surface, switchbacks, water bars and infiltration steps. 9
 - (c) Bank stabilization projects (state Lake Encroachment permitting may be required).
- (H) Roads and driveways shall comply with the standards in §8.9 of this bylaw.
- (I) New Development shall comply with the erosion prevention and sediment control standards in Section §8.101 of this bylaw.
- <u>C.</u> (J) Stormwater shall be managed through land development strategies and Shoreland Bbest
 <u>M</u>management Ppractices as recommended by the state in the Vermont Low Impact Development Guide for Residential and Small Sites.

E. Runoff from cleared or impervious areas within the Shoreland Protection District shall not enter the Shoreland Buffer Resource Zone in channelized form.

- F. (K) New Development must also shall comply with the applicable Flood Hazard Area regulations in (Article 6) if
- ——it is located in the Special Flood Hazard Area.
- (L) Wetlands. Any Development or clearing projects within a Class I or Class II wetland or associated wetland buffer (100' and 50' respectively) shall only occur in compliance with the Vermont Wetlands Rules. A state permit may be required. The Greensboro Wetlands Map can be viewed at the town offices.

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⁹ See Shoreland Best Management Practices publications: *Planning Pathways, Infiltration Steps, Water Bars & Open-top Culverts*. See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp.

§ 8.5 <u>Management of Vegetative Cover Cutting</u> in the <u>Protected</u> Shoreland <u>AreaProtection District</u>

- (A) In the Protected Shoreland Area, the following activities are allowed and do not require a permit:
 - 1. Management of vegetation according to Vegetation Protection Standards in §8.5(B).
 - 2. Lawns, gardens, and landscaped areas existing as of July 1, 2014, may be maintained.

 Individual trees that are not part of the natural vegetation, but part of gardens and landscaped areas existing as of July 1, 2014, may be pruned and cut. In the Shoreland Buffer Zone, existing lawns, gardens, and landscaped areas shall not be expanded or new ones created.
 - 3. Pruning of branches on the bottom third of a tree's height and removal of unsafe branches.

 Thinning of upper branches of trees for safety reasons is allowed if performed by a qualified professional so as not to damage the health of the tree.
 - 4. Removal of dead, diseased and dangerous trees.
 - 5. Removal of invasive species, nuisance plants and noxious weeds.
 - 6. Onshore planting projects to restore natural shoreline buffer and bank stabilization that implement Vermont Shoreland Best Management Practices and do not involve grading, hardened stabilization structures such as retaining walls and crib walls, or construction of structures, or any work in the Lake (including stone toes, riprap, or sea walls).
 - 7. Limited clearing and pruning of trees and shrubs for the creation and maintenance of one (1)

 Access Footpath per parcel to provide water access, no wider than 5 feet, is allowed and does not require a permit. See §8.7 for Access Footpath requirements and permitting for additional Access Footpaths.
 - 8. Creation and maintenance of views of the Lake from the primary structure provided that a broad unfiltered view of a structure's façade is not visible from the Lake. Lake view openings can be created by trimming the lower third of a tree's branches or by selectively removing individual trees according to the Vegetation Protection Standards in 8.5(B). The maintenance of existing hedges along the lakeshore is allowed.
 - 9. When the Shoreland Buffer Zone on a parcel is not already developed, the cutting or removal of vegetation under three (3) feet in height to create up to 250 SF of area within 25' and 150' from the Lake provided trees and the duff layer are not removed.

All tree maintenance, including cutting and pruning of tree within 250' of the mean water level, shall be in compliance with Vermont Shoreland Protection Act regulations. For information, see: https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/Shoreland/lp_ShorelandHandbook.pdf.

- (B) Vegetation Protection Standards: In the Protected Shoreland Area, property owners are not required to manage areas of Vegetative Cover, which can be left to grow naturally and undisturbed. When a property owner chooses to manage Vegetative Cover, the management of Vegetative Cover must comply with 10 V.S.A. §1447 *Lake Shoreland Vegetation Protection Standards*, summarized here, in order to prevent water quality degradation, maintain healthy wildlife habitat, and preserve the benefits of lakes.
 - 1. Applicability of Standards
 - (a) Within the Shoreland Buffer Zone (150' of the Lake), all existing natural vegetation must remain, and any management of existing natural vegetation must comply with the provisions of subsections (B) and (C) of this section §8.5, except when removal is allowed under subsection (A) or allowed with mitigation under §8.6, §8.7, or §8.8 with

- either DRB or AO approval, according to whether DRB or AO approval is required by these bylaws.
- (b) These Vegetation Protection Standards may be used for the management of Vegetative Cover beyond 150' of the Lake. Areas managed according to the requirements of subsections (B) and (C) of this section §8.5 shall not be counted toward the Cleared Area on a parcel.
- 2. The discretionary removal of trees is allowed, provided a well-distributed stand of trees and other existing natural vegetation is retained. Discretionary removal of a tree is the removal of a tree that is not dead, diseased, or dangerous. No discretionary removal of trees is allowed if such cutting will decrease the stand below minimum levels. 10
- 3. To ensure the growth of replacement trees, no discretionary cutting of saplings under 2" in diameter is allowed if such cutting will decrease the number of such saplings below a minimum level. 11
- 4. All existing natural vegetative cover under three feet in height and other groundcover, including leaf litter, decaying woody debris and the forest duff layer, shall not be cut, covered or removed except as allowed in subsection (A) of this section §8.5.
- (C) Any removal of vegetation shall be conducted to:
 - 1. Prevent damage to surrounding healthy trees, limbs, saplings, and shrubs.
 - 2. Minimize damage to Natural Ground Cover.
 - 3. Prevent soil erosion and sedimentation reaching the Lake.
 - 4. Leave all stumps and roots intact.
- (D) In any inquiry regarding the removal or cutting of trees and other vegetation in violation of provisions of Article 8:
 - 1. Enforcement of the provisions in Article 8 regarding tree and vegetation removal will follow the process in §5.13 Zoning Enforcement Policy.
 - 2. The burden of proof that the removal/cutting of trees and other native vegetation was allowed under Article 8 shall be on the property owner. Proof may include: before and after photographs of the property that clearly show vegetation that has been removed; a sketch of the property showing the location of the vegetation removed; the before and after percentage of Cleared Area on the property within 250' of the lake; and photographs and written certification signed by an individual with knowledge of and experience in assessing tree health or plant identification that trees and limbs removed were unsafe or that vegetation was invasive.
 - 3. Per §5.13(C), the owner shall be required to remedy or cure a violation. As a remedy, the property owner shall implement a restoration plan, paid for by the property owner. If the vegetation removal is significant, the restoration plan shall be designed by a qualified professional.

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A well-distributed stand of trees is defined in 10 V.S.A.§1447(b). Examples of the minimum level of tree coverage within a 25'x25' area include (a) one tree of 12" in diameter plus one tree of 8-12" in diameter, or (b) three trees of 8-12" in diameter, or (c) 6 trees of 4-8" in diameter, or (d) 12 trees of 2-4" in diameter, or combinations of the above.
 Five saplings less than 2" in diameter, at 4.5 feet above ground, shall be maintained in each 25'x25' area. If five saplings do not exist, no woody stems less than 2" in diameter can be removed until five saplings have been planted or rooted in the plot.

§ 8.6 General Standards Within the Shoreland Buffer Resource Zone

Lake shoreland will be protected from Development, including roads and driveways, by maintaining and/or establishing undisturbed naturally vegetated riparian buffers within the Shoreland Buffer Resource-Zone as follows:

- (A)- Except as provided in Sections §8.4 §8.5, §8.6, §8.7 and §8.8 of this bylaw, no Development, as defined in Section §8.3, is allowed in the Shoreland Buffer Resource-Zone.
 - (B)- No new structures, except Boat Houses, are allowed within 150 feet of the Lake. No portion of any structure within 50 feet of the Lake shall be increased in height.
- New Development shall be set back, measured horizontally, at least 150 feet from all Lakes. This distance includes the minimum Shoreland Buffer Resource Zone of 100 feet, plus an additional 50 feet to prevent incursion into the Buffer Zone during construction. The Shoreland Buffer Resource Zone shall exceed 100 feet if it includes a Bluff and /or a Steep Slope as defined in Section 8.4, in which case, the Shoreland Buffer Resource Zone shall include the entire Bluff and/or Steep Slope and all land located at least 25 feet from the top of the Bluff and/or Steep Slope. [See Figure 4A.]
- (C). The minimum lot shoreline frontage shall be 100 feet and the minimum depth shall be 200 feet.

 When an applicant with a parcel of land on which there is no habitable structure is unable to locate

 Cleared Area or Impervious Surface at least 150 feet from the Mean Water Level due to parcel size
 or physical characteristics of the land on the parcel, Development within 150 feet of the Mean Water

 Level requires variance approval and conditional use review by the DRB.
 - 1. The applicant must demonstrate that Tthe new proposed eCleared aArea or iImpervious sSurface proposed within 150 feet of the Lake-will shall be located as far as possible from the mMean wWater iLevel and at a minimum shall be no less than 25 feet from the Mean Water Level except for -shoreline stabilization measures which are permitted under a Lake Encroachment Permit from the Vermont Agency of Natural Resources or activities which are allowed under §8.5 and §8.7 that and implement Vermont Shoreland Best Management Practices.

 On a parcel that is developed with a habitable structure, any expansion of impervious surface within 150 feet of the mean water level will not encroach any closer to the shoreline than the pre-existing development on the parcel.
 - 2. As a condition of approval, the DRB shall require Tthe proposed eCleared Aarea or Impervious Ssurface within 150 feet of the Lake will to be mitigated in accordance with §8.4(G). Best Management Practices to control erosion and stormwater runoff from new Impervious Surfaces are required. Vermont Shoreland Best Management Practices as most recently publicized by the Vermont Department of Environmental Conservation (for more information, see https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp).
- (D). New roads and driveways shall not be constructed in the Shoreland Buffer Resource Zone.
- (E). New lawn areas within the Shoreland Buffer Resource Zone shall not be permitted allowed. Property owners with lawn areas in the Shoreland Buffer Resource Zone are encouraged to return lawn areas to their naturally vegetated state through Revegetation. See §8.4(G)(1). Supplemental

planting with appropriate vegetation to restore and enhance the effective filtering and bank stabilization functions of a Shoreland Buffer is encouraged.

However, Aareas that were once fields, lawns or cleared openings but have reverted to primarily shrubs, trees, or other woody vegetation are regulated as a buffer under these regulations.

- (F)-Any areas within the Shoreland Buffer Resource Zone that are disturbed as the result of the construction or installation of a permitted or conditional use or the expansion of a nonconformity provided in Sections 8.7 and 8.8 and are not essential to the intended use of the Development shall be restored through Revegetation natural regeneration and/or planting of native shrubs and trees appropriate to the site and designated as "no mow zones." See §8.4(G)(1).
- (G). Riprap and retaining walls used for ornamental purposes or for terracing natural sSlopes that disturb natural vegetation are not permitted within the Shoreland Buffer Resource Zone.
- (H). On the shorelines of Caspian and Eligo Lakes, †There shall be no cutting into, disturbance of, or removal of any Natural Berm separating the lakeshore property from the <u>Lake</u> itself.

Shoreline Setback. Any areas proposed to be cleared or covered with impervious surface must be located at least 150 feet from the mean water level except for boathouses and shoreline stabilization measures permitted under a Lake Encroachment Permit from the Vermont Agency of Natural Resources and that implement Vermont Shoreland Best Management Practices.

- 5. Steep Slopes. Any areas proposed to be cleared or covered with impervious surface must have a slope of less than 15% (as determined based on the most currently available lidar data from the state or by a current topographic survey of the project site prepared and stamped by a licensed Vermont surveyor), or the applicant must submit plans prepared by a professional engineer demonstrating that the slope will be stabilized with minimal potential for crosion and impacts to water quality.
- 6. Impervious Surface. The amount of impervious surface must not exceed 15% of the total area within 250 feet of the lake or the applicant must submit plans prepared by a professional engineer demonstrating that stormwater runoff will be managed with minimal potential for erosion and impacts to water quality.
- 7. Vegetative Cover. Vegetative cover must be maintained on at least 60% of the total area within 250 feet of the lake and the applicant must implement Vermont Shoreland Best Management Practices to provide crosion control, bank stability and wildlife habitat functionally equivalent to that which would be provided by clearing less than 40% of the land. Vegetative cover must be managed in accordance with the Vermont Shoreland Protection Act, per section 8.5 of this bylaw.

§ 8.7 <u>Specific New Uses and Encroachments</u> Within the Shoreland Buffer <u>Resource Zone</u>

A. Permitted uses which do not require a zoning permit:

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¹² Turf grass is not an appropriate choice for Shoreland Buffer Re-vegetation.

- 1. Removal of unsafe trees as provided in Section 8.5.
- 2. Removal of trees or saplings so long as the clearing limitations provided in Section 8.5 are met.
- 3. Removal of vegetation only necessary to accommodate the placement of a stairway and associated landing, or lift for Americans With Disabilities Act (ADA) accessibility and access path. Trees, shrubs, and Natural Ground Cover shall be maintained within these areas. The construction shall not involve earth moving equipment. Stairways and lifts shall meet the following design requirements:
 - a. Stairways and lifts shall not exceed four feet in width.
 - b. Landings for stairways and lifts shall not exceed 32 square feet in area.
- 3. c. Canopies or roofs are not allowed on stairways, lifts, or landings.

A. Lake Access Footpaths.

1. General provisions for Access Footpaths:

- a. An Access Footpath to the Lake shall be constructed according to Shoreland Best

 Management Practices to prevent erosion, avoid compaction, control runoff, and absorb

 water. Techniques include, but are not limited to, meandering pathways with gentle slopes,
 water bars, infiltration steps, and a permeable path surface. Construction and maintenance
 of Access Footpaths shall involve limited clearing and pruning.
- b. Lake Access Footpaths should be designed only as wide as necessary but no wider than 5 feet including stairs, landings, and platforms. Lake Access Footpaths shall not be used for motorized vehicles; no new roads or driveways are allowed in the Shoreland Buffer Zone.
- c. An Access Footpath within a wetland or associated wetland buffer shall only occur in compliance with the Vermont Wetlands Rules. A state permit may be required.

2. Approvals and Permitting:

- a. The creation and maintenance of one (1) Access Footpath per parcel to provide Lake access is allowed and does not require a permit.
- b. The creation of an additional Access Footpath on a parcel to provide Lake access requires a permit approved by the Administrator Officer before construction commences.
- c. If there is any existing Lake Access Footpath on a lakeshore parcel, then the existence or grant of a right-of-way on or over that parcel shall not be deemed to give either the property owner or the grantee any right to construct or otherwise create an Access Footpath to the Lake on or within that right-of-way without the approval and issuance of a permit from the Town.

3. Requirements for permits for additional Access Footpaths:

- a. The applicant must submit a site plan of the parcel showing: (i) the Lake frontage of the parcel and the boundary of the Shoreland Buffer Zone, (ii) the location and width of the proposed Access Footpath and any associated steps or landings, (iii) the location and width of any pre-existing Access Footpaths, (iv) the location of all existing structures, and (v) the location of any existing Cleared Area.
- b. If Cleared Area exists in the Shoreland Buffer Zone, it is recommended that an additional Access Footpath be located in an existing Cleared Area (such as, an area of lawn-to-lake). If

¹³ See Vermont Department of Environmental Conservation's Shoreland Best Management Practices publications, such as: Planning Pathways, Infiltration Steps, Water Bars & Open-top Culverts. See https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp.

- the construction of the additional footpath creates new Cleared Area in the Shoreland Buffer Zone, Mitigation shall be required. See §8.4(G).
- c. The applicant must provide construction details demonstrating that the Access Footpath will comply with Shoreland Best Management Practices¹⁴ creating minimal potential for erosion.
- d. When an existing Access Footpath is compacted or shows signs of erosion or stormwater runoff along the footpath during rain events, the AO may require improvements to the existing footpath as a condition of approval for a new footpath.
- B. **Conditional Uses**. The DRB may authorize the following activities within the Shoreland Buffer Resource Zone, subject to the following provisions and subject to Ceonditional Uuse review procedures under Section §5.4.:
 - 1. Onshore Shoreland Buffer re-establishment and bank stabilization projects which involve grading, fill, removal of vegetation, hardened stabilization structures such as retaining walls or crib walls, or the creation of Impervious Surfaces. Note that any associated work beyond the Mean Water Level (including but not limited to fill, sea walls, retaining walls, docks, moving stones, and stone toes) requires a state Shoreland Encroachment Permit. 15

where the DRB finds that the purposes of this section will be protected through erosion controls, supplemental planting, protection of existing vegetation, and/or other measures.

- 2. Stairways and lifts wider than four feet and landings larger than 32 square feet with justification for ADA accessibility or improved erosion control. 16
- 32. <u>Boat Houses</u>. The construction, <u>Reconstruction</u>, <u>Enlargement</u>, <u>Exterior Structural Alteration</u>, or <u>Relocation</u> of a Boat House shall require a Conditional Use Permit and meet the following requirements.
 - a. <u>A maximum There is a limit of one (1) Boat House per tax lot is allowed in the Shoreland Buffer Zone.</u>
 - b. When clearing area and creating Impervious Surface during construction:
 - i. Stumps of any trees cut during the construction of the Boat House shall be left in the ground;
 - ii. Branches of any trees cut shall be chipped and distributed on area disturbed during construction;
 - iii. Provisions for adequate control of stormwater runoff shall be made.-
 - b. When a new or expanded Boat House is permitted on a developed lot with existing

 Cleared Area in the Shoreland Buffer Zone, Mitigation shall be required to compensate
 for the increased Impervious Surface and Cleared Area created by the Boat House project
 as per §8.4(G). The DRB shall require the applicant to return portions of the existing

 Cleared Area, of a size greater than or equal to the proposed new Cleared Area, to a

15 See www.anr.state.vt.us/dec/waterq/permits/htm/pm_encroachment.htm

¹⁴ See dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp

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¹⁶ Any work (fill, construction, sea walls, retaining walls, docks, moving stones, rock toes etc.) beyond the Mean Water Level requires a state Shoreland Encroachment Permit. www.anr.state.vt.us/dec/waterq/permits/htm/pm_encroachment.htm

- natural state by Revegetation so as not to increase the Cleared Area in the Shoreland Buffer Zone. Best Management Practices to control erosion and stormwater runoff from the new Impervious Surface are required.
- c. Boat House applications shall include a site map of the parcel showing (i) the existing development on the parcel including Access Footpaths, (ii) the existing elevation contours and existing Cleared Area, (iii) the location of the proposed Boathouse, and (iv) the location of any proposed new Cleared Area, Access Footpath from the Boathouse to the Lake, and new Access Footpath to the Boat House. The application will also include the floor plan of the proposed structure including locations of exterior doors and elevation(s) showing how the height of the structure is measured.
- d. A new Boat House
 - i. Shall be used only for the storage of boats and related items.
- <u>ii. A new Boat House sShall</u> be constructed <u>at least 25' behind the Mean Water Level. The provision §8.4(B) regarding construction on Steep Slopes must be complied with. behind the Natural Berm, if it exists. Where there is no Natural Berm, the following applies:</u>

i. The Boat House shall be built behind the high water

ii. Stumps of any trees cut during the construction of the Boat House shall be left in the ground;

iii. Provisions for adequate control of stormwater runoff shall be made..

- b. iii. A Boat House Sshall not have plumbing.
- e. <u>iv.</u> The maximum size of a Boat House's footprint Shall be not exceed 200400 square. Feet of Floor Area.
- d. v. The maximum height of a Boat House building Shall be not exceed 15 feet in height.
- e. There is a limit of one (1) Boat House per tax lot.
- f. vi.- Shall Nonot include any decks (including roof decks), porches or other similar

appendages will be allowed on Boat Houses.

- e. Any reconstructed, modified, expanded, or relocated Boat House
 - i. Shall maintain its existing boat storage function. Existing Nonconforming Uses for a Boat House may be maintained. However, the Floor Area and volume devoted to Nonconforming Uses shall not be increased.
 - ii. Shall not include any new or expanded plumbing.
 - iii. Shall not exceed 200 square feet in Floor Area or the existing Floor Area, whichever is greater.
 - iv. Shall not exceed a height of 15 feet. Portions of the existing structure higher than 15 feet can be maintained but shall not be increased in height.
 - v. Shall not include any new or enlarged decks (including roof decks), porches or similar appendages.
- g. A new or reconstructed Boat House shall require a Conditional Use permit.
- h. A new or reconstructed Boat House shall be used only for storage of boats.

§ 8.8 Nonconforming Uses and Structures Within the Shoreland Buffer Resource Zone

A. Any structure or use of land legally in existence or legally permitted as of the effective date of these regulations that does not meet the requirements of these regulations shall be considered nonconforming. Nonconforming <u>U</u>uses and <u>Ststructures</u> within the Shoreland Buffer Resource Zone are subject to the provisions of §8.4, §8.5, §8.6, §8.7, and §8.10 and the following conditions:

A Nonconforming Structure may undergo normal maintenance and repair without a permit provided that such action does not increase the Area of Encroachment and the degree of nonconformanceity. Alterations within the existing footprint shall be allowed; such alterations require a conditional use permit. New and altered windows and doors are a permitted use and require only a building permit, not a conditional use permit. Normal repair does not include any Enlargement, Reconstruction, Exterior Structural Alteration or Relocation. Exterior accessory appendages such as porches and decks may be replaced in place with structures of the same size and functionality with the approval of the AO. Interior renovations to a nonconforming structure are allowed without a Town zoning permit; however, state permits may be required.17 See subsection C of this section regarding reconstruction.

(A)

(B)

(C) If any portion of a structure is within 50 feet of the Lake, that portion shall not be increased in height. For example, if any portion of a deck is within 50 feet of the Lake, that portion shall not be raised or enclosed; and, if any portion of a roof is within 50 feet of the Lake, that portion shall not be raised.

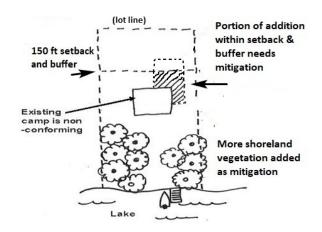
(C) No increase in the Area of Encroachment shall be allowed:

- 1. For all nonconforming accessory structures, including accessory dwelling units, and nonconforming primary non-residential structures within 150 feet of the Lake.
- 2. Within the minimum setback from a lot line with an adjoining property and the centerline of a public or private road right-of-way.
- 3. Within 50 feet of the Lake.

(D) Any approved increase in the Area of Encroachment expansion of a Nonconforming Structure, including the addition of decks, porches or patios, shall not extend towards the water Lake beyond the existing Area of Encroachment nonconformity. [See Figure 9A8D.]

<u>Figure 8D. Example of Expansion of a Non-conforming Structure in the Shoreland Buffer Zone with</u> Mitigation by Adding Shoreland Vegetation

¹⁷ For example, a state wastewater permit may be required if interior space is reconfigured to add a bedroom.



- (E) An adjacent patio that is an appendage to a nonconforming structure cannot be converted to another type of Encroachment.
- (F) A Nonconforming Structure may be enlarged, extended, reconstructed, expanded, modified or relocated Any Enlargement, Reconstruction, Exterior Structural Alteration or Relocation of a Nonconforming Structure in the Shoreland Buffer Zone is allowed only with the approval of the DRB, subject to conditional use review under Section § 5.4. The DRB must determine that anythe Eenlargement, extension, expansion, modification Reconstruction, Exterior Structural Alteration or Relocation does not increase the degree of nonconformance as defined in § 3.8 and does not increase the Area of Encroachment except as allowed in this § 8.8. ity or else it compensates for lost Shoreland Buffer through Mitigation measures (See #4 below) and meets all other applicable requirements of these regulations.
 - 1. Beyond 50 feet from the lake, any increase in the Area of Encroachment of a nonconforming primary residential structure shall not exceed 10% of such structure's existing Area of Encroachment and will be allowed only once after [the enactment date of this bylaw revision]. Any increase in the Area of Encroachment shall be compensated for through Mitigation under 8.4(G). The minimum size of the area of Revegetation required as a Mitigation measure shall be the size of the proposed increase in the Area of Encroachment or else the Mitigation measures shall include supplementary measures under §8.4(G)(2). Best Management Practices to control erosion and stormwater runoff from new Impervious Surface are required. Other restrictions in this bylaw may limit the amount by which the Area of Encroachment may be increased, including but not limited to parcel restrictions on Impervious Surface and Cleared Area and size restrictions on structures.
 - 2. When an applicant applies to modify a Nonconforming Structure as a result of any Enlargement, Reconstruction, Exterior Structural Alteration, or Relocation without increasing the Area of Encroachment, the DRB may require the applicant to implement Mitigation measures under 8.4(G) to bring the lot into closer compliance with Development standards in the Shoreland Buffer Zone.
 - 3. A Nonconforming Structure can be relocated so that it is **less** nonconforming but still within the Shoreland Buffer Resource Zone provided that disturbed the areas from which the

structure was moved shall be are restored to a naturally vegetated state by Revegetation with supplemental planting of appropriate native vegetation. Relocation shall require a Conditional Use permit.

4. Where the expansion of a Nonconforming Structure is permitted, the DRB shall require the applicant, as a Mitigation measure, to return a significant portion of any mowed or cleared areas in the Shoreland Buffer Resource Zone to a naturally vegetated state with supplemental planting of appropriate non-invasive vegetation. At a minimum, slopes of 20% or greater shall be returned to natural vegetation cover. Other areas not essential to intended use of the development may be returned to natural vegetation cover as well in order to bring the development closer to compliance with the development standards of the Shoreland Buffer Resource Zone.

(G) No part of the Shoreland Buffer Resource Zone shall be <u>cleared</u> forfeited to replace lawn areas lost as a result of the any Enlargement, Reconstruction, Exterior Structural Alteration or <u>Relocation expansion</u> of a Nonconforming Structure.

5.

(H) Expansion Any Enlargement, Reconstruction, Exterior Structural Alteration or Relocation of a Nonconforming Structures shall comply with the erosion prevention and sediment control standards in Section §8.108.11 of these regulations.

6.

New roads and driveways are not allowed as part of an expansion of a Nonconforming Structure. However, the DRB may authorize improvements to existing nonconforming roads and driveways if such improvements will result in a reduction of existing shoreland erosion and unbuffered stormwater runoff. Cleared openings and lawns within the Shoreland Buffer Resource Zone legally in existence on the effective date of these regulations may be maintained.

7. However, areas that were once fields, lawns or cleared openings but have reverted to primarily shrubs, trees, or other woody vegetation are regulated as a buffer under these regulations.

8.

Figure 9A. Expansion of a Nonconforming Structure

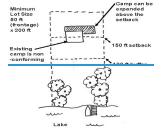
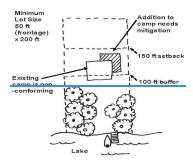


Figure 9B. Nonconforming Structure Mitigation



(I) Any proposed increase in the Area of Encroachment in the Shoreland Buffer Zone that does not comply with this section §8.8 shall require both a variance approval and conditional use review by the DRB. The DRB shall specify, as a condition of any approval, the requirement for Mitigation to compensate for the increase in the Area of Encroachment. The size of the area of Revegetation required as a Mitigation measure shall, at a minimum, be the size of the proposed increase in the Area of Encroachment or else the Mitigation measures shall include supplementary measures under §8.4(G)(2). This provision 8.8(H) does not apply to Boat Houses which are regulated under §8.7.

B. In accordance with 24 V.S.A. § 4469(a) and Section 5.5 of this bylaw, a variance from the DRB is required for any Development on pre-existing, nonconforming lots that currently does not comply with the Shoreland Buffer Resource Zone setback, lot shoreline frontage, and/or minimum depth standards.

C. Reconstruction and Relocation in the Shoreland Buffer Resource Zone

- 1. A Nonconforming Structure may be rebuilt in its existing Building Footprint provided that the Nonconforming Structure is not located in the Special Flood Hazard Area. The building and its accessory appendages may be replaced but not enlarged. Accessory appendages such as porches and decks are not part of the Building Footprint but may be replaced in place with structures of the same size and functionality. A Nonconforming deck or porch may not be enclosed. A Conditional Use permit shall be required for reconstruction. A reconstructed building must comply with the erosion prevention and sediment control standards in Section 8.11 of this bylaw.
- 2. A Nonconforming Structure can be relocated so that it is less nonconforming but still within the Shoreland Buffer Resource Zone provided that disturbed areas are restored to a naturally vegetated state with supplemental planting of appropriate native vegetation. Relocation shall require a Conditional Use permit. A relocated building shall comply with erosion prevention and sediment control standards in Section 8.11 of this bylaw.
 - 3. Where the reconstruction or relocation of a Nonconforming Structure is permitted, the Development Review Board shall require the applicant to compensate through Mitigation measures. Robust mitigation will be required if nonconforming structure is allowed to become more nonconforming.
 - 1. The proposed cleared area or impervious surface will be located as far as possible from the mean water level except for shoreline stabilization measures permitted under a Lake Encroachment Permit from the Vermont Agency of Natural Resources or that implement Vermont Shoreland Best Management Practices.
 - 2.1.On a parcel that is developed with a habitable structure, any expansion of impervious surface within 150 feet of the mean water level will not encroach any closer to the shoreline than the pre-existing development on the parcel.
 - 3.1. The proposed cleared area or impervious surface will be mitigated in accordance with Vermont Shoreland Best Management Practices as most recently publicized by the Vermont Department of Environmental Conservation (for more information, see https://dee.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp).

§ 8.9 Roads and Driveways New Uses and Encroachments Within the Shoreland Protection District

New uses and encroachments and expansions of nonconformities allowed within the Shoreland Buffer Resource Zone, which comprises the first 100 feet of the Shoreland Protection District, are outlined in Sections 8.7 and 8.8 of this bylaw. [See Figure 4A.] The Administrative Officer (AO) may authorize Development within the remainder of the Shoreland Protection District subject to the following conditions:

- A. The minimum lot shoreline frontage shall be 100 feet and the minimum lot depth shall be 200 feet.
- B. New Development shall comply with the erosion prevention and sediment control standards in Section 8.11 of this bylaw.
- C. Stormwater shall be managed through land development strategies and best management practices as recommended by the state in the <u>Vermont Low Impact Development Guide for Residential and Small Sites.</u>
- E. Runoff from cleared or impervious areas within the Shoreland Protection District shall not enter the Shoreland Buffer Resource Zone in channelized form.
- F. New Development must also comply with the applicable Flood Hazard Area regulations (Article 6) if it is located in the Special Flood Hazard Area.

F. Roads and Driveways

All roads and driveways in the Shoreland Protection District shall comply with the following standards. A permit is not required for repair and maintenance of existing public or private roads that is done in compliance with this section and Shoreland Best Management Practices.

- A. 1. Roads and driveways shall be properly crowned to allow stormwater to flow immediately off the surface into surrounding vegetation or a stabilized ditch. Water bars can also be utilized to intercept water flowing lengthwise down the surface and transfer it off to the side into vegetation or ditched areas.
- B. 2. Banks shall have a <u>sSlope of of 50% 2:1 (horizontal: vertical)</u> or less.
- C. 3. Grades shall be no steeper than 10%. New roads or driveways crossing Steep Slopes shall be avoided.
- D. 4. Drainage ditches with <u>sS</u>lopes less than 5% shall be lined with grass and run-off ditches; <u>sS</u>lopes greater than 5% shall be lined with riprap.
- <u>E.</u> <u>-5.</u> Drainage ditches shall empty, in a diffused manner, into vegetated buffer strips set back at least 150 feet from the water's edge.
- <u>F.</u> 6. Adequate and correctly installed cross drains, culverts, and water turnouts shall be provided to avoid ditch erosion.

<u>G.</u>

7. New and existing driveways shall not be paved but may have StayMat or other similar gravel products in the Shoreland Protection District. but shall use road materials such as a mix of crushed gravel and fines (not bank run gravel) so the particles 'lock' together.¹⁸

§ 8.10 Shoreland Protection District Erosion Prevention and Sediment Control Standards for New Construction, Reconstruction, and Relocation.

- A. The extent of earthwork, erosion potential, and protection of critical features shall be considered in site selection and design. Site selection shall consider existing topography, existing drainage courses, vegetation and soil conditions. Erosion prevention and sediment control measures shall be well thought-out early in the selection process.
 - 1. Development of a lot or site shall require the least possible amount of vegetation clearing, soil disturbance, exposure time, soil compaction and topography change.
 - 2. Lot coverage and building footprints shall minimize site disturbance and preserve large areas of undisturbed space. Environmentally sensitive areas shall be a priority for preservation.
 - 3. Runoff from above the construction site shall be intercepted and directed around the disturbed area into an undisturbed vegetated area.
 - 4. Vegetated strips and swales, sediment traps, and silt fences shall be used to prevent soil from leaving the site.
 - 5. There shall be no soil compaction outside the construction disturbance area, which shall be identified and delineated in the field with appropriate safety or landscape fencing. In areas outside the disturbance area, there shall be no storage of construction vehicles, construction materials, or fill, nor shall these areas be used for circulation.
 - 6. Immediate seeding and mulching or the application of an erosion control mat shall be completed at the conclusion of each phase of construction, or at the conclusion of construction if not phased. Use only matting with non-fixed net joints so animals will not get trapped in the matting.
 - 7. Development, grading or clearing of vegetation on land where the slope is greater than 15% is prohibited.
- B. Pre-Development Submission Requirements for Single Family Dwellings and Accessory Dwelling Units. (Accessory Structures are exempted from these requirements).
 - 1. An existing condition site assessment providing <u>sS</u>lope profiles, existing gradients, sensitive natural communities, and site features that aid in stormwater management such as natural drainage ways and <u>areas of Vegetative Covervegetated lands</u>.

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¹⁸ See Vermont Department of Environmental Conservation's Shoreland Best Management Practices publication *Driveways* and Lake Roads. See dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp

- 2. A map drawn to scale showing (a) existing Development on the parcel and (b) the location, extent and type of proposed Development and land disturbance and its proximity to the Shoreland Buffer Resource-Zone and Lake. The plan shall include consideration of low impact development concepts as recommended in the Vermont Low Impact Development Guide for Residential and Small Sites.
- 3. An erosion and sediment control plan that incorporates accepted management practices as recommended by the state in <u>The Low Risk Site Handbook for Erosion Prevention and Sediment Control.</u> Any construction activity that disturbs one or more acres of land, or is part of a larger development plan that will disturb an acre or more requires a Vermont state permit for stormwater discharges from construction sites.

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¹⁹ Any construction activity that disturbs one or more acres of land, or is part of a larger development plan that will disturb an acre or more requires a Vermont state permit for stormwater discharges from construction sites.