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ResearchReport

Wetlands Buffer Zones in New England

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Issue

Compare wetlands "buffer zones" in other New England states.

Summary

Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont all have laws designed to protect wetlands and their adjacent areas, known as "buffer zones." These laws regulate activities in these areas, including by (1) setting buffer zone size; (2) requiring permits for certain activities in the wetlands and buffer zones (e.g., dredging, draining, or building structures); and (3) specifying the activities that are not subject to permitting requirements (e.g., certain cutting of vegetation or other minor activities). The buffer zones across these states vary widely:

- Maine's Mandatory Shoreland Zoning Act requires municipalities to adopt, administer, and enforce shoreland zoning ordinances to regulate land use activity within (1) 250 feet of great ponds, rivers, and wetlands and (2) 75 feet of streams. Maine's Natural Resources Protection Act additionally creates a 75-foot buffer zone for "protected natural resources" where certain activities are limited.

- Massachusetts regulates wetlands and buffer zones through its Wetlands Protection Act and accompanying regulations. The act generally defines a 100-foot buffer zone around wetland areas, though different buffers apply to various riverfront areas, ranging from 25 to 200 feet depending on their location.

- New Hampshire's Shoreland Water Quality Protection Act establishes a buffer zone of generally 250 or 50 feet for certain water resources, and restricts construction, excavation, and filling activities within that buffer zone. New Hampshire's Fill and Dredge in Wetlands

Act additionally allows municipalities to designate "prime wetlands," which may have a 100-foot buffer.

- Rhode Island's Freshwater Wetlands Act requires its state agencies to adopt regulations to regulate freshwater wetlands, including through standards for buffers and setbacks. The buffer zones range from 25 to 200 feet, and generally require that all projects within the buffers avoid altering the character of the buffers.

- Vermont's Wetland Rules establish 50-foot and 100-foot buffer zones for certain classifications of wetlands, activities in which generally require a permit, conditional use determination, or orders issued by the Department of Environmental Conservation secretary. Vermont's Shoreland Protection Act also regulates certain development activities within 250 feet of the mean water level for lake and ponds greater than 10 acres in size.

This report broadly summarizes these buffer zone protection laws. Each law contains many specific exceptions and exemptions, and detailed provisions for notice, administration, and enforcement, which are beyond the scope of this report.

> *Connecticut's Upland Review Areas*
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> *Connecticut's Inland Wetlands and Watercourses Act (IWWA) requires municipalities to regulate activities in or affecting wetlands and watercourses in their territorial limits (CGS § 22a-42). (There is a separate law for activities in tidal areas.) Wetlands and watercourses include, among other things, rivers, streams, brooks, lakes, ponds, swamps, and bogs. The types of activity covered are construction, removing material, and filling.*
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> *Under the IWWA, municipalities may regulate activities in areas that are likely to impact or affect wetlands or watercourses, commonly referred to as "upland review areas," buffers, or setbacks. The Department of Environmental Protection issued guidelines in 1997 for municipalities implementing these provisions in their wetland regulations.*
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> *These buffers vary in size across municipalities. For example, Tolland's upland review area is generally 100 feet from a watercourse and 50 feet from a wetland, and may be doubled in some cases. East Lyme's is 300 feet from any wetland or watercourse but can extend further if there is a potential for impact.*

Maine

Maine regulates wetlands under several laws, but primarily under its Natural Resources Protection Act (NRPA) and Mandatory Shoreland Zoning Act.

NRPA

NRPA covers a range of "protected natural resources" including coastal sand dune systems, coastal wetlands, freshwater wetlands, great ponds, rivers, streams, and brooks, as defined under the law (Me. Rev. Stat. Ann. tit. 38, § 480-B). It requires permits for specified regulated activities (like

dredging, draining, or building a permanent structure) located in, on, or over a protected natural resource, or located adjacent to (1) a coastal wetland, great pond, river, stream, or brook, or significant wildlife habitat contained within a freshwater wetland, or (2) certain freshwater wetlands. Maine's Department of Environmental Protection's regulations define "adjacent to" to be within 75 feet of a great pond, river, stream, or brook, or coastal or freshwater wetland. The regulated area begins at the normal high-water line or upland edge of the applicable area (Code Me. R. tit. 06-096 Ch. 305, § 2).

NRPA also requires a special three-tiered permit review process for any alterations to freshwater wetlands (Me. Rev. Stat. Ann. tit. 38, § 480-X). These alterations generally include dredging; bulldozing; removing or displacing soil, sand, vegetation, or other materials; draining; filling; or building, repairing, or altering any permanent structure. The same 75-foot setback applies for purposes of these permitting requirements (Code Me. R. tit. 06-096 Ch. 310, § 3).

Mandatory Shoreland Zoning Act

Maine's Mandatory Shoreland Zoning Act requires municipalities to adopt, administer, and enforce shoreland zoning ordinances that regulate land use activity generally within (1) 250 feet of a great pond, river, saltwater body, or coastal wetland, or freshwater wetland of at least 10 acres (with certain exceptions) and (2) 75 feet of certain streams. The regulated area, referred to as the "shoreland zone," begins at the normal high-water line or upland edge of the area, as applicable (Me. Rev. Stat. Ann. tit. 38, § 435 et seq.).

Under this law, municipalities must adopt zoning and land use controls that are at least as stringent as those adopted by the state's Board of Environmental Protection. These include, among other things, standards for (1) building and structure size; (2) setback and location and establishment of resource protection, general development, limited residential, commercial fishery, and maritime activity zones and other zones; (3) allowable uses in the zones; and (4) administrative and enforcement procedures.

Massachusetts

Massachusetts regulates wetlands and buffer zones through its Wetlands Protection Act and its accompanying regulations. The law is designed to protect wetlands in Massachusetts and the public interests they serve, including (1) flood control; (2) prevention of pollution and storm damage; and (3) protection of public and private water supplies, groundwater supply, fisheries, and wildlife habitat (Mass. Gen. Laws ch. 131, § 40 and Mass. Regs. Code tit. 310, § 10.00 et seq.).

The law regulates activities such as removing vegetation, regrading, and building structures within wetland areas and, generally, a 100-foot buffer zone. These wetland areas include any bank, riverfront area, freshwater wetland, coastal wetland, beach, dune, flat, marsh, or swamp that borders (1) the ocean; (2) an estuary, creek, river, stream, pond, or lake; or (3) land subject to tidal action, coastal storm flowage, or flooding. The 100-foot buffer zone does not apply to riverfront areas, which in most municipalities, are 200 feet wide and are measured from each side of the river from the mean annual high-water line outward horizontally and parallel to the river. The riverfront area is (1) 25 feet in specified municipalities and state-designated densely developed areas and (2) 100 feet for new agricultural and aquacultural activities (Mass. Regs. Code tit. 310, § 10.58).

Activities, other than those defined as "minor," within the buffer zone that will alter the area subject to protection are generally restricted under the law. "Minor activities" include, provided they comply with relevant regulations, certain fencing, vista pruning, planting of native species of trees, shrubs, or groundcover, and the conversion of lawn to use accessory to residential structures, like decks and sheds (Mass. Regs. Code tit. 310, § 10.02(b)(2)).

New Hampshire

New Hampshire primarily protects wetlands and shorelands through its Shoreland Water Quality Protection Act and Fill and Dredge in Wetlands Act.

The Shoreland Water Quality Protection Act

The Shoreland Water Quality Protection Act regulates construction, excavation, and filling activities within 250 feet of (1) lakes, pond, and artificial impoundments of at least 10 acres; (2) coastal waters and tidal rivers; and (3) year-round flowing rivers, excluding small streams in the upper reaches of watersheds ("protected shoreland") (N.H. Rev. Stat. Ann. § 483-B:1 et seq. and N.H. Code Admin. R. Ann. Env-Wq 1400). The line delineating where the law's requirements begin to apply (the "reference line") is the ordinary high-water mark for rivers; the highest observable tide line for coastal waters; and the surface elevation designated by the state's Department of Environmental Services (DES) for lakes, ponds, and impoundments. For certain river segments, the "protected shoreland" extends only 50 feet from the reference line (N.H. Rev. Stat. Ann. § 483-B:4 XV).

Proposed projects within the protected shoreland generally require a DES permit to ensure compliance with the law's shoreland protection standards. Among other things, these standards restrict the establishment of certain facilities (e.g., salt storage yards and hazardous waste facilities), require a 50-foot setback from the reference line for primary structures, and limit

fertilizer use in protected shorelands. The standards also establish specific restrictions (e.g., vegetation and ground cover requirements) within two buffer areas located within the regulated area: the "waterfront buffer," which is within 50 feet of the reference line, and the "natural woodland buffer," which is within 150 feet of the reference line (N.H. Rev. Stat. Ann. § 483-B:9).

Fill and Dredge in Wetlands Act

New Hampshire's Fill and Dredge in Wetlands Act requires permits for excavating, removing, dredging, filling, or constructing any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the state. Under this law, municipalities may designate wetlands as "prime wetlands" that receive a higher level of protection. "Prime wetlands" are generally areas that, because of their size, unspoiled character, fragile condition, or other relevant factors, make them of substantial significance. They must be at least two acres in size, have specified characteristics, including a wildlife habitat, and be at least 50 feet wide at their narrowest point.

Under the law, a permit for activities in a prime wetland, or within a 100-foot buffer of a prime wetland (if the buffer was required when the prime wetland was first designated) may only be issued if DES finds clear and convincing evidence that there will not be a significant loss of value as a result of the permit (e.g., an adverse effect on the value of areas as sources of nutrients for finfish, crustacea, shellfish, and wildlife of significant value).

Property owners may request a waiver to conduct certain forest management work and related activities within a forested portion of the prime wetland or buffer, and a waiver may only be granted if the department finds that there will be no significant net loss of wetland values. The department may require conditions on the waiver that it deems necessary to protect the prime wetlands resource (N.H. Rev. Stat. § 482-A:1 et seq. and N.H. Code Admin. R. Ch. ENV-WT 701.01 et seq.).

Rhode Island

Rhode Island's Freshwater Wetlands Act establishes requirements for the Rhode Island Department of Environmental Management (DEM) and the Coastal Resources Management Council (CRMC) to generally regulate freshwater wetlands, including through standards for buffers and setbacks (R.I. Gen. Laws §§ 2-1-18 to 2-1-24 and 250 R.I. Code R. 150-15-3.1 et seq.). Under the law, freshwater wetlands are generally rivers, streams, ponds, and other areas inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions (R.I. Gen. Laws § 2-1-20(8)). Generally, the DEM regulates freshwater inland wetlands, while the CRMC regulates freshwater wetlands in the vicinity of the coast with certain exceptions (e.g., DEM retains authority over faming-related projects).

The regulations establish tiers of buffer zones depending on the region (urban and non-urban) and protected resource. The buffer zones generally range from 25 feet for certain swamps to 200 feet for designated rivers and rivers within the watersheds of public drinking water reservoirs (250 R.I. Code R. 150-15-3.23). The regulations require that all projects and activities within the buffer zones be designed to avoid altering the buffers, within narrow exceptions for new residential construction. The regulations also generally require permits for activities that would alter the character of a freshwater wetland, buffer, or floodplain (e.g., excavating, draining, filling, placing trash, constructing in the regulated area). Certain activities are exempt and do not require a permit, including limited cutting of vegetation, maintenance and repair activities, and invasive species control (250 R.I. Code R. 150-3.4(A)(4) & 3.6.1(C)).

Vermont

Vermont primarily protects wetlands in two ways: its Wetlands Protection and Water Resources Management laws and regulations (i.e. Wetlands Rules) (Vt. Stat. Ann. tit. 10 §§ 901-930 and Vt. Admin. Code 16-5-103:1 et seq.), and Shoreland Protection Act (Vt. Stat. Ann. tit. 10 § 1441 et seq.).

Wetlands Rules

The Vermont Wetland Rules regulate land uses within significant wetlands and their associated buffer zones. The rules classify wetlands into three categories (Classes I, II, and III respectively) based on their ecological functions, and mandate a buffer zone for Class I and II wetlands. The buffer is generally 100 feet for Class I wetlands and 50 feet for Class II wetlands, but the Department of Environmental Conservation (DEC) can designate different buffer zones on a case-by-case basis (Vt. Stat. Ann. tit. 10 § 902 and Vt. Admin. Code 16-5-103:4). (In general, most wetlands in Vermont are classified as Class II, with a small number of Class I.)

Activities in Class I and II wetlands and their buffer zones generally require a permit, conditional use determination, or orders issued by the DEC secretary (Vt. Stat. Ann. tit. 10 § 913 and Vt. Admin. Code 16-5-103:9). However, permits are not required for allowed uses, which include (1) activities that generally do not alter the wetland (e.g., hunting, birdwatching, hiking, scientific research, and educational activities); (2) certain forestry operations; (3) existing hydroelectric activities; and (4) hazardous materials remediation, among other things (Vt. Admin. Code 16-5-103:6).

While the Vermont Agency of Natural Resources maintains a database for wetlands and other natural resources, the agency notes that unmapped wetlands may still be subject to protections and wetland boundaries must be field-delineated by a qualified wetland scientist.

Shoreland Protection Act

Vermont law also regulates certain development activities within 250 feet of the mean water level for lake and ponds greater than 10 acres in size (Vt. Stat. Ann. tit. 10, § 1441 et seq.). The protected shoreland area is divided into two "zones": the "lakeside zone," comprised of the first 100 feet to the mean water level, and the "upland zone," comprised of the remaining 150 feet of the regulated area. Generally, stricter rules apply to the lakeside zone than the upland zone, including vegetation protection standards.

Under the law, new development, redevelopment, or clearing property may require a permit or registration. These requirements vary depending on a property's preexisting conditions, size, and site characteristics. The shoreland law also exempts from permitting or registration many types of projects, including maintaining existing buildings or lawns; reconstructing existing impervious areas; removing or managing certain vegetation; existing agricultural production that complies with state rules; railroad activity; utility work; state or municipal transportation projects; and development in downtowns, village centers, and urban or industrial areas.

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