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PART Env-Wq 1401 PURPOSE AND APPLICABILITY

Env-Wq 1401.01 Purpose. The purpose of these rules is to implement RSA 483-B, the shoreland water quality protection act.

Env-Wq 1401.02 Applicability. These rules shall apply to all land areas that fall within the definition of protected shoreland in RSA 483-B:4, XV.
PART Env-Wq 1402 DEFINITIONS

Env-Wq 1402.01 “Abutter” means “abutter” as defined in RSA 483-B:4, I, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.02 “Accessory structure” means “accessory structure” as defined in RSA 483-B:4, II, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.03 “Commissioner” means “commissioner” as defined in RSA 483-B:4, IV, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.04 “Construction” means, for the purpose of RSA 483-B:5-b, I(a):

(a) The erection, demolition, reconstruction, or alteration of any structure; or

(b) Any activity that results in an increase in the impervious surface area on a property.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.05 “Department” means “the department of environmental services” as defined in RSA 483-B:4, V, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.06 “Disturbed area” means “disturbed area” as defined in RSA 483-B:4, VI, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.07 “Excavation” means, for the purpose of RSA 483-B:5-b, I(a), to dig, remove, form a cavity or a hole in, or otherwise remove material from an area within the department’s jurisdiction.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.08 “Fertilizer” as used in RSA 483-B:9, means “fertilizer” as defined in RSA 431:3, VII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.09 “Fill” as a noun means any rock, soil, gravel, sand, or other material that has been deposited or caused to be deposited by human activity.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.10 “Fill” as a verb means to place or deposit materials in or on a wetland, surface water body, or bank, or otherwise in or on an area within the jurisdiction of the department.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
Env-Wq 1402.11 “Footprint” means:

(a) When used in RSA 483-B:11, I, the area of land surface that lies directly beneath the limits of the exterior walls of a structure, whether the structure rests directly on the ground or is raised above the ground surface; and

(b) For all other purposes, the area outlined by the vertical projection of an impervious surface onto the ground surface where it is or will be located.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.12 “Ground cover” means “ground cover” as defined in RSA 483-B:4, VII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.13 “Impervious surface area” means, for purposes of the impervious surface limitation specified in RSA 483-B:9, V(g), the sum total of the footprint of each impervious surface that is located within the protected shoreland. The term includes “composed of impervious surfaces”.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.14 “Impervious surface” means “impervious surface” as defined in RSA 483-B:4, VII-b, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.15 “Lot of record” means “lot of record” as defined in RSA 483-B:4, VIII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.16 “Low phosphate, slow release nitrogen fertilizer” means fertilizer that is guaranteed, as indicated on the package label, to contain:

(a) Not more than 2% phosphorus; and

(b) A nitrogen component which is at least 50% slow release nitrogen components.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.17 “Municipality” means “municipality” as defined in RSA 483-B:4, X, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.18 “Natural woodland buffer” means “natural woodland buffer” as defined in RSA 483-B:4, XI, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.19 “Non-conforming lot of record” means “nonconforming lot of record” as defined in RSA 483-B:4, XI-c, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
Env-Wq 1402.20 “Nonconforming structure” means “nonconforming structure” as defined in RSA 483-B:4, XI-d, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.21 “Open porch” means a porch that is supported by pilings or post supports but that does not have permanent foundation walls, insulation, or a heat source. The term includes a porch that is screened but does not include a porch that is enclosed in whole or in part with glass or any other material designed or intended to provide a weather-proof barrier.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.22 “Ordinary high water mark” means “ordinary high water mark” as defined in RSA 483-B:4, XI-e, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.23 “Person” means “person” as defined in RSA 483-B:4, XII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.24 “Pre-existing nonconforming primary structure” means a primary structure that does not meet current setback requirements and that was built prior to:

(a) July 2, 2002, for properties on the Connecticut River;

(b) June 15, 1998, for properties on the Lamprey River, the Swift River, and those portions of the Merrimack River and the Contoocook River designated prior to that date for protection under RSA 483, as provided by Laws of 1998, 182:1;

(c) July 1, 1994, for all other properties that are subject to RSA 483-B other than those specified in (d), below; and

(d) April 1, 2008, for properties that are included as a result of Laws of 2007, Ch. 267, namely all properties on designated rivers not included in (a) or (b), above, and fourth order streams classified pursuant to RSA 483-B:4, XVI(c) that were not previously classified as fourth order.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.25 “Primary building line” means “primary building line” as defined in RSA 483-B:4, XIII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.26 “Primary structure” means “primary structure” as defined in RSA 483-B:4, XIV, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.27 “Project” means the full scope of development activities that are proposed to take place on a parcel of property within 5 years of the application date.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
Env-Wq 1402.28 “Protected shoreland” means “protected shoreland” as defined in RSA 483-B:4, XV, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.29 “Public waters” means “public waters” as defined in RSA 483-B:4, XVI, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.30 “Reference line” means “reference line” as defined in RSA 483-B:4, XVII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.31 “Removal or removed” means “removal or removed” as defined in RSA 483-B:4, XVIII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.32 “Repeat violation” means “repeat violation” as defined in RSA 483-B:4, XVIII-a, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.33 “Repair” means “repair” as defined in RSA 483-B:4, XVIII-b, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.34 “Replace in kind” means “replace in kind” as defined in RSA 483-B:4, XVIII-c, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.35 “Replacement system” means “replacement system” as defined in RSA 483-B:4, XVIII-d, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.36 “Residential unit” means “residential unit” as defined in RSA 483-B:4, XIX, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.37 “Sapling” means “sapling” as defined in RSA 483-B:4, XX, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.38 “Segment” means a section of waterfront buffer delineated in accordance with RSA 483-B:9, V(a)(2)(D). The term includes full segments, meaning a 50 foot by 50 foot area, and partial segments, meaning any area that does not comprise a full segment.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
Env-Wq 1402.39  “Shoreland frontage” means “shoreland frontage” as defined in RSA 483-B:4, XX-a, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.40  “Shoreland permit” means a permit issued under RSA 483-B:5-b, I(a) other than a permit by notification.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.41  “Shrub” means “shrub” as defined in RSA 483-B:4, XXI, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.42  “Stabilized” means conditions under which soils will not erode.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.43  “Structure” means “structure” as defined in RSA 483-B:4, XXII, as reprinted in Appendix B. The term does not include any item that can readily be moved from one location to another, including but not limited to picnic tables, lawn furniture, swing-sets, and poles used to support items such as clotheslines, bird houses, bird feeders, or lawn ornaments.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.44  “Subdivision” means “subdivision” as defined in RSA 483-B:4, XXIII, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.45  “Tree” means “tree” as defined in RSA 483-B:4, XXIV, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.46  “Unaltered state” means “unaltered state” as defined in RSA 483-B:4, XXIV-b, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.47  “Unsafe tree” means a tree that has a structural defect and poses an imminent hazard to structures or to personal property or safety.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.48  “Urbanization” means “urbanization” as defined in RSA 483-B:4, XXV, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1402.49  “Water dependent structure” means “water dependent structure” as defined in RSA 483-B:4, XXVI, as reprinted in Appendix B.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
“Waterfront buffer” means the protected shoreland within 50 feet of the reference line, as specified in RSA 483-B:9, V(a)(1).

PART Env-Wq 1403 MAINTENANCE OF THE WATERFRONT BUFFER AND THE NATURAL WOODLAND BUFFER

Env-Wq 1403.01 Maintenance of the Waterfront Buffer.

(a) Within the waterfront buffer, no person shall undertake any activity in violation of RSA 483-B:9, V(a).

(b) The department shall proceed in accordance with RSA 483-B:5 to require the property owner to restore the waterfront buffer if the department determines that any of the provisions of RSA 483-B:9, V(a) have been violated.

Env-Wq 1403.02 Maintenance of the Natural Woodland Buffer.

(a) Within the natural woodland buffer, no person shall undertake any activity in violation of RSA 483-B:9, V(b).

(b) The department shall proceed in accordance with RSA 483-B:5 to require the property owner to restore the natural woodland buffer if the department determines that any of the provisions of RSA 483-B:9, V(b) have been violated.

Env-Wq 1403.03 Construction Within the Protected Shoreland.

(a) All impacts related to construction shall be completely contained within the area of disturbance allowed by RSA 483-B:9, V(b)(2)(A) as appropriate given the area of the lot within the natural woodland buffer.

(b) Within 3 days of final grading or temporary suspension of work in an area that is in the protected shoreland, all exposed soil areas shall be stabilized by:

(1) Seeding and mulching, if during the growing season;

(2) If not within the growing season, by mulching with tack or netting; or

(3) With an alternative method of temporary stabilization as specified in Env-Wq 1500.

(c) A maximum of 150 square feet of retaining wall may be excluded from the calculation of impervious area, provided the wall has a footprint of 12 inches or less in width.

Env-Wq 1403.04 Removal of Dead, Diseased, Or Unsafe Vegetation.

(a) A property owner may remove, or may have removed, any dead, diseased, or unsafe trees, limbs, saplings, or shrubs from the waterfront buffer that are not included in the scoring described in RSA 483-B:9, V(a)(2)(D), subject to the conditions specified in (b) and (c), below.
(b) The cutting and removal shall be conducted so as to:

   (1) Prevent damage to surrounding healthy trees, limbs, saplings, and shrubs;
   (2) Minimize damage to ground cover;
   (3) Prevent soil erosion and sedimentation to the water body; and
   (4) Leave all stumps intact in accordance with RSA 483-B:9, V(a)(2)(B).

(c) In any enforcement action against a property owner or contractor for removal of trees, limbs, saplings, or shrubs in violation of RSA 483-B, the burden of proving that trees, limbs, saplings, or shrubs removed pursuant to this section were in fact dead, diseased, or unsafe shall be on the property owner or contractor, as applicable.

(d) Proof that removed trees, limbs, saplings, or shrubs were dead, diseased, or unsafe shall include, but not be limited to, the following:

   (1) Photographs of the property which clearly show the dead, diseased, or unsafe trees, limbs, saplings, and shrubs; and
   (2) Written certification signed by an individual with knowledge and experience in assessing tree health, such as a licensed forester, certified arborist, or licensed landscape architect, that the trees, limbs, saplings, and shrubs that were removed were dead, diseased, or unsafe, as applicable.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1403.05 Removal of Trees or Saplings That Are Not Dead, Diseased, Or Unsafe.

(a) As provided in RSA 483-B:9, V(a)(2)(D)(iv), a property owner may remove, or may cause to have removed, trees or saplings from the waterfront buffer that are not dead, diseased, or unsafe if the sum of the scores of the remaining trees and saplings in that segment does not total less than allowed by RSA 483-B:9, V(a)(2)(D), subject to the conditions specified in (b) and (c), below.

(b) The cutting and removal shall be conducted so as to:

   (1) Prevent damage to surrounding trees and saplings;
   (2) Minimize damage to ground cover;
   (3) Prevent soil erosion and sedimentation to the water body; and
   (4) Leave all stumps intact in accordance with RSA 483-B:9, V(a)(2)(B).

(c) In any enforcement action against a property owner or contractor for removal of trees or saplings in violation of RSA 483-B, the burden of proving that the removal of trees or saplings pursuant to this section did not bring the sum of the scores of the remaining trees and saplings in that segment below that allowed by RSA 483-B:9, V(a)(2)(D) shall be on the property owner or contractor, as applicable.

(d) Proof that the removal complied with RSA 483-B:9, V(a)(2)(D) shall include, but not be limited to, the following:

   (1) Photographs of the property which clearly show the trees or saplings; and
   (2) A sketch of the property showing the location and point scores of the trees and saplings that will remain on the property.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
PART Env-Wq 1404  STORMWATER AND EROSION AND SEDIMENTATION CONTROL

Env-Wq 1404.01  Protection of Water Quality.

(a) No person shall undertake construction or any other activity in such a way as to degrade water quality in violation of the water quality standards specified in RSA 485-A:8 or Env-Wq 1700.

(b) As required by RSA 483-B:9, V(d)(2), new structures and all modifications to existing structures within the protected shoreland shall be designed and constructed to prevent the release of surface runoff across exposed soils.

Source.  (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1404.02  Stormwater Management and Erosion Control.

(a) As required by RSA 483-B:9, V(d)(1), all new structures, modifications to existing structures, and excavation or earth moving within the protected shoreland shall be designed and constructed in accordance with RSA 485-A:17 and Env-Wq 1500, to manage stormwater and control erosion and sediment, before, during, and after construction.

(b) For projects for which a stormwater management system is required by RSA 483-B:9, V(g)(1) or (2), the department shall review the proposed stormwater management system as provided in Env-Wq 1500.

Source.  (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

PART Env-Wq 1405  ACCESSORY STRUCTURES

Env-Wq 1405.01  Applicability.  The requirements of this part shall apply to structures located between the reference line and the primary building line.

Source.  (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1405.02  Construction of Accessory Structures.

(a) No accessory structure shall be constructed unless allowed by local zoning.

(b) Any accessory structure that is constructed shall be built in accordance with applicable local building requirements.

Source.  (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1405.03  Limitations on Accessory Structures within the Waterfront Buffer.

(a) The limitations in this section shall apply only to accessory structures located between the reference line and the primary building line.

(b) Accessory structures shall:
   (1) Not exceed 12 feet in height; or
   (2) Not exceed 20 feet in height if authorized by a permit under RSA 482-A, but located on the land rather than over public water, such as a dug-in boathouse.

(c) Subject to (d) and (e), below, accessory structures shall be:
   (1) No larger than 1.5 square feet per linear foot of shoreline; or
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(2) No larger than 900 square feet per structure if authorized by a permit under RSA 482-A but located on the land rather than over the public water, such as a beach or a dug-in boathouse.

(d) The construction of the accessory structure shall not cause or otherwise result in any violations of the point score requirement of RSA 483-B:9, V(a)(2).

(e) The foot path allowed by RSA 483-B:9, V(a)(D)(ix) shall be excluded when calculating the area of accessory structures under (c), above.

(f) Accessory structures shall be located so as to avoid the need to remove ground cover to the maximum extent practicable.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1405.04 Setback for Accessory Structures.

(a) Except as provided in (b), below, all accessory structures built after November 26, 1996 shall be set back at least 20 feet from the reference line, unless otherwise approved by the department in accordance with RSA 482-A and rules adopted pursuant thereto, Env-Wt 100-900.

(b) The 20-foot setback shall not apply to structures that require direct access to the water as an operational necessity, such as access stairs, pump houses, and wells.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1405.05 Slope Limitation for Accessory Structures. No accessory structure shall be built on or into land having greater than 25% slope.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

PART Env-Wq 1406 PERMITTING OF PROJECTS

Env-Wq 1406.01 Permit Required.

(a) Subject to (b), below, as specified in RSA 483-B:5-b, I(a), no person shall commence construction, excavation, or filling activities within the protected shoreland without obtaining a permit from the department to ensure compliance with RSA 483-B, subject to the exceptions specified in RSA 483-B or established in Env-Wq 1406.03 or Env-Wq 1406.04 pursuant to RSA 483-B:17, X.

(b) A person may commence construction, excavation, or filling activities within the protected shoreland pursuant to a permit by notification upon receipt of acceptance of the PBN filing by the department or as otherwise provided in RSA 483-B:5-b, V(d).

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.02 Statutory Exemptions.

(a) The following shall not be subject to this chapter, as they are exempted by statute from the requirements of RSA 483-B:

(1) Agriculture performed in accordance with best management practices, as specified in RSA 483-B:3, III, and RSA 483-B:9, V;

(2) Forest management that is not associated with shoreland development or land conversion that is conducted in compliance with RSA 227-J:9, as specified in RSA 483-B:9, V; and
(3) Forestry conducted in compliance with RSA 227-J:9 by or under the direction of a water supplier for the purpose of managing a water supply watershed, as specified in RSA 483-B:9, V.

(b) The following shall not be subject to this chapter, as they are exempted by statute from the requirement to obtain a shoreland permit:

(1) As specified in RSA 483-B:5-b, II, timber harvesting activities permitted in accordance with RSA 485-A:17, IV;

(2) As specified in RSA 483-B:5-b, IV, impacts in the protected shoreland that are:
   a. Covered by a permit issued under RSA 482-A; or
   b. Commercial or industrial redevelopment in accordance with RSA 485-A:17; and

(3) As specified in RSA 483-B:9, III, private water supply facilities.

(c) Construction of public roads, public utility lines and associated structures and facilities, and public water access facilities are exempted by statute from the permit fee, as specified in RSA 483-B:5-b, III.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.03 Exemption for Vested Rights.

(a) Subject to (e), below, activities in the protected shoreland shall not require a permit under RSA 483-B:5-b if the property owner or developer can demonstrate to the department’s satisfaction, pursuant to (b) or (c), below, that the property owner or developer has incurred substantial liabilities in a reasonable, good faith reliance on the absence of a controlling law or regulation, sometimes called vested rights.

(b) The department shall deem any of the following to be proof that the property owner or developer has vested rights:

(1) The activities are specifically identified in an application that has been the subject of notice by a planning board pursuant to RSA 676:4, I(d) or the zoning board of adjustment prior to July 1, 2007, regardless of whether an approval has yet been issued, provided that such application is ultimately approved by the municipal board(s) having authority over the activities covered by the application;

(2) The activities are specifically identified in a detailed plan or narrative description submitted with a building permit application submitted to a municipality prior to January 1, 2008, provided that such application is ultimately approved by the municipal board(s) or official having authority over building permits;

(3) A concrete foundation for the primary structure was installed between April 1, 2007 and July 1, 2008;

(4) The activities are specifically identified in a variance or redevelopment waiver issued by the department prior to July 1, 2008 pursuant to RSA 483-B, unless the approval specifically requires the permittee to obtain a permit pursuant to this section if work was not commenced prior to July 1, 2008; or

(5) The activities were specifically approved in a permit issued pursuant to RSA 485-A:17 prior to July 1, 2008, unless the approval specifically requires the permittee to obtain a permit pursuant to this section if work was not commenced prior to July 1, 2008.

(c) A property owner or developer who is not able to show any of the conditions listed in (b)(1)-(5) may submit other evidence to demonstrate that the property owner or developer has otherwise incurred substantial liabilities and that such liabilities:
(1) Resulted from a reasonable, good faith reliance on the absence of a controlling law or regulation; and

(2) Are related to the provision of RSA 483-B from which the property owner or developer is seeking relief.

(d) A property owner claiming vested rights shall provide the following to the department in writing:

(1) The name and mailing address of the property owner;

(2) The name, mailing address, and daytime telephone number and, if available, an e-mail address, of an individual authorized to act on behalf of the property owner with whom the department can discuss the proposed project;

(3) The physical address of the proposed project site, if different from the property owner’s mailing address;

(4) The name of the surface water that causes the property to be subject to RSA 483-B;

(5) If the exemption is claimed under (b)(1), above, proof that the notice was issued;

(6) If the exemption is claimed under (b)(2), above, a copy of the detailed plan or narrative description submitted with the building permit application;

(7) If the exemption is claimed under (b)(3), above, proof that the foundation has been installed, such as dated photographs or a bill for the foundation showing the date of installation; and

(8) If the exemption is claimed under (c), above, the following information:

   a. A budget showing the total estimated cost of the project;

   b. A narrative describing the full scope of the project, including all work expected to be done on the property within a 5-year period;

   c. How much of the total estimated cost had been incurred prior to July 1, 2007 and how much of the total estimated cost had been incurred prior to July 1, 2008;

   d. How much of the total scope of the project had been completed prior to July 1, 2007 and how much of the total scope of the project had been completed prior to July 1, 2008;

   e. What revisions would be required to redesign the project to reflect the standards enacted to be effective July 1, 2008;

   f. The cost of the revisions that would be needed; and

   g. The relationship of the revisions to the full scope of the project as originally envisioned.

(e) An exemption shall not be available under (a), above, if:

(1) The applicant proposes changes to the activities from those that would otherwise be exempt under (a), above, and such changes would increase impacts in the natural woodland buffer established by RSA 483-B:9, V(b)(1); or

(2) The applicable permit, approval, variance, or redevelopment waiver expires or otherwise lapses prior to work commencing, or is revoked for cause by the issuing authority.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16
Env-Wq 1406.04 Activities in Protected Shoreland That Do Not Require a Shoreland Permit.

(a) A person shall not be required to obtain a permit under RSA 483-B:5-b, I(a) prior to undertaking any activity listed in (c) or (d), below, in the protected shoreland, provided that the activity is conducted in accordance with the conditions noted.

(b) In any enforcement action against a property owner or contractor for actions arguably covered by (a), above, the burden of proving that the exemption applies shall be on the property owner or contractor, as applicable.

(c) Activities exempt pursuant to (a), above, because the activity does not constitute construction, excavation, or filling shall be as follows:

1. Trimming, pruning, and thinning of branches to the extent necessary to protect structures, maintain clearances, and provide views, as allowed by RSA 483-B:9, V(a)(2)(D)(vi);

2. Removal of trees, limbs, saplings, or shrubs in accordance with Env-Wq 1403.04 or removal of trees or saplings in accordance with Env-Wq 1403.05;

3. Maintenance, repair, or modification of an existing, legal, primary structure that does not:
   a. Alter the footprint or impervious area of the structure;
   b. Require, or result in, the alteration of previously unaltered areas;
   c. Result in an increase in loading to an onsite sewage disposal system; or
   d. Require, or result in, any excavation or filling within the protected shoreland;

4. Maintenance, repair, or modification of an existing, legal, accessory structure that does not:
   a. Alter the footprint or impervious area of the structure;
   b. Require, or result in, the alteration of previously unaltered areas;
   c. Result in an increase in loading to an onsite sewage disposal system;
   d. Require, or result in any excavation or filling within the protected shoreland; or
   e. Exceed the criteria of Part Env-Wq 1405, if it is located within the waterfront buffer;

5. Maintenance of a grandfathered or altered open area, such as by mowing a lawn, raking leaves or pine needles, or mulching landscaped areas;

6. Hand-pulling or use of hand tools to remove invasive species or other noxious or harmful plants such as poison ivy, including root systems, provided that any area exceeding 10 square feet left without vegetation shall be subject to replanting with non-invasive, non-harmful species;

7. Hand-removal or use of hand tools to remove rocks and stones beyond the 50-foot setback; and

8. Placement or installation of readily removed items, such as picnic tables, lawn chairs and swing sets.

(d) Activities exempt pursuant to (a), above, because the activity constitutes de minimis construction, excavation, or filling shall be as follows:

1. Use of hand-held tools, whether motorized or not, such as augers or tile spades, to install monitoring wells, piezometers, and flow meters, for:
   a. Evaluating site conditions as necessary for the submittal of information required by a permit application under RSA 482-A relating to wetlands, RSA 485-A:29 relating to

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subdivisions or septic systems, or RSA 485-A:17 relating to alteration of terrain;
b. Educational or research purposes; or
c. Monitoring hydrology;

(2) Planting of non-invasive vegetation or maintenance of existing gardens within the allowable disturbed or altered area using hand-held tools;

(3) Placement of stepping stones, provided no root systems are removed to accommodate the placement;

(4) Construction or installation of a fence using hand-held tools;

(5) Digging test pits for the purposes of determining suitability for wastewater disposal under RSA 485-A:29 relating to subdivisions or septic systems, provided:
   a. There is no disruption of groundcover within 50 feet of the reference line; and
   b. No test pits are dug within 75 feet of the reference line unless required in order to evaluate eligibility for replacement under Env-Wq 1003.10;

(6) Planting one or more trees within existing open areas more than 50 feet from the reference line using mechanized equipment;

(7) Replacing utility poles and guy wires using mechanized equipment, provided that appropriate siltation and erosion controls are used and all temporary impacts are restored;

(8) Replacement of a failed septic system, either in-kind as specified in Env-Wq 1003.10 or under a new approval, provided there is no increase in sewage loading from the structure(s) served by the system;

(9) Placement of a single structure more than 50 feet from the reference line, provided that:
   a. The footprint of the structure is less than 150 sq. ft.;
   b. No excavation or filling using mechanized equipment will occur in conjunction with the construction or placement of the structure;
   c. The structure will not be heated;
   d. The structure will not have electricity or plumbing; and
   e. The structure will not be used as living space for humans; and

(10) Activities required to abate an imminent threat to public safety or public health or to stabilize property during or immediately following an emergency, provided the procedures specified in Env-Wq 1407 are followed.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.05 Permits by Notification. In addition to the activities listed in RSA 483-B:5-b, I(a) (1)-(3), the following activities may be undertaken in the protected shoreland pursuant to a permit by notification filed in accordance with RSA 483-B:5-b, I(a):

(a) Drilling geotechnical borings during the design of a public project, subject to the following conditions:

(1) The entity undertaking the project shall provide the landowner, the department, and the local governing body with written notification of the general location and the type of work to be conducted at least 14 days prior to its commencement;
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(2) Any vehicles used shall be operated in a manner that minimizes disturbance to the natural woodland buffer;

(3) Drilling operations shall be managed so as to have no impact on water quality;

(4) Drill holes shall be back-filled with drill spoil or filled with clean material or grout;

(5) Drill cuttings not used to back fill drill holes shall be removed or stabilized; and

(6) Equipment shall be operated and maintained to avoid spillage of fluids including, but not limited to, oil, gas, antifreeze, or hydraulic fluids;

(b) Drilling of test wells or installation of monitoring wells for purposes of exploring for public water supplies or soil or groundwater contamination, subject to the following conditions:

(1) The entity undertaking the drilling shall provide the landowner, the department, and the local governing body, with written notification of the general location and the type of work to be conducted at least 14 days prior to its commencement;

(2) Any vehicles used shall be operated in a manner that minimizes disturbance to the natural woodland buffer;

(3) Drilling operations shall be managed so as to have no impact on water quality;

(4) Drill holes shall be back filled with drill spoil or clean fill or permanently cased;

(5) Drill cuttings not used to back fill drill holes shall be removed or stabilized; and

(6) Equipment shall be operated and maintained to prevent spillage of fluids including, but not limited to, oil, gas, antifreeze, or hydraulic fluids;

(c) Drilling of drinking water wells outside of the natural woodland buffer, subject to the following conditions:

(1) The entity undertaking the drilling shall provide the landowner, the department, and the local governing body, with written notification of the intended location and type of well to be installed at least 14 days prior to commencing work;

(2) Any vehicles used shall be operated in a manner that minimizes disturbance to the terrain;

(3) Drilling operations shall be managed so as to have no impact on water quality;

(4) Any abandoned drill holes shall be back filled with drill spoil or clean fill;

(5) Drill cuttings not used to back fill drill holes shall be removed or stabilized; and

(6) Equipment shall be operated and maintained to prevent spillage of fluids including, but not limited to, oil, gas, antifreeze, or hydraulic fluids; and

(d) Site remediation activities approved by the department pursuant to Env-Or 600, subject to the following conditions:

(1) The information submitted to the department on which the approval for the activities was issued shall have clearly identified the protected shoreland;

(2) The information submitted to the department on which the approval for the activities was issued shall have clearly described the activities that will occur within the protected shoreland;

(3) The entity undertaking the activities shall provide the department’s wetlands bureau and the local governing body with written notification of the commencement of work as soon as practicable, but in no event later than 5 working days after commencing work;
(4) Any vehicles used shall be operated in a manner that minimizes disturbance to the terrain;

(5) All activities shall be managed so as to have no adverse impact on water quality;

(6) Contaminated materials shall not be removed and returned to the site unless the materials are treated to the appropriate standards prior to being returned to the site; and

(7) Equipment shall be operated and maintained to prevent spillage of fluids including, but not limited to, oil, gas, antifreeze, or hydraulic fluids.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.06 Shoreland Permit Application Procedures. To apply for a shoreland permit under RSA 483-B:5-b, I(a), the applicant shall submit the following to the department:

(a) A complete application as described in Env-Wq 1406.07, which has been signed as specified in Env-Wq 1406.08;

(b) Plans as specified in Env-Wq 1406.09, formatted as specified in Env-Wq 1406.11;

(c) Plans formatted as specified in Env-Wq 1406.11 or other information, or both, as specified in Env-Wq 1406.10, if applicable to the proposed project;

(d) The attachments identified in Env-Wq 1406.12;

(e) The certification(s) required by Env-Wq 1406.13(d); and

(f) The fee required by RSA 483-B:5-b, I(b), unless exempted by RSA 483-B:5-b, III.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.07 Shoreland Permit Application Information. An application for a permit under RSA 483-B:5-b, I(a) shall include the following information:

(a) The legal name of each property owner as it appears on the deed of record and the registry and book and page number where the deed is recorded;

(b) The regular mailing address and daytime telephone number of the property owner and, if available, an e-mail address;

(c) The name, mailing address, and daytime telephone number of the applicant, if other than the property owner, and, if available, an e-mail address;

(d) If the applicant is not the property owner and is not the authorized agent of the property owner for purposes of the application, documentation supporting the applicant’s right to engage in the proposed activity on the property, for example a long-term lease or purchase-and-sale agreement;

(e) The tax map, lot number, and block number, and street address of the proposed project site, if different from the property owner’s mailing address;

(f) The name of the water body that causes the property to be subject to RSA 483-B;

(g) The information required by Env-Wq 1408.05, if applicable;

(h) The information required by Env-Wq 1409.01, if applicable;

(i) A narrative description of the project;
(j) Total square feet of impact to the protected shoreland;

(k) Total square feet of new impervious area within the protected shoreland;

(l) For projects adjacent to lakes or ponds, the reference line elevation;

(m) Whether the application includes a proposal to make the property or structures thereon more nearly conforming in accordance with RSA 483-B:11; and

(n) Whether the application includes a request for a waiver of the minimum standards set forth in RSA 483-B:9, V(i).

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.08 Signatures Required.

(a) The property owner(s) and applicant, if other than the property owner, shall sign and date the application.

(b) The signature(s) shall constitute certification that:

   (1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and

   (2) The signer understands that:

       a. Any permit or waiver granted based on false, incomplete, or misleading information shall be subject to revocation;

       b. The signer is subject to the applicable penalties in RSA 641, Falsification In Official Matters; and

       c. Obtaining a shoreland permit shall not exempt the work proposed from other state, local, or federal approvals; and

   (3) The signer has notified the municipality, abutters, and, if applicable, the local river advisory committee in accordance with Env-Wq 1406.13.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.09 Plans to be Submitted with All Shoreland Permit Applications. The plans required by Env-Wq 1406.06(b) shall show the existing conditions on the property, all proposed work, and all temporary impacts within 250 feet of the reference line, including the following:

(a) An overview plan of the property within 250 feet of the reference line that shows the approximate location of all property lines, easements, and rights-of-way, clearly labeled;

(b) The scale, if any, used on the plan or, if the plan is not to scale, the complete dimensions of all features;

(c) A labeled north-pointing arrow to indicate orientation;

(d) A legend that clearly explains all symbols, line types, and shading used on the plan;

(e) The reference line, the primary building line, the limits of the natural woodland buffer, and the protected shoreland as those terms are defined in RSA 483-B:4;

(f) All other applicable local and state setbacks;
(g) The dimensions and locations of all existing and proposed structures, impervious areas, disturbed areas, areas to remain in an unaltered state, and all other relevant features necessary to clearly define both existing conditions and the proposed project;

(h) The dimensions, locations, and descriptions of all proposed temporary impacts associated with completion of the project;

(i) Proposed methods of erosion and siltation controls indicated graphically and labeled, or otherwise annotated as needed for clarity;

(j) A delineation of all existing and proposed disturbed areas and all vegetated areas to be maintained in an unaltered state within the natural woodland buffer;

(k) The limits of existing cleared areas, such as gardens, lawns, and paths;

(l) If the topography is to be permanently altered, the existing and proposed topography, including a reference elevation;

(m) A plan of any planting(s) proposed in the waterfront buffer, showing the proposed location(s) and scientific names or common names of proposed species;

(n) If applicable, the location of an existing or proposed 6-foot-wide foot path to the waterbody or temporary access path, as allowed by RSA 483-B:9, V(a)(2)(D)(viii) and (ix); and

(o) The date of plan and the preparer’s name.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.10 Plans or Other Information Required for Certain Projects. If applicable, the following plans or other information shall also be submitted with the application:

(a) For any project proposing that the impervious area be at least 15% but not more than 20% within the protected shoreland, a statement signed by the applicant certifying that the impervious area is not more than 20%;

(b) For any project proposing that the impervious area be greater than 20% within the protected shoreland, plans for a stormwater management system that will infiltrate increased stormwater from development, in accordance with Env-Wq 1500;

(c) For any project that proposes the expansion of a pre-existing non-conforming structure under RSA 483-B:11 where the expansion will occur in the area between the primary building line and the water, the information required by Env-Wq 1408.03;

(d) For any project that includes a waiver request under RSA 483-B:9, V(i), the information required by Env-Wq 1409;

(e) For any project that proposes to install new pervious surfaces or to maintain existing pervious surfaces:
   (1) A plan showing the location and type of each surface;
   (2) A cross-section of each type of pervious surface that shows the construction method and details; and
   (3) Specifications for how each type of pervious surface will be maintained; and

(f) For any project involving work within the waterfront buffer, the following:
   (1) A plan showing each segment of waterfront buffer that will be impacted by the project;
(2) The location and diameter of all existing trees and saplings, at least up to that which is sufficient to meet the point requirement specified in RSA 483-B:9, V(a)(2); and

(3) A designation of the trees to be cut during the project, if any, including:
   a. The diameter of all trees and saplings at 4-½ feet from the ground; and
   b. The names of the existing species, using either the scientific names or common names.

\[\text{Source. (See Revision Notes #1 and #2 at chapter heading)}\]
\#12062, eff 12-17-16

Env-Wq 1406.11  Format of Plans.

(a) The plans for any shoreland project submitted for approval on paper shall meet the format requirements specified in (b) through (e), below.

(b) Left margins shall be 2 inches and the remaining margins shall be at least one inch.

(c) Plans which are drawn to scale shall be shown using a scale of not more than 20 feet to one inch, except that if the lot cannot be shown on a 1:20 scale, it shall be shown on a larger scale on a separate sheet.

(d) All plans shall be folded to 8-1/2 inches by 11 inches.

(e) For plans submitted electronically, the format shall be as specified in the user agreement entered into by the individual authorized to submit the plans electronically.

\[\text{Source. (See Revision Notes #1 and #2 at chapter heading)}\]
\#12062, eff 12-17-16

Env-Wq 1406.12  Attachments to Shoreland Permit Application. The attachments required by Env-Wq 1406.06(d) shall be as follows:

(a) A copy of the recorded deed of the current property owner;

(b) A copy of the US geological survey map with the property and project located;

(c) Photographs which clearly show the existing site conditions in the shoreland zone, including the area within 50 feet of all proposed impacts;

(d) A copy of the tax map showing the location and lot number of the proposed project;

(e) A list of the names and mailing addresses, as well as tax map and lot numbers, of all abutters;

(f) The certification required by Env-Wq 1406.13;

(g) A copy of the NH department of resources and economic development, division of forests and lands, natural heritage bureau report for the subject property indicating that the portion of the natural woodland buffer impacted by the project has been screened for species of concern;

(h) A copy of a completed shoreland application worksheet that includes:
   
   (1) Square feet of the lot within 250 feet of the reference line;

   (2) The area of the lot located within the natural woodland buffer but outside of the waterfront buffer;

   (3) The area of the natural woodland buffer outside of the waterfront buffer in which vegetation must remain in an unaltered state in order to maintain compliance with RSA 483-B:9, V(b);
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(4) Square feet and percentage of the lot area constituting existing impervious surface(s) within 250 feet of the reference line;

(5) Proposed amount of impervious surface(s) within 250 feet of the reference line;

(6) Total percentage of lot area within the protected shoreland which will be impervious upon completion of the project;

(7) The name of the person who completed the worksheet; and

(8) The date of the plan on which the worksheet is based.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.13 Required Notifications.

(a) The applicant for a shoreland permit shall submit to the department postal receipts, or copies of the receipts, to verify that the notices required by RSA 483-B:5-b, IV-a, reprinted in Appendix C, have been delivered.

(b) The written notices required by RSA 483-B:5-b, IV-a, shall be sent at the time of submittal of the application to the department and shall include:

(1) The street address and municipality of the property that is the subject of the application;

(2) A clear statement that an application has been filed under RSA 483-B;

(3) The date that the application was or will be filed with the department; and

(4) For a project that requires notice to the appropriate local river advisory committee because a portion of the project is located within ¼-mile of a river or river segment designated under RSA 483, a copy of the completed and signed application.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.14 Coordination of Permit Applications. The application for a shoreland permit shall identify whether applications for any of the following permits have been submitted or will need to be submitted to the department for the same project:

(a) Wetlands permit under RSA 482-A;

(b) Individual sewage disposal system under RSA 485-A:29;

(c) Subdivision permit under RSA 485-A:29; and

(d) Alteration of terrain permit under RSA 485-A:17.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.15 Decisions on Shoreland Permit Applications.

(a) Upon receipt of an application for a shoreland permit, the department shall proceed in accordance with RSA 483-B:5-b, V.

(b) The department shall approve an application for a shoreland permit if all of the following are true:

(1) The application is complete as specified in Env-Wq 1406.06; and
(2) The project, during and after construction if constructed as proposed, will comply with all applicable criteria of these rules and RSA 483-B.

(c) If the department determines that the project as proposed will not comply with all applicable criteria of these rules and RSA 483-B but that reasonable project-specific conditions could be imposed to bring the project into compliance, the department shall approve the application with such conditions as are necessary to ensure compliance.

(d) If the department determines that the project as proposed will not comply with all applicable criteria of RSA 483-B and that reasonable project-specific conditions cannot be imposed that would bring the project into compliance, the department shall deny the application.

(e) The department shall notify the applicant in writing of its decision. If the application is denied, the notice shall specify the reason(s) for the denial.

(f) If a permit is issued, all work shall be done in accordance with the plans approved by the department, which shall be considered part of the issued permit.

(g) All permits issued shall be subject to the conditions specified in Env-Wq 1406.20.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.16 Shoreland Permit by Notification Procedures. Persons filing for a shoreland permit by notification under RSA 483-B:5-b, I shall submit the following to the department:

(a) A complete notification form as described in Env-Wq 1406.17 that has been signed by the owner of the property as specified in RSA 483-B:5-b, I(a) and Env-Wq 1406.08;

(b) The plans required by RSA 483-B:5-b, I(a) that clearly and accurately depict the work to be completed relative to the reference line of the jurisdictional waterbody;

(c) The photographs required by RSA 483-B:5-b, I(a) of the area to be impacted;

(d) Identification as required by RSA 483-B:5-b, I(a) of the project criteria that qualify the project for a permit by notification; and

(e) The fee required by RSA 483-B:5-b, I(b), unless exempted by RSA 483-B:5-b, III.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.17 Shoreland Permit by Notification Information. Each permit by notification form filed with the department shall include the following information:

(a) The information required by under RSA 483-B:5-b, I(a), reprinted in Appendix C, subject to the following:

(1) The name of the property owner shall be the legal name of each property owner as it appears on the deed of record;

(2) The address of the property owner shall be the property owner’s regular mailing address; and

(3) The waterbody named shall be the waterbody that causes the property to be subject to RSA 483-B; and

(b) The additional contact and project information listed below:

(1) The property owner’s daytime telephone number and e-mail address, if any;
(2) If an agent is filing the notification on behalf of the property owner, the agent’s name, mailing address, daytime telephone number, and e-mail address, if any, together with a statement signed by the property owner certifying that the property owner has authorized the agent to act on the property owner’s behalf for purposes of the notification;

(3) A narrative description of the project;

(4) The total area of protected shoreland to be impacted by the project in square feet;

(5) The area of net change in impervious surface resulting from the project in square feet; and

(6) An initialed agreement to adhere to those conditions applicable to all projects as described in Env-Wq 1406.19.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.18 Signatures Required.

(a) The property owner and the agent, if other than the property owner, shall sign the notification form.

(b) The signature(s) shall constitute certification that:

   (1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer;

   (2) The signer understands that any permit by notification obtained based on false, incomplete, or misleading information is not valid;

   (3) The project as proposed complies with the minimum standards established in RSA 483-B:9, V and will be constructed in strict accordance with the proposal;

   (4) The signer accepts the responsibility for understanding and maintaining compliance with RSA 483-B and these rules;

   (5) The signer understands that an accepted shoreland permit by notification shall not exempt the work proposed from other state, local, or federal approvals;

   (6) The signer understands that incomplete notifications shall be rejected and the notification fee shall not be returned.

   (7) The signer is subject to the applicable penalties in RSA 641, Falsification In Official Matters.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1406.19 Acceptance or Rejection of Shoreland Permit by Notification.

(a) Upon receipt of a filing under Env-Wq 1406.16, the department shall proceed in accordance with RSA 483-B:5-b, V(d).

(b) The department shall accept a shoreland permit by notification if all of the following are true:

   (1) The notification is complete as specified in RSA 483-B:5-b, I(a) and Env-Wq 1406.16;

   (2) The project, during and after construction if constructed as proposed, will comply with all applicable criteria of these rules and RSA 483-B as required by RSA 483-B:3; and

   (3) There is no evidence that work has already been done for which a permit is required but was not obtained.
(c) If the department determines that any of the criteria in (b), above, is not met, department shall reject the permit by notification.

(d) The department shall provide written notification of the acceptance or rejection of the permit by notification to the property owner and agent as specified in RSA 483-B:5-b, V(d). If the permit by notification is rejected, the notice shall specify the reason(s) for the rejection.

(e) If a permit by notification is accepted, then:
   
   (1) The plans submitted to the department with that notification shall be considered part of the permit by notification; and
   
   (2) All work shall be done in accordance with the accepted plans.

(f) All permits by notification shall be subject to the conditions specified in Env-Wq 1406.20.

Source.  (See Revision Notes #1 and #2 at chapter heading)  
#12062, eff 12-17-16

Env-Wq 1406.20 Conditions Applicable to All Projects in the Protected Shoreland. The following conditions shall apply to all projects in the protected shoreland, in addition to any project-specific conditions included pursuant to Env-Wq 1406.15 and regardless of whether a permit is obtained:

(a) Erosion and siltation control measures shall:
   
   (1) Be installed prior to the start of work;
   
   (2) Be maintained throughout the project; and
   
   (3) Remain in place until all disturbed surfaces are stabilized;

(b) Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters;

(c) No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700;

(d) Any fill used shall be clean sand, gravel, rock, or other suitable material; and

(e) For any project where mechanized equipment will be used, orange construction fence shall:
   
   (1) Be installed prior to the start of work at the limits of the temporary impact area as shown on the plans approved as part of a permit or accepted as part of the permit by notification;
   
   (2) Be maintained throughout the project; and
   
   (3) Remain in place until all mechanized equipment has been removed from the site.

Source.  (See Revision Notes #1 and #2 at chapter heading)  
#12062, eff 12-17-16

Env-Wq 1406.21 Issuance and Transferability.

(a) Subject to (b), below, the department shall issue a shoreland permit in the name of the owner(s) of the property on whose land the project is located.

(b) If the applicant is not the property owner or the agent for the property owner, but has a financial or other legal interest in the property that will arise after issuance of the permit but prior to commencement
of the activity covered by the permit, the department shall issue the permit in the applicant’s name directly if
so requested in writing signed by the property owner and the applicant.

(c) The department shall transfer a shoreland permit for a project that is not completed from one
owner to a new owner upon request of the new owner in accordance with (d) through (f), below.

(d) Prior to requesting a transfer of the shoreland permit, the new owner(s) shall:

(1) Read, view, and possess the original or a legible copy of the shoreland permit, including all
plans and conditions included pursuant to Env-Wq 1406.15; and

(2) Agree to abide by the terms and conditions of the shoreland permit.

(e) To request the transfer of a shoreland permit, the new owner(s) shall submit the following to the
department in writing:

(1) The shoreland permit number;

(2) Identification of the owner(s) listed on the issued shoreland permit;

(3) Identification of the person(s) to whom the shoreland permit is being transferred;

(4) Recording information of the deed that transferred ownership of property, including the
names of the grantor, grantee, town, county, registry and book and page numbers;

(5) The location of the property, by tax map and lot number and street address and municipality;

and

(6) The following statement, agreed to and signed by the new owner(s):

“I/we, the undersigned, certify that I am/we are the present owner(s) of the property formerly
of (name of former owner) and that I/we possess and have read the shoreland permit,
including all plans and conditions included pursuant to Env-Wq 1406.15(c). I/we agree that
I/we will abide by the previously-issued permit. I/we fully understand that the activities
covered by the permit must be completed in strict accordance with the permit unless an
amendment is applied for and granted. My/Our Title Reference is Book (number) Page
(number), (County) Registry of Deeds, and briefly is for land at (street address) in (town),
New Hampshire.”

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1406.22 Duration of Shoreland Permit; Amendments.

(a) A shoreland permit issued under RSA 483-B:5-b shall expire 5 years from the date of issuance as
specified on the permit.

(b) The holder of a shoreland permit who wishes to make changes to a project after the department
has issued the permit shall:

(1) Apply for an amended permit in accordance with (c), below, if the changes meet the criteria
specified in (e), below; or

(2) Apply for a new permit in accordance with Env-Wq 1406, if the changes do not meet the
criteria specified in (e), below.

(c) A permit holder shall request an amendment to an issued shoreland permit by submitting the
following to the department in writing:

(1) A copy of the permit that is sought to be amended;
(2) Those components of a complete original application that differ from the application originally submitted;

(3) A list that identifies each specific change to the project, with a cross-reference to where on the submitted documents that change is reflected and how it is reflected; and

(4) A statement signed by the permit holder certifying that the proposed changes meet all of the criteria specified in (e), below.

(d) The department shall review an amendment request in accordance with RSA 483-B:5-b, V.

(e) A shoreland permit shall be amended only if the proposed changes meet all of the following criteria:

(1) There is no increase in impervious area;

(2) There is no reduction in any set-back to the reference line;

(3) There is no increase in disturbed area or decrease in the area to be maintained in an unaltered state;

(4) The work can be completed prior to the expiration date of the original permit; and

(5) The project as revised would have been approved under Env-Wq 1406.15 if the revised project had been submitted originally.

(f) If the project as revised meets the criteria specified in (e), above, the department shall issue an amended permit. The issuance of an amended permit shall not extend the expiration date.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

PART Env-Wq 1407 EMERGENCY PROCEDURES

Env-Wq 1407.01 Emergency Authorizations.

(a) A property owner may request an authorization to act on an emergency basis pursuant to this section in lieu of filing an application under Env-Wq 1406.06 if:

(1) A threat to public safety or public health exists or significant damage to private property is imminent as a result of an occurrence beyond the control of the property owner, such as a natural disaster;

(2) The request for the emergency authorization is made within one week of discovering the need for the emergency authorization; and

(3) The work covered by the emergency authorization is limited to temporary stabilization of the property or other mitigation of the immediate threat, such as removal of hazardous or potentially hazardous materials.

(b) The property owner or property owner’s agent shall request an emergency authorization by providing the following information to the department by telephone, e-mail, or fax:

(1) The name and daytime telephone number of the individual requesting the permit, and, if available, an e-mail address and fax number;

(2) A description of the need for the emergency authorization; and

(3) A description of the work to be performed and a schedule for the work.

(c) If a request is made by telephone, the property owner or property owner’s agent shall provide the information required by (b), above, by e-mail or fax as soon as possible but no later than 24 hours after the
initial request.

(d) The department shall:

(1) Issue an emergency authorization when necessary to mitigate an immediate threat to public health or safety or personal property; and

(2) Keep a record of each emergency authorization issued.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1407.02 Work During Emergencies Without Prior Authorization.

(a) Subject to (b), below, work without a permit issued under Env-Wq 1406 or an emergency authorization issued under Env-Wq 1407.01 shall be allowed during a natural disaster if the work:

(1) Was initiated and completed during a natural disaster; and

(2) Is limited to that work necessary to mitigate an immediate threat or stabilize a property.

(b) If work is done pursuant to (a), above, the owner of the property where such work occurred, or the property owner’s agent, shall report the following information to the department as soon as practicable but no later than 30 days after commencing the work:

(1) The name and daytime telephone number of the individual reporting the information, and, if available, an e-mail address and fax number;

(2) A description of the need for the work to be done on an emergency basis; and

(3) A description of what work was done and when the work began and was completed.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1407.03 Action After Emergency. An application as specified in Env-Wq 1406.06 shall be submitted for any permanent repairs, restoration, or other activities proposed to be undertaken after the immediate threat has been abated and the property has been stabilized.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

PART Env-Wq 1408 REPLACEMENT OR REDEVELOPMENT

Env-Wq 1408.01 Replacement of Pre-existing Nonconforming Structures Damaged By Accidental Means.

(a) The owner of any pre-existing nonconforming structure damaged by accidental means who wishes to rebuild the structure in its existing location shall begin construction within 2 years of the date of the accident or such shorter period of time as is specified in local ordinances or regulations.

(b) For purposes of these rules, the time period specified in (a), above, shall not run during the pendency of any legal action that is intended to or has the effect of precluding the owner from rebuilding the structure.

(c) If the owner does not begin construction to replace the pre-existing nonconforming structure within the time period established in (a), above, any primary structure thereafter constructed shall conform to all applicable set-back requirements.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
Env-Wq 1408.02 Replacement of Pre-existing Nonconforming Structures Other Than Those Damaged By Accidental Means. Any pre-existing nonconforming primary structure shall be repaired, renovated, or replaced in kind in accordance with RSA 483-B:11 only if the property owner can demonstrate that the structure has been maintained in a functional and intact condition in the 2 years immediately prior to the replacement.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1408.03 Expansions Within The Waterfront Buffer.

(a) As specified in RSA 483-B:11, I, a nonconforming structure may be expanded within the waterfront buffer only if:

(1) The structure is not extended closer to the reference line; and

(2) The structure or the property is made more nearly conforming, as defined in RSA 483-B:11, II.

(b) As specified in RSA 483-B:11, V, no alteration shall be made to an existing structure between the primary building line and the reference line that extends the structure closer to the public water, except that a deck or open porch extending a maximum of 12 feet towards the reference line may be added to nonconforming structures erected prior to July 1, 1994.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1408.04 Conversion of Decks and Porches Prohibited. In accordance with RSA 483-B:11, I, no deck or porch located between the primary building line and the reference line shall be converted to become part of the primary living space.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1408.05 Redevelopment or Expansion of Nonconforming Structures. Any property owner who wishes to redevelop or expand a nonconforming structure within the waterfront buffer pursuant to RSA 483-B:11, II, shall submit the following to the department with the application required by Env-Wq 1406.06:

(a) The footprint(s), impervious area(s), and location(s) of all existing structure(s) within the protected shoreland;

(b) The footprint(s), impervious area(s), and location(s) of all proposed structures within the protected shoreland; and

(c) An explanation of how the project:

(1) Is more nearly conforming than the existing structure(s), as that phrase is defined in RSA 483-B:11, II, with reference to the information provided pursuant to (a) and (b), above, and any other supporting details that are relevant to making the proposal “more nearly conforming”; and

(2) Will provide at least the same degree of protection to the public waters.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1408.06 Decision on Application that Includes Redevelopment or Expansion of Nonconforming Structures.

(a) The department shall approve an application that includes the redevelopment or expansion of a nonconforming structure under RSA 483-B:11, I, upon finding that:
(1) The requirements specified in Env-Wq 1406.01 through Env-Wq 1406.14 and any applicable criteria specified in Env-Wq 1405 are met;

(2) The proposal to redevelop or expand the nonconforming structure meets the intent of RSA 483-B; and

(3) All applicable criteria in RSA 483-B:11 are met.

(b) The department shall notify the applicant in writing of its decision on the redevelopment or expansion in conjunction with its decision on the shoreland permit application. If the request is denied, the department shall identify the specific reason(s) for the denial.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

PART Env-Wq 1409 WAIVERS FROM THE MINIMUM STANDARDS

Env-Wq 1409.01 Requests for Waivers of Minimum Standards. Each applicant for a waiver under RSA 483-B:9, V(i) shall provide the following information with the application required by Env-Wq 1406.06:

(a) A statement of the waiver requested, with specific reference to the paragraph or subparagraph of RSA 483-B:9, V for which the request is being made;

(b) An explanation of how the applicable criteria of Env-Wq 1409.02 have been met;

(c) If the request is for a reasonable accommodation of the needs of an individual with one or more disabilities, a statement signed by the physician who is attending the individual for the disability or disabilities certifying that the impacts or structures for which the waiver is being requested are necessary to accommodate the individual’s disability or disabilities; and

(d) Verification that all of the abutters have been notified of the proposed project as required by Env-Wq 1406.13.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1409.02 Decision on Waiver Request.

(a) The department shall approve a request for a waiver under RSA 483-B:9, V(i) that is not requested to accommodate the reasonable needs of an individual or individuals with disabilities upon finding that:

(1) Strict compliance with the minimum standards of RSA 483-B:9, V will provide no material benefit to the public; and

(2) Waiving the standard will have no material adverse effect on the environment or the natural resources of the state.

(b) The department shall approve a request for a waiver under RSA 483-B:9, V(i) for a reasonable accommodation of needs of an individual or individuals with disabilities if:

(1) The proposal is adequate to ensure that the intent of RSA 483-B is met; and

(2) The statement submitted pursuant to Env-Wq 1409.01(c) is sufficient to demonstrate that the waiver is necessary to accommodate the individual’s disability.
(c) The department shall notify the applicant in writing of its decision in conjunction with the decision on the application for shoreland permit. If the request is denied, the department shall identify the specific reason(s) for the denial.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

PART Env-Wq 1410 URBANIZED SHORELAND EXEMPTION

Env-Wq 1410.01 Definitions.

(a) “Historic”, for purposes of Env-Wq 1410.03(a) and Env-Wq 1410.05(b), means the time period from 1971 to the date of the application or such longer period as the applicant designates.

(b) “Applicant” means the entity that is eligible under RSA 483-B:12, I or IV to apply for, and that does apply for, an urbanized shoreland exemption.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1410.02 Eligibility for Urbanized Shoreland Exemption.

(a) Pursuant to RSA 483-B:12, I, the governing body of a municipality may, in its discretion, request the commissioner to exempt all or a portion of the protected shoreland within its boundaries from the provisions of this chapter if the governing body finds that special local urbanization conditions exist in the protected shoreland for which the exemption is sought.

(b) Pursuant to RSA 483-B:12, IV, the Pease development authority, division of ports and harbors, may, in its discretion, request the commissioner to exempt all or a portion of any land purchased, leased, or otherwise acquired by it pursuant to RSA 12-G:39.

Source. (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1410.03 Evidence.

(a) Pursuant to RSA 483-B:12, II, the applicant for an urbanized shoreland exemption shall present evidence of existing and historic patterns of building and development in the protected shoreland, which shall address the following:

1. Current and historic building density;
2. Current commercial or industrial uses;
3. Municipal or other public utilities; and
4. Current municipal land use regulations which affect the protected shoreland.

(b) The applicant for an urbanized shoreland exemption shall also provide:

1. The number of structures in sight from the water body;
2. Density allowed under current local zoning ordinances;
3. Extent of non-residential land use currently existing;
4. One or more maps that clearly define the boundaries of the area to be exempted, based on lot lines as shown on a municipal tax map; and
(5) If available, a recent aerial photograph of the area.

Env-Wq 1410.04 Delivery. The applicant shall send the evidence directly to the office of energy and planning with a copy to the commissioner.

Env Ws 1410.05 Time Frames for Decisions.

(a) The department shall request the office of energy and planning to submit a written recommendation to the commissioner within 30 working days of receipt of a complete request.

(b) The commissioner shall approve the request if the evidence required by Env-Wq 1410 shows that the municipality has existing and historic patterns of building and development in the protected shoreland.

(c) The commissioner shall issue written findings in support of the decision within 30 working days from receipt of the recommendation.

PART Env-Wq 1411 CONSISTENCY OF STATE AND LOCAL ACTION ON SHORELAND ZONE PROJECTS

Env-Wq 1411.01 Required Information. The following information shall be included on all plans submitted to any state or local agency for any project that includes work in the protected shoreland:

(a) The reference line;

(b) The primary building line, 50 feet from the reference line; and

(c) Any local setbacks.

Env-Wq 1411.02 Consistency Required; Notice Required.

(a) As specified in RSA 483-B:3, state and local permits for work within the protected shoreland zone shall be issued only when consistent with RSA 483-B.

(b) State and local permits for work within the protected shoreland zone shall include a notice that a state shoreland permit under RSA 483-B may be required.

PART Env-Wq 1412 SHORELAND RESTORATION

Env-Wq 1412.01 Applicability. This part shall apply to all plans for restoration of a waterfront buffer or natural woodland buffer that are submitted to the department for approval.
Env-Wq 1412.02  **Definition.** For purposes of this part, the following definition shall apply:

(a) “Mat” means a density of no less than one individual plant per square foot.

*Source.* (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1412.03  **Restoration Plan Contents.** A restoration plan shall include the following:

(a) The information specified in Env-Wq 1406.09;

(b) The list of species of plants proposed for replanting, using scientific names or common names;

(c) The number and distribution of plants proposed for replanting, based on the matrix specified in Env-Wq 1412.04;

(d) A plan of the waterfront buffer, shown with vegetation sufficient to meet the points required by RSA 483-B:9, V(a)(2)(D);

(e) A plan of the natural woodland buffer, shown with the amount of impervious surface, amount of disturbed area to be restored, and the amount of area allowed to revert to an unaltered state;

(f) All existing and proposed structures, including but not limited to the primary structure and accessory structures; and

(g) A schedule for implementing the restoration and monitoring the success of the restoration over at least 2 growing seasons.

*Source.* (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1412.04  **Planting Matrix.** When restoring the waterfront buffer, the following shall apply to each segment to reach not less than the total points required by RSA 483-B:9, V(a)(2)(D) in that segment:

(a) Trees and saplings shall be assigned points based on their diameter measured at 4½ feet off the ground in accordance with RSA 483-B:9, V(a)(2)(D)(i), as reprinted in Appendix C.

(b) Subject to (c), below, ground cover in the form of shrubs planted as individual plants or clusters shall be assigned points in accordance with RSA 483-B:9, V(a)(2)(D)(ii), as reprinted in Appendix C, and the following:

1. A one-gallon to 2-gallon shrub shall equal one-third of a point;
2. A 3-gallon to 4-gallon shrub shall equal one-half of a point; and
3. Ground cover as specified in RSA 483-B:9, V(a)(2)(D)(ii) shall be planted in the form of sod or mat; and

(c) No points shall be credited for replacement of ground cover removed in violation of RSA 483-B:9, V(a)(2)(C).

*Source.* (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1412.05  **Plan Approval Criteria.** The department shall approve a restoration plan that meets the following criteria:

(a) Subject to (c), below, replacement plants shall consist of the native species that are as close as possible to the species present prior to vegetation removal and may be chosen from the DES Native Shoreland/Riparian Buffer Plantings for New Hampshire included in and available as noted in Appendix D to these rules;
(b) Subject to (c), below, replacement plants shall have spatial and compositional diversity that replicates the previously existing waterfront buffer or natural woodland buffer;

(c) No species listed on the New Hampshire prohibited invasive species list developed pursuant to RSA 430:53, III or the New Hampshire restricted invasive species list developed pursuant to RSA 430:53, IV shall be planted, even if such species existed on the property prior to the property being cleared;

(d) Within the waterfront buffer, replacement vegetation and ground cover shall be based on the trees, saplings, and ground cover that existed before removal. If the quantity and type of removed vegetation cannot be determined, the area shall be planted with native trees, saplings, or natural ground cover in sufficient quantity, type, and location either to meet the minimum score per RSA 483-B:9, V(a)(2)(D) or to provide at least an equivalent level of protection as would be afforded by native trees, saplings, and natural ground cover that met the minimum score;

(e) Replacement trees shall be placed at least 5 feet apart on center;

(f) No changes to surface drainage shall be made unless a sediment and erosion control plan that meets the requirements specified in Env-Wq 1500 is submitted with the restoration plan; and

(g) The requirements of Env-Wq 1412.04 shall be met.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

PART Env-Wq 1413 WAIVERS FROM RULES

Env-Wq 1413.01 Purpose. The purpose of these rules is to accommodate those situations where strict adherence to the rules would not be in the best interest of the public or the environment.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1413.02 Procedures.

(a) Any person who is or would be directly and adversely affected by the strict application of a rule in Env-Wq 1400 may request a waiver thereof.

(b) Each request for a rule waiver shall be filed in writing.

(c) Each request for a rule waiver shall include the information specified in Env-Wq 1413.03.

(d) All requests for a rule waiver that are submitted as part of an application for a shoreland permit under Env-Wq 1406 shall be submitted with the application, or as soon thereafter as the need for the rule waiver is identified by the applicant or the department.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1413.03 Content and Format of Requests.

(a) The person requesting the rule waiver shall provide the following information:

(1) The name, mailing address, daytime telephone number, and e-mail address, if any, of:

a. The property owner; and

b. The applicant, if other than the property owner;

(2) The location of the property to which the rule waiver request relates, if other than the
mailing address of the property owner or applicant;

(3) The specific section number of each rule for which a waiver is sought;

(4) A full explanation of why a rule waiver is being requested, including an explanation of the operational and economic consequences of complying with the rule as written;

(5) If applicable, a full explanation of the alternate that is proposed to be substituted for the requirement in the rule, including written documentation and/or data to support the alternative; and

(6) A full explanation of why the applicant believes that having the rule waiver granted will meet the criteria in Env-Wq 1413.04.

(b) The property owner and the person requesting the rule waiver, if other than the property owner, shall sign the request.

(c) The signature(s) shall constitute certification that:

(1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and

(2) The signer understands that:

a. Any waiver granted based on false, incomplete, or misleading information shall be subject to revocation; and

b. The signer is subject to the applicable penalties in RSA 641, Falsification In Official Matters.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1413.04 Criteria.

(a) Subject to (b), below, a request for a rule waiver shall be granted if:

(1) Granting the request will not result in:

a. An adverse effect to the environment or natural resources of the state, public health, or public safety; or

b. An impact on abutting properties that is more significant than that which would result from complying with the rule; and

(2) One or more of the following conditions is satisfied:

a. Granting the request is consistent with the intent and purpose of the rule being waived; or

b. Strict compliance with the rule will provide no benefit to the public and will cause an operational or economic hardship to the applicant.

(b) No rule waiver shall be granted if the effect of the waiver would be to waive or modify a statutory requirement.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16

Env-Wq 1413.05 Decisions. The department shall notify the person requesting the waiver of the decision in writing. If the request is denied, the department shall identify the specific reason(s) for the denial.

Source. (See Revision Notes #1 and #2 at chapter heading)
#12062, eff 12-17-16
PART Env-Wq 1414  SUSPENSION OR REVOCATION OF PERMITS OR WAIVERS

Env-Wq 1414.01  Purpose.  The purpose of this part is to establish the procedures to suspend or revoke a shoreland permit issued under Env-Wq 1406, a redevelopment or expansion request pursuant to Env-Wq 1408, a waiver of the minimum standards granted under Env-Wq 1409, or a rule waiver issued under Env-Wq 1413.

Source.  (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1414.02  Definitions.  For purposes of this part, the following definitions shall apply:

(a) “Approval” means a shoreland permit issued under Env-Wq 1406, a redevelopment or expansion request pursuant to Env-Wq 1408, a waiver of the minimum standards granted under Env-Wq 1409, or a rule waiver issued under Env-Wq 1413, as applicable to a particular proceeding; and

(b) “Recipient” means the person to whom the approval was issued or the person’s successor in interest.

Source.  (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16

Env-Wq 1414.03  Basis and Procedures for Suspension or Revocation.

(a) Any approval issued by the department shall be issued based on the presumption that the information submitted to obtain the approval is true, complete, and not misleading.

(b) If, after the issuance of an approval, the department receives information indicating that the information upon which the approval was based was false, incomplete, or misleading, the department shall notify the recipient in accordance with RSA 541-A:31, III of the date, time and place of a hearing at which the recipient shall be given an opportunity to show cause why the approval should not be revoked.

(c) The hearing shall be conducted in accordance with RSA 541-A:31 and Env-C 200.

(d) After the hearing, the department shall revoke the approval if the department determines that:

(1) The approval would not have been issued if the information submitted had been true, complete, and not misleading; and

(2) The project for which the approval was obtained cannot be made to conform to applicable requirements.

(e) After the hearing, the department shall suspend the approval if the department determines that:

(1) The approval would have been issued if the information submitted had been true, complete, and not misleading; and

(2) The project for which the approval was obtained would conform with applicable requirements if the deficiencies are corrected.

(f) If an approval is suspended pursuant to (e), above, the department shall reinstate the approval upon receiving proof from the recipient that the project meets applicable requirements for approval.

(g) The department shall notify the recipient in writing of its decision. If the decision is to suspend or revoke the approval, the department shall specify the reason(s) for the decision.

Source.  (See Revision Notes #1 and #2 at chapter heading) #12062, eff 12-17-16
APPENDIX A: STATE STATUTES IMPLEMENTED

<table>
<thead>
<tr>
<th>Rule Section(s)</th>
<th>State Statute(s) Implemented</th>
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<tbody>
<tr>
<td>Env-Wq 1401</td>
<td>RSA 483-B:1; RSA 483-B:2</td>
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<td>RSA 483-B:4; RSA 483-B:17, VIII and IX</td>
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<tr>
<td>Env-Wq 1403</td>
<td>RSA 483-B:5; RSA 483-B:9, V(a) and (b); RSA 483-B:17, III</td>
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<tr>
<td>Env-Wq 1403.03; 1403.04; 1403.05(a)</td>
<td>RSA 483-B:9, V(a) &amp; (b); RSA 483-B:17, III</td>
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<td>Env-Wq 1404.01</td>
<td>RSA 483-B:9, V(c)</td>
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<td>Env-Wq 1404.02</td>
<td>RSA 483-B:9, V(d) &amp; (g)</td>
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<td>Env-Wq 1405</td>
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<td>Env-Wq 1406</td>
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<tr>
<td>Env-Wq 1407</td>
<td>RSA 483-B:5-b; RSA 483-B:17, I and X</td>
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<tr>
<td>Env-Wq 1408</td>
<td>RSA 483-B:11</td>
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<td>Env-Wq 1409</td>
<td>RSA 483-B:9, V(i)</td>
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<td>Env-Wq 1410</td>
<td>RSA 483-B:12; RSA 483-B:17, II</td>
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<tr>
<td>Env-Wq 1411</td>
<td>RSA 483-B:3; RSA 483-B:6</td>
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<tr>
<td>Env-Wq 1412</td>
<td>RSA 483-B:9, V(a) and (b); RSA 483-B:17, IX</td>
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<tr>
<td>Env-Wq 1413</td>
<td>RSA 541-A:22, IV</td>
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<tr>
<td>Env-Wq 1414</td>
<td>RSA 541-A:16, I(b)</td>
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</table>

APPENDIX B: STATUTORY DEFINITIONS

RSA 431:3
VII. “Fertilizer” means any substance containing one or more recognized plant nutrients which is used for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth, except unmanipulated animal and vegetable manures, marl, lime, limestone, wood ashes, and other products exempted by rule by the commissioner. "Fertilizer” shall not include any horticultural growing medium as defined in RSA 433-A:3, VI.

RSA 483-B:4
I. “Abutter” means any person who owns property that is immediately contiguous to the property on which the proposed work will take place, or who owns flowage rights on such property. The term does not include those properties separated by a public road or more than 1/4 mile from the limits of the proposed work. If contiguous properties are owned by the person who is proposing the work, then the term includes the person owning the next contiguous property, subject to the 1/4 mile limitation.

II. “Accessory structure” means a structure, as defined in paragraph XXII of this section, on the same lot and customarily incidental and subordinate to the primary structure, as defined in paragraph XIV of this section; or a use, including but not limited to paths, driveways, patios, any other improved surface, pump houses, gazebos, woodsheds, garages, or other outbuildings.

IV. “Commissioner” means the commissioner of the department of environmental services or designee.

V. “Department” means the department of environmental services.

VI. “Disturbed area” means an area in which natural vegetation is removed, exposing the underlying soil.

VII. “Ground cover” means any herbaceous plant or any woody seedling or shrub generally less than 3 feet in height. Ground cover shall not include lawns, landscaped areas, gardens, invasive species as listed by the department of agriculture, markets, and food in accordance with RSA 430:53, III, exotic species as designated by rule of the department of environmental services in accordance with RSA 487:24, VII, imported organic or stone mulches, or other artificial materials.

VII-b. “Impervious surface” means any modified surface that cannot effectively absorb or infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, and unless designed to effectively absorb or infiltrate water, decks, patios, and paved, gravel, or crushed stone driveways, parking areas, and walkways.
VII-c. “Horticultural professional” means any arborist, landscape architect, or gardening consultant whose function is that of providing services relative to horticulture.

VIII. “Lot of record” means a legally created parcel, the plat or description of which has been recorded at the registry of deeds for the county in which it is located.

X. “Municipality” means a city, town, village district if specifically authorized to zone by the legislature, or county in respect to unincorporated towns or unorganized places or any combination thereof pursuant to RSA 53-A.

XI-c. “Nonconforming lot of record” means an existing lot which does not conform to the provisions of this chapter.

XI-d. “Nonconforming structure” means a structure that, either individually or when viewed in combination with other structures on the property, does not conform to the provisions of this chapter, including but not limited to the impervious surface limits of RSA 483-B:9, V(g).

XI-e. “Ordinary high water mark” means the line on the shore, running parallel to the main stem of the river, established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the immediate bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. Where the ordinary high water mark is not easily discernable, the ordinary high water mark may be determined by the department of environmental services.

XII. “Person” means a corporation, company, association, society, firm, partnership or joint stock company, as well as an individual, a state, and any political subdivision of a state or any agency or instrumentality thereof.

XIII. “Primary building line” means a setback for primary structures of 50 feet from the reference line.

XIV. “Primary structure” means a structure as defined in paragraph XXII of this section that is central to the fundamental use of the property and is not accessory to the use of another structure on the same premises.

XV. “Protected shoreland” means, for natural, fresh water bodies without artificial impoundments, for artificially impounded fresh water bodies, except private garden water features and ponds of less than 10 acres, and for coastal waters and rivers, all land located within 250 feet of the reference line of public waters. For river segments of third order or lower designated as protected under RSA 483:15 which are either designated after or for which specific exemptions are repealed after December 31, 2015, "protected shoreland" means all land located within 50 feet of the reference line of public water.

XVI. “Public waters” shall include:

(a) All lakes, ponds, and artificial impoundments greater than 10 acres in size.

(b) Coastal waters, being all waters subject to the ebb and flow of the tide, including the Great Bay Estuary and the associated tidal rivers.

(c) Rivers, meaning all year-round flowing waters of fourth order or higher and all rivers and river segments designated as protected under RSA 483:15. Stream order shall be determined using the New Hampshire hydrography dataset archived by the geographically referenced analysis and information transfer system (GRANIT) at the complex systems research center of the university of New Hampshire, and developed by GRANIT in collaboration with the department of environmental services. A listing of the streams of fourth order and higher shall be prepared and periodically updated by the GRANIT at the complex systems research center of the university of New Hampshire and delivered to the commissioner 30 days after the effective date of this subparagraph.

XVII. “Reference line” means:

(a) For all lakes, ponds, and artificial impoundments greater than 10 acres in size, the surface elevation as listed in the Consolidated List of Water Bodies subject to the shoreland water quality protection act as maintained by the department.

(b) For coastal waters, the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide.
(c) For rivers, the ordinary high water mark.

XVIII. “Removal or removed” means girdled, felled, cut, sawed, pruned, pushed over, buried, burned, or any other activity conducted to the extent that it otherwise kills the vegetation.

XVIII-a. “Repeat violation” means a violation that occurs within 3 years of notification by the department of a prior violation, as defined in RSA 483-B:18, I, whether on the same site or by the same person or entity on a second site. Each day of continuing violation after notification of that violation shall be considered a repeat violation.

XVIII-b. “Repair” means work conducted to restore an existing, legal structure by partial replacement of worn, broken, or unsound parts or to fix a specific defect, during which all of the exterior dimensions are intact and remain so at the conclusion of construction.

XVIII-c. “Replace in kind” means the substitution of a new structure for an existing legal structure, whether in total or in part.

XVIII-d. “Replacement system” means a septic system that is not considered new construction under RSA 485-A:29-44 and rules adopted to implement it.

XIX. “Residential unit” means a structure, or portion thereof, providing complete and independent living facilities, including permanent facilities for living, sleeping, eating, cooking, and sanitation which are used in common by one or more persons.

XX. “Sapling” means any woody plant which normally grows to a mature height greater than 20 feet and has a diameter less than 6 inches at a point 4 1/2 feet above the ground.

XX-a. “Shoreland frontage” means the actual shoreland frontage along the water front measured at the reference line.

XXI. “Shrub” means any multi-stemmed woody plant which normally grows to a mature height of less than 20 feet.

XXII. “Structure” means anything constructed or erected for the support, shelter or enclosure of persons, animals, goods, or property of any kind, with a fixed permanent location on or in the ground, exclusive of fences.

XXIII. “Subdivision” means subdivision as defined in RSA 672:14.

XXIV. “Tree” means any woody plant which normally grows to a mature height greater than 20 feet and which has a diameter of 6 inches or more at a point 4 1/2 feet above the ground.

XXIV-b. “Unaltered state” means native vegetation allowed to grow without cutting, limbing, trimming, pruning, mowing, or other similar activities except as needed for renewal or to maintain or improve plant health.

XXV. “Urbanization” means the concentrated development found in the sections of towns or cities where there has been an historic pattern of intensive building for residential, commercial, industrial, or mixed uses such that it contributes to or constitutes the municipality's downtown, community center, or central business district and wherein all vegetative buffers have been depleted, impervious surfaces are in excess of 50 percent, and residential uses are of at least 10 dwelling units per acre.

XXVI. “Water dependent structure” means a structure that is a dock, wharf, pier, breakwater, beach, boathouse, retaining wall, or launching ramp or other similar structure, or any part thereof, built over, on, or in the waters of the state.

APPENDIX C: RSA 483-B SECTIONS INCORPORATED

RSA 483-B:5-b

IV-a. At the time of the permit application, the applicant shall provide postal receipts or copies, verifying that the governing body of the municipality or municipalities in which the property is located and the local river management advisory committee, if the project is within a designated river corridor defined in RSA 483:4, XVIII and contains river and river segments designated in RSA 483:15, and all abutters have been notified of the application by certified mail. Applicants for the construction of public roads, public utility lines and associated structures and facilities, and public water access facilities shall only be required to
provide postal receipts or copies, verifying that the governing body of the municipality or municipalities in which the property is located, and the local river management advisory committee if the project is within a designated river corridor defined in RSA 483:4, XVIII and contains river and river segments designated in RSA 483:15, have been notified of the application by certified mail.

**RSA 483-B:9, V(a)(2)(D)**

(i) Tree and sapling diameters shall be measured at 4 1/2 feet above the ground for existing trees and saplings, or by caliper at a height consistent with established nursery industry standards when nursery stock is to be used, and are scored as follows:

- **Diameter or Caliper--Score**
  - 1 to 3 inches--1
  - Greater than 3 to and including 6 inches--5
  - Greater than 6 to and including 12 inches--10
  - Greater than 12 inches--15

(ii) For the purpose of planting under RSA 483-B:9, V(g)(3), shrubs and groundcover plants shall be scored as follows:

- Four square feet of shrub area--1 point.
- Ground cover, not including mowed lawn--one point for every 50 square feet.
- Shrub and groundcover shall count for at least 15 points and not more than 25 points in each full segment.
# APPENDIX D: NATIVE SHORELAND/RIPARIAN BUFFER PLANTINGS


<table>
<thead>
<tr>
<th>Common Name(s)</th>
<th>Latin Name</th>
<th>Height</th>
<th>Growth Rate</th>
<th>Rooting</th>
<th>Light Preference</th>
<th>Soil Preference</th>
<th>Habitat</th>
<th>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Basswood (American Linden)</td>
<td><em>Tilia americana</em></td>
<td>Medium-Large 60-100’</td>
<td>Moderate</td>
<td>Deep</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist</td>
<td>Rich woods, valleys, gentle slopes</td>
<td>Wildlife: Pileated woodpecker, wood duck, other birds; deer, rabbit, squirrel</td>
</tr>
<tr>
<td>American Beech</td>
<td><em>Fagus grandifolia</em></td>
<td>Medium-Large 60-90’</td>
<td>Slow</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry or Moist</td>
<td>Rich woods, well-drained lowlands</td>
<td><strong>Wildlife</strong>: Blue jay, chickadees, nuthatches, quail, ruffed grouse, tufted titmouse, wild turkey, wood duck, woodpeckers; bear, chipmunk, deer, fox, porcupine, snowshoe hare, squirrel</td>
</tr>
<tr>
<td>Common Name(s)</td>
<td>Latin Name</td>
<td>Height</td>
<td>Growth Rate</td>
<td>Rooting</td>
<td>Light Preference</td>
<td>Soil Preference</td>
<td>Habitat</td>
<td>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</td>
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<tr>
<td>American Hophornbeam (Ironwood)</td>
<td><em>Ostrya virginiana</em></td>
<td>Small 20-40’</td>
<td>Slow</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry or Moist</td>
<td>Rich woods</td>
<td><strong>Wildlife:</strong> Downy woodpecker, mockingbird, purple finch, ring-necked pheasant, rose-breasted grosbeak, ruffed grouse, wild turkey, wood quail; <strong>Food:</strong> Nuts, buds, seeds</td>
</tr>
<tr>
<td>American Hornbeam (Blue Beech/Musclewood)</td>
<td><em>Carpinus caroliniana</em></td>
<td>Small/Shrubby 20-40’</td>
<td>Slow</td>
<td>Moderate</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry, Moist, Flood Tolerant</td>
<td>Rich woods</td>
<td><strong>Wildlife:</strong> Quail, ruffed grouse, wood duck; <strong>Food:</strong> Seeds, buds</td>
</tr>
<tr>
<td>American Mountain Ash</td>
<td><em>Sorbus americana</em></td>
<td>Small Up to 25’</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full/Part Shade or Full-Sun</td>
<td>Dry, Moist</td>
<td>Forested wetlands, rich woods</td>
<td><strong>Wildlife:</strong> Bluebird, brown thrasher, catbird, cedar waxwing, grosbeak, mockingbird, robin, thrushes, wild turkey; <strong>Food:</strong> Fruit, twigs</td>
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<tr>
<td>Common Name(s)</td>
<td>Latin Name</td>
<td>Height</td>
<td>Growth Rate</td>
<td>Rooting</td>
<td>Light Preference</td>
<td>Soil Preference</td>
<td>Habitat</td>
<td>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</td>
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<tr>
<td>Balsam Fir</td>
<td><em>Abies balsamea</em></td>
<td>Small-Medium 40-60'</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Forested wetlands, streambanks, rich woods</td>
<td>Wildlife: Ruffed grouse, songbirds; small mammals, moose</td>
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<td>Food: Seeds</td>
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<tr>
<td>Balsam Poplar</td>
<td><em>Populus balsamea</em></td>
<td>Medium 60-80'</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Moist</td>
<td>Floodplains, riverbanks, streambanks, valleys</td>
<td>Wildlife: Beaver, deer, mouse, snowshoe hare</td>
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<td>Food: Buds, catkins, twigs, foliage</td>
</tr>
<tr>
<td>Big-Toothed Aspen</td>
<td><em>Populus grandidentata</em></td>
<td>Small-Medium 30-60'</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Dry or Moist</td>
<td>Sandy upland soils, floodplain streams; with quaking aspen</td>
<td>Wildlife: Black-capped chickadee, evening grosbeak, purple finch, ruffed grouse, yellow-bellied sapsucker; deer</td>
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<td>Food: Buds, catkins, bark, twigs, and foliage</td>
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<td>Common Name(s)</td>
<td>Latin Name</td>
<td>Height</td>
<td>Growth Rate</td>
<td>Rooting</td>
<td>Light Preference</td>
<td>Soil Preference</td>
<td>Habitat</td>
<td>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</td>
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<tr>
<td>Black Ash</td>
<td><em>Fraxinus nigra</em></td>
<td>Medium 60-80'</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part Shade</td>
<td>Moist, Flood Tolerant</td>
<td>Forested wetlands, streambanks</td>
<td>Wildlife: Songbirds, wood duck; deer, moose, small mammals Food: Fruit, twigs, young leaves</td>
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<tr>
<td>Black Birch (Sweet Birch)</td>
<td><em>Betula lenta</em></td>
<td>Medium 40-60'</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part Shade</td>
<td>Moist</td>
<td>Cool, moist uplands, rich woods</td>
<td>Wildlife: Grouse; deer, rabbit Food: Buds, catkins, seeds</td>
</tr>
<tr>
<td>Common Name(s)</td>
<td>Latin Name</td>
<td>Height</td>
<td>Growth Rate</td>
<td>Rooting</td>
<td>Light Preference</td>
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<tr>
<td>Black Cherry</td>
<td><em>Prunus serotina</em></td>
<td>Medium 40-60'</td>
<td>Moderate</td>
<td>Deep Taproot</td>
<td>Full/Part Shade</td>
<td>Dry or Moist</td>
<td>Rich woods, on many sites except very dry soils</td>
<td>Wildlife: Bluebird, blue jay, brown thrasher, cardinal, catbird, cedar waxwing, common crow, eastern kingbird, evening grosbeak, mockingbird, northern flicker, northern oriole, robin, ruffed grouse, sparrows, thrushes, veery, vireo, yellow-bellied sapsucker; bear, chipmunk, deer, fox, raccoon, squirrel</td>
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<td>Food: Berries, buds, sap</td>
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<td>Common Name(s)</td>
<td>Latin Name</td>
<td>Height</td>
<td>Growth Rate</td>
<td>Rooting</td>
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</table>
| Black Gum (Tupelo)     | *Nyssa sylvatica* | Medium 50-60         | Slow        | No Information Available | Full/Part Shade            | Dry or Moist          | Forested wetlands, floodplains   | Wildlife: Bluebird, cardinal, catbird, chickadee, crow, finches, mallards, robin, ruby-throated hummingbird, ruffed grouse, vireo, wild turkey, woodpeckers, wood duck; honeybees, bear, chipmunk, deer, opossum, squirrel.  
Food: Seeds, sap, nectar. |
| Black Spruce           | *Picea mariana*  | Small Up to 25’      | Slow        | Shallow                  | Full/Part Shade            | Moist, Flood Tolerant  | Bogs, forested wetlands, lake and pond shores | Wildlife: Songbirds, ruffed grouse, spruce grouse; chipmunk, cottontail, deer, porcupine, squirrel.  
Food: Seeds, twigs, nectar, bark. |
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<th>Common Name(s)</th>
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<th>Height</th>
<th>Growth Rate</th>
<th>Rooting</th>
<th>Light Preference</th>
<th>Soil Preference</th>
<th>Habitat</th>
<th>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</th>
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</table>
| Black Willow  | *Salix nigra* | Small-Medium Up to 50’ | Very Fast   | Very Shallow | Full Sun          | Moist, Flood Tolerant | Forested wetlands, lowlands, floodplains | Wildlife: Songbirds and mammals
                   |              |                    |             |              |                  |                               | Food: Buds, catkins                                        |
| Box Elder     | *Acer negundo* | Medium 40-70’      | Very Fast   | Deep, Lateral | Full Sun          | Dry, Moist, Flood Tolerant | Forested wetlands, lowlands, floodplains | Wildlife: Songbirds and mammals
                   |              |                    |             |              |                  |                               | Food: Seeds                                               |
| Eastern Cottonwood | *Populus deltoides* | Medium-Large 80-100’ | Fast        | Shallow     | Full Sun          | Dry or Moist     | Floodplains, streambanks, valleys     | Wildlife: Ruffed grouse
<pre><code>               |              |                    |             |              |                  |                               | Food: Catkins                                             |
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</table>
| Eastern Hemlock | *Tsuga canadensis* | Medium-Large 80-100’ | Moderate    | Shallow Lateral  | Full/Part Shade  | Dry or Moist, Acidic | Cool, moist uplands, ravines, rock outcrops, streambanks | **Wildlife:** Black-capped chickadee, blue and green warblers, crossbill, hawks, juncos, pine siskin, ruffed grouse, veery, wild turkey; deer, chipmunk, cottontail, porcupine, squirrel, white-footed mouse  
**Food:** Twigs, foliage, seeds |
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| Eastern White Pine  | *Pinus strobus* | Large 70-120’ | Moderate    | Shallow | Full Sun          | Dry or Moist, Well-Drained | Forested wetlands, bogs, ravines, cool shady north slopes | Wildlife: Brown creeper, chickadee, crossbill, grosbeak, junco, nuthatch, pine warbler, sparrows, spruce grouse, wild turkey, woodpeckers; beaver, chipmunk, deer, snowshoe hare, squirrel  
Food: Seeds, foliage, twigs; excellent winter food |
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<tbody>
<tr>
<td>Gray Birch (Wire Birch)</td>
<td><em>Betula populifolia</em></td>
<td>Small 20-35’</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry or Moist</td>
<td>Pioneer Species; poorest of sterile soils, sandy or gravelly slopes</td>
<td>Wildlife: American goldfinch, blue jay, chickadee, northern junco, pine siskin, red-tailed hawk, ruffed grouse, sparrows, vireo, yellow-bellied sapsucker, woodpeckers; snowshoe hare</td>
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<td>Food: Seeds, buds</td>
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<tr>
<td>Green Ash</td>
<td><em>Fraxinus pennsylvanica</em></td>
<td>Medium-Large 60-80’</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Forested wetlands, floodplains, streambanks; never on dry soils</td>
<td>Wildlife: Cardinal, finches, evening grosbeak, mourning dove, red-winged blackbird, wood duck; beaver, chipmunk, deer, porcupine, squirrel</td>
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<td>Food: Seeds, foliage</td>
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<tr>
<td>Northern White Cedar (Arborvitae)</td>
<td><em>Thuja occidentalis</em></td>
<td>Medium 30-60’</td>
<td>Slow to Moderate</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Bogs, wetlands, rich woods</td>
<td>Wildlife: Songbirds; small mammals, deer Food: Seeds, needles</td>
</tr>
<tr>
<td>Quaking/Trembling Aspen (Poplar)</td>
<td><em>Populus tremuloides</em></td>
<td>Small-Medium 30-60’</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Dry or Moist</td>
<td>Pioneer Species; dry open woods, sandy or gravelly slopes</td>
<td>Wildlife: Ruffed grouse; beaver, deer, porcupine, snowshoe hare Food: Buds, catkins, bark, twigs, and foliage</td>
</tr>
<tr>
<td>Red Maple</td>
<td><em>Acer rubrum</em></td>
<td>Medium 40-75’</td>
<td>Moderate to Fast</td>
<td>Very Shallow</td>
<td>Full Sun</td>
<td>Dry, Moist, Flood Tolerant</td>
<td>Forested wetlands, stream banks, lakeshores, rich woods,</td>
<td>Wildlife: Cardinal, chickadee, evening and pine grosbeaks, finches, robin, yellow-bellied sapsucker; beaver, chipmunk, deer; opossum, squirrel, snowshoe hare Food: Seeds, buds, bark, twigs, sap</td>
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<td>Common Name(s)</td>
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<tr>
<td>Red Oak</td>
<td><em>Quercus rubra</em></td>
<td>Medium 60-90'</td>
<td>Moderate</td>
<td>Deep Lateral</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry or Moist</td>
<td>Bottom lands, moist slopes,</td>
<td>Wild Life: Blue jay, brown thrasher, ducks, hawks, quail, nuthatch, ruffed grouse, towhee, wild turkey, woodpecker; bear, chipmunk, deer, gopher, opossum, raccoon, squirrel</td>
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<td><strong>Food:</strong> Acorns</td>
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<tr>
<td>Shagbark Hickory</td>
<td><em>Carya ovata</em></td>
<td>Large 70-100'</td>
<td>Fast</td>
<td>Deep Taproot</td>
<td>Full/Part Shade</td>
<td>Dry or Moist</td>
<td>Rich woods, valleys, upland slopes,</td>
<td>Wild Life: Cardinal, field sparrows, pine warbler, rose-breasted grosbeak, rufous-sided towhee, white-breasted nuthatch, wild turkey, wood duck, yellow-rumped warbler; chipmunks, squirrels</td>
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<td><strong>Food:</strong> Nuts</td>
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<tr>
<td>Silver Maple</td>
<td><em>Acer saccharinum</em></td>
<td>Medium 60-80'</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Forested wetlands, riverbanks, floodplains, streambanks</td>
<td>Wildlife: Cardinal, goldfinch, evening and pine grosbeaks, northern oriole, Food: Seeds, buds</td>
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<tr>
<td>Striped Maple (Moosewood/Moose Maple)</td>
<td><em>Acer pensylvanicum</em></td>
<td>Small/Shrubby 20-30'</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part-Shade</td>
<td>Moist</td>
<td>Rich woods, cool moist sites</td>
<td>Wildlife: Ruffed grouse; beaver, deer, moose, porcupine, rabbit, Food: Buds, bark, samaras</td>
</tr>
<tr>
<td>Sugar Maple</td>
<td><em>Acer saccharum</em></td>
<td>Medium-Large 60-100'</td>
<td>Slow</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist</td>
<td>Valleys and uplands; tolerates almost all soil types</td>
<td>Wildlife: Cardinal, goldfinch, grosbeak, ring-necked pheasant, robin, ruffed grouse, vireo; beaver, chipmunk, porcupine; Browse for deer, rabbit, snowshoe hare, Food: Seeds, twigs, bark</td>
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| Swamp White Oak     | *Quercus bicolor*  | Medium       | Fast        | No Information Available | Full/Part Shade | Moist           | Forested wetlands, floodplains, streambanks | Wildlife: Barred owl, blue jay, cardinal, brown thrasher, grouse, mallards, nuthatch, quail, red-bellied woodpecker, red-tailed hawk, ruffed grouse, starling, towhee, wild turkey, yellow-throated wabler, wren; beaver, chipmunk, cottontail, deer, gopher, opossum, raccoon, squirrel, white-footed mouse, wild turkey  
Food: Acorns               |
| Sweet Gum           | *Liquidambar styraciflua* | Medium-Large | Moderate    | No Information Available | Full Sun        | Moist           | Valleys, Lower slopes, mixed woodlands | Wildlife: Mourning dove, finches, junco, wren; beaver, chipmunk, squirrel  
Food: Seeds               |
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</thead>
<tbody>
<tr>
<td>Sycamore (Planetree/Buttonwood)</td>
<td><em>Platanus occidentalis</em></td>
<td>Large 80-100’</td>
<td>Slow</td>
<td>No Information Available</td>
<td>Full/Part Shade or Full-Sun</td>
<td>Dry or Moist</td>
<td>Floodplains, lakeshores, streambanks</td>
<td>Wildlife: Finches; chipmunk, squirrel</td>
</tr>
<tr>
<td>Tamarack (American/Eastern Larch)</td>
<td><em>Larix laricina</em></td>
<td>Small-Medium 40-80’</td>
<td>Variable</td>
<td>Moderate</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Bogs, swamps, wet peaty soils, drier upland loamy soils</td>
<td>Wildlife: Blue jay, kinglets, pheasant, red crossbill, robin, ruffed grouse, spruce grouse, yellow-bellied sapsucker; chipmunk, deer, porcupine, red squirrel, snowshoe hare</td>
</tr>
<tr>
<td>White Ash</td>
<td><em>Fraxinus americana</em></td>
<td>Medium-Large 70-100’</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Rich woods, valleys, slopes, forested wetlands, floodplains, streambanks</td>
<td>Wildlife: Finches, grosbeaks, red-winged blackbird, wood duck; deer, squirrel</td>
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<tr>
<td>White Birch (Paper Birch)</td>
<td>Betula papyrifera</td>
<td>Medium 50-75’</td>
<td>Fast</td>
<td>Shallow</td>
<td>Full Sun</td>
<td>Dry or Moist</td>
<td>Forested wetlands, rich woods</td>
<td>Wildlife: Grouse, siskins</td>
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<td>Food: Seeds, buds</td>
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<tr>
<td>White Oak</td>
<td>Quercus alba</td>
<td>Medium-Large 50-90’</td>
<td>Moderate</td>
<td>Deep</td>
<td>Full/Part Shade</td>
<td>Deep, rich, well-drained</td>
<td>Streambanks, lakeshores, gentle slopes; adapts to almost any condition</td>
<td>Wildlife: Blue jay, brown thrasher, nuthatch, quail, ruffed grouse, towhee, wild turkey, wood duck, woodpecker; chipmunk, bear, deer, gopher, opossum, raccoon, squirrel</td>
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<td>or Full Sun</td>
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<td>Food: Acorns</td>
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<tr>
<td>White Spruce</td>
<td>Picea glauca</td>
<td>Medium 40-70’</td>
<td>Moderate</td>
<td>Shallow</td>
<td>Full/Part Shade</td>
<td>Dry or Moist</td>
<td>Streambanks, lakeshores, rich woods, adjacent slopes</td>
<td>Wildlife: Fishers, martens, snowshoe hare, voles</td>
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| Yellow Birch        | *Betula alleghaniensis* | Medium-Large 70-100’ | Slow        | Shallow/Moderate | Full/Part Shade | Dry or Moist     | Forested wetlands, floodplains, ravines, cool, rich woods of high elevations | Wildlife: Black-capped chickadee, common redpoll, goldfinch, pine siskins, red-shouldered hawk, ring-necked pheasant, ruffed grouse, wild turkey, wood duck, yellow-bellied sapsucker; beaver, chipmunk, deer, porcupine, squirrel, snowshow hare  
**Food:** Catkins, buds, bark, twigs, foliage, seeds                                                                                                                                 |
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</table>
| American Hazelnut | *Corylus americana* | Medium 5-10’ | Moderate    | Full/Part Shade or Full Sun | Moist          | Borders of woods, hillsides, thickets | **Wildlife:** Blue jay, brown thrasher, cedar waxwing, hairy woodpecker, ring-necked pheasant, ruffed grouse; chipmunk, deer, rabbit, squirrel  
**Food:** Nuts, berries, foliage |
| Beaked Hazelnut  | *Corylus cornuta*  | Small 6-10’  | Moderate    | Full/Part Shade or Full Sun | Dry            | Dry places                       | **Wildlife:** Birds, mammals  
**Food:** Beaked nuts |
| Black Chokeberry | *Aronia melanocarpa* | Medium Up to 10’ | Moderate | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Shrub and forested wetlands | **Wildlife:** Cedar waxwing, chickadees, ruffed grouse, sharp-tailed grouse; deer, rabbit, squirrel  
**Food:** Berries, buds |
| Buttonbush      | *Cephalanthus occidentalis* | Medium 6-12’ | Moderate | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Streambanks, lakeshores, ponds, shrub and forested wetlands | **Wildlife:** Ducks, rails, ruby-throated hummingbird; beaver, deer, muskrat, butterflies, honeybees and other insects  
**Food:** Fruit, twigs, leaves, seeds, nectar |
| Chokecherry     | *Prunus virginiana* | Small 3-6’   | Moderate | Full/Part Shade or Full Sun | Dry or Moist    | With Aspen; dry soils            | **Wildlife:** Bluebird, brown thrasher, catbird, crow, eastern kingbird, evening grosbeak, orioles, pileated woodpecker, ring-necked pheasant, robin, rose grosbeak, ruffed grouse, thrushes, yellow-bellied sapsucker; rabbit, squirrel  
**Food:** Berries, buds, foliage |
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<tbody>
<tr>
<td>Elderberry</td>
<td><em>Sambucus canadensis</em></td>
<td>Small-Medium 3-12’</td>
<td>Moderate</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Rich woods, shrub and forested wetlands, marshes</td>
<td>Wildlife: Bluebirds, blue jay, brown thrasher, cardinal, catbird, grosbeak, indigo bunting, pileated woodpecker, ringed-neck pheasant, robin, rose-breasted grosbeak, ruffed grouse, thrushes, wild turkey, woodpecker; chipmunk, deer, rabbit, squirrel. Food: Berries, nectar, twigs, bugs</td>
</tr>
<tr>
<td>Gray Dogwood (Red-Panicle Dogwood)</td>
<td><em>Cornus racemosa</em></td>
<td>Medium 10-15’</td>
<td>Moderate</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry or Moist</td>
<td>Roadsides, thickets, wetlands</td>
<td>Wildlife: Blue jay, cardinal, catbird, cedar waxwing, eastern kingbird, finch, flycatcher, grosbeak, hairy woodpecker, northern flicker, phoebe, pileated woodpecker, pine grosbeak, pine warbler, red-bellied woodpecker, ring-necked pheasant, robin, ruffed grouse, starling, swamp sparrow, tufted titmouse, veery, vireo, wild turkey, wood duck, wood thrush, woodcock, yellow-bellied sapsucker; chipmunk, deer, red fox, rabbit, squirrel. Food: Berries, twigs</td>
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<tr>
<td>Highbush Blueberry</td>
<td><em>Vaccinium corymbosum</em></td>
<td>Medium 5-15’</td>
<td>Slow</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry, Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands, rich woods</td>
<td>Wildlife: Baltimore oriole, bluebird, blue jay, cardinal, chickadee, gray catbird, kingbird, orioles, phoebe, red-bellied woodpecker, ring-necked pheasant, robin, ruffed grouse, rufous-sided towhee, scarlet tanager, tufted titmouse, veery, wild turkey, woodpeckers, wood thrush; black bear, chipmunk, deer, muskrat, rabbit, squirrel, white-footed mouse. Food: Berries, foliage, twigs, buds</td>
</tr>
<tr>
<td>Common Name(s)</td>
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<td>Height</td>
<td>Growth Rate</td>
<td>Light Preference</td>
<td>Soil Preference</td>
<td>Habitat</td>
<td>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</td>
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</table>
| Hobblebush     | Viburnum alnifolium | Medium Up to 10’ | Moderate | Full/Part Shade | Moist, Flood Tolerant | Cool, moist ravines, shady lakeshores | Wildlife: Brown thrasher, cardinal, cedar waxwing, evening grosbeak, robin  
Food: Fruit |  |
| Juniper        | Juniperus communis | Small 1-4’ | Slow | Full Sun | Dry | Dry open land | Wildlife: Cedar waxwing, finches, grosbeaks, grouse, pheasant, robin; deer, rabbit, moose  
Food: Twigs, foliage, fruit |  |
| Lowbush Blueberry | Vaccinium angustifolium | 1-2’ | Slow | Full/Part Shade or Full Sun | Dry or Moist | Bogs, dry sandy flats, rocky slopes | Wildlife: Blue jay, grouse, kingbird, oriole, robin, tanagers, woodpeckers; squirrel  
Food: Berries, foliage, twigs |  |
| Maleberry      | Lyonia ligustris | Up to 10’ | Moderate | Full/Part Shade or Full Sun | Moist | Shrub and forested wetlands, rich woods, gentle slopes | Wildlife: Songbirds and mammals  
Food: Fruit |  |
| Mapleleaf Viburnum | Viburnum acerifolium | Small 3-6’ | Moderate | Full/Part Shade or Full Sun | Moist | Rich woods | Wildlife: Songbirds and mammals  
Food: Fruit |  |
| Mountain Laurel | Kalmia latifolia | Up to 20’ | Moderate | Full/Part Shade or Full Sun | Dry or Moist | Mixed uplands, acid soils | Wildlife: Ruffed grouse; deer  
Food: Foliage, buds, twigs, nectar |  |
<table>
<thead>
<tr>
<th>Common Name(s)</th>
<th>Latin Name</th>
<th>Height</th>
<th>Growth Rate</th>
<th>Light Preference</th>
<th>Soil Preference</th>
<th>Habitat</th>
<th>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</th>
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<tr>
<td><strong>Shrubs</strong></td>
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</tbody>
</table>
| Nannyberry                     | *Viburnum lentago*             | Medium-Large 10-25' | Moderate    | Fall/Part Shade or Full Sun| Dry or Moist    | Rich woods                     | Wildlife: Songbirds, mammals  
Food: Berries                                                  |
| Northern Arrowwood             | *Viburnum recognitum*          | Medium 10-15’       | Moderate    | Fall/Part Shade or Full Sun| Moist, Flood Tolerant | Shrub and forested wetlands, lakeshores, streambanks  
Wildlife: Ruffed grouse, songbirds; bear, chipmunks, raccoon, squirrel, skunk, white-footed mouse  
Food: Berries                                                   |
| Northern Wild Raisin (Witherod Viburnum) | *Viburnum nudum var.cassinoides* | Medium 6-10       | Moderate    | Full/Part Shade            | Moist, Flood Tolerant | Shrub and forested wetlands, valleys, slopes, streambanks  
Wildlife: Brown thrasher, cedar waxwing, flycatcher, ruffed grouse, veery, woodcock, yellow-warbler; chipmunk, deer, muskrat, squirrel, snowshoe hare  
Food: Bark, twigs, buds                                         |
| Pussy Willow                   | *Salix discolor*               | Medium-Large Up to 15’ | Fast       | Full Sun                   | Moist, Flood Tolerant | Shrub and forested wetlands, streambanks, lakeshores  
Wildlife: American goldfinch, ruffed grouse; beaver, hare, rabbits, squirrel  
Food: Buds, catkins, twigs, bark                               |
| Raspberry                      | *Rubus idaeus*                 | Small Up to 6’      | Fast        | Full/Part Shade or Full Sun| Dry or Moist    | Thickets, edges of woods       | Wildlife: Songbirds and mammals  
Food: Fruits                                                     |
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</table>
| Red Osier Dogwood         | *Cornus stolonifera* | Small-Medium 4-8’ | Fast        | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Rich woods, streambanks, lakeshores | **Wildlife:** Bluebird, brown thrasher, cardinal, catbird, cedar waxwing, downy woodpecker, eastern kingbird, finches, northern flicker, pine warbler, purple finch, ringed-neck pheasant, ruffed grouse, vireo, wild turkey, woodpeckers, wood duck; chipmunk, deer, rabbit, squirrel  
**Food:** Berries, twigs |
| Rhodora                   | *Rhododendron canadense* | Small 3-4’ | Slow        | Full Sun         | Moist, Flood Tolerant | Bogs, slopes, rocky summits        | **Wildlife:** Songbirds and mammals  
**Food:** Leaves |
| Shadbush (Serviceberry/June berry) | *Amelanchier spp.* | Large 15-25’ | Slow        | Full/Part Shade or Full Sun | Dry, Moist, Flood Tolerant | Shrub and forested wetlands, floodplains, streambanks, rich woods | **Wildlife:** Bluebird, brown thrasher, cardinal, catbird, cedar waxwing, gray catbird, junco, orioles, red squirrel, robin, ruffed grouse, scarlet tanager, thrushes, veery, woodpeckers; beaver, deer, red squirrel, skunk  
**Food:** Berries, twigs |
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<tr>
<td>Silky Dogwood</td>
<td><em>Cornus amomum</em></td>
<td>Medium 6-10’</td>
<td>Fast</td>
<td>Full/Part Shade or Full Sun</td>
<td>Dry, Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands, streambanks</td>
<td><strong>Wildlife:</strong> Baltimore oriole, black-capped chickadee, blue jay, brown thrasher, cardinal, catbird, cedar waxwing, downy woodpecker, eastern kingbird, flycatcher, mockingbird, northern flicker, pine warbler, purple finch, red-bellied woodpecker, ringed-necked pheasant, robin, rose-breasted grosbeak, ruffed grouse, song sparrow, starlings, tufted Titmouse, wild turkey, wood duck, wood thrush, veery; chipmunk, deer, rabbit, raccoon, skunk, squirrel, white-footed mouse</td>
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<td></td>
<td><strong>Food:</strong> Berries, buds, twigs</td>
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<tr>
<td>Speckled Alder</td>
<td><em>Alnus rugosa</em></td>
<td>Large 15-25’</td>
<td>Fast</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands, streambanks, lakeshores</td>
<td><strong>Wildlife:</strong> Alder flycatcher, catbird, goldfinch, mallards, pheasant, pine siskin, red-winged blackbird, ruffed grouse, swamp sparrow, yellow-bellied flycatcher, woodcock; bear, beaver, deer, cottontail, moose, muskrat, snowshoe hare</td>
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<td><strong>Food:</strong> Buds, twigs, bark, leaves</td>
</tr>
<tr>
<td>Spicebush</td>
<td><em>Lindera benzoin</em></td>
<td>Small-Large 6-17’</td>
<td>Moderate</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands, rich woods</td>
<td><strong>Wildlife:</strong> Catbird, kingbird, pheasant, quail, robin, ruffed grouse, veery, vireo, wood thrush; swallowtail butterflies; deer, muskrat</td>
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<td></td>
<td><strong>Food:</strong> Fruit, buds, twigs, leaves</td>
</tr>
<tr>
<td>Swamp Azalea</td>
<td><em>Rhododendron viscosum</em></td>
<td>Up to 5’</td>
<td>Moderate</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands, rich woods</td>
<td><strong>Wildlife:</strong> Hummingbird; butterflies and other insects; deer</td>
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<td></td>
<td><strong>Food:</strong> Leaves, nectar</td>
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<td>Common Name(s)</td>
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</table>
| Swamp Blackberry | *Rubus hispidus* | Small Up to 6’ | Slow | Full/Part Shade | Dry or Moist | Shrub and forested wetlands, rich woods | **Wildlife:** Blue jay, brown thrasher, cardinal, cedar waxwing, grackle, gray catbird, grosbeak, mockingbird, oriole tanager, ring-necked pheasant, robin, ruffed grouse, rufus-sided thrushes, towhee, veery, wild turkey, woodcock, woodpeckers, wood thrush; chipmunk, cottontail, deer, raccoon, skunk, squirrel  
**Food:** Fruit, canes |
| Sweet Gale | *Myrica gale* | Small 1-4’ | Slow | Full Sun | Moist, Flood Tolerant | Shrub and forested wetlands, lakeshores, streambanks | **Wildlife:** Black-capped chickadee, catbird, common yellowthroat, phoebe, pied-billed grebe, ruffed grouse, tree swallow, tufted titmouse, wild turkey; deer, muskrat  
**Food:** Buds, leaves |
| Sweet Pepperbush | *Clethra alnifolia* | Medium 3-10’ | Moderate | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Shrub and forested wetlands, lakeshores, streambanks | **Wildlife:** Butterflies and other insects  
**Food:** Fruit, seeds, nectar |
| Winterberry Holly (Black Alder) | *Ilex verticillata* | Medium 6-10’ | Slow | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Shrub and forested wetlands, lakeshores, streambanks | **Wildlife:** Cardinal, catbird, cedar waxwing, chickadees, finches, flickers, ruffed grouse, thrushes, vireo, woodpeckers; bear, cottontail, deer, moose, skunk, white-footed mouse  
**Food:** Berries, twigs, leaves |
| Witch Hazel | *Hamamelis virginiana* | Large 20-30’ | Slow | Full/Part Shade or Full Sun | Moist | Dry or rich woods | **Wildlife:** Cardinal, ring-necked pheasant, ruffed grouse, wild turkey; deer, squirrels  
**Food:** Seeds, buds, twigs, bark |
<table>
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<tr>
<th>Common Name(s)</th>
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<th>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boneset</td>
<td>Eupatorium perfoliatum</td>
<td>4-6’</td>
<td>Full Sun</td>
<td>Dry or Moist</td>
<td>Wet meadows, marshes, pond edges</td>
<td>Wildlife: Mallards, ruffed grouse, swamp sparrow, wild turkey; butterflies and other insects</td>
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<td>Food: Nectar</td>
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<tr>
<td>Blue Flag Iris</td>
<td>Iris versicolor</td>
<td>2-3’</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Marshes, lakeshores, streambanks</td>
<td>Wildlife: Blue-winged teal, ruby-throated hummingbird, wood duck; butterflies and other insects; muskrat</td>
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<td></td>
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<td>Food: Nectar, shoots</td>
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<tr>
<td>Bunchberry</td>
<td>Cornus canadensis</td>
<td>3-8”</td>
<td>Full/Part Shade</td>
<td>Moist</td>
<td>Cool, moist woods</td>
<td>Wildlife: Sharp-tailed grouse, spruce-grouse; moose</td>
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<td>Food: Fruit, buds</td>
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<tr>
<td>Cardinal Flower</td>
<td>Lobelia cardinalis</td>
<td>2-4’</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Damp sites, streambanks</td>
<td>Wildlife: Ruby-throated hummingbirds; butterflies and other insects; bear, deer</td>
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<td>Food: Nectar</td>
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<tr>
<td>Cattail (Broad-Leaf)</td>
<td>Typha latifolia</td>
<td>Up to 10’</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Marshes, lakeshores, streambanks</td>
<td>Wildlife: Blue-winged teal, black-crowned night heron, red-winged blackbird, king rail, least and American bittern, mallards, marsh wren, swamp sparrow, Virginia rail; chipmunk, deer, muskrat</td>
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<td>Food: Seed heads</td>
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<tr>
<td>Christmas Fern</td>
<td>Polystichium acrostichoides</td>
<td>Up to 1’</td>
<td>Full/Part Shade</td>
<td>Moist</td>
<td>Rich woods</td>
<td>Wildlife: Ruffed grouse; box turtle, chipmunk, rabbit</td>
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<td>Food: Fronds, filldeheads</td>
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<tr>
<td>Cinnamon Fern</td>
<td>Osmunda cinnamomea</td>
<td>Up to 3’</td>
<td>Full/Part Shade</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands</td>
<td>Wildlife: Brown thrasher, ruby-throated hummingbird, ruffed grouse, yellow throat; chipmunk, deer, white-footed mouse, vole</td>
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<td></td>
<td>Food: Fronds, filldeheads</td>
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<td><strong>Common Name(s)</strong></td>
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<td><strong>Height</strong></td>
<td><strong>Light Preference</strong></td>
<td><strong>Soil Preference</strong></td>
<td><strong>Habitat</strong></td>
<td><strong>Associated Birds &amp; Mammals (Cover, Nesting or Food) &amp; Food Value</strong></td>
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</table>
| Foamflower        | *Tiarella cordifolia* | Up to 1’   | Full/Part Shade      | Moist             | Rich woods  | Wildlife: Songbirds and mammals  
Food: Leaves                                                    |
| Goldenrod (Rough or Grass-Leaved) | *Solidago spp.* | 1-5’       | Full Sun             | Dry or Moist      | Wet meadows, marshes, damp swales  
Wildlife: Goldfinch, junco, ruffed grouse, swamp sparrow; butterflies and other insects; cottontail, meadow mice  
Food: Seeds, nectar                                           |
| Hay-Scented Fern  | *Dennstaedtia punctiloula* | Up to 2’   | Full/Part Shade or Full Sun | Moist             | Woodlands, hillside pastures  
Wildlife: Mammals  
Food: Fronds, fiddleheads                                     |
| Interrupted Fern  | *Osmunda punctiloula* | 3-4’       | Full/Part Shade      | Moist             | Woodland edges, stony dry soil  
Wildlife: Mammals  
Food: Fronds, fiddleheads                                     |
| Jewelweed (Spotted-Touch-Me-Not) | *Impatiens capensis* | 2-5’       | Full/Part Shade or Full Sun | Moist, Flood Tolerant | Shrub and forested wetlands, streambanks  
Wildlife: Ring-necked pheasant, ruffed grouse, ruby-throated hummingbird, veery; butterflies and other insects; white-footed mouse  
Food: Nectar, seeds                                           |
| Joe Pye Weed      | *Eupatorium purpureum* | 2-6’       | Full Sun             | Moist, Flood Tolerant | Wet meadows, marshes, shores  
Wildlife: Ruby-throated hummingbird, swamp sparrow; butterflies and other insects; cottontail, muskrat, raccoon  
Food: Nectar                                                  |
| New England Aster | *Aster novae-angliae* | Up to 5’   | Full Sun             | Dry or Moist      | Wet meadows, wetlands  
Wildlife: Songbirds; butterflies and other insects  
Food: Nectar, seeds                                           |
| Ostrich Fern      | *Pteretis pensylvanica* | Up to 6’   | Full/Part Shade      | Moist             | Shrub and forested wetlands  
Wildlife: Mammals  
Food: Fronds, fiddleheads                                     |
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<tbody>
<tr>
<td>Partridgeberry</td>
<td><em>Mitchella repens</em></td>
<td>Up to 1’</td>
<td>Full/Part Shade</td>
<td>Dry or Moist</td>
<td>Rich woods</td>
<td><em>Wildlife:</em> Grouse, mammals&lt;br&gt;<em>Food:</em> Berries</td>
</tr>
<tr>
<td>Rattlesnake Manna Grass</td>
<td><em>Glyceria canadensis</em></td>
<td>Up to 3’</td>
<td>Full Sun</td>
<td>Moist</td>
<td>Marshes, bogs, forested wetlands, lakeshores</td>
<td><em>Wildlife:</em> Songbirds and mammals&lt;br&gt;<em>Food:</em> Seeds</td>
</tr>
<tr>
<td>Rice Cutgrass</td>
<td><em>Leersia oryzoides</em></td>
<td>Up to 5’</td>
<td>Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Primarily fresh marshes</td>
<td><em>Wildlife:</em> Deer, muskrat, moose&lt;br&gt;<em>Food:</em> Seeds, foliage</td>
</tr>
<tr>
<td>Riverbank Grape (Vine)</td>
<td><em>Vistis riparia</em></td>
<td>Up to 25’</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist</td>
<td>Streambanks</td>
<td><em>Wildlife:</em> Pileated woodpecker, ruffed grouse, wild turkey, wood duck; various mammals&lt;br&gt;<em>Food:</em> Fruit</td>
</tr>
<tr>
<td>Royal Fern</td>
<td><em>Osmunda regalis</em></td>
<td>Up to 5’</td>
<td>Full/Part Shade or Full Sun</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands</td>
<td><em>Wildlife:</em> Mammals&lt;br&gt;<em>Food:</em> Fronds, fiddleheads</td>
</tr>
<tr>
<td>Sensitive Fern</td>
<td><em>Onoclea sensibilis</em></td>
<td>Up to 3’</td>
<td>Full/Part Shade</td>
<td>Moist, Flood Tolerant</td>
<td>Shrub and forested wetlands</td>
<td><em>Wildlife:</em> Black-capped chickadee, ruffed grouse; bear, deer&lt;br&gt;<em>Food:</em> Buds, foliage</td>
</tr>
<tr>
<td>Sheep Laurel</td>
<td><em>Kalmia angustifolia</em></td>
<td>Up to 4’</td>
<td>Fall/Part Shade or Full Sun</td>
<td>Dry, Moist, Flood Tolerant</td>
<td>Shrub and forest wetlands, fields/pastures</td>
<td>Poisonous to livestock.</td>
</tr>
<tr>
<td>Swamp Milkweed</td>
<td><em>Asclepias incarnata</em></td>
<td>Up to 2’</td>
<td>Fall/Part Shade</td>
<td>Moist</td>
<td>Wet meadows, wetlands, thickets, shores</td>
<td><em>Wildlife:</em> Black duck, mallards, red-winged blackbird, ruby-throated hummingbird; Monarch butterfly, other butterflies and insects; muskrat&lt;br&gt;<em>Food:</em> Nectar, seeds</td>
</tr>
<tr>
<td>Common Name(s)</td>
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| Sweet Fern    | Componia perigrina | 1-3’   | Full/Part Shade or Full Sun | Dry           | Open, dry sandy soils and pastures                           | Wildlife: Flickers, sharp-tailed grouse; deer, moose  
Food: Fruit |
| Tall Meadow Rue | Thalictrum polyganum | 2-8’   | Full/Part Shade  | Moist          | Wetlands, wet meadows, streamsides                            | Wildlife: Bees, butterflies  
Food: Nectar |
| Tussock Sedge | Carex stricta | Up to 4” | Full Sun         | Moist, Flood Tolerant | Marshes, rich woods                                          | Wildlife: Finches, ruffed grouse, snipe, sparrows; deer  
Food: Seeds, foliage |
| Twinflower    | Linnaea borealis | Up to 6” | Full/Part Shade  | Moist          | Rich woods                                                   | Wildlife: Mammals  
Food: Foliage |
| Virginia Creeper (Vine) | Parthenocissus quinquefolia | Up to 25’ | Full/Part Shade or Full Sun | Dry or Moist | Woods, rocky banks                                            | Wildlife: Bluebird, great-crested flycatcher, red-eyes vireo, pileated woodpecker  
Food: Berries |
| Whorled Loosestrife | Lysimachia quadrifolia | Up to 4’ | Full/Part Shade or Full Sun | Dry or Moist | Dry or moist open woods, thickets                             | Wildlife: Mammals  
Food: Foliage |
| Wild Sarsaparilla | Aralia nudicanlis | 8-15”   | Full/Part Shade  | Dry or Moist   | Upland woods                                                 | Wildlife: Mammals  
Food: Foliage, seeds, berries |
| Wintergreen (Teaberry/Checker berry) | Gaultheria procumbens | Up to 4” | Full Sun         | Dry            | Oak woods, sandy soils                                       | Wildlife: Partridge, ruffed grouse, songbirds; chipmunk, deer, moose  
Food: Fruit, foliage |
### APPENDIX E: CROSS-REFERENCE OF SECTIONS AFFECTED

<table>
<thead>
<tr>
<th>PRIOR RULE</th>
<th>2016 RULE</th>
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### PART Env-Wq 1406 PERMITTING OF PROJECTS

#### Env-Wq 1406.16 Recordation of Certain Permits

**(a)-(c)**

- Env-Wq 1406.16 Shoreland Permit by Notification Procedures.
  - intro, (a)-(e)
- Env-Wq 1406.17 Shoreland Permit by Notification Information.
  - intro, (a)-(b)
- Env-Wq 1406.18 Signatures Required.
  - (a)-(b)
- Env-Wq 1406.19 Acceptance or Rejection of Shoreland Permit by Notification.
  - (a)-(g)
- Env-Wq 1406.17 Conditions Applicable to All Projects in the Protected Shoreland
  - intro, (a)-(d)
  - intro, (a)-(d) [edits in (c), (d)]
  - (e) new re: mechanized equipment
- Env-Wq 1406.18 Issuance and Transferability
  - Env-Wq 1406.21 Issuance and Transferability
  - (a)-(e) [nc]
- Env-Wq 1406.19 Duration of Shoreland Permit; Amendments
  - Env-Wq 1406.22 Duration of Shoreland Permit; Amendments
  - (a)-(e) [edits to delete PBI maintenance permits]
  - (f) deleted [re: PBI MP]
  - (g) (f) edit
  - (h) deleted [re: PBI MP]

### PART Env-Wq 1408 REPLACEMENT OR REDEVELOPMENT

#### Env-Wq 1408.01 Replacement of Pre-existing Nonconforming Primary Structures Damaged By Accidental Means

**(a)-(c)**

- Env-Wq 1408.01 Replacement of Pre-existing Nonconforming Structures Damaged By Accidental Means
  - (a)-(c) [same edit in (a) as in title otherwise nc]
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