

## CHAPTER Env-Wt 600 COASTAL LANDS AND TIDAL WATERS/WETLANDS

## PART Env-Wt 601 PURPOSE; APPLICABILITY; INCORPORATED DEFINITIONS; ABBREVIATIONS AND ACRONYMS

Env-Wt 601.01 Purpose. The purpose of this chapter is to protect the public trust, public health and safety, and the natural resource functions of New Hampshire's coastal lands and tidal waters/wetlands, and to preserve the integrity of such areas, by establishing requirements for resource analysis, resource management, site alteration, and design and construction of structures, in order to preserve the productive and protective functions of this resource area and prevent unreasonable encroachment on surface waters of the state.

Env-Wt 601.02 Applicability and Intent.

(a) This chapter shall apply as specified in Env-Wt 305.02, provided that "this chapter" shall mean Env-Wt 600.

(b) This chapter shall apply in addition to all applicable provisions of Env-Wt 300, Env-Wt 400, Env-Wt 517 relative to trails and boardwalks, Env-Wt 525 relative to restoration and enhancement, Env-Wt 527 relative to public highways, and Env-Wt 700 through Env-Wt 900 to any dredging, filling, or construction activities in coastal lands or tidal waters/wetlands.

(c) This chapter is intended to implement and complement any applicable federal requirements, such as the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1465 (CZMA).

Env-Wt 601.03 Incorporated Definitions, Abbreviations, and Acronyms. Any term, abbreviation, or acronym used in this chapter that is not defined herein but is defined in Env-Wt 100 shall have the meaning established in Env-Wt 100, as summarized in Appendix E.

## PART Env-Wt 602 DEFINITIONS

Env-Wt 602.01 "Accessory structure" means a structure on the same lot with, and customarily incidental and subordinate to, the primary structure. The term includes paths, driveways, patios, any other improved surface, pump houses, gazebos, woodsheds, garages, and other outbuildings.

Env-Wt 602.02 "Aquaculture" means "aquaculture" as defined in RSA 211:62-e, II(b), reprinted in Appendix C.

Env-Wt 602.03 "Back dune" means the secondary complex of ridges or mounds of sand that form from continued wind-blown sand transport through breaches in the fore dune and across the dune slack area, typically developing adjacent to a bordering surface water or wetland.

Env-Wt 602.04 "Beach nourishment" means replenishment of material lost from natural sand beaches due to changes in currents, storm surge, and coastal erosion.

Env-Wt 602.05 "Coastal areas" means coastal lands and tidal waters/wetlands, alone or in any combination.

Env-Wt 602.06 "Coastal erosion" means a geological process that involves the breakdown and removal of material along shorelines via the movement of water and wind, typically occurring slowly over an extended period of time but able to occur suddenly due to events such as landslides and extreme storm events.

Env-Wt 602.07 "Coastal functional assessment (CFA)" means an evaluation of the jurisdictional coastal natural resource areas that would be impacted by a proposed project, and recommendations to protect the areas during and as a result of the project.

Env-Wt 602.08 "Coastal hazards" means natural phenomena in coastal areas, such as sea level rise, coastal storms, hurricanes, flooding, and erosion that occurs rapidly in a single event or gradually, that have the

potential to damage property including infrastructure, degrade the environment including habitat displacement, and threaten human life or safety.

Env-Wt 602.09 “Coastal lands” means tidal beaches, tidal flats, tidal shorelines, tidal buffer zones, and sand dunes, alone or in any combination.

Env-Wt 602.10 “Coastal flood risk” means the likelihood and adverse consequences of flooding from seawater and is a function of the coastal flood hazard at a location and the exposure and vulnerability of people and their assets to that hazard.

Env-Wt 602.11 “Commercial tidal dock” means a docking structure in tidal waters/wetlands that is associated with a marina, restaurant, business, or other commercial entity. The 3 types of commercial tidal docks are access points for transient public use, working waterfronts, and marinas.

Env-Wt 602.12 “Developed upland” means an upland area on a lot within the tidal buffer zone or sand dune where:

- (a) The natural soil and vegetation characteristics on more than 50% of the lot have been legally altered and have not returned to a natural state;
- (b) If the lot is in a tidal buffer zone, developed lots abut at least 2 sides of the lot;
- (c) If the lot is in a dune slack area, the lot is surrounded on 4 sides by developed lots or roadways;
- (d) If the lot is in a dune, the back side of a fore dune is within the line of encroachment and the lot is surrounded on 3 sides by developed lots or roadways; and
- (e) At least one of the following is true:
  - (1) The lot has legally been filled or excavated in whole or in part, whether prior to jurisdiction or pursuant to a permit or other authorization;
  - (2) The lot contains at least one paved or graded area that is, has been, or will be used for vehicular parking or traffic; or
  - (3) One or more residential or commercial buildings has been built on the lot.

Env-Wt 602.13 “Dredge prism” means a 3-dimensional geometric space depicting the volume of sediments to be dredged.

Env-Wt 602.14 “Dune slack area” means the generally flat expanse of dune that develops as a result of breaches in the fore dune that allow deposition of overwash sand to occur and disperse horizontally.

Env-Wt 602.15 “Dune vegetation” means vegetation that is commonly found in sand dunes, including but not limited to Ammophila breviligulata (American Beach Grass), Honckenya peploides (Seabeach Sandwort), Artemisia stelleriana (Dusty Miller, Beach Wormwood), Chamaesyce polygonifolia (Seaside Spurge), Hudsonia tomentosa (Beach Heather), Hudsonia ericoides (Beach Heather), Lathyrus japonicus (Beach Pea), Morella pensylvanica (Bayberry), Prunus maritima (Beach Plum), Rosa rugosa (Salt Spray Rose), and Rosa virginiana (Virginia Rose).  
*amended effective 12-24-19*

Env-Wt 602.16 “Federal navigation project (FNP)” means a project, including any resulting structure or feature, that has been specifically authorized by the U.S. Congress in federal enactment, such as the River and Harbor Appropriation Act of 1899. The term includes project undertaken by the US ACE and projects undertaken by others but adopted as an FNP.

Env-Wt 602.17 “Fertilizer” means any substance, other than limestone, that contains any recognized plant nutrient and is designed or intended for use in promoting plant growth or health or claimed to have value in promoting plant growth or health.

Env-Wt 602.18 “Fore dune” means the primary ridge or mound of sand closest to the sea, formed by the accumulation of wind-blown sand, that provides a substrate for the growth of dune vegetation which in turn traps more sand and allows the dune to grow so as to provide critical storm surge shoreline stabilization and habitat functions.

Env-Wt 602.19 “Forming dune” means a small, often ephemeral sand mound on the backshore, which in a prograding system may develop into a new fore dune.

Env-Wt 602.20 “Functionally-equivalent use” means a use for a new or remodeled structure that:

(a) Maintains the pre-existing use, for example using an existing residential structure as residential or an existing commercial structure as commercial; and

(b) If not served by a public wastewater collection and treatment system, does not increase the sewage loading.

Env-Wt 602.21 “Ground cover” means any herbaceous plant or any woody seedling or shrub generally less than 3 feet in height. The term does 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 aquatic species listed pursuant to Env-Wq 1303, imported organic or stone mulches, or other artificial materials.

Env-Wt 602.22 “High salt marsh” means a tidal marsh zone located above mean high water and inundated during periods of extreme high tide and storm surge associated with coastal storms.

Env-Wt 602.23 “Highest observable tide line (HOTL)” means a line defining the farthest landward limit of tidal flow, not including storm events, that 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 inland flow of the tide.

Env-Wt 602.24 “Impervious surface” means any surface modified by or as a result of human activity that cannot effectively absorb or infiltrate water. The term includes but is not limited to roofs, decks, and patios, and, unless specifically designed and maintained to effectively absorb or infiltrate water, paved, gravel, or crushed stone driveways, parking areas, and walkways.

Env-Wt 602.25 “Impervious surface area” means the sum total of the footprint of each impervious surface that is located within the tidal buffer zone.

Env-Wt 602.26 “Industrial tidal dock” means a docking structure in tidal waters/wetlands that serves vessels, including tankers, cargo ships, military vessels, and research vessels, that have a capacity and purpose such that an advanced and specialized level of structural engineering is required to safely and efficiently allow ship-to-shore and shore-to-ship transfers. The term includes tidal docks and infrastructure associated with power plants, fuel tank farms, cargo holding and transfer, security, and research.

Env-Wt 602.27 “Landscaping” means the planting of non-invasive ornamental or native plant species in planting beds created by hand or placement by hand of ornamental items such as small sculpture or statuary, stepping stones or stone edging within planting beds, all occurring in a previously altered area, such as lawn, within the developed coastal buffer. The term includes gardening.

Env-Wt 602.28 “Line of encroachment” means the linear limit of the majority of existing structure construction toward a resource area.

Env-Wt 602.29 “Living shoreline” means a management practice that provides erosion control benefits, protects, restores, or enhances natural shoreline habitat, and maintains coastal processes through the strategic placement of plants, stone, sand fill, and other structural organic materials, maintaining the continuity of the natural land-water interface while providing habitat value and protecting against coastal hazards.

Env-Wt 602.30 “Living shoreline sill” means a low-elevation structure that is constructed parallel to the existing shoreline with the primary purpose of stabilizing the toe of a tidal marsh or coastal bank and which protects fringe marshes or banks that require a higher degree of stabilization at the seaward edge. Sills can be made of soft structural materials such as geotextiles or biologs made from coir fiber, or hard structural materials such as shell, wood, or stone.

Env-Wt 602.31 “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 that is at least 50% slow-release nitrogen components.

Env-Wt 602.32 “Mean high tide” means “mean high tide” as defined in RSA 482-A:2, IV, reprinted in Appendix C.

Env-Wt 602.33 “Mean high water” means the average of all the high water heights observed over the National Tidal Datum Epoch (NTDE), or over an equivalent datum derived for stations with shorter series by comparison of simultaneous observation with a control tide station.

Env-Wt 602.34 “Mean higher high water” means the average of the higher high water height of each tidal day observed over the NTDE, or over an equivalent datum derived for stations with shorter series by comparison of simultaneous observations with a control tide station.

Env-Wt 602.35 “Mean low water” means the average of all the low water heights observed over the NTDE, or over an equivalent datum derived for stations with shorter series by comparison of simultaneous observations with a control tide station.

Env-Wt 602.36 “Mean lower low water” means the average of the lower low water height of each tidal day observed over the NTDE, or over an equivalent datum derived for stations with shorter series by comparison of simultaneous observations with a control tide station.

Env-Wt 602.37 “Mean tide level” means the arithmetic mean of mean high water and mean low water.

Env-Wt 602.38 “Natural condition” means the condition that exists without interference with the natural growth and regrowth of vegetation. The term does not include lawns or landscaped areas.

Env-Wt 602.39 “Overdredge” means the allowable margin of dredge that extends beyond the authorized dimensions of the dredge prism of a navigation or other dredge project.

Env-Wt 602.40 “Primary structure” means a structure that is central to the fundamental use of the property and is not accessory to the use of another structure on the same property.

Env-Wt 602.41 “Protected tidal zone” means the tidal buffer zone established under RSA 482-A and the protected shoreland established under RSA 483-B.

Env-Wt 602.42 “Public infrastructure” means public roads, facilities, and constructed landscape that is open to, and maintained to be used by, the general public.

Env-Wt 602.43 “Qualified coastal professional” for the purposes of conducting coastal functional assessments means a certified wetland scientist, professional engineer, or coastal scientist who has knowledge, based on education and experience, of coastal environments and systems that is sufficient to enable the individual to competently evaluate coastal resources.

Env-Wt 602.44 “Residential tidal dock” means a docking structure in tidal waters/wetlands that serves private residential properties, whether individually or as an association such as a homeowners’ association.

Env-Wt 602.45 “Sand dune” means "sand dune" as defined in RSA 482-A:2, VII, reprinted in Appendix C.

Env-Wt 602.46 “Sea-level rise” means the increase in sea level primarily caused by 2 factors related to climate change, namely the added water from melting land ice and expansion of sea water as it warms.

Env-Wt 602.47 “Sequential dredging” means the process of timing and conducting a dredge project in specified order, in a horizontal or vertical direction, or both, in order to address environmental conditions that include but are not limited to the tide cycle, the presence and activity level of fish and wildlife, and weather conditions, to minimize the biological impact on the natural resources present within the subject system.

Env-Wt 602.48 “Special aquatic sites” means inland and tidal wetlands, mud flats, vegetated shallows having submerged aquatic vegetation, sanctuaries and refuges, coral reefs, and riffle and pool complexes.

Env- Wt 602.49 “Storm surge” means the height of the sea during storms such as hurricanes that is above the height expected at that time and place based on tides alone.

Env-Wt 602.50 “Submerged aquatic vegetation” means rooted vegetation that grows in permanently-inundated areas, such as eelgrass and widgeon grass.

Env-Wt 602.51 “Tidal beach” means an established recreational beach area located between mean lower low water and the tidal shoreline break, typically consisting of expanses of unconsolidated, usually unvegetated, sediments that are subject to wave action.

Env-Wt 602.52 “Tidal buffer zone” means the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action.

Env-Wt 602.53 “Tidal dock infrastructure” means infrastructure associated with a tidal dock to facilitate ship-to-shore and shore-to-ship transfers. The term includes but is not limited to piers, catwalks, gatehouses, weigh stations, conveyors, mooring cells, dolphins, and pipelines or other conduits.

Env-Wt 602.54 “Tidal flats” means a relatively level landform composed of unconsolidated mineral and organic sediments, usually contiguous to the shore, that is alternately flooded and exposed by the tides.

Env-Wt 602.55 “Tidal flushing” means the influx and outflow of water associated with the ebb and flow of the tide.

Env-Wt 602.56 “Tidal marsh” means a marsh in which the primary source of water is salt water.

Env-Wt 602.57 “Tidal shoreline” means any land area within New Hampshire that is subject to the ebb and flow of the tide, extending from mean lower low water to land above the highest observable tide line. The term includes rocky shores, unconsolidated vegetated marine or estuarine banks, and artificial or constructed shorelines such as seawalls, bulkheads, and rip-rap slopes.

Env-Wt 602.58 “Tidal surface water” means any surface water that is subject to the ebb and flow of the tide.

Env-Wt 602.59 “Tidal waters/wetlands” means tidal wetlands and tidal surface waters.

Env-Wt 602.60 “Tidal wetlands” means wetlands whose vegetation, hydrology, and soils are influenced by periodic inundation of the tides.

Env-Wt 602.61 “Transient public use access points” means water-dependent docks or other structures that are open to the public for temporary berthing, whether for a fee or not, typically associated with a land-based commercial or public enterprise. The term includes docks at public parks, other public docks or ramps, and docks provided by restaurants or other land-based enterprises.

Env-Wt 602.62 “Working waterfront” means water-dependent or historic structures that represent a direct and on-going operational connection to the historical culture of a municipality and its business community.

Env-Wt 602.63 “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.

#### PART Env-Wt 603 ADDITIONAL APPLICATION INFORMATION FOR PROJECTS IN COASTAL AREAS

Env-Wt 603.01 Applicability. The applicant for a project in a coastal area shall provide the information required by this part in addition to the information required by Env-Wt 311 for a standard permit, Env-Wt 310 for an expedited permit, or Env-Wt 309 for a lower scrutiny approval, as applicable.

Env-Wt 603.02 Required Information. The applicant shall:

(a) Provide a written explanation of the purpose of the proposed project, including the overall goal of the project, the core project purpose including a concise description of the facilities and work that could impact jurisdictional areas, and the intended project outcome;

(b) Specifically identify all natural resource assets in the area proposed to be impacted and include maps created through a data screening in accordance with Env-Wt 603.03 and Env-Wt 603.04;

(c) For standard permit projects, provide:

(1) A CFA report in accordance with Env-Wt 603.04; and

(2) A vulnerability assessment in accordance with Env-Wt 603.05;

(d) Explain all recommended methods and other considerations to protect the natural resource assets during and as a result of project construction in accordance with Env-Wt 603.04, Env-Wt 311.07, and Env-Wt 313;

(e) Provide a narrative showing how the project meets:

(1) The standard conditions in Env-Wt 307; and

(2) The approval criteria in Env-Wt 313.01; and

(f) Provide:

(1) The project design narrative described in Env-Wt 603.06;

(2) Design plans that meet the requirements of Env-Wt 603.07;

(3) The water depth supporting information required by Env-Wt 603.08; and

(4) A statement regarding impact on navigation and passage required by Env-Wt 603.09.

Env-Wt 603.03 Data Screening.

(a) In order to determine the appropriate impact classification of a project and the type of approval required, if any, the person responsible for a proposed project in a coastal area shall:

(1) Conduct the data screening required by Env-Wt 306.05;

(2) Identify documented shellfish sites, existing salt marsh, salt marsh migration pathways, the 100-year floodplain, and eel grass beds that might be impacted by the proposed project using the WPPT or any other database or source that provides the requisite information;

(3) Conduct a data screening as described in (b), below, to identify documented essential fish habitat, and tides and currents that may be impacted by the proposed project;

(4) Verify or correct the information collected from the data screenings by conducting an on-site assessment of the subject property in accordance with Env-Wt 406 and Env-Wt 603.04; and

(5) Determine appropriate projected sea-level rise and location relative to available 100-year floodplain maps to inform the vulnerability assessment in Env-Wt 603.05.

(b) The data screening required by (a)(3), above, shall be done using the links provided in Table 603-1, below:

Table 603-1: Data Screening Links for Projects/Activities in Coastal Areas

<b>Resource</b>	<b>Link</b>
NOAA Tides & Currents	<a href="https://tidesandcurrents.noaa.gov/">https://tidesandcurrents.noaa.gov/</a>
NOAA Essential Fish Habitat Mapper	<a href="https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper">https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper</a>

Env-Wt 603.04 Coastal Functional Assessment

(a) For minor or major standard permit applications, the applicant shall submit a CFA report that is based on the data screening information and on-site evaluation required by Env-Wt 603.03.

(b) A CFA for tidal wetlands or tidal waters shall be:

(1) Performed by a certified wetland scientist or qualified coastal professional; and

(2) Completed using one of the following methods:

a. The US ACE Highway Methodology Workbook, dated 1993, together with the US ACE New England District Highway Methodology Workbook Supplement, dated 1999, both available as noted in Appendix B; or

b. An alternative scientifically-supported method with cited reference and the reasons for the alternative method substantiated.

(c) For any project that would impact tidal wetlands or tidal waters or associated sand dunes, the applicant shall:

(1) Use the results of the CFA to select the location of the proposed project having the least impact to tidal wetlands, tidal waters or associated sand dunes;

(2) Design the proposed project to have the least impact to tidal resources in (1), above;

(3) Where impact to wetland and other coastal resource functions is unavoidable, limit the project impacts to the least valuable functions, avoiding and minimizing impact to the highest and most valuable functions; and

(4) Include on-site minimization measures and construction management practices to protect coastal resource areas.

Env-Wt 603.05 Vulnerability Assessment. In accordance with the NH Coastal Risk and Hazards Commission Science and Technical Advisory Panel (STAP) Report, Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends, available at <http://www.nhcrhc.org/stap-report/>, Laws of 2016, 195:1, and best available science for projects located in coastal areas, the applicant shall:

(a) Determine the time period over which the proposed project is designed to serve;

(b) Identify the proposed project's relative risk tolerance to flooding and potential damage or loss likely to result from the flooding, to:

- (1) Buildings and infrastructure; and
- (2) Salt marshes, sand dunes, and other valuable coastal resource areas;
- (c) Reference the projected sea-level rise from the STAP report (2014), available at <http://www.nhcrhc.org/wp-content/uploads/2014-STAP-final-report.pdf>, and use the best available science and more recent available projected sea-level rise information that most closely matches the end of the project design life and the project's tolerance to risk or loss;
- (d) Identify areas of the proposed project site subject to flooding from the selected sea-level rise projection;
- (e) Identify areas that are currently located within the 100-year floodplain and subject to coastal flood risk;
- (f) Describe how the project will consider and address selected sea-level rise within the project design life, including in the design plans; and
- (g) Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a pre-application meeting with the department to evaluate design alternatives, engineering approaches, and use of the best available science and the STAP report in (c), above, that consider and address the selected sea-level rise.

Env-Wt 603.06 Project Design Narrative Required. The applicant shall provide a project design narrative that includes the following:

- (a) A discussion of how the proposed project:
  - (1) Uses best management practices and standard conditions in Env-Wt 307;
  - (2) Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
  - (3) Meets approval criteria in Env-Wt 313.01;
  - (4) Meets evaluation criteria in Env-Wt 313.01(c);
  - (5) Meets CFA requirements in Env-Wt 603.04; and
  - (6) Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;
- (b) A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and
- (c) A discussion of how the completed project will be maintained and managed.

Env-Wt 603.07 Design Plans.

- (a) The applicant shall submit design plan for the project in both plan and elevational views that clearly depict and identify all required elements, as described in Env-Wt 311 and (b) and (c), below.
- (b) The plan view shall depict the following:
  - (1) The engineering scale used, which shall be no larger than one inch equals 50 feet;
  - (2) The location of tidal datum lines depicted as a line with the associated elevation noted, based on NAVD 88, derived from [https://tidesandcurrents.noaa.gov/datum\\_options.html](https://tidesandcurrents.noaa.gov/datum_options.html), as described in Env-Wt 603.08;
  - (3) An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions;
  - (4) The location of all special aquatic sites at or within 100 feet of the subject property;



- (5) Existing bank contours;
  - (6) The name and license number, if applicable, of each individuals responsible for the plan, including:
    - a. The agent for tidal docking structures who determined elevations represented on plans; and
    - b. The certified wetland scientist or qualified coastal professional who completed the CFA report and located the identified resources on the plan; and
  - (7) The location and dimensions of all existing and proposed structures and landscape features on the property.
- (c) The elevational view shall depict the following:
- (1) The nature and slope of the shoreline;
  - (2) The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and
  - (3) Water depths depicted as a line with associated elevation at highest observable tide, mean high tide, and mean low tide, and the date and tide height when the depths were measured.

Env-Wt 603.08 Water Depth Supporting Information Required.

(a) Using current predicted NOAA tidal datum for the location, and tying field measurements to NAVD 88, field observations of at least 3 tide events, including at least one minus tide event, shall be located to document the range of the tide in the proposed location showing the following levels:

- (1) Mean lower low water;
- (2) Mean low water;
- (3) Mean high water;
- (4) Mean tide level;
- (5) Mean higher high water;
- (6) Highest observable tide line; and
- (7) Predicted sea-level rise as identified in the vulnerability assessment in Env-Wt 603.05.

(b) The following data shall be presented in the application project narrative to support how water depths were determined:

- (1) The date, time of day, and weather conditions when water depths were recorded; and
- (2) The name and license number of the licensed land surveyor who conducted the field measurements.

(c) For tidal stream crossing projects, provide water depth information to show how the tier 4 stream crossing is designed to meet Env-Wt 904.07(c) and (d), and for repair, rehabilitation or replacement of tier 4 stream crossings, demonstrate how the requirements of Env-Wt 904.09 are met.

Env-Wt 603.09 Statement Regarding Impact on Navigation and Passage.

(a) For any major project that proposes to construct a structure in tidal waters/wetlands or to extend an existing structure seaward, the applicant shall submit a statement from the pease development authority division of ports and harbors (“DP&H”) chief harbormaster, or designee, for the subject location relative to the proposed structure’s impact on navigation.

(b) If the proposed structure might impede existing public passage along the subject shoreline on foot or by non-motorized watercraft, the applicant shall explain how the impediments have been minimized to the greatest extent practicable.

#### PART Env-Wt 604 GENERAL CRITERIA FOR PROJECT IMPACTS IN COASTAL AREAS

##### Env-Wt 604.01 General Criteria for Tidal Beaches, Tidal Shoreline, and Sand Dunes.

(a) Any person proposing a project in or on a tidal beach, tidal shoreline, or sand dune, or any combination thereof, shall evaluate the proposed project based on:

- (1) The standard conditions in Env-Wt 307;
- (2) The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- (3) The approval criteria in Env-Wt 313.01;
- (4) The evaluation criteria in Env-Wt 313.05;
- (5) The project specific criteria in Env-Wt 600;
- (6) The CFA required by Env-Wt 603.04; and
- (7) The vulnerability assessment required by Env-Wt 603.05.

(b) New permanent impacts to sand dunes that provide coastal storm surge protection for protected species or habitat shall not be allowed except to protect public safety and only if constructed by a state agency, coastal resiliency project, or for a federal homeland security project.

(c) Projects in or on a tidal beach, tidal shoreline, or sand dune shall support integrated shoreline management that:

- (1) Optimizes the natural function of the shoreline, including protection or restoration of habitat, water quality, and self-sustaining stability to flooding and storm surge; and
- (2) Protects upland infrastructure from coastal hazards with a preference for living shorelines over hardened shoreline practices.

##### Env-Wt 604.02 General Criteria for Tidal Buffer Zones.

(a) The 100-foot statutory limit on the extent of the tidal buffer zone shall be measured horizontally.

(b) Any person proposing a project in or on an undeveloped tidal buffer zone shall evaluate the proposed project based on:

- (1) The standard conditions in Env-Wt 307;
- (2) The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- (3) The approval criteria in Env-Wt 313.01;
- (4) The evaluation criteria in Env-Wt 313.05;
- (5) The project specific criteria in Env-Wt 600;
- (6) The CFA required by Env-Wt 603.04; and
- (7) The vulnerability assessment required by Env-Wt 603.05.

(c) Projects in or on a tidal buffer zone shall preserve the self-sustaining ability of the buffer area to provide habitat values, protect tidal environments from potential sources of pollution, provide stability of the coastal shoreline, and maintain existing buffers intact where the lot has disturbed area defined under RSA 483-B:4, IV.

Env-Wt 604.03 General Criteria for Tidal Waters/Wetlands.

(a) Except as allowed under Env-Wt 606, permanent new impacts to tidal wetlands shall be allowed only to protect public safety or homeland security.

(b) Evaluation of impacts to tidal wetlands and tidal waters shall be based on:

- (1) The standard conditions in Env-Wt 307;
- (2) The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- (3) The approval criteria in Env-Wt 313.01;
- (4) The evaluation criteria in Env-Wt 313.05;
- (5) The project specific criteria in Env-Wt 600;
- (6) The CFA required by Env-Wt 603.04; and
- (7) The vulnerability assessment required by Env-Wt 603.05.

(c) Projects in tidal surface waters or tidal wetlands shall:

- (1) Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;
- (2) Be designed with a preference for living shorelines over hardened stabilization practices; and
- (3) Be limited to public infrastructure or restoration projects that are in the interest of the general public, including a road, a bridge, energy infrastructure, or a project that addresses predicted sea-level rise and coastal flood risk.

PART Env-Wt 605 AVOIDANCE AND MINIMIZATION; COMPENSATORY MITIGATION

Env-Wt 605.01 Avoidance and Minimization Requirements in Coastal Areas. In addition to the avoidance and minimization requirements in Env-Wt 307, Env-Wt 311.07, Env-Wt 313, and Env-Wt 603.04, projects in coastal areas shall:

(a) Use results of the CFA required by Env-Wt 603.04 to:

- (1) Minimize adverse impacts to finfish, shellfish, crustacea, and wildlife;
- (2) Minimize disturbances to groundwater and surface water flow;
- (3) Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and
- (4) Avoid impacts that might cause erosion to shoreline properties.

(b) Not impair the navigation, recreation, or commerce of the general public; and

(c) Minimize alterations in prevailing currents.

Env-Wt 605.02 Additional Requirements for Projects In or Adjacent to Tidal Waters/Wetlands and Tidal Buffer Zones. An applicant for a permit for work in or adjacent to tidal waters/wetlands or the tidal buffer zone also shall demonstrate that the following have been avoided or minimized as required by Env-Wt 313.04:

- (a) Adverse impacts to beach or tidal flat sediment replenishment;
- (b) Adverse impacts to the movement of sediments along a shore;
- (c) Adverse impacts on a tidal wetland's ability to dissipate wave energy and storm surge; and
- (d) Adverse impacts of project runoff on salinity levels in tidal environments.

Env-Wt 605.03 Impacts Requiring Compensatory Mitigation.

(a) Subject to (b), below, compensatory mitigation shall be required for all impacts to tidal surface waters, tidal wetlands, the tidal buffer zone, or sand dunes, or any combination thereof, that are intended to remain when the proposed project is completed.

(b) Compensatory mitigation shall not be required for:

- (1) Minimum impact maintenance activities such as piling replacement, in-kind structure reconstruction, sediment displacement from intake structures as described in Env-Wt 516, or otherwise classified as a minimum impact project;
- (2) Restoration or enhancement pursuant to Env-Wt 407.04 and Env-Wt 525;
- (3) Maintenance dredge of an existing FNP that is on an active dredge cycle;
- (4) Construction of a tidal docking structure where the combined total of all surface coverage on the frontage is less than 2,000 square feet (SF);
- (5) Work within an altered area of developed tidal buffer zone located greater than 75 feet from any salt marsh;
- (6) Work within an altered area of the developed tidal buffer zone that is not adjacent to a salt marsh and is less than 10,000 SF of total impact;
- (7) A project that is limited to a living shoreline project that uses non-structural vegetated approaches to hybrid hard structural natural methods that address erosion and inundation in a manner that improves or protects the ecological condition of the coastline or replaces lost tidal resource or tidal marsh functions;
- (8) A project that is limited to sand dune replacement or restoration; or
- (9) A project that increases the hydraulic capacity, aquatic organism passage, or geomorphic compatibility when associated with upgrading a tier 4 tidal crossing, or opens tidal restrictions to create new pathways or inundation for tidal marsh migration.

Env-Wt 605.04 Requirements for Compensatory Mitigation for Projects in Coastal Areas.

(a) If compensatory mitigation is required, the type of compensatory mitigation shall be determined in accordance with Env-Wt 801.03(a) or (b), as applicable.

(b) On-site mitigation shall be performed wherever practicable.

(c) If on-site mitigation is not practicable and the municipality does not have a list of local mitigation projects, or if none of the projects on the list are appropriate mitigation for the applicant's proposed project, the applicant shall provide an explanation and documentation relative to:

- (1) Why restoration of a disturbed upland tidal buffer zone is not practicable;
- (2) Why restoration, enhancement, or creation of wetlands, tidal waters, sand dunes, or tidal flats is not practicable;

- (3) Why a local stream crossing project cannot be upgraded to increase hydraulic capacity, aquatic organism passage, or increase geomorphic capacity;
- (4) Why a local project cannot open tidal restriction to create new pathways for tidal marsh migration when associated with a land preservation project; or
- (5) Why a project does not meet a state or federal coastal assessment priority, or a recognized conservation priority project.

(d) Compensatory mitigation proposals for projects in the tidal buffer zone shall demonstrate one or more of the following:

- (1) Stream crossing upgrades that allow tidal inflow or a legally protected preservation conservation easement in accordance with Env-Wt 800 for marsh migration compatible with projected sea-level rise;
- (2) Restoration of and preservation of an aquatic resource buffer in accordance with Env-Wt 804; or
- (3) Replacement or enhancement of buffer functions or living shorelines by following planting recommendations reflected in "Guidance for Considering the Use of Living Shorelines", NOAA, 2015, available as noted in Appendix B.

(e) Compliance with maintenance of the waterfront buffer, natural woodland buffer, unaltered percentage requirements, and impervious surface requirements, pursuant to Env-Wt 610 relative to tidal buffer zones shall not constitute mitigation.

(f) The applicant shall propose mitigation for proposed impacts that:

- (1) Meets or exceeds the minimum compensatory mitigation ratios stated in Table 800-1; or
- (2) Provides an acceptable alternative compensatory mitigation proposal as described in Env-Wt 803.09.

#### PART Env-Wt 606 OVERWATER STRUCTURES IN COASTAL AREAS

Env-Wt 606.01 Applicability. This part shall apply to all overwater structures in coastal areas, including residential tidal docks, commercial tidal docks, and industrial tidal docks and the infrastructure associated therewith.

##### Env-Wt 606.02 Avoidance and Minimization Standards for All Overwater Structures.

(a) Overwater structures shall be located and designed to avoid impacts to important wetland and coastal resource functions identified in the CFA report required by Env-Wt 603.04, including special aquatic sites, and to minimize any impact that cannot be avoided.

(b) On frontage that contains or is adjacent to special aquatic sites or congested or high traffic navigation conditions that require human alteration to create and maintain access, overwater structures shall be minimized by using upland boat storage and trailering to a launch point or marina to the greatest extent practicable.

##### Env-Wt 606.03 Design Requirements for All Overwater Structures.

(a) Overwater structures shall:

- (1) Meet the 20-foot property line setback specified in RSA 482-A:3, XIII(a); and
- (2) Not impede the passage of non-motorized watercraft or channel navigation to a degree that a reasonable person would find objectionable.

(b) Commercial tidal docks and industrial tidal docks shall be designed by a professional engineer.

(c) Any tidal dock infrastructure or specialized design features related to the unique function of a specific facility, such as structures on the docks that facilitate public use and control and management of the facility such as dock master huts, ticket facilities, ADA access, and information kiosks, shall:

- (1) Be substantiated by the applicant with a justification tied to the specific purpose of the project; and
- (2) Be certified by the applicant as meeting applicable local, industry, and legal standards.

(d) All floats and floating structures, or sections thereof, shall:

- (1) Be positioned waterward of and to avoid all vegetated wetlands and vegetated shallows;
- (2) Not be placed in areas supporting submerged aquatic vegetation; and
- (3) Be located, to the extent practicable, in water that is sufficiently deep for the intended use while:
  - a. Avoiding intertidal and shade impacts;
  - b. Minimizing or eliminating the need for dredging; and
  - c. Avoiding displacement of nesting or breeding habitat, eel grass beds, or essential fish habitat.

(e) Non-toxic materials such as untreated wood, concrete, or steel shall be used if at all practicable, as such materials help reflect light under docks and typically do not release contaminants into the aquatic environment. A design that uses treated wood timbers or pilings, or both, shall be approved only if the applicant demonstrates that using non-toxic materials is not practicable.

(f) To minimize under-structure shading, ambient light transmission under docking structures shall be facilitated and enhanced by using design features such as maximizing the height and minimizing the width of the structure, using grated decking material, using the fewest number of pilings necessary to support the structures, and aligning docking structure components in a north-south orientation to allow the path of the sun to cross perpendicular to the length of the structure and so reduce the duration of shading.

(g) Open piles placed at least 12 feet apart shall be the least impacting alternative of permanent docking construction.

(h) Supporting piles shall occupy 5% or less of the total volume under the docking structure at mean high water, to allow most wave and current energy to pass through so as to prevent deepening of the area.

Env-Wt 606.04 Plan Requirements for All Overwater Structures. In addition to the approval criteria in Env-Wt 313.01, CFA requirements in Env-Wt 603.04, vulnerability assessment requirements in Env-Wt 603.05, and general plan requirements in Env-Wt 311.05 and Env-Wt 603.05, plans submitted with an application for an overwater structure shall include the following:

- (a) A plan view, depicting the following:
  - (1) The location of the landward boundary of the FNP or, if no FNP is present, the landward boundary of the navigational channel;
  - (2) The location and dimensions of all existing shoreline structures on the subject property;
  - (3) The location and dimensions of all proposed structures; and
  - (4) For commercial tidal docks, public docks, and industrial tidal docks, certification by a professional engineer that the dock has been designed for its intended use;

- (b) An elevational view, depicting the following:
  - (1) The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and
  - (2) The location of the landward boundary of the FNP or, if no FNP is present, the landward boundary of the navigational channel;
- (c) For dock maintenance projects that are classified as minimum impact under Env-Wt 606.17, the applicant shall provide the following information as part of the application:
  - (1) Application certifications in Env-Wt 311.11;
  - (2) A plan showing the location and dimensions of all existing structures;
  - (3) An identification of those pilings and structures to be repaired or replaced; and
  - (4) Photographs showing the repair project from:
    - a. The docking structures looking waterward; and
    - b. The end of the dock looking towards the shoreland attachment; and
- (d) For minor impact dock maintenance projects under Env-Wt 606.04(c), the applicant shall provide the following information as part of the standard application:
  - (1) Application certifications in Env-Wt 311.11;
  - (2) Plans and photographs as described in (c) above; and
  - (3) A coastal functional assessment pursuant to Env-Wt 603.04.

Env-Wt 606.05 Docking Construction Requirements and Conditions. All tidal docking construction shall be subject to the following standard construction requirements and conditions:

- (a) Work shall be done in accordance with the standard conditions in Env-Wt 307;
- (b) Installation shall be done by barge or upland to prevent the driving of construction equipment in or through tidal waters/wetlands or on the bottom of the inter-tidal zone;
- (c) Access by construction equipment on the high salt marsh shall be limited to that provided by Env-Wt 307 and mats shall not be dragged into location; and
- (d) Construction of docks in or near essential fish habitat shall be subject to review by NHF&G and the National Marine Fisheries Service for design recommendations or time of year restrictions.

Env-Wt 606.06 Residential Tidal Docks General Criteria

- (a) Residential tidal docks shall be:
  - (1) For private recreational use associated with one or more private residences; and
  - (2) Designed as specified in this part, which might not result in all-tide access.
- (b) Ramp and float portions of residential tidal docks shall be seasonal and removed from the water during the non-boating season.
- (c) To reduce the overall number of residential tidal docks and the adverse impacts to nearshore habitat resulting therefrom, preference shall be given to residential tidal docks designed to serve multiple properties.

- (d) To demonstrate that a proposed residential tidal dock is the least impacting alternative, the applicant shall show that the subject property is not already served by an existing residential tidal dock at the property.
- (e) The location, design, and method of construction for a proposed residential tidal dock shall:
- (1) Be based on the results of the CFA required by Env-Wt 603.04 so as to avoid negative impacts to valuable and sensitive coastal wetlands and resources identified in the CFA report, and to minimize any impacts that cannot be avoided;
  - (2) Be the least environmentally-impacting practicable alternative;
  - (3) Be certified by a professional engineer as having sufficient structural integrity, based on the results of the vulnerability assessment required by Env-Wt 603.05, to not break free as a result of tidal forces encountered during winter ice and significant storm surges up to and including one percent annual chance event; and
  - (4) Not impede the passage of non-motorized watercraft to a degree that a reasonable person would find objectionable.
- (f) Pile-supported structures and floats shall not be located within 25 feet of currently-existing or previously-known vegetated shallows.
- (g) No structure shall extend across 25% or more of the waterway width at mean low water.
- (h) No structure shall be located within the buffer zone of the horizontal limits of an FNP, which is 3 times the authorized depth of a constructed FNP as measured on a horizontal plane.
- (i) No structure shall be constructed that obstructs the rights of passage of foot traffic within the inter-tidal zone, near shore watercraft users, or obstruct navigation in the channel.
- (j) The following shall not be approved for residential tidal docks:
- (1) Lightweight aluminum or similar seasonal pipe docks;
  - (2) Cantilevered or crank-up dock systems;
  - (3) One or more floats, a string of floats, or floating walkways connected directly to the shore;
  - (4) Floats that sit directly on the mud at low tide or on skids that sit directly on the mud at low tide;
  - (5) Boardwalks over tidal marsh to reach a dock; and
  - (6) Boathouses located in or over tidal waters/wetlands or over slips dug into the shore.
- (k) The density of coverage by residential tidal docks over public trust waters shall be limited by the following factors:
- (1) One structure that meets the property line setback established in RSA 482-A:3, XIII(a) on each frontage;
  - (2) The presence of special aquatic sites;
  - (3) Water depths; and
  - (4) Compliance with length and square footage requirements specified in Env-Wt 606.07.



Env-Wt 606.07 Residential Tidal Docks: Design Standards.

- (a) A residential tidal dock shall have one of the following configurations:
- (1) A pile-supported fixed pier perpendicular to the shore, that connects to a ramp, that connects to a float;
  - (2) A ramp that connects the shore to a float; or
  - (3) A pile-supported fixed pier parallel to shore.
- (b) An applicant may propose a fabricated wooden or metal stairway at the landward end of the dock for access to and from a residential tidal dock, which the department shall approve as part of the dock permitting process provided:
- (1) The width of the stairway does not exceed 6 feet;
  - (2) Construction over the bank does not require regrading or recontouring; and
  - (3) The bottom of the stairs lands above mean high tide.
- (c) The maximum overall structure length including pier, ramp, and float, measured seaward from the HOTL, shall not exceed the greater of 200 feet or the length needed to reach water of sufficient depth to allow the terminal section of the dock to be floating at mean low water.
- (d) The maximum overall footprint of the entire structure of a residential tidal dock serving a single residence shall not exceed 1,500 SF seaward of the HOTL, provided that a residential tidal dock proposed to serve a group of residences may be larger so long as compensatory mitigation is provided for structures exceeding 2,000 SF.
- (e) For permanent piers:
- (1) The maximum width shall not exceed 6 feet;
  - (2) The maximum length shall not exceed 200 feet; and
  - (3) The height-to-width ratio above the substrate shall be 1:1 or greater.
- (f) Floats may be of any configuration so long as the total square footage does not exceed 400 SF, provided that an additional 200 SF shall be allowed for a float serving a group of residences. Applicants for a residential tidal dock serving more than 4 residences may request a waiver of the 600-SF limit in accordance with Env-Wt 200.
- (g) All floats shall be designed and installed so as to prevent substantial changes in their positions from tides and storm events that are less than hurricane force.
- (h) To prevent mechanical damage or hydraulic damage, or both, to the substrate from the float(s) during low tides in cases where mean lower low water is seaward of the terminal float(s) at low tide, or if it is impracticable or impossible to place floating docks in water deep enough to avoid contact with the bottom, the design shall include float stops or other means of suspending the float with 2 feet or more of clearance between the bottom of the float and substrate, with greater clearances required in higher energy environments that experience strong wave action.
- (i) Float stops shall be marked with buoys to avoid being hazards to navigation when ramps and floats are removed for the season.
- (j) Float anchor chains shall be secured to the substrate by helical screw anchors where practicable. If helical screw anchors cannot be installed due to rocky bottom conditions, the applicant shall propose an

alternate means of anchoring the floating portion of the dock and show such means on the plans. If block anchors are proposed, the anchors shall be identified in the application as fill.

- (k) The spacing between decking components shall be not less than ¾-inch.
- (l) Minimum spacing between pile bents shall be 12 feet center to center.
- (m) The substrate shall not be shaded by any other structural components not addressed herein.
- (n) Aquaculture structures associated with residential tidal docks shall be installed within existing legal boat slips.
- (o) Aquaculture structures associated with residential tidal docks that extend outside the footprint of the originally permitted docking structure and associated boat slip(s) constitute a modification of the approved docking structure and shall meet the requirements of Env-Wt 603.02.

Env-Wt 606.08 Commercial Tidal Docks: Local Approvals. Department approval of a new commercial tidal dock or an expansion of an existing commercial tidal dock shall be in addition to any approvals required under applicable lawfully-enacted local land use requirements.

Env-Wt 606.09 Commercial Tidal Docks: Transient Public Use Access Points.

- (a) Proposed transient public use access point structures shall not be approved unless they provide a benefit to the public, such as a docking facility that is open to the general public for transient use.
- (b) The configuration and dimensions for commercial structures shall conform to the standards in Env-Wt 606.02 and Env-Wt 606.03.

Env-Wt 606.10 Commercial Tidal Docks: Marinas.

(a) To avoid damage to the environment due to leakage or spills of fuels, lubricants, waste products, or other pollutants, marinas shall be designed, constructed, and operated in compliance with all applicable provisions of:

- (1) RSA 146-A and Env-Or 300 relative to aboveground petroleum storage facilities;
- (2) RSA 146-C and Env-Or 400 relative to underground storage facilities;
- (3) RSA 147-A and subtitle Env-Hw relative to hazardous waste management;
- (4) RSA 483-B and Env-Wq 1400 relative to shoreland protection;
- (5) RSA 485-A and Env-Wq 1700 relative to surface water quality; and
- (6) RSA 485-A, RSA 485-C, and Env-Wq 401 relative to groundwater best management practices.

(b) To demonstrate compliance with (a), above, the applicant for marina construction or expansion may provide the department with evidence of compliance with the Marina BMPs, available at <https://www.des.nh.gov/organization/commissioner/pip/publications/wd/documents/nhdes-wd-01-12.pdf>.

(c) With any request for a new or expanded marina or any repairs that go beyond replacement in-kind, the applicant shall submit a master plan of operations that includes:

- (1) Existing or proposed operational conditions, which describe how the facility currently meets the definition of marina, as well as a description of services or activities that exceed the definition, such as use of slips for aquaculture;

- (2) A plan of all permanent and seasonal structures in plan view, including docking structures, boat ramps, boat haul out locations, and marine rails or other structures that are in the water or within the tidal buffer zone, or both;
  - (3) An operational plan for management of seasonal structures, including methods and timing of installation and removal and storage locations;
  - (4) A spill response action plan;
  - (5) A stormwater treatment plan; and
  - (6) A consideration of expansion statement that addresses whether the facility is at capacity or has the physical space to expand operations in the future.
- (d) In addition to complying with the applicable design and dimension standards for residential tidal docks, marinas shall include the following, designed to comply with the requirements identified in (a), above:
- (1) Designated wash areas with wash-water containment and treatment for all forms of vessel cleaning;
  - (2) Storm water runoff and treatment designs;
  - (3) The location of and a management plan for one or more pump-out facilities;
  - (4) The location of and a management plan for abrasive blasting, painting, and hull sanding; and
  - (5) The location of and a disposal method for oil and other waste products.
- (e) The density of coverage over public trust lands by structures constructed within tidal resources shall be limited by the following factors:
- (1) One or more structures on frontage, which shall meet the 20-foot property line setbacks;
  - (2) Resource limitations identified by the results of the CFA report;
  - (3) Water depths as documented in the CFA report and compliance with length and square footage requirements;
  - (4) Compensatory mitigation for square footage of structural coverage below HOTL that exceeds 2,000 SF;
  - (5) Dock length limitations based on water depth information; and
  - (6) Dock width and square footage limitations as described for residential tidal docks.
- (f) Finger floats shall be used instead of permanent structures where practicable.
- (g) For a proposal to redevelop an existing or previous marina, all functions of the marina shall be retained, provided that if the business function is abandoned or otherwise lost, the property shall be subject to removal to a level compliant with the residential or commercial transient access standard.

Env-Wt 606.11 Tidal Docks: Aquaculture at Marinas.

- (a) Aquaculture structures shall be installed within existing legal boat slips.
- (b) Aquaculture structures that extend outside the footprint of the originally permitted docking structure and associated boat slip(s) shall:
  - (1) Constitute a modification of the approved docking structure; and
  - (2) Meet the requirements of Env-Wt 603.02.

(c) If the department approves a proposed aquaculture structure, the department shall submit the approval to the governor and executive council for review as provided in RSA 482-A:3, II.

Env-Wt 606.12 Commercial Tidal Docks: Working Waterfront.

(a) The dimensions and configurations of a working waterfront facility shall be based on its use, rather than standard dimensions or configurations. Working waterfront structures may have non-conforming dimensions or functional features that can be retained or modified.

(b) Modifications of working waterfront structures may include remodeling or repair, or both, so long as the resulting structure has a functionally-equivalent use.

(c) No modification shall be allowed that changes a working waterfront structure into a dwelling unit or restaurant.

Env-Wt 606.13 Industrial Tidal Docks and Infrastructure.

(a) With any request for a new or expanded industrial dock or any repairs that go beyond replacement in-kind, the applicant shall submit the following:

- (1) A facility operations plan that describes the facility's function, operation, expected vessel usage and capacity in terms of tonnage, length, and draft, product delivered, and service to the general public;
- (2) A facility maintenance plan that identifies how the facility's various components will be maintained and the schedule on which the maintenance will be performed;
- (3) An existing facilities conditions plan that describes the condition of all existing facilities and includes a stormwater plan that demonstrates proper protection of water quality; and
- (4) An emergency response plan that addresses potential impacts associated with failure of the structure that would result in environmental harm or would require dredging to remediate and includes:
  - a. Product control on the regulated structure or within the regulated area;
  - b. Spill response;
  - c. Crash or structure failure; and
  - d. Dismantling and removal of structures.

(b) The configuration and dimensions allowed for industrial structures shall depend upon the use of the structure, as limited by the CFA required in Env-Wt 603.04 and the requirements in Env-Wt 605 relative to avoidance and minimization.

(c) The applicant shall submit with the application a consideration of expansion statement that addresses whether the facility is at capacity or has the physical space to expand operations in the future.

(d) The applicant shall:

- (1) Identify all federal design standards that apply to the proposed project, such as from the U.S. Coast Guard, the U.S. Maritime Administration, and the Maritime Transportation System; and
- (2) Certify that the identified requirements have been or will be met.

(e) The facility operations plan required by (a)(1), above, shall serve as the basis for the design justification.

Env-Wt 606.14 Moorings. Any person who wishes to install a mooring shall direct inquiries to the DP&H or harbor master.

Env-Wt 606.15 Boardwalks. Boardwalks in coastal areas shall meet the same criteria as specified in Env-Wt 517 for non-tidal boardwalks.

Env-Wt 606.16 Boathouses and Shoreline Slips. Boathouses in or over tidal waters/wetlands and slips dug into the shore shall not be approved.

Env-Wt 606.17 Project Classifications.

- (a) The following projects shall be classified as major:
- (1) All new overwater structure construction in tidal waters/wetlands; and
  - (2) Any maintenance, repair, or replacement of an existing legal docking structure that requires review by NHF&G, NHB, or National Marine Fisheries Service and impacts a protected species or habitat.
- (b) Maintenance, repair, and replacement in-kind of existing legal docking structures shall be classified as minimum impact, provided:
- (1) No work is proposed that would be prohibited under RSA 482-A:26;
  - (2) No change in location, configuration, construction type, or dimensions is proposed;
  - (3) No authorization is required from NHF&G to amend the standard time of year restriction in Env-Wt 307.04; and
  - (4) The applicant certifies in writing that:
    - a. The existing structures would be considered grandfathered in their current configuration and have not been abandoned; or
    - b. The existing structures were constructed pursuant to a previously-issued wetlands permit and have not been abandoned.
- (c) Maintenance, repair, or replacement in-kind of an existing legal docking structure shall be classified as a minor impact if the project:
- (1) Exceeds any of the criteria in (b), above; or
  - (2) Requires review by NHF&G, NHB, or National Marine Fisheries but does not impact a protected species or habitat.

#### PART Env-Wt 607 DREDGING ACTIVITIES

Env-Wt 607.01 Applicability. This part shall apply to:

- (a) Maintenance and improvement dredging of Federal Navigation Projects (FNPs);
- (b) New, improvement, and maintenance dredging associated with non-FNP projects that is in the direct interest of maintaining commerce for the well-being of the general public, such as shipping conveyance of fuel oil or road salt cargo and marinas; and
- (c) Dredging that is necessary to:
- (1) Remediate contaminated sites;
  - (2) Restore storm-driven sediment depositions that threaten public safety or hinder navigation; and

- (3) Maintain intake and outflow infrastructure.

Env-Wt 607.02 Avoidance and Minimization.

- (a) New dredging shall be avoided to the maximum extent practicable.
- (b) Dredging of existing regularly maintained FNP areas that exhibit high natural resource value shall meet avoidance and minimization techniques in Env-Wt 311.07 and Env-Wt 313.
- (c) All dredging projects shall be in accordance with standard conditions Env-Wt 307.03 and Env-Wt 307.10, provided that if the site is known to be a recruitment site for oyster spat, dredging shall not occur from June 1 through September 15 to accommodate oyster recruitment and spat development.
- (d) Using data screening in Env-Wt 603.03, dredging projects shall be screened to avoid shellfish beds, submerged aquatic vegetation and essential fish habitat.
- (e) The footprint and volume of material to be dredged shall be reduced to the maximum extent practicable.
- (f) Sequential dredging shall be used when practicable to avoid dredging activity during specific time periods in environmentally sensitive areas, to avoid turbidity and sedimentation, bottom disruption, and noise in sensitive areas used by fishery resources during spawning, migration, and egg development.
- (g) Avoidance and minimization techniques require avoidance of dredging in accordance with Env-Wt 607.05 in areas of high resource value identified by the CFA, including the following resource areas:
  - (1) Areas that support shellfish beds;
  - (2) Areas with submerged aquatic vegetation, areas that historically supported submerged aquatic vegetation, historic and maintained FNP areas that exhibit high resource value, and publicly funded restoration sites;
  - (3) Intertidal and wetland habitat; or
  - (4) Estuarine/salt marshes, and other high value habitat areas, including shorebird habitat and nesting areas, essential fish habitat, and other protected species or habitat.
- (h) New cable and pipeline crossings shall be aligned along the least environmentally damaging route, specifically to avoid sensitive habitats including rocky reefs, submerged aquatic vegetation, oyster reefs, shellfish beds, emergent marsh, and mud flats.
- (i) Pipelines and submerged cables shall be buried where possible to avoid impacts to invertebrate migratory patterns resulting from pipe exposure.
- (j) Open trenching for pipeline or cable installation shall not be used unless all other methods are not practicable. If open trenching is used, a method in which the trench is immediately backfilled shall be used to reduce the impact duration.
- (k) Existing rights-of-way shall be used whenever possible to lessen overall encroachment and disturbance of coastal areas.
- (l) Equipment access shall be limited to the immediate project area unless access requires use of a more environmentally sensitive access.
- (m) No dredged material shall be disposed in areas containing sensitive or unique marine benthic habitats, including spawning sites, feeding sites, and surface deposits of cobble or gravel substrate.

(n) Impacts to tidal waters/wetlands and submerged lands during the mobilization and demobilization of dredging and other related project equipment shall be evaluated and minimized.

Env-Wt 607.03 Tidal Dredge Project Descriptions; Approval Criteria.

(a) Dredging in tidal waters or tidal wetlands shall not be allowed unless the primary purpose of the dredging is to:

- (1) Maintain or improve a FNP that provides a public benefit to commercial and industrial shipping, commercial fishing, existing working waterfront areas, or homeland security;
- (2) Construct, maintain, or improve a marina, private association, or public facility; or
- (3) Remediate contamination, remove storm-driven sediment, or maintain intake and outflow infrastructure.

(b) Dredging in tidal waters or tidal wetlands shall not be approved unless:

- (1) The project meets standard conditions of Env-Wt 307 and avoidance and minimization techniques in Env-Wt 607.02;
- (2) The project applicant participates in and follows guidance provided in a pre-application meeting with the department or the New Hampshire dredge management task force; and
- (3) The project is sponsored by the state so that:
  - a. All applications to the department for dredging of FNPs in tidal waters or tidal wetlands are submitted by the DP&H pursuant to RSA 12-G:45; and
  - b. All other dredging projects in tidal waters/wetlands have DP&H sponsorship or authorization for another entity, such as a municipality or private person, to act as an agent to apply for a permit from the department.

Env-Wt 607.04 Other Application Requirements.

(a) Prior to finalizing a dredge proposal, the applicant shall conduct an existing conditions bathymetric survey and submit it with the application to the department.

(b) Prior to finalizing a dredge proposal, the applicant shall submit information regarding the current and historic presence of submerged aquatic vegetation, as documented by the CFA in Env-Wt 603.04, within and adjacent to the proposed dredging footprint.

(c) As specified in RSA 482-A:3, X(b), the application fee for dredging in tidal waters/wetlands for the purpose of improving navigation for a municipality, as sponsored by DP&H, shall not exceed \$10,000.

(d) The application fee for all projects not covered by (c), above, shall be as specified in RSA 482-A:3, I(a)(3).

Env-Wt 607.05 Additional Information Required for Dredging Projects.

(a) In addition to the plan requirements in Env-Wt 603, plans for tidal dredging projects shall include the following:

- (1) Location of the state boundary line for projects proposed in the Piscataqua River or Salmon Falls River;
- (2) Location of each sediment sampling location, with a key to sampling findings;
- (3) Projected dredge prism tied to bottom contours; and

- (4) Proposed overdredge, not to exceed 2 feet.
- (b) Disposal sites adequate to contain the volume of dredged material, including the volume of allowable over-depth dredging, shall be identified.
- (c) Bankward slopes of the dredged area shall be no steeper than 3:1 to ensure that sloughing of the channel side slopes does not occur.
- (d) Fishery habitat functions/services in the project areas, including an essential fish habitat study, shall be identified and characterized prior to any dredge and fill activities.
- (e) The impacts of dredge or fills on fishery habitat shall be identified during proposed project reviews, including alterations of hydrology and water quality as a result of the proposed project.
- (f) The CFA required in Env-Wt 603.04 shall include an assessment of the cumulative impact from past, current, and all reasonably foreseeable future dredge and fill operations that impact aquatic habitats and an anticipated dredge cycle.
- (g) Sediment from the proposed dredge site shall be characterized according to the following:
  - (1) Benthic analysis;
  - (2) Grain size; and
  - (3) History of exposure to contamination sources, whether from a land-based discharge source or in-water source from a spill.
- (h) If the results of the sediment characterization assessment in (g), above, meet the formula for potential or known contamination, then testing of the sediment in the proposed dredge location shall be as required by:
  - (1) Requirements for land-based solid or hazardous waste disposal as specified in Env-Sw 100-2000, Env-Hw 100-1200, and Env-Or 600; and
  - (2) Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters, US EPA New England and US ACE New England District, dated April 2004, available as noted in Appendix B.

Env-Wt 607.06 Dredge Methods.

- (a) For non-FNP projects, sediment dispersion modeling shall be done to characterize sediment resuspension and dispersion during operations, and modeling outputs shall be used to design operations, including measures to avoid and minimize impacts from suspended sediment and turbidity on living marine resources. Sediment dispersion models shall be field-verified to various sediment and hydraulic conditions to ensure they have been calibrated appropriately to predict sediment transport and dispersion.
- (b) Proposed dredging methods shall:
  - (1) Be based on the nature of the sediment as determined by sediment characterization, results of contaminant testing, turbidity transport modeling, and resource vulnerabilities;
  - (2) Be based on suitability of existing site conditions;
  - (3) Be based on location and suitability of disposal options;
  - (4) Represent the least environmentally-impacting practicable alternative; and
  - (5) Be by one of the following means, listed in descending order of preference:
    - a. Mechanical closed, or enviro, bucket dredge;



- b. Mechanical clamshell dredge;
- c. Mechanical open bucket dredge; or
- d. Suction dredge.

Env-Wt 607.07 Dredging Contaminated Sites.

- (a) Areas of known contamination shall not be partially dredged, leaving freshly-exposed sources of contamination to be transported by currents and dispersed into uncontaminated areas.
- (b) For sites identified as contaminated, no dredging of contaminated sediments shall be allowed without complete removal of all contaminated material.

Env-Wt 607.08 Sedimentation Control.

- (a) Dredging in fine sediments shall be avoided when possible to reduce turbidity plumes and the release of nutrients and contaminants that bind to fine particles.
- (b) All practicable methods for minimizing suspended sediment and turbidity shall be employed, including closed buckets when appropriate.

Env-Wt 607.09 Sediment Transport and Disposal.

- (a) The applicant shall include in the application an explanation of how the dredged material will be transported and off-loaded to minimize dispersion of sediments.
- (b) The CFA report shall be considered when assessing the potential impact of proposed disposal locations and determining the least impacting disposal location.
- (c) Sediment disposal shall not negatively impact priority resource areas.
- (d) Any unavoidable negative impacts from sediment disposal shall require compensatory mitigation.
- (e) The primary acceptable means of disposal for uncontaminated sediments shall be for beneficial use, such as beach nourishment, dune restoration, and shoal creation associated with living shorelines.
- (f) Near-shore disposal of dredged material with the intent of creating a berm to provide a sand source for a nearby sandy beach shall be considered beneficial use.
- (g) If dredged materials will not be beneficially used, the disposal location shall be:
  - (1) Appropriate to the nature of the material; and
  - (2) Identified in the application.
- (h) Contaminated sediment shall be disposed of at a facility authorized to accept such material.
- (i) For non-FNP requests to place dredged material in state waters, the applicant shall evaluate the site evaluation criteria developed for selection or designation of dredged material disposal sites in accordance with 40 CFR 228 and EPA's ocean dumping program described for Region I at <https://www.epa.gov/ocean-dumping/managing-ocean-dumping-epa-region-1>.

Env-Wt 607.10 Project Classifications.

- (a) Except as provided in (b), below, all forms of dredging in tidal waters/wetlands shall be classified as major.

(b) Removal of sediments surrounding an intake or outflow structure shall be classified as minimum impact provided:

- (1) The sediments are removed by means of hand-held suction equipment;
- (2) Work is limited to the immediate mouth of the structure; and
- (3) The footprint of the activity does not exceed 500 SF.

#### PART Env-Wt 608 TIDAL BEACH MAINTENANCE AND STABILIZATION

##### Env-Wt 608.01 Maintenance and Stabilization Activities on Public Tidal Beaches.

(a) Removal of seaweed, algae, or other debris (beach debris) from public tidal beaches shall not require a permit under RSA 482-A:3, provided:

- (1) All work is done:
  - a. By the state or local agency responsible for maintaining the public beach, or its authorized agent, not by private land owners;
  - b. Between April 15 and October 15; and
  - c. Using the technique most appropriate for the work that will have the least environmental impact;
- (2) No work is done in standing or flowing water;
- (3) No work is done within 10 feet of sand dunes or salt marshes, unless work is in a legally-existing developed area;
- (4) Disturbance and removal of sand or other beach substrate is minimized to the maximum extent practicable;
- (5) Front-end bucket loaders are only used:
  - a. To collect beach debris if no other practicable means exist; and
  - b. To transport beach debris collected by other means;
- (6) The state or local agency responsible for maintaining the beach consults with NHF&G to avoid and minimize potential impacts to piping plovers and their habitat; and
- (7) If the agency responsible for maintaining the beach intends to use equipment to remove sand or other beach substrate, the agency provides written notification to the department, which may be via email, in advance of the work by providing the following information:
  - a. The date(s) and location of the work;
  - b. The estimated volume of material to be removed;
  - c. The method by which the material will be removed; and
  - d. The location where the material will be disposed.

(b) The use of motorized equipment and machinery to regrade and recontour public tidal beaches as necessary to maintain the integrity of seawalls by the NH DNCR, NHDOT, or the authorized agent(s) of either agency, shall not require a permit under RSA 482-A:3 provided:

- (1) No work is done in standing or flowing water;
- (2) Wash-outs of materials to adjacent tidal wetlands, waters, or to adjacent properties is prevented;

- (3) No work is done within 10 feet of dunes or salt marshes, unless work is in a legally-existing developed area;
- (4) The removal of sand or other beach substrate from the beach is minimized to the maximum extent practicable; and
- (5) Prior to commencing the work, the agency responsible for the work provides written notice to the department, which may be via email, by providing the following information:
  - a. The date(s) and location of the work; and
  - b. The methods and equipment to be used to perform the work.

Env-Wt 608.02 Project Classification. A project shall be classified as a major project if it:

- (a) Occurs below the HOTL; and
- (b) Does not qualify as a maintenance or stabilization project under Env-Wt 608.01.

Env-Wt 608.03 Construction of Private Tidal Beaches Prohibited. No new beach shall be constructed in or on the tidal shoreline or within the tidal buffer zone, whether by cutting through vegetation, replacing or covering natural material with sand fill, replacing or covering natural ground surface and vegetation with a constructed sand perched beach, changing contours by excavating the intertidal zone, shoreline, or tidal buffer zone, or any other means.

Env-Wt 608.04 Beach Nourishment.

- (a) Beach nourishment shall be:
  - (1) Allowed only on publicly-owned beaches; and
  - (2) Authorized only by the state or local agency responsible for maintaining the beach.
- (b) Proposed nourishment material shall be:
  - (1) Chosen based on compatibility with that of existing beach material for grain size, shape, and color; and
  - (2) If not virgin material, tested for contaminants prior to placement on the beach.
- (c) The slope of the beach after beach nourishment shall mimic the natural beach profile.

#### PART Env-Wt 609 TIDAL SHORELINE STABILIZATION

Env-Wt 609.01 Tidal Shoreline Stabilization Requirements. Tidal shoreline stabilization projects shall:

- (a) Maintain or enhance the natural process functions of the shoreline as the critical transition zone between the intertidal zone and upland tidal buffer zone/sand dune regimes;
- (b) Provide wildlife habitat while providing protection against coastal hazards;
- (c) Be compatible with the existing natural land cover and its functions;
- (d) Address the known causes of erosion; and
- (e) Avoid adverse impacts to nearshore ecosystem processes and habitats and adjacent shoreline.

Env-Wt 609.02 Hierarchy of Tidal Shoreline Stabilization Methods. Applications for tidal shoreline stabilization projects shall demonstrate that:

- (a) The technique or combination of techniques is based on best available scientific and engineering practices; and
- (b) The proposed technique or combination of techniques addresses:
  - (1) Results of the avoidance and minimization narrative required in Env-Wt 311.07, the avoidance, minimization, and mitigation demonstration required in Env-Wt 313.03 and Env-Wt 313.04, the CFA required in Env-Wt 603.04, and the project design narrative required in Env-Wt 603.06;
  - (2) Any causes of erosion that can be identified;
  - (3) The degree or extent of erosion;
  - (4) Relative exposure based on shoreline geometry, shore orientation, intensity of boat traffic, influence of adjacent structures, storm surge, and extreme precipitation events;
  - (5) Potential sea-level rise and vulnerability assessment under Env-Wt 603.05;
  - (6) Potential marsh migration as a result of sea level rise as shown on the Sea Level Affecting Marshes Model (SLAMM) wetlands bureau One-Stop mapper; and
  - (7) The design requirements of Env-Wt 514.04.

Env-Wt 609.03 Analysis of Existing Structure Conditions Required. As part of an application to repair or rehabilitate an existing tidal shoreline stabilization structure, the engineer or qualified coastal professional shall rate the condition of the existing structure and the purpose for repair based on the following:

- (a) The degree of damage or extent of deterioration, as applicable, such as missing components, cracking, or weeping with erosion;
- (b) Whether the existing installation has functioned as intended;
- (c) Whether opportunities exist to use soft bank stabilization components or a combination of soft and hard components; and
- (d) The ability of the structure to withstand coastal flood risk in accordance with the vulnerability assessment required by Env-Wt 603.05.

Env-Wt 609.04 Techniques for Tidal Shoreline Stabilization.

- (a) Subject to (c), below, tidal shoreline stabilization shall be accomplished using living shoreline techniques unless the applicant demonstrates that a living shoreline is not practicable.
- (b) Living shoreline techniques shall include the following:
  - (1) Soft vegetative bank stabilization, including regrading and replanting of slopes, in which all work occurs at or above the mean tide level;
  - (2) Bioengineered bank stabilization that uses a combination of live vegetation, shells, woody material, or geotextile matting, which may include regrading and replanting of slopes with all work occurring at or above the mean tide level;
  - (3) Soft vegetative shoreline stabilization that occurs below mean tide level, which may include fill and soft sill structures to restore the stabilizing and natural functions of salt marshes; and

(4) Bioengineered shoreline stabilization that occurs below mean tide level, which may include fill and a combination of live vegetation, woody material, geotextile matting, and harder structural materials such as rocks to create a sill at toe of a marsh or bank stabilization project.

(c) Living shoreline techniques shall be required if the project is to replace an existing stabilization structure that:

- (1) Has not functioned as required by Env-Wt 609.01; or
- (2) Is not an existing legal structure.

Env-Wt 609.05 Living Shoreline Design Plans.

(a) A living shoreline design plan shall be prepared and stamped by a professional engineer and reviewed relative to delineations of wetlands and stamped by a certified wetland scientist, in accordance with “Guidance for Considering the Use of Living Shorelines”, NOAA (2015), available as noted in Appendix B.

(b) A living shoreline design plan shall be prepared to show that the project will:

- (1) Use native vegetation, sand fill, and limited stone or wood as specified in Env-Wt 609.06 to provide shoreline stabilization and protection;
- (2) Mimic the natural landscape and leave natural vegetation intact to the greatest extent practicable;
- (3) If practicable based on the location of the HOTL, water turbulence, and soil conditions, add vegetation to existing sand beaches or dunes or construct vegetated sand dunes;
- (4) Design the sill to the lowest elevation possible that still ensures stabilization of the toe of the living shoreline;
- (5) Maintain the shoreline’s ability to absorb and mitigate storm impacts and adapt to the landward progression of the sea;
- (6) Minimize or prevent wave reflection toward abutting properties;
- (7) If space and soil conditions allow, cut back unstable banks to a flatter slope, seed and replant with native, non-invasive trees and shrubs; and
- (8) Provide habitat for wildlife and aquatic species.

Env-Wt 609.06 Use of Wood and Rock in Living Shorelines. Large wood debris such as driftwood, root wads, and natural rock that is comparable to naturally-occurring rock found in the vicinity of the project may be incorporated into a soft tidal shoreline stabilization design as matrix material for a bio-engineering bank stabilization technique.

Env-Wt 609.07 Tidal Shoreline Stabilization Using New Hard-Scape or Rip-Rap.

(a) The department shall not approve any tidal shoreline stabilization plan that proposes to install new rip-rap unless:

- (1) The applicant demonstrates that:
  - a. Anticipated turbulence, flows, restricted space, fetch, or similar factors render soft stabilization methods physically impractical; and
  - b. Natural areas or naturalized soft shoreline stabilization on neighboring properties will not be damaged by the placement of the proposed rip-rap; or
- (2) The rip-rap is a component used as a sill to stabilize the toe, but is not the primary or dominant component of a living shoreline stabilization design.

- (b) The applicant proposing to install new rip-rap shall include with the application:
- (1) Evidence of erosion that cannot be stabilized solely with a soft stabilization design;
  - (2) A description of anticipated turbulence, flows, restricted space, fetch, or similar factors that render vegetative and diversion methods physically impractical;
  - (3) An assessment of the potential for the proposed rip-rap to erode the shoreline of neighboring properties, based on an examination of the shoreline and modeling based on tides, average wave height and force, and the energy absorption or deflection ability of the proposed rip-rap;
  - (4) Specification of:
    - a. Minimum and maximum stone sizes;
    - b. Existing contours and final proposed contours;
    - c. The volume of rip-rap to be used;
    - d. The minimum and maximum rip-rap thickness; and
    - e. The type and thickness of bedding for the stone;
  - (5) Cross-section and plan views of the proposed installation; and
  - (6) The relationship of the project to fixed points of reference, abutting properties, and features of the natural shoreline.
- (c) In addition to plan requirements specified in Env-Wt 311, applications to use rip-rap adjacent to tidal water bodies shall:
- (1) Include stamped engineering plans; and
  - (2) If the state holds fee simple ownership, a stamped survey showing the location of the mean high water tide line on the shoreline and the footprint of the proposed project.

Env-Wt 609.08 Repair of Existing Rip-Rap.

- (a) Existing rip-rap may be maintained in-kind, repaired in-kind, or replaced in-kind as a minimum impact tidal shoreline stabilization project only if the work meets the requirements of Env-Wt 609.10.
- (b) The applicant shall provide the following with or as part of an application for any work that does not qualify under Env-Wt 609.10:
- (1) A signed certification that the rip-rap that is the subject of the work is an existing legal structure; and
  - (2) The design information specified in Env-Wt 609.07(b)(2)-(6).

Env-Wt 609.09 Tidal Shoreline Stabilization Using Walls.

- (a) Due to the loss of natural features, such as habitat and the ability of the shoreline to move and adapt naturally to coastal hazard events that results from constructing a wall in tidal waters/wetlands, and due to the reflection and redirection of wave energy that can have an adverse effect on surrounding properties and ecology, the department shall not approve the installation of a wall unless required to protect public infrastructure in situations where a softer stabilization technique is shown to be impracticable.
- (b) The following shall apply to any application to install a wall to stabilize a tidal shoreline:

- (1) Walls shall be permitted only if there is insufficient space to cut back slopes to eliminate the need for a wall;
- (2) The applicant shall provide:
  - a. Cross-section and plan views of the proposed installation; and
  - b. Plans that clearly show the relationship of the project to fixed points of reference, abutting properties, and features of the natural shoreline;
- (3) The face of a project shall be angular, not smooth, to minimize reflected wave energy;
- (4) Fill shall be allowed only to the extent necessary to achieve structural stability;
- (5) Weep holes shall be provided to allow seepage of groundwater and to promote slope stability;
- (6) Walls shall:
  - a. Not reflect or re-direct currents or wave energy towards adjacent wetlands, structures, or neighboring properties, or otherwise contribute to erosion; and
  - b. Be concave on the seaward side to reflect wave energy where practicable.

Env-Wt 609.10 Minimum Impact Tidal Shoreline Stabilization Projects.

(a) Subject to the conditions in (b), below, a shoreline stabilization project shall be classified as minimum impact if it consists of:

- (1) In-kind maintenance, in-kind repair, or in-kind stabilization of an existing installation that is fully exposed at low tide;
- (2) Conversion of an existing stabilization practice to bioengineered bank stabilization or living shoreline;
- (3) A living shoreline project that is fully exposed at low tide; or
- (4) An existing stabilization project located below mean high water, including the placement of fill material landward of sills, provided the fill is for erosion control or wetland function enhancement, or both, and not recreational activity.

(b) For a project that is listed in (a), above, to qualify as minimum impact, the following conditions shall be met:

- (1) Before submitting an application, the applicant shall meet with department staff to discuss the proposed project to insure the proposed work will not exceed minimum impact limits;
- (2) No impacts to protected species or habitat shall be allowed unless the applicant has received and incorporated recommendations from NHB, NHF&G, or both, as applicable;
- (3) There shall be no change in the location, configuration, construction type, or dimensions of the installation unless the project is a living shoreline project that enhances the natural processes and functions of a previously disturbed or eroding shoreline;
- (4) All work shall be done at low tide when the work area is fully exposed;
- (5) The existing installation shall have functioned as intended without adverse effects on the property or surrounding properties such as increased erosion due to deflection of waves or currents;
- (6) A living shoreline project shall be either:
  - a. A restoration/enhancement project under Env-Wt 500; or

- b. No longer than 200 LF with marsh restoration of less than one acre and extending no more than 50 feet seaward of mean low water;
- (7) Unless converted to a living shoreline, the applicant shall certify in writing that each installation being maintained, repaired, or replaced in-kind is an existing legal structure as defined in Env-Wt 102; and
- (8) The applicant shall perform a CFA and a vulnerability assessment.

Env-Wt 609.11 Tidal Shoreline Stabilization Projects Requiring Standard Permit.

- (a) A shoreline stabilization project shall require a standard permit, except as provided for in Env-Wt 609.10(b)(5), if it:
  - (1) Is a living shoreline that does not meet the requirements of Env-Wt 609.01 or an installation of hard structures in any previously undisturbed coastal lands or tidal wetlands;
  - (2) Represents an increase in hardening of the shoreline, such as by constructing a wall, installing rip-rap, converting a bio-installation to armoring, or increasing the dimensions of existing armoring; or
  - (3) Does not qualify as a minimum impact project under Env-Wt 609.10.
- (b) The following shall constituted major impact projects:
  - (1) Projects in sand dunes, tidal wetlands, or bogs, except for repair of existing structures pursuant to Env-Wt 609.10; and
  - (2) Projects within 100 feet of the highest observable tide line that alter any bank, flat, wetlands, surface water, or undeveloped uplands, except for repair of existing structures pursuant to Env-Wt 609.08(a).
- (c) Projects that do not meet the criteria for minimum impact or major projects shall constitute minor impact projects.

PART Env-Wt 610 PROTECTED TIDAL ZONE

Env-Wt 610.01 Applicability. This part shall apply to the tidal buffer zone established in RSA 482-A and to all protected shoreland in coastal areas established by RSA 483-B, referred to collectively as the protected tidal zone.

Env-Wt 610.02 Projects in the Protected Tidal Zone that Do Not Require a Permit. The following activities may be undertaken in the protected tidal zone without first obtaining a permit under RSA 482-A:

- (a) The maintenance, repair, or modification of an existing legal primary or accessory structure that does not:
  - (1) Increase or move the footprint or impervious area of the structure;
  - (2) Result in the alteration of previously-unaltered areas;
  - (3) Result in an increase in loading to an onsite sewage disposal system;
  - (4) Increase the number of residential units on the property; or
  - (5) Necessitate or result in any dredging or filling within the protected tidal zone;
- (b) Work done pursuant to an approved remediation plan that is prepared in response to any enforcement action against a property owner or contractor where the violator is directed by the department to remediate violations of:



- (1) RSA 482-A or rules in subtitle Env-Wt, or both; or
- (2) RSA 483-B or Env-Wq 1400, or both;
- (c) Landscaping or gardening consistent with Env-Wq 1400;
- (d) The construction of stairs in the upland protected tidal zone, provided:
  - (1) The bottom of the stair structure lands on a beach above mean high tide; and
  - (2) No excavation is required;
- (e) Trimming, pruning, and thinning of branches to the extent necessary to protect structures, maintain clearances, or maintain the ecological health of the planted area, provided the activity does not endanger the health of the plant;
- (f) Removal of dead, diseased, or unsafe trees, limbs, saplings, or shrubs that pose a hazard to structures or have the potential to cause personal injury, provided:
  - (1) The work is done in a way that:
    - a. Prevents damage to surrounding healthy trees, limbs, saplings, and shrubs;
    - b. Minimizes damage to ground cover;
    - c. Prevents soil erosion and sedimentation to the water body; and
    - d. Leaves all stumps intact; and
  - (2) The person who authorizes the work shall bear the burden of proving, in any enforcement action for a violation of this rule, that the trees, limbs, saplings, or shrubs removed were in fact dead, diseased, or unsafe, where proof that removed trees, limbs, saplings, or shrubs were dead, diseased, or unsafe may include the following:
    - a. Photographs of the property which clearly show the dead, diseased, or unsafe trees, limbs, saplings, and shrubs; and
    - b. 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;
- (g) 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 SF left without vegetation shall be replanted with native, non-invasive species in accordance with Agr 3802;
- (h) Hand-removal or use of hand tools to remove rocks and stones beyond the 50-foot setback to the HOTL with a waterfront buffer as defined in RSA 483-B:9, V(a)(1); and
- (i) The placement or installation of readily-removed items, such as picnic tables and lawn chairs.

Env-Wt 610.03 Design Standards. The applicant shall certify that a proposed project for the construction of structures within the protected tidal zone complies with the standards described in FEMA P-55, Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Residential Buildings in Coastal Areas, 4th Edition (2011) and with local resiliency planning ordinances.

Env-Wt 610.04 Plans and Other Information Required. The following plans and other information shall be submitted with applications for work within the protected tidal zone:

- (a) Existing and proposed contours at 2-foot intervals measured from the HOTL;

- (b) If any portion of the subject parcel is located in a regulatory floodplain, the location of the 100-year flood boundary the zone, and water elevation as shown on the applicable FEMA Flood Insurance Rate Map;
- (c) All other applicable local and state setbacks;
- (d) The dimensions and locations of all:
  - (1) Existing and proposed structures;
  - (2) Existing and proposed impervious areas;
  - (3) Existing and proposed disturbed areas;
  - (4) Areas to remain in an unaltered state;
  - (5) Existing cleared areas, such as gardens, lawns, and paths; and
  - (6) Proposed temporary impacts associated with completion of the project;
- (e) Proposed methods of erosion and siltation controls, identified graphically and labeled on a plan, or otherwise annotated as needed for clarity;
- (f) A plan of any planting(s) proposed in the waterfront buffer, showing the proposed location(s) and Latin names and common names of proposed species;
- (g) If applicable, the location of an existing or proposed 6-foot-wide foot path to the waterbody or a temporary access path;
- (h) For any project proposing that the impervious area be at least 15% but not more than 20% within the protected tidal zone, a statement signed by the applicant certifying that the impervious area is not more than 20%;
- (i) For any project proposing that the impervious area be greater than 20% within the protected tidal zone, plans for a stormwater management system that will infiltrate increased stormwater from development, provided that if impervious area is or is proposed to be greater than 30 %,the stormwater management systems shall be designed by a professional engineer;
- (j) For any project involving pervious surfaces, a plan with specifications of how those surfaces will be maintained; and
- (k) All other relevant features necessary to clearly define both existing conditions and the proposed project.

Env-Wt 610.05 Protected Tidal Zone Restrictions. The restrictions identified in RSA 483-B:9, II shall apply to the protected tidal zone.

Env-Wt 610.06 Maintenance of a Waterfront Buffer. The provisions of RSA 483-B:9, V(a) shall apply to the protected tidal zone within 50 feet of the HOTL.

Env-Wt 610.07 Accessory Structures. Accessory structures in the waterfront buffer shall comply with the applicable provisions of Env-Wq 1400.

Env-Wt 610.08 Maintenance of a Woodland Buffer. The provisions of RSA 483-B:9, V(b) shall apply to the protected tidal zone within 150 feet of the HOTL.

Env-Wt 610.09 Individual Sewage Disposal Systems. The provisions of RSA 483-B:9, V(c) shall apply to the protected tidal zone.

Env-Wt 610.10 Erosion and Siltation. The provisions of RSA 483-B:9, V(d) shall apply to the protected tidal zone.

Env-Wt 610.11 Minimum Lots and Residential Development. The provisions of RSA 483-B:9, V(e) shall apply to the protected tidal zone.

Env-Wt 610.12 Minimum Lots and Non-Residential Development. The provisions of RSA 483-B:9, V(f) shall apply to the protected tidal zone.

Env-Wt 610.13 Impervious Surfaces. The provisions of RSA 483-B:9, V(g) shall apply to the protected tidal zone.

Env-Wt 610.14 Rebuilding of Non-Conforming Structures.

(a) In accordance with RSA 483-B, nonconforming primary structures may be entirely demolished and reconstructed, with continued encroachment into the waterfront buffer, provided the replacement structure is located farther back from the reference line than the preexisting nonconforming structure.

(b) No alteration shall extend the structure closer to the public water between the primary building line and the reference line.

(c) The proposal or property shall be made more nearly conforming than the existing structure or the existing conditions of the property in accordance with RSA 483-B.

(d) Applicants rebuilding existing structures following storm damage shall acknowledge that continued reconstruction in floodplain or flood risk area may not be achievable in the future based on the actual extent of sea level rise, and that retreat may be necessary.

Env-Wt 610.15 Conversion of Decks and Porches Prohibited. 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.

Env-Wt 610.16 Slope Limitation for Structures. No structure shall be built on or into land in the protected tidal zone having greater than 25% slope.

Env-Wt 610.17 Project Classifications.

(a) A major project shall be:

(1) Any dredging, filling, or construction activity, or any combination thereof, that is proposed to:

a. Occur within 100 feet of the HOTL; and

b. Alter any tidal shoreline bank, tidal flat, wetlands, surface water, or undeveloped uplands;  
or

(2) A project that would be major based on an aggregation of projects under Env-Wt 400.

(b) A minor project shall be any dredging, filling, or construction activity, or any combination thereof, that:

(1) Involves work within 75 feet of a saltmarsh in the developed upland tidal buffer;

(2) Is not a major project; and

(3) Will disturb 3,000 SF or more but less than 10,000 SF in the developed upland tidal buffer.

(c) A minimum impact project shall be any dredging, filling, or construction activity, or any combination thereof, that:

- (1) Is in a previously developed upland area;
- (2) Is within 100 feet of the HOTL; and
- (3) Will disturb less than 3,000 SF.

*Amended effective 01-22-20*

#### PART Env-Wt 611 SAND DUNES

Env-Wt 611.01 Prohibited Impacts. No person shall undertake any regulated activities in any fore dune or back dune, due to the rarity, ecological significance, and critical functions of such areas in abating storm surge, accommodating sea level rise, and providing habitat, except as specifically allowed in this part.

Env-Wt 611.02 Projects That Do Not Require a Permit. The following projects and activities may be undertaken without first obtaining a permit, provided the conditions stated are met:

(a) Removal of sand that blows or drifts onto any lawn, driveway, walkway, parking or storage area, or boat ramp, or that blows or drifts in, on, or around buildings or other structures by the person who owns the affected property, as provided by RSA 482-A:3, VII, subject to the following limitations:

- (1) Work shall be done without the use of motorized machinery;
- (2) No established vegetation shall be removed; and
- (3) Sand that has accumulated against the side of buildings and other structures between the structure and a sand dune shall be removed no closer than 36 inches to the angle of repose of the slope of the adjacent dune; and

(b) As provided by RSA 482-A:3, IX, operation of any of the following:

- (1) Police vehicles or fire vehicles;
- (2) Vehicles used in cases of emergency;
- (3) Authorized maintenance vehicles when performing maintenance duties; and
- (4) Vehicles used by commercial fishermen or commercial lobstermen when engaged in activities related to fishing or lobstering.

#### Env-Wt 611.03 Pre-Application Assessment.

(a) As provided in RSA 482-A:3, VII, the department shall provide a pre-application assessment of any lot of record located in sand dunes upon request of the property owner.

(b) The purpose of a pre-application assessment shall be to provide the property owner with information regarding what requirements apply to the property, including reviewing the property for the presence of threatened or endangered dune vegetation or other exemplary natural community features that may require protection, relocation, or mitigation, or any combination thereof.

(c) To request a pre-application assessment, the property owner shall submit to the department a written request for an assessment that includes:

- (1) The property owner's name and contact information;
- (2) The street address and tax map/lot of the property; and
- (3) Any questions the property owner has about the applicability of specific requirements.

(d) The department shall undertake the pre-application assessment by reviewing available aerial photography, orthophotography, and GIS data. If the available information is not sufficient to finalize the assessment, the department shall conduct a site inspection.

- (e) The department shall provide the results of the pre-application assessment to the property owner in writing.
- (f) For major impact projects in sand dunes that require mitigation, the pre-application assessment shall not replace the formal pre-application meeting to discuss compensatory mitigation required by Env-Wt 311.02.

Env-Wt 611.04 Design and Plan Requirements.

- (a) No structures shall be proposed in sand dunes except for structures on in-fill lots that will be located on the landward side of the fore dune.
- (b) Designs for projects in sand dunes shall:
  - (1) Incorporate mechanisms to limit impacts to existing intact sand dunes;
  - (2) Use sand fences to capture sand for major projects;
  - (3) Identify construction practices needed to protect sensitive plant and animal species and water quality; and
  - (4) Identify construction techniques and designs used to address any vulnerability assessment.
- (c) The applicant for a permit for a construction project in sand dunes shall provide the following information on the plans submitted pursuant to Env-Wt 311.06:
  - (1) If any portion of the property is located in the 100-year floodplain, the location of the 100-year floodplain boundary and water elevation as shown on the effective FEMA Flood Insurance Rate Map;
  - (2) The location of the 2.0-foot elevation contour as measured above the HOTL; and
  - (3) The location, with dimensions, of:
    - a. All impervious areas;
    - b. Areas of existing vegetation, with the vegetation identified on the plan;
    - c. Each rare, threatened, or endangered plant species as reported by NHB;
    - d. All disturbed areas, including existing lawn, gardens, and paths;
    - e. All areas to remain in an unaltered state;
    - f. All proposed temporary impacts associated with completion of the project, with a description of each temporary impact;
    - g. Proposed methods of erosion and siltation controls indicated graphically and labeled or otherwise annotated as needed for clarity;
    - h. A planting plan to include the Latin names and common names of plant species, plant spacing location and depth of each planting, time of planned planting, watering, irrigation to monitor and ensure success, any soil requirements or exposure requirements of plantings; and
    - i. All other relevant features necessary to clearly define both existing conditions and the proposed project.
- (d) The applicant for a permit for a construction project in sand dunes shall submit with the application a completed impervious coverage worksheet that includes:
  - (1) The name of the person who completed the worksheet;
  - (2) The date of the plan on which the worksheet is based;

- (3) Square feet of the lot within the sand dune;
- (4) Square feet and percentage of the lot area constituting existing impervious surface(s) within the sand dune; and
- (5) Total percentage of sand dune area within the lot that will be impervious upon completion of the project.

(e) For any project proposing an impervious area on an in-fill lot of at least 15% but not more than 20%, the applicant shall certify in writing that the impervious area is not more than 20%.

(f) For any project proposing an impervious area on an in-fill lot of greater than 20%, the applicant shall submit plans, prepared by a professional engineer, for a stormwater management system that will infiltrate the increased stormwater.

(g) For any project proposing pervious surfaces, the applicant shall submit a plan and specifications for long-term maintenance of the pervious surfaces.

Env-Wt 611.05 Additional Requirements for Projects in Sand Dunes.

- (a) Work on or in sand dunes shall be limited to existing developed lots and in-fill lots.
- (b) Natural dune sand and dune vegetation shall be removed only for the building footprint and driveway area.
- (c) Structures proposed to be constructed in or on sand dunes shall not change wind circulation patterns such that more sand is eroded.
- (d) The project shall not disturb any sand dune vegetation listed as a threatened or endangered species by the NHB.
- (e) Work shall be done in a time and manner so as to not disturb migratory waterfowl breeding and nesting areas.
- (f) Appropriate siltation and erosion controls shall be in place prior to construction, shall be maintained during construction, and shall remain until the area is stabilized.
- (g) Temporary siltation and erosion controls shall be removed once the area has been stabilized.
- (h) Any American Beachgrass (*Ammophila breviligulata*) that would be disturbed by a project shall be removed and replanted elsewhere on site according to approved plans.
- (i) Only indigenous native plant species shall be planted on the property.
- (j) No non-native ornamental plants shall be introduced to or used on the property.
- (k) The project shall not disturb any sand dune vegetation growing on adjacent properties.

Env-Wt 611.06 Project Classifications: Major Impact Projects.

(a) Any activity that would destroy, raze, deface, reduce, alter, build on, or remove any sand or vegetation from any sand dune shall be a major impact project unless it does not require a permit as specified in Env-Wt 611.02 or is a project that qualifies as a minimum impact project as specified in Env-Wt 611.07.

(b) Major projects shall be subject to the mitigation requirements specified in Env-Wt 605 and Env-Wt 800.

- (c) Major projects shall include, but are not limited to:
- (1) Development of an undeveloped in-fill lot located contiguous to the fore dune;
  - (2) Removal with heavy equipment or other tracked or wheeled machinery of a portion of a formed or vegetated sand dune that has encroached on an existing dwelling to a degree that cannot be remedied by use of hand tools;
  - (3) Changes to the morphology of an existing or forming dune or removal of established dune vegetation;
  - (4) Previously developed in-fill lots found to have threatened or endangered species located on the lot; and
  - (5) Any other proposal to alter by regulated activity any area of fore dune or back dune.

Env-Wt 611.07 Project Classifications: Minimum Impact Projects. The following projects shall qualify as minimum impact projects:

- (a) Dune restoration projects that meet the requirements for restoration under Env-Wt 407.04; and
- (b) Structure construction or other landscape alteration of previously-developed in-fill lots located in the dune slack area on which there are no threatened or endangered species.

#### PART Env-Wt 612 AQUACULTURE

Env-Wt 612.01 Applicability. This part shall apply to aquaculture operations in tidal waters/wetlands.

Env-Wt 612.02 Aquaculture Operations Not Requiring a Permit.

(a) An aquaculture operation licensed by NHF&G prior to the effective date of this rule shall not be required to apply for a permit.

(b) An aquaculture operation not licensed by NHF&G prior to the effective date of this rule shall be considered minimum impact and not require a permit under RSA 482-A:3, provided the following conditions are met:

- (1) The owner or operator applies to NHF&G for a marine aquaculture license;
- (2) After reviewing a copy of the application received by the department pursuant to Fis 807.07(g), the department issues a written statement to NHF&G that it has no objection to issuance of the license;
- (3) NHF&G issues a license based on the application reviewed by the department;
- (4) The department confirms in a written statement to the owner or operator that it has no objection to the final license issued by NHF&G;
- (5) The operation does not include the culture of finfish; and
- (6) For marine bottom culture operations inland of the General Sullivan Bridge:
  - a. There is at least 150 feet between locations of adjacent marine bottom culture operations licensed by NHF&G; and
  - b. The maximum size of the operation does not exceed 4.5 acres.

Env-Wt 612.03 Aquaculture Operations Requiring a Permit. Operations that do not meet all of the criteria in Env-Wt 612.02 shall file a standard permit application with the department.

**APPENDIX A: STATE/FEDERAL STATUTES & FEDERAL REGULATIONS IMPLEMENTED**

<b>Rule Section(s)</b>	<b>State Statutes Implemented</b>	<b>Federal Statutes, Regulations Implemented</b>
Env-Wt 600	RSA 482-A:1 - 4, 6, 8 - 34; RSA 483-B; RSA 485-A; RSA 487; RSA 212-A	Clean Water Act, 33 U.S.C. Chapter 26, Subchapter IV, § 1344 (Permits for Dredged or Fill Material); 33 CFR Parts 322 & 323; USACE Gen. Permit No. NAE-2016-02415

**APPENDIX B: INCORPORATED REFERENCES**

<b>Rule</b>	<b>Name (Date)</b>	<b>Available from</b>
Env-Wt 603.04(b)(2)a.	The Highway Methodology Workbook (1993)  The Highway Methodology Workbook Supplement (1999)	U.S. Army Corps of Engineers New England District 696 Virginia Road Concord, MA 01742-2751 (978) 318-8338  Download at no charge from: <a href="http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Forms/HighwayMethodBook.pdf">http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Forms/HighwayMethodBook.pdf</a>  <a href="http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Forms/HighwaySupplement6Apr2015.pdf">http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Forms/HighwaySupplement6Apr2015.pdf</a>
Env-Wt 605.04(d)(3)  Env-Wt 609.05(a)	Guidance for Considering the Use of Living Shorelines (2015)	National Oceanic and Atmospheric Administration 1401 Constitution Avenue NW, Room 5128 Washington, DC 20230  Download at no charge from: <a href="https://www.habitatblueprint.noaa.gov/wp-content/uploads/2018/01/NOAA-Guidance-for-Considering-the-Use-of-Living-Shorelines_2015.pdf">https://www.habitatblueprint.noaa.gov/wp-content/uploads/2018/01/NOAA-Guidance-for-Considering-the-Use-of-Living-Shorelines_2015.pdf</a>
Env-Wt 607.05(h)(2)	Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters (2004)	US Environmental Protection Agency, Headquarters 1200 Pennsylvania Avenue, NW Mail Code: 4504T Washington, DC 20004  Download at no charge from: <a href="https://www.epa.gov/ocean-dumping/regional-implementation-manual-evaluation-dredged-material-proposed-disposal-new">https://www.epa.gov/ocean-dumping/regional-implementation-manual-evaluation-dredged-material-proposed-disposal-new</a>

**APPENDIX C: STATUTORY DEFINITIONS****211:62-e, II**

(b) “Aquaculture” means the propagation and rearing of aquatic species and marine species and includes the planting, promoting of growth, harvesting and transporting of these species in, on, or from the waters of this state, or the operation of a fishing preserve.



**482-A:2**

IV. “Mean high tide” shall be determined according to the published tables and standards of the United States Coast and Geodetic Survey, adjusted to the locality from such tables.

VII. “Sand dune” shall mean a hill or ridge of sand piled up by the wind and commonly found on the seacoast.

**APPENDIX D: OTHER STATUTORY PROVISIONS**

[NONE IN THIS CHAPTER]

**APPENDIX E: SUMMARY OF ABBREVIATIONS AND ACRONYMS**

<b>Term</b>	<b>Meaning</b>
Agriculture BMWPs	“Best Management Wetlands Practices for Agriculture” dated 2019, published by the NH Department of Agriculture, Markets, and Food
A/M BMPs	“Wetlands Best Management Practice Techniques For Avoidance and Minimization” dated 2019, published by the New England Interstate Water Pollution Control Commission
CPESC specialist	Certified Professional Erosion and Sediment Control specialist - an individual certified by EnviroCert International, Inc.® as competent to develop and implement erosion and sediment control practices
CY	Cubic Yard
Federal classification method	Method established in “Classification of Wetlands and Deepwater Habitats of the United States”, adapted from Cowardin, Carter, Golet and LaRoe (1979), August 2013, FGDC- STD-004-2013
Federal delineation method	Method established in “Wetlands Delineation Manual”, Technical Report Y-87-1, Corps of Engineers, January 1987, and “Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region”, Version 2.0, U.S. Army Corps of Engineers, January 2012
Forestry BMPs	“New Hampshire Best Management Practices for Erosion Control on Timber Harvesting Operations” dated 2016, published by the University of New Hampshire Cooperative Extension
HOTL	Highest Observable Tide Line
Invasive Plant BMPs	“Best Management Practices For the Control of Invasive and Noxious Plant Species” dated 2018, published by the NHDOT
Marina BMPs	“Best Management Practices For New Hampshire Marinas” dated 2001, published by the NHDES Pollution Prevention Program
LAC	Local [River] Advisory Committee
LiDAR	Light Detection and Ranging - A surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor, with the differences in laser return times and wavelengths then being used to make digital 3-D representations of the target.
LF	Linear Foot
NH Method	“Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire” dated 2013 and revised 2015 and 2016, available at <a href="https://nhmethod.org/">https://nhmethod.org/</a>
NHB	Natural Heritage Bureau of the NH DNCR
NH DNCR	NH Department of Natural and Cultural Resources
NHF&G	NH Fish and Game Department
NHDOT	NH Department of Transportation
NRCS	Natural Resources Conservation Service of the U.S. Department of Agriculture

<b>Term</b>	<b>Meaning</b>
PBN	Permit-by-Notification (created in the rules)
PRA	Priority Resource Area - a jurisdictional area that: <ul style="list-style-type: none"> <li>(a) Has documented occurrences of protected species or habitat;</li> <li>(b) Is a bog;</li> <li>(c) Is a floodplain wetland contiguous to a tier 3 or higher watercourse;</li> <li>(d) Is a designated prime wetlands or a duly-established 100-foot buffer zone;</li> <li>(e) Is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or</li> <li>(f) Is any combination of (a) through (e), above.</li> </ul>
Professional engineer	RSA 310-A:2, II. "Professional engineer" means a person who by reason of advanced knowledge of mathematics and the physical sciences, acquired by professional education and practical experience, is technically and legally qualified to practice engineering, <b>and who is licensed by the board or otherwise authorized by this subdivision to engage in the practice of engineering.</b>
Routine Roadway BMPs	"Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire" dated 2019, published by the NHDOT
SF	Square Foot
SPN	Statutory Permit-by-Notification (established in RSA 482-A)
Subject property	<ul style="list-style-type: none"> <li>(a) For projects in surface water for which any kind of permit is required, the parcel(s) of land adjacent to and associated with the area in which the project will occur or has occurred; or</li> <li>(b) For all other projects for which any kind of permit is required, the parcel(s) of land on which the project will occur or has occurred.</li> </ul>
Trail BMPs	"New Hampshire Best Management Practices for Erosion Control During Trail Maintenance and Construction" dated 2017, published by the NH DNCR
US ACE	U.S. Army Corps of Engineers
USGS	United States Geological Survey
Utility BMPs	"Best Management Practices Manual, Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire" dated 2019, published by the NH DNCR
WAP	Wildlife Action Plan prepared and published by NHF&G
Water Quality BMPs	Recommended practices for minimizing or preventing the direct or indirect discharge of sediment or other pollutants into surface waters and wetlands, including those listed in Env-Wt 307 and the Agriculture BMPs, Forestry BMPs, Marina BMPs, Invasive Plant BMPs, Roadway Maintenance BMPs, Trail BMPs, and Utility BMPs, as applicable
WPPT	Wetlands Permit Planning Tool - a GIS tool that provides access to data for planning projects near or in jurisdictional areas, available at <a href="http://des3.sr.unh.edu/Html5Viewer/Index.html?configBase=http://jointagencyvm.sr.unh.edu/Geocortex/Essentials/des3.sr.unh.edu/REST/sites/NH_DES/viewers/gvh/virtualdirectory/Resources/Config/Default">http://des3.sr.unh.edu/Html5Viewer/Index.html?configBase=http://jointagencyvm.sr.unh.edu/Geocortex/Essentials/des3.sr.unh.edu/REST/sites/NH_DES/viewers/gvh/virtualdirectory/Resources/Config/Default</a>