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7/30/2026

NHDES Expedited Minimum Impact Wetland Permit Application

Society for the Protection of New Hampshire Forests
400 Little Harbor Rd, Portsmouth, NH
Tax Map 203, Lot 8

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**EXPEDITED MINIMUM IMPACT (EXP)
WETLANDS PERMIT APPLICATION**
Water Division / Land Resources Management Program /
Wetland Bureau



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RSA/Rule: RSA 482-A/Env-Wt 100-900 (Env-Wt 310.01)

APPLICANT NAME: Dylan Summers

TOWN NAME: Portsmouth

Administrative Use Only	File number:	Initials:
	Check number:	Amount:

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; Env-Wt 603.03; Env-Wt 603.05)

Please use the [Land Resources Management Permit Planning Tool \(LRMPPT\)](#), the [DataCheck Tool](#), the [New Hampshire Stream Crossing Initiative Data Viewer](#) or other sources to assist in identifying key features such as: [Priority Resource Areas \(PRAs\)](#), [protected species or habitats](#), coastal areas, designated rivers or designated prime wetlands.

Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
Does the project qualify for an Impact Classification Adjustment (such as and NHDES Ecological Review Section agreement for a classification downgrade) or a Project-Type Exception (such as a Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04).	☒ Yes ☐ No
Protected species or habitat?	☒ Yes ☐ No
If yes, species or habitat name(s): Iva Frutescens	DataCheck ID #: DCT26-0644
Bog?	☐ Yes ☒ No
Floodplain wetland contiguous to a tier 3 or higher watercourse?	☐ Yes ☒ No
Designated prime wetland or duly-established 100-foot buffer?	☐ Yes ☒ No
Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	☒ Yes ☐ No
Is the property within a designated river corridor? If yes, provide the following information:	☐ Yes ☒ No
Name of Local River Management Advisory Committee (LAC):	
A copy of the application was sent to the LAC on (mm-dd-yyyy):	
For dredging projects, is the subject property contaminated?	☐ Yes ☒ No
If yes, list contaminant(s):	
Is there potential to impact impaired waters, Class A waters, or outstanding resource waters?	☐ Yes ☒ No
For stream crossing projects, provide watershed size (see LRMPPT or Stream Stats):	

SECTION 2 - ELIGIBILITY (Env-Wt 306.03; Env-Wt 310.01; Env-Wt 310.03)

You must confirm that your project meets *all* of the following statements to qualify for the EXP process:

- The project qualifies as a minimum-impact project (Env-Wt 306.03).
- The project does not include activities that are prohibited under RSA 482-A (Env-Wt 306.03(a)).
- The project does not include any work in a jurisdictional area that was started without first obtaining applicable approval (Env-Wt 306.03(b)).
- No work has been done on the subject property pursuant to another EXP or a Statutory Permit-by-Notification (SPN) within 12 months of the date this EXP will be issued. Alternatively, if any work has been done on the subject property pursuant to another EXP or a SPN within 12 months of the date this EXP will be issued, then you are submitting information, including a plan, with this application demonstrating that:
- Work proposed in this application is wholly unrelated to and separate from work already done under the EXP or SPN.
- The work proposed in this EXP application, when combined with work that has been done under previously issued EXPs or SPNs within the last 12 months, does not constitute a project for which a Standard Permit is required (Env-Wt 310.03(a)).
- If the project is located in a PRA, it also qualifies for an impact classification adjustment under Env-Wt 407.02 or a Project-Type Exception (PTE) under Env-Wt 407.04 (Env-Wt 310.01(d)(6)).

☒ My project meets all the statements above. *Proceed to Section 3.*

☐ My project does not meet all of the statements above. **It does not qualify for the EXP process. It either is not permissible or requires a Standard Dredge and Fill Wetlands Permit Application.**

SECTION 3 - INFORMATION ON THE PROPOSED PROJECT (Env-Wt 310.01(c))

Identify the rule(s)/provision(s) which make the project a minimum impact project. Refer to the project list below and the [Expedited Minimum Impact \(EXP\) Project Classification Guidance Document](#).

- ☐ Aquatic Vegetation Control Projects (Env-Wt 510.08(a)).
- ☐ Water Access Structure Construction Projects (Env-Wt 511.06(a)).
- ☐ Beach Replenishment Projects (Env-Wt 511.07(a)).
- ☐ Deck or Patio Repair Projects (Env-Wt 511.08(a)).
- ☐ Breakwater Maintenance and Repair Projects (Env-Wt 512.07(b)).
- ☐ Docking and Accessory Docking Structure Construction, Repair, and Replacement Projects (Env-Wt 513.24(a)).
- ☐ Docking Structure Modification Projects (Env-Wt 513.25(a)).
- ☐ Accessory Docking Structure Installation, Construction, Modification, Repair, Replacement (Env-Wt 513.26(a)).
- ☐ Canopy Projects (Env-Wt 513.27(a)).
- ☐ Bank or Shoreline Stabilization Construction Projects (Env-Wt 514.07(a)).
- ☐ Dug-in Basins and Boathouse Construction or Modification Projects (Env-Wt 515.06(a), (b)).
- ☐ Dug-in Basins and Boathouse Maintenance and Repair Projects (Env-Wt 515.07(a)).
- ☐ Intake and Outflow Structure Construction, Maintenance and Repair Projects (Env-Wt 516.05; Env-Wt 516.06(b)).
- ☒ Trail or Pathway Projects (Env-Wt 517.06(a); Env-Wt 517.06(d)).
- ☐ Boardwalk Projects (Env-Wt 517.07(a); (Env-Wt 517.09)).
- ☐ Dry Hydrants and Other Non-Docking Structure Projects (Env-Wt 518.07(a)(1), (b)).
- ☐ Pond Construction, Maintenance, and Repair Projects (Env-Wt 519.08(a), (b); Env-Wt 519.09(a)).
- ☐ Residential Utility Installation Projects (Env-Wt 521.06(a)(7)).

- ☐ Non-tidal Dredging Projects (Env-Wt 523.04(a)).
- ☐ Residential, Commercial, and Industrial Development Projects (Env-Wt 524.06(b)).
- ☐ Restoration/Enhancement Projects (Env-Wt 525.05).
- ☐ Dam Construction, Reconstruction, or Replacement Projects (Env-Wt 526.06(a)).
- ☐ Dam Modification, Repair, or Maintenance Projects (Env-Wt 526.07(a)).
- ☐ Public Highway Projects (Env-Wt 527.06; Env-Wt 527.07).
- ☐ Coastal Projects (Env-Wt 600).
- ☐ Stream Crossing Projects (Env-Wt 903.01(e)).
- ☐ All Other Projects (Env-Wt 407.03).

Provide the project-specific information required by the rule(s) / provision(s). Refer to Chapters Env-Wt 500, Env-Wt 600, and/or Env-Wt 900, as applicable, for project-specific application and design requirements. Please see applicable standard [Project Specific Worksheets](#) for guidance.

The project impacts will remain within the existing footprint of the trail per Env-Wt 517.04(a), and will not impact tidal wetlands below the HOTL or undeveloped tidal buffer zones. The project's purpose of repairing the trail so that user's will stay in the existing trail corridor will help protect the buffer zone's ability to protect habitat values and tidal environments per Env-Wt 604.02(c)

The project will comply with BMPs outlined in "Best Management Practices NH Trail Construction and Maintenance Manual", NH Bureau of Trails, 2017.

☒ Not applicable

For projects on waterbodies, provide shoreline frontage on the property in linear feet:

Briefly describe the project and its purpose. Outline the scope of work to be performed and whether impacts are temporary or permanent. *Do not* reply "See attached."

The purpose of the project is to address a 300 foot linear section of degraded trail that frequently sees muddy conditions. Trail erosion and compaction over time have left the trail below grade, causing muddy trail conditions, and trail widening as walkers skirt the edges of the trail to avoid mud. To address this, we seek to install a turnpike, a trail structure that uses fill to raise the trail surface slightly above the existing ground, and when combine with a layer of drainage stone underneath, keeps the surface of the trail higher than water that would saturate it. All impacts would be within existing developed areas of the tidal wetland buffer zone. The turnpike would be 5 feet wide and 300 feet long and stay entirely within the existing footprint of the trail, making 1500 square feet of permanent impact. Additionally, a 150 square foot section of lawn inside the tidal

☐ Not applicable

Identify the type of jurisdictional resources to be impacted and the area of impact in square feet and/or linear feet: The project will impact developed areas of the tidal buffer zones on the property. The turnpike will impact 1500 square feet (300 linear feet) of permanent impact. There will be an additional 150 square feet of temporary impact where the material stockpiles will be located, also in a developed area of the tidal buffer zone.

SECTION 4 - PROJECT LOCATION (Env-Wt 310.01(b))			
Address:400 Little Harbor Rd			
Town or city:Portsmouth			
Tax map / lot number:203/008			
US Geological Survey (USGS) topo map waterbody name:			☐ n/a
Latitude / longitude in decimal degrees (to five decimal places)		North:43.05952	West:70.73892
SECTION 5 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 310.01(a)) <i>If the applicant is a trust or a company, then the name of the trust or company should be written as the applicant's name.</i>			
Name:Society for the Protection of New Hampshire Forests			
Mailing address:54 Portsmouth St			
Town or city:Concord		State:NH	ZIP:03301
Phone:603-224-9945		Email address (optional):	
Electronic communication: by initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.			
SECTION 6 - AUTHORIZED AGENT INFORMATION (Env-Wt 310.01(a)) <i>If the agent is a company, then the name of the company should be written as the agent's name.</i>			
Name:Dylan Summers - Stewardship Project Manager			
Mailing address:54 Portsmouth St			
Town or city:Concord		State:NH	ZIP:03301
Phone:603-688-5905		Email address (optional):dsummers@forestsociety.org	
Electronic communication: by initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically. DS			
SECTION 7 - PROPERTY OWNER INFORMATION, IF DIFFERENT FROM APPLICANT (Env-Wt 310.01(a)) <i>If the owner is a trust or a company, then the name of the trust or company should be written as the owner's name.</i>			
Name:			
Mailing address:			
Town/city:		State:	ZIP:
Phone:		Email address (optional):	
Electronic communication: by initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.			
SECTION 8 - APPLICATION FEE (RSA 482-A:3, I)			
☒ \$600 for minimum impact projects. If filing offline, please make check or money order payable to: "Treasurer - State of NH."			

SECTION 9 - REQUIRED CERTIFICATIONS (Env-Wt 310.01(d)) <i>Initial each box below to certify.</i>		
Initials:DS	The proposed project meets the conditions and limits of the applicable minimum impact project rule.	
Initials:DS	All abutters have been notified.	
Initials:	If the project is to repair or replace a docking structure, the docking structure is an existing legal structure. (☒ N/A)	
Initials:DS	The proposal is the alternative with the least adverse impact to jurisdictional areas, as required by Env-Wt 313.03.	
Initials:DS	The project is not an after-the-fact application.	
Initials:DS	The project is either: • Not located in a PRA. • Located in a PRA but is subject to a classification adjustment under Env-Wt 407.02 or a project-type exception under Env-Wt 407.04.	
Initials:DS	The applicant is aware of the limits of the EXP and understands and will comply with all conditions in the EXP and all applicable conditions in Env-Wt 307.	
Initials:DS	To the best of the signer's knowledge and belief, all required notifications have been provided.	
Initials:DS	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.	
Initials:DS	The signer understands that submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the office of professional licensure and certification established by RSA 310.	
Initials:DS	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.	
SECTION 10 - REQUIRED SIGNATURES (Env-Wt 310.01(d))		
Signature (owner)*:	Print name legibly: Dylan Summers	Date:
<i>*Note: If the applicant is not the owner, each property owner also shall sign and date the application provided that property owner signatures shall not be required for transportation projects adjacent to existing rights-of-way where an easement will be obtained prior to the start of construction (Env-Wt 311.11(d)).</i> Check the following box if your project meets this exception: ☐ .		
Signature (applicant, if different from owner):	Print name legibly:	Date:
Signature (agent, if applicable):	Print name legibly: Dylan Summers	Date:

SECTION 11 - CONSERVATION COMMISSION SIGNATURE (Env-Wt 310.01(h))**

The signed statement from the conservation commission may be submitted electronically.

The signature below certifies that the municipal conservation commission or, if there is no conservation commission, the local governing body, has reviewed this application, and the municipality waives its right to intervene on the project, per RSA 482-A:11.

Authorized commission signature:

Print name legibly:

Date:

SECTION 12 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE SIGNATURE (Env-Wt 310.01(i))**

The signature below certifies that the LAC waives its right to intervene, per RSA 482-A:11:

☐ N/A - This project is **not** within a designated river corridor.

Authorized LAC representative signature:

Print name legibly:

Date:

***Note: If the application is administratively complete, except for the signed statement from the Conservation Commission and/or LAC, the application will be processed under the timelines established in RSA 482-A:3, XIV (Env-Wt 310.02(h)). Applicants may also indicate that they are applying for a minimum impact application under standard processing timelines.*

SECTION 13 - TOWN / CITY CLERK SIGNATURE (Env-Wt 310.01(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has provided a hard copy and a digital copy of a completed application form, with required attachments, to the town or city indicated below.

Town or city clerk signature:

Print name legibly:

Town or city:

Date:

DIRECTIONS FOR TOWN OR CITY CLERK

1. Upon confirming receipt of one paper copy and one digital copy of this application, with its attachments, immediately sign a copy of the application and return it to the applicant for submittal to the department.
2. Retain the hard copy for review by the public and immediately distribute a digital copy of the application package to each of the following bodies:
 - a. Local conservation commission.
 - b. Local governing body such as select board or town or city council.
 - c. Local planning board.

DIRECTIONS FOR APPLICANT

1. Bring one hard copy of the application and its attachments, and one digital copy of the same, to the municipal clerk(s) of the town(s) in which proposed jurisdictional impacts are located. Digital copies shall be in PDF format or other formats approved by NHDES.
2. Submit the copy of the complete application package signed by the municipal clerk(s) to NHDES.
3. State agency applicants may file simultaneously with NHDES and the municipal clerk.



EXPEDITED MINIMUM IMPACT (EXP) WETLANDS PERMIT APPLICATION CHECKLIST



Keep this checklist for your reference. Do not submit it with your application.

APPLICATION CHECKLIST

REQUIRED FOR ALL APPLICATIONS

- ☐ The completed, dated, signed and certified application (Env-Wt 310.01).
- ☐ Application fee of \$600, as determined in RSA 482-A:3, I (Env-Wt 310.01(e)). If filing offline, please make check or money order payable to "Treasurer – State of NH".
- ☐ [US Army Corps of Engineers \(ACE\) "Appendix B, New Hampshire General Permits \(GPs\), Required Information and Corps Secondary Impacts Checklist"](#) and its required attachments (Env-Wt 307.02). This includes the [US Fish and Wildlife Service IPAC review](#) and New Hampshire [Section 106 Historic / Archaeological Resource review](#).
- ☐ A copy of the town tax map(s) showing the location of the proposed project in relation to abutters (Env-Wt 310.01(b)(2)).
- ☐ A list of abutters' names and mailing addresses to cross-reference with the tax map (Env-Wt 310.01(b)(3)).
- ☐ A copy of the appropriate US Geological Survey map with the property and project clearly marked (Env-Wt 310.01(b)(4)).
- ☐ Photos that meet all of the following criteria:
 - ☐ Clearly show the area to be impacted.
 - ☐ Are mounted or printed no more than two per sheet on 8.5-inch x 11-inch paper.
 - ☐ Are annotated to explain impact (Env-Wt 310.01(b)(6)).
- ☐ DataCheck Tool results and identification number (Env-Wt 310.01(b)(8)), as well as documentation of any ecological review request made to NHDES with the results and recommendations.
- ☐ An accurate drawing showing the precise location, with detailed dimensions clearly annotated to document existing site conditions and to show the proposed impacts to the jurisdictional areas (Env-Wt 310.01(c)(4)).
- ☐ An accurate drawing to show the impact of the proposed activity on jurisdictional areas, including the following (Env-Wt 310.01(c)(5)):
 - ☐ An overview of the property and proposed impact areas in relation to property lines.
 - ☐ The scale, if any, used on the drawing.
 - ☐ If the drawing is not to scale, the dimensions of all existing and proposed structures, existing and proposed topography, and all other relevant features necessary to clearly define the project.
 - ☐ A labeled north-pointing arrow to indicate orientation.
 - ☐ A legend that clearly indicates all symbols, line types, and shading used on the plan.
 - ☐ The location of the jurisdictional areas delineated and associated wetland delineation notes, in accordance with Env-Wt 400.
 - ☐ The proposed construction sequence, including pre-construction through post-construction activities and the relative timing and progression of all work.
 - ☐ The location and type of siltation and turbidity controls indicated graphically and labeled or annotated as necessary.
 - ☐ For any project using a temporary coffer dam and for any repair of a tier 3 stream crossing, the date, signature, and seal of the licensed professional engineer who prepared or had responsibility for the plan(s).

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- ☐ For restoration/enhancement projects, the information required to be shown on a map by Env-Wt 525.
- ☒ For tidal minimum impact projects, the information required to be shown on a map by Env-Wt 600, and
- ☐ For minimum impact stream crossing projects, information required to be shown on a map by Env-Wt 900.
- ☒ Plans or documentation showing that impacts have been avoided and minimized to the maximum extent practicable per Env-Wt 313.03(a).

☒ The linear distance of the project from abutting property boundaries (Env-Wt 310.01(c)(7)).

REQUIRED FOR CERTAIN PROJECT TYPE, AS APPLICABLE

- ☐ The type of dock construction (Env-Wt 310.01(c)(8)).
- ☐ The diameter of culvert(s) to be used for road or driveway crossings (Env-Wt 310.01(c)(8)).
- ☐ The additional information specified in Env-Wt 522 for minimum-impact agricultural applications (Env-Wt 310.01(c)(8)).
- ☐ Plans for maintenance of retaining walls, as specified in Env-Wt 514 (if applicable; Env-Wt 310.01(c)(8)).
- ☐ Specifications and plans for maintenance of rip-rap, as required by Env-Wt 514 (Env-Wt 310.01(c)(8)).
- ☒ Any other project-specific plan, cross section, or information required under Env-Wt 500 and as described in the project-specific worksheet (Env-Wt 310.01(c)(8)).
- ☒ Information required on the [Coastal Resource Worksheet](#) for coastal projects under Env-Wt 600.
- ☐ Prime Wetlands information required under Env-Wt 700.
- ☐ Information requested on the [Stream Crossing Worksheet](#) required by Env-Wt 900.
- ☐ Agricultural activities only: A signed statement by the county conservation district or certified wetland scientist certifying compliance with all conditions as described in Env-Wt 522.06(a)(2). (Env-Wt 310.01(g))



COASTAL RESOURCE WORKSHEET
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/ Env-Wt 600

APPLICANT LAST NAME, FIRST NAME, M.I.: Summers, Dylan, M

This worksheet may be used to present the information required for projects in coastal areas, in addition to the information required for Lower-Scrutiny Approvals, Expedited Permits, and Standard Permits under Env-Wt 603.01.

Please refer to Env-Wt 605.03 for impacts requiring compensatory mitigation.

SECTION 1 - REQUIRED INFORMATION (Env-Wt 603.02; Env-Wt 603.06; Env-Wt 603.09)

The following information is required for projects in coastal areas.

Describe the purpose of the proposed project, including the overall goal of the project, the core project purpose consisting of a concise description of the facilities and work that could impact jurisdictional areas, and the intended project outcome. 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 (refer to Section 2) and Env-Wt 603.04 (refer to Section 3) as attachments.

This project is intended to repair a degraded section of walking trail at Creek Farm, part of the Little Harbor Loop Trail. Over many decades of use, the tread surface of the trail has become compacted and eroded, causing the trail to become a depression in the gently sloped terrain, with a tendency to capture and hold water, causing muddy trail conditions especially during spring and large rain events. When muddy, walkers skirt around the edges of the trail to keep their feet dry, causing the trail to become wider over time, impacting undisturbed areas beside the trail and increasing the sizes of the muddy areas.

Our project intends to repair this damage by rebuilding the trail surface into a durable and well draining section of trail. We plan on building a modified turnpike, a trail structure that uses fill to raise the trail surface above the water table, and improve drainage with layers of drainage stone and low ditching. A basic turnpike design can be referenced in "Best Management Practices for Erosion Control During Trail Maintenance and Construction" (NH Bureau of Trails, 2017)

Our project will be built entirely within the existing trail corridor, only impacting already disturbed areas of the tidal buffer zone. Besides pruning back invasive species and a few overhanging branches for equipment clearance, we will not impact vegetation outside of the already disturbed trail corridor, and will build over exposed roots to protect trees.

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For standard permit projects, provide:

- ☐ A Coastal Functional Assessment (CFA) report in accordance with Env-Wt 603.04 (refer to Section 3).
- ☐ A vulnerability assessment in accordance with Env-Wt 603.05 (refer to Section 4).

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 311.07, Env-Wt 313, and Env-Wt 603.04.

The project shall use appropriate erosion control to stop the spread of fill material during construction - including compost filter socks along the length of the worksite, and silt fencing around material stockpiles. Fill material will be clean and compacted in lifts to stabilize the trail surface and prevent runoff.

Construction activities will remain in the footprint of the existing trail to protect undisturbed vegetation in the tidal buffer, with only minimal pruning of invasive species and one or two overhanging branches needed. Exposed roots in the trail corridor will be built over rather than cut, to protect trees near the trail. Areas of temporary disturbance will be restored per Env-Wt 307.12.

As a result of the project, walkers will remain on the trail rather than skirting it's edges to keep their feet dry, and trail widening will not continue to impact undisturbed areas of the tidal buffer. By putting in a more durable tread surface, the project will minimize erosion to the trail.

Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.

Besides the above practices which will minimize impact and protect natural resources during construction, our project has minimal or no impact on natural wetland resources or buffer areas. Equipment will stay on access roads, lawn and in the existing trail corridor during construction. All permanent impacts will be within the existing trail corridor, an already disturbed part of the tidal buffer zone. No rare, threatened or endangered species will be impacted by the project, per our DES datacheck. Our project is designed to have minimal impact to the buffer area, does not effect hydrologic connections between adjacent fresh and salt water wetlands, and enhances recreational uses.

Provide a project design narrative that includes the following:

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

Please see attached project design narrative

- ☒ Provide design plans that meet the requirements of Env-Wt 603.07 (refer to Section 5);
- ☒ Provide water depth supporting information required by Env-Wt 603.08 (refer to Section 6); and
- ☐ For any major project that proposes to construct a structure in tidal waters/wetlands or to extend an existing structure seaward, provide 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. 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.



SECTION 2 - DATA SCREENING (Env-Wt 603.03, in addition to Env-Wt 306.05)

Please use the Wetland Permit Planning Tool, or any other database or source, to indicate the presence of:

- ☐ Existing salt marsh and salt marsh migration pathways;
- ☐ Eelgrass beds;
- ☐ Documented shellfish sites;
- ☒ Projected sea-level rise; and
- ☒ 100-year floodplain.

Conduct data screening as described to identify documented essential fish habitat, and tides and currents that may be impacted by the proposed project, by using the following links:

- ☒ [National Oceanic and Atmospheric Administration \(NOAA\) Tides & Currents](#); and
- ☒ [NOAA Essential Fish Habitat Mapper](#).
- ☒ 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.

SECTION 3 - COASTAL FUNCTIONAL ASSESSMENT/ AVOIDANCE AND MINIMIZATION (Env-Wt 603.04; Env-Wt 605.01; Env-Wt 605.02; Env-Wt 605.03)

Projects in coastal areas shall:

- ☒ Not impair the navigation, recreation, or commerce of the general public; and
- ☒ Minimize alterations in prevailing currents.

An applicant for a permit for work in or adjacent to tidal waters/wetlands or the tidal buffer zone shall demonstrate that the following have been avoided or minimized as required by Env-Wt 313.04:

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

For standard permit applications submitted for minor or major projects:

- ☐ Attach a CFA based on the data screening information and on-site evaluation required by Env-Wt 603.03. The CFA for tidal wetlands or tidal waters shall be:
 - Performed by a qualified coastal professional; and
 - Completed using one of the following methods:
 - a. The US Army Corps of Engineers (USACE) Highway Methodology Workbook, dated 1993, together with the USACE New England District *Highway Methodology Workbook Supplement*, dated 1999; or
 - b. An alternative scientifically-supported method with cited reference and the reasons for the alternative method substantiated.

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

- ☐ 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;
- ☐ Design the proposed project to have the least impact to tidal wetlands, tidal waters, or associated sand dunes;
- ☐ 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
- ☐ Include on-site minimization measures and construction management practices to protect coastal resource areas.

Projects in coastal areas shall use results of this CFA to:

- ☐ Minimize adverse impacts to finfish, shellfish, crustacean, and wildlife;
- ☐ Minimize disturbances to groundwater and surface water flow;
- ☐ Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and
- ☐ Avoid impacts that might cause erosion to shoreline properties.

SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05)

Refer to the New Hampshire Coastal Flood Risk Summary Part 1: Science and New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections or other best available science to:

Determine the time period over which the project is designed to serve.

(Not required for EXP permit application)

Identify the project's relative risk tolerance to flooding and potential damage or loss likely to result from flooding to buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas.

(Not required for EXP permit application)

Reference the projected sea-level rise (SLR) scenario that most closely matches the end of the project design life and the project's tolerance to risk or loss.

(Not required for EXP permit application)

Identify areas of the proposed project site subject to flooding from SLR.

(Not required for EXP permit application)

Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.

(Not required for EXP permit application)

Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.

(Not required for EXP permit application)

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.

☐ Pre-application meeting date held:

SECTION 5 - DESIGN PLANS (Env-Wt 603.07, in addition to Env-Wt 311)

Submit design plans for the project in both plan and elevation views that clearly depict and identify all required elements.

The plan view shall depict the following:

- ☒ The engineering scale used, which shall be no larger than one inch equals 50 feet;
- ☒ The location of tidal datum lines depicted as lines with the associated elevation noted, based on North American Vertical Datum of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html, as described in Section 6.
- ☒ An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions;
- ☒ The location of all special aquatic sites at or within 100 feet of the subject property;
- ☒ Existing bank contours;
- ☒ The name and license number, if applicable, of each individual responsible for the plan, including:
 - a. The agent for tidal docking structures who determined elevations represented on plans; and
 - b. The qualified coastal professional who completed the CFA report and located the identified resources on the plan;
- ☒ The location and dimensions of all existing and proposed structures and landscape features on the property;
- ☒ Tidal datum(s) with associated elevations noted, based on NAVD 88; and
- ☒ Location of all special aquatic sites within 100-feet of the property.

The elevation view shall depict the following:

- ☒ The nature and slope of the shoreline;
- ☒ The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and
- ☒ 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. Refer to Section 6 for more instructions regarding water depth supporting information.

See specific design and plan requirements for certain types of coastal projects:

- Overwater structures (Env-Wt 606).
- Tidal shoreline stabilization (Env-Wt 609).
- Dredging activities (Env-Wt 607).
- Protected tidal zone (Env-Wt 610).
- Tidal beach maintenance (Env-Wt 608).
- Sand Dunes (Env-Wt 611).

SECTION 6 - WATER DEPTH SUPPORTING INFORMATION REQUIRED (Env-Wt 603.08)

Using current predicted NOAA tidal datum for the location, and tying field measurements to NAVD 88, field observations of at least three 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:

- ☒ Mean lower low water;
- ☒ Mean low water;
- ☒ Mean high water;
- ☒ Mean tide level;
- ☒ Mean higher high water;
- ☒ Highest observable tide line; and
- ☐ Predicted sea-level rise as identified in the vulnerability assessment in Env-Wt 603.05.

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

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

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).

For repair, rehabilitation or replacement of tier 4 stream crossings:

- ☐ Demonstrate how the requirements of Env-Wt 904.09 are met.

SECTION 7 - GENERAL CRITERIA FOR TIDAL BEACHES, TIDAL SHORELINE, AND SAND DUNES (Env-Wt 604.01)

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:

- ☐ The standard conditions in Env-Wt 307;
- ☐ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- ☐ The approval criteria in Env-Wt 313.01;
- ☐ The evaluation criteria in Env-Wt 313.05;
- ☐ The project specific criteria in Env-Wt 600;
- ☐ The CFA required by Env-Wt 603.04; and
- ☐ The vulnerability assessment required by Env-Wt 603.05.

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.

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

- ☐ 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
- ☐ Protects upland infrastructure from coastal hazards with a preference for living shorelines over hardened shoreline practices.

SECTION 8 - GENERAL CRITERIA FOR TIDAL BUFFER ZONES (Env-Wt 604.02)

The 100-foot statutory limit on the extent of the tidal buffer zone shall be measured horizontally. Any person proposing a project in or on an undeveloped tidal buffer zone shall evaluate the proposed project based on:

- ☒ The standard conditions in Env-Wt 307;
- ☒ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- ☒ The approval criteria in Env-Wt 313.01;
- ☒ The evaluation criteria in Env-Wt 313.05;
- ☒ The project specific criteria in Env-Wt 600;
- ☒ The CFA required by Env-Wt 603.04; and
- ☒ The vulnerability assessment required by Env-Wt 603.05.

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.

SECTION 9 - GENERAL CRITERIA FOR TIDAL WATERS/WETLANDS (Env-Wt 604.03)

Except as allowed under Env-Wt 606, permanent new impacts to tidal wetlands shall be allowed only to protect public safety or homeland security. Evaluation of impacts to tidal wetlands and tidal waters shall be based on:

- ☐ The standard conditions in Env-Wt 307;
- ☐ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- ☐ The approval criteria in Env-Wt 313.01;
- ☐ The evaluation criteria in Env-Wt 313.05;
- ☐ The project specific criteria in Env-Wt 600;
- ☐ The CFA required by Env-Wt 603.04; and
- ☐ The vulnerability assessment required by Env-Wt 603.05.

Projects in tidal surface waters or tidal wetlands shall:

- ☐ Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;
- ☐ Be designed with a preference for living shorelines over hardened stabilization practices; and
- ☐ 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.



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Appendix B

New Hampshire General Permits (GPs) Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to <https://www.nae.usace.army.mil/Missions/Regulatory/> “Useful Documents, Forms and Publications” and then “Corps Application Form and Guidance.” Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- New Hampshire Department of Environmental Services (DES) Wetlands Permit Application.
- Request for Project Review Form by the New Hampshire Division of Historical Resources (DHR)
<https://www.nh.gov/nhdhr/review/rpr.htm>.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - Project limits with existing and proposed conditions.
 - Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - Delineation of all waterways and wetlands on the project site,;
- Use Federal delineation methods and include Corps wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.



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**New Hampshire General Permits (GPs)
Appendix B - Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)**

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 5, regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*		X
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?		X
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/ . The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	X	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	0	
2.7 What is the area of the proposed fill in wetlands?	0	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	0	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: • PDF: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.	X	
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 21?	N/A	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	X	
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		N/A
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X	

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.



54 Portsmouth Street
Concord, NH 03301

Tel. 603.224.9945

Fax 603.228.0423

info@forestociety.org

www.forestociety.org

NHDES Expedited Minimum Impact Permit Application

Society for the Protection of New Hampshire Forests – Creek Farm
400 Little Harbor Rd
Portsmouth, NH

Project Design Narrative – Trail Turnpike

This project is intended to address trail maintenance issues on a 300-foot section of public walking trail at the Society for the Protection of New Hampshire Forests (Forest Society) Creek Farm property in Portsmouth, NH.

The walking trail at Creek Farm, part of the larger Little Harbor Loop Trail that extends on to nearby State Park and City of Portsmouth conservation properties, pre-dates the Forest Society's ownership, and over many decades of use, has degraded trail conditions in some locations, particularly along a 300 foot section of trail that brings walkers along a man made tidal pool and out to the shore of Sagamore Creek. Through years of erosion and soil compaction, this section of trail has fallen below grade, causing water to collect in the depression of the trail in an otherwise relatively dry area, causing frequent muddy and wet trail conditions along this section. During muddy trail conditions, visitors often skirt around the edge of the wet trail to keep their feet dry, causing the trail to slowly become wider as this avoidance creates more impact on the edges, widening the muddy area and causing walkers to go even further off the original trail to avoid mud. As a result of this, the trail is over 5 feet wide in many areas and getting wider over time as more people avoid muddy trail areas.

To address this maintenance issue, the Forest Society is seeking to build a "Turnpike", a trail feature that elevates the trail surface above wet ground, whether natural or due to degraded conditions such as in our case and is referenced in *Best Management Practices for Erosion Control During Trail Maintenance and Construction* (State of New Hampshire Bureau of Trails, 2017).

Our turnpike will use clean, crushed stone fill from a nearby quarry with a base layer of coarse drainage stone, and a layer of well compacting crushed stone aggregate on top to form the tread surface, with geotextile fabric separating the layers from each other and the existing ground. Where appropriate, a shallow ditch on the downhill side will help move water to natural drainage locations, as well as capped stone drains at those same natural drainage locations to help water cross under the trail surface and move downhill away from the trail.

Our turnpike design will use the minimal amount of fill needed to raise the trail surface and allow drainage, while avoiding unnecessary interventions used in turnpikes in more extreme cases/wetter ground, such as extensive ditching on both sides of the trail, timber retaining walls to elevate the surface higher, and culverts crossing under the turnpike.

Permenant and Temporary Impacts and Mitigation

The entire project will take place in the existing trail corridor, with no permeant impacts and minimal temporary impacts outside the existing trail corridor. Filter socks will be installed along the length of the construction zone to minimize runoff of fill during construction. Construction equipment will remain in the existing trail corridor, and only require some pruning of vegetation outside of the trail corridor for required clearance of equipment, pruning back a thicket of invasive species such as buckthorn, honeysuckle, oriental bittersweet and multiflora rose. Construction materials will be stockpiled on an area of lawn near the road. About 1/3rd of the material stockpile area will be in the tidal buffer zone, or 150 square feet of the 450 square feet the stockpile area will cover. Silt fencing will be used around the materials stockpile to prevent downhill run-off, and the area will be restored after construction.

Construction Sequence

The contractor will install filter socks along the length of the project area, and silt fencing below the stockpile area. Materials will be delivered by dump truck to the stockpile area. The contractor will excavate a few inches of soil from the existing trail tread to build the turnpike, disposing of any extra spoils outside of the buffer zone. The contractor will lay a base of geofabric, lay in the base course of drainage stone, and then another layer of geofabric on top. Then the contractor will lay the aggregate that will form the trail surface, compacting it well while moisture content is appropriate. After construction is complete, the contractor will rehabilitate the stockpile area, using grass seed as appropriate.

All construction activities are expected to take around 2 weeks, and will be conducted in Fall of 2026

Maintenance Plan

A small pile of extra surfacing material will be stored on site in a discreet location outside of the tidal buffer zone and away from wetlands. This will be used to patch and repair the surface of the trail as needed if damaged by flooding or excessive rain. Drainage ditching will be maintained several times each year by trained staff or volunteers, clearing the ditches of accumulated organic material. Staff working onsite will inspect the trail conditions on a regular basis.

Flooding and Sea-level Rise

The trail is expected to remain an important recreational opportunity even if sea-level rise were to inundate parts of the trail. Flooding in this location should not cause high velocity flow that would threaten major impacts to the trail, especially since it is designed to mitigate the impacts of water, but staff will repair any damage caused by flooding as needed.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner



To: Dylan Summers, Society for the Protection of New Hampshire Forest
54 Portsmouth Street
Concord, NH 03301
dsommers@forestsociety.org

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc:

Date: 03/20/2026 (valid until 03/20/2027)

Re: DataCheck Review by NHDES Ecological Review Section

Permits: MUNICIPAL POR - Portsmouth, NH, NHDES - Wetlands Statutory Permit-by-Notification (PBN)

DCT ID: DCT26-0644

Town: Portsmouth
Location: 400 Little Harbor Road

Project Description: Over the coming Summer or Fall we will be doing maintenance on a 300 foot stretch of the Little Harbor Loop Trail that is muddy and wet for parts of the year. We will be building 270 feet of trail turnpike in this section to address the areas of the trail that are muddy and wet.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information, protected species may be impacted by the proposed work activities. Please carefully read the comments and instructions below for next steps to avoid and minimize impacts.

Plant and Exemplary Natural

Community Comments: If impacts are proposed to occur at or below the highest observable tide line, then an ecological review with NHDES is required, and a \$500 ecological review fee is NOT required. This is because marsh elder (*Iva frutescens*), protected pursuant to RSA 217-A, occurs adjacent to the proposed project area. To request an ecological review and receive conservation measures to avoid and minimize impacts, follow the instructions provided below. If no impacts are proposed to occur at or below the highest observable tide line, then there is no need for an ecological review for plants.

Wildlife and Critical Habitat

Comments: No ecological review needed based on provided information.

www.des.nh.gov

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095

(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

Ecological Review Instructions

Pursuant to Env-C 804.01, ecological reviews are either required by rule or recommended to comply with RSA 212-A and 217-A. Pursuant to Env-C 804.02, required ecological reviews that meet certain criteria must pay a \$500 fee to request an ecological review.

Instructions regarding how to request an ecological review for plants and/or wildlife are provided below:

When is an Ecological Review for Plants and Exemplary Natural Communities Needed

If this letter includes records of protected plants and/or exemplary natural communities, you may request an Ecological Review from NHDES (see further instructions below).

If no plant or exemplary natural communities are included on this letter, no further plant review is needed.

When is an Ecological Review for Wildlife and Critical Habitat Needed

If this letter includes records of protected wildlife and/or critical habitat, please refer to one of the following next steps:

- a. If your project requires an NHDES permit, authorization, or approval you may request an Ecological Review from NHDES (see further instructions below).
- b. If your project **does not** need an NHDES permit, authorization, or approval, then no ecological review with NHDES is needed. Instead, you can request a review from the New Hampshire Fish and Game (NHFG) Nongame and Endangered species program. Contact NHFGreview@wildlife.nh.gov or 603-271-2461 to request a review with NHFG.

If no wildlife species or critical habitat are included on this letter, then no further wildlife review is needed.

How to Request an Ecological Review from NHDES

To request an ecological review, access and complete the [Ecological Review Request form](https://onlineforms.nh.gov) found at onlineforms.nh.gov.

Submit the completed form and all required attachments by email, mail, or hand delivery to:

New Hampshire Department of Environmental Services
Attn: Ecological Review Section
P.O. Box 95
29 Hazen Drive
Concord, NH 03302-0095
EcologicalReviews@des.nh.gov

For questions about requesting an ecological review, call 603-271-7972.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be federally listed species in New Hampshire that are impacted by your activity not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) [Information for Planning and Consultation \(iPaC\) website](#) for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your iPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through iPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or [603-223-2541](tel:603-223-2541)).

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(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

Ecological Review Database records:

The following species and habitats may be impacted by the proposed work activities. Please refer to this list when coordinating.

Plant species	State ¹	Federal	Notes
marsh elder (<i>Iva frutescens</i>)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

Disclaimer:

DataCheck Tool screening only includes occurrences of protected species and exemplary natural communities that have been documented and verified by state biologists and ecologists. This letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, on site surveys are the best way to determine the resources present on your site.

DCT26-0644



0 0.02 0.04 0.06 0.08 0.1 Miles

Legend
City/Town
Site bounds



RE: NHDES Ecological Review: DCT26-0644

From DES: Ecological Reviews <EcologicalReviews@des.nh.gov>

Date Wed 4/22/2026 10:30 AM

To Dylan Summers <dsummers@forestsociety.org>

You don't often get email from ecologicalreviews@des.nh.gov. [Learn why this is important](#)

Dylan Summers,

Thanks for reaching out about this. Switching the Wetlands SPN to a Standard Dredge & Fill permit will not change the comments you received in your current DataCheck results letter. You may use this email correspondence for permitting to show that DCT26-0644 is still valid after changing the attached permit to a Wetlands Standard Dredge & Fill.

Let me know if you have any questions about this.

Best regards,
Ryan

Ryan Esch (he/him)
Ecological Program Specialist
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
603-271-7972
EcologicalReviews@des.nh.gov
[DataCheck Tool](#)

IMPORTANT: As of **Jan 19, 2026**, new Env-C 800 rules are in effect. Use the new Ecological Review Request Form on <https://onlineforms.nh.gov/nform/> to request NHDES plant and/or wildlife reviews. Refer to the comments and instructions in your DataCheck results letter to learn if an Ecological Review is required, and if there is a fee. Let us know if you need help with this. For wildlife reviews that do not require an NHDES permit, authorization, or approval, contact NHFGreview@wildlife.nh.gov.

NHDES would greatly appreciate your feedback and wants to hear from you. Please take a moment to fill out our short (5-question) [NHDES Customer Service Satisfaction Survey](#).

From: Dylan Summers <dsummers@forestsociety.org>

Sent: Tuesday, April 21, 2026 10:59 AM

To: DES: Ecological Reviews <EcologicalReviews@des.nh.gov>

Subject: Re: NHDES Ecological Review: DCT26-0644

EXTERNAL EMAIL WARNING! This email originated outside of the New Hampshire Executive Branch network. Do not open attachments or click on links unless you recognize the sender and are expecting the email. Do not enter your username and password on sites that you have reached through an email link. Forward suspicious and unexpected messages by clicking the Phish Alert button in your Outlook and if you did click or enter credentials by mistake, report it immediately to helpdesk@doit.nh.gov!

Hi Ryan,

After talking with folks at DES, we have determined we will need a Standard Dredge and Fill Permit, not the SPN that we thought we may qualify for. Can I reuse this datacheck for that higher level permit, or should I reapply for a new datacheck?

Thanks
Dylan Summers

— — — —

Dylan Summers (he/him)

Stewardship Projects Manager

Society for the Protection of NH Forests

Phone: 603.688.5905 (cell)

www.forestsociety.org

Celebrate 125 years of conservation & stewardship with the Forest Society!



From: DES: Ecological Reviews <EcologicalReviews@des.nh.gov>

Sent: Friday, March 20, 2026 6:00 PM

To: Dylan Summers <dsummers@forestsociety.org>

Subject: NHDES Ecological Review: DCT26-0644

You don't often get email from ecologicalreviews@des.nh.gov. [Learn why this is important](#)

IMPORTANT: New rules for Env-C 800 Ecological Review became effective January 19, 2026. Please read the Ecological Review Instructions in your DataCheck results letter carefully, as procedures have changed:

- Some Ecological Review requests may be subject to a \$500 fee pursuant to Env-C 804.02.

Attached, please find the NHDES Ecological Review Section's report on whether the proposed project could impact protected species, exemplary natural communities, and critical habitat.

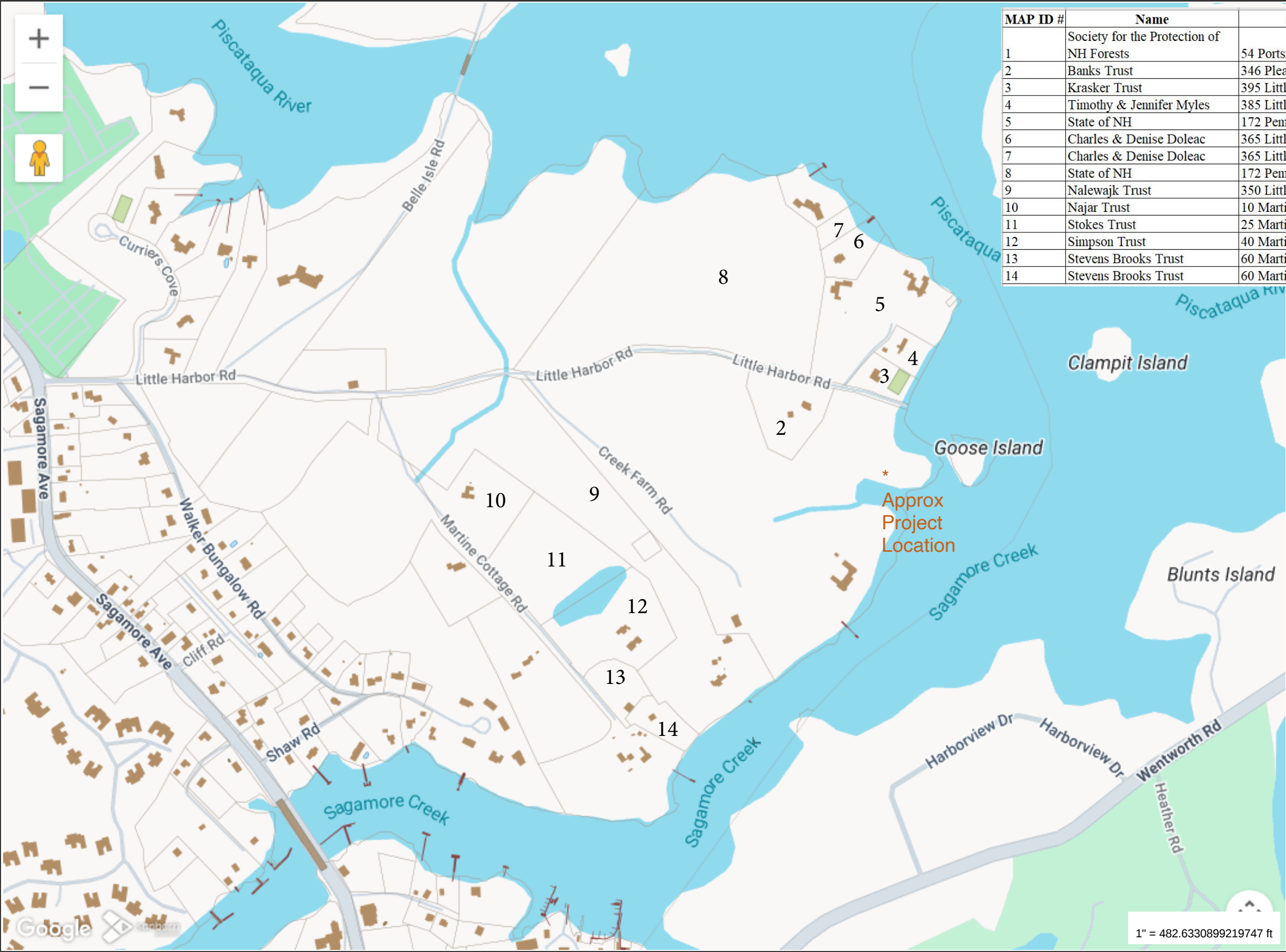
To request an Ecological Review for plants and/or wildlife, please reply to this email with a completed [Ecological Review Request Form](#), all required attachments as indicated on the form, and any additional information requested in the comments of the DataCheck Tool results letter.

One Ecological Review Request Form should be submitted to cover both the plant and wildlife review. If you are seeking an Ecological Review for only plants or only wildlife, please indicate which review type you are requesting.

For questions about requesting an Ecological Review, reply to this email or call (603) 271-7972.

Best,
Ryan

Ryan Esch (he/him)
Ecological Information Specialist
Ecological Review Section
Land Resources Management Program
Water Division, NH Department of Environmental Services
P.O. Box 95
Concord, NH 03302-0095
603-271-7972



MAP ID #	Name	Address	City	State	Zip	Map-Lot
1	Society for the Protection of NH Forests	54 Portsmouth Street	Concord	NH	3301	203-008
2	Banks Trust	346 Pleasant Street	Portsmouth	NH	3801	203-001
3	Krasker Trust	395 Little Harbor Road	Portsmouth	NH	03801	203-002
4	Timothy & Jennifer Myles	385 Little Harbor Road	Portsmouth	NH	03801	203-003
5	State of NH	172 Pembroke Road	Concord	NH	03301	203-004
6	Charles & Denise Doleac	365 Little Harbor Road	Portsmouth	NH	03801	203-005
7	Charles & Denise Doleac	365 Little Harbor Road	Portsmouth	NH	03801	203-006
8	State of NH	172 Pembroke Road	Concord	NH	03301	203-001
9	Nalewajk Trust	350 Little Harbor Road	Portsmouth	NH	03801	202-016
10	Najar Trust	10 Martine Cottage Road	Portsmouth	NH	03801	202-14A
11	Stokes Trust	25 Martine Cottage Road	Portsmouth	NH	03801	202-014
12	Simpson Trust	40 Martine Cottage Road	Portsmouth	NH	03801	202-015
13	Stevens Brooks Trust	60 Martine Cottage Road	Portsmouth	NH	03801	202-017
14	Stevens Brooks Trust	60 Martine Cottage Road	Portsmouth	NH	03801	202-018



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 03/06/2026

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

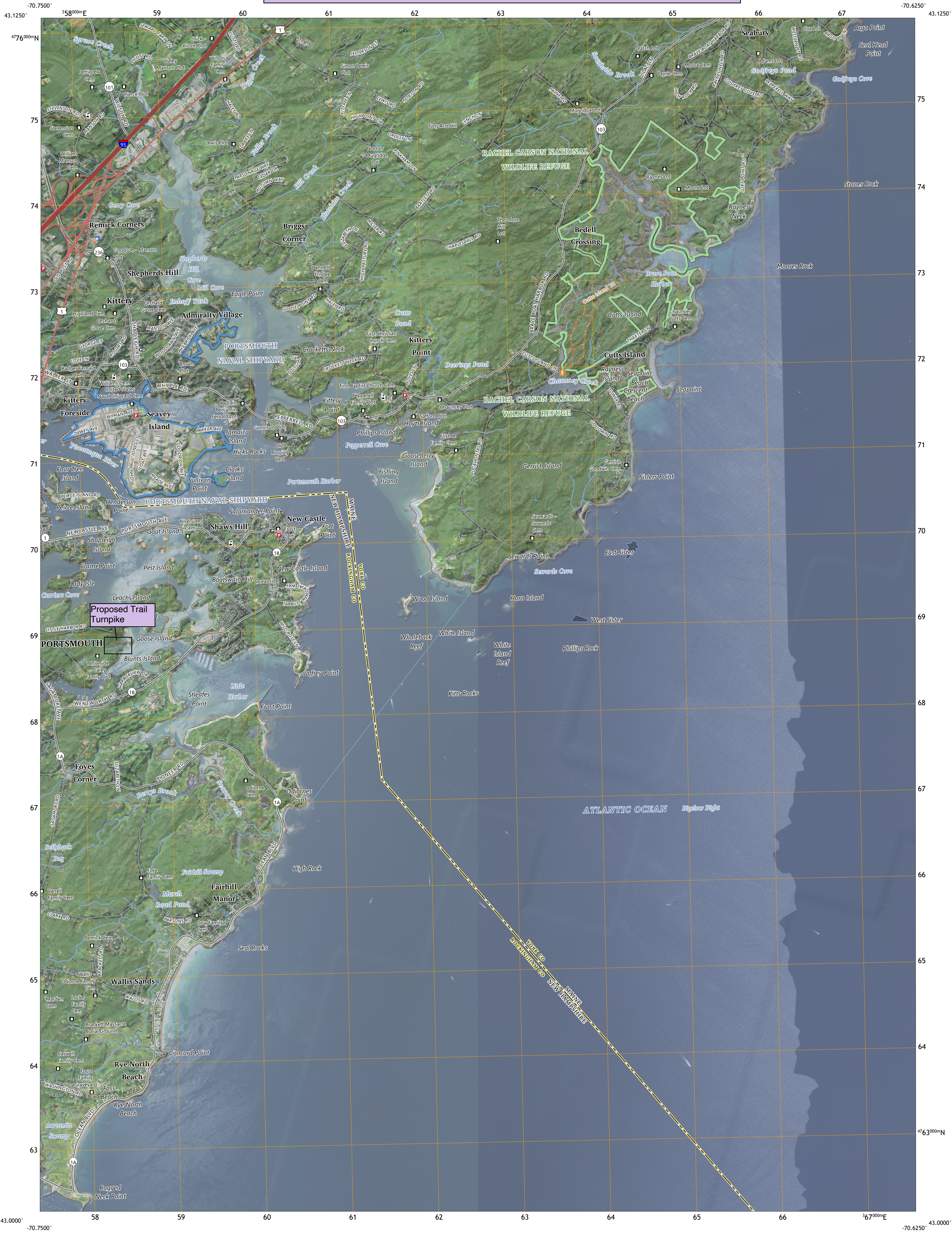
1" = 482.6330899219747 ft



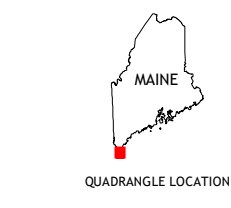
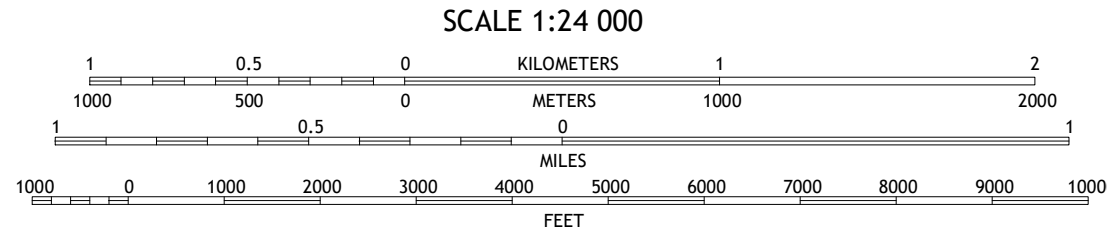
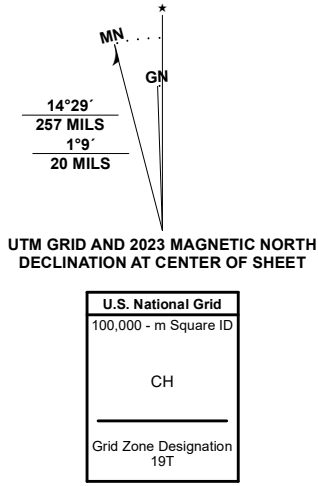
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Society for the Protection of New Hampshire Forests
Minimum Impact Expedited Wetland Permit Application
USGS Topo showing project area
7/29/2026

KITTERY QUADRANGLE
MAINE - NEW HAMPSHIRE
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) - Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 19T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.
Imagery.....NAIP, August 2018 - August 2018
Roads.....U.S. Census Bureau, 2017 2018
Names.....GNIS, 1974 2023
Hydrography.....National Hydrography Dataset, 2005 - 2022
Contours.....National Elevation Dataset, 2022
Boundaries.....Multiple sources: see metadata file 2020 - 2022
Wetlands.....FWS National Wetlands Inventory 2001 - 2012



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

KITTERY, ME, NH
2024



Photo #1

Taken from west end of project area,
looking east. Invasive shrubs along trail
will be pruned back for access.

Wet depression on left will be filled



Photo #2

Taken from middle of project area looking southwest
Trail widening visible on right (uphill) side of trail.



Photo # 3

Taken from middle of project area, facing west.

Trail widening visible to right side of photo. large root will be left intact.



Photo #4

Taken from same location as Photo #3, but looking east.
Will build over roots to protect tree health.



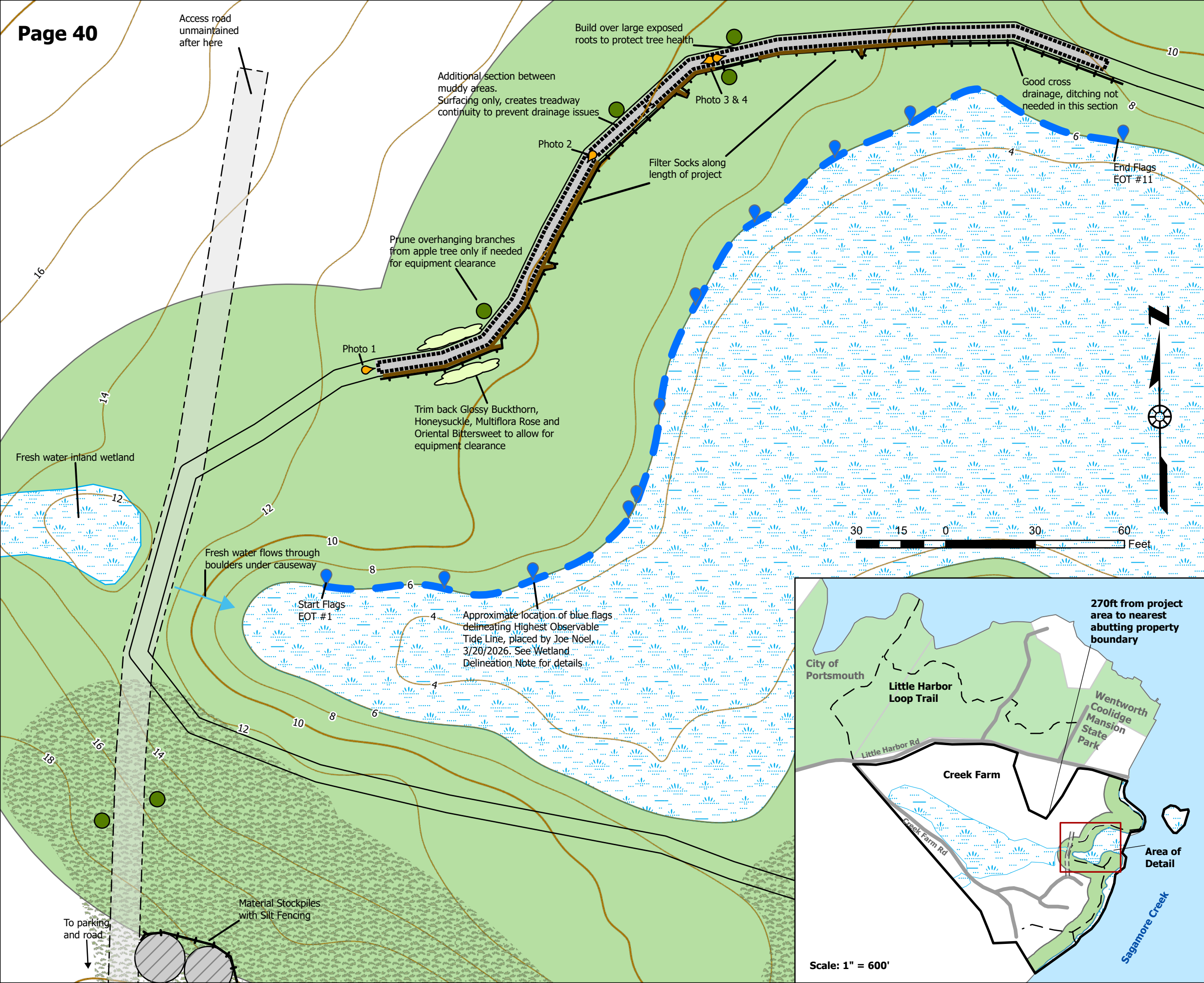
Photos #5 and #6 - Tide levels, looking Northwest across water toward project area (in woods past shoreline)



Photo #5
Low Tide
July 28th
2026
10:30am



Photo #
6High
TideJuly
30th
20261:0



Legend

- Flagged Highest Observable Tide Line
- Tidal Wetlands (Below HOTL)
- 100 ft Tidal Wetland Buffer
- Lawn
- Little Harbor Loop Trail
- Turnpike to be constructed
- Erosion Control (Silt Socks or Silt Fence)
- Downhill side ditch and lead-off ditches
- Access Road
- Photo Location Indicating Direction
- Material Stockpile
- Shrub to be trimmed back
- Tree near project area
- 2 foot Contour Interval
- 10 foot Index Contour Interval

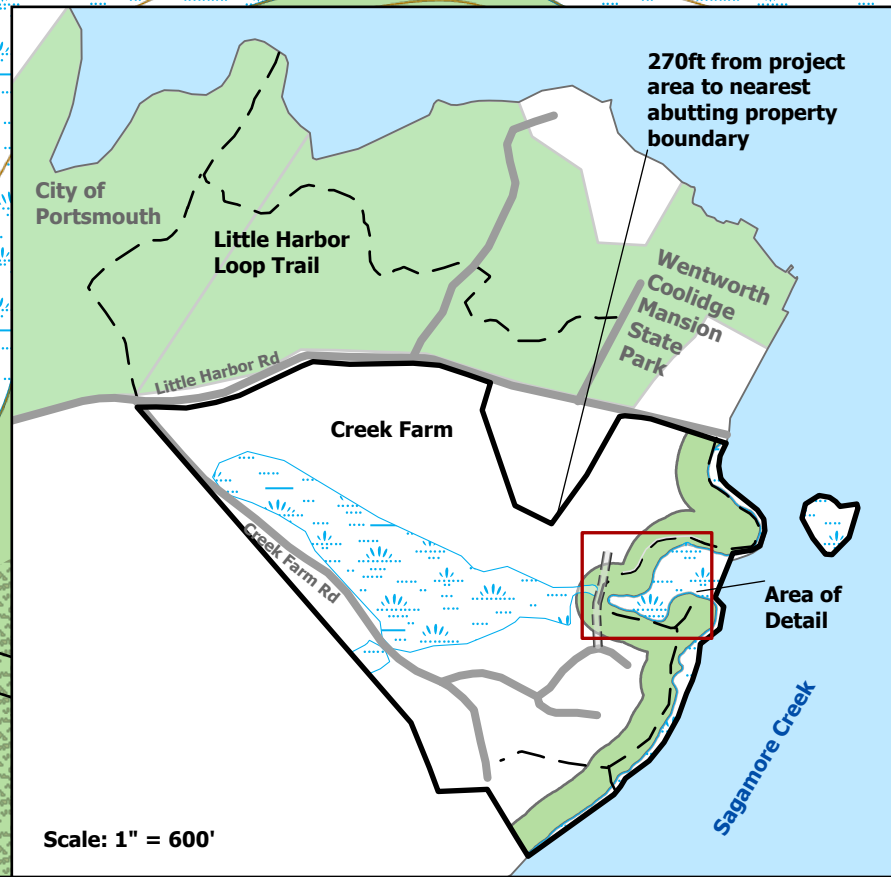
Spatial Reference: NAD83 StatePlane New Hampshire (US Survey Feet) Elevations in NAVD88

Tidal Datum: from station at Seavey Island, ME (in NAVD88 elevations): MHHW: 4.18 ft, MHW: 3.76 ft, MLW: -4.39 ft, MLLW: -4.71 ft, MTL: -0.32 ft

Scale: (22"x34") 1"=15', (11"x17") 1"=30ft. Ratio 1:180

Wetland Delineation Note:

The wetland boundary depicted on this plan was delineated/flagged by Joseph W. Noel, NH Certified Wetland Scientist #086 in 2019 and again on March 19, 2026 (only the portion where the trail improvements are planned was reflagged/reviewed). Some of the flags were survey located by Knight Hill Land Surveying Services, Inc. in 2019. The eastern end of the flagging does not appear to have been survey-located in 2019 but follows the same contour line as the survey-located portion. The delineation was conducted in accordance with the U.S. Army Corps of Engineers document Corps of Engineers Wetlands Delineation Manual, (1987) along with the required Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, (Version 2, January 2012) at the federal level and per NH Code of Administrative Rules Env-Wt 602.23 at the state level. See attached signed and stamped report dated 3/21/2026, and the original delineation and functional assessment report dated 3/23/2020 for more information.



Proposed Trail Turnpike

Little Harbor Loop Trail

Creek Farm

NHDES Minimum Impact Expedited Wetland Permit Site Plan

400 Little Harbor Road, Portsmouth, NH

Tax Map 203, Lot 08

Date Submitted: 5/7/2026

Revision:

Prepared By:

Dylan Summers

Stewardship Project Manager

Society for the Protection of New Hampshire Forests

dsummers@forestsociety.org

(603) 224-9945

Owner/Applicant:

Society for the Protection of New Hampshire Forests

54 Portsmouth St.

Concord, NH, 03301

(603) 224-9945

www.forestsociety.org

SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS

SINCE 1901

COMPACTED $\frac{3}{8}$" MINUS CRUSHED STONE AGGREGATE CROWNED AT CENTER 4"-6" THICK GEOTEXTILE FABRIC BETWEEN LAYERS 2" CRUSHED DRAINAGE STONE 4"-6" THICK 5'-0" EXISTING GROUND SHALLOW DITCH DRAINS RUNOFF TO LEAD OFF DITCH FILTER SOCK INSTALLED DURING CONSTRUCTION TYPICAL CONSTRUCTION CROSS SECTION	Proposed Trail Turnpike Little Harbor Loop Trail 400 Little Harbor Rd Portsmouth, NH NHDES Wetland Permit Application
	Society for the Protection of New Hampshire Forests 54 Portsmouth St. Concord, NH
	1" = 1' 0"
	7/27/26
	Prepared by: Dylan Summers Stewardship Projects Manager 603-707-2859 dsommers@ forestsociety.org

**Photo example of typical construction,
including capped stone drain**



JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, MAINE 03908
(207) 384-5587

CERTIFIED SOIL SCIENTIST

WETLAND SCIENTIST

LICENSED SITE EVALUATOR

March 21, 2026

Mr. Dylan Summers
Stewardship Projects Manager
Society for the Protection of New Hampshire Forests
54 Portsmouth Street
Concord, New Hampshire 03301

RE: 400 Little Harbor Road, Portsmouth, New Hampshire, JWN #95-445

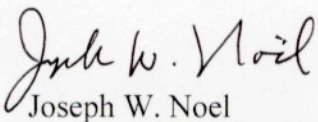
Dear Dylan:

It was a pleasure meeting you on March 19, 2026 at the above-referenced site (known as Creek Farm). You showed me the approximate limits of where the planned Little Harbour Loop trail improvements will occur. These improvements are near the adjacent coastal wetland system (i.e., tidal area). The scope of work only included this limited area where the trail system is being upgraded.

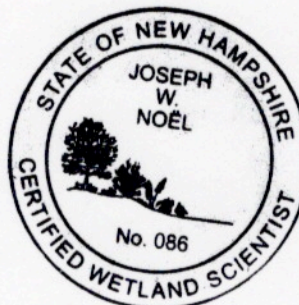
A second visit was made on March 20, 2026 and blue flagging (EOT1 – EOT11) was placed along the highest observable tide line (HOTL). The delineation was done in accordance with NH Code of Administrative Rules Env-Wt 602.23. This boundary was previously flagged by the undersigned on December 13, 2019 using blue flagging and at least a portion of this boundary was located by Knight Hill Land Surveying Services, Inc. The eastern end of the 2026 flagging (i.e., last few flags) may not have been survey-located in 2019 but do follow the same contour line). The approximate location of the EOT1 – EOT11 have been added to the sketch map that you provided for planning purposes. Four of the original 2019 flags (i.e. remaining knots) were observed during the 2026 fieldwork. It appears from the on-site that there are no detectable changes to the wetland boundary. Refer to that attached photo that shows one of the remaining blue flags on a honeysuckle shrub (*Lonicera sp.*). Also noted nearby is a patch of marsh elder (*Iva frutescens*). This shrub is also known as Jesuit's-Bark or High-Tide Bush (refer to attached photo) and its state status is Threatened. No direct impacts will occur where this patch of shrubs is located.

Please feel free to call if you have any questions or need additional information.

Sincerely,


Joseph W. Noel

NH Certified Wetland Scientist #086



PHOTOS

400 Little Harbor Road – Portsmouth, New Hampshire

(Photos taken by Joseph W. Noel on March 20, 2026)



Remnant of blue flagging from the 2019 delineation



Photo of a patch of marsh elder (*Iva frutescens*)

400 Little Harbor Road
Portsmouth, NH
Tax Map 203, Lot 08

Date Submitted: 2/20/2026

Legend

- Highest Observable Tide
- Wetlands
- 100 ft Tidal Wetland Buffer
- 40 ft Vegetated Buffer Strip
- 100 ft Freshwater Wetland
- Little Harbor Loop Trail
- Turnpike to be constructed
- Erosion Control
- Access Road
- 2 foot Contour Interval
- 10 foot Index Contour Interval

Scale:
 $(22'' \times 34'') - 1'' = 15'$
 $(11'' \times 17'') - 1'' = 30'$

Prepared By:
Dylan Summers
Stewardship Project Manager
Society for the Protection of New Hampshire
Forests
dsommers@forestsociety.org
(603) 224-9945

Owner/Applicant:
Society for the
Protection of New
Hampshire Forests

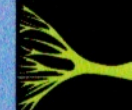
54 Portsmouth St.
Concord, NH, 03301

(603) 224-9945

www.forestsociety.org

**SOCIETY FOR THE
PROTECTION OF
NEW HAMPSHIRE
FORESTS**

SINCE 1901



**WETLAND DELINEATION
&
FUNCTIONAL ASSESSMENT REPORT**

FOR

**CREEK FARM
400 LITTLE HARBOR ROAD
PORTSMOUTH, NEW HAMPSHIRE**

PREPARED FOR:

**ALTUS ENGINEERING, INC.
133 COURT STREET
PORTSMOUTH, NEW HAMPSHIRE 03801**

PREPARED BY:

**JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, MAINE 03908**

**JWN# 95-445
MARCH 23, 2020**

**JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, MAINE 03908
(207) 384-5587**

CERTIFIED SOIL SCIENTIST

*

WETLAND SCIENTIST

*

LICENSED SITE EVALUATOR

INTRODUCTION

This report replaces the Partial Wetland Delineation Report/Letter dated January 22, 2020. This report was prepared to aid in the review of the proposed municipal waterline replacement (930'+/- linear feet) for Creek Farm. The property is 30.20+/- acres and is located at 400 Little Harbor Road in Portsmouth, New Hampshire. No direct wetland impacts are planned but the proposed project will require encroaching into the 100-foot wetland buffer to relocate and replace a portion of the waterline serving the property. This Functional Assessment is for the freshwater wetland not the adjacent downstream tidal wetland associated with Sagamore Creek.

WETLAND DELINEATION

To determine the wetland boundary, the methodologies in the U.S. Army Corps of Engineers document *Corps of Engineers Wetlands Delineation Manual* (1987) along with the required *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) were used. Wetlands were identified based on soils, vegetation, and wetland hydrology. Except in special cases, all three factors (hydric soils, hydrophytic vegetation, and wetland hydrology) must be present for an area to classify as wetland. A predominance of wetland and upland vegetation was determined from visual estimates in the vegetative layers (herbaceous, shrub, sapling, and tree layers). Plant species indicator status was based on the U.S. Army Corps of Engineers publication *National Wetland Plant List* (2016).

Shallow soil observations were made using a hand auger to assess the soil morphological features and to examine for wetland hydrology. Hydric soil determinations were conducted in accordance with the United States Department of Agriculture, Natural Resources Conservation Service document *Field Indicators of Hydric Soils in the United States, Version 8.1* (2017) along with the manual *Field Indicators for Identifying Hydric Soils in New England* (Version 4, April 2019).

The freshwater wetland boundary in the vicinity of the proposed waterline replacement/relocation was field delineated with sequentially numbered pink and black striped flagging on December 13, 2019. Flagged sequence A1 thru A8 delineates a portion of the freshwater wetland southwest of the former "Carriage House" now unoccupied and used for storage (not part of the wetland assessment area). Flagged sequences B1 thru B20 delineate a portion of the freshwater wetland north of Creek Farm and west of a Sagamore Creek tidal inlet (wetland assessment wetland). The freshwater and tidal wetlands are separated by a culverted trail (culvert type unknown - may be an old stone culvert or simply stone/boulder pile serving as a drainageway). The tidal boundary or HOTL was flagged with blue flagging on April 24, 2019 and extended on December 13, 2019. These flags were located by Knight Hill Land Surveying Services, Inc. and placed on the project plans.

March 23, 2020
JWN #95-445
Page 2 of 6

FUNCTIONAL ASSESSMENT

The majority of the freshwater wetland being assessed is nearly level to gently sloping and dominated by a scrub-shrub plant community with forested edges and pockets of emergent vegetation. The National Wetland Inventory (NWI) database classifies the wetland as PFO1C (palustrine, forested, broad-leaved deciduous, seasonally flooded), PSS1C (palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded), and PEM1C (palustrine, emergent, persistent, seasonally flooded). The soils are poorly drained and fine textured. Project plans show no direct wetland impacts will occur. No formal vernal pool survey was conducted by the undersigned; however, the delineated wetlands near the proposed project did not appear to have the physical characteristics of a vernal pool. Refer to attached photos of the wetland systems and the trail where the waterline will be crossing.

The parcel contains an old farm/estate that contains the main house and the Creek Farm Cottage that was originally built in the 1800s. In ~1997 a conservation easement was established and in 2000 the Society For the Protection Of Forests acquired the property as a conservation area. Currently the land is being used for hiking trails, outdoor education, tree farm, bird sanctuary and wildlife refuge. The freshwater wetland drains down to Sagamore Creek through a constricted outlet (intermittent stream section and wetland swale with a portion that was dug out a long time ago to improve drainage out of the freshwater wetland system.

METHODOLOGY

Provided by Altus Engineering, Inc. for the wetland assessment was a plan with the existing condition and where the proposed waterline is being replaced/rerouted. Also reviewed by the undersigned were the following resource maps: NH Wetland Mapper map, NRCS soil survey, FEMA map, and the NWI map. The fieldwork portion of the wetland assessment was conducted on March 1, 2020 using *The Highway Methodology Workbook Supplement: Wetland Functions and Values, A Descriptive Approach* (US Army Corps of Engineers, New England Division, 1999). One completed Wetland Function-Value Evaluation Form has been included (refer to Attachments for details). There is one identified rare species or exemplary community documented on the site by the New Hampshire Natural Heritage Bureau (NHB). Marsh elder/jesuit's-bark (*Iva frutescens*) is documented but is not in the wetland being assessed. A survey was conducted by the undersigned in close proximity to the project and two additional small communities were noted on the upper banks of the downstream tidal system (located ~70' or more from the waterline project). Attached are plant and wildlife lists of the subject development area (not detailed lists of the entire property). Observations were also limited due to winter conditions. The FEMA map verified that the wetland is not within the 100 year floodplain. There are no downstream public or private wells (municipal water on-site). The USGS shows a blue line associated with the subject wetland, however, this stream appears to be dug out in some areas and more intermittent in nature in the freshwater wetland from the limited site observations (refer to stream photo in Attachment section).

The Highway Methodology utilizes list of considerations/qualifiers to assist in determining the presence and evaluating the importance of the following functions and values. The description

of each function and value comes directly from *The Highway Methodology Workbook Supplement* (1999).

- 1) Groundwater Recharge/Discharge – This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area.
- 2) Floodflow Alteration – This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters.
- 3) Fish and Shellfish Habitat (Freshwater) – This function considers the effectiveness of seasonal or permanent watercourses associated with the wetland in question for fish and shellfish habitat
- 4) Sediment/Toxicant/Pathogen Retention – This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.
- 5) Nutrient Removal/Retention/Transformation – This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels.
- 6) Production Export – This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.
- 7) Sediment/Shoreline Stabilization – This function considers the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.
- 8) Wildlife Habitat – This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge.
- 9) Recreation – This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other passive recreational activities.
- 10) Education/Scientific Value – This value considers the suitability of the wetland as a site for an "outdoor classroom" or a location for scientific study or research.
- 11) Uniqueness/Heritage – This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values.
- 12) Visual Quality/Aesthetics – This value considers the visual and aesthetic quality or usefulness of the wetland.
- 13) Endangered Species Habitat – This value considers the suitability of the wetland to support threatened or endangered species.

FUNCTION AND VALUES DISCUSSION

The wetlands will not be directly impacted by the proposed waterline. There is one principle function in the wetland system (i.e., Wildlife Habitat). This wetland is favorable for birds (migrating, nesting, etc.) along with a number of smaller mammals. Deer use was also noted in the wetland. Two other principle values were noted but had more to do with the area adjacent to or surrounding the freshwater wetland (i.e., Recreation and Education/Scientific Value). In addition, the wetland system does provide the following functions and values: Groundwater Recharge/Discharge, Floodflow Alteration, Sediment/Toxicant Retention, Nutrient Removal, Production Export, Uniqueness/Heritage, and Visual Quality/Aesthetics. The wetland does not

provide the following functions and values: Fish and Shellfish Habitat, Sediment/Shoreline Stabilization, or Endangered Species Habitat. The adjacent tidal wetland does provide these values and should be considered a highly valuable wetland system. No Historic Preservation database review was provided. This should be conducted due to the historic nature of the site (first settled in 1640).

The wetland buffer to be impacted is almost all along the existing trail system and through an overgrown old field that is dominated by invasive species. The water line is planned in uplands represented by invasive plant species such as: asian bittersweet (*Celastrus orbiculatus*), japanese-knotweed (*Reynoutria japonica*), european buckthorn (*Rhamnus cathartica*), european barberry (*Berberis vulgaris*), japanese barberry (*Berberis thunbergii*), glossy false buckthorn (*Frangula alnus*), rambler rose (*Rosa multiflora*), honeysuckles (*Lonicera spp.*), norway maple (*Acer platanoides*), and black locust (*Robinia pseudoacacia*). These invasive plants are listed in the *New Hampshire Guide to Upland Invasive Species* (2011) or the NH Invasive Plant Species Watch List (April 24, 2019). In addition to the aforementioned invasive plants: eastern white pine (*Pinus strobus*), northern red oak (*Quercus rubra*), quaking aspen (*Populus tremuloides*), apple (*Malus sp.*), stag-horn sumac (*Rhus typhina*), sensitive fern (*Onoclea sensibilis*), and grape (*Vitis sp.*) were also noted. The water line will pass through an existing narrow stone culverted trail where the freshwater "B" flagged series drains to the tidal creek (i.e., wetlands separated by trail). The downslope side of the trail where the waterline is crossing is essentially boulders. The upslope side of the trail is the freshwater wetland. Plant species noted on the upslope side slope side of the trail and in close proximity to the trail in the freshwater wetland included: rambler rose, sedges, smooth arrow-wood, sedges, Japanese barberry, asian bittersweet, and buckthorn. Observations were limited due the winter conditions and area just upslope was still iced over. The trail where the waterline will be crossing between the two wetland systems is the natural constricted point of the freshwater wetland system and being adjacent to the tidal system, this crossing was most likely established here back in the late 1800's.

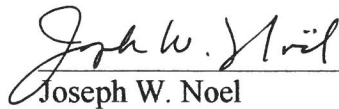
The upland soils are shallow to moderately deep to bedrock (i.e., ranging from 10 to 40 inches deep) with textures ranging from fine sandy loam to loamy sand. The hydric soils within the freshwater wetlands are primarily fine textured (i.e., very fine sandy loam or finer).

By using the existing gravel path to cross between the wetland system (where existing line is) and rerouting the balance of the waterline through upland that are further away from the tidal system than the existing waterline, there will be no permanent impacts to the wetland buffer or the wetland systems from the new waterline. This will also be further away from the marsh elder communities.

Selective thinning of the vegetation will also occur within the 100-foot buffer. By removing the invasive species, etc. a more natural plant community/buffer could regenerate here. Proper removal of the invasive species should be conducted to prevent further spread. Contractors should be familiar with proper removal of these plants (e.g., New Hampshire Guide to Upland Invasive Species publication is one guide that provides proper removal of invasive species). Soil disturbance will be limited to the waterline corridor, this will not impact the wetlands function and values. This should enhance the wetland buffer.

Wildlife Habitat is the function that will be temporarily impacted by the proposed development. White-tailed deer rubs were noted but wildlife observations were very limited due to the time of

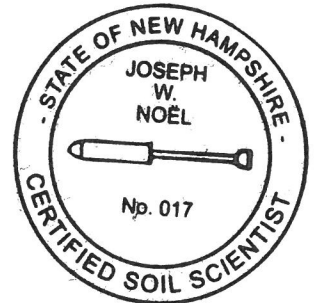
year and several groups of people walking their leashed dogs on the trail system. The impacts to the wildlife will be temporary during the construction of the waterline. The wildlife will return after the construction is completed. Kim Tuttle of the NHB also noted concerns about a nearby bat hibernacula and voluntary recommendations provided Ms. Tuttle in her email dated March 6, 2020 should be followed. If Best Management Practices are strictly adhered to along with the other design features to limit impacts (e.g., SiltSoxx will be installed around the project limits), there should be no secondary impacts to the wetlands or direct impacts to the wetland buffers. This will also be the case with the highly valuable tidal wetland that is downstream. Refer to Altus Engineering, Inc. plans for details on erosion control, etc. Please note, the NH Wetland Functional Assessment worksheet was referred to but is not part of this report. All pertinent information discussed in the worksheet is included in the narrative report or the attached Corps Wetland Function-Value Form.



Joseph W. Noel

New Hampshire Certified Soil Scientist #017

New Hampshire Certified Wetland Scientist #086



ATTACHMENTS

PHOTOS

Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire
(Photos taken by Joseph W. Noel on March 1, 2020)



Walkway Where Waterline Crosses Between Wetlands



From The Walkway Looking At The Freshwater Wetland

PHOTOS

Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire

(Photos taken by Joseph W. Noel on March 1, 2020)



From Walkway Looking At the Tidal Wetland



Overview Of Wetland Assessment Wetland (Forested Example)

PHOTOS

Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire

(Photos taken by Joseph W. Noel on March 1, 2020)



Overview Of Wetland Assessment Wetland (Scrub-Shrub Example)



Overview Of Wetland Assessment Wetland (Emergent Example)

PHOTOS

Creek Farm – 400 Little Harbor Road – Portsmouth, New Hampshire

(Photos taken by Joseph W. Noel on March 1, 2020)



Intermittent Stream Segment Leaving Wetland System Upslope From Walkway



Jesuit's-bark (*Iva frutescens*) – Also Known As Marsh Elder Or High-tide Bush Community

Wetland Function-Value Evaluation Form (freshwater wetland only – not downstream tidal wetland)

Total area of wetland 5.2 +/- Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No
 Adjacent land use Residential Homes Distance to nearest roadway or other development <100 feet
 Dominant wetland system present PSSI Contiguous undeveloped buffer zone present No
 Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin? _____
 How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list) yes attached
 PFO Swale

Latitude 43.059 Longitude 70.741
 Prepared by: TWN NHCWS #086 Date 3/23/2020
 Wetland Impacts: amount subject to change (no direct impacts)
 Type N/A Amount N/A

Evaluation based on: Office – Yes Field – Yes
 Corps manual wetland delineation
 Completed? Yes

Function/Value	Suitability Y N	Rationale (Reference #)	Principal Function(s)	Comments
Groundwater Recharge/Discharge	X	6, (7), 9, 10	No	Fine-textured soils limit this function, discharge via intermittent stream/wetland swale only near outlet may contribute to limited groundwater recharge. Wetlands near project (waterline crossing) drain to Sagamore Creek Tidal wetland.
Floodflow Alteration	X	3, (6), (7), 9, 15 (18)	No	Subject wetland provides limited flood storage from surrounding uplands, Intermittent stream/wetland swale drains to Sagamore Creek via a bedrock natural constricted outlet. Limited floodplain storage near waterline
Fish and Shellfish Habitat (Freshwater)	X	1	No	This function does not appear to apply to the freshwater wetland system. Just downstream of the evaluation area is a special aquatic site.
Sediment/Toxicant Retention	X	4, 7, 8, 9, (10), 13, 14, 16	No	Freshwater wetland has negligible surface water. Wetland structure (basin) can trap sediment. Contains constricted outlet. Some dense vegetation. Limited opportunity exists to trap sediments from overland flow from adjacent parking areas.
Nutrient Removal	X	3, 7, 8, 9, 11, 12, 13, 14	No	Minor potential for nutrient uptake exist, lack of persistent deep open water, little dense vegetation except in limited areas
Production Export	X	1, 2, 4, 5, (7), 12	No	Seeds, fruits, berries, etc., are present intermittent stream provides mode of transportation
Sediment/Shoreline Stabilization	X	2, 7, (9), 12, 15	No	Intermittent stream/wetland swale outlets to Sagamore Creek. No erosive forces in freshwater wetland.
Wildlife Habitat	X	3, (4), 5, 7, 8, 11, (13), (15), 16, 17, 18, 19, (21)	Yes	Favorable for birds (migrating, nesting, insect source, etc.), small mammals, etc. Limited wildlife observations due to winter conditions. Adjacent forested uplands and tidal system increase this function.
Recreation	X	1, (4), 5, 7, 8, 10, 11, 12	Yes*	* = not in freshwater wetland itself but existing trail system provides opportunity for hiking, birdwatching, etc.. Access to available parking.
Educational/Scientific Value	X	(1), 3, (4), 5, 6, 8, 9, 10, 13, 15, 16	Yes*	* = not in freshwater wetland. Lacks unusual wetland plant community in freshwater wetland, parking is available, handicap accessible. Downstream tidal wetland has threatend plant. Trail system with some limited views of freshwater wetland.
Uniqueness/Heritage	X	4, 5, 7, 8, 9, 10, 12, (13), (15), 19, (20)	No	Freshwater wetland is not unique. Database search should be conducted for historic features – part of old farm estate dating back to 1887 & first settled in 1640. Downstream is man-made tidal pool.
Visual Quality/Aesthetics	X	1, 3, 4, 5, 7, 8, (9), 10	No	Freshwater wetland is not visually distinct – parking available – trail access provided - Sagamore Creek (adjacent is high quality)
Endangered Species Habitat	X	(1)	No	No trees will be cut for the proposed waterline. NHB and NHFG reviewed proposed project – no expected impacts to sensitive wildlife or the Marsh Elder plant communities (noted during wetland assessment) A review should be conducted with the Federal Wildlife Service (IPAC) (not provided for the wetland assessment).
Ecological Integrity (Required For NH Permits)	X	N/A	No	Old farmland (not natural area), invasive plant species noted in the area, trail system/road in wetland buffer, parking areas, man-made tidal pool, ditch out just upstream from the walkway – alter the natural communities

Sagamore Creek tidal/marine system (very valuable wetland system) is downstream of the walkway (i.e., where waterline will cross). The tidal system is not part of this wetland assessment but pertinent comments will be included. The watershed is ~35 acres and the freshwater wetland being assessed is ~5.2 acres per NH Wetland Mapper.

Plant List

Alder-leaf buckthorn
Allegheny blackberry
American bittersweet
Apple
Asian bittersweet
Barberry
Black cherry
Black locust
Bluejoint
Bristly dewberry
Broad-leaf cat-tail
Burning bush
Common winterberry
Cottongrass bulrush
Eastern marsh fern
Eastern poison ivy
Eastern white pine
European barberry
European buckthorn
Fringed sedge
Glossy False Buckthorn
Grape
Honeysuckle
Horsetail
Japanese barberry
Japanese-knotweed
Jesuit's-bark
Lamp rush
Maleberry
New England American-aster
New York fern
Northern bayberry
Northern bracken fern
Northern red oak
Norway maple
Pointed broom sedge
Possumhaw
Purple loosestrife
Quaking aspen
Rambler rose
Red maple
Royal fern
Sedges
Sensitive fern

Rhamnus alnifolia
Rubus allegheniensis
Celastrus scandens
Malus sp.
Celastrus orbiculatus
Berberis sp.
Prunus serotina
Robinia pseudoacacia
Calamagrostis canadensis
Rubus hispidus
Typha latifolia
Euonymus alatus
Ilex verticillata
Scirpus cyperinus
Thelypteris palustris
Toxicodendron radicans
Pinus strobus
Berberis vulgaris
Rhamnus cathartica
Carex crinita
Frangula alnus
Vitis sp.
Lonicera spp.
Equisetum sp.
Berberis thunbergii
Reynoutria japonica
Iva frutescens
Juncus effusus
Lyonia ligustrina
Symphotrichum novae-angliae
Parathelypteris noveboracensis
Morella pensylvanica
Pteridium aquilinum
Quercus rubra
Acer platanoides
Carex scoparia
Viburnum nudum
Lythrum salicaria
Populus tremuloides
Rosa multiflora
Acer rubrum
Osmunda spectabilis
Carex spp.
Onoclea sensibilis

Shag-bark hickory
Silky dogwood
Smooth arrow-wood
Speckled alder
Stag-horn sumac
Steeplebush
White meadowsweet
Willowherb

Carya ovata
Cornus amomum
Viburnum recognitum
Alnus incana
Rhus typhina
Spiraea tomentosa
Spiraea alba
Epilobium sp.

Wildlife List

American crow
Black-capped chickadee
Blue jay
Cardinal
Carolina wren
Downy woodpecker
Eastern chipmunk
Eastern gray squirrel
Nuthatch
White-tailed deer

Corvus brachyrhynchos
Poecile atricapillus
Cyanocitta cristata
Cardinalis cardinalis
Thryothorus ludovicianus
Picoides pubescens
Tamias striatus
Sciurus carolinensis
Sitta sp.
Odocoileus virginianus

** A complete wildlife survey was not conducted. Observations from visual sightings, scat, and tracks.