The State of New Hampshire JUL 25'18 AM10:00 DAS Department of Environmental Services



Robert R. Scott, Commissioner



July 25, 2018

His Excellency, Governor Christopher T. Sununu and The Honorable Council State House Concord, NH 03301

REQUESTED ACTION

Approve Michael R. Clark's request to perform the following work on Sagamore Creek, in Portsmouth. File # 2018-00474. This project will not have significant impact on or adversely affect the values of Sagamore Creek.

Impact 2,008 square feet within the previously developed upland tidal buffer zone for permanent grading, landscaping and structure construction associated with redevelopment of a single family residential property. Additionally, temporarily impact 1,754 square feet for construction access and staging. The project also includes reconstruction of an existing tidal docking structure consisting of 73 square feet of impact landward of the highest observable tide line to reconstruct a 4 foot x 30 foot pier and 490 square feet within tidal wetland to construct a 3 foot x 30 foot ramp connected to two 10 foot x 20 foot floats, with an overall structure length seaward of the highest observable tide line of 40 feet to provide two boat slips on 404 feet of shoreline frontage on Sagamore Creek, in Portsmouth.

The New Hampshire Department of Environmental Services (NHDES) imposed the following conditions as part of this approval:

- All work shall be in accordance with plans by MSC, A Division of TF Moran, Inc., dated February 21, 2018 and revised through May 18, 2018, and received by the New Hampshire Department of Environmental Services (NHDES) on June 22, 2018.
- 2. This permit shall not be valid until it is recorded at the Rockingham County Registry of Deeds office by the permittee. A copy of the recorded permit shall be submitted to the NHDES Wetlands Bureau prior to the commencement of construction.
- 3. No less than five state business days prior to starting work authorized by this permit, the permittee shall notify the NHDES Wetlands Bureau and the local conservation commission in writing of the date on which work under this permit is expected to start.
- 4. The height of the pier's decking over the surface of the tidal marsh at mean high tide shall equal the width of the decking. Decking shall have 3/4-inch spacing between the decking planks.
- 5. The seasonal structures, including but not limited to the gangway and floats, shall be removed during the nonboating season and stored on the existing pier or in an upland location.
- 6. Construction of the dock shall occur from land, or from a barge and crane if land-based construction is not feasible, to reduce potential impacts to the salt marsh and intertidal zone.
- 7. Pile driving or pile removal work shall be done during low tide.
- 8. Pilings to be removed shall be cut level with the substrate rather than pulled, in order to limit the creation of turbidity.
- 9. All work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.

www.des.nh.gov 29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095 NHDES Main Line: (603) 271-3503 • Subsurface Fax: (603) 271-6683 • Wetlands Fax: (603) 271-6588 TDD Access: Relay NH 1 (800) 735-2964 His Excellency, Governor Christopher T. Sununu and The Honorable Council

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- 10. All work shall be conducted in a manner that avoids excessive discharges of sediments to fish spawning areas.
- 11. All construction-related debris shall be properly disposed of outside of the areas subject to RSA 482-A.
- 12. No more than 23% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from the NHDES.
- 13. Native vegetation within an area of at least 7,292 square feet within the Natural Woodland Buffer located between 50 and 150 feet landward of the reference line shall be retained in an unaltered state in order to comply with RSA 483-B:9, V, (b), (2).
- 14. This permit does not authorize the removal of trees or saplings within the waterfront buffer that would result in a tree and sapling point score below the minimum required per RSA 483-B:9, V, (a)(2)(D)(iv).
- 15. Any further alteration of areas on this property that are within the jurisdiction of the NHDES Wetlands/Shoreland Bureau will require further permitting by the Bureau.
- 16. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of New Hampshire Code of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
- 17. No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant, which includes all of their cultivars and varieties listed in Table 3800.1 of the New Hampshire prohibited invasive species list (Agr 3802.01).
- 18. To prevent the import or export of invasive plant species to and from the site, the permittee's contractor(s) shall clean all soils and vegetation from construction equipment and matting before such equipment is moved to or from the site.
- 19. Appropriate siltation and erosion controls shall be in place prior to construction, shall be maintained during construction, and shall remain in place until the area is stabilized. Temporary controls shall be removed once the area has been stabilized.
- 20. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
- 21. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
- 22. The contractor responsible for completion of the work shall use techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
- 23. Construction equipment shall be inspected daily for leaking fuel, oil, and hydraulic fluid prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
- 24. The permittee's contractor shall maintain appropriate oil/diesel fuel spill kits on site that are readily accessible at all times during construction, and shall train each operator in the use of the kits.
- 25. Within three days of final grading or temporary suspension of work in an area that is adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.

EXPLANATION

The NHDES Wetlands Bureau approved this project on June 25, 2018. NHDES supported its decision with the following findings:

- 1. This is a Major Project per Administrative Rule Env-Wt 303.02(a), projects in sand dunes, tidal wetlands, or bogs, except for the repair of existing structures pursuant to Env-Wt 303.04(v).
- 2. The need for the proposed impacts has been demonstrated by the applicant per Env-Wt 302.01. The property is under new ownership and is being redeveloped. The existing docking structure is in disrepair and is in a non-conforming location and configuration. The proposed dock will meet current standards.

His Excellency, Governor Christopher T. Sununu and The Honorable Council

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- 3. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03.
- 4. The dock is the minimum length necessary to provide full tide access at mean lower low water at this location and to a water depth which will prevent the float and vessel from sitting on the mud at low tide.
- 5. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) and (c), Requirements for Application Evaluation, has been considered in the design of the project.
- 6. NH Natural Heritage Bureau (NHB) report submitted with the application package (NHB18-0311) identified the potential to impact several natural communities and state-endangered plant species.
- In correspondence dated March 30, 2018 NHB coordinated with the applicant and ultimately stated that there
 were "no additional concerns" with the proposed project regarding special natural communities or endangered
 plant species.
- 8. In correspondence dated June 01, 2018, the Pease Development Authority, Division of Ports and Harbors determined that the project would not have any negative effect on navigation in the channel.
- 9. This dock is consistent with other tidal dock facility approvals in the seacoast.
- 10. NHDES staff field inspection on June 21, 2018 found that plans accurately reflect field conditions and that the proposed design will not obstruct near-shore navigation.
- 11. No comments of concern were received by the NHDES from abutters or local governing organizations.
- 12. The project will result in a net increase of approximately 10% of impervious surface area within the protected shoreland of the subject property.
- 13. In correspondence dated March 29, 2018, signed authorization was obtained from the abutting property owner (map/lot: 224/10-014) for impacts to occur within 20 feet of their property boundary.
- 14. A NHDES Shoreland permit has been obtained for impacts landward of the tidal buffer zone within the Protected Shoreland (NHDES File #: 2018-00477).
- 15. In accordance with RSA 482-A:8, NHDES finds that the requirements for a public hearing do not apply as the permitted project is not of substantial public interest, and will not have a significant impact on or adversely affect the values of the estuarine resource, as identified under RSA 482-A:1.

Application file documents are being forwarded to the Governor and Executive Council in connection with their consideration of this matter pursuant to RSA 482-A:3,II.(a) as it is a major project in public waters of the state.

We respectfully submit this request for your consideration.

Robert R. Scott Commissioner



RSA 482-A/ En

HDES-W-06-012

A/Rule

WETLANDS PERMIT APPLICATION Water Division/ Wetlands Bureau Land Resources Management Check the status of your application www.des.nh.gov/onestop



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NAN STREAM WATERSHED SIZE 31048.6 ac USGSTOPO MAP WATERBODY NAME: Sagamore Creek Latitude/Longitude LOCATION COORDINATES (If known

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Demolition of existing pool house and pool area, construction of new pool house, pool, garage, retaining wall and expansion of driveway to accommodate new structures, reconstruction of a failing timber retaining wall and removal and reconstruction of a seasonal tidal dock.

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SHORELINE FRONTAGE 404 NA This does not have shoreline frontage? Shoreline frontage is calculated by determining the average of the distances of the actual navigable shoreline frontage and a straight line drawn between the property lines both of which are measured at the normal high water line

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Natural Hentage Bureau File ID: NHB 18 ____ 0311

; and Designated River the project is in ¼ miles of date a copy of the application was sent to the Local River Management Advisory Committee: Month: __ Day: __ Year. X N/A

> im@des.nh.gov or (603) 271-2147 NHDES Wettands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH .03302-0095 www.des.nh.gov

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STATE ZIP CODE TOWN/CITY PHONE EMAIL OF FAX

eby authorize NHDES to communicate all matters relativ ECTRONIC COMMUNICATION: By Initialing here

GENIHINFORM

COMPANY NAME MSC: A division of TF Moran ASTINAME FIRSTINAME MI Colwell; Corey MAILING ADDRESS: 170/Commerce Way, #102

ZIP_CODE: 03801 TOWN/CITY Portsmouth STATE NE

PHONE: 603-431-2222 EMAIL or FAX: ccolwell@tfmoran.com

By signing the application, I am certifying that:

authorize the applicant and/or agent indicated on this form to act in my behalf in the processing of this application, and to furnish supplemental information in support of this permit application.

ed and submitted information & attachments outlined in the instructions and Required Attachment document. All abutters have been identified in accordance with RSA 482-A:3; I and Env-Wt 100-900.

I have read and provided the required information outlined in Env. Wt 302.04 for the applicable project type

I have read and understand Env-Wt 302:03 and have chosen the least impacting alternative

Any structure that I am proposing to repair/replace was either previously permitted by the Wetlands Bureau or would be considered grandfathered per Env-Wt 101:47.

I have submitted a Request for Project Review (RPR) Form (www.hh.gov/hdh/review) to the NH State Historic Preservation Office (SHPO) at the NH Division of Historical Resources to identify the presence of historical/ archeological resources while coordinating with the lead federal agency for NHPA 106 compliance.

I authorize NHDES and the municipal conservation commission to inspect the site of the proposed project.

I have reviewed the information being submitted and that to the best of my knowledge the information is true and accurate.

I understand that the willful submission of faisified or misrepresented information to the New Hampshire Department of Environmental Services is a criminal act, which may result in legal action.

I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining. The mailing addresses I have provided are up to date and appropriate for receipt of NHDES correspondence. NHDES will not 12. forward returned mail.

2.100.20

Date

Property Owner Signature

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10.

Print name legibly

Irm@des.nh.goy'or (603) 271-2147 .

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

MUNICIPAL SIGNATURES

12. CONSERVATION COMMISSION SIGNATURE

The signature below certifies that the municipal conservation commission has reviewed this application and

Waives its right-to intervene per RSA 482-A 11. Believes that the application and submitted plans accurately represent the proposed project- and

Has no objection to permitting the proposed work

DIRECTIONS FOR CONSERVATION COMMISSION.

1 Expedited review QNLY requires that the conservation commission's signature is obtained in the space above: 2. Expedited review requires the conservation Commission signature be obtained prior to the submittal of the original application to the rewi/City Cierk follognature.

Print name legibly

Date

3 The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason the application is noticiligible for expedited review and the application will be reviewed in the standard review time frame.

13. TOWN / CITY CLERK-SIGNATURE

As required by Chapter 482-A-3 (amended 2014): Ithereby certify that the applicant has filed four application forms; four detailed plans, and four USGS location maps with the town/city indicated below.

Kolig Barnoly Kell Brinney Partsmouth 2-2218

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DIRECTIONS FOR TOWN/CITY CLERK: Per.RSA 482-A 31

- 1. For applications where "Expedited Review"/is checked on page 1- if the Conservation Commission signature is not present WHDES will accept the permit application, but it will NOT receive the expedited review time.
- 2. IMMEDIATELY sign the original application form and four copies in the signature space provided above;
- Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
- IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board, and
- 5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT

Submit the single, original permit application form bearing the signature of the Town/ City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery.

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The Application Fee is the above calculated Total or \$200, whichever is greater = \$ 1776.40

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NHDES-W-06-012

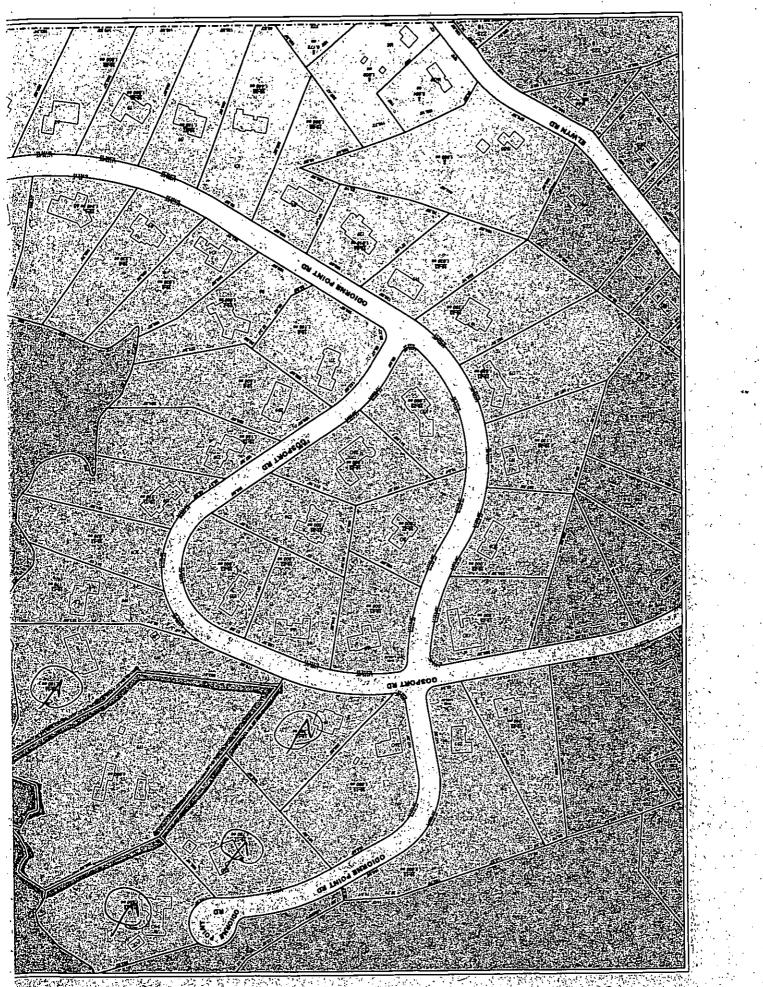
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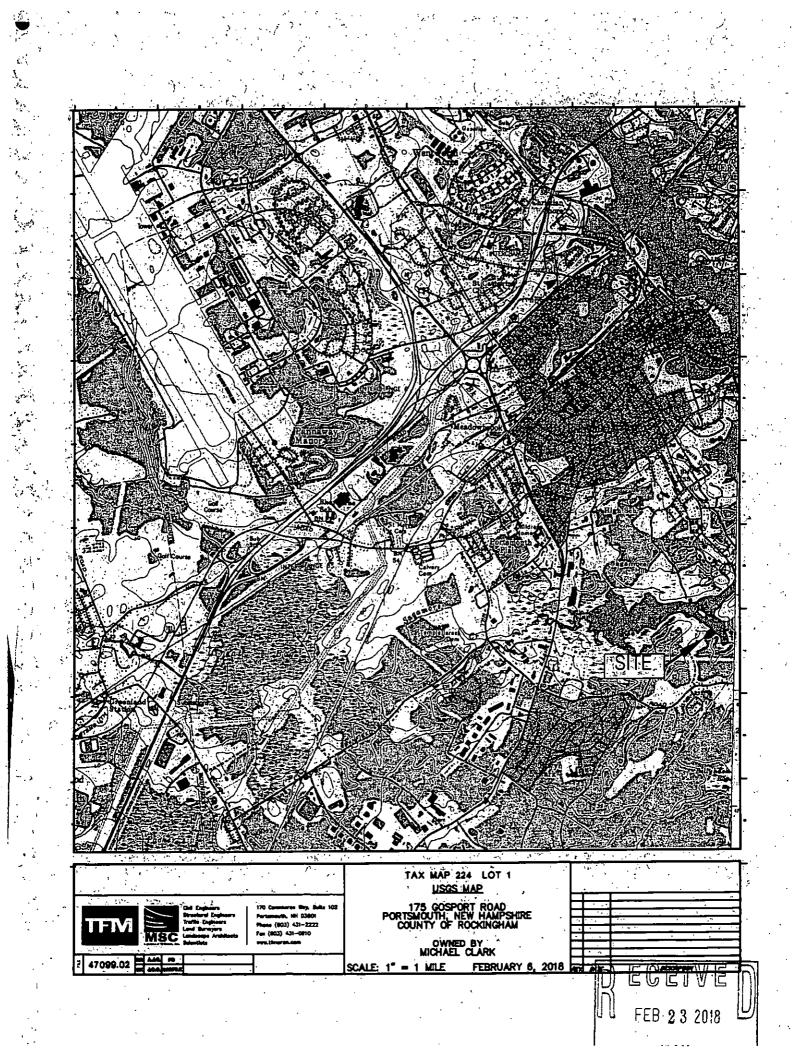
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in.	To: Andrew Gray, TF Moran 170 Commerce Way, Suite #102	the second se
7 . *	Portsmouth, NH 03801	
	From: Amy Lamb, NH Natural Heritage Bureau Date: 1/31/2018 (valid for one year from this date)	
	Re: Review by NH Natural Heritage Bureau	
	NHB File ID: 'NHB18-0311 Town: Ports	mouth Location: Tax Maps: Map 224, Lot 1
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	NHB File ID NHB18-0311 Town: Ports Description: Demolition of existing pool house and po- accommodate new structures. As requested, I have searched our database for records of fire species Comments: Please send NHB information about where the propo- adjacent to a sensitive are. Natural Community State High salt marsh Intertidal flat Low salt marsh Salt marsh	ol area, construction of new pool house, pool, garage and expansion of driveway to nd exemplary natural communities, with the following results red structures will be placed and associated work will occur. This property is a) Notes threats to these communities 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) and increased input of nutrients and pollutants in storm number runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants.
	NHB File ID NHB18-0311 Town: Ports Description: Demolition of existing pool house and po- accommodate new structures. As requested, I have searched our database for records of fire species Comments: Please send NHB information about where the propo- adjacent to a sensitive are. Natural Community State High salt marsh Intertidal flat Low salt marsh	ol area, construction of new pool house, pool, garage and expansion of driveway to nd exemplary natural communities, with the following results and exemplary natural communities, with the following results and structures will be placed and associated work will occur. This property is all Notes threats to diese communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants. al Notes: Threats are primarily alterations to the hydrology of the wetland, such as ditching or
	NHB File ID NHB18-0311 Town: Ports Description: Demolition of existing pool house and po- accommodate new structures. As requested, I have searched our database for records of fire species Comments: Please send NHB information about where the propo- adjacent to a sensitive are. Natural Community State High salt marsh Intertidal flat Low salt marsh Salt marsh Salt marsh system - Plant species State	ol area, construction of new pool house, pool, garage and expansion of driveway to nd exemplary natural communities, with the following results and exemplary natural communities, with the following results are structures will be placed and associated work will occur. This property is threats to these communities 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) and increased input of nutrients and pollutants in storm number Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants.
	NHB File ID NHB18-0311 Town: Ports Description: Demolition of existing pool house and po- accommodate new structures. As requested, I have searched our database for records of fire species Comments: Please send NHB information about where the propo- adjacent to a sensitive arel. Natural Community State High salt marsh State Intertidal flat Low salt marsh Salt marsh system	ol area, construction of new pool house, pool, garage and expansion of driveway to and exemplary natural communities, with the following results, and scenario of the placed and associated work will occur. This property is threads to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats to these communities 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) and increased input of nutrients and pollutants in storm runoff. Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants. Notes 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 constructions that might affect the sheet flow of tidal waters across the intertidal
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	NHB File ID NHB18-0311 Town: Ports Description: Demolition of existing pool house and po- accommodate new structures. As requested, I have searched our database for records of fire species Comments: Please send NHB information about where the propo- adjacent to a sensitive ared. Natural Community State High salt marsh Intertidal flat Low salt marsh Salt marsh Salt marsh system - Plant species State dwarf glasswort (Salicornia bigelovil)* E Department of Natural and Cultural Resources Division of Forests and Lands	ol area, construction of new pool house, pool, garage and expansion of driveway to and exemplarly natural communities, with the following result, and exemplarly natural communities are primarily alterations to the hydrology of the wetland (such as difficung or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm numbers. Threats to these communities are primarily alterations to the hydrology of the wetland (such as difficung or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm numbers. Threats to these communities are primarily alterations to the hydrology of the wetland (such as difficung or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm runoff. Threats to these communities are primarily alterations to the hydrology of the wetland (such as difficung or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat) and increased input of nutrients and pollutants in storm runoff. Threats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants. Notes 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 DNCR/NHB 172 Pembroke Rd.

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NH NATURAL HERITAGE BUREAU NHB DATACHECK RESULTS LETTER

tundra alkali grass (Puccinellia pumila)*

Rat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.

Primarily vulnerable to changes to the hydrology of its habitat, especially alterations that change water. I way also be susceptible to increased pollutants and nurients carried in stormwater unoff.

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"Codes: "E" = Endangered, "I" = Threatened, "SC" = Special Concern, "--" = an exemplary daular community, of a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An esterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

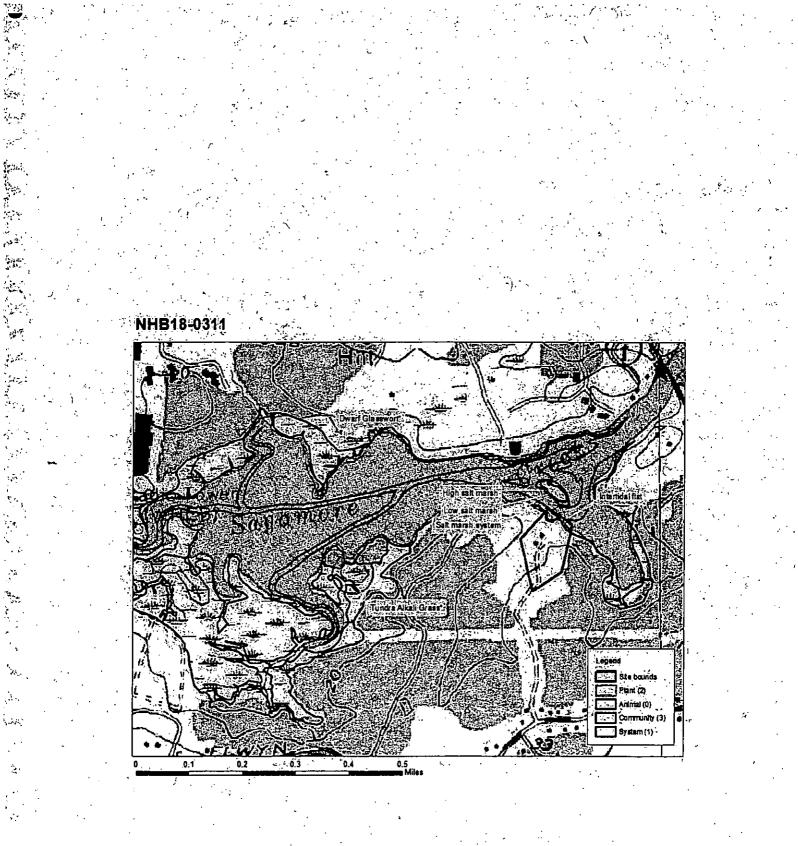
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A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have nover been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

Department of Natural and Cultural Resources Division of Forests and Lands (603) 271-2214 fax: 271-6488

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DNCR/NHB 172 Pembroke Rd. Concord, NH 03301



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New Hampshire Natural Heritage Bureau - Community Record

(quack-grass), Ligusticum scothicum (Scotch lovage), Panicum virgatum (switch-grass), Aster novi-belgii (New York aster), Teucrium canadensis (germander), Sanguisorba canadensis (Canadian burnet); Spartina pectinata (fresh-water cord-grass), Carex. hormathodes. (necklace sedge), and Juncus arcticus yar. littoralis (shore rush). Distichlis spicata mixed with S. patens, growing at similar elevations on the high marsh or dominate in of the wetter, more poorly drained areas with Triglochin maritimum (arrow-grass). Som of these Triglochin (forb) pannes supported large numbers of the rare plants Agalinis maritima (salt-marsh gerardia) and Salicornia bigelovii (dwarf glasswort). Spartina alternijlora (short form) pannes occurred on less firm peat soils and appeared to be somewhat deeper, often larger, and saturated or flooded for longer periods than forb panne 1997: Sagamore Creek is a relatively diverse, sizable, and significant estuary supporting		High salt marsh
Federal: Not listed Global: Not maked (med more information) State: Not listed Description at this Location Conservation Rank: Conservation Rank: Good quality, condition and landscape context (B: on a scale of A-D). Comments on Rank: Sagamore Creek estuary 1997. Dominated by the perennial grass Sparita patent (salt-meridow cord-grass). Covered more are tan the towsqut markn. This zone had the higher species richness within the high markh and included Solidago semperiviens (essate goldenröd). Festuac rubra (red fescue), Hierochloe dodrata (sweet grass), Elyirgia repen (quack-grass), Liguiticum scohheum (Scoth livage), Panicum virgatim (switch-grass), Aster nowi-beigti (New York sater), Teierrium canadensis (germander), Sarguiorba canadersis (Canadian burret), Spring at similar elevations on the high marsh or dominate in of the wetter, more poorly drained areas with Triglochin maritimum (arrow-grass), Som of these Triglochin (forb) patien of Salteornia bige periods the high marsh or dominate in of the wetter, more poorly drained areas with Triglochin (maritimum (arrow-grass), Som of these Triglochin (forb) patien Salteornia bigelovii (dwarf gaswort). Sparina alternifyor (short forri) pannes occurred on less firm peat soils and appeared to be somewhat deeper-, oten haiter, and salturet of the doded for longer periods than forb panne good quality estuarine habits. The small, fair quality brackish marsher source landware of the high salt marsh. Low salt marsh, taid area battero of toded for longer periods than forb panne duality estuarine habits. The small marsh, taid area batter source landware of the high salt marsh. Low salt marsh, slands*. In the estuary. These islands were covered by hemlock-beech-oak-pine forest. Moderate residehila had commercial development occurs partou	Legal Status	Conservation Status
State: Not listed Description at this Location Conservation Rank: Good quality, condition and landscape context (B ¹ on a scale of A-D). Comments on Rank: 2006: Observed and photographed high salt marsh as the dominant community in the Sagamore Creek estuary 1997. Dominated by the perennial grass Sparting patents (saltmetide) for stratule and the low salt marsh. This zone had the higher species richness within the high marsh and included Solidago sempervirens (seaside goldenrod), Festuce arubra (red tescue), Hierochloe adorda (sweet grass), Elyring a repen (quack-grass), Liguisticum scothicum (Sooth lovage), Panicium vingatum (with-grass), Aster, novi-beigt (10 (New York aster), Teiorium condicatists (germander), Sanguisoba canadensis (Canadian burnet), Spartina pectinata (fresh-water cord-grass), Elyringia repen (quack-grass), Liguisticum scothicum (Sooth lovage), Panicium vingatum (with-grass), Aster, novi-beigt (10 (Tob) panies supported) arg. numbers of the high marsh or dominate in of the wetter, more poorly drained areas with Triglochim maritimum (arrow grass). Som of these, Triglochin (Tob) panies supported large numbers of the area plants Agalinis maritima (salt-marsh gerardia) and Salicorina bigelowi (dwarf glasswort). Spartina alterniflora (short form) pannes occurred on loss firm peat soils and appeared to be somewhat deeper, often larger, and saturated or flooded for longer periods than forb panne supported large, adiulty backtish intertidal fat, and an undifferentiated saline/brackish subtidal chaine/brackish interdial fat, and an undifferentiated saline/brackish subtidal chainel/bay bottom occur toward th channel/ A population of Paccinella papereul var. idats/mar (Alaskan goose-grass) was found on the cobbiby shore of one of two "salt marsh. Iddea the shore storts of Rte. 1 and unafferentistes daline/brackish subtidal ch		
Description at this Location Conservation Rank: Good quality, condition and landscape context (B ¹ on a scale of A-D). Comments on Rank: 2006: Observed and photographed high salt marsh as the dominant community in the Sagamore Creek estuary. 1997. Dominated by the perennial grass Sporting patients, context (B ¹ on a scale of A-D). Detailed Description: 2006: Observed and photographed high salt marsh as the dominant community in the Sagamore Creek estuary. 1997. Dominated by the perennial grass Sporting patients, control beild (New York aster), Teucrium control weet grass). Elyisticum scothicum (Socith) Evolution wirggutum (switch-grass). Aster novi-belgi (New York aster), Teucrium canadensis (germander). Statisticus scothicum Stochho edoraid dweet grass). Elyisticus scothicum Stochho edoraid corder grass). Correct more acting the statistic (germander). Statisticus scothicus supported large numbers of the rare plants Agalins maritima (salt-marsh grandua) and Solicornia bigelowi (Warf Basswort). Sporting a similar elevations to not he high inarsh grandua) and Solicornia bigelowi (Warf Basswort). Sporting a similar of Dooded for longer periods than forb panne of these Triglochin (forth) panies occurred on less firm peat soils and appeared to be sointewhild teper, coften laizer, and saturated or Booded for longer periods than forb panne good quality estuarine habitat: Three small, fair quality brackish marshes occurred landwing worther high aff marsh. Low salt marsh, dial creak bottoms, salthorbrackish interidal flar, and an undifferentiated satin-Poreckish subtidic thained/bay bottom occur loward the chained/bay by hemotock-beech-oak-pine forest. Moderate residential and commercial development occurs particularly wound the western lobe where Re. 1 crosses the estuary. Estuarine tidal flow was evaluated as alequate for the salt marsh		
Conservation Rapk: Good quality, condition and landscape context (B' on a scale of A-D). Comments on Rank: 2006: Observed and photographed high salt marsh as the dominant community in the Sagamore Creek estuary 1997: Dominated by the perennial grass Sporting patent (salt-meadow Gord-grass). Covered more area than the <i>low salt marsh</i> . This zone had the highe species richness within the high marsh and included Solidago sempervires (seaside goldenröd). Festuciar ubro's (caffectore). Hierochloe ödorat (sweet grass), Liguisticum scothicum (Scotch lövage), Paricium virgatum (switch-grass), Aster novi-belgi (New York aster), Teicrium canadensis (gentander). Sanguisorbo caradensis (Canadina burnet). Sparina perinatina tertaint (resh-water cord-griss), Care. hormathode: (ricklace selge), and Juncus arcticus yet. Ittiorialit (shore rush). Districhts spicate mixed with S. patens, growing at similar levations on the high marsh of dominate in of the wetter, more poorly drained areas with Triglochin maritimum (arrow-grass). Som of these Triglochin (tot) pathes supported large numbers of the rare plants Agalinis maritima (salt-marsh. Beardia) and Salicorita ballogicovii (dwarg Baswort). Spartina adterriflora (short form) pannes occurred on less firm peat soils and appeared to be somewhat deeper, often larger, and salurated or flooded for longer periods than forb panne 1997. Sagamore Creek is a relatively diverse, sizable, and significant estuary supporting good quality estuarine habita: Three small, fair quality bracktsh marshe accurred landwe of the flagh salt. General Area: 1997. Sagamore Creek is a relatively diverse, sizable, and significant estuary supporting good quality estuarine habita: Three small, fair quality bracktsh marshe so courred landwe of the flagh sagt marsh. Low salt marsh. full catesh botoms, a sallne/bracktsh interstesi soltand vere covered by hemiock-beech-ack-		
Commenis on Rank: Defailed Description: 2006: Observed and photographed <i>high salt marsh</i> as the dominant community in the Sagamore Creek estuary. 1997: Dominated by the perennial grass <i>Spariting patens</i> (salt- meidow gord grass). Covered more area than the <i>low sait marsh</i> . This zone had the highe species richness within the high marsh and included <i>Solidago sempervirens</i> (seaside goldenrid). <i>Festuca rubra</i> (red fescue), <i>Hierochloe dorata</i> (sweet grass). <i>Elyrigia repen</i> (quack-grass). <i>Ligariticam soliton</i> (red foscue), <i>Atternation wirgatum</i> (switch-grass). <i>Aster novi-belgi</i> (New York aster), <i>Teairim canadensis</i> (germander), <i>Sanguisorba</i> <i>canadensis</i> (canadian burnet). Spariting perinating (festh-water cord-grass). <i>Correx.</i> <i>hormathodes</i> (necklace sedge), and <i>Juncus arcticus</i> yar. <i>Hittoralis</i> (shore rush). <i>Distichlis</i> <i>spicata</i> mixed with <i>S. patens</i> , gröwing at similar elevations on the high marsh or dominate in of the wetter, more poorly drained areas with <i>Triglochin maritinum</i> (arrow grass). Som of these, <i>Triglochin</i> (forb) pathes supported large numbers of the rise plants <i>Agalinis</i> <i>maritima</i> (salt-marsh gerardia) and <i>Saltcornia bigelovii</i> (dwarf glasswort). <i>Spartina</i> <i>alterniflora</i> (sloif form) panines occurred on less firm peti solis and sppeared to be soinewhat deeper, often larger, and saturated or flooded for longer periods than forb panne good quality estuarine habita: Three small, fair quality <i>bracklish marshes</i> occurred landwr of the <i>high sait marsh. Low sait marsh, tidal creb hotoms</i> , a sallne <i>bracklis hierital</i> <i>Had</i> , an undifferentiated saline/bracklish usbitdal channel/bay bottom occur. Ioward th changed By: Urban Forestry Center Survey Site Name: Sagamore Creek Managed By: Urban Forestry Center Dispersed as adequate for the satt marsh west of Rte. 1 and unaffected for the remainder of the marsh (USDA Soil Conservation Service 1994). Sentents: <i>Joeation</i> Survey Site Name: Sagamore Creek, and east through adjacent upland forest to more trails leading		
Detailed Description: 2006: Observed and photographed high salt marsh as the dominant community in the Sagamore Creek estuary. 1997: Dominated by the perennial griss Sparting patens (salt-meidow cord-griss). Covered more area than the low,salt marsh This sone had the higher species richness within the high marsh and included Solidago sempervirens (seaside goldenröd); Festucar rubra (red fescue), Hierochloe ödorata (sweet grass), Elyrigia rependent (quack-grass), Ligusticum scothicum (Scotch lovago), Panicum virgenzium (switch-grass), Aster, novi-beigi (New York ster), Teincirum virgenzium (switch-grass), Aster, novi-beigi (New York ster), Teincirum virgenzium (switch-grass), Carex. hormathodes (necklace sedge), and Juncus arcticus yur. Ilitoralis (shore rust), Distichtis spicata mixed with S. patens, growing at similar elevations on the high marsh or dominate in of the wetter, more poorly drained areas with Triglochim maritimum (arrow-grass). Som of these Triglochim (otb) paines sciurred on less firm peat soils and appeared to be somewhild depercy often larger, and saturated or floodet fologer periods than fort panne good quality estuarine habitat: Three small, fair quality brackish marshes occurred and speared to be somewhild depercy often larger, and saturated or floodet fologer periods the intervided of the high salt marsh. Low satu marsh, fuid creck botoms, a saltne/brackkin intervided flat, and an undifferentiated saline/brackish subfidal charne/bap botom occur toward th channel. A population of <i>Puecimellia papereula</i> var. alaskana (Alaskan goose-grass) was found on the cobbly shore of one of two "salt marsh islands" in the estuary. These islands were covered by <i>hemlock-beech-oak-pine forest</i> . Moderate residential and commercial development occurs particulariy around the western lobe where Rte. 1 crosses the estuary. Estuarine tidal flow was evaluated as adequate for the salt marsh west of Rte. 1 and unaffected for the remainder of the marsh (USDA Soil Conser		Good quality, condition and landscape context (B! on a scale of A-D).
Sagamore Creek estuary 1997: Dominated by the perennial griss Sparing parten geners (salimed word-griss). Covered more area than the low.salt marsh. This zone had the higher species richness within the high marsh and included Solidago sempervirems (seaside goldenröd). Festucar ribro' (red fescue), Hierochloe odorata (sweet grass). Elyirigia repen (quack-grass), Liguisticum scothicum (Socothicum Socothicum Socothicum, Socothicum	Comments on Rank:	
Sagamore Creek estuary 1997: Dominated by the perennial griss Sparing parten getas (salimetic species richness within the high marsh and included Solidago sempervirem (seaside goldenröd); Festucar izöra (red fescue), Hierochiee ödoraia (sweet grass), Elyírigia repen (quack-grass), Elyírigia repen (guack-grass), Elyírigia repen (quack-grass), Elyírigia repen (quack-grass), Elyírigia repen (guack-grass), Elyírigia (guach-grass), Elyírigia (guack-grass), Elyírigia	Detailed Dessertations	2006. Observed and shad shad had been sate mouth of the distance sources to the
meidow gord-grass). Covered more area than the <i>law, galt marsh</i> . This zone had the higher species richness within the high marsh and included <i>Solidago sempervirens</i> (seaside goldenröd). <i>Festuca rubra</i> (red fescuë), <i>Hierochloë odorata</i> (sweet grass). <i>Elyirigia repen</i> (quack-grass). <i>Ligusticum scothicum</i> (Scotch lövage), <i>Panicum virgatum</i> (switch-grass), <i>Asier novi-belgii</i> (New York sster), <i>Teierium canadensis</i> (germander), <i>Sargusiorba canadensis</i> (Canadian burnet). <i>Spartina pectinata</i> (fresh-water cord-grass). <i>Cares</i> . <i>hormathodes</i> (nicklace sedge), and <i>Juncus arcticus</i> yar. <i>littoralis</i> (shore rush). <i>Distichlis</i> . <i>spicata</i> mixed with S. <i>paters</i> , growing at similar elevations on the high marsh or dominate in of the wetter, more poorly drained areas with <i>Triglochin maritinum</i> (arrow-grass). Som of these, <i>Triglochin</i> (fort) paines supported large numbers of the rare plants <i>Agalinis</i> <i>maritina</i> (salt-marsh gerarida) and <i>Salicorina biglebini</i> (dwarf glasswort). <i>Spartina</i> <i>alterniflora</i> (short form) pannes occurred on less firm peat soils and appeared to be somewhait deeper, often larger, and saturated or flooded for longer periods than forb panne good quality estuarine habitat: Three small, fair quality <i>brackish marshes</i> occurred landwr of the <i>high sqlt marsh</i> . <i>Low salt marsh</i> , <i>stalidals</i> , <i>alue/brackish intertidal</i> <i>Hat</i> , and an undifferentiated saline/brackish subfidal chainet/bay bottom occur-toward th chainel. A population of <i>Puccinellia paupercula var. alaskana</i> (Alaskan goose-grass) was found on the cobbly shore of one of two "salt marsh islands": In the estuary. These islands were covered by <i>hemlock-beech-oak-pine forfsst</i> . Moderate resideitifal and commercial development occurs particularly around the western lobe where Rte. 1 crosses the estuary. Estuarine tidal flow was evaluated as adequate for the salt marsh west of Rte. 1 and unaffected for the remainder of the marsh (USDA Soil Conservation Šervice 1994). General Comiments: Management Cownt(s): Portsmouth Size: 64.4 acres Eleva	Detailed Description.	Sagamore Creek estuary 1997: Dominated by the perennial grass Sparting patents (salt-
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western edge of the salt marsh (the marsh continues on the western side of the bridge but it has bee	Size: 64.4 acrès Precision: Within Directions: Park at the salt	Elevation: 4 feet (but not necessarily restricted to) the area indicated on the map. Urban Forestry Center on Elwyn Road. Trails lead from here down to the southern edge of marsh along Sagamore Creek, and east through adjacent upland forest to more trails leading
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New Hampshire Natural Heritage Bureau - Community Record

•	Intertidal flat
and Status	Conservation Status
Legal Status	Global: Not ranked (need more information)
State: Not listed	State: Rare or uncommon
Sulle: Not instead	
Description at this L	ocation
Conservation Rank:	Good quality, condition and landscape context ('B' on a scale of A-D).
Comments on Rank:	Good quaity, condition and reliascupe context (D, on a searce on the st
Detailed Description:	2006: Mudflats observed and photographed at low-mid tide. 1997: No details.
General Area:	1997: Sagamore Creek is a relatively diverse, sizable, and significant estuary supporting
	good quality estuarine habitat. Three small, fair quality brackish marshes and high and low
	salt marshes occur landward of the flats. Tidal creek bottoms and an undifferentiated
	saline/brackish subtidal channel/bay bottom occur toward the channel. A population of
·. ·	Puccinellia paupercula var. alaskana (Alaskan goose-grass) was found on the cobbly shore
· · · ·	of one of two "salt marsh islands" in the estuary. These islands were covered by hemlock-
	beech-oak-pine forest. Moderate residential and commercial development occurs
· · ·	particularly around the western lobe where Rte. 1 crosses the estuary. Estuarine tidal flow
ат, 11	was evaluated as adequate for the salt marsh west of Rte. 1 and unaffected for the remainder
-	of the marsh (USDA Soil Conservation Service 1994).
General Comments:	1997: Intertidal sand and mud flats are gently sloping, sparsely vegetated, habitats. The substrate, exposed completely at extra low spring tide, ranges in composition from sands to
· · · · · · · · · · · · · · · · · · ·	muds and silts. Benthic diatoms and other microalgae occurring in this environment are
· · ·	important contributors to the primary productivity of the total estuarine system (Sickley
· · · · ·	1989). Macroalgae is typically uncommon across the exposed substrate. Characteristic
	invertebrates found in New Hampshire's intertidal mudflats include polychaete worms
· •	(including Nereis virgns, Nephtys caeca, Clymenella tortquata, and Scoloplos spp.) and
· · ·	mollusks (including soft-shelled clam [Mya arenaria]. Baltic Macoma [Macoma balthica].
	mollusks (including soft-shelled clam [Mya arenaria], Baltic Macoma [Macoma balthica],
	mollusks (including soft-shelled clam [Mya arenària], Baltic Macoma [Macoma balthica], gem shell [Gemma gemma], and swamp Hydrobia [Hydrobia minuta]) (NAI 1973).
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Comments: Location Survey Site Name: S Managed By: I County: Rockingha Town(s): Portsmout	mollusks (including söft-shelled clam [Mya arenària]; Baltic Macoma [Macoma balthica], gem shell [Gemma gemma], and swamp Hydrobia [Hydrobia minuta]) (NAI 1973). Arthropods are also well represented and include green crabs (Carcinus maenus), rock crabs (Cancer irroratus), flat-clawed hermit crabs (Pagurus pollicaris), and horseshoe crabs (Limulus polyphemis). During the diurnal (twice daily) tidal flooding, several species of fish and other aquatic species feed on the benthos and epibenthic algae. This community also provides important foraging habitat for shorebirds and other animals when the intertidal flat is exposed. The diverse variety of primary foods (microalgae, phytoplankton, and detritus) available to consumers supports the high productivity found on intertidal flats. The substrate is composed of sand or silt and clay rich in organic matter. Vascular plants are sparse to more typically absent.
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Comments: Location Survey Site Name: S Managed By: I County: Rockingha Town(s): Portsmout Size: 88.5 acres	mollusks (including söft-shelled clam [Mya arenària]; Baltic Macoma [Macoma balthica], gem shell [Gemma gemma], and swamp Hydrobia [Hydrobia minuta]) (NAI 1973). Arthropods are also well represented and include green crabs (Carcinus maenus), rock crabs (Cancer irroratus), flat-clawed hermit crabs (Pagurus pollicaris), and horseshoe crabs (Limulus polyphemis). During the diurnal (twice daily) tidal flooding, several species of fish and other aquatic species feed on the benthos and epibenthic algae. This community also provides important foraging habitat for shorebirds and other animals when the intertidal flat is exposed. The diverse variety of primary foods (microalgae, phytoplankton, and detritus) available to consumers supports the high productivity found on intertidal flats. The substrate is composed of sand or silt and clay rich in organic matter. Vascular plants are sparse to more typically absent.

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Occurs between estuarine marshes or other coastal communities landward and subtidal communities seaward and includes tidal creek channels exposed at low tide. Park at Urban Forestry Center on Elwyn Road. Trails lead from here down to the southern edge of the salt marsh. Salt marsh can also

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be accessed from the Rte. 1 bridge on the western side.

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Dates document First reported:	1997-06-18		Last reported	: 2006-05-24
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New Hampshire Natural Heritage Bureau - Community Record

Low salt marsh

Federal:	atus	<i></i>				vation Statu			·	
				•		Not ranked		e informat	ion)	
Stäte:	Not listed			. '	State:	Rare or uno	ommon	, . , .	· ,	
· · · · ,	· · · ·	, i i i			•	· 1				•
Descript	tion at this	Location	leg a l	•	•	, , ,				*
Conserv	ation Rank:	Good	quality, condi	tion and	landscape	context ('B'	on a scale	of A-D).	1.7	
	nts on Rank:		•	•	•		÷	,		
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Detailed	Description	n: 2006:	Observed and	l photogra	anhèd alo	ng the edges	of tidal cr	eeks and al	long the loy	ver
		fringe	s of the much	more do	minant <i>bl</i>	ah salt mars	h commun	ity 1997 .	nartina ali	erniflord
· .			oth cord-grass)							
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	<i>i</i>		nore Creek.			inge arong a	iteries, indu	1 010003, 00	ió má Bina	, i
General	Åren .		The transition	. hotween	high and	l Iou calt mà	Inch occium	ed anorovi		ha maan
Jenerar	rica.		water mark; hi							
· ·			es of spring tic							
	•.		y supporting i							
			high salt mar							
	· · · ·		e/brackish inte							
			m occurred tov							
			kan goose-gra							
	·		tuary. These is							
·		reside	intial and com	mercial d	evelopme	nt occurs pa	rticularly a	round the	western lob	e where
		Rte. 1	crosses the es	tuary. Es	tuarine tie	dal flow was	evaluated	as adequat	e for the sa	lt marsh
			of Rte. 1 and u							
		• •	1004			emainder of	116 III 01 911 (00000 000		luon
		Servic	ce 1994).	• •		emainder of		.000A 20		. ,
General (Comments:		ce 1994). The <i>low salt i</i>	narsh ha			•			• •
General (Comments:	1997.	The low salt r		s more fre	quent tidal f	looding, lo	wer soil o	xygen, and	reduced
General (Comments:	1997: soil sa	The <i>low salt i</i> alinity compar	ed to the	s more fre high salt	equent tidal f marsh. S. al	looding, lo terniflora (wer soil o lominated	xygen, and the physics	reduced
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lanager. Commen	nent its:	1997: soil sa	The <i>low salt i</i> alinity compar	ed to the	s more fre high salt	equent tidal f marsh. S. al	looding, lo terniflora (wer soil o lominated	xygen, and the physics	reduced
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New Hampshire Natural Heritage Bureau - System Record

Salt marsh system

Legal Status	Conservation Status		<u>.</u>	
Federal: "Not listed State: Not listed	Global: Not ranked (need more information) State: Rare or uncommon	. v.	· ·	• •
Description at this Location				
	n and landscape context ('B' on a scale of A-D).			· · · ·
Comments on Rank:				
habitat. Three small, f	zable, and significant estuary supporting good quality e air quality brackish marshes and a high salt marsh occ	stuarine ur landwa	urd of.	
the low salt marsh.	al flats and a subtidal system.	•		· · ·
General Area: 2006: Borders intertid General Comments:				
Management				- ·
Comments:		• .	·	
Location				• • •
Survey Site Name: Sagamore Creek Managed By: Urban Forestry Center		•		
County: Rockingham				
Town(s): Portsmouth Size: 64.4 acres	Elevation:			
Precision: Within (but not necessarily re	stricted to) the area indicated on the map.	**		i.
r recision. While out not necessarily re		• •		
Directions: Sagamore Creek east of Rte. 1				•
Dates documented				
First reported: 1997-06-18	Last reported: 2007-10-17		•	·

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New Hampshire Natural Heritage Bureau - Plant Record

dwarf glasswort (Salicornia bigelovii)

egal Status	 Global: Demonstrably widespread, abundant, and secure
tate: Listed End	
state: Listed End	angered State. Critically imperfied due to fairly of valietability
escription at this L	Location
	Historical records only - current condition unknown.
omments on Rank:	
etailed Description:	: 1997: More than 3,000 plants on north shore, and 200-400 on the south shore. 1983: (Nort
•	of Urban Forestry Center) 20 by 20 foot area. Old (last years) inflorescences with new
· .	growth, ca. 2 cm in height, none flowering. Specimen at UNH. 1973: (North shore) ca. 10
	1000 plants with seeds dispersing. Specimen S.N. at NHA.
ieneral Area:	1997: Triglochin forb pannes on the high salt marsh. Associated dominants were Trigloch
•	maritimum (arrow-grass), Distichlis spicata (spike-grass), Spartina alterniflora (smooth cord-grass), and S. patens (salt-meadow cord-grass). Salicornia europaea (common
* •	glasswort) also present. 1973: 0-10 feet, flat, full sun, wet mud, surrounded by Spartina
	(cord-grass) species. In salt marsh. Marsh pannes on green.
anami Commente	
eneral Comments:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge
eneral Comments:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop
	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge
Aanagement	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop
Aanagement	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop
Aanagement Comments:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop
Anagement Comments:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983), F.D. Richardson, NH Water Resources Board (1973).
fanagement comments: ocation urvey Site Name:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek
Aanagement comments: ocation urvey Site Name:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983), F.D. Richardson, NH Water Resources Board (1973).
Management Comments: <u>cocation</u> urvey Site Name: Managed By:	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983), F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land
Management Comments: <u>Cocation</u> urvey Site Name: Managed By: County: Rockingha	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983), F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am
fanagement comments: <u>ocation</u> urvey Site Name: fanaged By: county: Rockingh own(s): Portsmout	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th
fanagement comments: <u>ocation</u> urvey Site Name: fanaged By: county: Rockingh own(s): Portsmout	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th
fanagement omments: ocation urvey Site Name: fanaged By: ounty: Rockingh own(s): Portsmout ize: 14.8 acres	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th
fanagement comments: <u>ocation</u> urvey Site Name: fanaged By: county: Rockingh own(s): Portsmout ize: 14.8 acres recision: Withi	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th s Elevation: 10 feet in (but not necessarily restricted to) the area indicated on the map.
Management Comments: <u>ocation</u> urvey Site Name: Managed By: County: Rockinghe own(s): Portsmout ize: 14.8 acres recision: Withi Directions: Three	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th s Elevation: 10 feet in (but not necessarily restricted to) the area indicated on the map. e known sites: (1) Rte 1 and Sagamore Creek; south of Sagamore Creek and east of Rte 1. We
Managed By: County: Rockingh own(s): Portsmout lize: 14.8 acres recision: Withi Directions: Three panne	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th s Elevation: 10 feet in (but not necessarily restricted to) the area indicated on the map. e known sites: (1) Rte 1 and Sagamore Creek; south of Sagamore Creek and east of Rte 1. We e about 30 yards from Rte 1 between 2 telephone poles. Just above State of NH Urban Forestr
Management Comments: Jocation Jurvey Site Name: Managed By: County: Rockinghe Yown(s): Portsmout ize: 14.8 acres recision: Withi Directions: Three panne Cente	This occurrence may have been impacted by 1995/96 Dept. of Transportation bridge replacement project. Several colonies (1983) Coastal Zone Report, Bertrand and Dunlop (1983); F.D. Richardson, NH Water Resources Board (1973). Sagamore Creek Sagamore Creek Land am th s Elevation: 10 feet in (but not necessarily restricted to) the area indicated on the map. e known sites: (1) Rte 1 and Sagamore Creek; south of Sagamore Creek and east of Rte 1. We

Dates documented

First reported:	1973	 -	·	•	Last reported:	1997-06-18	· •	

; . ; . .

New Hampshire Natural Heritage Bureau - Plant Record tundra alkali grass (Puccinellia pumila)

bal: Demonstrably widespr te: Critically imperiled du	read, abundant, and secure are to rarity or vulnerability
ondition unknown.	γ
	gor. <i>eda linearis</i> (southern sea-blite)
· . ·	
	· · · · · · ·
	-
vation: 10 feet	· ·
he area indicated on the map).
	l, all in flower, of normal vig ociated species include Succ ides (salt marsh plantain).

Dates documented

First reported: 19	97-06-18	Last reported:	1997-06-18	1.
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Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists

Abutters List

DECEIVED REB 2 3 2018

NHDES LAND RESOURCES MANAGEMENT

•:

Michael Clark 175 Gosport Road Portsmouth, NH 03801

Date: Fébruary 12, 2018 Project #: 47099.02

÷	1. 			
	Assesso	1	Abutter Name	Mailing Address
	Мар.	Lot		
	LOCUS 224	1	175 GOSPORT ROAD, LLC	175 GOSPORT RD PORTSMOUTH, NH 03801
	224	10-14	DENNIS D. & SHARON S. DONNERMEYER	PORTSMOUTH NH 03801
	224	10-15	JÖSEPH T. ERRICO	PORTSMOUTH NH 03801
	224	10-17	MARK MCVEIGH &- AMY FEDERICO	CHARLESTOWN: MA 02129
	224	N0-18	FRANCIS JEFFREY LONDRES & CAROLYN LOUISE MANNERING	PORTSMOUTH NH 03801
Ē	223	25B		1 JUNKINS AVENUE PORTSMOUTH, NH 03801
	227	1	ELKS of PORTSMOUTH LODGE # 97	PO BOX 143 PORTSMOUTH, NH 03802
	227	2	CITY OF PORTSMOUTH	SAME AS MAP 223 LOT 25B
	,			The second s
		an a	ngineers / Súrveyor 1	ISC, a división of TFMoran, Inc. 70 Commerce Way – Suite 102 Portsmouth, NH 03801
•	· · · · ·	Environmer	tal / Wetlands Scientist	
			Architect	

TFMoran, Inc. 48 Constitution Drive, Bedford, NH 03110 T(603) 472-4488 www.tfmoran.com



MSC a division of TFMoran, Inc. 170 Commerce Way–Suite 102, Portsmouth, NH 03801 T(603) 431-2222 www.tfmoran.com

GENERAL INFORMATION

LINKINS A VENUE

ACT ALLOS PLANED DECTO

OWNER/APPLICANT

SITE RENOVATION PLANS

MICHAEL CLARK

175 GOSPORT ROAD PORTSMOUTH, NEW HAMPSHIRE

FEBRUARY 21; 2018

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VICINITY PLAN

Civil Engineers Structural Engineers Difference Differe

