



The State of New Hampshire

**NHDES Department of Environmental Services**



**Robert R. Scott, Commissioner**

July 07, 2017

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

**REQUESTED ACTION**

Approve the City of Dover's request to perform the following work on the Cocheco River, in Dover. File # 2016-03429. This project will not have significant impact on or adversely affect the values of the Cocheco River.

Construct a public tidal dock on the Cocheco River as part of City of Dover's municipal waterfront park facilities development, consisting of a 9 ft. wide x 16 ft. long permanent pier, 10 ft. of which is in the upland tidal buffer zone and 6 ft. of which is seaward of the highest observable tide, connecting to a 7 ft. wide x 38 ft. long ramp connecting in a "T" configuration to a 10 ft. wide x 108 ft. long float, with an 18 ft. wide x 12 ft. long end float and a 5 ft. wide x 25 ft. long angled infill section for safety, along the backside of the main float, creating seven slips on 1,480 ft. of frontage. The overall dock length into the river from highest observable tide line is 60 ft. at the upriver end and 100 ft. at the downstream end due to the curve of the river.

The Department imposed the following conditions as part of this approval:

1. All work shall be in accordance with revised plans by Ironwood dated March 9, 2017, as received by the NH Department of Environmental Services (NHDES) on April 20, 2017.
2. This permit shall not be effective until 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. Not less than 5 state business days prior to starting work authorized by this permit, the permittee shall notify the NHDES Wetlands Bureau Pease District office and the local conservation commission in writing of the date on which work under this permit is expected to start.
4. There shall be no staging or storing of equipment, watercraft, construction materials, construction foot traffic or user foot traffic in designated "sensitive" areas. User foot traffic that results in impacts to the designated "sensitive" areas may be grounds for reduction or removal of the dock structure.
5. There shall be no removal of mature trees along the shoreline of the river on this property associated with the construction of the dock.
6. Future construction of additional docks on this frontage shall require additional permitting, and shall not be considered for approval unless the new requested structure provides functions not able to be provided by the dock approved herein. All portions of the dock approved herein shall be at least 20 ft. from abutting property lines or the imaginary extension of those lines into the water.

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095  
(603) 271-3503 • Fax: 271-7894 TDD Access: Relay NH 1-800-735-2964

7. The height of the pier's decking over the surface of the tidal marsh at normal high tide shall equal the width of the decking. Decking shall have 3/4-inch spacing between the decking planks.
8. The seasonal structures, including but not limited to the gangway and floats, shall be removed during the non-boating season and stored on the existing pier or in an upland location.
9. Any future work in jurisdiction as specified in RSA 482-A on this property will require a new application and approval by the NHDES Wetlands Bureau.
10. No person undertaking any activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards in RSA 485-A and Env-Wq 1700.
11. 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.
12. 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.
13. Pile driving or pile removal work shall be done during low tide.
14. Pilings to be removed shall be cut level with the substrate rather than pulled, in order to limit the creation of turbidity.
15. All work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
16. All work shall be conducted in a manner that avoids excessive discharges of sediments to fish spawning areas.
17. All construction-related debris shall be properly disposed of outside of the areas subject to RSA 482-A.
18. 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 07, 2017. The NHDES supported its decision with the following findings:

1. This is a major impact 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. There is currently no dock present on the frontage. The proposal is for public tidal dock facility on the Cochecho River as an initial step in the City of Dover's municipal waterfront park facilities development. This dock will be a public facility designed to primarily serve rowing users, including UNH and local crew teams and clubs, other paddle sport users and will also be available to motorized craft of a limited size.

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. The dock is the minimum length necessary to provide access at this location and to a water depth which will prevent the floats from sitting on the mud at low tide. The structure has a small permanent pier and the majority of the structure consists of seasonal floats.
4. 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.
  - a. With respect to both plant and wildlife species of concern reported by the NH Natural Heritage Bureau (NHB), the applicant has worked with NHB to locate populations of rare plant species associated with this site and those locations have been mapped designated as "sensitive" on the plans. The permit has been further conditioned to prohibit human disturbance impacts to those mapped areas whether by construction activities or ongoing dock users. Per the recommendation of the NH Fish and Game Department (NHFG), the permit has been conditioned to not allow removal of mature trees along the shoreline of the river in order to protect bald eagle habitat.
  - b. With respect to the proposal's impact on navigation, the entire structure is located greater than 20 ft. off the abutting property lines or the imaginary extensions waterward thereof. The design has been reviewed by the Pease Development Authority, Division of Ports and Harbors and, per letter dated March 17, 2017, determined that the project would have no negative effect on navigation in the channel.
  - c. The project has been screened for IPaC resources, Essential Fish Habitat, shellfish habitat, submerged aquatic vegetation (SAV) and special aquatic sites (SAS), as well as a review by NHFG Marine division and no further habitat or resource impacts are expected as a result of the dock.
5. The Dover Conservation Commission recommends approval.
6. This dock is consistent with other public tidal dock facility approvals in the seacoast.
7. NHDES staff field inspection on December 02, 2016 found that plans accurately reflect field conditions, and that the proposed design will provide a public access point for near-shore navigation in the river.

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.

  
for Robert R. Scott  
Commissioner



# WETLANDS PERMIT APPLICATION

Water Division/ Wetlands Bureau  
Land Resources Management

Check the status of your application: [www.des.nh.gov/onestop](http://www.des.nh.gov/onestop)



RSA Rule: RSA 482-A:1-106, 100

	<b>COMPLETE</b>	2016-03429
	DEC 08 2016	Checked by: 0223752
	DEC 08 2016	Amount: 71,936.00
	DEC 08 2016	Initials: EML

**1. REVIEW TIME:** Indicate your Review Time below. To determine review time, refer to Guidance Document A for instructions.

- Standard Review (Minimum, Minor or Major Impact)       Expedited Review (Minimum Impact only)

**2. MITIGATION REQUIREMENT:**

If mitigation is required a Mitigation-Pre Application meeting must occur prior to submitting this Wetlands Permit Application. To determine if Mitigation is Required, please refer to the Determine if Mitigation is Required Frequently Asked Question.

Mitigation Pre-Application Meeting Date: Month: \_\_\_ Day: \_\_\_ Year: \_\_\_

- N/A - Mitigation is not required

**DESIGNATED RIVER**  
REVIEW UNDER RSA 483

**3. PROJECT LOCATION:**

Separate wetland permit applications must be submitted for each municipality that wetland impacts occur within.

ADDRESS: <b>31 River Street</b>		TOWN/CITY: <b>Dover</b>	
TAX MAP: <b>22</b>	BLOCK:	LOT: <b>1</b>	UNIT:
USGS TOPO MAP WATERBODY NAME: <b>COCHECHO RIVER</b>		<input type="checkbox"/> NA	STREAM WATERSHED SIZE: <b>185 SQ MI</b> <input type="checkbox"/> NA
LOCATION COORDINATES (if known): <b>43.197459, -70.868140</b>		<input checked="" type="checkbox"/> Latitude/Longitude <input type="checkbox"/>	

**4. PROJECT DESCRIPTION:**

Provide a brief description of the project outlining the scope of work. Attach additional sheets as needed to provide a detailed explanation of your project. **DO NOT** reply "See Attached" in the space provided below.

The Applicant proposes to construct a City-owned and maintained 8'x16' (128 sf) permanent pier that is connected to an 8'x35' (280 sf) aluminum gangway and 10'x120' (1200 sf) float. The proposed dock system will provide public recreational water access to the Cochecho River. The proposal includes the construction of an 8'-wide stone dust access path from the existing parking area through an existing cleared portion of the site.

**5. SHORELINE FRONTAGE:**

- NA This does not have shoreline frontage.      SHORELINE FRONTAGE: **1480**

Shoreline frontage is calculated by determining the average of the distances of the actual natural navigable shoreline frontage and a straight line drawn between the property lines, both of which are measured at the normal high water line.

**6. RELATED NHDES LAND RESOURCES MANAGEMENT PERMIT APPLICATIONS ASSOCIATED WITH THIS PROJECT:**

Please indicate if any of the following permit applications are required and, if required, the status of the application.

To determine if other Land Resources Management Permits are required, refer to the Land Resources Management Web Page.

Permit Type	Permit Required	File Number	Permit Application Status
Alteration of Terrain Permit Per RSA 485-A:17	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Individual Sewerage Disposal per RSA 485-A:2	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Subdivision Approval Per RSA 485-A	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED
Shoreland Permit Per RSA 483-B	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	_____	<input type="checkbox"/> APPROVED <input type="checkbox"/> PENDING <input type="checkbox"/> DENIED

**7. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS:**

See the Instructions & Required Attachments document for instructions to complete a & b below.

a. Natural Heritage Bureau File ID:    NHB 16 - 1056

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

**DESIGNATED RIVER**  
REVIEW UNDER RSA 483

**8. APPLICANT INFORMATION (Desired permit holder)**LAST NAME, FIRST NAME, M.I.: **Joyal, J Michael Jr.**TRUST / COMPANY NAME: **City of Dover**MAILING ADDRESS: **288 Central Ave**TOWN/CITY: **Dover**STATE: **NH**ZIP CODE: **03820**EMAIL or FAX: **m.joyal@doover.nh.gov**PHONE: **603.516.6023**ELECTRONIC COMMUNICATION: By initialing here: **MJ**, I hereby authorize NHDES to communicate all matters relative to this application electronically**9. PROPERTY OWNER INFORMATION (If different than applicant)**

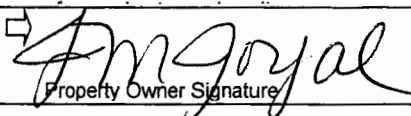
LAST NAME, FIRST NAME, M.I.:

TRUST / COMPANY NAME: **City of Dover**MAILING ADDRESS: **288 Central Ave**TOWN/CITY: **Dover**STATE: **NH**ZIP CODE: **03820**EMAIL or FAX: **m.joyal@doover.nh.gov**PHONE: **603.516.6023**ELECTRONIC COMMUNICATION: By initialing here **M**, I hereby authorize NHDES to communicate all matters relative to this application electronically**10. AUTHORIZED AGENT INFORMATION**LAST NAME, FIRST NAME, M.I.: **Martel, Jennifer**COMPANY NAME: **Ironwood Design Group**MAILING ADDRESS: **55 Main Street, Suite 129**TOWN/CITY: **Newmarket**STATE: **NH**ZIP CODE: **03857**EMAIL or FAX: **jmartel@fewood.com**PHONE: **603-772-0590**ELECTRONIC COMMUNICATION: By initialing here **JM**, I hereby authorize NHDES to communicate all matters relative to this application electronically**11. PROPERTY OWNER SIGNATURE:**

See the Instructions &amp; Required Attachments document for clarification of the below statements

By signing the application, I am certifying that:

1. I authorize the applicant and/or agent indicated on this form to act in my behalf in the processing of this application, and to furnish upon request, supplemental information in support of this permit application.
2. I have reviewed and submitted information & attachments outlined in the Instructions and Required Attachment document.
3. All abutters have been identified in accordance with RSA 482-A:3, I and Env-Wt 100-900.
4. I have read and provided the required information outlined in Env-Wt 302.04 for the applicable project type.
5. I have read and understand Env-Wt 302.03 and have chosen the least impacting alternative.
6. 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.
7. I have submitted a Request for Project Review (RPR) Form ([www.nh.gov/nhdhr/review](http://www.nh.gov/nhdhr/review)) to the NH State Historic Preservation Officer (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.
8. I authorize NHDES and the municipal conservation commission to inspect the site of the proposed project.
9. I have reviewed the information being submitted and that to the best of my knowledge the information is true and accurate.
10. I understand that the willful submission of falsified or misrepresented information to the New Hampshire Department of Environmental Services is a criminal act, which may result in legal action.
11. I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining.
12. The mailing addresses I have provided are up to date and appropriate for receipt of NHDES correspondence. NHDES will not



Property Owner Signature

J. Michael Joyal  
Print name legibly

12/15/2016  
Date


shoreland@des.nh.gov or (603) 271-2147  
NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095  
[www.des.nh.gov](http://www.des.nh.gov)

## MUNICIPAL SIGNATURES

### 12. CONSERVATION COMMISSION SIGNATURE

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

1. Waives its right to intervene per RSA 482-A:11;
2. Believes that the application and submitted plans accurately represent the proposed project; and
3. Has no objection to permitting the proposed work.

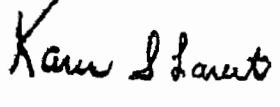
	Print name legibly	Date
---	--------------------	------

#### DIRECTIONS FOR CONSERVATION COMMISSION

1. Expedited review ONLY 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 Town/City Clerk for signature.
3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will reviewed in the standard review time frame.

### 13. TOWN / CITY CLERK SIGNATURE

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

	Karen S. Lavertu	Dover	12/6/16
Town/City Clerk Signature	Print name legibly	Town/City	Date

#### DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I

1. For applications where "Expedited Review" is checked on page 1, if the Conservation Commission signature is not present, NHDES 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;
3. 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.
4. 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:

1. 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.

**14. IMPACT AREA:**

For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact

*Permanent: impacts that will remain after the project is complete.*

*Temporary: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete.*

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.		TEMPORARY Sq. Ft. / Lin. Ft.	
Forested wetland	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Scrub-shrub wetland	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Emergent wetland	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Wet meadow	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Intermittent stream	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Perennial Stream / River	1600 /	<input type="checkbox"/> ATF	0 /	<input type="checkbox"/> ATF
Lake / Pond	0 / 0	<input type="checkbox"/> ATF	0 / 0	<input type="checkbox"/> ATF
Bank - Intermittent stream	/	<input type="checkbox"/> ATF	/ 0	<input type="checkbox"/> ATF
Bank - Perennial stream / River	/ 11	<input type="checkbox"/> ATF	/ 0	<input type="checkbox"/> ATF
Bank - Lake / Pond	/ 0	<input type="checkbox"/> ATF	/ 0	<input type="checkbox"/> ATF
Tidal water	/ 0	<input type="checkbox"/> ATF	/ 0	<input type="checkbox"/> ATF
Salt marsh	00	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Sand dune	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Prime wetland	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Prime wetland buffer	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Undeveloped Tidal Buffer Zone (TBZ)	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Previously-developed upland in TBZ	1164	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Docking - Lake / Pond	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Docking - River	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
Docking - Tidal Water	0	<input type="checkbox"/> ATF	0	<input type="checkbox"/> ATF
<b>TOTAL</b>	<b>2764 / 11</b>		<b>/</b>	

**15. APPLICATION FEE:** See the Instructions & Required Attachments document for further instruction

Minimum Impact Fee: Flat fee of \$ 200

Minor or Major Impact Fee: Calculate using the below table below

Permanent and Temporary (non-docking) \_\_\_\_\_ sq. ft. X \$0.20 = \$ \_\_\_\_\_

Temporary (seasonal) docking structure: **1480** sq. ft. X \$1.00 = **\$ 1480**

Permanent docking structure: **128** sq. ft. X \$2.00 = **\$ 256**

**Projects proposing shoreline structures (including docks) add \$200 = \$ 200**

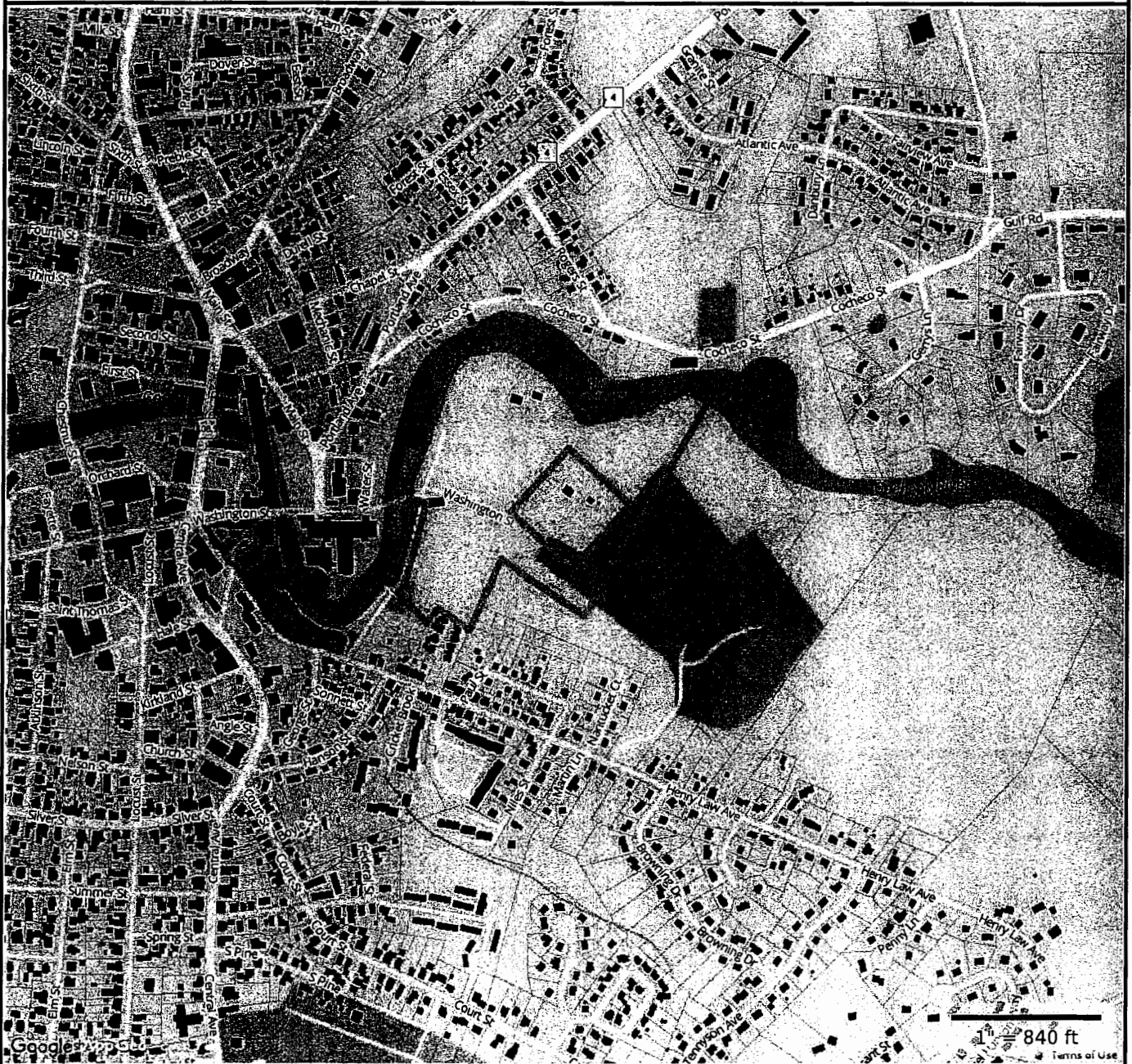
Total = **\$ 1936**

The Application Fee is the above calculated Total or \$200, whichever is greater = **\$ 0**

[shoreland@des.nh.gov](mailto:shoreland@des.nh.gov) or (603) 271-2147

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

[www.des.nh.gov](http://www.des.nh.gov)



**Property Information**

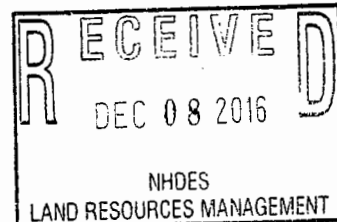
**Property ID** 22001-000000  
**Location** 31 RIVER ST  
**Owner** CITY OF DOVER



**MAP FOR REFERENCE ONLY  
 NOT A LEGAL DOCUMENT**

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

Parcels updated 11/15/2016  
 Properties updated 11/30/2016

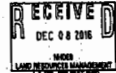




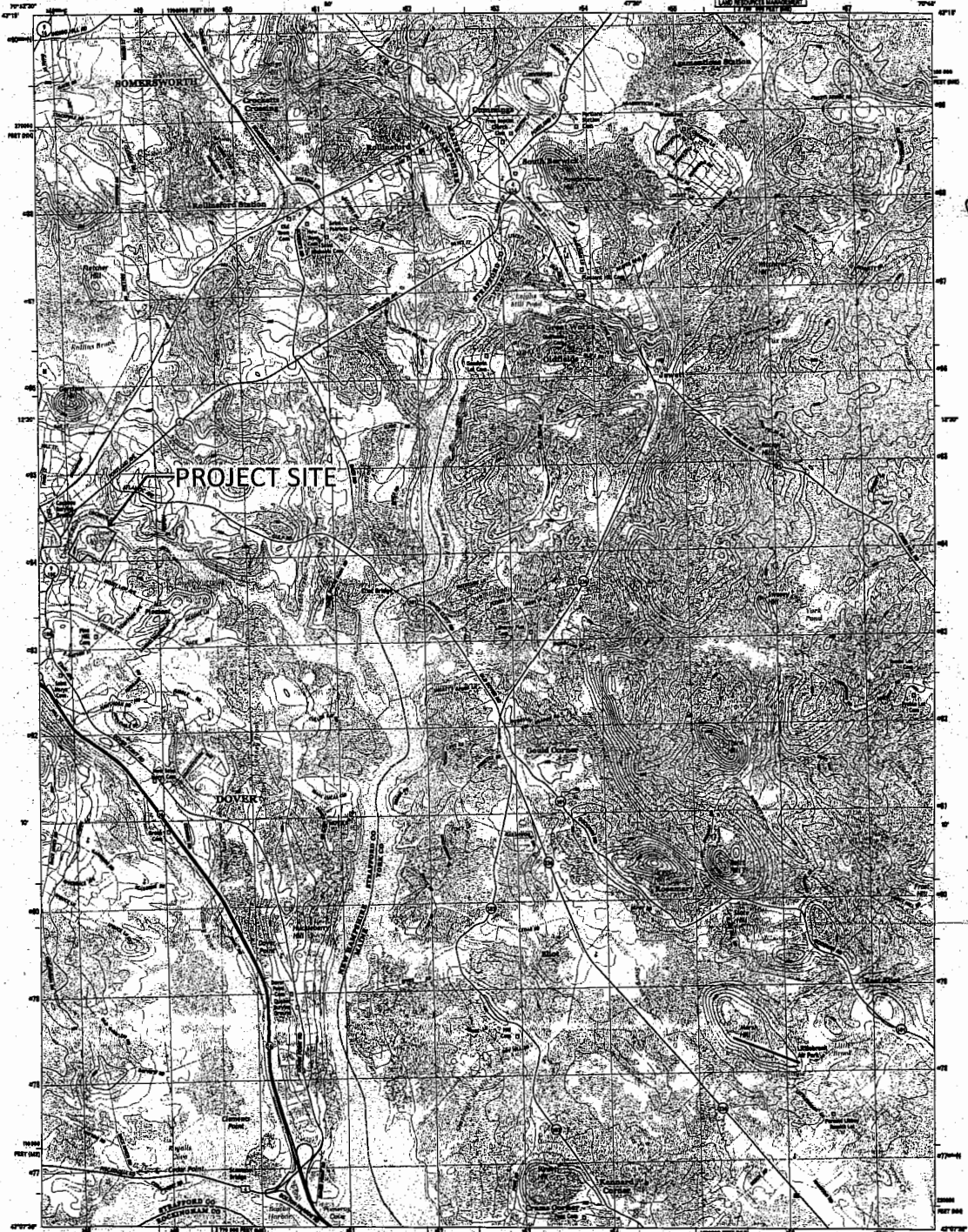
2016-03439



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



DOVER EAST QUADRANGLE  
NEW HAMPSHIRE-SAME  
7.5-MINUTE SERIES



ASC  
156

Produced by the United States Geological Survey  
This map is a digital elevation model (DEM) derived from  
a 1/4-degree resolution digital elevation model (DEM) of  
the conterminous United States. The DEM is based on  
the National Elevation Dataset (NED) and is available  
at <http://www.fgdl.gov>.



ROAD CLASSIFICATION

Interstate	State Route
Local Highway	Local Road
Trail	Other Road

ROAD CLASSIFICATION

Interstate	State Route
Local Highway	Local Road
Trail	Other Road

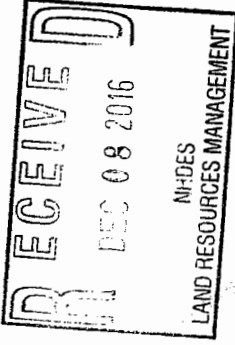
CONTERMINOUS UNITED STATES  
NORTH AMERICAN DATUM OF 1983

DOVER EAST, NH-ME  
2011

**Memo**



NH NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER



**To:** Jennifer Martel, Ironwood Design Group  
55 Main Street  
Suite 129  
Newmarket, NH 03857

**From:** Amy Lamb, NH Natural Heritage Bureau  
**Date:** 4/15/2016 (valid for one year from this date)  
**Re:** Review by NH Natural Heritage Bureau

NHB File ID: NHB16-1056 Town: Dover NH

Description: The City of Dover would like to build a pier and seasonal dock on this property to provide public access to the Cocheco River. The dock will be designed to accommodate 8-person rowing shells as well as kayaks. The dock will be constructed as part of a new community waterfront park that is being planned for this site.

Location: Tax Maps: 31 RIVER STREET, 22/1

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

**Comments:** The threatened and endangered plant species below occur in the vicinity of the project area; an onsite plant survey is recommended to determine if these species occur on the property. Surveys should occur during the growing season when the plants are readily identifiable, and should be conducted by an experienced botanist with aquatic plant identification skills. More information about survey parameters and an NHB Rare Species Reporting Form may be obtained by contacting me at [Amy.Lamb@dred.nh.gov](mailto:Amy.Lamb@dred.nh.gov). Please contact NH Fish & Game to address wildlife concerns.

**Natural Community**

Low brackish riverbank marsh

State<sup>1</sup> Federal 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 runoff.

**Plant species**

eastern grasswort (*Lilaeopsis chinensis*)

State<sup>1</sup> Federal Notes

E -- -- 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.

little-headed spikesedge (*Eleocharis parvula*)

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

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

DRED/NHB  
172 Pembroke Rd.  
Concord, NH 03301

# Memo



seaside brookweed (*Samolus valerandi* ssp. *parviflorus*)      E      --      storm runoff.  
Occurs on river and streambanks, as well as estuarine and seashore habitats. Threats include direct destruction of the plants and major alterations of their habitat.

## Vertebrate species

American Eel ( <i>Anguilla rostrata</i> )	State <sup>1</sup>	Federal	Notes
	SC	--	Contact the NH Fish & Game Dept. (see below).

<sup>1</sup>Codes: "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. An asterisk (\*) indicates that the most recent report for that occurrence was more than 20 years ago.  
*Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.*

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 never 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.

## New Hampshire Natural Heritage Bureau - Animal Record

### American Eel (*Anguilla rostrata*)

#### Legal Status

Federal: Not listed  
State: Special Concern

#### Conservation Status

Global: Apparently secure but with cause for concern  
State: Rare or uncommon

#### Description at this Location

Conservation Rank: Not ranked  
Comments on Rank:

Detailed Description: 2011: Area 13367: 1 observed.

General Area: 2011: Area 13367: Canopy cover-clost to 100%. Losses of garbage in stream. Hough Road crossing consists of three small culverts (two are clogged with debris and no flow is going through them). The single culvert with flow appears to be suitable for passage. Stream is still entrenched in some places here. Stream is very turbid and becomes completely brown when walking though it. It likely gets this way after storm events as well.

General Comments:  
Management  
Comments:

#### Location

Survey Site Name: Lower Cocheco River  
Managed By:

County: Strafford  
Town(s): Dover  
Size: 1.9 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2011: Berry Brook

#### Dates documented

First reported: 2011-05-26                      Last reported: 2011-05-26

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

## New Hampshire Natural Heritage Bureau - Animal Record

American Eel (*Anguilla rostrata*)**Legal Status**

Federal: Not listed  
State: Special Concern

**Conservation Status**

Global: Apparently secure but with cause for concern  
State: Rare or uncommon

**Description at this Location**

Conservation Rank: Not ranked  
Comments on Rank:

Detailed Description: 2011: Area 13366: 2 observed.

General Area: 2011: Area 13366: Stream is very entrenched with minimal or no buffer. Much of this section has lawn up to the water's edge. Stream has cut down up to two feet in some locations. Very turbid with iron color.

General Comments:  
Management  
Comments:

**Location**

Survey Site Name: Lower Cocheco River  
Managed By:

County: Strafford  
Town(s): Dover  
Size: 1.9 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2011: Berry Brook

**Dates documented**

First reported: 2011-05-26                      Last reported: 2011-05-26

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

## New Hampshire Natural Heritage Bureau - Plant Record

seaside brookweed (*Samolus valerandi* ssp. *parviflorus*)Legal Status

Federal: Not listed  
 State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure  
 State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ('C' on a scale of A-D).  
 Comments on Rank: Rank is for the entire population.

Detailed Description: 2004: 200+ stems observed at the Upper Narrows (west shore) and 100+ stems observed below the Upper Narrows. Plant vigor is normal. 1995: 129 plants located in five patches at the mouth of Emerson Brook. 1988: 1001-10,000 flowering and immature vigorous plants, mostly on the east shore.

General Area: 2004: Population occurs in a low and **high brackish tidal riverbank marsh**. Common associates include *Spartina alterniflora* (smooth cord-grass), *Amaranthus cannabinus* (water hemp), and *Typha angustifolia* (narrow-leaved cattail). Less frequent are *Lemna minor* (lesser duckweed), *Polygonum hydropiper* (water-pepper), *Argentina egedii* (coastal silverweed), *Lilaeopsis chinensis* (eastern lilaeopsis), *Ranunculus cymbalaria* (seaside crowfoot), and *Eleocharis parvula* (small spike-rush). 1995: Gulf of Maine brackish tidal marsh. Inundated to saturated bottom land with partial light. Found with *Lilaeopsis chinensis* (eastern lilaeopsis). 1988: Gulf of Maine Brackish Tidal Marsh. Growing on gravelly shore. Associated plant species include *Plantago* cf. *major* (common plantain), *Atriplex patula* (narrow-leaved orach), *Spartina alterniflora* (smooth cord-grass), *Bidens cernua* (nodding bur-marigold), and *Acuidia cannabina* [*Amaranthus cannabinus*] (water hemp).

General Comments:  
 Management: 1988: Guard against further disturbance.  
 Comments:

Location

Survey Site Name: Cocheco River Narrows  
 Managed By: Great Bay Megasite

County: Strafford  
 Town(s): Dover  
 Size: 3.1 acres Elevation: 20 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Cocheco River downstream of downtown Dover. 2004: Henry Law Avenue, turn north onto access road to baseball fields. Park in lot for baseball fields and walk northeast, across power line corridor, to Cocheco River. 1995: North and south of the mouth of Emerson Brook. 1988: Between Upper Narrows and Emerson Brook, east shore (a few plants on west shore).

Dates documented

First reported: 1988-09-13 Last reported: 2004-09-05

## New Hampshire Natural Heritage Bureau - Community Record

## Low brackish riverbank marsh

Legal Status

Federal: Not listed  
State: Not listed

Conservation Status

Global: Not ranked (need more information)  
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ('C' on a scale of A-D).  
Comments on Rank:

Detailed Description: 2004: Dominant species are *Spartina alterniflora* (smooth cord-grass), *Amaranthus cannabinus* (water hemp), and *Typha angustifolia* (narrow-leaved cattail). Less frequent are *Lemna minor* (lesser duckweed), *Polygonum hydropiper* (water-pepper), *Argentina egedii* (coastal silverweed), *Eleocharis parvula* (small spike-rush), *Ranunculus cymbalaria* (seaside crowfoot), *Lilaeopsis chinensis* (eastern lilaeopsis), and *Samolus parviflorus* (false water pimpernel). 1988: Forms a narrow zone along the river, dominated by *Spartina alterniflora* (smooth cord-grass). A few stands of *Typha angustifolia* (narrow-leaved cattail) exist, mostly less than an acre in size. Rare plant species present are *Samolus parviflorus* (false water pimpernel), *Lilaeopsis chinensis* (eastern lilaeopsis), and *Eleocharis parvula* (small spike-rush). *Spartina alterniflora* (smooth cord-grass) is dominant. A few stands of *Typha angustifolia* (narrow-leaved cat-tail) exist. Many exotic species are present. The bases of steep, rocky slopes support virtually no emergent vegetation.

General Area: 2004: This low marsh lies adjacent to a sparsely or narrowly vegetated **high brackish tidal riverbank marsh**. The high tidal riverbank is often an unvegetated zone grading into the adjacent upland. Some characteristic species are *Solidago sempervirens* (seaside goldenrod) and *Spartina pectinata* (fresh-water cord-grass). Along most of the riverbank community, moderate residential and commercial development occurs on adjacent lands. High levels of development occur along the west end of the riverbank in downtown Dover. 1988: A narrow zone along the river. Bordered by steep forested slopes and heavily impacted areas.

## General Comments:

Management  
Comments:

2004: Several invasive species occur on the higher margins of the riverbank community, especially at the west end nearest downtown Dover. They include *Lythrum salicaria* (purple loosestrife), *Phalaris arundinacea* (reed canary-grass), *Rorippa nasturtium-aquaticum* (true watercress), *Polygonum cuspidatum* (Japanese knotweed), and *Solanum dulcamara* (nightshade). These plants should be monitored. 1988: Guard against future development. Current disturbance includes impacts by rock fill, dams, clearing, and power plant construction.

Location

Survey Site Name: Cochecho River Narrows  
Managed By: Great Bay Megasite

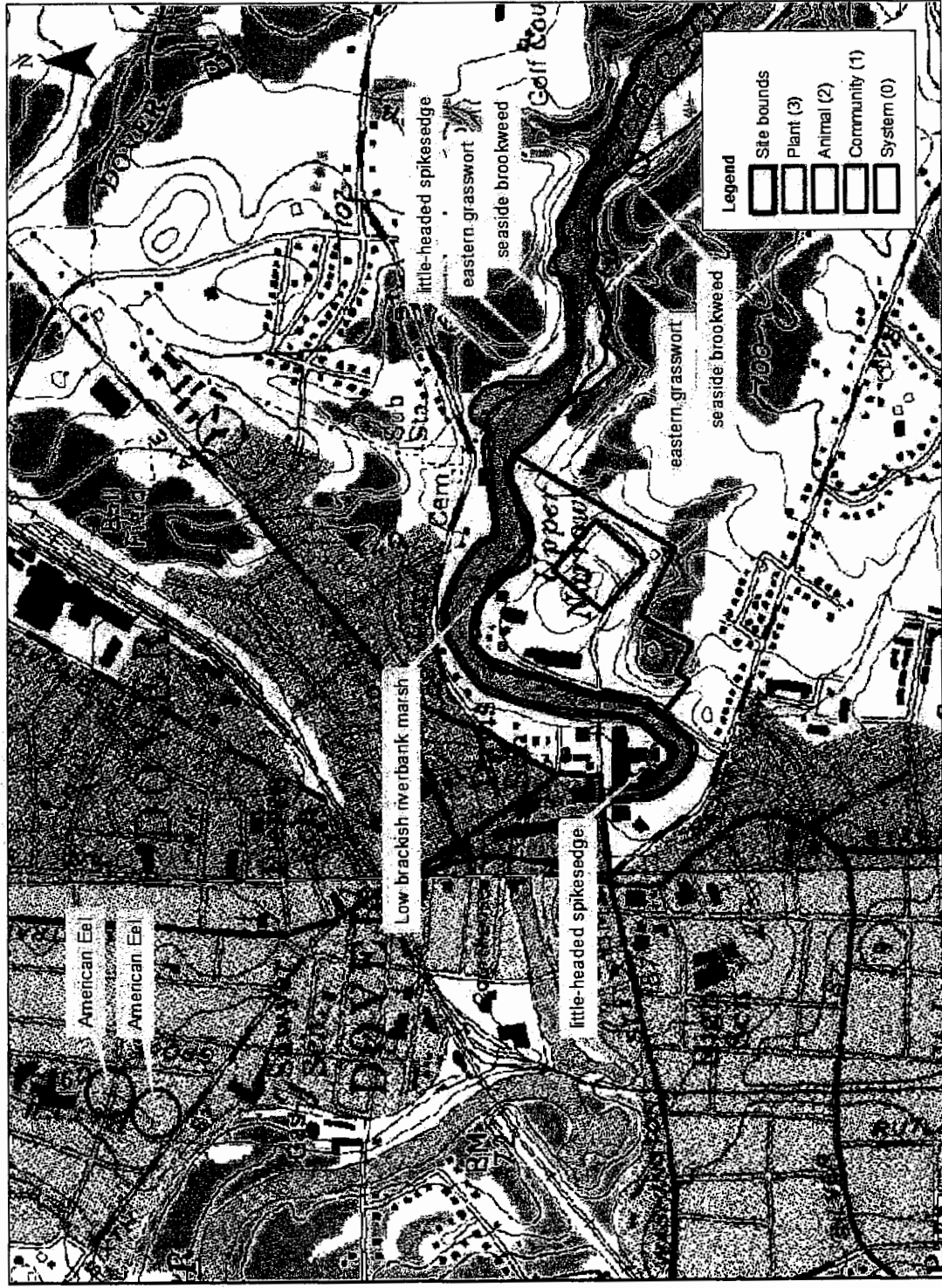
County: Strafford  
Town(s): Dover  
Size: 94.2 acres

Elevation: 20 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Cochecho River downstream of downtown Dover. 2004: The tidal riverbank marsh extends from downtown Dover (beginning downstream of Washington Street) to the mouth of the Cochecho. For the tidal marsh nearest downtown Dover, park at Henry Law Park. For the tidal marsh 0.75 miles eastward, from Henry Law Avenue, turn north onto access road to baseball fields. Park in lot for baseball fields and walk NE, across power line corridor, to Cochecho River. 1988: Tidal wetlands and shores along Cochecho River between upper and lower narrows, due east and just downstream of downtown Dover.

NHB16-1056



0 0.1 0.2 0.3 0.4 0.5 Miles



## List of Abutters

1. Mary Eleanor Dennis  
[REDACTED]  
Dover, NH 03820
2. Catherine and Kevin McEneaney  
[REDACTED]  
Dover, NH 03820
3. Trueman Man M Trustee  
Knox Gina M Revocable Trust  
[REDACTED]  
Dover, NH 03820-4945
4. Dover Bluff Condominium Association  
[REDACTED]  
Dover, NH 03820
5. George Maglaras  
[REDACTED]  
Dover, NH 03820
6. Cochecho River LAC Chair:  
Tom Fargo (Acting Chair)  
[REDACTED]  
Dover, NH 03820  
thomas.fargo@des.nh.gov

