

# Attachment D



**US Army Corps  
of Engineers**®  
New England District

**Key:**

**X<sup>L</sup>: Refers to Lee Traffic Circle Water Line Extension project area**

**X<sup>D</sup>: Refers to Main Street (Route 155A) Water Main Improvements project area**

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

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

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



3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm">www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm</a>.</li> <li>• Data Mapper: <a href="http://www.granit.unh.edu">www.granit.unh.edu</a>.</li> <li>• GIS: <a href="http://www.granit.unh.edu/data/downloadfreedata/category/databycategory.html">www.granit.unh.edu/data/downloadfreedata/category/databycategory.html</a>.</li> </ul>	<b>X<sup>L</sup></b>	<b>X<sup>D</sup></b>
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		<b>X</b>
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		<b>X</b>
3.5 Are stream crossings designed in accordance with the GC 21?	<b>N/A</b>	
<b>4. Flooding/Floodplain Values</b>	<b>Yes</b>	<b>No</b>
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	<b>X<sup>L</sup> X<sup>D</sup></b>	
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?	<b>X<sup>L</sup> X<sup>D</sup></b>	
<b>5. Historic/Archaeological Resources</b>		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form ( <a href="http://www.nh.gov/nhdhr/review">www.nh.gov/nhdhr/review</a> ) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	<b>X<sup>L</sup></b> <b>X<sup>D</sup></b>	

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

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

**tnoble@underwoodengineers.com**

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**From:** Lamb, Amy <Amy.Lamb@dncr.nh.gov>  
**Sent:** Wednesday, April 22, 2020 2:04 PM  
**To:** tnoble@underwoodengineers.com  
**Cc:** 'Benjamin T. Dreyer'  
**Subject:** RE: NHB File ID: NHB19-2103 and NHB19-2102

Hello Tim,

Thank you very much for sending these materials for my review, and for noting which materials were relevant to NHB concerns.

NHB completed two DataChecks, NHB19-2103 and NHB19-2102, for the review of the Lee Traffic Circle Water Line Extension project in Lee and Durham. **NHB19-2102, for the proposed work in Durham, did not contain any rare species of concern.** NHB19-2103, for the work proposed in Lee, contained the following State-Listed plant species:

great bur-reed (*Sparganium eurycarpum*), T  
incurved umbrella sedge (*Cyperus squarrosus*), T  
red-root umbrella sedge (*Cyperus erythrorhizos*), E

[Note: NHB19-2103 also contained Threatened, Endangered, and Special Concern wildlife species, but NHB does not provide comments on wildlife impacts; you must contact the NH Fish & Game Department.]

Based on a review of the provided materials, as well as viewing the locations on Google Street View, it appears that the only area likely to potentially support any of the plant species listed in this NHB review is Wetland Impact Area 9, associated with Dube Brook / Oyster River. **Since there are no wetland impacts at this location, and directional drilling is proposed underneath this resource, NHB does not expect impacts to the above listed wetland plant species. If the project should change to include impacts at this location, please contact NHB for additional review.**

Thank you for the opportunity to review and comment.

Best,  
Amy

Amy Lamb  
Ecological Information Specialist  
**(603) 892-5162 – Please note I am only available by cell at this time.**  
[amy.lamb@dncr.nh.gov](mailto:amy.lamb@dncr.nh.gov)

NH Natural Heritage Bureau  
**DNCR** - Forests & Lands  
172 Pembroke Rd  
Concord, NH 03301

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**From:** tnoble@underwoodengineers.com <tnoble@underwoodengineers.com>  
**Sent:** Friday, April 17, 2020 9:59 AM  
**To:** Lamb, Amy <Amy.Lamb@dncr.nh.gov>  
**Cc:** 'Benjamin T. Dreyer' <bdreyer@underwoodengineers.com>  
**Subject:** NHB File ID: NHB19-2103 and NHB19-2102

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Hi Amy,

Thanks for taking some time to discuss NHB requirements today. Per your request please see attached for the following:

1. Draft Plans for Review
2. Site Photos/Descriptions – We had a functional assessment prepared by Marc Jacobs, Certified Wetlands and Soil Scientist for this project to fulfill requirements for the new Wetland Application rules. He had the site photos and descriptions prepared really nicely already so I figured I'd send those to you for review. Unfortunately, I was not able to extract relevant pages from the PDF. This is a lengthy document so please see below notes prior to reviewing:
  - a. Project introduction and existing conditions including descriptions of Wetland ID #'s – **pages 3 – 14**
    - i. Marc evaluated every wetland in the project area. I have noted on the document in red text where there are no proposed wetland impacts.
  - b. Wetland Photos – **pages 23 – 30**
    - i. Photos were taken in February 2020. I can likely dig up some old photos Danielle took this past summer if these aren't enough.
  - c. Wetland ID Photo Key – **page 140**

I have also attached the file for NHB19-2102 which we briefly discussed on the phone. Per the file, I believe we don't have any further actions to take.

Please call me with any questions.

Thanks,

Tim



**Timothy K. Noble, EIT**  
Project Engineer  
Underwood Engineers, Inc.  
Office 603-436-6192

[www.underwoodengineers.com](http://www.underwoodengineers.com)

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**From:** Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>  
**Sent:** Monday, May 11, 2020 9:48 AM  
**To:** 'tnoble@underwoodengineers.com'  
**Cc:** 'Benjamin T. Dreyer'  
**Subject:** RE: NHB19-2103 (Lee) & NHB19-2102 (Durham)

Hello Tim,

The NHFG Nongame and Endangered Species Program has reviewed NHB19- 2103 for the proposed new water line that will run parallel to the public right-of-way, Route 4 in Lee. The NHB database check identified the following protected wildlife species in the vicinity of the project:

American Brook Lamprey (*Lampetra appendix*) E --  
American Eel (*Anguilla rostrata*) SC --  
Banded Sunfish (*Enneacanthus obesus*) SC --  
Blanding's Turtle (*Emydoidea blandingii*) E --  
Spotted Turtle (*Clemmys guttata*) T --  
Wood Turtle (*Glyptemys insculpta*) SC  
1Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern

**We are satisfied that efforts have taken to protect Dube Brook through directional drilling and increased sediment control to protect the highly endangered American brook lamprey documented in this brook.** Similar erosion and sediment control strategies are also being employed for the Durham work (NHB19-2102). Dube and Chesley Brook in Lee contain the last viable populations of brook lamprey in NH and all efforts to protect water quality at this site must be taken. The applicant has agreed to the following:

For the above impacted areas, the following construction measures will be taken:

- Install double erosion control measures such as silt fence with hay bales to mitigate sediment transport to adjacent wetlands.
  - Excavate, segregate, and stockpile the existing top 12" - 18" of soils separately and re-use them for the top 12"-18" after backfilling the trench.
  - "Wildlife friendly" erosion matting without welded plastic will be used where applicable.
- It will be specified for contractors to provide products from the NHDOT Qualified Products List.
- Contractor will be required to provide a dewatering plan as part of their Storm Water Pollution Prevention Plan (SWPPP) submittal, including discharge locations with pump discharge sediment traps (such as hay bales and crushed stone).
  - Specific wetlands construction monitoring services will be provided in areas as required by NHDES.

#### Dube Brook Preventative Impact Measures

Extending the proposed water main to the traffic circle includes crossing the Dube Brook. To avoid any impacts to the brook, directional drilling methods are proposed. Proposed drilling pits are located more than 100-ft from the limits of the brook. In addition, double erosion control measures are proposed to be installed down-gradient from the proposed drilling pits to prevent sediment transport from construction activities.

NH Fish and Game has requested additional measures to bring attention to the potential presence of the Blanding's turtle, wood turtle and spotted turtle in the proximity to the work area. The

following will be added to the final construction documents:

- Note in the plans that reads: "If spotted, wood, or Blanding's turtles are found laying eggs in the work area, please contact Melissa Dupoeralski (cell: 603-479-1129) or Josh Megyesy (cell: 978-578-0802 or office: 603-271-1125) for further instructions.
- The "Seeking Reports of Rare Turtles" flyer provided by Fish and Game on 4/21/2020 will be provided in the contract documents as an appendix with instructions for the contractor to post throughout the work area.

Thanks,

Kim Tuttle  
Wildlife Biologist  
NH Fish and Game  
11 Hazen Drive  
Concord, NH 03301  
603-271-6544

---

**From:** tnoble@underwoodengineers.com <tnoble@underwoodengineers.com>  
**Sent:** Sunday, May 10, 2020 10:50 AM  
**To:** Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>  
**Cc:** 'Benjamin T. Dreyer' <bdreyer@underwoodengineers.com>  
**Subject:** RE: NHB19-2103 & NHB19-2102

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Hi Kim,

Just following up on the below.

Thanks,

Tim



**Timothy K. Noble, EIT**  
Project Engineer  
Underwood Engineers, Inc.  
Office 603-436-6192  
[www.underwoodengineers.com](http://www.underwoodengineers.com)

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**From:** Tuttle, Kim <[Kim.Tuttle@wildlife.nh.gov](mailto:Kim.Tuttle@wildlife.nh.gov)>  
**Sent:** Tuesday, April 28, 2020 10:06 AM  
**To:** 'tnoble@underwoodengineers.com' <[tnoble@underwoodengineers.com](mailto:tnoble@underwoodengineers.com)>  
**Subject:** RE: NHB19-2103 & NHB19-2102

Hi Tim

We will try to take a look at it this week.

Kim

---

**From:** [tnoble@underwoodengineers.com](mailto:tnoble@underwoodengineers.com) <[tnoble@underwoodengineers.com](mailto:tnoble@underwoodengineers.com)>  
**Sent:** Wednesday, April 22, 2020 2:27 PM  
**To:** Tuttle, Kim <[Kim.Tuttle@wildlife.nh.gov](mailto:Kim.Tuttle@wildlife.nh.gov)>  
**Cc:** 'Benjamin T. Dreyer' <[bdreyer@underwoodengineers.com](mailto:bdreyer@underwoodengineers.com)>  
**Subject:** RE: NHB19-2103 & NHB19-2102

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Hi Amy,

Thanks for the information below. I have put together a technical memorandum to respond to Fish and Game's additional information request (see attached). The aerial figures you requested are enclosed as well.

Please note that we did not include any project plans. We are still negotiating with other involved parties on what they will be requiring for the plans and do not want to have different parties with different versions of plans. When we have closed the loop with everyone and have finalized a plan ready for submittal for the Wetlands Application we can make sure you get a copy.

Please let me know if this is enough for Fish & Game blessing.

Thanks,

Tim Noble



**Timothy K. Noble, EIT**

Project Engineer

Underwood Engineers, Inc.

Office 603-436-6192

[www.underwoodengineers.com](http://www.underwoodengineers.com)

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**From:** Tuttle, Kim  
**Sent:** Monday, April 20, 2020 1:57 PM  
**To:** 'tnoble@underwoodengineers.com'  
**Cc:** 'Benjamin T. Dreyer'  
**Subject:** RE: NHB19-2103 & NHB19-2102

Hi Tim,

To get started, please avoid the use of welded plastic or 'biodegradable plastic' netting or thread in erosion control matting. There are numerous documented cases of snakes and other wildlife being trapped and killed in erosion control matting with synthetic netting and thread. The use of erosion control berm, white Filtrexx Degradable Woven Silt Sock, or several 'wildlife friendly' options such as woven organic material (e.g. coco or jute matting such as North American Green SC150BN or equivalent) are readily available. Please let us know what specific product you intend on using. Tree cutting should be avoided to the fullest extent possible to protect water quality and temperature and riparian and aquatic habitat.

The following notes should be prominently added to the plans for the NHB19-2103 project in Lee along with a photo of Blanding's, spotted and wood turtle that you may copy from the attached flyer:

Construction personnel should be aware of the potential to encounter spotted, wood and Blanding's turtles, especially during turtle nesting season which extends from late May through the beginning of July.

**IF SPOTTED, WOOD OR BLANDING'S TURTLES ARE FOUND LAYING EGGS IN THE WORK AREA, PLEASE CONTACT MELISSA DOPERASKI (603-479-1129 cell) or JOSH MEGYESY (cell 978-578-0802 or 271-1125 office) FOR FURTHER INSTRUCTIONS.**

We can give a final okay via email after we review the additional information requested and see this note and the photo added to the plan sheet along with the specific approved erosion control matting.

Thanks,

Kim Tuttle  
Wildlife Biologist  
NH Fish and Game  
11 Hazen Drive  
Concord, NH 03301  
603-271-6544

---

**From:** [tnoble@underwoodengineers.com](mailto:tnoble@underwoodengineers.com) <[tnoble@underwoodengineers.com](mailto:tnoble@underwoodengineers.com)>

**Sent:** Thursday, April 16, 2020 4:04 PM

**To:** Tuttle, Kim <[Kim.Tuttle@wildlife.nh.gov](mailto:Kim.Tuttle@wildlife.nh.gov)>

**Cc:** 'Benjamin T. Dreyer' <[bdreyer@underwoodengineers.com](mailto:bdreyer@underwoodengineers.com)>

**Subject:** NHB19-2103 & NHB19-2102

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Hi Kim,

Thanks for taking the time to discuss additional information needed for NHB/wildlife approval.

As requested, I've attached the NHB file for the 2102 project.

I will work on getting the additional information you requested including (please let me know if I forgot anything):

- Aerial map showing limits of impacted wetlands
- Narrative describing construction operations to minimize impact to wetlands, including sediment transport to the Dube Brook

As I understand, I will send you this information and you will email me a letter stating recommended products (bio-net, etc.) to minimize impacts and we can use this letter to send to NHDES with our wetlands application to show that we've done our due diligence for NHB (along with any confirmation literature from Amy Lamb for plant species).

Thanks,

Tim Noble



**Timothy K. Noble, EIT**

Project Engineer

Underwood Engineers, Inc.

Office 603-436-6192

[www.underwoodengineers.com](http://www.underwoodengineers.com)

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25 Vaughan Mall  
Portsmouth, NH, 03801-4012  
Tel: 603-436-6192 Fax: 603-431-4733

## Technical Memorandum

To: Kim Tuttle, Wildlife Biologist, NH Fish and Game  
From: Timothy Noble, E.I.T.  
Date: April 22, 2020  
Subject: Additional Information Requested by NH Fish & Game

As discussed on April 16, 2020, NH Fish and Game has requested additional information for a previous NHB review submission (NHB File ID: NHB19-2103). Information requested includes the following:

- Aerial map showing limits of impacted wetlands
- Narrative describing construction operations to minimize impact to wetlands, including sediment transport to the Dube Brook

Also note that because there are two project areas included in our wetlands permit application, additional information has been provided for NHB File ID: NHB19-2102 as well.

### Attachments

- Aerial Figures for Proposed Wetland Impacts

### Project Background

The first project area consists of a proposed 12" water transmission main extension from the Lee Well (UNH/Durham Water System) off Angell Road to the Lee Traffic Circle area (~8,600 linear feet) to provide drinking water to 14 MtBE-affected properties in Lee, NH. The second project area includes abandoning the existing 10" water main on Main St. (Route 155A) and replacing it with a 12" water main (~1,200 linear feet). This location has been identified as a hydraulic restrictions to providing service to the MtBE-affected properties near the Lee Traffic Circle. Proposed impacts to jurisdictional wetland areas in both project areas are all classified as temporary impacts.

### NHB File ID: NHB 19-2103 – Lee Traffic Circle Water Line Extension

Wetland ID numbering below matches the numbering from the Wetland Functional Assessment prepared by Marc Jacobs, dated March 11, 2020. The functional assessment evaluated all wetlands within the project corridor. However, only wetlands with proposed impacts have been included below.



Wetland Impact Summary Table

Wetland ID #	Wetland Type	Proposed Impact Area
1	Scrub-shrub	325 SF (temporary)
2	Scrub-shrub	3,000 SF (temporary)
5	Forested	2,300 SF (temporary)
6	Forested	800 SF (temporary)
7	Forested	700 SF (temporary)
8	Forested	3,650 SF (temporary)
10	Scrub-shrub	250 SF (temporary)
11	Forested	500 SF (temporary)

The proposed impacts above are all classified as temporary wetland impacts for extending a 12” water main to MtBE-affected properties in the vicinity of the Lee Traffic Circle. The construction method for the impacted areas is a standard cut-and-fill method with typical measures to restore wetlands and minimize sediment transport to adjacent jurisdictional wetland areas. For the above impacted areas, the following construction measures will be taken:

- Install double erosion control measures such as silt fence with hay bales to mitigate sediment transport to adjacent wetlands.
- Excavate, segregate, and stockpile the existing top 12” - 18” of soils separately and re-use them for the top 12”-18” after backfilling the trench.
- “Wildlife friendly” erosion matting without welded plastic will be used where applicable. It will be specified for contractors to provide products from the NHDOT Qualified Products List.
- Contractor will be required to provide a dewatering plan as part of their Storm Water Pollution Prevention Plan (SWPPP) submittal, including discharge locations with pump discharge sediment traps (such as hay bales and crushed stone).
- Specific wetlands construction monitoring services will be provided in areas as required by NHDES.

Dube Brook Preventative Impact Measures

Extending the proposed water main to the traffic circle includes crossing the Dube Brook. To avoid any impacts to the brook, directional drilling methods are proposed. Proposed drilling pits are located more than 100-ft from the limits of the brook. In addition, double erosion control measures are proposed to be installed down-gradient from the proposed drilling pits to prevent sediment transport from construction activities.



NH Fish and Game has requested additional measures to bring attention to the potential presence of the Blanding’s turtle, wood turtle and spotted turtle in the proximity to the work area. The following will be added to the final construction documents:

- Note in the plans that reads: “If spotted, wood, or Blanding’s turtles are found laying eggs in the work area, please contact Melissa Dupoeralski (cell: 603-479-1129) or Josh Megyesy (cell: 978-578-0802 or office: 603-271-1125) for further instructions.
- The “Seeking Reports of Rare Turtles” flyer provided by Fish and Game on 4/21/2020 will be provided in the contract documents as an appendix with instructions for the contractor to post throughout the work area.

**NHB File ID: NHB 19-2102 – Main St./Route 155A Water Main Improvements**

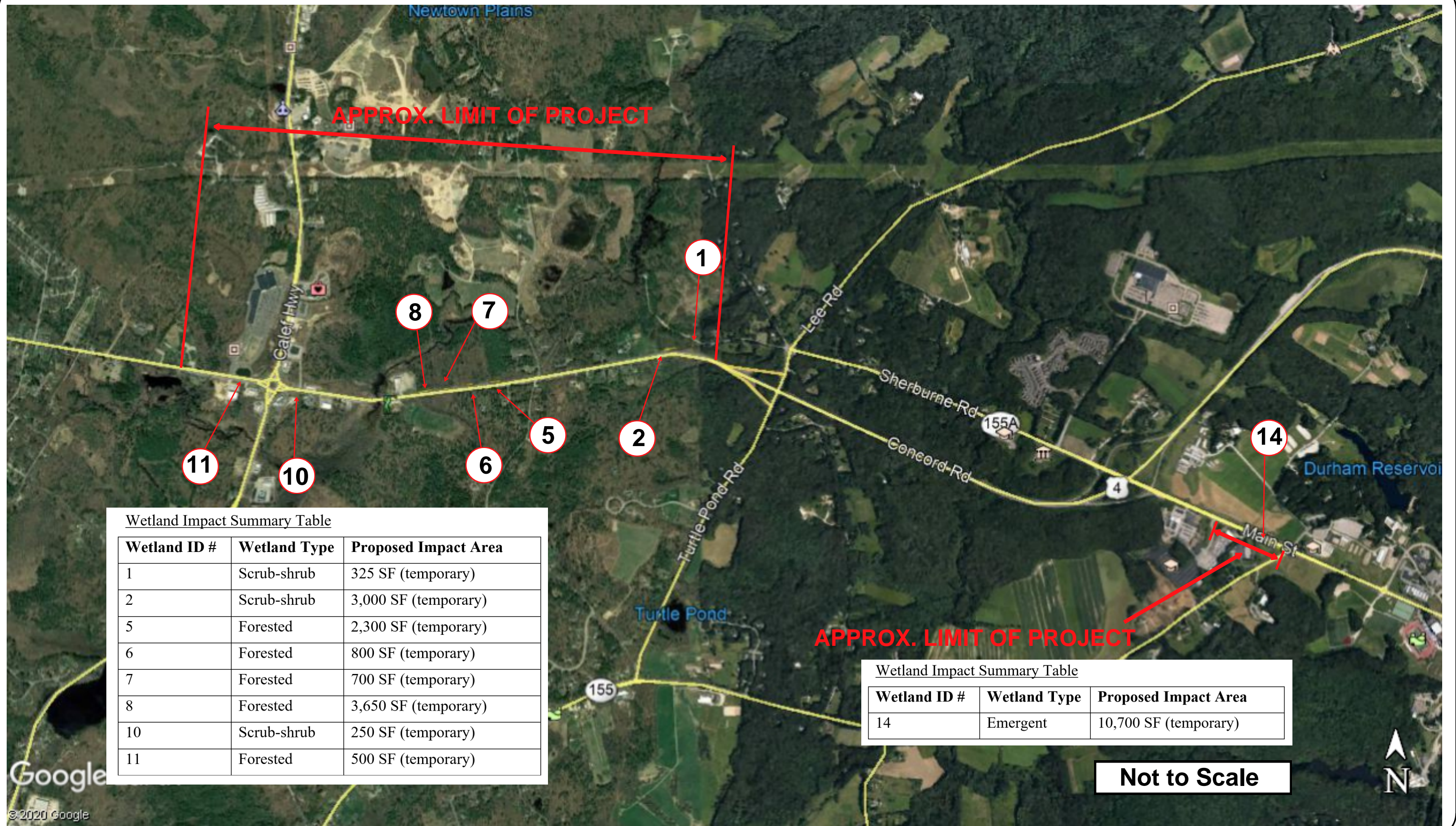
Wetland Impact Summary Table

Wetland ID #	Wetland Type	Proposed Impact Area
14	Emergent	10,700 SF (temporary)

The proposed impacts above are all classified as temporary wetland impacts for abandoning the existing 10” water main and installing a new 12” water main. The proposed water main alignment crosses College Brook on the west end of the highlighted wetland impact area. It is proposed to provide construction sheeting and a bypass pump to maintain flow and construct the water main below the existing brook. The construction method for the rest of the impacted area will be a standard cut-and-fill method with typical measures taken to restore wetlands and minimize sediment transport to adjacent jurisdictional wetland areas. For the above impacted area, the following construction measures will be taken:

- Install double erosion control measures such as silt fence with hay bales to mitigate sediment transport to adjacent wetlands.
- Excavate, segregate, and stockpile the existing top 12” - 18” of soils separately and re-use them for the top 12”-18” after backfilling the trench.
- “Wildlife friendly” erosion matting without welded plastic will be used where applicable. It will be specified for contractors to provide products from the NHDOT Qualified Products List.
- Contractor will be required to provide a dewatering plan as part of their Storm Water Pollution Prevention Plan (SWPPP) submittal, including discharge locations with pump discharge sediment traps (such as hay bales and crushed stone).
- Specific wetlands construction monitoring services will be provided in areas as required by NHDES.





Wetland Impact Summary Table

Wetland ID #	Wetland Type	Proposed Impact Area
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11	Forested	500 SF (temporary)

Wetland Impact Summary Table

Wetland ID #	Wetland Type	Proposed Impact Area
14	Emergent	10,700 SF (temporary)

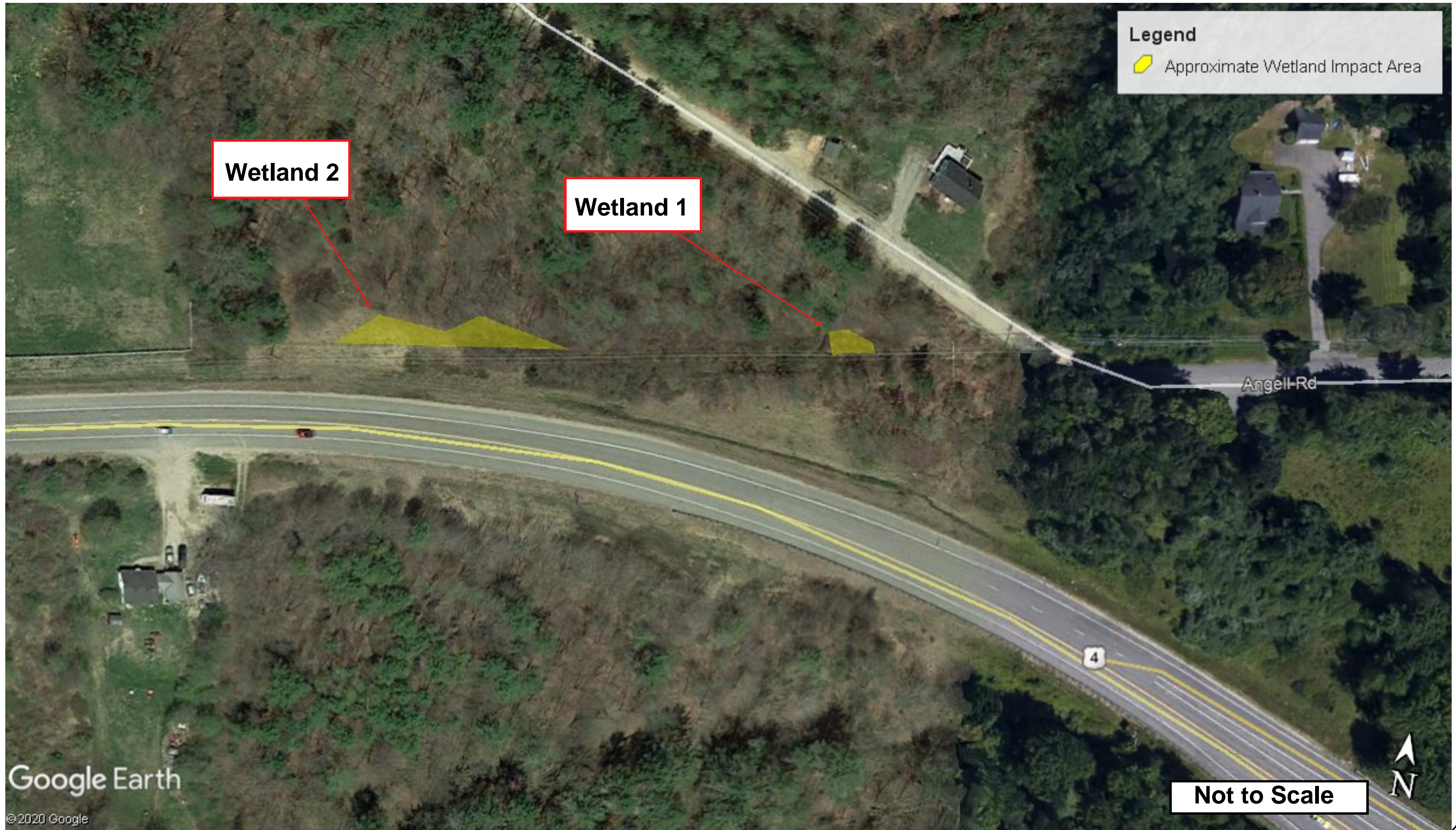
**Not to Scale**



Wetland ID numbering matches the numbering from the Wetland Functional Assessment prepared by Marc Jacobs, dated March 11, 2020. The functional assessment evaluated all wetlands within the project corridor. However, only wetlands with proposed impacts have been included.

DATE 4/20/2020	 <b>UNDERWOOD</b> engineers 25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	WETLAND IMPACTS LOCATIONS TOWN OF LEE/TOWN OF DURHAM NEW HAMPSHIRE	FIG. <b>1</b>
PROJECT 2274			





**Legend**  
 [Yellow Polygon] Approximate Wetland Impact Area

**Wetland 2**

**Wetland 1**

Angell Rd

4

Google Earth

© 2020 Google

**Not to Scale**



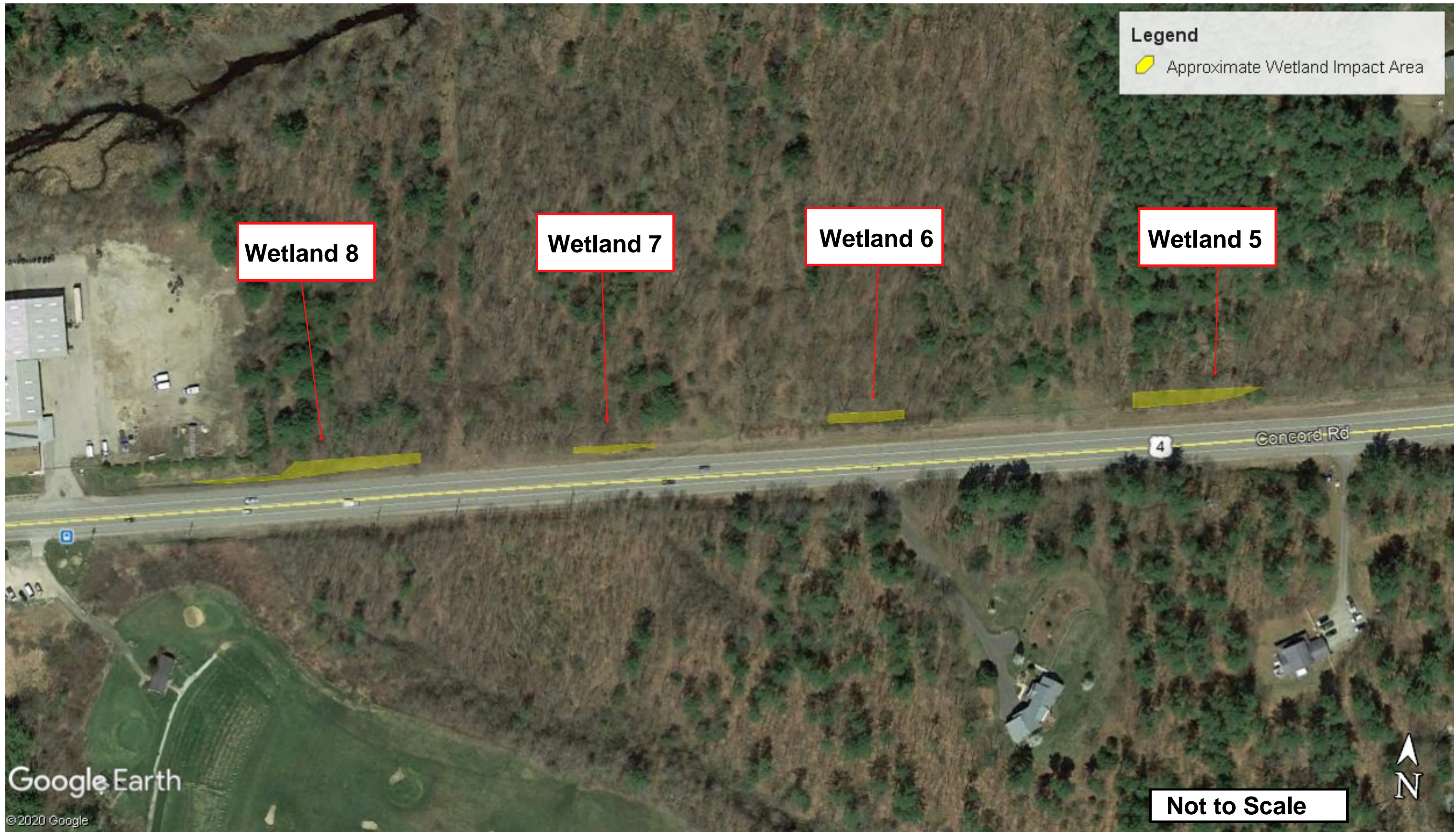
DATE  
4/20/2020  
PROJECT  
2274

**UNDERWOOD**  
engineers  
25 Vaughan Mall, Portsmouth, N.H. 03801  
Tel. 603-436-6192 Fax. 603-431-4733

ROUTE 4 WETLAND IMPACTS  
TOWN OF LEE  
NEW HAMPSHIRE

FIG.  
**2**





**Legend**  
 [Yellow Polygon] Approximate Wetland Impact Area

**Wetland 8**

**Wetland 7**

**Wetland 6**

**Wetland 5**

Concord Rd


4

Google Earth

© 2020 Google

**Not to Scale**



DATE 4/20/2020	 <b>UNDERWOOD</b> engineers 25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	ROUTE 4 WETLAND IMPACTS TOWN OF LEE NEW HAMPSHIRE	FIG. <b>3</b>
PROJECT 2274			





DATE 4/20/2020	<b>UNDERWOOD</b> engineers 25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	ROUTE 4 WETLAND IMPACTS TOWN OF LEE NEW HAMPSHIRE	FIG. <b>4</b>
PROJECT 2274			





<b>DATE</b> 4/20/2020	 <b>UNDERWOOD</b> engineers	MAIN STREET WETLAND IMPACTS TOWN OF DURHAM NEW HAMPSHIRE	<b>FIG.</b>
<b>PROJECT</b> 2274			25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733





## SEEKING REPORTS OF RARE TURTLES



The NH Fish & Game Department is collecting observations of four turtle species:



### **Blanding's turtle** (state endangered)

- Large, dark/black domed shell with lighter speckles
- Distinct yellow throat/chin
- Aquatic but often moves on land



### **Wood turtle** (special concern)

- Sculpted, pyramidal brownish shell
- Orange around neck and limbs
- River/stream turtle spending many months on land



### **Eastern box turtle** (state endangered)

- Small terrestrial turtle with highly domed shell
- Irregular yellow or orange markings over brown/black base



### **Spotted turtle** (state threatened)

- Small, mostly aquatic with black or dark brown with yellow spots.
- Fairly flat shell compared to Blanding's turtle

Report sightings to [RAARP@wildlife.nh.gov](mailto:RAARP@wildlife.nh.gov) or 603-271-2461 *Please report promptly, noting specific location and date – Photographs strongly encouraged*

# CONFIDENTIAL – NH Dept. of Environmental Services review

## Memo



NH NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

**To:** Danielle Kalmbach, Underwood Engineers  
25 Vaughan Mall  
Portsmouth, NH 03801

**From:** Amy Lamb, NH Natural Heritage Bureau  
**Date:** 7/8/2019 (valid for one year from this date)  
**Re:** Review by NH Natural Heritage Bureau  
NHB File ID: NHB19-2103

**Town:** Lee  
**Location:** Tax Maps: Map 4 02-0,100,101, 07-100,200,300, 06-500, 08-100,200,300,400,500. Map 7 08-0,100,200,300,400,500, 06-100,200, 04-0,100

**Description:** Due to MtBE contamination in the groundwater, the public water supply is being extended to the Lee Traffic Circle and surrounding areas. The new water line will run parallel to the public right-of-way, Route 4.

**cc:** Kim Tuttle

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

**Comments:** Please send NHB information including plans, descriptions, and photos, about any wetland impacts anticipated for the project, especially impacts to any marshes and to the Oyster River. Contact the NH Fish & Game Department to address wildlife concerns.

Plant species	State <sup>1</sup>	Federal	Notes
great bur-reed ( <i>Sparganium eurycarpum</i> )	T	--	Threats to aquatic species include changes in water quality, e.g., due to pollution and stormwater runoff, and significant changes in water level.
incurved umbrella sedge ( <i>Cyperus squarrosus</i> )	T	--	Changes to local hydrology, or recreational activities along the shoreline, could threaten this species, which occurs on river or streambanks..
red-root umbrella sedge ( <i>Cyperus erythrorhizos</i> )	E	--	
Vertebrate species	State <sup>1</sup>	Federal	Notes
American Brook Lamprey ( <i>Lampetra appendix</i> )	E	--	Contact the NH Fish & Game Dept (see below).
American Eel ( <i>Anguilla rostrata</i> )	SC	--	Contact the NH Fish & Game Dept (see below).
Banded Sunfish ( <i>Enneacanthus obesus</i> )	SC	--	Contact the NH Fish & Game Dept (see below).
Blanding's Turtle ( <i>Emydoidea blandingii</i> )	E	--	Contact the NH Fish & Game Dept (see below).
Spotted Turtle ( <i>Clemmys guttata</i> )	T	--	Contact the NH Fish & Game Dept (see below).
Wood Turtle ( <i>Glyptemys insculpta</i> )	SC	--	Contact the NH Fish & Game Dept (see below).

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

DNCR/NHB  
172 Pembroke Rd.  
Concord, NH 03301

# CONFIDENTIAL – NH Dept. of Environmental Services review

## Memo



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.*

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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 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.

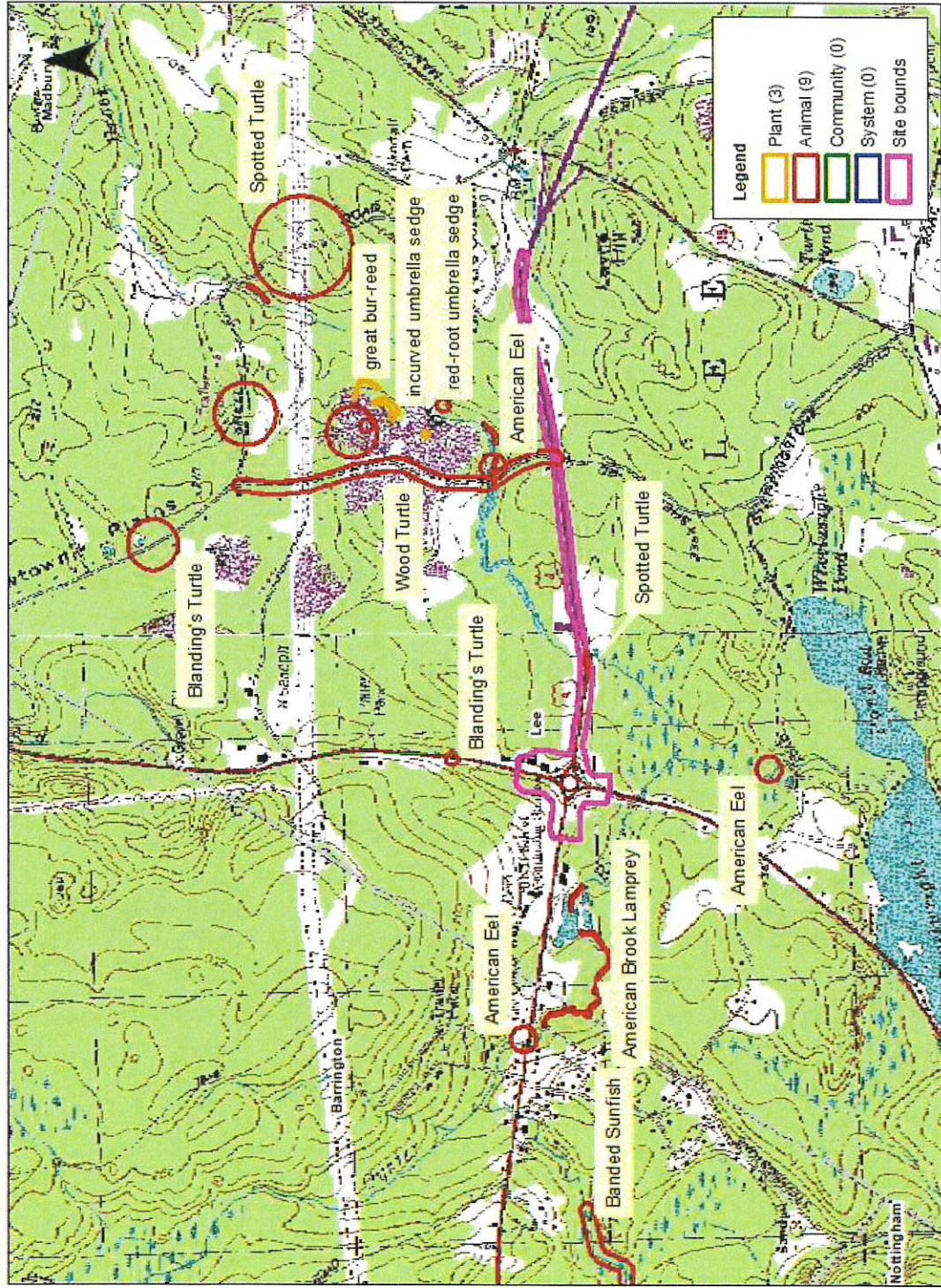
Department of Natural and Cultural Resources  
Division of Forests and Lands  
(603) 271-2214 fax: 271-6488

DNCR/NHB  
172 Pembroke Rd.  
Concord, NH 03301



CONFIDENTIAL – NH Dept. of Environmental Services review

NHB19-2103



0 0.1 0.2 0.3 0.4 0.5 Miles

## New Hampshire Natural Heritage Bureau - Plant Record

### great bur-reed (*Sparganium eurycarpum*)

#### **Legal Status**

Federal: Not listed  
State: Listed Threatened

#### **Conservation Status**

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

#### **Description at this Location**

Conservation Rank: Not ranked  
Comments on Rank:

Detailed Description: 2012: 200+ genets, 400 feet of shoreline about 4 feet wide. Condition robust, increasing along this shoreline. 40 reproductive genets.

General Area: 2012: Habitat: Man made marshes in old sand pit adjacent to Dube Brook. Associated species: broad-leaved cattail (*Typha latifolia*), pondweed (*Potamogeton* sp.), water-plantain (*Alisma* sp.), Comet Darner, Carolina Saddlebags, American Bittern

#### **General Comments:**

Management Comments: 2012: Recently installed and planted wetlands/uplands with invasive species control. Should be secure for some time.

#### **Location**

Survey Site Name: Old Mill Road Wetlands Mitigation Area  
Managed By: NRCS\_WRP\_Kelley

County: Strafford  
Town(s): Lee  
Size: .3 acres

Elevation:

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

Directions: 2012: Biggest pond/marsh near parking area, eastern shoreline on far side

#### **Dates documented**

First reported: 2012-06-27                      Last reported: 2012-06-27

## New Hampshire Natural Heritage Bureau - Plant Record

### incurved umbrella sedge (*Cyperus squarrosus*)

#### Legal Status

Federal: Not listed  
State: Listed Threatened

#### Conservation Status

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

#### Description at this Location

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

Detailed Description: 2016: CYPSSQU1: More than 1,000 plants over 0.7 acres. CYPSSQU2: Less than 100 plants in 0.15 acre area.

General Area: 2016: This area is a reclaimed gravel pit along the Oyster River. 2 ponds were created as part of the sculpting of the land. The north and bigger pond has a sand bottom. The second (south) pond has a sand bottom overlaid with ancient peat. Around this pond they planted Atlantic white cedar (*Chamaecyparis thyoides*), hoping to create a White Cedar Swamp. Most of the plant material around these ponds was brought in either as nursery stock or seeded. Across the river is a municipal well, so the dynamic water table is enhanced by public drawdown. This has been especially acute in the last three years, where the ponds have been drying out during the growing season. The previous 5 years there was always some water in the ponds, in the spring up to 5 feet in the northern one. Associated species include straw-colored umbrella sedge (*Cyperus strigosus*), shining umbrella sedge (*Cyperus bipartitus*), red-root umbrella sedge (*Cyperus erythrorhizos*), beach umbrella sedge (*Cyperus filicinus*), southern water-plantain (*Alisma subcordatum*), yellow-seeded false pimpernel (*Lindernia dubia*), small white American-aster (*Symphotrichum racemosum*), common grass-leaved-goldenrod (*Euthamia graminifolia*), brown cudweed (*Gnaphalium uliginosum*), ditch-stonecrop (*Penthorum sedoides*), purple loosestrife (*Lythrum salicaria*), and blunt spikeseed (*Eleocharis obtusa*), among many others.

#### General Comments:

Management Comments: 2016: Common reed (*Phragmites australis*) is spreading rapidly into the mudflats. One of the runners was 50' long. Now would be the time to curtail this species before it dominates the whole of the south pond.

#### Location

Survey Site Name: Old Mill Road Wetlands Mitigation Area  
Managed By:

County: Strafford

Town(s): Lee

Size: .8 acres

Elevation:

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

Directions: 2016: From Route 4 follow Old Mill Road. As you cross Oyster River, the conservation area begins on the right. Follow down the street until parking area with green metal gate. Ponds are clearly visible down the hill. On the topo map the Oyster River is misnamed Dube Brook.

#### Dates documented

First reported: 2016-09-01

Last reported: 2016-09-03

## New Hampshire Natural Heritage Bureau - Plant Record

### red-root umbrella sedge (*Cyperus erythrorhizos*)

#### 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: Excellent quality, condition and landscape context ('A' on a scale of A-D).  
Comments on Rank:

Detailed Description: 2016: CYPERY1: More than 80 plants scattered across 0.5 acres. CYPERY2: More than 400 plants in 0.15 acre area. Center densely packed, plants of short stature due to crowding  
General Area: 2016: This area is a reclaimed gravel pit along the Oyster River. 2 ponds were created as part of the sculpting of the land. The north and bigger pond has a sand bottom. The second (south) pond has a sand bottom overlaid with ancient peat. Around this pond they planted Atlantic white cedar (*Chamaecyparis thyoides*), hoping to create a White Cedar Swamp. Most of the plant material around these ponds was brought in either as nursery stock or seeded. Across the river is a municipal well, so the dynamic water table is enhanced by public drawdown. This has been especially acute in the last three years, where the ponds have been drying out during the growing season. The previous 5 years there was always some water in the ponds, in the spring up to 5 feet in the northern one. Associated species include straw-colored umbrella sedge (*Cyperus strigosus*), shining umbrella sedge (*Cyperus bipartitus*), incurved umbrella sedge (*Cyperus squarrosus*), beach umbrella sedge (*Cyperus filicinus*), southern water-plantain (*Alisma subcordatum*), yellow-seeded false pimpernel (*Lindernia dubia*), small white American-aster (*Symphotrichum racemosum*), common grass-leaved-goldenrod (*Euthamia graminifolia*), brown cudweed (*Gnaphalium uliginosum*), ditch-stonecrop (*Penthorum sedoides*), purple loosestrife (*Lythrum salicaria*), and blunt spikeseed (*Eleocharis obtusa*), among many others.

#### General Comments:

Management Comments: 2016: Common reed (*Phragmites australis*) is spreading rapidly into the mudflats. One of the runners was 50' long. Now would be the time to curtail this species before it dominates the whole of the south pond. Purple loosestrife (*Lythrum salicaria*) not abundant enough on barren ground to be of concern but bears watching.

#### Location

Survey Site Name: Old Mill Road Wetlands Mitigation Area  
Managed By:

County: Strafford

Town(s): Lee

Size: .5 acres

Elevation:

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

Directions: 2016: From Route 4 follow Old Mill Road. As you cross Oyster River, the conservation area begins on the right. Follow down the street until parking area with green metal gate. Ponds are clearly visible down the hill. On the topo map the Oyster River is misnamed Dube Brook.

#### Dates documented

First reported: 2016-09-03

Last reported: 2016-09-03





## New Hampshire Natural Heritage Bureau - Animal Record

### American Brook Lamprey (*Lampetra appendix*)

#### Legal Status

Federal: Not listed  
State: Listed Endangered

#### Conservation Status

Global: Apparently secure but with cause for concern  
State: Critically imperiled due to rarity or vulnerability

#### Description at this Location

Conservation Rank: Not ranked  
Comments on Rank:

Detailed Description: 2007: Route 4: about a dozen juveniles less than 70mm in length.2006: Dube Brook 1: 1 adult and 5 juveniles sampled by electrofishing. Chesley Brook: 7 adults, 13 juveniles and 20 of unknown age sampled by electrofishing.2005: Dube Brook 2: 2 juveniles sampled by electrofishing.1985: Oyster River: 2 juveniles sampled by electrofishing.

General Area: 2006: Dube Brook 1, Chesley Brook: Freshwater stream or river.2005: Dube Brook 2: Freshwater stream or river.1985: Oyster River: Freshwater stream or river.

General Comments: 2007: Route 4: speculate absence of adults due to recent colonization or mortality due to sedimentation during flooding.2006: Dube Brook 1: NHFGD fish survey (electrofishing). Found ammocoetes and adult in sand/silt substrate created by debris from abandoned beaver dam. Chesley Brook: NHFGD survey (electrofishing). Dense population of adults and ammocoetes; many individuals missed. American brook lamprey coexist with a dense population of naturally reproducing brook trout. Brook appears to maintain a relatively stable temp.2005: Dube Brook 2: Sampled by electrofishing. Individuals buried in fine sediment. Voucher specimen collected.1985: Oyster River: Sampled at NHFGD Fishing for the Future index site ST285030. Index site is 300 feet long. One individual was 108 mm and other was 142 mm. Burrowed in soft bottom.

Management  
Comments:

#### Location

Survey Site Name: Oyster River  
Managed By: NRCS\_WRP\_Brisson

County: Strafford  
Town(s): Lee  
Size: .9 acres  
Elevation:

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

Directions: 2007: Oyster River just south of Rte. 4, west of Rte. 125.2006: Dube Brook 1: Upstream of Snell Road just downstream of powerline, below beaver impoundment. Chesley Brook: Upstream of Packers Falls Road.2005: Dube Brook 2: Ca. 50 meters downstream of Old Mill Road crossing.1985: Oyster River: Rte. 155A between Rte. 4 and Lee Five Corners.

#### Dates documented

First reported: 1985-07-05  
Last reported: 2007

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: 2007: Area 13285M: Not enumerated.2005: Area 13285M: 5 observed.

General Area:

General Comments: 2007: Area 13285M: Reshocked area sampled in 2005. Hillside collapsed due to flood and washed sediment downstream changing stream channel

Management

Comments:

#### Location

Survey Site Name: Oyster River  
Managed By: NRCS\_WRP\_Peters

County: Strafford

Town(s): Lee

Size: 1.9 acres

Elevation:

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

Directions: 2005: Area 13285M: Downstream side of bridge crossing on Old Mill Rd in Lee.

#### Dates documented

First reported: 2005-09-02                      Last reported: 2007-05-11

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: 2007: Area 13301: Not enumerated.

General Area:

General Comments: 2007: Area 13301: Crossings at Emerald Acres Road and the upstream Rt 4 crossing are undersized.

Management

Comments:

**Location**

Survey Site Name: Oyster River

Managed By:

County: Strafford

Town(s): Barrington

Size: 1.9 acres

Elevation:

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

Directions: 2007: Oyster River

**Dates documented**

First reported: 2007-05-11

Last reported: 2007-05-11

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: 2007: Area 13304: Not enumerated.  
 General Area: 2007: Area 13304: Slow flow, alder canopy, not many fish.  
 General Comments:  
 Management  
 Comments:

**Location**

Survey Site Name: Oyster River  
 Managed By:

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

Elevation:

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

Directions: 2007: Area 13304: Oyster River Tributary, sampled upstream to 100 m above Stepping Stones Road.

**Dates documented**

First reported: 2007-06-22                      Last reported: 2007-06-22

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

### Banded Sunfish (*Enneacanthus obesus*)

#### Legal Status

Federal: Not listed  
State: Special Concern

#### Conservation Status

Global: Demonstrably widespread, abundant, and secure  
State: Rare or uncommon

#### Description at this Location

Conservation Rank: Not ranked  
Comments on Rank:

Detailed Description: 2007: Area 12259: 2 observed. 2005: Area 8991: 3 observed. Area 8989: 1 observed. Area 8990: 1 observed. Area 8992: 3 observed. Area 8981: 2 observed. 1985: 3 observed, age and sex unknown (Obs\_id 384).

General Area: 2007: Area 12259: Vegetation along the margins of small stream channels flowing through abandoned beaver impoundments. 2005: Areas 8991, 8989, 8990, 8992, and 8981: Freshwater - stream or river. 1985: Freshwater - stream or river (Obs\_id 384).

General Comments: 1985: 3 BDS (85,70,68 mm.) sampled by electrofishing at NHFG Fishing for the Future index site ST285030. Index site is 300 ft. long (Obs\_id 384).

Management  
Comments:

#### Location

Survey Site Name: Oyster River  
Managed By: NRCS\_WRP\_Brisson

County: Strafford  
Town(s): Barrington  
Size: 5.2 acres  
Elevation:

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

Directions: 2007: Area 12259: Upper Oyster River, downstream of Glass Road (dirt road heading south off of Rt 4) at eastern inlet to abandoned beaver impoundment. 2005: Area 8991: Oyster River SW of the Lee traffic circle. Area 8989: Oyster River at Sheep Rd. just N of Rte 4. Area 8990: Oyster River just W of New Market Rd. Area 8992: Oyster River W of New Market Rd. Area 8981: Longmarsh Brook at the crossing with Longmarsh Rd. 1985: Oyster River at Rte.155A between Rte.4 and Lee Five Corners (Obs\_id 384).

#### Dates documented

First reported: 1985-07-05  
Last reported: 2007-07-13

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

### **Blanding's Turtle (*Emydoidea blandingii*)**

**Legal Status**

Federal: Not listed  
 State: Listed Endangered

**Conservation Status**

Global: Apparently secure but with cause for concern  
 State: Critically imperiled due to rarity or vulnerability

**Description at this Location**

Conservation Rank: Not ranked  
 Comments on Rank:

Detailed Description: 2014: Area 13903: 1 adult female observed, dead on road with eggs.  
 General Area: 2014: Area 13903: Dead on large highway in area of commercial development.  
 General Comments:  
 Management  
 Comments:

**Location**

Survey Site Name: Pierce Brook  
 Managed By:

County: Strafford  
 Town(s): Lee  
 Size: .4 acres

Elevation:

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

Directions: 2014: Area 13903: Route 125, Lee, southbound near intersection at Market Basket plaza (43.15326, -71.00552).

**Dates documented**

First reported: 2014-06-30                      Last reported: 2014-06-30

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

### Spotted Turtle (*Clemmys guttata*)

#### **Legal Status**

Federal: Not listed  
State: Listed Threatened

#### **Conservation Status**

Global: Demonstrably widespread, abundant, and secure  
State: 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: 2012: Area 13017: 1 adult male observed.2005: Area 9311: 1 adult turtle observed crossing the road.2000: Area 1062: 1 adult seen, shell about 5" long.

General Area: 2012: Area 13017: Manmade wetlands in old gravel pit along Dube Creek.2000: Area 1062: Marshy area, water ankle deep [with] meadowsweet, grasses, iris, ferns.

General Comments:  
Management  
Comments:

#### **Location**

Survey Site Name: Oyster River  
Managed By: Henry Easement

County: Strafford  
Town(s): Lee  
Size: 31.4 acres

Elevation:

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

Directions: 2012: Area 13017: Old Mill Rd Wetlands Reserve, Lee. Around the big impoundment nearest the parking area 2005: Area 9311: Route 4 at the Oyster River ca. 0.25 miles east of the Lee traffic circle. 2000: Area 1062: Seepage marsh off Snell Road beneath powerlines.

#### **Dates documented**

First reported: 2000-05-30                      Last reported: 2012-08-14

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

## Wood Turtle (*Glyptemys insculpta*)

**Legal Status**

Federal: Not listed  
 State: Special Concern

**Conservation Status**

Global: Rare or uncommon  
 State: Rare or uncommon

**Description at this Location**

Conservation Rank: Not ranked  
 Comments on Rank:

Detailed Description: 2015: Area 14039: 1 adult observed, sex unknown.<br />2013: Area 13541: 1 adult female observed, dead on road. Area 13555:1 adult female observed.<br />1997: Area 6461: 1 seen.

General Area: 2015: Area 14039: Roadside.<br />2013: Area 13541: Roadside, urban/suburban. Area 13555: Manmade wetlands in old gravel pit along Dube Creek.<br />1997: Area 6461: Driveway adjacent to scrub-shrub wetland along Dube Brook.

General Comments: 2013: Area 13555: Observer's note: "Coming out of the Oyster River to lay in sand pit area."<br /> 1997: Area 6461: The wetland has since been moved, so all shrubs between the open water and driveway were cut.

Management Comments:

**Location**

Survey Site Name: Newtown Plains Rd. near Sandpits  
 Managed By: NRCS\_WRP\_Kelley

County: Strafford  
 Town(s): Lee  
 Size: 36.3 acres Elevation:

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

Directions: 2015: Area 14039: Old Mill Road, Lee.<br />2013: Area 13541: Route 4, Lee. Area 13555: Old Mill Road wetlands reserve.<br />1997: Area 6461: Driveway at 82 Snell Road.

**Dates documented**

First reported: 1997-06-19 Last reported: 2015-06-19

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.



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>



In Reply Refer To:  
Consultation Code: 05E1NE00-2019-SLI-2239  
Event Code: 05E1NE00-2020-E-06490  
Project Name: Lee Traffic Circle Water Line Extension

April 15, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

## Project Summary

Consultation Code: 05E1NE00-2019-SLI-2239

Event Code: 05E1NE00-2020-E-06490

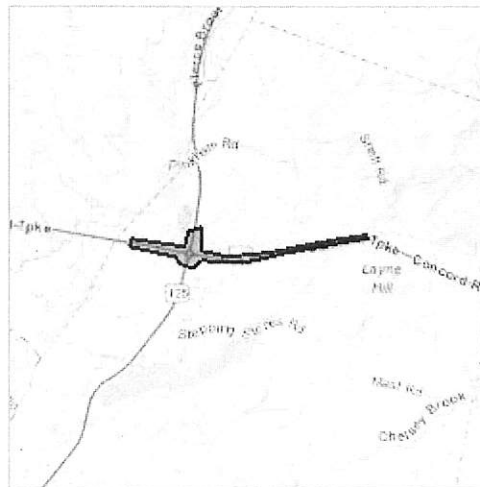
Project Name: Lee Traffic Circle Water Line Extension

Project Type: WATER SUPPLY / DELIVERY

Project Description: Due to MtBE groundwater contamination, the groundwater is no longer potable. A new water line will connect a section of Route 4 and the Lee Traffic Circle to public water supply. The water line will be placed parallel to Route 4, with additional connections in the Traffic Circle.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.149594925776455N71.00963820123744W>



Counties: Strafford, NH

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1890">https://ecos.fws.gov/ecp/species/1890</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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## United States Department of the Interior

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New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
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Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>



In Reply Refer To:  
Consultation Code: 05E1NE00-2019-SLI-2239  
Event Code: 05E1NE00-2019-E-05719  
Project Name: Lee Traffic Circle Water Line Extension

July 09, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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### Critical habitats

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## United States Department of the Interior

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Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>



IPaC Record Locator: 233-17358203

July 10, 2019

Subject: Consistency letter for the 'Lee Traffic Circle Water Line Extension' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Danielle Kalmbach:

The U.S. Fish and Wildlife Service (Service) received on July 10, 2019 your effects determination for the 'Lee Traffic Circle Water Line Extension' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"<sup>[1]</sup> of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Small Whorled Pogonia, *Isotria medeoloides* (Threatened)

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

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## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

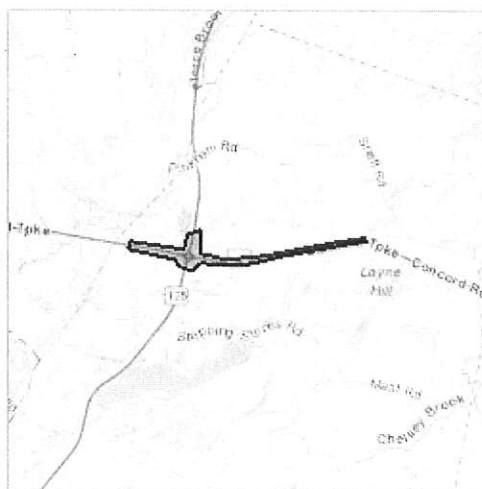
Lee Traffic Circle Water Line Extension

### 2. Description

The following description was provided for the project 'Lee Traffic Circle Water Line Extension':

Due to MtBE groundwater contamination, the groundwater is no longer potable. A new water line will connect a section of Route 4 and the Lee Traffic Circle to public water supply. The water line will be placed parallel to Route 4, with additional connections in the Traffic Circle.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.149594925776455N71.00963820123744W>



### Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

### Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

---

## Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

### Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

*No*

2. Will your activity purposefully **Take** northern long-eared bats?

*No*

3. Is the project action area located wholly outside the White-nose Syndrome Zone?

**Automatically answered**

*No*

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases is available at [www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html).

*Yes*

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

*No*

6. Will the action involve Tree Removal?

*Yes*

7. Will the action only remove hazardous trees for the protection of human life or property?

*Yes*

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## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

**If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



NEW HAMPSHIRE NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

---

**To:** Danielle Kalmbach, Underwood Engineers  
25 Vaughan Mall  
Portsmouth, NH 03801

**From:** NH Natural Heritage Bureau

**Date:** 7/8/2019 (valid for one year from this date)

**Re:** Review by NH Natural Heritage Bureau of request submitted 7/2/2019

**NHB File ID:** NHB19-2102

**Applicant:** Town of Durham

**Location:** Durham  
Tax Maps: 13-3-1

**Project Description:** The water main on Main Street/Mast Road is being replaced parallel to Main Street.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

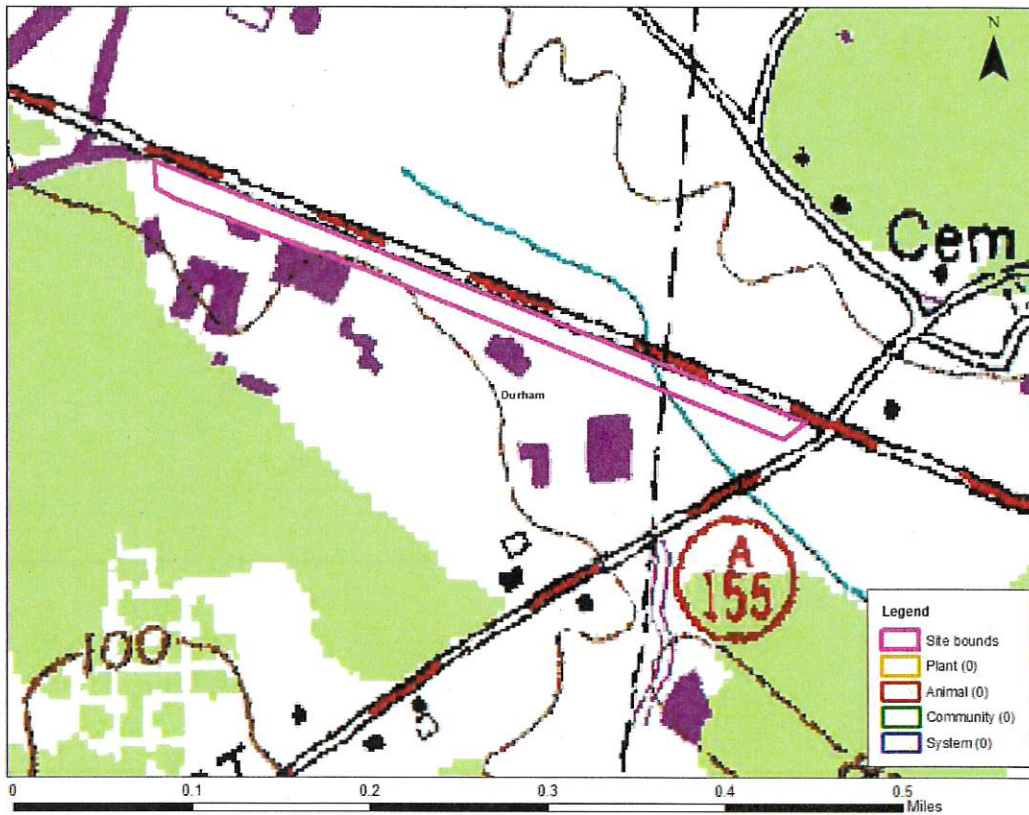
It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 7/2/2019, and cannot be used for any other project.



NEW HAMPSHIRE NATURAL HERITAGE BUREAU  
NHB DATACHECK RESULTS LETTER

MAP OF PROJECT BOUNDARIES FOR: NHB19-2102

NHB19-2102





## United States Department of the Interior



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New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

In Reply Refer To:  
Consultation Code: 05E1NE00-2019-SLI-2251  
Event Code: 05E1NE00-2020-E-06499  
Project Name: UNH Water Main Improvements

April 15, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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Concord, NH 03301-5094

(603) 223-2541

## Project Summary

Consultation Code: 05E1NE00-2019-SLI-2251

Event Code: 05E1NE00-2020-E-06499

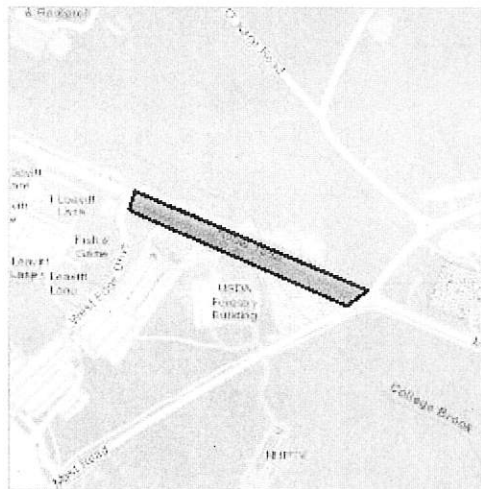
Project Name: UNH Water Main Improvements

Project Type: WATER SUPPLY / DELIVERY

Project Description: The purpose of the project is to upgrade the water main on Main Street in Durham, NH.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.14299997627331N70.94909269250932W>



Counties: Strafford, NH



## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

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### Critical habitats

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## United States Department of the Interior

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In Reply Refer To:  
Consultation Code: 05E1NE00-2019-SLI-2251  
Event Code: 05E1NE00-2019-E-05757  
Project Name: UNH Water Main Improvements

July 10, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

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<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

## Project Summary

Consultation Code: 05E1NE00-2019-SLI-2251

Event Code: 05E1NE00-2019-E-05757

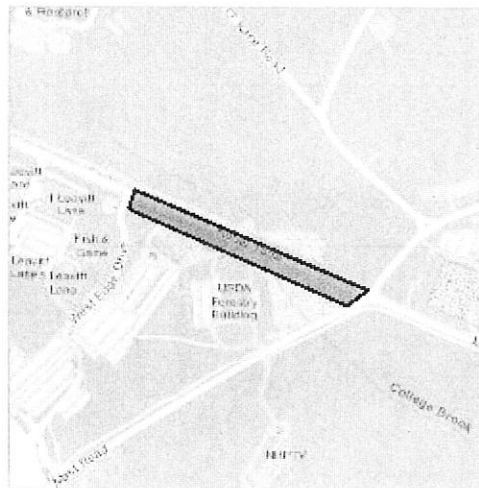
Project Name: UNH Water Main Improvements

Project Type: WATER SUPPLY / DELIVERY

Project Description: The purpose of the project is to upgrade the water main on Main Street in Durham, NH. The scope of the project includes less than 600 feet of pipeline improvements.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.14299997627331N70.94909269250932W>



Counties: Strafford, NH

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1890">https://ecos.fws.gov/ecp/species/1890</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>



IPaC Record Locator: 231-17379348

July 10, 2019

Subject: Consistency letter for the 'UNH Water Main Improvements' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Danielle Kalmbach:

The U.S. Fish and Wildlife Service (Service) received on July 10, 2019 your effects determination for the 'UNH Water Main Improvements' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”<sup>[1]</sup> of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Small Whorled Pogonia, *Isotria medeoloides* (Threatened)

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

---



**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

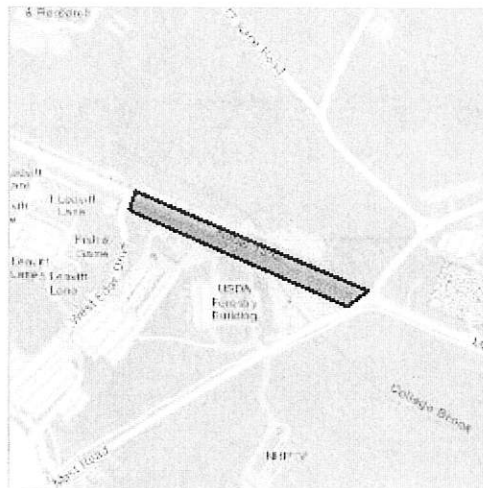
UNH Water Main Improvements

**2. Description**

The following description was provided for the project 'UNH Water Main Improvements':

The purpose of the project is to upgrade the water main on Main Street in Durham, NH. The scope of the project includes less than 600 feet of pipeline improvements.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.14299997627331N70.94909269250932W>

**Determination Key Result**

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

**Determination Key Description: Northern Long-eared Bat 4(d) Rule**

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

---

## Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

*No*

2. Will your activity purposefully **Take** northern long-eared bats?

*No*

3. Is the project action area located wholly outside the White-nose Syndrome Zone?

**Automatically answered**

*No*

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases is available at [www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html).

*Yes*

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

*No*

6. Will the action involve Tree Removal?

*Yes*

7. Will the action only remove hazardous trees for the protection of human life or property?

*Yes*

---

## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

**If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

# 2015 HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

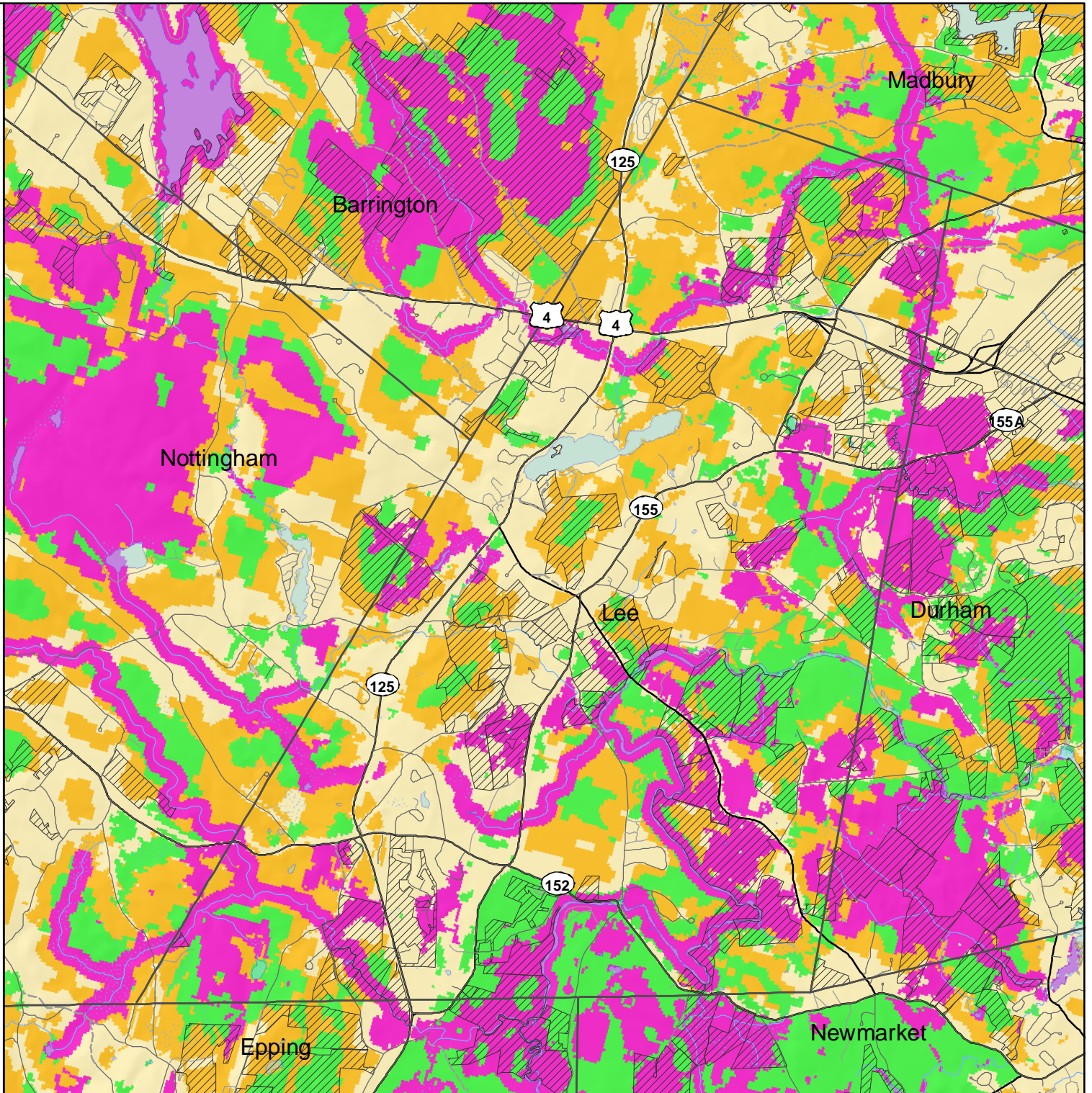
 Highest Ranked Habitat in New Hampshire

 Highest Ranked Habitat in the Biological Region

Biological region = TNC ecoregional subsection for terrestrial habitats or Aquatic Resource Mitigation region for wetlands and floodplain forest.

 Supporting Landscapes

 Conservation or public



Base map data provided by NH GRANIT (2015)  
Not intended for legal use.






NEW HAMPSHIRE  
**Wildlife Action Plan**  
September 2015

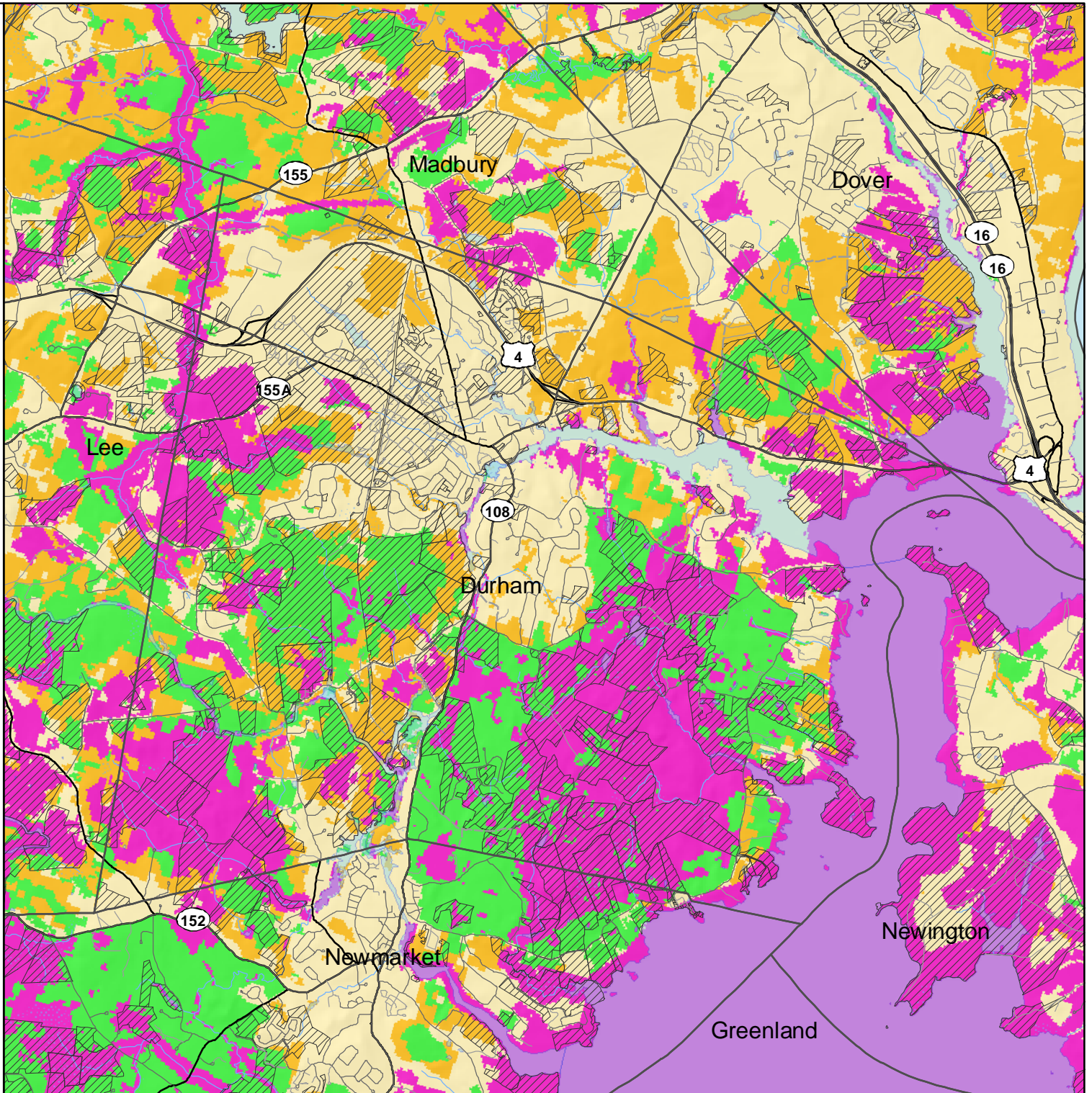
0 1 2  
Kilometers

0 1 2  
Miles



# 2015 HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

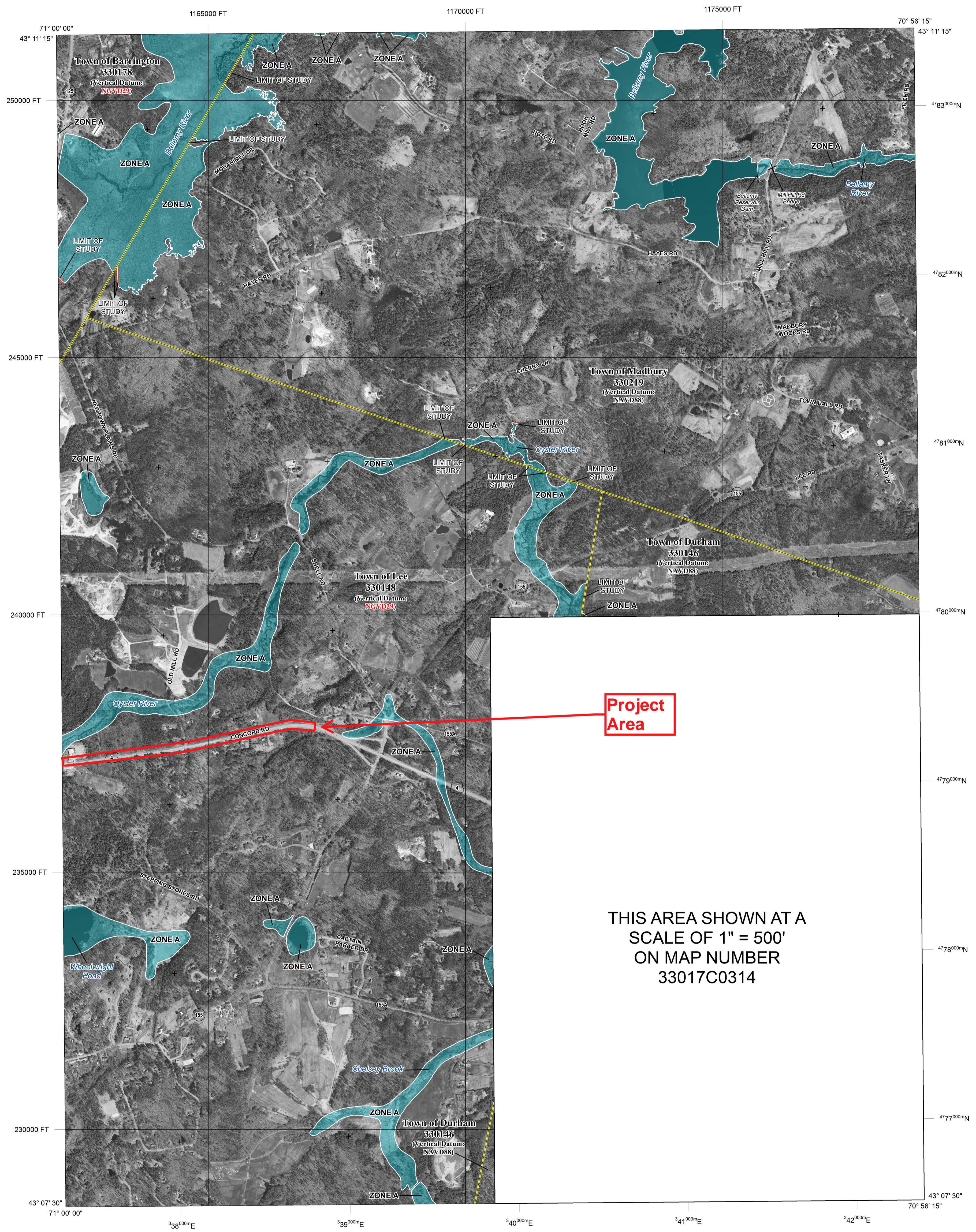
-  Highest Ranked Habitat in New Hampshire
-  Highest Ranked Habitat in the Biological Region
- Biological region = TNC ecoregional subsection for terrestrial habitats or Aquatic Resource Mitigation region for wetlands and floodplain forest.
-  Supporting Landscapes
-  Conservation or public



Base map data provided by NH GRANIT (2015)  
Not intended for legal use.







**Project Area**

THIS AREA SHOWN AT A  
SCALE OF 1" = 500'  
ON MAP NUMBER  
33017C0314

**FLOOD HAZARD INFORMATION**

**SEE FIS REPORT FOR ZONE DESCRIPTIONS**  
**THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTP://MSC.FEMA.GOV](http://msc.fema.gov)**

<b>SPECIAL FLOOD HAZARD AREAS</b>		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes. Zone X
<b>OTHER AREAS</b>		Areas Determined to be Outside the 0.2% Annual Chance Floodplain Zone X
		Area of Undetermined Flood Hazard Zone D
<b>GENERAL STRUCTURES</b>		Channel, Culvert, or Storm Sewer
		Accredited or Provisionally Accredited Levee, Dike, or Floodwall
		Non-accredited Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
<b>OTHER FEATURES</b>		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

**NOTES TO USERS**

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

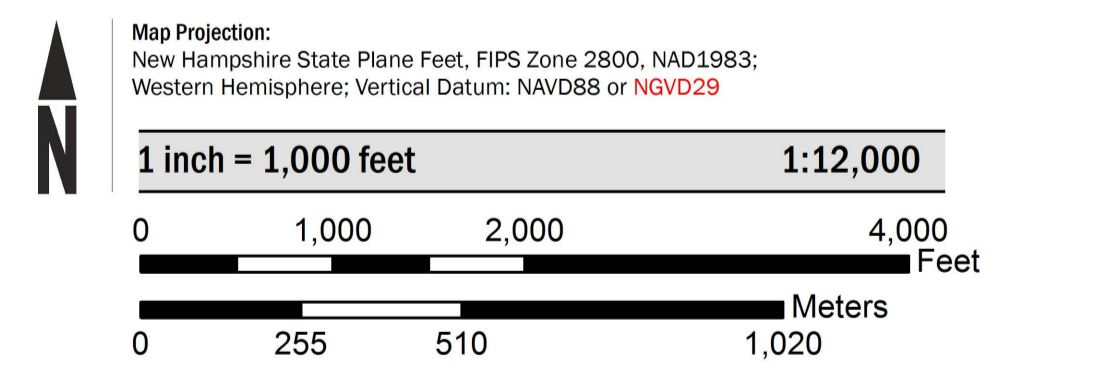
To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). This information was derived from digital orthophotography at a 2-foot resolution from photography dated 2010.

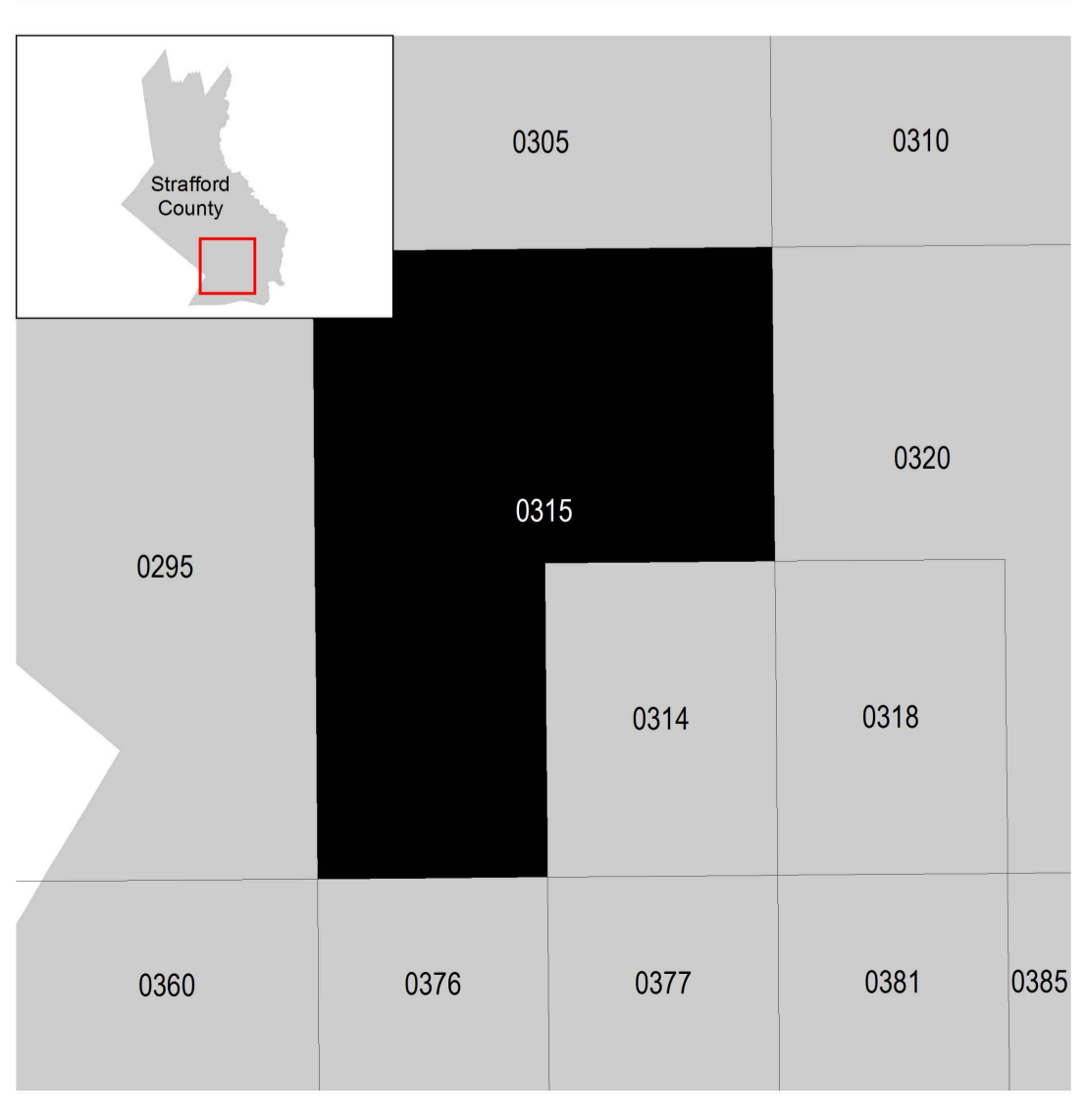
Flood elevations on this map are referenced to either the National Geodetic Vertical Datum of 1929 (NGVD29) or the North American Vertical Datum of 1988 (NAVD88). Please refer to the title section on the lower right portion of this map to determine which datum is used for each community displayed on this panel. Additional information is available in Section 3 of the accompanying Flood Insurance Study report. Note that flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 (NGVD29) and the North American Vertical Datum of 1988 (NAVD88), visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
 NOAA, NIMS12  
 National Geodetic Survey  
 SSMC-3, #9204  
 1315 East-West Highway  
 Silver Spring, Maryland 20910-3282  
 (301) 713-3242

**SCALE**



**PANEL LOCATOR**



**FEMA**  
 National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM**  
 FLOOD INSURANCE RATE MAP

**STRAFFORD COUNTY, NEW HAMPSHIRE**  
 (ALL JURISDICTIONS)

**PANEL 315 OF 405**

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BARRINGTON, TOWN OF (Vertical Datum: NGVD29)	330178	0315	E
DURHAM, TOWN OF (Vertical Datum: NAVD88)	330146	0315	E
LEE, TOWN OF (Vertical Datum: NGVD29)	330148	0315	E
MADBURY, TOWN OF (Vertical Datum: NAVD88)	330219	0315	E

**VERSION NUMBER**  
 2.2.2.1

**MAP NUMBER**  
 33017C0315E

**MAP REVISED**  
 September 30, 2015



**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles, Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was New Hampshire State Plane, FIPSZONE 2800. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov) or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3181

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

**Base map** information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles (DOQs) produced at a scale of 1:12,000 from photography dated 1998 or later.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9629 and their website at [www.fema.gov/msc](http://www.fema.gov/msc).

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at [www.fema.gov](http://www.fema.gov).



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

**ZONE A** No Base Flood Elevations determined.

**ZONE AE** Base Flood Elevations determined.

**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

**ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

**ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

**ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

**ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

**ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary  
0.2% annual chance floodplain boundary  
Floodway boundary  
Zone D boundary  
CBRS and OPA boundary  
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.  
Base Flood Elevation line and value; elevation in feet\*  
Base Flood Elevation value where uniform within zone; elevation in feet\*  
\*Referenced to the National Geodetic Vertical Datum of 1929

**A** Cross section line  
**33** Transsect line  
91° 07' 30", 32° 22' 30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere  
4270000M 1000-meter Universal Transverse Mercator grid values, zone 19  
600000 FT 5000-foot grid ticks: New Hampshire State Plane coordinate system (FIPSZONE 2800), Transverse Mercator projection  
DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)  
M1.5 River Mile MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP MAY 17, 2005  
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6629.

MAP SCALE 1" = 1000'  
500 0 1000 2000 FEET  
300 0 300 600 METERS

**Project Area**

FLOOD HAZARD INFORMATION IS NOT SHOWN ON THIS MAP IN AREAS OUTSIDE OF STRAFFORD COUNTY

**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0295D**

**FIRM FLOOD INSURANCE RATE MAP STRAFFORD COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS)**

**PANEL 295 OF 405**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

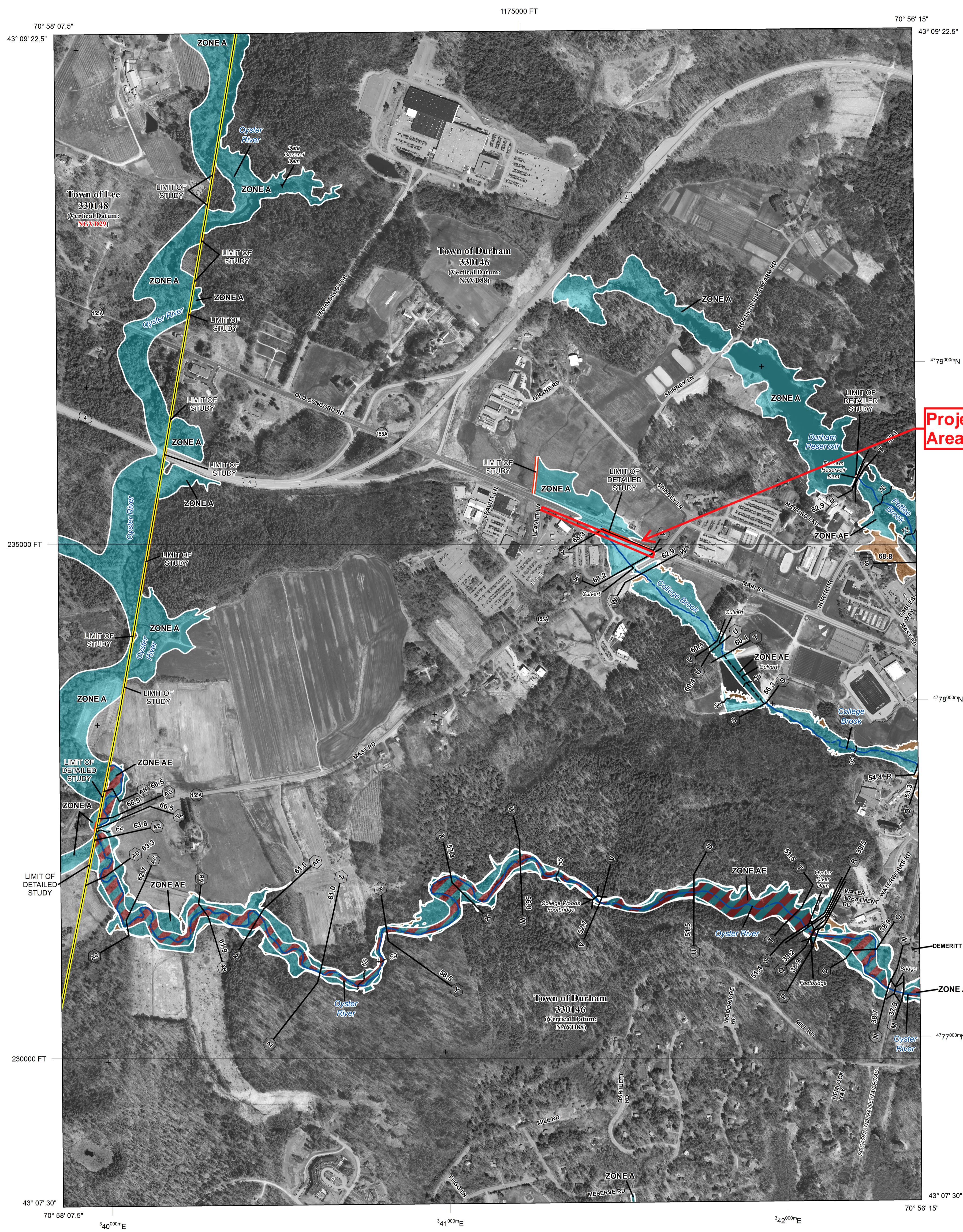
COMMUNITY	NUMBER	PANEL	SUFFIX
BARRINGTON TOWN OF	330178	0295	D
LEE TOWN OF	330148	0295	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER 33017C0295D**  
**EFFECTIVE DATE MAY 17, 2005**

Federal Emergency Management Agency





**FLOOD HAZARD INFORMATION**

**SEE FIS REPORT FOR ZONE DESCRIPTIONS**  
**THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTP://MSC.FEMA.GOV](http://msc.fema.gov)**

<b>SPECIAL FLOOD HAZARD AREAS</b>		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes. Zone X
<b>OTHER AREAS</b>		Areas Determined to be Outside the 0.2% Annual Chance Floodplain Zone X
		Area of Undetermined Flood Hazard Zone D
<b>GENERAL STRUCTURES</b>		Channel, Culvert, or Storm Sewer Accredited or Provisionally Accredited Levee, Dike, or Floodwall
		Non-accredited Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation (BFE) 18.2, 17.5
		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
<b>OTHER FEATURES</b>		Base Flood Elevation Line (BFE) 513
		Limit of Study
		Jurisdiction Boundary

**NOTES TO USERS**

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

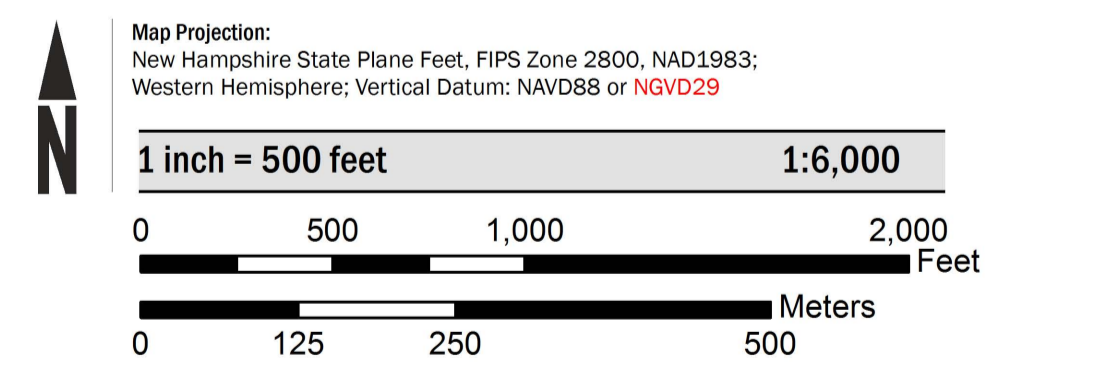
To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). This information was derived from digital orthophotography at a 2-foot resolution from photography dated 2010.

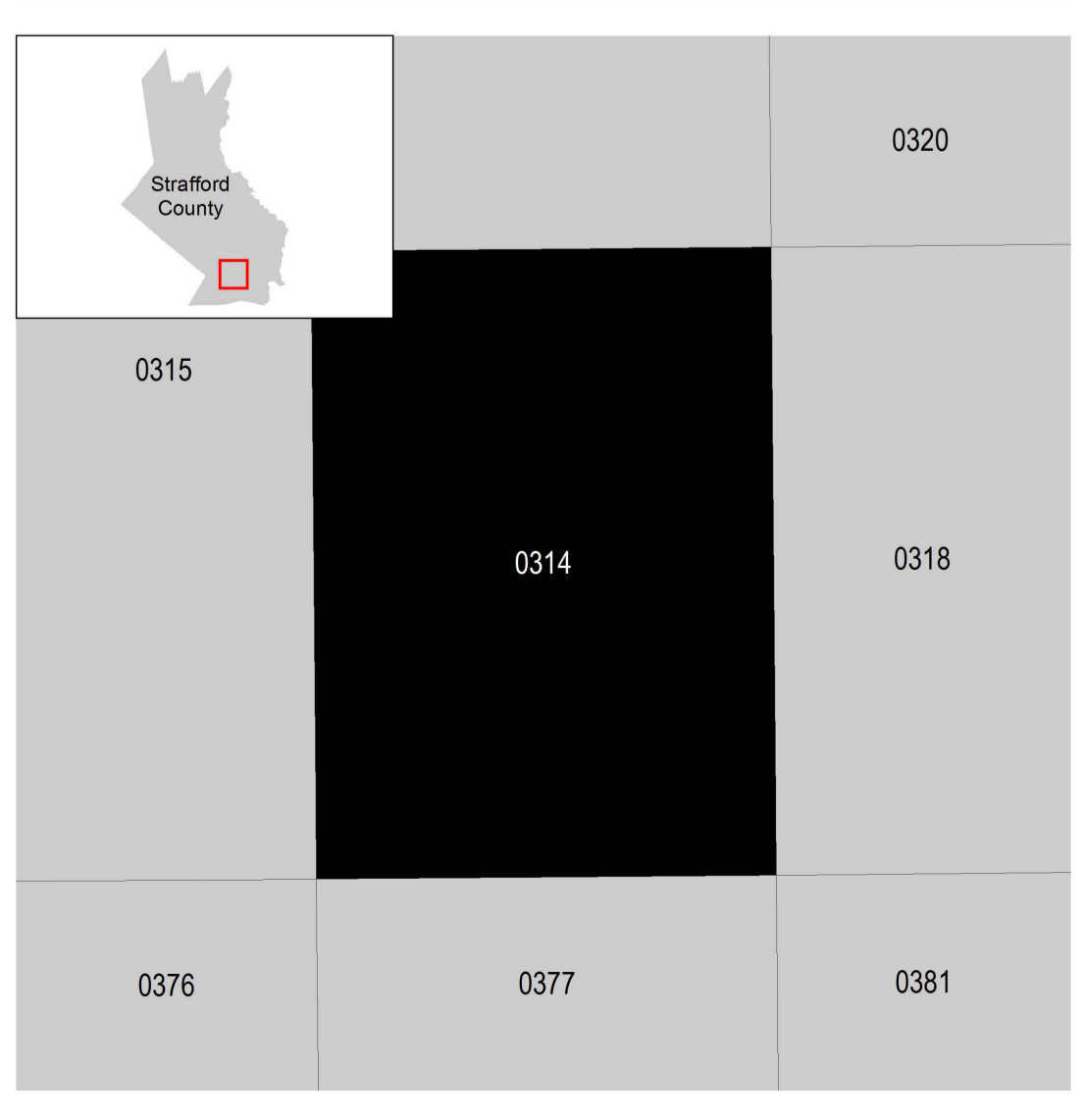
Flood elevations on this map are referenced to either the National Geodetic Vertical Datum of 1929 (NGVD29) or the North American Vertical Datum of 1988 (NAVD88). Please refer to the title section on the lower right portion of this map to determine which datum is used for each community displayed on this panel. Additional information is available in Section 3 of the accompanying Flood Insurance Study report. Note that flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 (NGVD29) and the North American Vertical Datum of 1988 (NAVD88), visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
 NOAA, NINCS12  
 National Geodetic Survey  
 SSMC-3, #9202  
 1315 East-West Highway  
 Silver Spring, Maryland 20910-3282  
 (301) 713-3242

**SCALE**



**PANEL LOCATOR**



**National Flood Insurance Program**

**NATIONAL FLOOD INSURANCE PROGRAM**  
**FLOOD INSURANCE RATE MAP**

**STAFFORD COUNTY, NEW HAMPSHIRE**  
 (ALL JURISDICTIONS)

PANEL 314 OF 405

Panel Contains:			
COMMUNITY	NUMBER	PANEL	SUFFIX
DURHAM, TOWN OF (Vertical Datum: NAVD88)	330146	0314	E
LEE, TOWN OF (Vertical Datum: NGVD29)	330148	0314	E

VERSION NUMBER  
**2.2.2.1**

MAP NUMBER  
**33017C0314E**

MAP REVISED  
**September 30, 2015**



2274.12

May 15, 2020

Attention: Review and Compliance  
NH Division of Historical Resources  
State Historic Preservation Office  
19 Pillsbury Street  
Concord NH, 03301-3570

**Re: Request for Project Review**  
**Lee Traffic Circle Water Line Extension**  
Lee, New Hampshire

To whom it may concern:

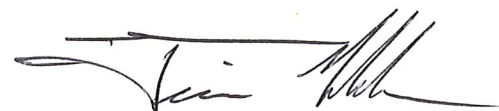
We have enclosed for the Department's review, one (1) copy of the Request for Project Review Form and supplemental material for the referenced project. Department review is requested as part of the NHDES wetlands permit application process. The proposed work includes extending a 12" water main from the existing UNH/Durham Water System to the Lee Traffic Circle area in Lee, NH. The project is authorized under NHDES Project No. 0038060 and is needed to provide municipal water to 14 MtBE-affected properties in Lee, NH.

Following review of the attached information, please use the enclosed self-addressed envelope to return the completed review form to our office.

Please contact Timothy Noble or myself with any questions.

Very truly yours,

  
Benjamin T. Dreyer, P.E.  
Project Manager

  
Timothy K. Noble, E.I.T.  
Project Engineer

BTD/tnk

Encl.

cc: April Talon, Town Engineer, Town of Durham (w/ encl.)  
Caren Rossi, Planning & Zoning Administrator, Town of Lee (w/ encl.)

ph 603.436.6192  
fx 603.431.4733  
25 Vaughan Mall  
Portsmouth, NH 03801

2274.12

May 15, 2020

Attention: Review and Compliance  
NH Division of Historical Resources  
State Historic Preservation Office  
19 Pillsbury Street  
Concord NH, 03301-3570

**Re: Request for Project Review**  
**Main Street/Route 155A Water Main Improvements**  
Durham, New Hampshire

To whom it may concern:

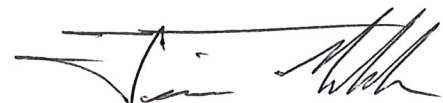
We have enclosed for the Department's review, one (1) copy of the Request for Project Review Form and supplemental material for the referenced project. Department review is requested as part of the NHDES wetlands permit application process. The proposed work includes water main improvements to the UNH/Durham Water System in Durham, NH. The project is authorized under NHDES Project No. 0038060 and is needed to provide municipal water to 14 MtBE-affected properties in Lee, NH.

Following review of the attached information, please use the enclosed self-addressed envelope to return the completed review form to our office.

Please contact Timothy Noble or myself with any questions.

Very truly yours,

UNDERWOOD ENGINEERS, INC.  
  
Benjamin T. Dreyer, P.E.  
Project Manager

  
Timothy K. Noble, E.I.T.  
Project Engineer

BTD/tnk

Encl.

cc: April Talon, Town Engineer, Town of Durham (w/ encl.)