

**BIOINVENTORY OF  
EXETER RIVER FLOODPLAIN WETLANDS  
IN THE TOWNS OF  
DANVILLE, FREMONT & SANDOWN**

Prepared for:  
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## **1. INTRODUCTION**

The Floodplain of the Exeter River in Danville, Fremont and Sandown supports a wide variety of wetland plant communities that protect and enhance water quality of the River filtering surface water and trapping and attenuating pollutants and sediments. Red Maple Forested Swamps, Oxbow Marshes, Buttonbush Swamps and Vernal Pools, can be found in floodplains and these wetlands provide critical habitat for several rare and endangered plant and wildlife species. Habitat for wood turtle, State endangered Blanding's turtle, and spotted turtle is present in these wetlands. Habitat also exists for rare bird species including sedge wren, American and least bittern, pied-billed grebe and American black duck. Mapping and inventorying these habitats will help to provide these three towns the important planning tools. The information collected from this project can be used in future grant requests and to prioritize habitat and water quality protection.

### ***Exeter River Watershed Information from Exeter River Local Advisory Committee***

Watershed Area – 67,700 acres (fresh water portion)

River Length – 33 miles

Drainage Basin – 126 square miles

Forested Land – 67%

Developed Land – 16%

Farmland – 6%

Water and Barren Land – 6%

Wetlands – 3%

This study included mapping the wetlands within the FEMA mapped floodplain of the Exeter River in the three towns, field data collection to verify plant communities and wildlife habitats, preparing a report with maps and data and presenting this information to the towns at public meetings.

### ***Study Area Information***

Total Study Area – 1882.27 acres

Overall reach of Exeter River within Study Area – approximately 15 miles almost half of the rivers reach. Most of the study area in Danville and Sandown represents the headwaters of the Exeter River and therefore is critical to the overall health of the river.

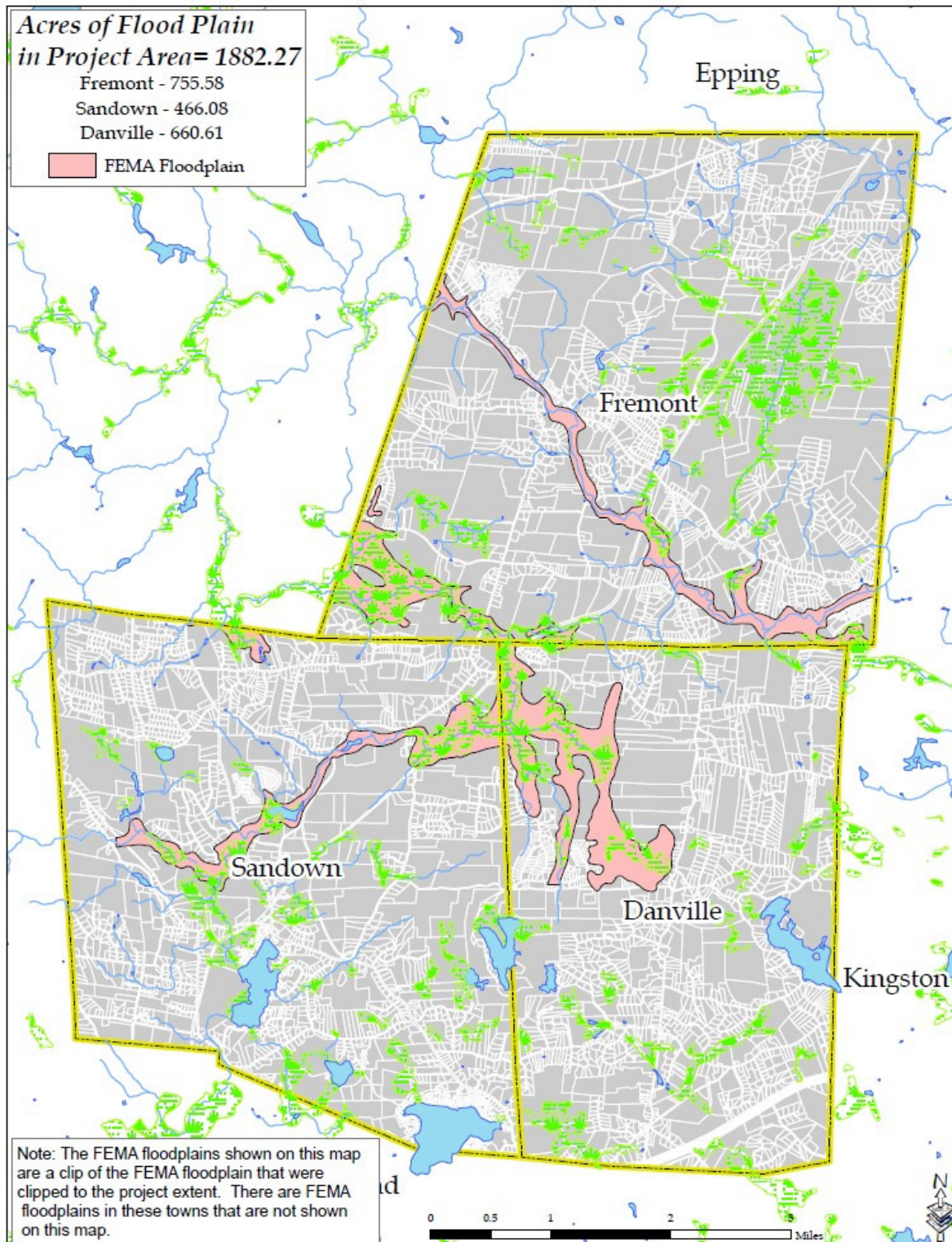
Town Reaches include:

Sandown – 5 miles

Danville – 1 mile and tributaries

Fremont – south reach 2 miles - north reach 7 miles

Portions of the FEMA mapped floodplain do not contribute to the Exeter River and in some cases are not part of its watershed.





## 2. FLOODPLAIN WETLAND MAPPING METHODOLOGY

Wetlands within the floodplain study area were mapped through aerial photo interpretation of Spring 2006 black and white stereo aerial photos with a scale of 1" = 500'. Using a stereo scope, the preliminary wetland boundaries were mapped onto the photos. Field inspections were conducted in November and December of 2010 where access was granted by private landowners or on public lands and roads. Edits to wetland boundaries and water flow were performed as a result of field work. Wetland boundaries were then digitalized onto Spring 2008 color ortho-photos with corresponding alpha numeric wetland identification.



### 3. FIELD RESEARCH AND DOCUMENTATION

Field inspections were conducted in November and December of 2010 on public land and roads and on land where owner access was granted. Previous field work conducted in 2006 (Fremont) and 2007 (Sandown) as part of town-wide wetland inventory was utilized in this study. A Wetland Data Form was completed for each wetland and includes the following data:

**Plant Community Data** was collect to compare aerial photo mapping of 2006 and 2008 with 2010 existing conditions. The presence of beaver throughout the study area can result in changes to wetland hydrology and therefore plant communities. Despite the activity the wetlands appear to remain relatively stable in their plant community types. Plant Communities were also evaluated to determine if they were rare natural communities based on the **Natural Communities of New Hampshire**. Section 5 of this report details this evaluation process.

**Wetland Hydrology Data** was collected to provide a better understanding of the flood storage capacity of each wetland and its hydroperiod. Hydroperiod is the depth and duration of flooding in a wetland. Although many of the floodplain wetlands experience flooding during string runoff and major rain events; a significant portion of the headwater areas are permanently or semi-permanently flooded by beaver dams. These wetland complexes provide critical flood storage which in turn provide down stream protection to residents and roadways. There are also several manmade dams along the river reach of this study area.

**Wildlife Habitat Data** was also collected including information on habitat structure, diversity, and potential rare and endangered species habitat. This information includes the specific features present that provide special habitat requirements for each rare species. It was also determined whether a wetland was mapped as highest ranked habitat by the NH Fish and Game Wildlife Action Plan. Section 4 of this report details this evaluation.

Other wetland features documented during field inspections included recreation use in the form of fishing, watercraft access, parking, walking biking trails and other uses. Other data collected included invasive species, water quality degradation, and restoration/stabilization potential. This last feature identifies areas where restoration opportunities may exist if there is landowner interest. Examples include wetland trail crossings that could benefit from a wooded bridge to reduce on going erosion cause by trail use.

Completed data forms for each wetland are found in Section 7 of this report. The goal of the collection of data was to provide a better understanding of the plant community, hydrology and wildlife habitat found in each wetland.

#### **4. WILDLIFE HABITAT ASSESSMENT**

Included in this section is a map of the study area in relation to the NH Wildlife Action Plan's Highest Ranked Wildlife Habitat. Significant portions of the Exeter River Floodplain Wetlands are either highest ranked habitat in the state or in the biological region. This study further evaluated the presence of potential habitat for rare and endangered species in the floodplain wetlands.

Based on information provided by the NH Natural Heritage Bureau and habitat types found in the study area wetlands, a list of rare wildlife species was generated. These species are listed below along with their special habitat requirements. The timing of the field inspections limited the potential for actual observation of most of these species, however the wetland data forms provide information regarding potential rare species habitat and whether it is present within a particular wetland. A detailed evaluation of fish habitat was not included as part of this project.

NH Natural Heritage reported the following information:

##### Wildlife Species

- Blanding's Turtle – last reported 2008 NH - Endangered
- Spotted Turtle – last reported 2008 NH - Threatened
- Vesper Sparrow – last reported 2001 NH – Special Concern
- Great Blue Heron Rookery

##### Blandings Turtle Habitat Requirements:

- Slow moving rivers with beaver ponds
- Aquatic vegetation
- Soft muddy bottoms
- Loafing logs

##### Spotted Turtle Habitat Requirements:

- Unpolluted shallow water
- Marshes
- Vernal pools
- Forested wetlands

##### Wood Turtle Habitat Requirements:

- Slow moving meandering streams
- Sandy bottoms
- Overhanging wooded banks

Photo examples of these species and their habitats are included in this section. Other species that might be present within these habitats are sedge wren (state endangered), pied-billed grebe (state endangered), and least bittern (state species of concern). Further field work during the active breeding season for these species is recommended. Appendix A includes the NH Natural Heritage Memo with rare species data.





Blandings turtles (larger with yellow necks) with painted turtles (smaller)



Wetland F-8a – Blanding's turtle habitat





Spotted turtle



Wetland F-9 – spotted turtle habitat





Wood turtle



Wetland F-3 – Wood Turtle Habitat



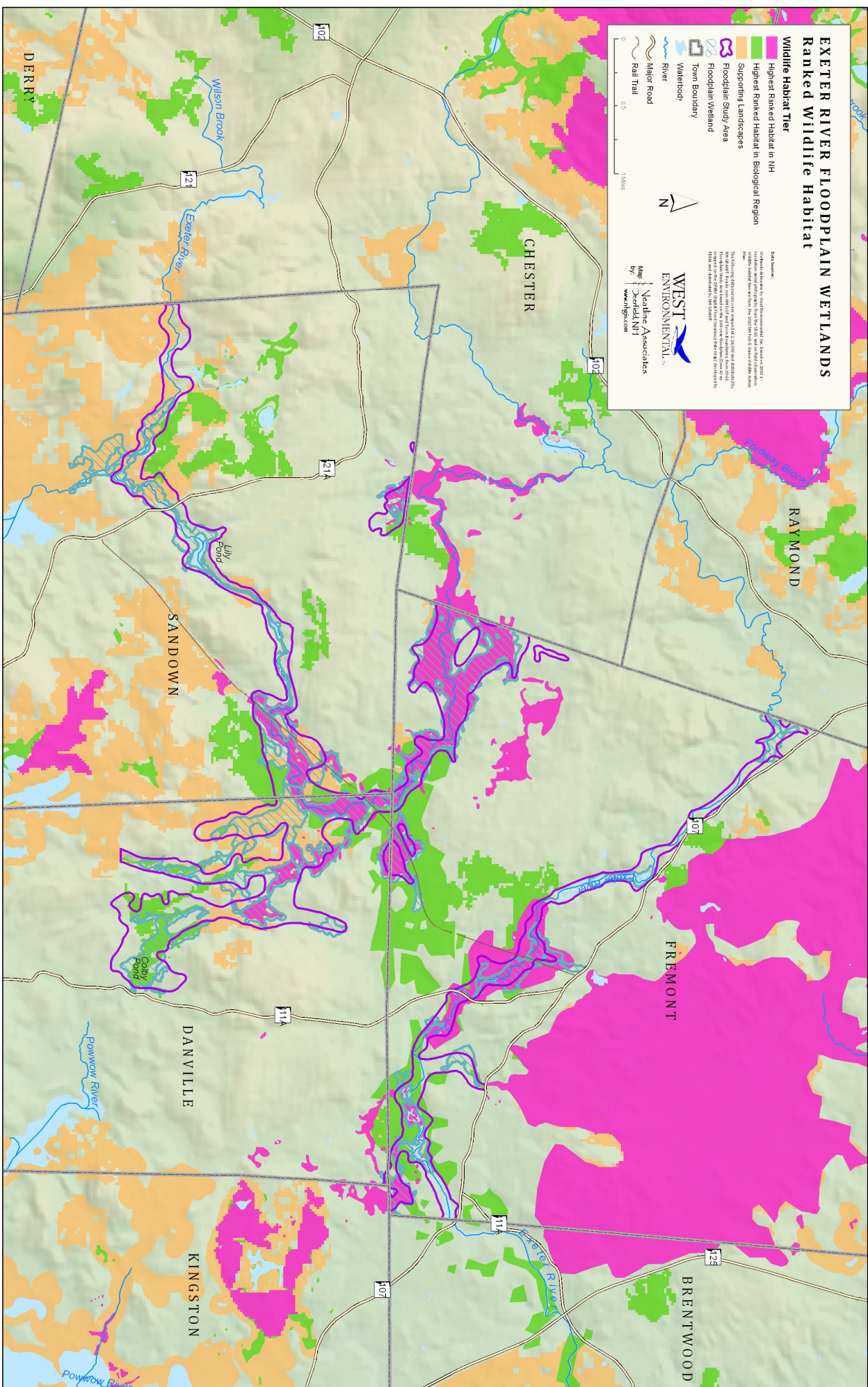


Wetland D-9a – Great Blue Heron Rookery in Colby Pond



Wetland D-5 –Great Blue Heron Rookery





## **5. RARE PLANT COMMUNITIES**

A list of rare wetland plant communities found in the study area includes the state ranking S1-S5. S5 are the most common plant communities and S1 are the rarest. Several S2 and S3 community types were identified within the study area wetlands. Identified natural communities include:

- Oxbow buttonbush swamp (S3)
- Deep emergent marsh – aquatic bed (S4)
- Vernal floodplain pool (S2)
- Leatherleaf-sheep laurel dwarf shrub bog (S3)
- Red maple floodplain forest (S4)
- Sweet pepperbush wooded fen (S2)

NH Natural Heritage also reported the following information:

Plant Species:

- Climbing Hempweed – last reported 1940
- Featherfoil – last reported 1940
- Piled-up Sedge – N/A

These are old records and may or may not be present.

Natural Communities:

- Sweet pepperbush wooded fen – last reported 2009 NH-S2
- Poor level fen/bog system – last reported 2009 NH-S3

These communities are present in Spruce Swamp in Fremont..

Photo examples of these habitat types follow.





Wetland S-2 **Oxbow Buttonbush Swamp** taken from Rail Trail



Wetland D-1 – **Buttonbush Swamp** taken from Sandown Road. This is a potential pied-billed grebe habitat.





**Wetland F-3 – Deep emergent marsh-aquatic bed community**



**Wetland F-3 – Floodplain Marsh** with potential sedge wren habitat





**Wetland F-8b – Deep emergent marsh - aquatic bed plant community**



**Wetland F-1 – Vernal floodplain pool community**





Wetland F-8a – a **Leatherleaf/sheep laurel dwarf shrub bog** in Fremont and Danville



Wetland F-10 – **Red maple floodplain swamp**





**Wetland S-3 – Red maple forested floodplain**



**Wetland D-6a – Sweet pepperbush wooded fen**



## 6. MAPPING RESULTS

Each wetland is identified by a letter and number. Tables for each town are shown below and include a total acreage of 1,118 acres of wetland. It should be noted that several wetland complexes do not flow into the Exeter River and do not appear to be within its floodplain. These wetlands include most notably the Colby Pond Wetland Complex (S-9) which flows into the Pow Wow River. Other wetlands include D-10 and D-11 in Danville and F-8a and F-8b in Fremont.












Danville Wetlands	Acres
D1	56.0
D2	64.6
D3a	21.1
D3b	8.0
<i>Total D3</i>	<i>29.1</i>
D4	19.8
D5	24.0
D6a	17.0
D6b	2.4
<i>Total D6</i>	<i>19.4</i>
D7	17.1
D8	5.7
D9a	60.6
D9b	7.3
D9c	10.6
D9d	3.7
<i>Total D9</i>	<i>82.2</i>
D10	10.7
D11	11.92
<b>Total</b>	<b>340.34</b>

Fremont Wetlands	Acres
F1	21.0
F2	19.4
F3a	27.1
F3b	34.5
<i>Total F3</i>	<i>61.6</i>
F4	4.0
F5	18.1
F6	35.1
F7	25.1
F8a	31.5
F8b	17.4
<i>Total F8</i>	<i>49.0</i>
F9	12.6
F10a	223.3
F10b	39.7
<i>Total F10</i>	<i>263.0</i>
<b>Total</b>	<b>509.0</b>

Sandown Wetlands	Acres
S1a	72.51
S1b	9.23
S1c	10.36
<i>Total S1</i>	<i>92.10</i>
S2	16.90
S3	1.00
S4	6.89
S5	4.57
S6	5.80
S7a	2.21
S7b	28.45
<i>Total S7</i>	<i>30.66</i>
S8a	18.93
S8b	56.85
S8c	14.99
<i>Total S8</i>	<i>90.77</i>
S9	20.96
<b>Total</b>	<b>269.65</b>

The Wetland Map that follow include aerial photo interpreted wetland boundaries, Wetland ID, and other mapped features shown on the map legend on the next page.

## EXETER RIVER FLOODPLAIN WETLANDS Tiles 1 & 2

-  Floodplain Wetland
-  Data Collection Points
-  Parking
-  Potential Restoration Site
-  Invasive Species
-  Rare Plant Community
-  Potential Rare Wildlife Species Habitat
-  Direction of Flow
-  Floodplain Study Area
-  Rail Trail
-  Town Boundary

### Data Sources:

Wetlands delineated by West Environmental, Inc. based on 2008 1'-resolution aerial photography from the USGS and on field observation. Features of interest (rare plants, invasive species, etc.) mapped by West Environmental, Inc. based on field observation and inference. Please see the accompanying report for more information.

The following data sources were mapped at 1:24,000 and distributed by NH GRANIT: Roads from NHDOT and Town Boundaries, from USGS. Floodplain Study Area based on the 100-year floodplain (Zone A) as mapped on the DFIRM (Digital Flood Insurance Rate Map) developed by FEMA and distributed by NH GRANIT. Background imagery is 2008 1'-resolution aerial photographs from USGS, provided by the Rockingham Planning Commission.

**WEST**   
ENVIRONMENTAL, INC.

Map  
by:  Neatline Associates  
Deerfield, NH  
[www.nhgis.com](http://www.nhgis.com)

0 1,000 Feet  


## **References**

Sperduto, D.D. and William F. Nichols. 2004 Natural Heritage Communities of New Hampshire. NH Natural Heritage Bureau, Concord, NH.

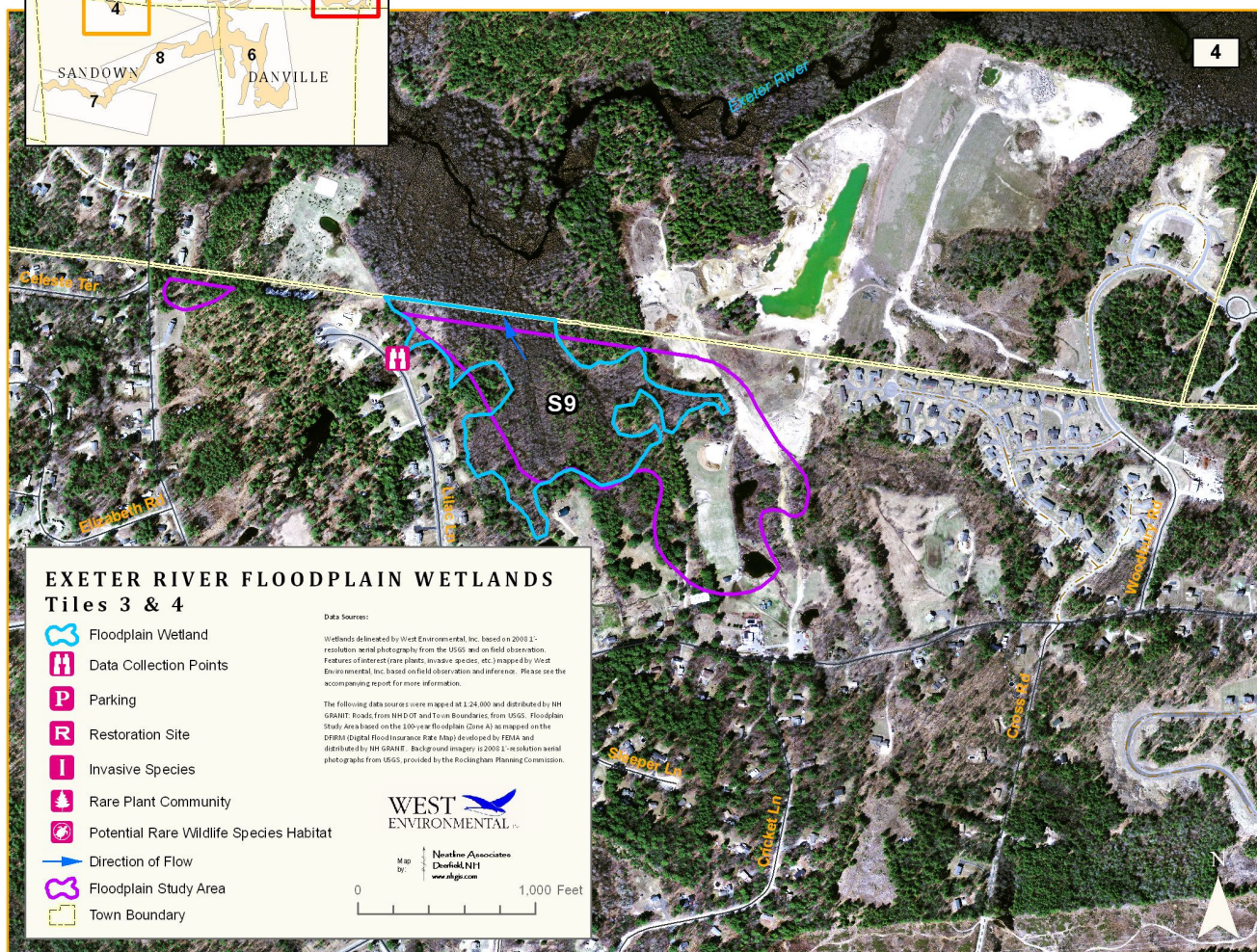
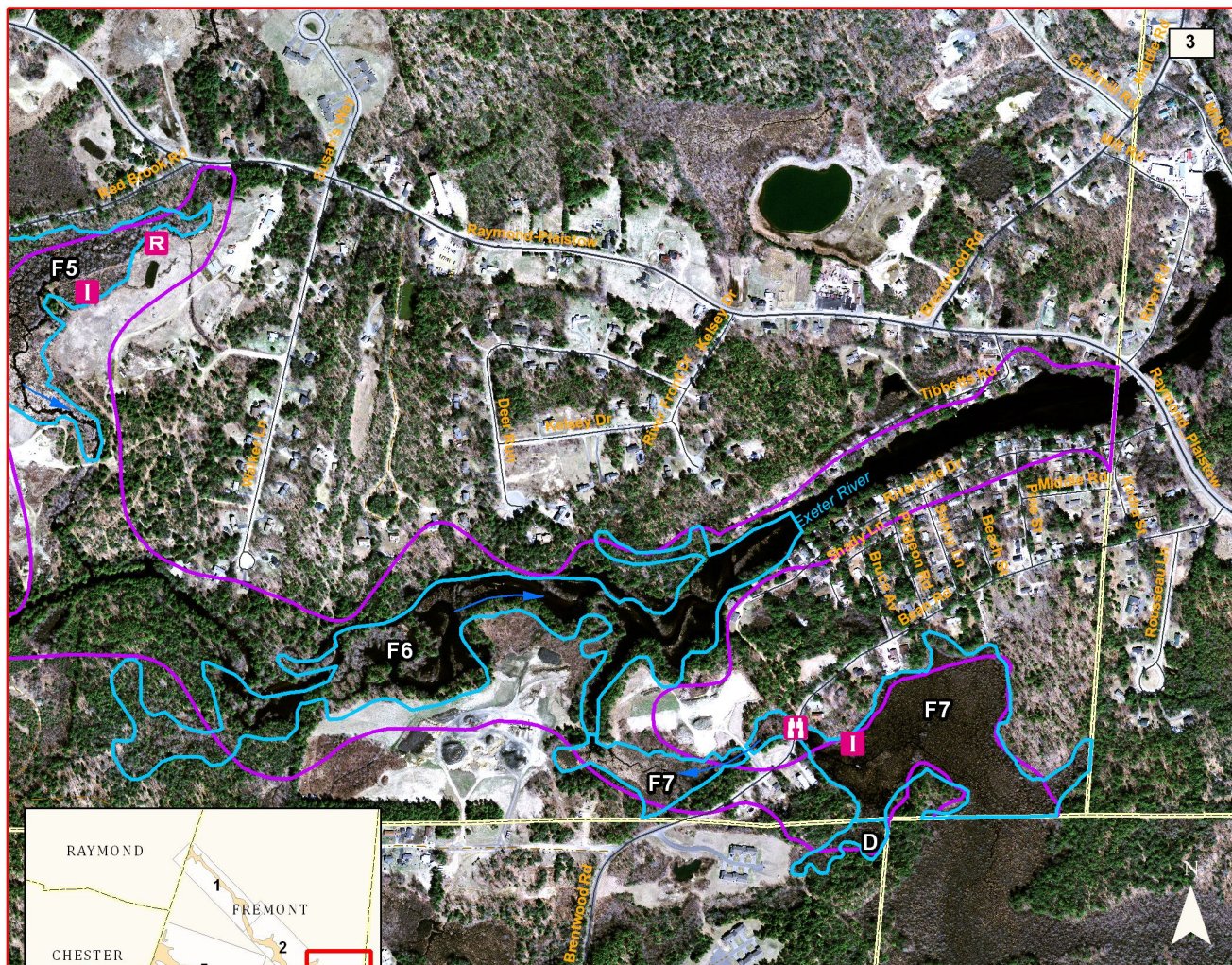
DeGraaf, Richard M. New England Wildlife Habitat, Natural History, and Distribution by Richard M. DeGraaf and Mariko Yamasaki. University Press of New England, Hanover, NH.

NH Fish & Game Wildlife Action Plan. March 2010.









## EXETER RIVER FLOODPLAIN WETLANDS Tiles 3 & 4

- Floodplain Wetland
- Data Collection Points
- Parking
- Restoration Site
- Invasive Species
- Rare Plant Community
- Potential Rare Wildlife Species Habitat
- Direction of Flow
- Floodplain Study Area
- Town Boundary

Data Sources:

Wetlands delineated by West Environmental, Inc. based on 2008 1" resolution aerial photography from the USGS and on field observation. Features of interest (rare plants, invasive species, etc.) mapped by West Environmental, Inc. based on field observation and inference. Please see the accompanying report for more information.

The following data sources were mapped at 1:24,000 and distributed by NH GRANIT: Roads from NHDOT and Toon Boundaries from USGS. Floodplain Study Area based on the 100-year Floodplain (Zone A) as mapped on the FEMA (Digital Flood Insurance Rate Map) developed by FEMA and distributed by NH GRANIT. Background imagery is 2008 1" resolution aerial photograph from USGS, provided by the Rockingham Planning Commission.

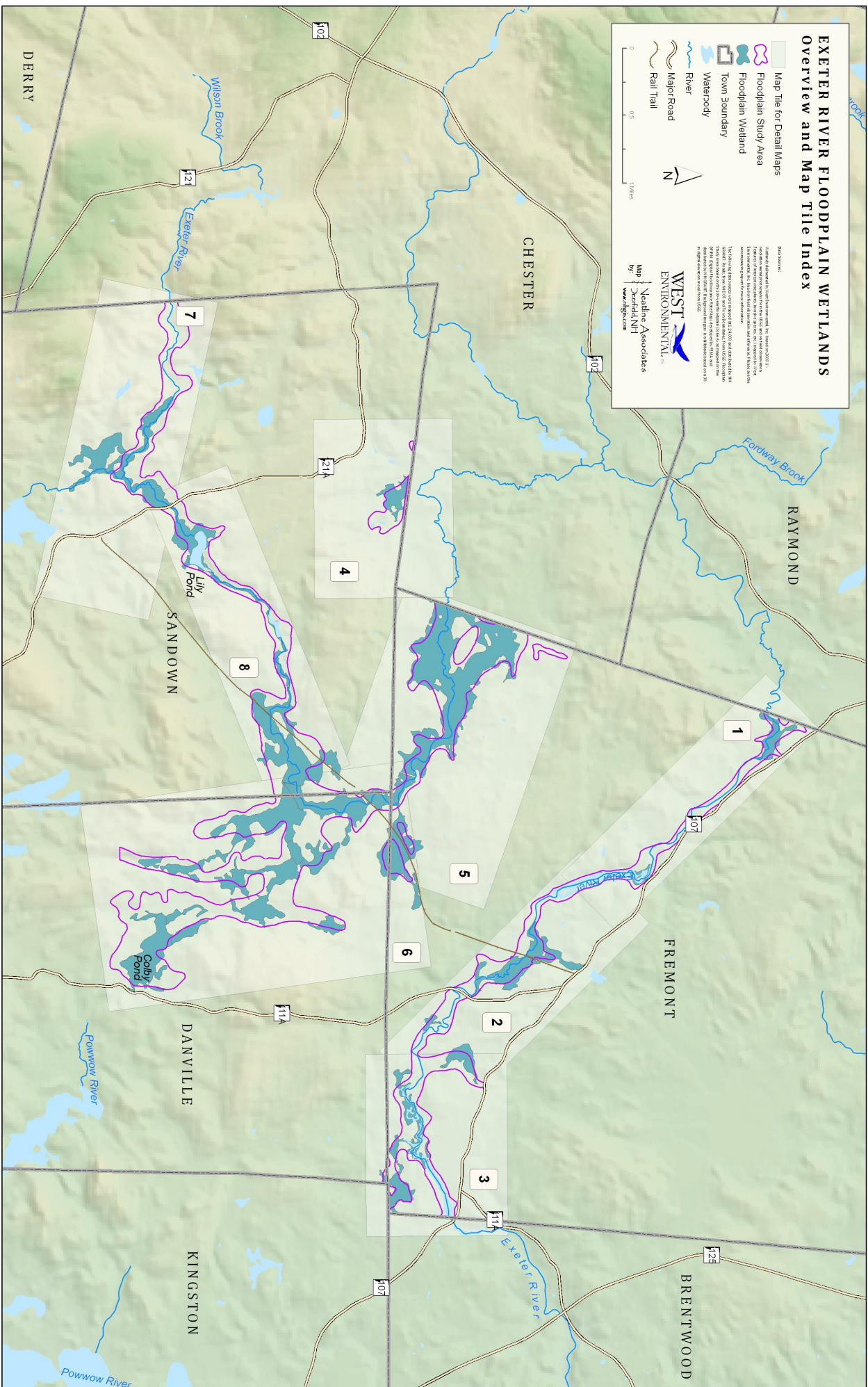
**WEST**  
ENVIRONMENTAL, INC.

Northline Associates  
Dorset, NH  
www.nhgis.com

0 1,000 Feet



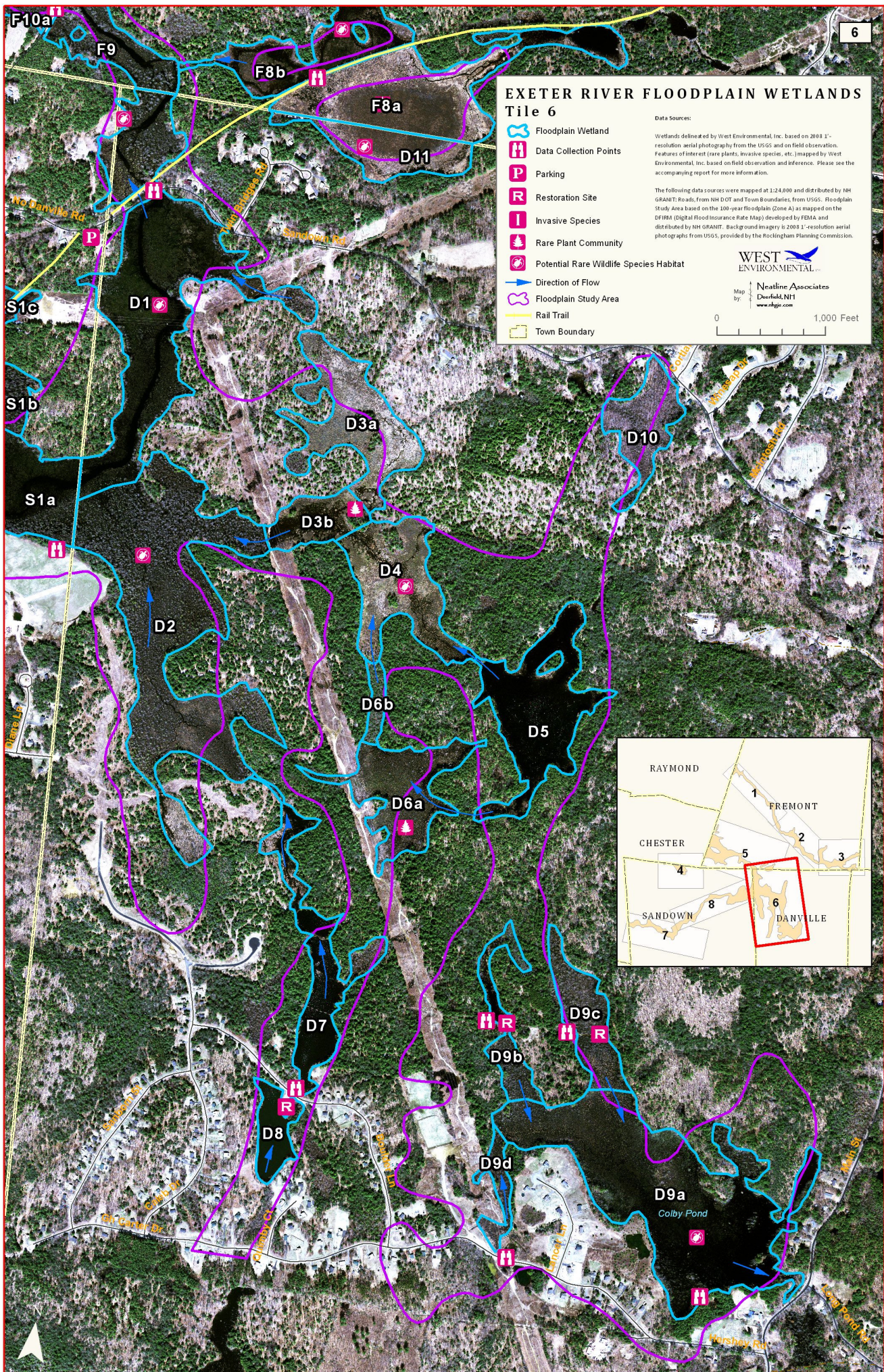
A map of the Foothill Study Area. At the top, a scale bar shows distances of 0, 0.5, and 1 Mile. Below the scale bar, a north arrow points upwards. The map features several labeled landmarks with corresponding icons: a purple butterfly for 'Foothill Study Area', a green tree for 'Floodplain Wetland', a blue house for 'Tom Town Boundary', a blue wavy line for 'River', a brown wavy line for 'Major Road', a brown line for 'Rail Trail', and a blue wavy line for 'Waterbody'. The map is oriented with North at the top.

















## Section 7 – Data Forms

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D1

CLASSIFICATION: PSS1/EM1b

ACREAGE: 56

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☒ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Dead trees

### SAPLING LAYER

### SHRUB LAYER

Buttonbush  
Winterberry  
Leatherleaf

### HERBACEOUS LAYER

Swamp loosestrife  
Tussock sedge  
Aster  
Eastern burreed  
Royal fern  
Cattail  
Beggars tick  
Blue joint grass

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Open water in river channel to 4-6' deep  
Remaining wetland 2-3' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No  
☒ Yes ☐ No

Type: Blandings & spotted turtle

Specific Habitat Features: Soft muddy bottom, aquatic vegetation, loafing logs

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

Rail trail crosses wetland downstream

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-2

CLASSIFICATION: PFO1/SS1Eb

ACREAGE: 64.6

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Dead

### SAPLING LAYER

Speckled alder

### SHRUB LAYER

Northern arrowwood  
Winterberry  
Highbush blueberry  
Maleberry

### HERBACEOUS LAYER

Tussock sedge  
Cinnamon fern  
Blue joint grass  
Purple loosestrife

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 2' deep in wetland and 3-4' deep in stream channel

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

Existing Critical Habitat

Critical Habitat Features

Type:

Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☐ No

☐ Yes ☐ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: along powerlines east of wetland

### H2O Quality Degradation

☒ Yes ☐ No

### Invasive species

☒ Yes ☐ No

List: purple loosestrife

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-3a

CLASSIFICATION: PSS1/EM1/FO1/4Eb

ACREAGE: 21.1

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☒ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☒ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
 White pine  
 Dead

### SAPLING LAYER

Red maple

### SHRUB LAYER

Sweet pepperbush  
 Highbush blueberry  
 Winterberry  
 Maleberry  
 Leatherleaf

### HERBACEOUS LAYER

Sphagnum moss  
 Sedges  
 Rushes  
 Cattail  
 Royal fern  
 Cinnamon fern

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 1-2' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
 Critical Habitat Features

Type:

Specific Habitat Features:

☒ Yes ☐ No

☐ Yes ☐ No  
☐ Yes ☐ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-3b

CLASSIFICATION: PSS3/1/EM1Eb

ACREAGE: 8

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Dead

### SAPLING LAYER

### SHRUB LAYER

Leatherleaf  
 Sweet pepperbush  
 Sheep laurel

### HERBACEOUS LAYER

Tussock sedge  
 Blue joint grass  
 Canada rush  
 Deep marsh plants

Rare Plant Community? ☒ Yes ☐ No

Describe: Leatherleaf-sheep laurel dwarf shrub bog

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 3-4' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

### Existing Critical Habitat

### Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings & spotted turtle habitat

Specific Habitat Features: Unpolluted stream, soft muddy bottom, aquatic vegetation, loafing logs

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: Trail crossing under power lines at outlet

### H2O Quality Degradation

☐ Yes ☐ No

### Invasive species

☐ Yes ☒ No

List:

power lines on west side of wetland

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-4

CLASSIFICATION: PEM1/SS1Eb

ACREAGE: 19.8

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple (sparse)

### SAPLING LAYER

Red maple (sparse)

### SHRUB LAYER

Sweet pepperbush  
Meadowsweet

### HERBACEOUS LAYER

Tussock sedge  
Blue joint grass  
Pockets of deep marsh veg.

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 1-3' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat

Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Marsh habitat for secretive bird species

Specific Habitat Features: Large shallow and deep marsh, well protected with extensive tall vegetation cover

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-5

CLASSIFICATION: PFO5/UBHb

ACREAGE: 24

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☒ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Dead

### SAPLING LAYER

Red maple

### SHRUB LAYER

Highbush blueberry (edges)

### HERBACEOUS LAYER

Deep marsh vegetation

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Permanently flooded to 4+/-' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☐ Yes ☒ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

### Existing Critical Habitat

### Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Standing dead trees for heron nesting

Specific Habitat Features: Blue heron rookery

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-6

CLASSIFICATION: PSS1

ACREAGE: 19.4

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☒ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Dead

### SAPLING LAYER

Red maple

### SHRUB LAYER

Sweet pepperbush  
Winterberry  
Highbush blueberry

### HERBACEOUS LAYER

Sphagnum moss  
Tussock sedge  
Royal fern  
Broadleafed cattail

Rare Plant Community? ☒ Yes ☐ No Describe: Sweet pepperbush wooded fen (S2)

## WETLAND HYDROLOGY DATA:

Seasonally flooded 1-2' deep by beaver dam

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

### Existing Critical Habitat

### Critical Habitat Features

### Type:

### Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☐ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: ATV trails cross wetlands in several locations

### H2O Quality Degradation

☒ Yes ☐ No

### Invasive species

☐ Yes ☒ No

List:

Powerlines along western boundary of wetland

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-7

CLASSIFICATION: PEM1/ABHb

ACREAGE: 17.1

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Dead

### SAPLING LAYER

### SHRUB LAYER

Steeplebush

### HERBACEOUS LAYER

Tussock sedge  
 Woolgrass  
 Blue joint grass  
 Eastern burreed

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 2-4' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

Existing Critical Habitat

Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings/spotted turtle habitat

Specific Habitat Features: Aquatic vegetation, soft bottom open water, loafing logs

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-8

CLASSIFICATION: PUBHb

ACREAGE: 5.7

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☒ POND  
☐ VERNAL POOL  
☒ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial

Name:

☐ Documented

Description: Man made pond in subdivision

☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent

☐ Potential

☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☒ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple (edges)

### SAPLING LAYER

### SHRUB LAYER

Sweet pepperbush

### HERBACEOUS LAYER

Broad-leaf cattail  
Sedges

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Man-made impounded pond to 6+' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☐ Yes ☒ No  
 Food Sources? ☐ Yes ☒ No  
 Cover? ☐ Yes ☒ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

Existing Critical Habitat

Critical Habitat Features

Type:

Specific Habitat Features:

☒ Yes ☐ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☒ Yes ☐ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: Fill area to road northwest side of pond

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

☐ Yes ☒ No

List:

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-9a

CLASSIFICATION: PSS1/EM1/FO5b

ACREAGE: 60.6

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☒ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name: Colby Pond  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Dead

### SAPLING LAYER

Red maple (sparse)

### SHRUB LAYER

Leatherleaf  
 Buttonbush  
 Winterberry  
 Highbush blueberry  
 Sheep laurel

### HERBACEOUS LAYER

Tussock sedge  
 Broad-leaf cattail  
 Blue joint grass  
 Swamp loosestrife  
 Bidens  
 Eastern burreed  
 Deep marsh vegetation

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Impounded to 2-4' deep behind beaver dam; flows south away from Exeter River

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

Existing Critical Habitat

Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings turtle habitat

Specific Habitat Features: Great blue heron rookery

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-9b

CLASSIFICATION: PFO1/SS1E

ACREAGE: 7.3

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☐ POND  
☒ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☒ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple

### SAPLING LAYER

Red maple

### SHRUB LAYER

Highbush blueberry  
 Winterberry  
 Maleberry  
 Red chokeberry  
 Sheep laurel  
 Meadowsweet

### HERBACEOUS LAYER

Tussock sedge  
 Cinnamon fern  
 Royal fern  
 Soft rush

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded 1-3' deep; drains south away from Exeter River

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

Existing Critical Habitat  
 Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No  
☐ Yes ☐ No

Type: Spotted turtle habitat

Specific Habitat Features: Unpolluted stream, soft muddy bottom, aquatic vegetation, vernal pools

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☐ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: Tucker Town Road Class 6 crosses wetland

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

☐ Yes ☒ No

List:

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-9c

CLASSIFICATION: PFO1Eb

ACREAGE: 10.6

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Black ash

### SAPLING LAYER

Red maple  
Black ash  
Speckled alder

### SHRUB LAYER

Winterberry  
Northern arrowwood  
Highbush blueberry  
Meadowsweet  
Silky dogwood

### HERBACEOUS LAYER

Cinnamon fern  
Sedges  
Nodding marigold  
Soft rush

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 1-3' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

### Existing Critical Habitat

### Critical Habitat Features

### Type:

### Specific Habitat Features:

☒ Yes ☐ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

☒ Yes ☐ No

Describe: Large road crossing Tucker Town Road

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

☐ Yes ☒ No

List:

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-9d

CLASSIFICATION: PSS1/EM1E

ACREAGE: 3.7

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Dead

### SAPLING LAYER

Speckled alder

### SHRUB LAYER

Winterberry  
 Sweet pepperbush  
 Poison sumac  
 Chokeberry  
 Highbush blueberry  
 Pussywillow

### HERBACEOUS LAYER

Tussock sedge  
 Broad-leaf cattail  
 Blue joint grass  
 Eastern burreed  
 Purple loosestrife

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded to 1' deep, 3' deep in stream channel

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☒

Existing Critical Habitat

Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings/spotted turtle habitat

Specific Habitat Features: Aquatic vegetation, soft muddy bottom

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☒ Yes ☐ No (potentially from ATV trails)

### Invasive species

List: Purple loosestrife

☒ Yes ☐ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: D-10

CLASSIFICATION: PFO1E

ACREAGE: 10.7

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☒ Intermittent  
☐ Potential  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Yellow birch

### SAPLING LAYER

### SHRUB LAYER

Winterberry  
Highbush blueberry

### HERBACEOUS LAYER

Cinnamon fern  
Tussock sedge

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded/saturated to less than 1' deep; drains west away from Exeter River

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☐ Yes ☒ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☐ Yes ☒ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☐ Yes ☒ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

Existing Critical Habitat  
Critical Habitat Features

Type:

Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F-8a & D-11

CLASSIFICATION: PSS1/3/EM1H

ACREAGE: 43.42

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

### SAPLING LAYER

### SHRUB LAYER

Leatherleaf  
 Steeplebush  
 Meadowsweet  
 Red maple

Bayberry  
 Sweet gale  
 Winterberry  
 Sheep laurel

### HERBACEOUS LAYER

3-way sedge  
 Canada rush  
 Soft rush  
 Swamp loosestrife  
 Swamp candle  
 Sedges  
 Eastern burreed  
 Tussock sedge

Rare Plant Community? ☒ Yes ☐ No

Describe: Leatherleaf-sheep laurel dwarf shrub bog

## WETLAND HYDROLOGY DATA:

Wetland is permanently flooded to 3' deep from beaver dams and feeds into an intermittent stream which flows west into river

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
 Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings/spotted turtle habitat

Specific Habitat Features: Soft muddy bottom, aquatic vegetation, loafing logs

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F1

CLASSIFICATION: PFO1C

ACREAGE: 21

DATE:

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☒ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
White pine

### SAPLING LAYER

Red maple

### SHRUB LAYER

Highbush blueberry  
Winterberry  
Northern arrowwood  
Silky dogwood  
Meadowsweet  
Buttonbush

### HERBACEOUS LAYER

Cinnamon fern  
Royal fern  
Marsh fern  
Sedges  
Burreed  
Pickerel weed

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded with backwaters and old oxbows up to 4' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

Existing Critical Habitat  
Critical Habitat Features

☐ Yes ☒ No

☒ Yes ☐ No  
☒ Yes ☐ No

Type: Wood turtle

Specific Habitat Features: Sandy bottom, overhanging banks

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

**WETLAND ID:** F3a & 3b    **CLASSIFICATION:** PSS1/EM1E & PFO1E    **ACREAGE:** 61.6    **DATE:** Dec 2010

## WETLAND TYPE:

- |  |  |   |  |
|--|--|---|--|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous          | <input type="checkbox"/> Evergreen                  | <input checked="" type="checkbox"/> Scrub-Shrub                      |
| <input checked="" type="checkbox"/> MARSH        | <input checked="" type="checkbox"/> Freshwater Shallow | <input checked="" type="checkbox"/> Freshwater Deep | <input type="checkbox"/> Tidal                                       |
| <input type="checkbox"/> WET MEADOW              | <input type="checkbox"/> Ditched                       | <input type="checkbox"/> Grazed                     |  |
| <input checked="" type="checkbox"/> RIVER        | <input type="checkbox"/> Upper Perennial               | <input checked="" type="checkbox"/> Lower Perennial | Order:   |
| <input type="checkbox"/> STREAM                  | <input type="checkbox"/> Perennial                     | <input type="checkbox"/> Intermittent               |  |
| <input type="checkbox"/> POND                    | Name:  | <input type="checkbox"/> Potential                  |  |
| <input type="checkbox"/> VERNAL POOL             | <input type="checkbox"/> Documented                    | <input type="checkbox"/> Abandoned                  |  |
| <input type="checkbox"/> HUMAN MADE or OTHER     | Description:   |   |  |
| <input type="checkbox"/> BEAVER FLOWAGE          | <input type="checkbox"/> Active                        |   | Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No |

## WETLAND PLANT COMMUNITY DATA

### PSS1/EM1E (F3b)

#### TREE LAYER

Red maple

#### SAPLING LAYER

Red maple

#### SHRUB LAYER

Speckled alder  
Highbush blueberry  
Northern arrowwood  
Meadowsweet  
Silky dogwood  
Buttonbush

#### HERBACEOUS LAYER

Tussock sedge  
Cinnamon fern  
Burreed  
Sweet flag  
Blue joint grass  
Marsh fern  
Tearthumb  
Reed canary grass  
Smartweed  
Pickerel weed  
Arrowhead  
Woolgrass  
Water hemlock  
3-way sedge  
Swamp candle

### PFO1E(F3a)

#### TREE LAYER

Red maple

#### SAPLING LAYER

Red maple

#### SHRUB LAYER

Speckled alder  
Buttonbush

#### HERBACEOUS LAYER

Tussock sedge  
Royal fern  
Jewelweed  
Pickerel weed

Rare Plant Community?   ☐ Yes   ☐ No    Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded by river with active floodplain oxbows and backwater areas up to 4' deep; marsh areas 1-2' deep with 3' deep depressions

## WILDLIFE HABITAT:

### Diversity

- |                             |   |
|-----------------------------|---|
| Aquatic Insect Habitat?     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Amphibian Habitat?          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Fisheries Habitat?          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Cavity Trees?               | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Food Sources?               | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Cover?                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Prox. to Beaver/Mink/Otter? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

### WAP Highest Ranked Habitat?

State ☒    Region ☐

### Existing Critical Habitat

### Critical Habitat Features

### Type:

### Specific Habitat Features:

☒ Yes   ☐ No

☒ Yes   ☐ No

☐ Yes   ☒ No

## WETLAND VALUES:

### Recreational Use

- |                        |   |
|------------------------|---|
| Parking Available?     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Watercraft Access?     | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Fishing Available?     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Hunting Permitted?     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Walking/Biking Trails? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| ATV/4 Wheel?           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

### Restoration Stabilization Potential

Describe:

☐ Yes   ☒ No

### H2O Quality Degradation

☐ Yes   ☒ No

### Invasive species

List: Reed canary grass

☒ Yes   ☐ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F4

CLASSIFICATION: PSS1/EM1E

ACREAGE: 4

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☒ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

### SAPLING LAYER

### SHRUB LAYER

Buttonbush  
 Sweet gale  
 Meadowsweet  
 Silky dogwood

### HERBACEOUS LAYER

Broad-leaved cattail  
 Swamp milkweed  
 Royal fern (on perimeter)  
 Lurid sedge  
 False nettle (on perimeter)

Rare Plant Community? ☐ Yes ☐ No Describe:

## WETLAND HYDROLOGY DATA:

Active floodplain

Seasonally flooded to 3' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☐ Yes ☒ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat

Critical Habitat Features

Type:

Specific Habitat Features:

☒ Yes ☐ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☐ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☐ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F5

CLASSIFICATION: PFO1/SS1E/EM1Eb

ACREAGE: 18.1

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☒ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
Scattered softwood

### SAPLING LAYER

Red maple

### SHRUB LAYER

Pepperbush  
Winterberry  
Northern arrowwood  
Maleberry  
Meadowsweet

### HERBACEOUS LAYER

Tussock sedge  
Cinnamon fern  
Royal fern  
Sphagnum moss  
Purple loosestrife

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

### **Pit & mound topography**

Seasonally flooded to 1-2' deep

A perennial stream bisects the southern component of this wetland, draining in a southwesterly direction towards the river

## WILDLIFE HABITAT:

### **Diversity**

- Aquatic Insect Habitat? ☐ Yes ☐ No  
 Amphibian Habitat? ☐ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☐ No  
 Cavity Trees? ☐ Yes ☐ No  
 Food Sources? ☐ Yes ☐ No  
 Cover? ☐ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☐ Yes ☐ No

### **WAP Highest Ranked Habitat?**

State ☐ Region ☒

Existing Critical Habitat  
Critical Habitat Features

Type:

Specific Habitat Features:

☒ Yes ☐ No

☐ Yes ☒ No  
☐ Yes ☒ No

## WETLAND VALUES:

### **Recreational Use**

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### **Restoration Stabilization Potential**

☒ Yes ☐ No

Describe: potentially along the eastern boundary

### **H2O Quality Degradation**

☒ Yes ☐ No (from adjacent excavated areas)

### **Invasive species**

☒ Yes ☐ No

List: purple loosestrife



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F6, F7

CLASSIFICATION: PSS1E/PEM1E

ACREAGE: 60.2

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☒ RIVER  
☒ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☒ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☒ Upper Perennial  
☒ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple

### SAPLING LAYER

Red maple (on perimeter)

### SHRUB LAYER

Winterberry  
 Buttonbush  
 Highbush blueberry

### HERBACEOUS LAYER

Tussock sedge  
 Broad-leaf cattail  
 Sedges  
 Grasses

Rare Plant Community? ☐ Yes ☐ No Describe:

## WETLAND HYDROLOGY DATA:

Large open water component 6' deep

Evident river channel (Exeter River) flowing easterly

Standing water evident in scrub-shrub wetland adjacent Old Danville Road

Associated perennial brook that drains in a northwesterly direction

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
 Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No  
☒ Yes ☐ No

Type: Wood turtle

Specific Habitat Features: Sandy bottom, overhanging banks

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☐ No  
 Watercraft Access? ☐ Yes ☐ No  
 Fishing Available? ☐ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☐ No  
 ATV/4 Wheel? ☐ Yes ☐ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List: Phragmites

☒ Yes ☐ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F8b

CLASSIFICATION: PSS/ABHb

ACREAGE: 17.4

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☐ RIVER  
☐ STREAM  
☒ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
  
☐ Potential  
  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

### SAPLING LAYER

### SHRUB LAYER

Maleberry  
 Sweet pepperbush  
 Buttonbush

### HERBACEOUS LAYER

Eastern burreed  
 Spadderdock  
 Arrow arum  
 Tussock sedge  
  
 Switchgrass  
 Pickerel weed  
 Rattlesnake grass

Rare Plant Community? ☒ Yes ☐ No

Describe:

## WETLAND HYDROLOGY DATA:

Wetland is permanently flooded to 3' deep from beaver dams and feeds into an intermittent stream which flows west into river

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☐ Yes ☒ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
 Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

Type: Blandings/spotted turtle habitat

Specific Habitat Features: Soft muddy bottom, aquatic vegetation, loafing logs

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F-9

CLASSIFICATION: PFO1/SS1E

ACREAGE: 12.6

DATE: Dec 2010

## WETLAND TYPE:

<input checked="" type="checkbox"/> WOODED SWAMP	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Evergreen	<input checked="" type="checkbox"/> Scrub-Shrub
<input type="checkbox"/> MARSH	<input type="checkbox"/> Freshwater Shallow	<input type="checkbox"/> Freshwater Deep	<input type="checkbox"/> Tidal
<input type="checkbox"/> WET MEADOW	<input type="checkbox"/> Ditched	<input type="checkbox"/> Grazed	
<input checked="" type="checkbox"/> RIVER	<input type="checkbox"/> Upper Perennial	<input checked="" type="checkbox"/> Lower Perennial	Order:
<input type="checkbox"/> STREAM	<input type="checkbox"/> Perennial	<input type="checkbox"/> Intermittent	
<input type="checkbox"/> POND	Name:	<input type="checkbox"/> Potential	
<input type="checkbox"/> VERNAL POOL	<input type="checkbox"/> Documented		
<input type="checkbox"/> HUMAN MADE or OTHER	Description:	<input type="checkbox"/> Abandoned	
<input checked="" type="checkbox"/> BEAVER FLOWAGE	<input checked="" type="checkbox"/> Active		Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
American elm

### SAPLING LAYER

Red maple

### SHRUB LAYER

Speckled alder  
Winterberry  
Northern  
arrowwood  
Meadowsweet  
Sweet pepperbush  
Maleberry  
Highbush blueberry

Bayberry  
Sweet gale  
Sweet gale  
Glossy-leaved  
buckthorn  
Buttonbush  
Dogwood  
Winterberry  
Bayberry

### HERBACEOUS LAYER

Blue joint grass  
Eastern burreed  
Tussock sedge  
  
Royal fern  
Marsh fern

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Wetland is seasonally flooded to 3-4' deep by Exeter River; river channel to 6' deep

## WILDLIFE HABITAT:

### Diversity

Aquatic Insect Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Amphibian Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Fisheries Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cavity Trees?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Food Sources?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cover?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Prox. to Beaver/Mink/Otter?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No  
☒ Yes ☐ No

Type: Blandings/spotted turtle habitat

Specific Habitat Features: Soft muddy bottom, aquatic vegetation, loafing logs

## WETLAND VALUES:

### Recreational Use

Parking Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Watercraft Access?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Fishing Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Hunting Permitted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Walking/Biking Trails?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ATV/4 Wheel?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### Restoration Stabilization Potential

Describe:

☒ Yes ☐ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: F10a, F10b

CLASSIFICATION: PFO1/SS1/EM1Eb

ACREAGE: 263

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☒ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
 American elm  
 Green ash

Black gum

### SAPLING LAYER

American elm  
 Red maple

### SHRUB LAYER

Speckled alder  
 Winterberry  
 Northern  
 arrowwood  
 Meadowsweet  
 Sweet pepperbush  
 Maleberry  
 Highbush blueberry

Bayberry  
 Sweet gale  
 Glossy-leaved  
 buckthorn  
 Buttonbush  
 Silky dogwood  
 Winterberry

### HERBACEOUS LAYER

Cinnamon fern  
 Royal fern  
 Marsh fern  
 Sphagnum moss  
 Poison ivy  
 Tussock sedge  
 Sweet flag  
 Blue joint grass  
 Water hemlock  
 Asters  
 Goldenrod  
 Joe pye weed  
 Sensitive fern  
 Virginia creeper

Rare Plant Community? ☐ Yes ☒ No

Describe:

## WETLAND HYDROLOGY DATA:

Wetland is seasonally flooded to 3-4' deep by the Exeter River and beaver dams; river channel to 6' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

Existing Critical Habitat  
 Critical Habitat Features

☐ Yes ☒ No

☒ Yes ☐ No  
☐ Yes ☐ No

Type: Wood turtle habitat

Specific Habitat Features: Sandy bottom, overhanging banks

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☐ Yes ☒ No  
 Hunting Permitted? ☒ Yes ☐ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List: Glossy leaved buckthorn

☒ Yes ☐ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: S1a, S1b,  
S1c

CLASSIFICATION: PFO1/SS1Cb;  
PSS1/EM1E

ACREAGE: 92.10

DATE: Dec 2010

## WETLAND TYPE:

<input checked="" type="checkbox"/> WOODED SWAMP	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Evergreen	<input checked="" type="checkbox"/> Scrub-Shrub
<input type="checkbox"/> MARSH	<input type="checkbox"/> Freshwater Shallow	<input type="checkbox"/> Freshwater Deep	<input type="checkbox"/> Tidal
<input type="checkbox"/> WET MEADOW	<input type="checkbox"/> Ditched	<input type="checkbox"/> Grazed	
<input checked="" type="checkbox"/> RIVER	<input type="checkbox"/> Upper Perennial	<input checked="" type="checkbox"/> Lower Perennial	Order:
<input type="checkbox"/> STREAM	<input type="checkbox"/> Perennial	<input type="checkbox"/> Intermittent	
<input type="checkbox"/> POND	Name:	<input type="checkbox"/> Potential	
<input type="checkbox"/> VERNAL POOL	<input type="checkbox"/> Documented		
<input type="checkbox"/> HUMAN MADE or OTHER	Description:	<input type="checkbox"/> Abandoned	
<input checked="" type="checkbox"/> BEAVER FLOWAGE	<input checked="" type="checkbox"/> Active		Dam Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## WETLAND PLANT COMMUNITY DATA

(S1a/b) PFO1/SS1E

### TREE LAYER

Red maple  
Black gum

### SAPLING LAYER

Red maple

### SHRUB LAYER

Sweet pepperbush  
Highbush blueberry

Winterberry  
Silky dogwood  
Speckled alder

### HERBACEOUS LAYER

Wood reed  
Cinnamon fern  
Tussock sedge  
Phragmites

Sedges  
Royal fern  
Blue joint grass

(S1c) PSS1/EM1E

### TREE LAYER

### SAPLING LAYER

### SHRUB LAYER

Meadowsweet  
Winterberry

Steeplebush  
Speckled alder

### HERBACEOUS LAYER

Sedges  
Large leaf cranberry

Woolgrass  
Rushes

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Seasonally flooded by the Exeter River and flooded by beaver dams up to 3-4' deep  
Active floodplain

## WILDLIFE HABITAT:

### Diversity

Aquatic Insect Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Amphibian Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Fisheries Habitat?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cavity Trees?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Food Sources?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cover?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Prox. to Beaver/Mink/Otter?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

Existing Critical Habitat  
Critical Habitat Features

☒ Yes ☐ No

☒ Yes ☐ No  
☐ Yes ☐ No

Type: Blandings/spotted turtle

Specific Habitat Features: Soft muddy bottom, aquatic vegetation,  
loafing logs

## WETLAND VALUES:

### Recreational Use

Parking Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Watercraft Access?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Fishing Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Hunting Permitted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Walking/Biking Trails?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ATV/4 Wheel?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List: phragmites

☒ Yes ☐ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: S2

CLASSIFICATION: PSS1E

ACREAGE: 16.9

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☒ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☐ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☒ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☒ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

### SAPLING LAYER

### SHRUB LAYER

Buttonbush  
 Black willow

### HERBACEOUS LAYER

Tussock sedge  
 Blue joint grass  
 Deep marsh species

Rare Plant Community? ☒ Yes ☐ No Describe: **Buttonbush oxbow swamp**

## WETLAND HYDROLOGY DATA:

Flooded to 3-4' deep

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☒ Region ☐

### Existing Critical Habitat

### Critical Habitat Features

Type: Blandings & spotted turtle

Specific Habitat Features: Soft muddy bottom, aquatic vegetation, loafing logs

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☒ Yes ☐ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☒ Yes ☐ No (potentially from adjacent development)

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: S3

CLASSIFICATION: PFO1C

ACREAGE: 1

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☒ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☒ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☒ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple  
 White pine  
 Red oak

### SAPLING LAYER

Red maple

### SHRUB LAYER

Highbush blueberry

### HERBACEOUS LAYER

Cinnamon fern  
 Sedges

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Floodplain wetland that floods during high water but is dry the rest of the year

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

### Existing Critical Habitat

### Critical Habitat Features

### Type:

### Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No

# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: S4

CLASSIFICATION: PSS1C

ACREAGE: 6.89

DATE: Dec 2010

## WETLAND TYPE:

- ☒ WOODED SWAMP  
☐ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☐ Freshwater Shallow  
☐ Ditched  
☒ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☐ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☒ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple

### SAPLING LAYER

### SHRUB LAYER

Silky dogwood  
Speckled alder  
Buttonbush

### HERBACEOUS LAYER

Sedges  
Grasses  
Eastern burreed

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Semipermanently flooded by old dam

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

Existing Critical Habitat  
Critical Habitat Features

Type:

Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☒ Yes ☐ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☒ Yes ☐ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List:

☐ Yes ☒ No



# WETLAND INVENTORY DATA FORM – EXETER RIVER BIOINVENTORY

WETLAND ID: S5

CLASSIFICATION: PEM1/SS1/ABH

ACREAGE: 4.57

DATE: Dec 2010

## WETLAND TYPE:

- ☐ WOODED SWAMP  
☒ MARSH  
☐ WET MEADOW  
☒ RIVER  
☐ STREAM  
☐ POND  
☐ VERNAL POOL  
☐ HUMAN MADE or OTHER  
☐ BEAVER FLOWAGE

- ☐ Deciduous  
☒ Freshwater Shallow  
☐ Ditched  
☒ Upper Perennial  
☐ Perennial  
 Name:  
☐ Documented  
 Description:  
☐ Active

- ☐ Evergreen  
☒ Freshwater Deep  
☐ Grazed  
☐ Lower Perennial  
☐ Intermittent  
☐ Potential  
☐ Abandoned

- ☐ Scrub-Shrub  
☐ Tidal

Order:

Dam Present ☐ Yes ☐ No

## WETLAND PLANT COMMUNITY DATA

### TREE LAYER

Red maple

### SAPLING LAYER

### SHRUB LAYER

Highbush blueberry  
 Northern arrowwood  
 Glossy leaved buckthorn

### HERBACEOUS LAYER

Water willow  
 Tussock sedge  
 Cinnamon fern  
 Purple loosestrife  
 Deep marsh species

Rare Plant Community? ☐ Yes ☒ No Describe:

## WETLAND HYDROLOGY DATA:

Impounded to 6' deep behind dam with areas of 2-4' deep ponding and river channel at upstream end

## WILDLIFE HABITAT:

### Diversity

- Aquatic Insect Habitat? ☒ Yes ☐ No  
 Amphibian Habitat? ☒ Yes ☐ No  
 Fisheries Habitat? ☒ Yes ☐ No  
 Cavity Trees? ☒ Yes ☐ No  
 Food Sources? ☒ Yes ☐ No  
 Cover? ☒ Yes ☐ No  
 Prox. to Beaver/Mink/Otter? ☒ Yes ☐ No

### WAP Highest Ranked Habitat?

State ☐ Region ☐

### Existing Critical Habitat

### Critical Habitat Features

### Type:

### Specific Habitat Features:

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

## WETLAND VALUES:

### Recreational Use

- Parking Available? ☐ Yes ☒ No  
 Watercraft Access? ☐ Yes ☒ No  
 Fishing Available? ☒ Yes ☐ No  
 Hunting Permitted? ☐ Yes ☒ No  
 Walking/Biking Trails? ☐ Yes ☒ No  
 ATV/4 Wheel? ☐ Yes ☒ No

### Restoration Stabilization Potential

Describe:

☐ Yes ☒ No

### H2O Quality Degradation

☐ Yes ☒ No

### Invasive species

List: Purple loosestrife, glossy buckthorn, Japanese knotweed (on road slope), barberry (on road slope)

☒ Yes ☐ No

## Section 8 - Photologs





1. Wetland D-1 is a large buttonbush swamp south of Sandown Road.



2. Wetland D-1 – This is a view of the rail trail bridge over the Exeter River at the Danville-Fremont town line.





3. Wetland D-2 is a large forested wetland complex in the background behind this new house on Caleb Drive.



4. Wetland D-4 is a remote marsh wetland complex.





5. Wetland D-4 – this wetland provides potential habitat for secretive marsh bird species.



6. Wetland D-5 is an active beaver pond.





7. Wetland D-5 has a great blue heron rookery. This tree has three nests in it.



8. Wetland D-6a is a sweet pepperbush wooded fen.





9. This portion of Wetland D-6a under the power lines is a cattail marsh.



10. Wetland D-6b is a hemlock dominated forested wetland.





11. Wetland D-7a is an active beaver flowage with shallow and deep marsh habitat.



12. Wetland D-8 is also an active beaver pond with a small dam at its outlet.





13. Wetland D-8 – This beaver was sunning itself in the December morning sunlight.



14. The Restoration Site in Wetland D-8 is used as a parking area.





15. Great Blue Heron Rookery in Wetland D-9a (Colby Pond) – this rookery has seven nests.



16. Wetland D-10 is a Red Maple Swamp that flows away from the Exeter River Floodplain.





17. This photo is looking south from the rail trail in Fremont at Wetland D-11 which is in the background.





**Wetland F-1 – Vernal floodplain pool community**



**Wetland F-3 – Deep emergent marsh-aquatic bed community**





1. Wetland F-3 – this is a view of the wetland associated with the tributary stream that flows into Wetland 3 from the north.



2. Wetland F-4





3. Wetland F-4 is an old oxbow channel of the river.



4. Wetland F-5 is a forested wetland complex.





5. Wetland F-6 is a shallow and deep marsh wetland. A small stand of invasive phragmites (left) borders the marsh.



6. Wetland F-7 is an open water component of the Exeter River.





7. Wetland F-8a includes a leatherleaf-sheep laurel dwarf shrub bog.



8. This photo is looking north from the rail trail at the outlet of Wetland F-8b where it flows under the trail into Wetland F-8a.





9. Wetland F-8b is another buttonbush swamp.



10. Wetland F-9 is a thick scrub shrub/forested wetland complex.





11. Wetland F-10 is a very large forested floodplain swamp. This is the largest wetland within the study area at 263 acres.





1. Wetland S-1a looking down from the rail trail where small stands of invasive phragmites border the channel in the background.



2. Wetland S-1a is a very large scrub-shrub wetland complex bordering the river.





3. Portions of Wetland S-1a are a forested floodplain wetland.



4. Wetland S-2 is an oxbow buttonbush swamp.





5. Wetland S-2 – the seed of buttonbush shrubs are an important food source for waterfowl.



6. This photo shows Wetland S-3 from Odell Road Bridge.





7. There is a USGS gauge on the Exeter River at the Odell Road Bridge.



8. Wetland S-4 is a silky dogwood scrub-shrub wetland upstream of the old mill site.





9. Wetland S-4 – this is a view of the stonework at the old mill site which is now a small park.



10. This is a view of Wetland S-5 from Fremont Road. The dam is in the left background of the photo. An emergent marsh borders the river behind the dam.





11. Wetland S-5 has invasive species (Japanese knotweed) on the road slopes adjacent to the wetland.



12. Wetland S-6 from Fremont Road at another old mill site.





13. Wetland S-6 in the background from Fremont road where the river flows past fields.



14. Wetlands S-7a and S-7b are scrub-shrub forested wetlands.





15. Wetlands S-7a and S-7b include a frozen river near Lilly Pond.



16. Wetlands S-8a, 8b & 8c – a large scrub-shrub wetland complex where a tributary stream joins the river.





17. Wetlands S-8a, 8b & 8c – this photo shows coyote tracks across the frozen river.



18. Wetland S-9 is a forested wetland south of the Exeter River on the Chester town line.

## Appendix A





## NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DRED - DIVISION OF FORESTS & LANDS

PO Box 1856 -- 172 PEMBROKE ROAD, CONCORD, NH 03302-1856

PHONE: (603) 271-2214 FAX: (603) 271-6488

**To:** Mark West, West Environmental Inc  
122 Mast Road Suite 6  
Lee NH 03824

**From:** Sara Cairns, NH Natural Heritage Bureau

**Date:** 2010-12-09

**Re:** Review by NH Natural Heritage Bureau of request dated 2010-12-08

**NHB File ID:** 871

**Project type:** Landowner Request

**Town:** Fremont, Sandown, Danville

**Location:** 100-year floodplain in the towns of Fremont, Sandown, and Danville

I have searched our database for records of rare species and exemplary natural communities on the property(s) identified in your request. Our database includes known records for species officially listed as Threatened or Endangered by either the state of New Hampshire or the federal government, as well as species and natural communities judged by experts to be at risk in New Hampshire but not yet formally listed.

NHB records on the property(s):

	Mapping Precision	% within tract	Last Reported	Listing Status		Conservation Rank	
Invertebrate Species				Federal	NH	Global	State
Brook Floater ( <i>Alasmodonta varicosa</i> )	Good	40	1953	--	E	G3	S1
Vertebrate species (For more information on animal species, contact Kim Tuttle, NH F&G at 271-6544)				Federal	NH	Global	State
Banded Sunfish ( <i>Enneacanthus obesus</i> )	Good	102	2006	--	SC	G5	S3
Blanding's Turtle ( <i>Emydoidea blandingii</i> )	Good	18	2008	--	E	G4	S1
Bridled Shiner ( <i>Notropis bifrenatus</i> )	Good	95	2006	--	T	G3	S2
Great Blue Heron (Rookery) ( <i>Ardea herodias</i> )	Good	100	1990	--	--	G5	S4B
Redfin Pickerel ( <i>Esox americanus americanus</i> )	Good	100	2000	--	SC	T5	S3
Vesper Sparrow ( <i>Poocetes gramineus</i> )	Good	39	2001	--	SC	G5	S2B

**NOTE:** This review *cannot* be used to satisfy a permit or other regulatory requirement to check for rare species or habitats that could be affected by a proposed project, since it provides detailed information only for records actually on the property.



# NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DRED - DIVISION OF FORESTS & LANDS

PO Box 1856 -- 172 PEMBROKE ROAD, CONCORD, NH 03302-1856

PHONE: (603) 271-2214 FAX: (603) 271-6488

NHB records within one mile of the property(s):

	Last Reported	Listing Status		Conservation Rank	
Vertebrate species (For more information on animal species, contact Kim Tuttle, NH F&G at 271-6544)		Federal	NH	Global	State
Great Blue Heron (Rookery) ( <i>Ardea herodias</i> )	1986	--	--	G5	S4B
Redfin Pickerel ( <i>Esox americanus americanus</i> )	1984	--	SC	T5	S3
Banded Sunfish ( <i>Enneacanthus obesus</i> )	2005	--	SC	G5	S3
Swamp Darter ( <i>Etheostoma fusiforme</i> )	1984	--	SC	G5	S3
Spotted Turtle ( <i>Clemmys guttata</i> )	2008	--	T	G5	S2
Blanding's Turtle ( <i>Emydoidea blandingii</i> )	2009	--	E	G4	S1
Natural Community		Federal	NH	Global	State
Sweet pepperbush wooded fen	2009	--	--	--	S2
Poor level fen/bog system	2009	--	--	--	S3
Plant species		Federal	NH	Global	State
Climbing Hempweed ( <i>Mikania scandens</i> )	1940	--	E	G5	S1
Featherfoil ( <i>Hottonia inflata</i> )	1940	--	E	G4	S1
Piled-up Sedge ( <i>Carex cumulata</i> )	0	--	T	G4	S2

Listing codes: T = Threatened, E = Endangered SC = Special Concern

Rank prefix: G = Global, S = State, T = Global or state rank for a sub-species or variety (taxon)

Rank suffix: 1-5 = Most (1) to least (5) imperiled. "--", U, NR = Not ranked.

B = Breeding population, N = Non-breeding. H = Historical, X = Extirpated.

A negative result (no record in our database) does not mean that no rare species are 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.

**NOTE: This review *cannot* be used to satisfy a permit or other regulatory requirement to check for rare species or habitats that could be affected by a proposed project, since it provides detailed information only for records actually on the property.**