

Town of Fremont Wetland Evaluation Report

Prepared for:

Town of Fremont, NH
Conservation Commission



September 2007

Prepared by:

WEST 
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with assistance from


New Hampshire
Estuaries Project

TABLE OF CONTENTS

- I. Introduction
- II. Methodology
 - Mapping
 - Wetland Evaluation
- III. Findings
- IV. Recommendations
 - Prime Wetland Candidates
 - Vernal Pool Survey
 - Wetland Restoration Projects
 - Wetland Ordinance Revisions
- V. Aerial Photo Wetland Maps
 - Wetland Inventory Data Forms
 - Photo Documentation
- Appendices
 - A) Wetland Function/Value Assessment Data Forms
 - B) Natural Heritage Bureau List for Fremont
 - C) Maps & Excerpts from The Land Conservation Plan for New Hampshire's Coastal Watersheds
 - D) Aquifer Map

I. INTRODUCTION

West Environmental, Inc. (WEI) has prepared this report to document the evaluation of 55 wetlands within the Town of Fremont, New Hampshire. This is a follow-up study to the WEI study of Spruce Swamp in 2003. These wetlands were previously identified in the Fremont Wetland Mapping Report (April 2007), also prepared by WEI. The field work for this evaluation was conducted from February to September 2007 and included the verification of potential prime wetland boundaries.

The purpose of this wetland evaluation was to gain a better understanding of the wetland resources within the Town of Fremont and to identify wetlands that qualify for Prime Wetland Designation. Each wetland was analyzed to determine its relative importance within the town and the region. The information in this report may also be used as a planning tool by town officials to identify and protect natural resources within the community. The wetland boundaries identified on the aerial photo overlays are for planning and Prime Wetland Designation purposes and are not to be construed as site specific wetland delineations per State of New Hampshire regulations.

The Town of Fremont can utilize this report as the basis for selecting Prime Wetland candidates for designation in accordance with the requirements of RSA 482-A:15 and Chapter Wt 700 of the New Hampshire Department of Environmental Services (NHDES) administrative rules. These regulations allow for designation of "wetlands of significant value...because of their uniqueness, fragility and unspoiled character."

The following sections of this report document the functions and values of 55 wetlands and include the supporting information used to make these determinations.

II. METHODOLOGY

West Environmental, Inc. identified 57 wetlands for the inventory in the Fremont Wetland Mapping Report (April 2007). These wetlands all met the following criteria:

- State of New Hampshire jurisdictional wetlands with the presence of hydric soils, hydrophytic vegetation and wetland hydrology

Wetland Mapping

Fifty-seven wetland systems were mapped onto stereo black & white photographs with a flight date of March 28, 2006. Individual wetlands components were classified using the US Fish and Wildlife-Cowardin classification system. WEI staff then field inspected accessible wetlands during the 2007 field season. The wetland boundaries were verified to assess general accuracy and hydrologic connections. Wetland boundary revisions were drawn directly onto the aerial photos. These color aerial photo overlays are included in the report and the boundary for each wetland is shown in dark blue. The wetland boundaries were not flagged "on the ground" in the field and do not constitute a wetland delineation according to the 1987 Corps of Engineers Wetland Delineation Manual, Technical report Y-87-1. These wetland boundaries are not appropriate for project permitting by local, State or Federal Agencies. Two wetlands were not accessible in the field, Wetlands #51 & 57.

Wetland Evaluation

The Wetland Inventory Data Form includes wetland plant community descriptions, verifications of NRCS poorly and very poorly drained soil mapping, and information on field observations of wetland hydrology. This form also includes wildlife habitat observations. A photolog of the various wetland components is included to illustrate the physical features of each wetland. The wetland systems were evaluated utilizing a wetland assessment methodology developed by WEI based in part on the US Army Corps of Engineers New England Divisions Highway Methodology Workbook Supplement. This evaluation is based on collection of data on the physical characteristics of the wetland through field inspections, research of existing information and best professional judgment. This methodology provides a better understanding of the physical characteristics of each wetland for both its function and values.

The physical features were evaluated to determine if a function is present. The wetland is then evaluated to determine if the function present is a principal function of that wetland based on comparison to other wetlands in the region and using professional judgment.

Wetland Inventory Functional Value Assessment Data Forms were completed for each wetland (See Appendix A). This assessment evaluates the following wetland functions:

- ***Groundwater Recharge/Discharge*** – This function includes the ability of a wetland to provide recharge of surface water into the ground and/or discharge groundwater into surface waters.
- ***Flood-flow Alteration*** – This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.
- ***Sediment/Toxicant/Pathogen Retention*** – The presence of this function reduces or prevents degradation of water quality because the wetland acts as a trap for sediments, toxicants or pathogens.
- ***Nutrient Removal/Retention Transformation*** – This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering surface waters or aquifers.
- ***Product Export*** – This function relates to the effectiveness of the wetland to produce food or usable products for human or other living organisms.
- ***Sediment/Shoreline Stabilization*** – This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.
- ***Wildlife Habitat*** – This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with the wetland and the wetland edge (includes resident and migratory species).

The assessment also evaluates the following values associated with wetlands:

- ***Recreational Value*** – This value considers the effectiveness of the wetland and associated watercourses to provide recreation opportunities such as canoeing, fishing, hunting, hiking and other passive recreational activities. This does not include any activities that involve wheeled or tracked vehicles.
- ***Educational/Scientific Value*** – This value considers the effectiveness of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.
- ***Uniqueness/Heritage*** – This value includes such things as archeological sites, unusual aesthetic quality, historical features, or unique plants, animal or unusual geologic features.

An assessment of Restoration Potential was also performed for each wetland

Restoration Stabilization Potential – This assessment includes evaluating the restoration potential of wetlands that have ecological deterioration due to human activity. This includes water quality impacts, invasive species, ditching and fill from erosion or human disturbance.

A comparison of the functions and values used in this study with the Method for Comparative Evaluation of Non-tidal Wetlands in New Hampshire (1991) (NH Method) is shown below.

	<u>Wetland Functions/Values</u>	<u>NH Method</u>
1	Groundwater Recharge/Discharge	Groundwater Use Potential
2	Floodflow Alteration	Flood Control Potential
3	Sediment/Toxicant/Pathogen Retention	Sediment Trapping
4	Nutrient Removal/Retention Transformation	Nutrient Attenuation
5	Production Export	(No equivalent)
6	Sediment/Shoreline Stabilization	Shoreline Anchoring & Dissipation of Erosive Forces
7	Wildlife Habitat	Wildlife Habitat
8	Recreational Value	Water-based Recreation
9	Educational/Scientific Value	Educational Potential
10	Uniqueness/Heritage	Noteworthiness
11	Restoration Potential	(No equivalent)

III. FINDINGS

The 57 wetland systems identified for the inventory include wetlands ranging in size from 3 to 277 acres. Two wetlands were not accessible for evaluation. The mapped area of the 55 wetlands totals approximately 1,338.5 acres. Forested and scrub-shrub wetlands were the dominant wetland type. The wetlands within Fremont are associated with two main watersheds: the Exeter River and Brown Brook. By far the majority of wetlands drain into the Exeter River which enters the southwest portion of town from Sandown and exits into Chester. It reenters Fremont on its western boundary with Raymond and crosses the entire width of town. The freshwater wetland systems identified in the inventory include forested and scrub-shrub swamps, wet meadows, marshes, and beaver ponds. Most of the freshwater wetlands are associated with intermittent streams and many of them are interconnected and drain into the Exeter River.

Based on field assessments of the above-mentioned wetland values and functions a ranking system was developed to assess the comparative function and value of each wetland (see Table 1 Freshwater Wetlands). The ranking system in this report is based on three components of each wetland: **size** (larger wetlands generally provide greater potential to perform wetland function); **number of principal functions** (diverse wetlands with numerous functions are more important than wetlands with limited functions); and **wetland values** (wetlands that provide human-based values provide greater benefit to the community). These elements were combined to provide a total score for each wetland.

The calculation for ranking the freshwater wetlands is as follows:

Wetland size (acres) x Number of principal functions + Wetland Value score = Total Score
For the Wetland Value score there are 3 values and each value gets a score of 1, 2 or 3 for low, medium and high.

Based on the ranking system, four distinct tiers of wetlands emerged. Tier 1 includes 7 of the largest, most diverse freshwater and tidal wetlands complexes in Fremont. These wetlands represent 711.4 acres. These wetlands range in size from 61 to 277 and all of them score over 400 in their evaluations. The total acreage of this tier is 711.4.

Tier 2 includes 7 wetlands that score over 150 and under 400. These wetlands, although smaller than the Tier 1 wetlands, are diverse and high functioning. They range from a 44-acre freshwater scrub-shrub swamp to a 32-acre floodplain forest. The total acreage of this tier is 251.6.

Tier 3 includes the next 12 wetlands ranging from scores of 75 to 150. These wetlands range in size from 12 to 20 acres and provide significant wetland function and value. The total acreage of this tier is 191.7.

Tier 4 includes the remaining 23 wetlands that scored below 75. All of these wetlands still qualify as prime but they do not have the high function and value that the top 26 wetlands have.

Table 1

Fremont Freshwater Wetlands Ranking

Wetland ID	Size(acres)	#PF	WVs	Total Score	Rank
2	13.3 x	6	+ 7	= 86.8	23
3	4.4	6	5	31.4	41
4	4.7	6	5	33.2	40
5	18.2	6	8	117.2	17
6	N/A - 50% hydric A soils				
7	7.6	7	7	60.2	32
8	13.7	6	6	88.2	22
9	22.2	3	3	69.6	29
10	38.9	6	7	240.4	10
11	9.1	6	5	59.6	33
12	6.0	7	6	48.0	37
13	8.0	6	5	53.0	35
14	34.9	6	7	216.4	13
15	81.1	7	9	576.7	3
16	67.5	7	5	477.5	5
17	18.0	6	6	114.0	18
18/19	6.0	1	3	9.0	49
20	61.0	7	9	436.0	6
21	12.0	4	5	53.0	34
22	20.6	4	4	86.4	25
23	4.6	5	5	28.0	43
24	9.8	2	3	22.6	44
25	19.3	6	7	122.8	15
26	16.2	7	5	118.4	16
27	14.0	7	5	103.0	20
28	4.5	4	3	21.0	46
29	9.8	6	3	61.8	30
30	12.0	7	6	90.0	21
31/32	13.0	5	8	73.0	28
33	7.5	6	4	49.0	36
34	6.0	5	6	36.0	39
35	28.0	6	9	177.0	14
36	8.3	5	3	44.5	38

#PF = Number of Principal Functions WVs = Wetland Value score

Table 1 (cont.)

Wetland ID	Size(acres)	#PF	WVs	Total Score	Rank
37	60.0	7	9	427.0	7
38	3.0	5	4	19.0	47
39	76.0	7	5	537.0	4
40	12.0	6	3	75.0	27
41	88.8	7	5	621.0	2
42	277.0	7	7	1946.0	1
43	44.0	7	8	316	8
44	11.1	5	5	60.5	31
45	12.8	6	7	83.8	26
46	35.8	6	5	219.8	12
47	13.6	6	5	86.6	24
48	20.0	5	5	105.0	19
49	38.0	7	7	273.0	9
50	3.0	5	6	21.0	45
52	3.2	3	3	12.6	48
53	N/A - 50% hydric A soils				
54	N/A - 50% hydric A soils				
55	32.0	7	5	229.0	11
56	5.0	5	5	30.0	42

55 wetlands

Total Acres 1335.5

#PF = Number of Principal Functions identified in the Wetland Evaluation

WVs = Wetland Values score for Each Wetland

Table 2

Tier One All wetlands with a score over 400

Wetland ID	Size	Score	Rank
42	277.0	1946.0	1
41	88.8	621.0	2
15	81.1	576.7	3
39	76.0	537.0	4
16	67.5	477.5	5
20	61.0	436.0	6
37	60.0	427.0	7
Total acres	711.4		

Table 3

Tier Two

All wetlands with a score over 150 and under 400

Wetland ID	Size	Score	Rank
43	44.0	316.0	8
49	38.0	273.0	9
10	38.9	240.4	10
55	32.0	229.0	11
46	35.8	219.8	12
14	34.9	216.4	13
35	28.0	177.0	14
Total acres	251.6		

Table 4

Tier Three
All wetlands with a score over 75 and under 150

Wetland ID	Size	Score	Rank
25	19.3	122.8	15
26	16.2	118.4	16
5	18.2	117.2	17
17	18.0	114.0	18
48	20.0	105.0	19
27	14.0	103.0	20
30	12.0	90.0	21
8	13.7	88.2	22
2	13.3	86.8	23
47	13.6	86.6	24
22	20.6	86.4	25
45	12.8	83.8	26
Total acres	191.7		

IV. RECOMMENDATIONS

Prime Wetland Recommendations

West Environmental, Inc. (WEI) recommends all of the wetlands in Tiers 1, 2 & 3 be nominated as prime wetland candidates for designation by Fremont to the NHDES Wetlands Bureau. These 26 wetlands represent the highest functioning wetlands that provide critical habitat, crucial wetlands function and recreational and educational opportunities to the residents of Fremont. All of these wetlands qualify for Prime Wetland status and the majority of them are identified as highest value wildlife habitat of state importance in the NH Fish & Game's Wildlife Action Plan (2006).

It is recommended that the boundaries of these wetlands be finalized and digitized for placement on the Fremont Tax Maps as part of the local Prime Wetland Designation. The Fremont Conservation Commission should engage the Fremont Planning Board in this process and a warrant article should be crafted per RSA 482-A:15 for local Prime Wetland Designation. A public hearing should be held presenting the information regarding these wetlands and the public should have the opportunity to review the wetland maps and reports and ask questions. When and if the public approves these wetlands for Prime Designation, a final report with the Prime Wetland tax map overlays should be submitted to the NHDES Wetlands Bureau for their acceptance.

Vernal Pool Survey

A significant number of the Tier 3 wetlands provide critical vernal pool habitat that may be utilized by spotted or Blanding's turtles. Numerous smaller vernal pools were also identified during field inspections. A Vernal Pool Survey conducted during amphibian and turtle breeding season would help determine whether these wetlands in fact provide rare species habitat. This information could then be utilized in determining how these wetlands should be protected in the future.

Wetland Restoration Projects

Several of the wetlands identified in this study have the potential for some degree or form of restoration. Alterations to wetland hydrology, inadequate culvert sizing, and disturbance/encroachment were observed in some of the wetlands. Several of these wetlands have invasive species which could be controlled through management and better storm water protection in the wetlands watershed. These areas should be further evaluated and landowners could be contacted in a cooperative effort to restore wetland function lost to impacts and degradation. Grants could potentially be obtained to fund these restoration projects.

Wetland Ordinance Revisions

Another option for Fremont would be to amend Article VII Wetland Ordinance of the Fremont Zoning Ordinances to reference the information contained in this study and to increase protection of prime wetland candidates with greater setbacks and more restrictive buffer zones. This effort would be supported by the data collected in the wetland evaluation and would provide a higher level of protection to these critical resource areas.

V. AERIAL PHOTO WETLAND MAPS

WETLAND INVENTORY DATA FORMS

PHOTO DOCUMENTATION

MAR.27,2006

500

24933-3-27

②

MAR.27,2006

500

24933-4-2

MAR.27.2006

500

24936-3425

North Road

POPE

50

50

50

50

50

50

50

50

50

50

50

50

50

50

50

50

MAR.27,2006

500

24933-4-32

To the
Piscataway

MAR.27.2006

500

2450



PEISLEY



FOUR

TEMPLE

(see
24933-4-32

PROTE (2)
w/ 6 pr 10
COMPACT (2)

from
pharmaceutical
firm!

1

MAR.27.2006

500

24933-3-32

Athletic Field

Epine (Fremont Townline) (±)

10

PF01E

PF01E

Margin Road

(See 24933-4-32)

PF04E(?)
w/ spruce
component (?)

fish channel
silled?

MAR.27,2006

500

24933-3-33

©2006 COL-EAST NORTH ADAMS, MA

1-800-FLY-TOPO

MAR.28, 2006

500

24933-2-33



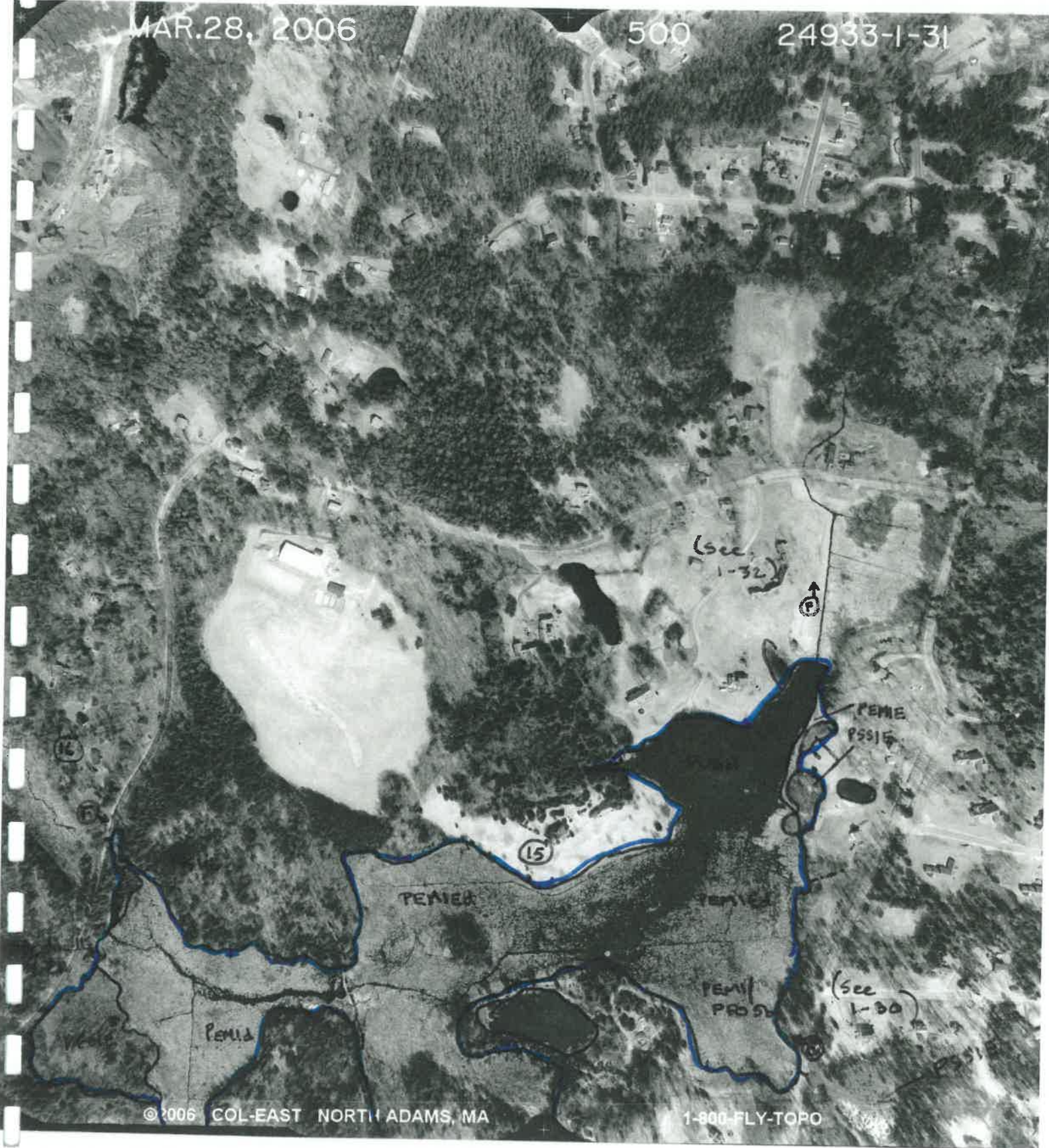
©2006 COL-EAST NORTH ADAMS, MA

1-800-FLY-TOPO

MAR.28, 2006

500

24933-1-31



MAR 28 2006

500

24933-1-30

(16)

(15)

(See
1-31)

PERKINS
5918

MAR.28, 2006

500

24933-1-29

(15) (See
1-30)

PF01145
SS16

(31)

MAR.28, 2006

500

24933-1-32

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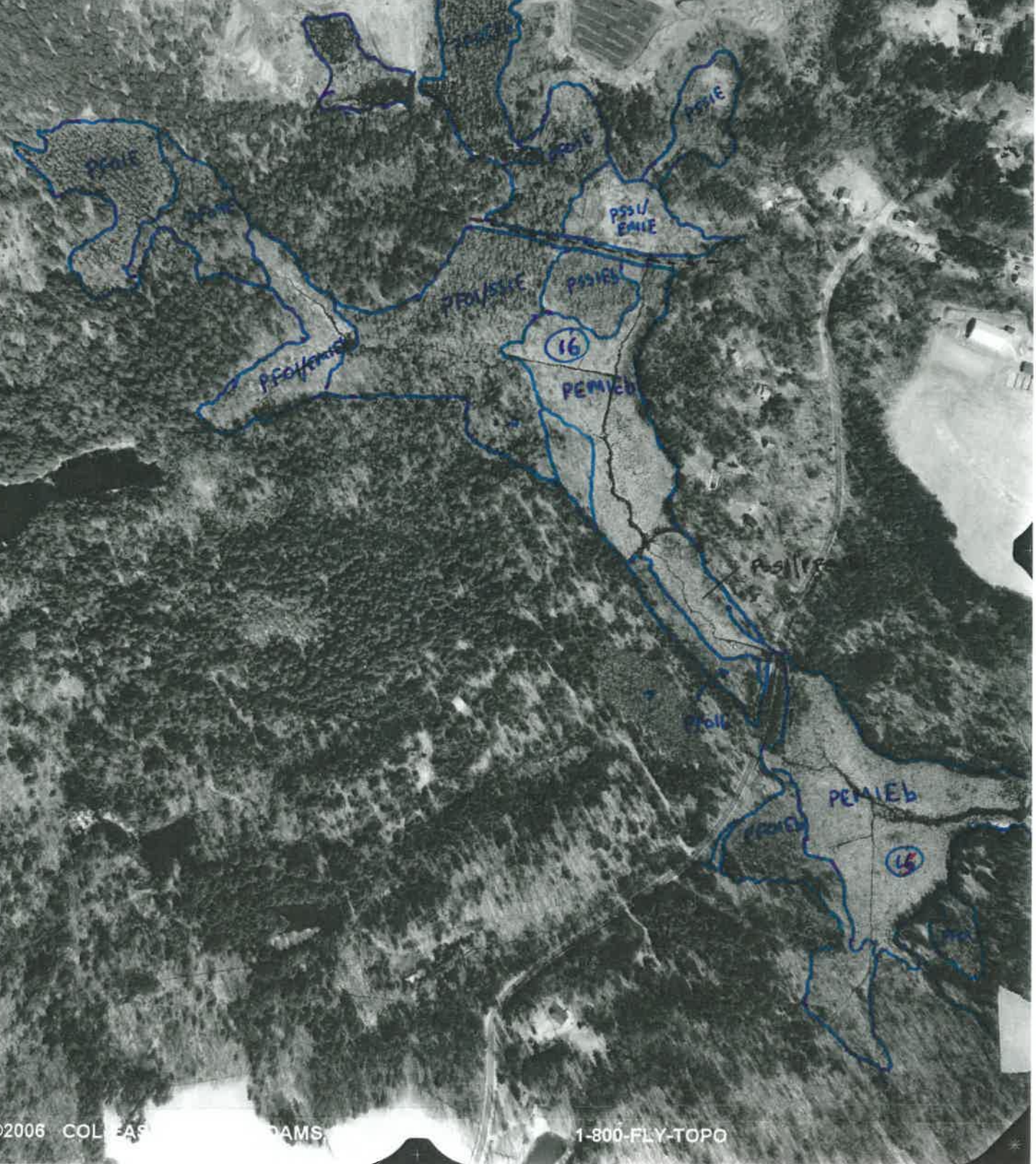
1,800-FL TOP



MAR.28, 2006

500

24932-11-31



MAR.28, 2006

500

24932-10-31



MAR 28, 2006

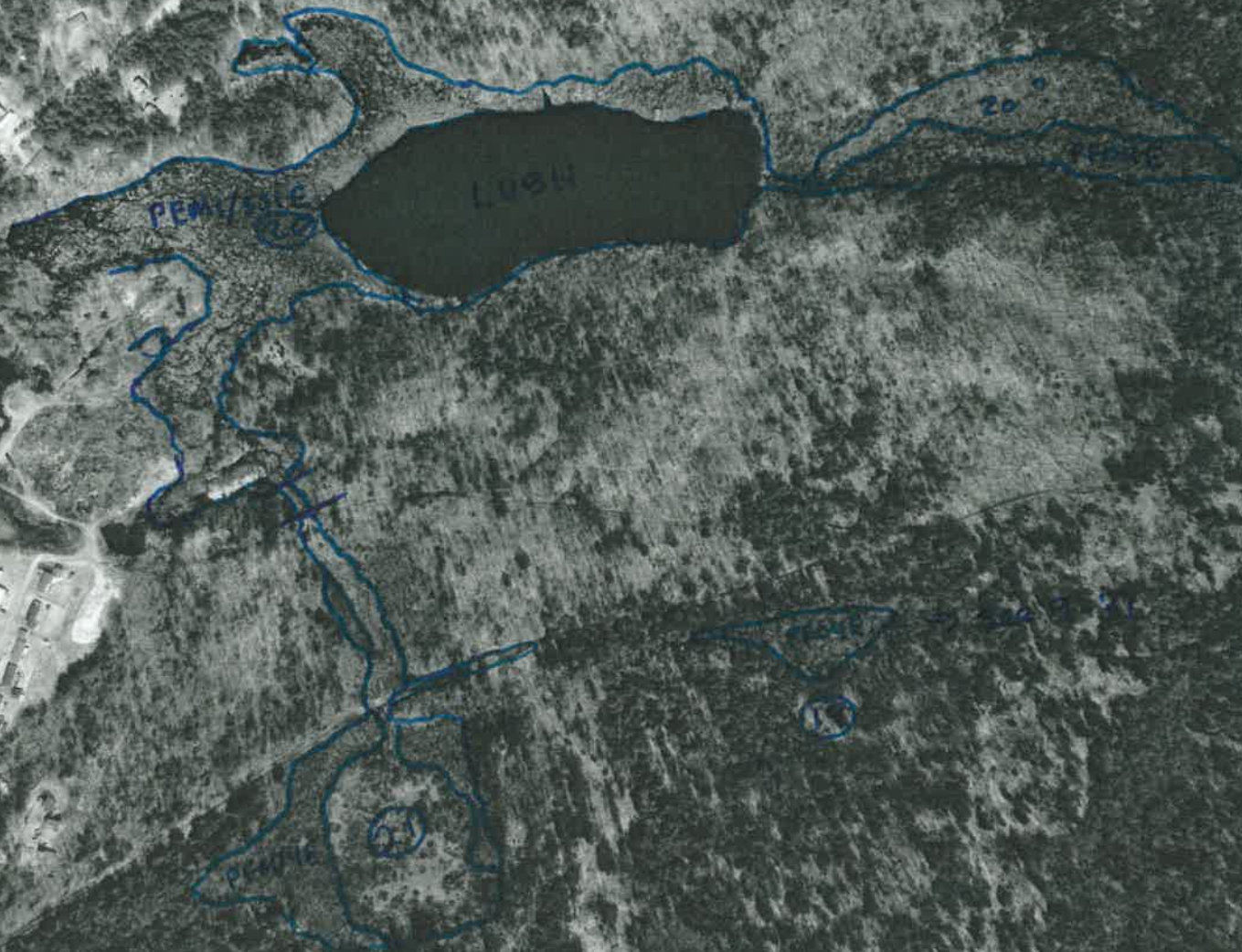
500

24932-9-31

MAR. 28, 2006

500

24932-9-32



© 2006 COL-EAST NORTH ADAMS, MA

1-800-FLY-TOPO

MAR.28, 2006

500

24932-10-29

PFOY
EMIEB

(26)

52

MAR.28, 2006

500

24932-II-29



24932-11-28

©2003 COL-EAST NORTH ADAMS MA

1-800-FLY-TOPO

MAR.28, 2006

500

24932-11-30

30
PUBK
PFOIE
30
PFOIE
PFOIE

MAR.28, 2006

24933-1-28

31

PENIEN

MAR 28, 2006

500

24932-11-26



2006

ST. ADAMS, MA

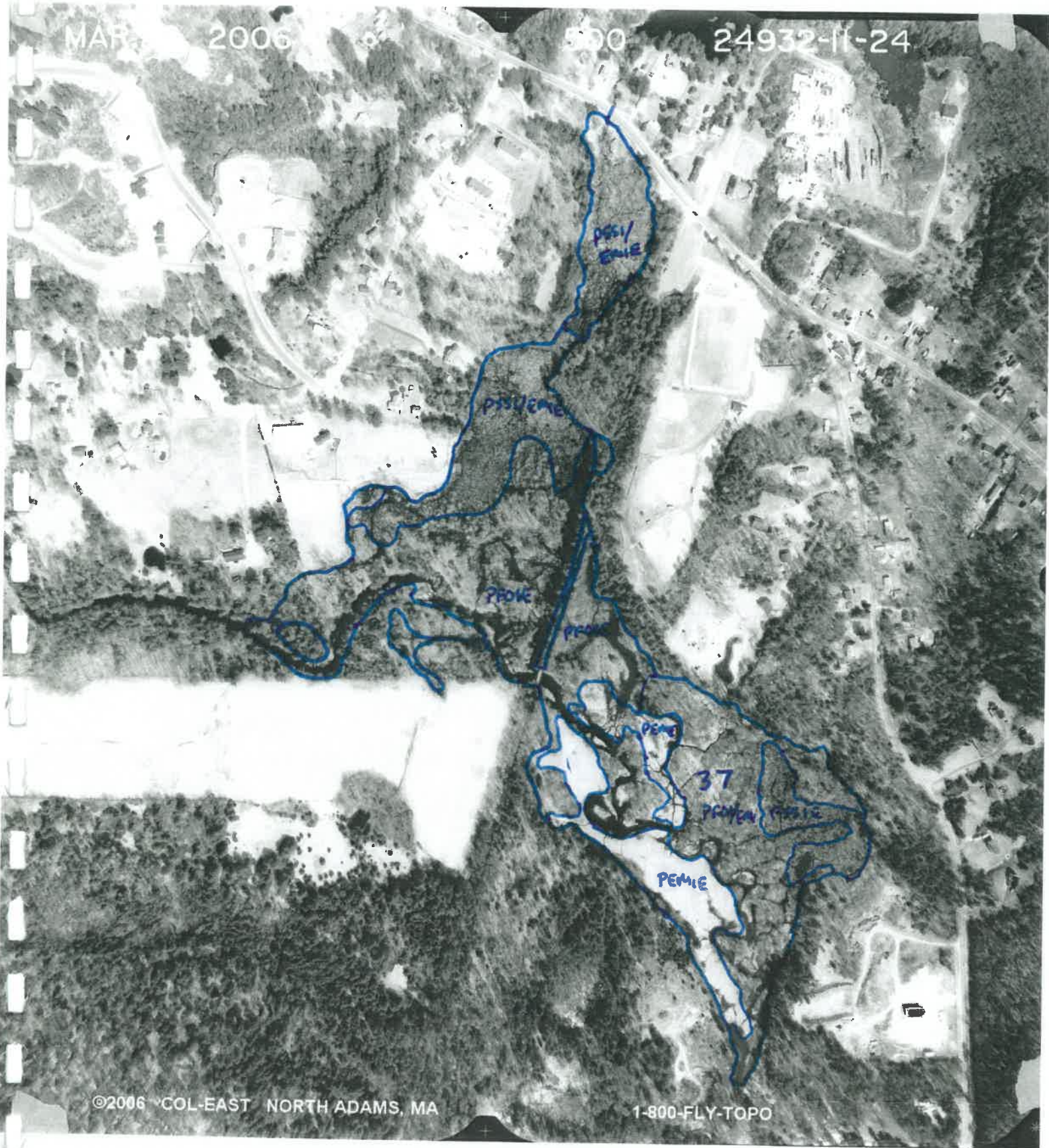
1-800-FL

MAR

2006

500

24932-11-24



MAR.28, 2006

500

24932

(39)

PSS/EMIEb

PSS/EMIEb

MAR.28, 2006

500

24932-8-23



MAR.28, 2006

500

24932-10-25

PEMIE

PISC/END

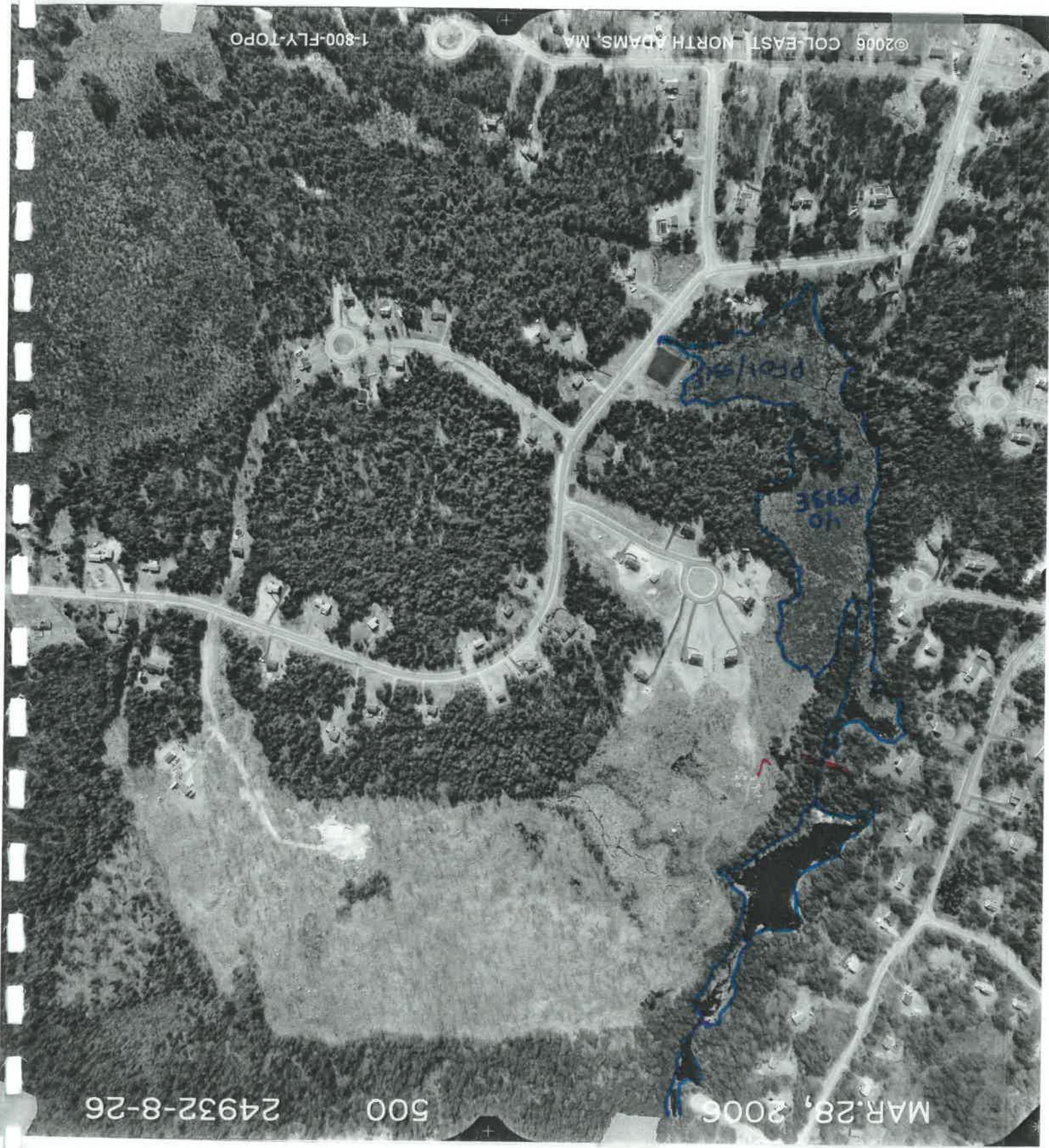
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24932-8-26

500

MAR. 28, 2006



MAR. 28, 2006

500

24932-9-241

PSS/EMIEb.

(41)

MAR.28, 2006

500

24932-7-21

PERMIEB

PERMIEB

©2006 COL-EAST NORTH ADAMS, MA

1-800-FLY-TOPO

MAR.28, 2006

500

24932-8-21

(42)

PSSI/CMIFB

PSSI/CMIFB

PORT

©2006 COL-EAST NORTH ADAMS, MA

1-800-FLY-TOPO

MAR.28, 2006

500

24932-9-21

42

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1-800-FLY-TOPO

MAR.28, 2006

500

24952-10-21

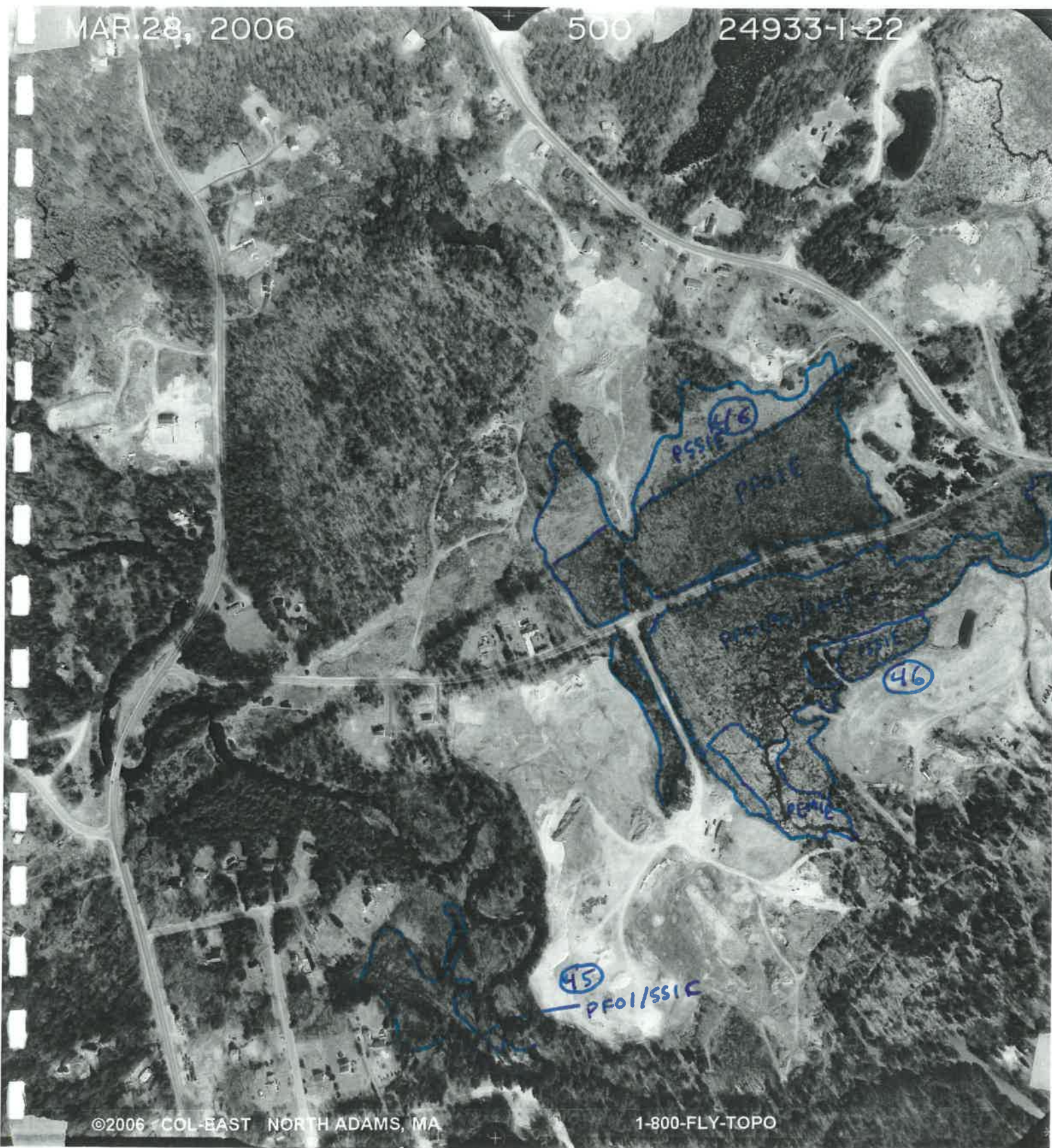
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1-800-FLY-TOPO

MAR 28, 2006

500

24933-1-22



MAR.28, 2006

500

24933-2-25

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1-800-FLY-TOPO

24933-3-22

1-800-FLY-TOPO

24933-3-20

cc 2-21

LIBRA

Branswood
London

Wet?

PSSA

TEMA

Waverly/Kington
Township

MAR.27,2006

500

2493

150

20
KTC 111

MAR. 28, 2006

500

24932-8-28

33

25010

WETLAND INVENTORY DATA FORM

WETLAND ID: #2

CLASSIFICATION: PFO1/4/SS1E

ACREAGE: 13.3

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: August 2007

WETLAND TYPE:

☒ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous (66%)

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☒ Evergreen

☒ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

☐ Potential

☒ Scrub-Shrub (33%)

☐ Tidal

Order:

WETLAND DESCRIPTION

The main wetland component is forested scrub-shrub. Open water components with associated marsh are situated on the most southern and eastern ends of this wetland.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

SAPLING LAYER

Red maple

Yellow birch

SHRUB LAYER

Winterberry

HERBACEOUS LAYER

Cinnamon fern

Poison ivy

observed 24" black gum in adjacent upland

WETLAND SOILS DATA

The wetland soils are mapped as (295) Greenwood mucky peat or (495) Ossipee mucky peat according to the Rockingham County Soil Survey. The adjacent upland slopes are moderately steep.

WETLAND HYDROLOGY DATA:

- Windthrow
- Associated intermittent stream

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Porcupine (den & scat)
- White-tailed deer (trail in nearby upland; deer stand in tree)
- Conservation markers were evident indicating adjacent land protection

WETLAND INVENTORY DATA FORM

WETLAND ID: #3

CLASSIFICATION: PFO1E/SS1E

ACREAGE: 4.4

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 6/9/07

WETLAND TYPE:

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

- ☒ Deciduous (50%)
☐ Freshwater Shallow
☐ Ditched
☐ Upper Perennial
☐ Perennial

Name:

Name:

☐ Documented

Description:

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

(exits wetland on perimeter)

☒ Potential

- ☒ Scrub-Shrub (50%)
☐ Tidal

Order:

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. This wetland is hydrologically connected with Wetland #4 on the north and east.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
Black gum
Tamarack (scattered)

SAPLING LAYER

Red maple
Yellow birch

SHRUB LAYER (DENSE)

Pepperbush
Highbush blueberry
Winterberry

HERBACEOUS LAYER

Cinnamon fern
Sphagnum moss

WETLAND SOILS DATA

This wetland is mapped as a (495) Ossiipee mucky peat, very poorly drained. Soil auguring in the field revealed a 24" "O" layer.

WETLAND HYDROLOGY DATA:

- Standing water
- Pit & mound topography
- An intermittent stream flows in a westerly direction from this wetland into Wetland #4

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Pileated woodpecker (feeding evidence)
- White-tailed deer (scat)
- Travel corridor between wetland and adjacent driveway

WETLAND INVENTORY DATA FORM

WETLAND ID: #4

CLASSIFICATION: PEM1E/SS1E/FO5Eb

ACREAGE: 4.7

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 6/9/07

WETLAND TYPE:

☒ WOODED SWAMP

☒ MARSH (33%)

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous (33%)

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

(discharges into this wetland)

☐ Potential

☒ Scrub-Shrub (33%)

☐ Tidal

Order:

WETLAND DESCRIPTION

This wetland is an abandoned beaver flowage that is now comprised of an emergent marsh interspersed with wetland shrubs. A dead overstory of snags was also evident.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead snags

SAPLING LAYER

SHRUB LAYER (DENSE)

Pepperbush

Highbush blueberry

Steeplebush

Red maple

HERBACEOUS LAYER

Tussock sedge

Sphagnum moss

Swamp dewberry

Small-headed beak rush

* Pink ladyslipper, a species of concern, was observed in the adjacent upland

WETLAND SOILS DATA

This wetland is mapped as a (125) Scarboro muck. Soil auguring in the field revealed a 20-24" muck. This was underlain by a gray sandy oam. A strong sulfur smell was evident.

WETLAND HYDROLOGY DATA:

- 4-5" of standing water
- Wetland #4 receives flowage via a seasonal stream from Wetland #3

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Chestnut-sided warbler (audio)
- Spring peeper (audio)
- Bullfrog (visual)
- White-tailed deer (tracks/trail)
- According to an abutting landowner, wild turkey, coyote, fisher and moose have been observed

WETLAND INVENTORY DATA FORM

WETLAND ID: #5

CLASSIFICATION: PEM1E/SS1E

ACREAGE: 18.2

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> WOODED SWAMP | <input 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 type="checkbox"/> Freshwater Deep | <input type="checkbox"/> Tidal |
| <input checked="" type="checkbox"/> WET MEADOW | <input type="checkbox"/> Ditched | <input type="checkbox"/> Grazed | |
| <input type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input checked="" type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: Brown Brook | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland is bisected by Brown Brook, a perennial stream. It is comprised chiefly of wet meadow, shallow marsh, and scrub-shrub components. The stream flows in a southeasterly direction. This wetland's position adjacent several large fields increases its ecological diversity and overall uniqueness.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

SAPLING LAYER

SHRUB LAYER

Speckled alder

HERBACEOUS LAYER

Tussock sedge
Soft rush
Buttercup (spp.)
Swamp milkwood
Lurid sedge
Red top grass
Boneset

WETLAND SOILS DATA

The wetland soil is mapped as a (538A) Squamscott fine sandy loam, a poorly drained soil with inclusions of Maybid and Scitico. Soil auguring in the wetland revealed a 4-6" "O" layer. A sulfur smell was evident.

WETLAND HYDROLOGY DATA:

Surface water flowage drained in a southeasterly direction, perennial in character. Adjacent wetlands are saturated to the soil surface.

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Red-wing blackbird
- Killdeer
- Whirlygig beetles (in brook)
- Water strider (in brook)
- The speckled alder shrub layer within this wetland provides excellent habitat for woodcock. The adjacent field areas (some of them wet meadow) provide critical nesting habitat to several species of songbird requiring large open tracts.

WETLAND INVENTORY DATA FORM

WETLAND ID: #6

CLASSIFICATION: PUBHe

ACREAGE: 6.1

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input checked="" type="checkbox"/> Scrub-Shrub (on perimeter) |
| <input checked="" type="checkbox"/> MARSH (on perimeter) | <input checked="" 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input checked="" type="checkbox"/> Intermittent (?) | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input checked="" type="checkbox"/> HUMAN MADE or OTHER | Description: Excavated pond | | |

WETLAND DESCRIPTION

This wetland appears to have been excavated. Stockpiles of soil are situated nearby. An open water component is evident with a tight perimeter of shallow marsh and scrub-shrub vegetation. A small seasonal outlet was noted.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

*Noted invasives:

Barberry (spp.) encountered
in adjacent uplands

Speckled alder

Tussock sedge
Broad-leaved cattail
Woolgrass

*These 3 speices were located
on the very outside edge of the
pond

WETLAND SOILS DATA

Soils could not be confirmed due to the depth of existing surface water. The surrounding soils are mapped as a 38A Eldridge fine sandy loam, moderately well drained. Eldridge soil units can contain 20% inclusions of either Squamscott or Scitico, poorly drained soils. It is impossible at this time, post excavation, that these were present.

WETLAND HYDROLOGY DATA:

- Evident surface water
- A USGS map shows an exiting intermittent stream on the north side of the pond

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- 14 Canada geese
- Wildlife structure is lacking within the pond

Note: The large area encompassed by open water and lack of any associated wetlands disallows prime wetland status.

WETLAND INVENTORY DATA FORM

WETLAND ID: #7

CLASSIFICATION: PEM1/SS1E

ACREAGE: 7.6

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 6/12/07

WETLAND TYPE:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input checked="" type="checkbox"/> Scrub-Shrub (33%) |
| <input checked="" type="checkbox"/> MARSH | <input checked="" type="checkbox"/> Freshwater Shallow (66%) | <input type="checkbox"/> Freshwater Deep | <input type="checkbox"/> Tidal |
| <input type="checkbox"/> WET MEADOW | <input type="checkbox"/> Ditched | <input type="checkbox"/> Grazed | |
| <input type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input checked="" type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland occupies a long and narrow drainageway that includes an intermittent stream. The plant community consists chiefly of shallow marsh with an interspersed of shrubs. An abandoned railroad is situated adjacent this wetland.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Meadowsweet
Steeplebush
Winterberry
Silky dogwood

Tussock sedge
Broad-leaved cattail
Sphagnum moss
Bedstraw
Spatterdock
Royal fern (on perimeter)
Joe pye weed (on perimeter)

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (125) Scarboro muck, a very poorly drained soil. Soil auguring in the wetland revealed a 12-14" "O" layer.

WETLAND HYDROLOGY DATA:

This wetland is hydrologically connected with Wetland #8. A 5' diameter galvanized culvert underneath North Road and a 4 x 6 foot granite culvert underneath an abandoned railroad bed do not appear to impede flowage as it drains in a northeasterly direction (where it eventually merges with a consolidated/straightened ditch line).

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Whirlygig beetles
- Dragonfly (spp.)
- Presence of basking logs and tussock sedge potentially provide preferred habitat to spotted turtles.

WETLAND INVENTORY DATA FORM

WETLAND ID: #8

CLASSIFICATION: PSS1/EM1E6

ACREAGE: 13.7

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 6/12/07

WETLAND TYPE:

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

- ☐ Deciduous
☒ Freshwater Shallow (50%)
☐ Ditched
☐ Upper Perennial
☐ Perennial
Name:
Name:
☐ Documented
Description:

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

- ☒ Scrub-Shrub (50%)
☐ Tidal

Order:

- ☐ Potential

WETLAND DESCRIPTION

This scrub-shrub / emergent wetland is bisected by an intermittent stream. An abandoned railroad bed divides this wetland in two.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Buttonbush
Speckled alder
Winterberry
Meadowsweet
Maleberry

HERBACEOUS LAYER

Tussock sedge
Royal fern
Boneset
Jewelweed
Goldenrod (spp.)

Noted invasive:

Barberry (spp.)

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (97) Greenwood & Ossipee soils, ponded, very poorly drained soil. Soil auguring in the wetland revealed a 6-8" "O" layer.

WETLAND HYDROLOGY DATA:

This wetland is hydrologically connected with Wetland #7 via a 5' diameter galvanized culvert. North Road separates these two wetland systems. A connecting intermittent stream flowage drains from Wetland #8 to #7 in a northeasterly direction. Prior ponding by beaver is suspected.

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Green frog
- Whirlygig beetles
- Dragonfly (spp.)

WETLAND INVENTORY DATA FORM

WETLAND ID: #9

CLASSIFICATION: PFO1/SS1E

ACREAGE: 22.2

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 8/31/07

WETLAND TYPE:

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

- ☒ Deciduous (66%)
☐ Freshwater Shallow
☐ Ditched
☐ Upper Perennial
☐ Perennial
Name:
Name:
☐ Documented
Description:

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

- ☒ Scrub-Shrub (33%)
☐ Tidal

Order:

- ☐ Potential

WETLAND DESCRIPTION

This is a forested wetland with a scrub-shrub understory.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
American elm (scattered)

SAPLING LAYER

Red maple
Musclewood

SHRUB LAYER

Winterberry
Highbush blueberry
Northern arrowwood

HERBACEOUS LAYER

Cinnamon fern
Royal fern
Sphagnum moss
Poison ivy
Carex intumescens

WETLAND SOILS DATA

Soils are mapped in the Rockingham County Soil Survey as Pipestone with inclusions of either Scarboro or Chocorua. Soil auguring in the field revealed a 3-4" "O" layer underlain with a gray sandy loam in a wetter portion of the wetland. Due to the percentage of hydric B soils, this wetland may not meet the established criteria for prime wetlands.

WETLAND HYDROLOGY DATA:

- Pit and mound topography
- Surficial rooting
- Stained leaves
- Flowage drains in an easterly direction under Brown Brook Circle (via 24" diameter culvert)

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- White-tailed deer (tracks)

WETLAND INVENTORY DATA FORM

WETLAND ID: #10

CLASSIFICATION: PEM1/SS1Eb

ACREAGE: 38.9

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: August 2007

WETLAND TYPE:

☐ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☐ Deciduous

☒ Freshwater Shallow (50%)

☐ Ditched

☐ Upper Perennial

☒ Perennial

Name: Brown Brook

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☒ Scrub-Shrub (50%)

☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This wetland occupies a very long and narrow drainageway that includes Brown Brook, a perennial flowage. The wetland stretches from Wildwood Road on the west to Martin Road on the east. The chief wetland classification within this wetland system is emergent / scrub-shrub.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Snags (scattered)

SAPLING LAYER

SHRUB LAYER

Steeplebush
Speckled alder
Silky dogwood
Meadowsweet

HERBACEOUS LAYER

Tussock sedge
Woolgrass
Reed canary grass
Broad-leaved cattail

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soils are mapped as either a (97) Greenwood & Ossipee soils, ponded, very poorly drained, a (395) Chocorua mucky peat, very poorly drained, or a (134) Maybid silt loam, also very poorly drained.

WETLAND HYDROLOGY DATA:

- Past ponding was evident probably due to prior beaver activity
- A well established stream channel (Brown Brook) that drains in a westerly direction

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Fisher (tracks)
- Beaver (historical ponding evidence)
- Hawk (spp.) in flight

WETLAND INVENTORY DATA FORM

WETLAND ID: #11

CLASSIFICATION: PFO1/SS1E

ACREAGE: 9.1

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 8/31/07

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

- ☒ Scrub-Shrub
☐ Tidal

Order:

☒ Potential

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. Large depressions within the wetland appear to hold surface water during the spring and early summer months, providing potential vernal pool habitat.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
White pine (scattered)

SAPLING LAYER

Red maple

SHRUB LAYER

Winterberry
Maleberry
Speckled alder
Meadowsweet

HERBACEOUS LAYER

Tussock sedge
Woolgrass
Burr-marigold
Sphagnum moss

WETLAND SOILS DATA

The Rockingham County Survey indicates the soil within the wetlands to be a (314A), Pipestone sand (somewhat poorly drained) with inclusions of Scarboro or Chocorua soils. While soil sampling/ auguring, an 18-20" "O" layer (very fibrous in character) was noted.

WETLAND HYDROLOGY DATA:

- Evidence of standing water
- Pit & mound topography
- Fluted trunks were a characteristic on the red maple trees

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- According to an abutter, a species of turtle has been observed on several occasions
- Scrub-shrub wetlands provide critical habitat to several species of wildlife

WETLAND INVENTORY DATA FORM

WETLAND ID: #12

CLASSIFICATION: PFO1/SS1E

ACREAGE: 6

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 2/20/07

WETLAND TYPE:

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

- ☒ Deciduous (50%)
☐ Freshwater Shallow
☐ Ditched
☐ Upper Perennial
☐ Perennial

Name:

Name:

☐ Documented

Description:

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

☐ Potential

- ☒ Scrub-Shrub (50%)
☐ Tidal

Order:

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. A small intermittent stream exits on the west (underneath Wildwood Road). Although small and surrounded by residential development, this wetland provides critical winter yarding to a few white-tailed deer.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
Black gum
White pine (scattered)

SAPLING LAYER

Red maple
Eastern hemlock (scattered)

SHRUB LAYER

Highbush blueberry
Winterberry
Pepperbush

HERBACEOUS LAYER

Cinnamon fern
Swamp dewberry
Bugleweed
Wetland grasses (spp.)

WETLAND SOILS DATA

There is very little topographical relief between the elevation of the wetland and adjacent uplands. According to the Rockingham County Soil Survey, the wetland soils are mapped as a (314A) Pipestone sand, somewhat poorly drained with inclusions of either Scarboro or Chocorua, very poorly drained soils.

WETLAND HYDROLOGY DATA:

Wetland #12 is hydrologically connected with Wetland #10 via an intermittent stream. Secondary indicators include pit and mound topography and scattered windthrow.

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Red squirrel (audio/feeding activity)
- White-tailed deer (urine/scat and 5 deer beds)
- Excellent wetland structure – abundant fallen wood

WETLAND INVENTORY DATA FORM

WETLAND ID: #13

CLASSIFICATION: PFO1/SS1E

ACREAGE: 8

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 2/20/07

WETLAND TYPE:

☒ WOODED SWAMP

☐ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous (66%)

☐ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

☐ Potential

☒ Scrub-Shrub (33%)

☐ Tidal

Order:

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. A small intermittent stream bisects the wetland and slowly flows in a southeasterly direction. The wetland's topographical position and plant community description suggest that this wetland may be of exemplary status.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

Black gum

Yellow birch

SAPLING LAYER

Red maple

Eastern hemlock

SHRUB LAYER

Highbush blueberry

Winterberry

Pepperbush

Maleberry

HERBACEOUS LAYER

Cinnamon fern

Sphagnum moss

Bugleweed

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soils are mapped as a (295) Greenwood mucky peat, very poorly drained. Frozen conditions did not allow soil auguring.

WETLAND HYDROLOGY DATA:

- Pit & mound topography
- Some standing water

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Pileated woodpecker (feeding activity)
- White-breasted nuthatch
- 6/12/07 sighting of snapping turtle
- Further clarification of possible exemplary status should be pursued to confirm potential uniqueness

WETLAND INVENTORY DATA FORM

WETLAND ID: #14

CLASSIFICATION: PEM1Eb

ACREAGE: 34.9

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 2/21/07

WETLAND TYPE:

☐ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☐ Deciduous

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

☐ Potential

☐ Scrub-Shrub

☐ Tidal

Order:

WETLAND DESCRIPTION

This wetland occupies an abandoned beaver flowage. The abandonment has occurred recently as a shrub layer has not established itself. The wetland is comprised chiefly of emergent marsh.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead snag component

SAPLING LAYER

SHRUB LAYER

On perimeter:
Winterberry
Speckled alder
Steeplebush

HERBACEOUS LAYER

Broad-leaved cattail
Woolgrass
Sensitive fern
Swamp loosestrife

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soils are mapped as a (295) Greenwood mucky peat, very poorly drained. Frozen conditions did not allow soil auguring.

WETLAND HYDROLOGY DATA:

Originally an open water component, this wetland appears recently drained. Pockets of standing water were evident. Two intermittent streams exit this wetland (one southerly, the other easterly).

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Prior beaver activity including 5 lodges and 2 large dams
- 9 observed great blue heron nests, an established rookery, 2 fledglings observed at two nests on 6/12/07
- Fisher (tracks)
- River otter (slide)
- Coyote (tracks)
- Northern water snake
- Numerous standing cavity trees / abundant fallen wood

WETLAND INVENTORY DATA FORM

WETLAND ID: #15

CLASSIFICATION: PEM1Ed; PUBH;
PEM1/PFO5b; PFO1/4E/SS1E
SCIENTIST: Earle Chase

ACREAGE: 81.1

WEI PROJECT #: 06-076NH

DATE: August 2007

WETLAND TYPE:

☐ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☐ Deciduous

☒ Freshwater Shallow

☒ Ditched

☐ Upper Perennial

☒ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☒ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

☐ Scrub-Shrub

☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This is one of the larger wetland systems in Fremont. A large percentage of the wetland is comprised of emergent marsh. Beaver actively occupy the site. Brown Brook flows in an easterly direction through the wetland into an open water component and then northwards.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Standing snags

SAPLING LAYER

SHRUB LAYER

Steeplebush

HERBACEOUS LAYER

Tussock sedge

Broad-leaved cattail

Reed canary grass

WETLAND SOILS DATA

The wetland soil is mapped as a (295) Greenwood mucky peat, very poorly drained.

WETLAND HYDROLOGY DATA:

- Open water component
- Appears prior wetlands were ditched
- Wetland #15 is hydrologically connected with Wetland #16 on the northwest
- Brown Brook, a perennial stream, bisects this wetland, first flowing easterly then northerly
- Proximity to aquifer

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Beaver (lodge, dam, browse)
- Bordered by large open fields on the north

WETLAND INVENTORY DATA FORM

WETLAND ID: #16

CLASSIFICATION: PFO1/SS1E; PEM1Eb;
PSS1/PFO1E

ACREAGE: 67.5

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 7/13/07

WETLAND TYPE:

☒ WOODED SWAMP

☐ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous

☐ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☒ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

☒ Scrub-Shrub

☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This wetland is another of the larger sized wetlands in Fremont. Brown Brook commences its southeasterly flow down through this wetland. Historical and possibly active beaver activity was noted in the northeastern and central portions of this wetland. The wetland is approximately equally classified as emergent, scrub-shrub or forested.

WETLAND PLANT COMMUNITY DATA

PSS1/PFO1Eb

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Winterberry

Speckled alder

Northern arrowwood

Meadowsweet

HERBACEOUS LAYER

Tussock sedge

Sphagnum moss

Jewelweed

Red top

Swamp milkweed

WETLAND SOILS DATA

Soils are mapped as a (295) Greenwood mucky peat, very poorly drained. Soil auguring within the wetland revealed a thick 3-4' "O" layer.

WETLAND HYDROLOGY DATA:

The upper reaches of Brown Brook, a perennial stream, drains in a southeasterly direction through this wetland. Wetland #16 is hydrologically connected with Wetland #15.

proximity to aquifer

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Spotted turtle association with presence of tussock sedge
- Adjacent uplands with large mast trees
- Evident roosting by bird species
- Small fish noted from the crossing structure on Beede Hill Road

WETLAND INVENTORY DATA FORM

WETLAND ID: #17

CLASSIFICATION: PUB/EM1H

ACREAGE: 18

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> WOODED SWAMP | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input checked="" type="checkbox"/> POND | Name: | <input checked="" type="checkbox"/> Beaver | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This beaver pond includes a large open water area and a shallow marsh at its end

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead trees

SAPLING LAYER

SHRUB LAYER (DENSE)

Maleberry (on edges)

Highbush blueberry (on edge)

HERBACEOUS LAYER

Eastern burreed

Woolgrass

Broad-leaved cattail

WETLAND SOILS DATA

(97) Greenwood Ossipee soil ponded

WETLAND HYDROLOGY DATA:

Ponded to 4-6' deep by the beaver dam

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Wading bird, turtle / amphibian, water fowl and cavity nesting bird habitat
- Beaver / otter / mink habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #18 & 19

CLASSIFICATION: PFO4E

ACREAGE: 6

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

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

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

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

- ☐ Scrub-Shrub
☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

Uniform red maple – hemlock swamp

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Eastern hemlock
Red maple
White pine

SAPLING LAYER

Eastern hemlock
Red maple

SHRUB LAYER

Winterberry
Hemlock
Highbush blueberry
Northern wild raisin
Hobblebush

HERBACEOUS LAYER

Cinnamon fern
Royal fern
Goldthread
Marsh fern
Sphagnum moss
Canada mayflower

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to less than 6"

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Potential deer yard habitat
- Otherwise, a uniform hemlock swamp

WETLAND INVENTORY DATA FORM

WETLAND ID: #20

CLASSIFICATION: PUB/SS1/FO1Hb

ACREAGE: 61

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|--|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input type="checkbox"/> Scrub-Shrub |
| <input checked="" type="checkbox"/> MARSH | <input checked="" 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input type="checkbox"/> STREAM | <input checked="" type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input checked="" type="checkbox"/> POND | Name: Loon Pond | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

Loon Pond is surrounded by a wooded swamp and includes a variety of wetland habitat.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
White pine (on edges)

SAPLING LAYER

SHRUB LAYER (DENSE)

Maleberry
Highbush blueberry
Winterberry
Buttonbush

HERBACEOUS LAYER

Tussock sedge
3-way sedge
Grasses
Burreed
Cinnamon fern
Spatterdock
Pond lilly

WETLAND SOILS DATA

97) Greenwood Ossipee soil ponded
(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Permanently flooded to 6+' with deep and shallow marsh transitioning into wooded swamp

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Very high wildlife habitat value
- Wading bird, turtle / amphibian, water fowl and cavity nesting bird habitat
- Beaver / otter / mink habitat
- Fisheries & recreation area

WETLAND INVENTORY DATA FORM

WETLAND ID: #21

CLASSIFICATION: PSS1/FO1E

ACREAGE: 17.8

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a very thick scrub-shrub / forested wetland bisected by an ATV trail

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Eastern hemlock
Red maple

SAPLING LAYER

Red maple
Grey birch

SHRUB LAYER

Winterberry
Buttonbush
Highbush blueberry
Maleberry
Meadowsweet
Chokeberry

HERBACEOUS LAYER

Cinnamon fern
Blue joint grass
Canada rush
Tussock sedge
Burreed
Woolgrass
Royal fern
Goldenrod
Asters
Swamp dewberry

WETLAND SOILS DATA

97) Greenwood and Ossipee soils ponded
115) Scarboro muck

WETLAND HYDROLOGY DATA:

Seasonally flooded to depths of 2'

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Thick scrub-shrub habitat bordered by old field, forest and ATV trail

WETLAND INVENTORY DATA FORM

WETLAND ID: #22

CLASSIFICATION: PFO1/4E

ACREAGE: 20.6

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|---|---|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input checked="" type="checkbox"/> Evergreen | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input checked="" type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a moderate sized forested wetland bordered by an esker to the south that separates it from Wetlands #23 & 25.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
Eastern hemlock

SAPLING LAYER

SHRUB LAYER

Highbush blueberry
Winterberry
Sweet pepperbush
Poison sumac
Maleberry

HERBACEOUS LAYER

Cinnamon fern
Sphagnum moss
Goldthread
Bunchberry

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

- Seasonally flooded / saturated
- Pockets of standing water
- Potential vernal pool habitat

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Potential vernal pool habitat
- Good forested wetland habitat with berry producing shrubs

WETLAND INVENTORY DATA FORM

WETLAND ID: #23

CLASSIFICATION: PFO1E

ACREAGE: 4.6

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|---|--|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input checked="" type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a smaller forested wetland located in the northwest portion of town in a cluster of wetlands.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
White pine

SAPLING LAYER

SHRUB LAYER

Highbush blueberry
Winterberry
Buttonbush
Maleberry

HERBACEOUS LAYER

Leatherleaf
Sphagnum moss
Sedges
Tussock sedge

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

- Seasonally flooded / saturated

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Potential vernal pool habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #24

CLASSIFICATION: PFO1Eb

ACREAGE: 9.8

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

- ☐ Scrub-Shrub
☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This is a smaller forested wetland located in the northwest portion of town in a cluster of wetlands.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
White pine (dead)

SAPLING LAYER

SHRUB LAYER

Highbush blueberry
Winterberry
Red maple

HERBACEOUS LAYER

Blue joint grass
Bidens (spp.)
Sedges
Cinnamon fern
Grasses
Bugleweed
Bed straw
Marsh fern

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

- Recently flooded by beaver and then drained

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Forested wetland habitat
- No aquatic habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #25

CLASSIFICATION: PFO1/4E

ACREAGE: 19.3

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|---|---|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input checked="" type="checkbox"/> Evergreen | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input checked="" type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input checked="" type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a medium-sized forested wetland with red spruce and black gum present in the canopy. This is the easternmost wetland in the cluster of wetlands in the northwest portion of town.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
White pine
Red spruce
Black gum

SAPLING LAYER

SHRUB LAYER

Highbush blueberry
Winterberry
Sweet pepperbush
Poison sumac
Maleberry

HERBACEOUS LAYER

Sphagnum moss
Goldthread
Bunchberry
Cinnamon fern

WETLAND SOILS DATA

(295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

- Seasonally flooded with pockets of standing water
- Drains southeast toward Wetland #26

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Potential vernal pool habitat
- Rare tree species present
- Note -- check eastern boundary

WETLAND INVENTORY DATA FORM

WETLAND ID: #26

CLASSIFICATION: PFO5/EM1Eb

ACREAGE: 11.2

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

☐ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☐ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☐ Deciduous

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☒ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☐ Scrub-Shrub

☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This is a moderate sized marsh drained by an intermittent stream with lots of standing dead trees.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

SAPLING LAYER

SHRUB LAYER

Steeplebush

Highbush blueberry

Red maple

Winterberry

HERBACEOUS LAYER

Cattail

Brown sedge

Budgeweed

Scoparia

Panarium (spp.)

Rattlesnake grass

Phragmites

Marsh fern

Panicon (spp.)

Sensitive fern

Woolgrass

Sphagnum moss

Swamp loosestrife

Tearthumb

Lurid sedge

Purple loosestrife

St. John's wort

Burreed

Sedges

WETLAND SOILS DATA

295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded with areas of permanent flooding adjacent beaver dam

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Wading bird, and water fowl habitat
- Trees for cavity nesting birds
- Turtle & amphibian habitat observed
- Beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #27

CLASSIFICATION: PFO1/EM1E; PUBH;
PEM1E

ACREAGE: 9.1 + 5 = 14

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input checked="" type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a series of small beaver ponds with a forested wetland feeding into them.

WETLAND PLANT COMMUNITY DATA

PFO1/EM1E

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Speckled alder
Winterberry
Northern
arrowwood
Meadowsweet

Mountain holly
Buttonbush
Sweet
pepperbush
Poison sumac

HERBACEOUS LAYER

Tussock sedge
Joe pye weed
Blue joint grass
Marsh fern
Willow herb
Marsh marigold
Arrow arrum
Burreed

PUBH

TREE LAYER

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Tussock sedge
Bidens (spp.)
Pond lilly
Spadderdock
Rushes
Cattail
Burreed
Cottongrass
Woolgrass
Purple loosestrife

PEM1E

TREE LAYER

Dead trees

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Cattail
Purple loosestrife
Pickerel weed

WETLAND SOILS DATA

97) Greenwood and Ossipee soils ponded; underlain by ledge

WETLAND HYDROLOGY DATA:

Permanently flooded by beaver dams to 4' deep; open water areas drained by stream on southern end

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Beaver ponds with turtle, amphibian, wading bird, and water fowl habitats observed
- Beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #28

CLASSIFICATION: PFO1/4E

ACREAGE: 4.5

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

☒ WOODED SWAMP

☐ MARSH

☐ WET MEADOW

☐ RIVER

☐ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous

☐ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☒ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☐ Scrub-Shrub

☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

A basin-like wooded swamp drained by an intermittent stream that flows under Beede Hill Road into Wetland #27

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Eastern hemlock

Red maple

Yellow birch

SAPLING LAYER

White ash

SHRUB LAYER

Winterberry

Spicebush

Highbush blueberry

HERBACEOUS LAYER

Cinnamon fern

Poison ivy

Goldthread

Dwarf blackberry

Sphagnum moss

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to depths of 12"

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Potential vernal pool habitat
- Otherwise, a uniform forested wetland

WETLAND INVENTORY DATA FORM

WETLAND ID: #29

CLASSIFICATION: PEM1/SS1E & PUBH

ACREAGE: 9.8

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

- ☒ Scrub-Shrub
☐ Tidal

Order:

☒ Potential

WETLAND DESCRIPTION

This is a very thick scrub-shrub / forested wetland bisected by an ATV trail

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple (edges)
Dead trees

SAPLING LAYER

SHRUB LAYER

Winterberry
Buttonbush
Highbush blueberry
Leatherleaf

HERBACEOUS LAYER

3-way sedge
Woolgrass
Blue joint grass
Swamp loosestrife
Burreed
Woodreed

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to depths of 2' with pond area up to 4'

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Songbird, turtle / amphibian habitat
- Small pond wading bird habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #30

CLASSIFICATION: PFO1E; PFO5/EM1Eb;
PUB/SSIHb

ACREAGE: 10

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: September 2007

WETLAND TYPE:

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

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

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

- ☒ Scrub-Shrub
☐ Tidal

Order:

WETLAND DESCRIPTION

This is a series of well established beaver ponds connected by streams with forested wetlands. This is a very diverse wetland system.

WETLAND PLANT COMMUNITY DATA

PFO1E

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Royal fern
Winterberry

Cinnamon fern
Meadowsweet

HERBACEOUS LAYER

Grasses
3-way sedge

Bugleweed

PFO5/EM1Eb

TREE LAYER

Red maple
Dead trees

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Eastern burreed
Tearthumb
Rattlesnake grass

Tussock sedge
Joe pye weed
Sedges (spp.)

PUB/SSIHb

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Meadowsweet
Highbush blueberry

Winterberry
Maleberry

HERBACEOUS LAYER

Cranberry
Royal fern

Marsh fern
Tussock sedge

WETLAND SOILS DATA

(97) Greenwood and Ossipec soils ponded / (546A) Walpole very fine sandy loam

WETLAND HYDROLOGY DATA:

- Seasonally flooded to 3' deep
- Impounded by beaver dams to 3' deep
- Drained by intermittent stream west under Beede Hill Road

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Turtle / amphibian habitat
- Cavity nesting bird, songbird, and water fowl habitat
- Beaver / mink / otter habitat
- Woodcock, solitary sandpipers, wood duck and black duck observed

WETLAND INVENTORY DATA FORM

WETLAND ID: #31 & 32

CLASSIFICATION: PEM1Fb/PEM1Eb

ACREAGE: 13

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: September 2007

WETLAND TYPE:

- | | | | |
|--|--|---|--------------------------------------|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland contains an active beaver colony. Wetlands #31 & 32 are now merged due to the backing up of surface water by current damming activities. The plant community chiefly consists of both shallow and deep marsh. Ridge Road, a Town Class VI road accommodates good access to this wetland.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

A few snags

SAPLING LAYER

SHRUB LAYER

Maleberry
Highbush blueberry
Steeplebush

HERBACEOUS LAYER

Broad-leaved cattail
Woolgrass
Rattlesnake grass

WETLAND SOILS DATA

(295) Greenwood mucky peat, very poorly drained

WETLAND HYDROLOGY DATA:

An open water area was evident in the most northern (PEM1Fb) wetland component.

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Beaver activity noted (active dam, lodge, browse)

WETLAND INVENTORY DATA FORM

WETLAND ID: #33

CLASSIFICATION: PSS1E

ACREAGE: 7.5

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | |
| <input type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | Order: |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a very thick scrub-shrub wetland that drains west under Beede Hill Road into Wetland #27

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple (sparse)

SAPLING LAYER

Red maple

SHRUB LAYER (DENSE)

Winterberry
Buttonbush
Highbush blueberry
Northern arrowwood
Meadowsweet

HERBACEOUS LAYER

Tussock sedge
Cinnamon fern

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to depths of 2'

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Songbird, turtle / amphibian habitat
- Dense berry producing shrubs

WETLAND INVENTORY DATA FORM

WETLAND ID: #34

CLASSIFICATION: PFO5/SS1/EM1E

ACREAGE: 6

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

☐ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☐ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☐ Deciduous

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☐ Beaver

☐ Potential

☐ Scrub-Shrub

☐ Tidal

Order:

WETLAND DESCRIPTION

This is a small marsh habitat with dead trees. This wetland drains into Wetland #35.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead

SAPLING LAYER

Red maple

SHRUB LAYER (DENSE)

Maleberry

Highbush blueberry

HERBACEOUS LAYER

Broad-leaved cattail

Tussock sedge

Marsh fern

Swamp dewberry

Reed canary grass

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to 18"

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Songbird, amphibian and cavity nesting bird habitat
- Adjacent to recreational hiking trails

WETLAND INVENTORY DATA FORM

WETLAND ID: #35

CLASSIFICATION: PEM1/UBHb & PFO1E

ACREAGE: .28

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

☒ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☐ STREAM

☒ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☒ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☒ Beaver

☐ Potential

☐ Scrub-Shrub

☐ Tidal

Order:

WETLAND DESCRIPTION

This large beaver pond includes an open water, shallow and deep marsh habitat drained by a tributary stream to the Exeter River.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple (on edges)

Grey birch

White pine

SAPLING LAYER

SHRUB LAYER (DENSE)

Buttonbush

Winterberry

Highbush blueberry

Northern arrowwood

HERBACEOUS LAYER

Broad-leaved cattail

Tussock sedge

Marsh fern

Fringed sedge

Eastern burreed

Pickrel weed

Pond lilly

Spadderdock

Royal fern

WETLAND SOILS DATA

(97) Greenwood Ossipee soils ponded

(295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

Permanently flooded to 6' by beaver dam with shallower flooding in forested fingers

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Water fowl, wading bird turtle / amphibian and cavity nesting bird habitat
- Large deep marsh component
- Beaver / mink / otter habitat bordered by recreation trails

WETLAND INVENTORY DATA FORM

WETLAND ID: #36

CLASSIFICATION: PFO5/EM1/UBHb

ACREAGE: 8.3

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: September 2007

WETLAND TYPE:

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

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

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

☐ Potential

- ☐ Scrub-Shrub
☐ Tidal

Order:

WETLAND DESCRIPTION

This small beaver pond appears to be abandoned. It is adjacent to a lumberyard and has historic disturbance in its buffers.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead

SAPLING LAYER

Birch

SHRUB LAYER

Meadowsweet

HERBACEOUS LAYER

Woolgrass
Tussock sedge
Rattlesnake grass
Eastern burreed
3-way sedge

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to 3' deep

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Turtle / amphibian habitat
- Cavity nesting bird habitat
- Historic disturbance around this wetland

WETLAND INVENTORY DATA FORM

WETLAND ID: #37

CLASSIFICATION: PSS1/EM1E & PFO1E

ACREAGE: 60

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland is located at the confluence of the Exeter River and an unnamed stream that drains Wetland #35. It includes forested, scrub-shrub and emergent floodplain wetlands and has beaver activity in portions of the wetland.

WETLAND PLANT COMMUNITY DATA

PSS1/EM1E

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

TREE LAYER

Red maple

SAPLING LAYER

Red maple

SHRUB LAYER

Speckled alder
Buttonbush

HERBACEOUS LAYER

Tussock sedge
Royal fern
Jewelweed
Pickerel weed

WETLAND SOILS DATA

295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded by river with active floodplain oxbows and backwater areas

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- High value songbird, wading bird, and water fowl habitat
- Fisheries habitat associated with river
- Turtle & amphibian habitat observed
- Beaver / mink / otter habitat
- High value upland buffers including large hay field

WETLAND INVENTORY DATA FORM

WETLAND ID: #38

CLASSIFICATION: PEM1/SS1E

ACREAGE: 3

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|--|--------------------------------------|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input type="checkbox"/> Scrub-Shrub |
| <input checked="" type="checkbox"/> MARSH | <input checked="" 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a small marsh associated with perennial tributary to the Exeter River.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

SAPLING LAYER

SHRUB LAYER (DENSE)

HERBACEOUS LAYER

Speckled alder
Meadowsweet
Winterberry

Blue joint grass
Jewelweed
Sensitive fern
Sedges
Smartweed

WETLAND SOILS DATA

(97) Greenwood Ossipee soils ponded

WETLAND HYDROLOGY DATA:

Seasonally flooded to 2' deep

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Some amphibian and marsh bird habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #39

CLASSIFICATION: PSS1/FO1Eb;
PEM1/UBHb; PSS1/EM1E

ACREAGE: 76

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input checked="" type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This large wooded swamp has a beaver pond at its eastern end where it is drained by a perennial stream. There is a small finger of this wetland located east of Sandown Road where it is connected by an old box culvert.

WETLAND PLANT COMMUNITY DATA

PSS1/FO1Eb

TREE LAYER

Red maple
Black gum
Yellow birch
Hemlock (on edges)

SAPLING LAYER

Red maple

SHRUB LAYER

Highbush blueberry
Winterberry
Maleberry

HERBACEOUS LAYER

Cinnamon fern
Sphagnum moss
Sweet flag
Marsh fern

Woolgrass
Marsh marigold
Blue flag

PEM1/UBHb

TREE LAYER

Red maple

SAPLING LAYER

SHRUB LAYER

Highbush blueberry
Maleberry
Sweet pepperbush

HERBACEOUS LAYER

Eastern burreed
Broad-leaf cattail
Rushes

3-way sedge
Bidens (spp.)

PSS1/EM1E

TREE LAYER

SAPLING LAYER

SHRUB LAYER

Buttonbush
Northern arrowwood
Meadowsweet

HERBACEOUS LAYER

Blue joint grass
Marsh fern
Smartweed

Tussock sedge
3-way sedge
Burreed

WETLAND SOILS DATA

295) Greenwood mucky peat & (97) Greenwood and Ossipee soils ponded

WETLAND HYDROLOGY DATA:

Seasonally flooded with beaver dams and open water areas adjacent to beaver dam

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Large forested swamp with songbird and water fowl habitat
- Turtle habitat
- Beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #40

CLASSIFICATION: PFO1/SS1Eb

ACREAGE: 12

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: September 2007

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

☐ Potential

- ☒ Scrub-Shrub
☐ Tidal

Order:

WETLAND DESCRIPTION

Forested wetland associated with an intermittent stream along the Raymond town line in the western boundary of Fremont.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

SAPLING LAYER

Red maple
Grey birch
American elm

SHRUB LAYER

Winterberry
Highbush blueberry

HERBACEOUS LAYER

Tussock sedge
Cattail
Woolgrass
Sedges
Marsh fern
Joe pye weed
Purple loosestrife

WETLAND SOILS DATA

295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

Seasonally flooded to 12"

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

Not as high value as other wetlands due to disturbance associated with adjacent development

WETLAND INVENTORY DATA FORM

WETLAND ID: #41

CLASSIFICATION: PEM1/SS1E;
PFO1/SS1/EM1Eb

ACREAGE: 88

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

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 checked="" type="checkbox"/> WET MEADOW | <input type="checkbox"/> Ditched | <input checked="" type="checkbox"/> Grazed | |
| <input type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input checked="" type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland includes two large shallow marsh systems connected by a stream with areas of scrub-shrub and forested wetlands. The wetland is bordered by cattle grazing lands and is grazed in portions.

WETLAND PLANT COMMUNITY DATA

PEM1/SS1E TREE LAYER

SAPLING LAYER

Red maple

SHRUB LAYER

Glossy leaved
buckthorn
Winterberry
Meadowsweet
Speckled alder
Highbush
blueberry

Buttonbush

Steeplebush
Black willow
Pussy willow

HERBACEOUS LAYER

Woodreed
Blue joint grass
Tussock sedge
Rattlesnake grass
Broad-leaved cattail

Reed canary
grass
Jewelweed
Tearthumb
Burreed

PFO1/SS1/EM1Eb TREE LAYER

SAPLING LAYER

Red maple

SHRUB LAYER

Winterberry
Maleberry
Glossy leaved buckthorn

HERBACEOUS LAYER

Reed canary grass
Cardinal flower
Joe pye weed

Fringed sedge
Hop sedge
Goldenrod

WETLAND SOILS DATA

WETLAND HYDROLOGY DATA:

Seasonally flooded with several beaver dams along the stream system that drains at the western end

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Shallow marsh bird habitat with great blue herons observed
- Turtle habitat with turtles observed
- Water fowl habitat – no fisheries

WETLAND INVENTORY DATA FORM

WETLAND ID: #42

CLASSIFICATION: PFO1/SS1/EM1Eb

ACREAGE: 277

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

☐ Potential

- ☒ Scrub-Shrub
☐ Tidal

Order: 2nd

WETLAND DESCRIPTION

This is the second largest wetland in Fremont and is located in the southwest corner of town and extends into Chester. The Exeter River flows through it to the west and Sandown to the south.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
American elm
Green ash

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
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

WETLAND SOILS DATA

(295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

Wetland is seasonally flooded to 3' deep by the Exeter River

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Large size of the wetland and thick scrub-shrub growth provide high value wildlife habitat
- Fisheries in the Exeter River
- Water fowl, songbird, turtle / amphibian, and beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #43

CLASSIFICATION: PSS1/3/EM1H & PUBH

ACREAGE: 44

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|--|---|---|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input checked="" type="checkbox"/> POND | Name: | <input checked="" type="checkbox"/> Beaver | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a large bog-like wetland located in the southwest portion of town along the Sandown town line. It is drained by a stream in its eastern end.

WETLAND PLANT COMMUNITY DATA

PSS1/3/EM1E

TREE LAYER

SAPLING LAYER

SHRUB LAYER

Leatherleaf
Steeplebush
Meadowsweet
Red maple

Bayberry
Sweet gale
Winterberry

HERBACEOUS LAYER

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

PUBH

TREE LAYER

SAPLING LAYER

SHRUB LAYER

Maleberry
Sweet pepperbush

HERBACEOUS LAYER

Eastern burreed
Spadde dock
Arrow arum
Tussock sedge
Switchgrass
Pickerel weed
Rattlesnake grass

WETLAND SOILS DATA

(97) Greenwood and Ossipee soils ponded
295) Greenwood mucky peat

WETLAND HYDROLOGY DATA:

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

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

Unique plant community with a wide variety of habitat including water fowl, wading bird, turtle / amphibian, and beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #44

CLASSIFICATION: PEM1E; PFO1/SS1E;
PFO1/4; PUBHb

ACREAGE: 11.1

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: September 2007

WETLAND TYPE:

☒ WOODED SWAMP

☒ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous

☒ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☒ Perennial

Name:

Name:

☐ Documented

Description:

☒ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☐ Intermittent

☐ Potential

☒ Scrub-Shrub

☐ Tidal

Order:

WETLAND DESCRIPTION

This wetland occupies a long and narrow drainageway that includes a perennial brook. It appears beaver have abandoned the lower reaches of this wetland. Their prior activity have contributed to the overall diversity of varying wetland classifications within this wetland system.

WETLAND PLANT COMMUNITY DATA

Emergent component (East of Taylor Road):

TREE LAYER

Dead snag

SAPLING LAYER

Red maple

SHRUB LAYER

Buttonbush

Steeplebush

HERBACEOUS LAYER

Broad-leaved cattail

Woolgrass

Joe pye weed

Tussock sedge

Reed canary grass

Jewelweed

Smartweed

Goldenrod (spp.)

Royal fern (on perimeter)

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (547A) Walpole, poorly drained soil. Inclusions of (115) Scarboro muck are characteristic with this soil unit.

WETLAND HYDROLOGY DATA:

- Evidence of extended inundation (mortality of both white pine and eastern hemlock)
- Broken perennial channel – flowage drains in a southeasterly direction then to the north, eventually outletting to the Exeter River

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Solitary sandpiper (visual)
- Whirlygig beetles
- Wildlife corridor
- White-tailed deer stand noted

WETLAND INVENTORY DATA FORM

WETLAND ID: #45

CLASSIFICATION: PSS1/EM1E

ACREAGE: 12.8

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: September 2007

WETLAND TYPE:

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

- ☐ Deciduous
☒ Freshwater Shallow (33%)
☐ Ditched
☐ Upper Perennial
☐ Perennial

Name:

Name:

☐ Documented

Description:

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

☐ Potential

- ☒ Scrub-Shrub (66%)
☐ Tidal

Order:

WETLAND DESCRIPTION

The main component of this wetland is scrub-shrub / emergent. It is situated nest to a prior oxbow of the Exeter River, and appears to function as a spillover area during cyclic flooding. An intermittent stream flows from the wetland in a southeasterly direction.

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)

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (395) Chocorua mucky peat, very poorly drained.

WETLAND HYDROLOGY DATA:

- Cyclic flooding
- Several obligate wetland plant species
- Level of hydrology supports a seasonal stream with defined channel
- Proximity to wetland

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Green frog (visual)
- Whirlygig beetles (visual)
- Water strider (visual)
- Beaver (prior browse)
- Mink (tracks)
- Raccoon (tracks)
- Sandpiper (tracks)

WETLAND INVENTORY DATA FORM

WETLAND ID: #46

CLASSIFICATION: PFO1/SS1E/EM1Eb

ACREAGE: 35.8

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: September 2007

WETLAND TYPE:

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

- ☒ Deciduous (50%)
- ☒ Freshwater Shallow
- ☐ Ditched
- ☐ Upper Perennial
- ☒ Perennial

Name:

Name:

☐ Documented

Description:

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

- ☒ Scrub-Shrub (50%)
- ☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. Red Brook Road divides this wetland. A perennial stream originating at Spruce Swamp crosses the southern component of this wetland. Major disturbance was noted in the adjacent uplands in the south and west by prior / ongoing gravel operations.

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

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (295) Greenwood mucky peat, very poorly drained. Soil auguring in the field revealed 3.5-4' of peat.

WETLAND HYDROLOGY DATA:

- Pit & mound topography
- Surficial rooting
- Tree throw
- A perennial stream bisects the southern component of this wetland, draining in a southwesterly direction
- Proximity to aquifer

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Grey catbird (audio)
- White-tailed deer (tracks)
- The southern wetland component was posted against hunting

WETLAND INVENTORY DATA FORM

WETLAND ID: #47

CLASSIFICATION: PSS1Eb/PFO1Eb

ACREAGE: 13.6

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 5/3/07

WETLAND TYPE:

- | | | | |
|--|---|--|---|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous (40%) | <input type="checkbox"/> Evergreen | <input checked="" type="checkbox"/> Scrub-Shrub (60%) |
| <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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input checked="" type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland is actively being occupied by beaver. The plant community consists of a thick scrub-shrub layer with a hardwood tree overstory. An intermittent stream connects this wetland with Spruce Swamp (Wetland #1).

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple (with snags)

SAPLING LAYER

Red maple

SHRUB LAYER

Highbush blueberry
Winterberry
Maleberry

HERBACEOUS LAYER

Cinnamon fern (on perimeter)

Note: Mayflower, a "species of concern" was observed in the adjacent uplands

WETLAND SOILS DATA

The wetland soil is mapped as a (495) Ossipee mucky peat, very poorly drained. Depth of the standing water prevented field assessment of soils.

WETLAND HYDROLOGY DATA:

- Standing water; the current level of hydrology is being influenced by beaver activity
- Wetland #47 appears hydrologically connected with Wetland #1 (Spruce Swamp) by an intermittent stream
- Additional flowage is received from a forested wetland located on the northeast

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Wetland #47 is actively occupied by beaver (browse / canal)
- Belted kingfisher (in flight)
- White-tailed deer (adjacent travel corridor)
- Frog (spp.)
- Water strider
- Basking logs evident

WETLAND INVENTORY DATA FORM

WETLAND ID: #48

CLASSIFICATION: PSS1/PEM1E & PFO5E

ACREAGE: 20

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 5/2/07

WETLAND TYPE:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input checked="" type="checkbox"/> Scrub-Shrub (40%) |
| <input checked="" type="checkbox"/> MARSH | <input checked="" type="checkbox"/> Freshwater Shallow (40%) | <input type="checkbox"/> Freshwater Deep | <input type="checkbox"/> Tidal |
| <input type="checkbox"/> WET MEADOW | <input type="checkbox"/> Ditched | <input type="checkbox"/> Grazed | |
| <input type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: |
| <input checked="" type="checkbox"/> STREAM | <input type="checkbox"/> Perennial | <input checked="" type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland is both emergent and scrub-shrub. An intermittent stream bisects the wetland flowing in a northeasterly direction.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
with dead snag component

SAPLING LAYER

Red maple

SHRUB LAYER

Winterberry
Meadowsweet
Steeplebush
Highbush blueberry
Maleberry

HERBACEOUS LAYER

Broad-leaved cattail
Tussock sedge
Sphagnum moss
Swamp dewberry
Wetland grass (spp.)

WETLAND SOILS DATA

This soil is mapped as a (97) Greenwood and Ossipee, ponded, very poorly drained.

WETLAND HYDROLOGY DATA:

- Standing water
- Stream channel evident
- No apparent hydrological connection with adjacent pond
- Proximity to aquifer

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- American toad (calling)
- Killdeer (visual)
- White-tailed deer (scat)
- Potential turtle nesting habitat (sandy/gravel substrate, formerly used as gravel pit)
- Water strider
- Whirligig beetle

WETLAND INVENTORY DATA FORM

WETLAND ID: #49

CLASSIFICATION: PSS1E/PEM1E

ACREAGE: 38

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 5/2/07

WETLAND TYPE:

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> WOODED SWAMP | <input 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 – Exeter River | <input checked="" type="checkbox"/> Upper Perennial | <input type="checkbox"/> Lower Perennial | Order: 4th |
| <input checked="" type="checkbox"/> STREAM | <input checked="" type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | |
| <input type="checkbox"/> POND | Name: | | |
| <input type="checkbox"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland complex contains a section of the Exeter River with associated scrub-shrub / emergent wetland. A perennial stream connects the two independent wetland systems.

WETLAND PLANT COMMUNITY DATA

Wetland component SE of Old Danville Rd:

TREE LAYER

SAPLING LAYER

Red maple (on perimeter)

SHRUB LAYER

Winterberry
Buttonbush
Highbush blueberry

HERBACEOUS LAYER

Tussock sedge

WETLAND SOILS DATA

This soil is mapped as a (395) Chocorua mucky peat, very poorly drained.

WETLAND HYDROLOGY DATA:

- Large open water component
- 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
- Proximity to aquifer

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Painted turtles (visual)
- Red-winged blackbird (visual)
- Frog species (visual)

WETLAND INVENTORY DATA FORM

WETLAND ID: #50

(accessed by Kerlin Road)

WEI PROJECT #: 06-076NH

CLASSIFICATION: PFO1E/SS1E

SCIENTIST: Earle Chase

ACREAGE: 3

DATE: 6/9/07

WETLAND TYPE:

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

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

Name:

Name:

☐ Documented

Description:

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

- ☒ Scrub-Shrub
☐ Tidal

Order:

☐ Potential

WETLAND DESCRIPTION

This is a forested scrub-shrub wetland. Its plant community's description and location in a very poorly drained depression closely resembles an exemplary plant community referred to as a Nutrient-Poor Basin Swamp. This wetland's small size probably limits its full status.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
Black gum
White pine (scattered)

SAPLING LAYER

Red maple
Yellow birch

SHRUB LAYER (DENSE)

Pepperbush
Highbush blueberry
Winterberry
Eastern hemlock

HERBACEOUS LAYER

Cinnamon fern
Sphagnum moss
Goldthread
Canada mayflower

WETLAND SOILS DATA

This wetland is mapped as a (125) Scarboro muck, very poorly drained. Soil auguring in the field revealed a 3' "O" layer.

WETLAND HYDROLOGY DATA:

- 3-4" of standing water
- Pit & mound topography
- Surficial roots

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Rabbit species (scat)
- Well traveled wildlife corridor situated between the wetland and Karlin Road
- River otter (scat with fish scales)

WETLAND INVENTORY DATA FORM

WETLAND ID: #52

CLASSIFICATION: PFO5/EM1E

ACREAGE: 3.2

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: September 2007

WETLAND TYPE:

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

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

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

- ☐ Scrub-Shrub
☐ Tidal

Order:

- ☐ Potential

WETLAND DESCRIPTION

This is a small abandoned beaver pond that has transitioned into a shallow marsh / wet meadow.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Dead

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Grasses
Lurid sedge
Woolgrass
Bidens (spp.)

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

- Seasonally flooded to 2' by beaver dam
- Downstream of Wetland #26

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Good grazing habitat for white-tailed deer
- Cavity trees for songbirds

WETLAND INVENTORY DATA FORM

WETLAND ID: #53

CLASSIFICATION: PEM1Ed

ACREAGE: 6

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: June 2007

WETLAND TYPE:

- | | | | |
|--|---|--|--------------------------------------|
| <input type="checkbox"/> WOODED SWAMP | <input type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input type="checkbox"/> Scrub-Shrub |
| <input type="checkbox"/> MARSH | <input type="checkbox"/> Freshwater Shallow | <input type="checkbox"/> Freshwater Deep | <input type="checkbox"/> Tidal |
| <input checked="" type="checkbox"/> WET MEADOW | <input checked="" type="checkbox"/> Ditched | <input checked="" type="checkbox"/> Grazed | |
| <input type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This wetland occupies a depression in a large open field area. It is characterized as a wet meadow being comprised of chiefly wetland and upland grasses. Due to the presence of poorly drained soils, haying is delayed here, allowing the nesting of songbird species, requiring open habitat.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

SAPLING LAYER

SHRUB LAYER

HERBACEOUS LAYER

Red top
Timothy grass
Sensitive fern
Buttercup (spp.)
Spike rush
Green bulrush

Note: This plant community has been historically altered by years of continuous farming and harvesting of hay

WETLAND SOILS DATA

According to the Rockingham County Soil Survey, the wetland soil is mapped as a (33A) Scitico silt loam, a poorly drained or a (538A) Squamscott fine sandy loam, also a poorly drained soil. Both soil units may contain inclusions of Maybid (up to 15%). Soil auguring in the field revealed 4" "O" layer in the wetter and lower reaches of the wetland. It appears that due to the smaller percentage of Hydric A soils, this wetland may not qualify for prime wetland status.

WETLAND HYDROLOGY DATA:

- Saturation to the surface
- Man-made swales / ditch lines have historically altered the pre-existing hydrology

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Red-winged blackbird (visual)
- Potential high-valued songbird nesting habitat due to the adjacent large open fields

WETLAND INVENTORY DATA FORM

WETLAND ID: #54

CLASSIFICATION: PFO1E

ACREAGE: 4.2

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: September 2007

WETLAND TYPE:

- | | | | |
|--|---|--|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input 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 type="checkbox"/> RIVER | <input type="checkbox"/> Upper Perennial | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a forested wetland. Prior logging had created some rutting within the wetland. A newer road and cul-de-sac is situated just south of the wetland.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple
Eastern hemlock
(interspersed)

SAPLING LAYER

Red maple
Eastern hemlock

SHRUB LAYER

Winterberry
Eastern hemlock
White pine

HERBACEOUS LAYER

Cinnamon fern
Swamp dewberry
Canada mayflower

WETLAND SOILS DATA

Soil auguring in the wetland revealed no "O" layer, but a gray silty soil was noted. Soils are mapped as a (547B) Walpole, poorly drained. This soil unit may contain inclusions of Scarboro muck.

WETLAND HYDROLOGY DATA:

- Pit & mound topography
- Some standing water

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- A thick understory of white pine provided good wildlife cover

WETLAND INVENTORY DATA FORM

WETLAND ID: #55

CLASSIFICATION: PFO1C

ACREAGE: 32

WEI PROJECT #: 06-076NH

SCIENTIST: Mark West

DATE: August 2007

WETLAND TYPE:

- | | | | |
|--|---|---|--------------------------------------|
| <input checked="" type="checkbox"/> WOODED SWAMP | <input checked="" type="checkbox"/> Deciduous | <input type="checkbox"/> Evergreen | <input 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"/> LAKE | Name: | | |
| <input type="checkbox"/> VERNAL POOL | <input type="checkbox"/> Documented | <input type="checkbox"/> Potential | |
| <input type="checkbox"/> HUMAN MADE or OTHER | Description: | | |

WETLAND DESCRIPTION

This is a moderate sized forested wetland bordered by an esker to the south that separates it from Wetlands #23 & 25.

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

Cardinal flower
Joe pye weed
Smartweed
Duck potato
Bugleweed

WETLAND SOILS DATA

(395) Chocorua mucky peat

WETLAND HYDROLOGY DATA:

- Seasonally flooded with backwaters and old oxbows

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Fisheries habitat associated with river
- Turtle & amphibian habitat
- Beaver / mink / otter habitat

WETLAND INVENTORY DATA FORM

WETLAND ID: #56

CLASSIFICATION: PFO1E/SS1E

ACREAGE: 5

WEI PROJECT #: 06-076NH

SCIENTIST: Earle Chase

DATE: 8/31/07

WETLAND TYPE:

☒ WOODED SWAMP

☐ MARSH

☐ WET MEADOW

☐ RIVER

☒ STREAM

☐ POND

☐ LAKE

☐ VERNAL POOL

☐ HUMAN MADE or OTHER

☒ Deciduous

☐ Freshwater Shallow

☐ Ditched

☐ Upper Perennial

☐ Perennial

Name:

Name:

☐ Documented

Description:

☐ Evergreen

☐ Freshwater Deep

☐ Grazed

☐ Lower Perennial

☒ Intermittent

(however, the flowage is more consistent than not)

☐ Potential

☒ Scrub-Shrub

☐ Tidal

Order:

WETLAND DESCRIPTION

Wetland #56 is a forested wetland chiefly comprised of red maple with a scrub-shrub understory. An intermittent brook bisects this wetland. The flowage drains in an easterly direction to Shirkin Road.

WETLAND PLANT COMMUNITY DATA

TREE LAYER

Red maple

Yellow birch

SAPLING LAYER

Yellow birch

Musclewood

Black ash

SHRUB LAYER

Winterberry

(interspersed northern

arrowwood & meadowsweet)

HERBACEOUS LAYER

Royal fern

Sensitive fern

Cinnamon fern

Tussock sedge

Sphagnum moss

Jewelweed

WETLAND SOILS DATA

The Rockingham County Survey indicates the soil within the wetlands to be a (395), a Chocorua mucky peat. While soil sampling/ augering, a 4" "O" layer was noted.

WETLAND HYDROLOGY DATA:

- Springtime flooding evident
- Pit & mound topography
- Windthrow

WILDLIFE SIGNIFICANCE / ADDITIONAL NOTES:

- Raccoon (tracks)
- White tailed deer (tracks)
- Gray treefrog (audio)
- Flock of rusty blackbirds (visual)



1. This is a view of Wetland #2 directed northwards. The two predominate layers in this wetland are mixed forest and scrub-shrub.



2. This photo shows a large 24" black gum located within the wetland. The large cavity (top center) is being utilized by a porcupine as a home. A large quantity of scat was noted at the base of the tree.



3. A deer stand was also noted within this wetland. Its location here suggests back and forth movement through this wetland by white-tailed deer. The scrub-shrub component provides critical cover.



1. This is a view of Wetland #3 showing a very thick scrub-shrub understory.



2. These pink lady slippers (a plant species of concern) were observed along the outside edge of Wetland #3.



1. Wetland #4 was previously occupied by a colony of beaver. Its plant community is chiefly comprised of emergent marsh and scrub-shrub species. Interspersed within the wetland were many dead snags (trees that previously had been killed by the high water).



2. Detritus, wood that has fallen to the ground, provides an excellent substrate for insects and wildlife structure.



1. Wetland #5 consists of a wet meadow – emergent marsh – scrub-shrub plant community. Brown Brook, a perennial stream, flows in a southeasterly direction through the wetland.



2. It appears that earlier flood events have caused disturbance (sediment deposition) in a section of this wetland where an access road was overtopped with water.



1. Wetland #6 is an excavated pond with a thin fringe of emergent vegetation. This wetland is surrounded by farm fields.



2. On the day the wetland inventory was completed, a flock of Canada geese was observed utilizing the open water component. The nearby grassed fields provide important feed.



3. Some degradation is occurring to overall water quality at Wetland #6 by cows that are being allowed to drink directly from the pond. Best Management Practices for agriculture can provide good alternatives and, at the same time, provide better protection of the effected wetland.



1. This is a view of the center portion of Wetland #7. It occupies a drainageway with an intermittent stream.



2. The wetland plant community is chiefly comprised of emergent marsh and scrub-shrub. Detritus (lying wood debris) provides potential basking logs for both spotted and Blanding's turtles.



1. Wetland #8 flows into Wetland #7. North Road divides the two wetland systems. The wetland plant community is equally divided between emergent marsh and scrub-shrub species.



1. Wetland #9 contains a forested scrub-shrub plant community. The thick understory of shrubs provides excellent wildlife cover. A paved road, Brown Brook Circle, bisects this wetland.



1. Wetland #10 occupies a very long and narrow drainageway that includes Brown Brook, a perennial flowage. The wetland stretches from Wildwood Road on the west to Martin Road on the east.



2. This is a view of a component of Wetland #10 situated just south of the new athletic field. Its fish and wildlife classification as emergent / scrub-shrub was representative of a large percentage of this wetland system.



1. This is a view of Wetland #11 looking northwards. Its classification is forest – scrub-shrub. The observed pit and mound topography contained numerous depressions that would hold surface water during the spring months and provide potential habitat for breeding and egg laying amphibians.



1. This is a view of Wetland #12 looking in a southeasterly direction. This is a forested scrub-shrub wetland which is hydrologically connected to Wetland #10.



2. This photo shows the winter yarding activity by a small group of white-tailed deer (5 individual beds). This photo helps to highlight the importance of very small wetland components in providing critical winter habitat.



1. Wetland #13 is a forested / scrub-shrub wetland. The wetland's topographical position and plant community description suggest that this wetland may be of exemplary status.



2. This large diameter black gum was observed within this wetland. These mature trees increase the overall diversity of the wetland and adjacent landscape.



3. This photo shows a snapping turtle that was observed at the edge of Beede Hill Road adjacent to Wetland #13.



4. This photo shows a painted turtle that was crushed by a car between Beede Hill Road and Wetland #13. The sighting of two turtles just days apart indicates that Wetland #13 contains important habitat for turtles.



1. This photo is directed northwards from Shirken Road at Wetland #14. This wetland was previously occupied by a large beaver colony (five separate beaver lodges were counted). The once open water component has been since drained. Pre-existing beaver dams located on the northeast were observed to have been dismantled.



2. A total of 9 great blue heron nests were observed in the snag component within Wetland #14. This photo also shows two of the five beaver lodges that were situated in this prior beaver flowage.



3. The interspersed dead snag component provided critical nesting opportunities to the great blue heron. On 6/12/07, two fledgling birds were observed in one of the nests.



4. These large beaver flowages attract a multitude of large predators. Here, the bounding tracks and slide of a river otter were observed.



5. This photo shows the most southern scrub-shrub component of Wetland #14 (situated between Shirken Road and Beede Hill Road).



6. This photo shows a northern water snake that had been killed on the southern end of Wetland #14 at the edge of Beede Hill Road. It appears that there is quite a bit of movement by reptiles to and from Wetlands #13 & 14.



1. Wetland #15 is one of the larger wetland systems found in Fremont. This photo shows the open water component that is situated on the northeast section of this wetland.



2. Canada geese were observed (top, center) in the open water component. Canada geese prefer habitats that are surrounded by grasslands.



3. This photo shows Wetland #15 looking northwesterly from Tavern Road. Beaver actively occupy this section of the wetland.



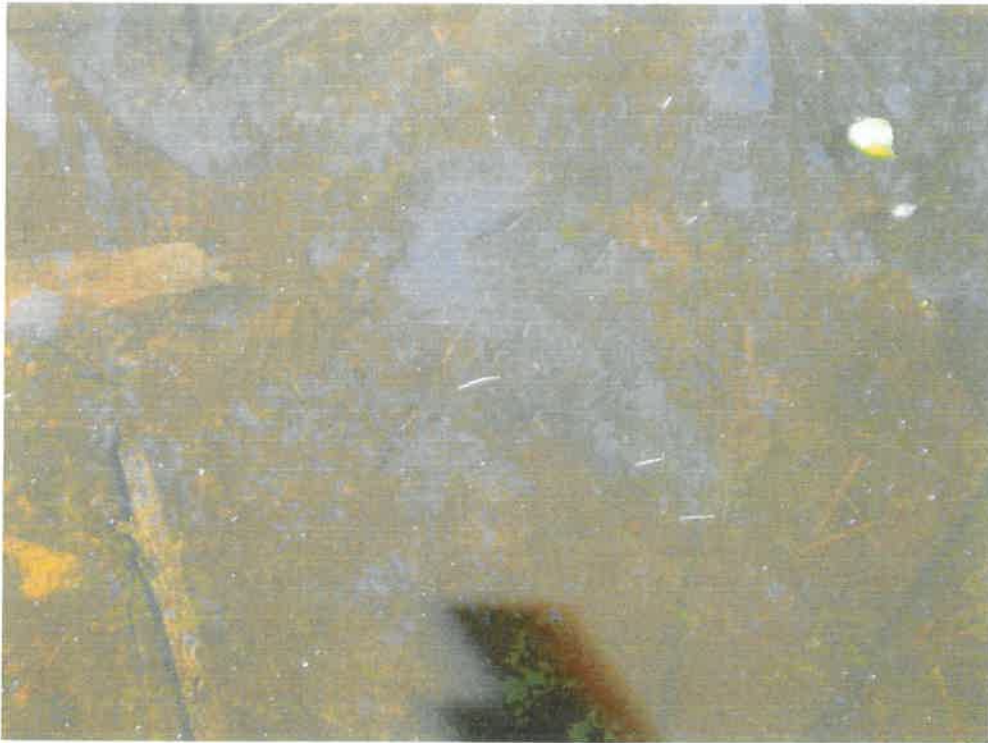
4. This photo shows the hydrological connection (at Beede Hill Road) between Wetland #15 and Wetland #16. The existing box maintains a natural stream bottom.



1. This is a view of the scrub-shrub forested component situated northwest of Beede Hill Road in Wetland #16. A perennial stream flows in a southeasterly direction through this wetland.



2. This is a view of Wetland #16 from the stream crossing on Beede Hill Road (looking in a northwesterly direction). This photo shows the perennial stream channel.



3. Fish (fingerling stage) were observed in the perennial stream at the stream crossing on Beede Hill Road. Wetlands #16 & 15 are connected hydrologically by this stream.



4. This photo shows the ATV trail that bisects the northeast section of this wetland. West Environmental, Inc. is recommending that this ATV trail be removed to restore the wetland's original connection. This may fulfill a future mitigation requirement by a potential developer.



1. This is a view of Wetland #17 looking west from the beaver dam. This wetland has deep marsh in the eastern end and shallow marsh in the western end.



2. The edges of the beaver pond have shallow marsh and scrub-shrub habitat.



3. This is a view of the western end of the wetland which has deep and shallow marsh.



4. Deep marsh habitat is interspersed with shallow marsh habitat in this wetland.



1. This is a typical view of Wetland #18a, a pit and mound hemlock dominated swamp.



2. This is a view of Wetland #19, also dominated by a hemlock canopy with red maple mixed in.



1. This is a view of Loon Pond which is a surface water surrounded by wetland.



2. Loon Pond is a popular fishing spot for local anglers.



3. This is a view of the scrub-shrub portion of this wetland. Deep & shallow marsh habitats are interspersed with scrub-shrub vegetation.



4. There is a small access road to this pond off of Prescott Road.



1. This is a view of Wetland #21 from the ATV trail. It has a thick shrub and herb layer.



2. This is a view of the culvert connecting the wetland across the ATV trail.



1. This forested wetland has both a dense shrub and herb layer.



2. Sweet pepperbush is one of the dominant shrub species in Wetland #22.



1. This is a view of the northern boundary of Wetland #23, a red maple swamp with a carpet of sphagnum moss.



2. Tussock sedge was also present in the herb layer and portions of this wetland have a thick shrub layer.



1. Recent beaver activity has altered the hydrology of this red maple swamp.



2. This is a view of lot development along the western end of this wetland off of Christopher Lane.



1. This is a view of the western end of Wetland #25 where vernal pool habitat is present.



2. The central portion of this wetland has white pine mixed with red maple in the canopy.



3. Red spruce was also observed in this wetland.



4. Black gum is present along the northern boundary of this wetland.



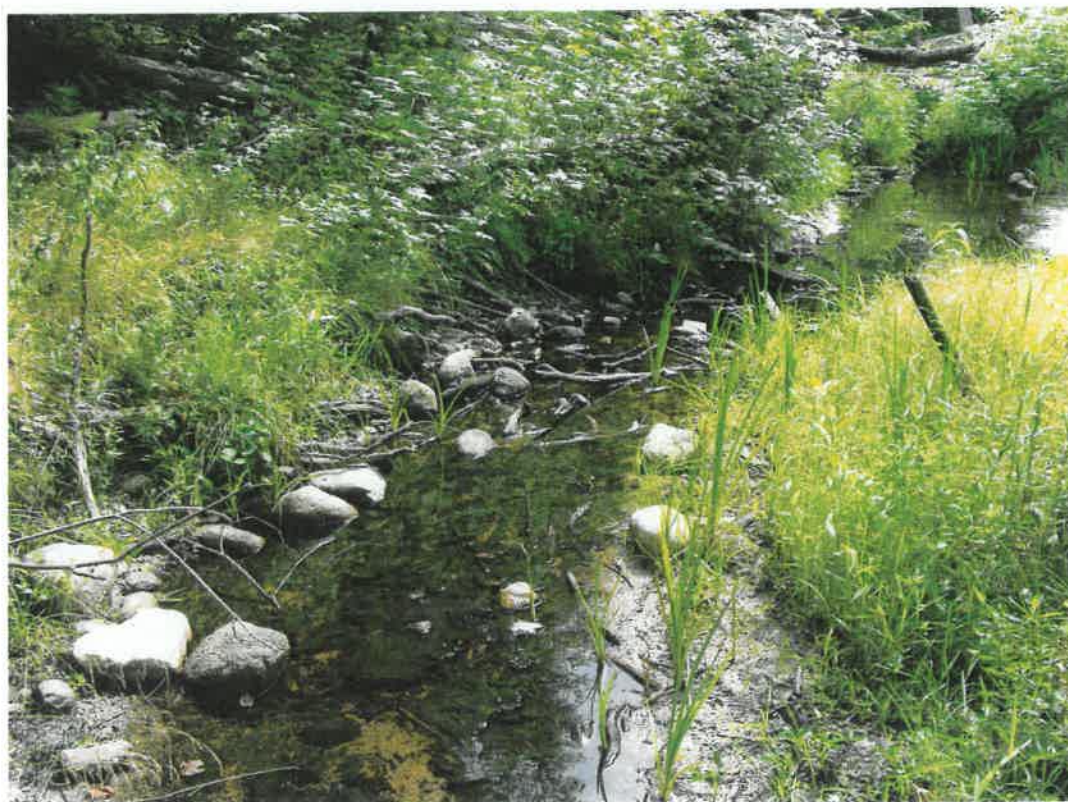
1. This is a view of Wetland #26 looking north into its center. Dead trees are interspersed with shallow marsh habitat.



2. This is a view of the western end of the wetland adjacent a beaver dam.



3. Painted turtles take advantage of the numerous logs in the deep marsh and open water areas.



4. Wetland #26 is drained by a perennial stream that flows south.



1. This is a view of the northern portion of Wetland #27 where it is a red maple swamp with a dense herb layer.



2. This is a view of a shallow marsh portion of Wetland #27.



3. This photo shows the beaver pond in the central portion of the wetland.



4. This is a view of the arch culvert crossing the wetland.



5. This photo was taken looking north into the deep marsh portion of Wetland #27.



6. This is a view of the southern most marsh with standing dead trees present.



1. This is a view of Wetland #28, a red maple / eastern hemlock swamp.



2. Portions of this wetland have less hemlock and more shrubs present.



1. This is a view of the wetland which has a dense marsh with standing tree snags.



2. This is a view of the pond in the western end of the wetland.



1. This is a view of the emergent portion of the wetland located at the eastern end.



2. This is a view of one of the open water / deep marsh areas.



3. Black ducks were seen feeding in one of the beaver ponds.



4. The stream system is bordered by forested wetlands between the beaver ponds.



1. This wetland system contains an active beaver colony. The backup of water via their dam structures has merged Wetlands #31 (on the north) with Wetland #32 (on the south).



2. Taken in the late afternoon, this photo shows the open water component at Wetland #31. An actual dam, lodge, and browse were all noted.



1. This is a view of this thick scrub-shrub wetland with numerous berry-producing shrub species.



2. This is a view of the small stream channel that drains this wetland under Beede Hill Road.



1. This is a view of the wetland at the northern end of Wetland #34.



2. The central portion of this wetland is a shallow marsh with standing dead trees.



1. This is a view of Wetland #35 looking north from the railroad bed at the large expanse of marsh habitat.



2. This photo was taken looking south into Wetland #35.



3. This is a view of the forested swamp fingers of Wetland #35 along the old railroad bed.



4. Wetland #35 is bordered by mature forest along its eastern boundary.



1. This is a view of Wetland #36 with a house that is located east of the wetland.



2. This is a view of the central portion of the wetland which includes open water, shallow marsh, and lots of dead wood.



1. This is a view of the northern portion of Wetland #37 which is flooded by a beaver dam.



2. This is a view of the shallow marsh portion of Wetland #37, west of the old railroad bed.



3. This is a view of the central portion of Wetland #37 from the railroad bed looking west.



4. This photo shows the railroad bridge over the Exeter River where the western and eastern portions of Wetland #37 connect.



5. This is a view of the deep and shallow marsh habitat in the eastern portion of the wetland.



6. This is a view of a river back water in the same area.



7. This is a view of the railroad bed which gets heavy ATV use.



8. This photo shows an example of the buttonbush swamps associated with Wetland #37.



1. This is a view of Wetland #38, which is a shallow marsh downstream of Wetland #39.



1. This is a view of the northeast finger of Wetland #39, which is forested with hemlock mixing in.



2. The northern portion of this wetland is a red maple swamp with a thick shrub and sapling layer.



3. The southeastern portion of the wetland includes a beaver pond with deep and shallow marsh habitat.



4. There is a forested wetland associated with the stream that drains the beaver pond.



5. The eastern portion of Wetland #39 extends across Sandown Road. This is a buttonbush swamp with pockets of deep marsh habitat.



6. This is a view of the box culvert that connects the wetland.



1. This is a view of the central portion of Wetland #40 which has a very dense shrub layer.



2. This is a photo of the fire pond east of Wetland #40.



1. This is a view of the eastern portion of Wetland #41, a broad shallow marsh area.



2. This photo was taken from one of the islands looking west across the wetland.



3. This is a view of the southern boundary of the wetland where cattle graze in the wetland.



4. This photo shows the southeastern corner of Wetland #41, which is forested.



5. This is a view of the southwest finger of Wetland #41, which is a forested swamp associated with an intermittent stream.



6. This is a view of the marsh habitat associated with the stream and the beaver dams.



1. The eastern end of Wetland #42 borders the old railroad bed and the Sandown town line where there is a wood bridge crossing.



2. This portion of the wetland is dominated by shrubs with pockets of forested wetland.



3. This photo is looking north from the wood bridge (downstream) at the Exeter River.



4. This is a view of the forested portion of the wetland which is the dominant cover type of this wetland.



5. This is a view of the wetland where the river crosses under Sandown Road.



6. This is a view of the northern portion of the wetland which is forested with a thick herb layer of grasses and sedges.



1. This is a view of the portion of Wetland #43 north of the old railroad bed.



2. This is a photo of the old railroad bed which is used by ATVs.



3. This is a photo of the wetland south of the railroad bed which includes a leather-leaf swamp with shallow marsh edges.



4. This is a view of the shallow marsh edges which have pockets of deep marsh habitats.



5. The eastern end of this wetland has a series of beaver ponds with deep marsh areas.



6. There are open water areas in this portion of the wetland.



1. This photo shows a component of Wetland #44 situated just west of Taylor Road (taken from the stream crossing). At this time, its associated perennial stream was nearly dry.



2. This photo shows a solitary sand piper (center of photo) busily feeding at the edge of the water.



3. An elevated culvert was noted at the stream crossing beneath Taylor Road. Its elevation probably severely restrains passage of fish into the upper reaches of this perennial drainage.



1. The main component of Wetland #45 is scrub-shrub / emergent. This wetland is situated adjacent to a prior oxbow of the Exeter River and appears to function as a spillover area during cyclical river flooding.



2. An intermittent stream exits this wetland flowing in a southeasterly direction towards the Exeter River.



3. Sets of tracks (bird and mammal) were observed on the soft mud substrate within the dried up stream channel.



4. A snail, a kind of mollusk, was also observed. Snails scrape algae off rocks, logs, and plant stems with their rasp-like “radulae” containing thousands of teeth.



1. Wetland #46 is a forested – scrub-shrub wetland. Red Brook Road divides this moderate-sized wetland in two. This photo shows the section of wetland situated south of the Red Brook Road. Here, dense herbaceous and shrub layers are evident.



2. This photo was taken within the northern section of this wetland. White-tailed deer sign was noted in both sections of wetland.



1. Wetland #47 is actively occupied by beaver. The plant community consists of a thick scrub-shrub layer with a hardwood tree overstory.



2. A wildlife corridor was noted (center, top to bottom) on the western perimeter of Wetland #47.



3. Both deer scat and other mammal scat (see photo) was observed on this heavily used trail.



4. Mayflower, a plant species of concern, was observed on the outer edge of this wetland. Plants that are of special concern, or threatened/endangered, are often found within the limits of a wetland.



1. Wetland #48 is both emergent and scrub-shrub. An intermittent stream bisects the wetland flowing in a northeasterly direction. This wetland's position adjacent a reclaimed gravel pit increases its overall habitat value for turtles.



2. A significant snag component was evident within Wetland #48. Snags provide homes for foraging insects and cavities to a number of songbird species.



3. This photo shows an excavated pond that is situated immediately adjacent to Wetland #48. It was determined by West Environmental, Inc. that there is no hydrological connection with the pond. The presence of nearby pond, however, increases the general diversity (mixture of wetland classifications) of Wetland #48.



1. This is a view of Wetland #49 from Old Danville Road looking in a southeasterly direction. The wetland is characterized as scrub-shrub / emergent. This wetland component is directly connected with the Exeter River via an associated perennial stream.



2. Painted turtles were observed (bottom right) basking in the sun in this wetland.



3. The thick scrub-shrub layer at Wetland #49 provides excellent habitat for both spotted and Blanding's turtles. The addition of a perennial stream and linkage with the Exeter River augments its overall habitat value.



4. This photo shows a section of the Exeter River northwest of Wetland #49.



1. Wetland #50 is characterized as forested scrub-shrub. Its plant community description and location in a very poorly drained depression closely resembles an exemplary plant community referred to as a “Nutrient-Poor Basin Swamp”. This wetland’s small size probably limits its full status.

2. This photo shows a 22-24” diameter black gum observed within Wetland #50. These old-age trees help to increase overall biological diversity of a wetland and surrounding landscape.





3. A well used wildlife corridor was noted between Wetland #50 and Karlin Road. Deer scat and river otter scat were both documented.



1. Wetland #52 is an old beaver pond that has recently been drained and has dead trees and shallow marsh habitat.



1. This photo shows Wetland #53 looking in a northeasterly direction. This wetland occupies a depression in a large open field area. It is characterized as a wet meadow comprised chiefly of wetland and upland grasses.



2. This photo shows Wetland #53 from Martin Road looking in a southwesterly direction. Due to the presence of poorly drained soils, haying is delayed in this wetland, allowing for ground nesting by a specific group of songbirds requiring open habitat. This fulfills a critical habitat need for these birds.



3. This photo shows a close-up of the herbaceous layer and the hydrology within Wetland #53 in June of 2007.



1. Wetland #54 is a forested wetland. This photo shows the pit and mound topography, the coniferous understory, and hydrological regime.



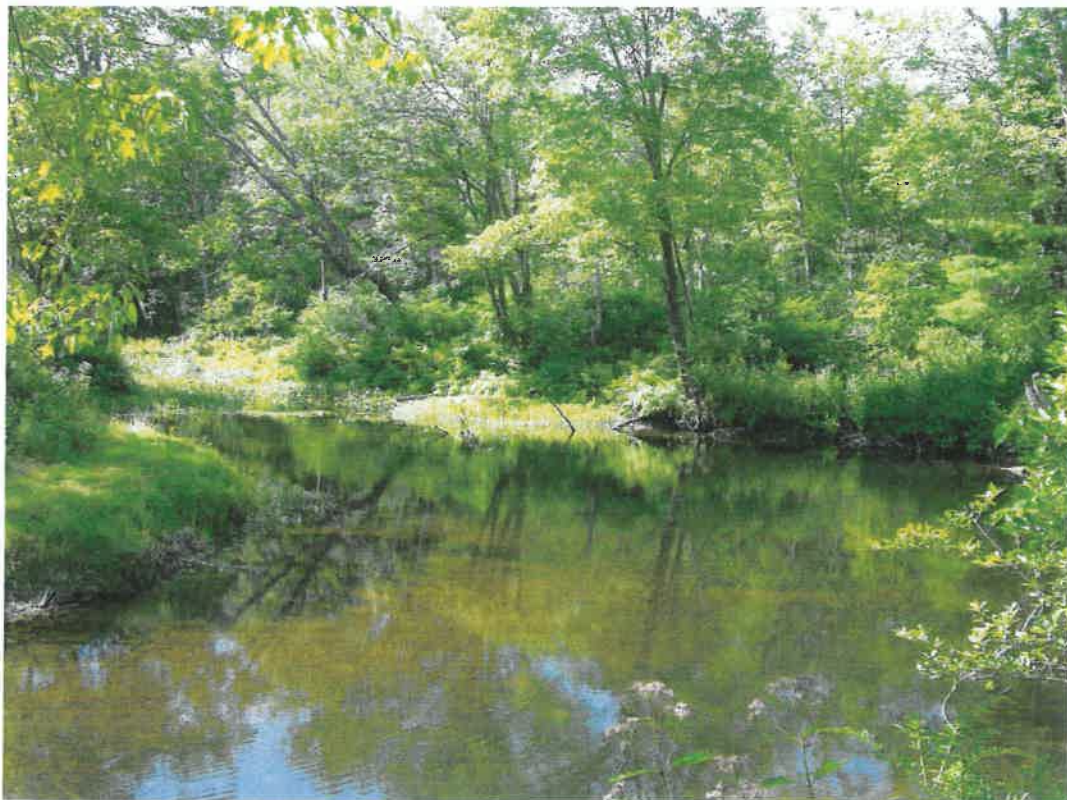
1. This is a view of the northern portion of Wetland #55 along Route 107. Beaver activity has recently flooded this portion of the wetland.



2. This is a view of a tributary stream to Wetland #55 that has recently been excavated/restored adjacent to Route 107.



3. This is a view of an old oxbow associated with the Exeter River and Wetland #55.



4. This photo shows the river and forested floodplain in the central portion of the wetland.



1. Wetland #56 is a forested wetland chiefly comprised of red maple with a thick winterberry scrub-shrub understory. An intermittent stream flows in an easterly direction through the wetland.



2. Black ash, an unusual tree species, was found within Wetland #56.

Appendix A

Wetland Function / Value Assessment Data Forms

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: # 2

Size: 13.3 AC

Date:

WEI Project # 06-076NH

Classification: RFO14|SSIE

Aerial Photograph #: 24933-4-27

24933-4-28

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n

Subsoil type: Mucky peat

Other geologic features: thicker "O" layer

Function Present ☒ y ☐ n**Hydrology**Groundwater relationship present ☒ y ☐ nVariable water levels observed ☒ y ☐ nSprings or seeps observed ☒ y ☐ nContains only inlet or outlet ☒ y ☐ n**Principal Function**

(Yes)

☒ No**Floodflow Alteration****Watershed Information**

Land cover in catchment area? forest

Watershed position ☒ H ☐ M ☐ LOther catchment storage ☒ y ☐ nWatercourse associated ☒ y ☐ nContains hydric A soils ☒ y ☐ nFunction Present ☒ y ☐ n**Topographic Information**

Topography of watershed: Moderate to steep

Topography of wetland: relatively flat

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ nProvides downstream protection ☒ y ☐ n

nearby Rte 125

☒ Yes

No

Sediment/Toxicant/Pathogen Retention**Soils**Organic Soils ☒ y ☐ nBroad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ nDense vegetation ☒ y ☐ nFunction Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ nErosion/sedimentation observed ☒ y ☐ nDiffuse flow/slow moving water ☒ y ☐ nDoes wetland flood ☒ y ☐ nLong water retention ☒ y ☐ n☒ Yes

No

Nutrient Removal/Retention Transformation**Hydrology**Open water present ☒ y ☐ nSlow moving water ☒ y ☐ nNutrients upslope ☒ y ☐ nFunction Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ nAquatic vegetation ☒ y ☐ nAbundant vegetation ☒ y ☐ n☒ Yes

No

Production Export**Vegetation**Density ☒ H ☒ M ☐ LInterspersion ☒ H ☐ M ☐ LDiversity ☒ H ☐ M ☐ LFood source ☒ y ☐ nFunction Present ☒ y ☐ n**Export**Detritus ☒ y ☐ nAquatic plants ☒ y ☐ nBerry producing shrubs ☒ y ☐ nNectar sources ☒ y ☐ nSeed/mast sources ☒ y ☐ n☒ Yes

No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present ☒ y ☐ nHigh seasonal flows ☒ y ☐ nChannelized flow ☒ y ☐ nOpen water fetch ☒ y ☐ nFunction Present ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ nBank vegetated ☒ y ☐ nBank eroded ☒ y ☐ nSteep bank ☒ y ☐ nStabilized Bank ☒ y ☐ n☒ Yes

No

Wetland ID: # 2

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Deep marsh

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: open water w/ associated emergent marsh

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☐ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n (in adjacent uplands)
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Function Present

☒ y ☐ n

Strengths of Upland Habitat:

diversity of wetland classifications;
open water component ☒ Yes ☐ No

Vegetated Buffer

Type: forest/urban Width: 50-500'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n - generally

Habitat Degradation

Percentage of wetland buffer with encroachment: 20%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

adjacent road + development

Wetland Values

Recreational Value

Parking available ☐ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails - old logging trail ☒ y ☐ n
Value H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H ☒ M ☐ L

Comments/Notes

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: #3

Size: 4.4

Date: 6/9/07

WEI Project # 06-076NH

Classification: PFOLE|SSIE

Aerial Photograph #: 24933-3-29

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n

Subsoil type: peat

Other geologic features: thick 0 12 yr

Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n

Variable water levels observed ☒ y ☐ n

Springs or seeps observed ☒ y ☐ n

Contains only inlet or outlet ☒ y ☐ n

Principal Function

Yes

☒ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? forest/urban

Watershed position ☒ H ☐ M ☐ L

Other catchment storage ☒ y ☐ n

Watercourse associated ☒ y ☐ n

Contains hydric A soils ☒ y ☐ n

Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: adjacent slopes

Topography of wetland: relatively flat

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ n

Provides downstream protection ☒ y ☐ n

Yes

No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n

Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n

Dense vegetation ☒ y ☐ n

Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n

Erosion/sedimentation observed ☒ y ☐ n

Diffuse flow/slow moving water ☒ y ☐ n

Does wetland flood ☒ y ☐ n

Long water retention ☒ y ☐ n

Yes

No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n

Slow moving water ☒ y ☐ n

Nutrients upslope ☒ y ☐ n

Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n

Aquatic vegetation ☒ y ☐ n

Abundant vegetation ☒ y ☐ n

Yes

No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L

Interspersion ☒ H ☐ M ☐ L

Diversity ☒ H ☐ M ☐ L

Food source ☒ y ☐ n

Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n

Aquatic plants ☒ y ☐ n

Berry producing shrubs ☒ y ☐ n

Nectar sources ☒ y ☐ n

Seed/mast sources ☒ y ☐ n

Yes

No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n

High seasonal flows ☒ y ☐ n

Channelized flow ☒ y ☐ n

Open water fetch ☒ y ☐ n

Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n

Bank vegetated ☒ y ☐ n

Bank eroded ☒ y ☐ n

Steep bank ☒ y ☐ n

Stabilized Bank ☒ y ☐ n

Yes

No

Wetland ID: #3

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Potential Vernal
Pool

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: scrub-shrub wetland component

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

- Potential Vernal pool
- Adjacent wildlife corridor ☒ Yes ☐ No

Function Present ☒ y ☐ n

Vegetated Buffer

Type: forest/urban Width: 100-500'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

nearby driveway

Habitat Degradation

Percentage of wetland buffer with encroachment: 15%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

adjacent driveway w/ (2) residences

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value

H M ☒ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value

H M ☒ L

Comments/Notes

wire fence

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: # 4 Size: 4.7 AC. Date: 6/9/07 WEI Project # 06-076NH
Classification: PEMIE/SSIE/FOSEB Aerial Photograph #: 24933-3-29

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y (n)
Subsoil type: grey sandy loam
Other geologic features: thin 0" layer
Function Present y (n)

Hydrology

Groundwater relationship present y (n)
Variable water levels observed y (n)
Springs or seeps observed y (n)
Contains only inlet or outlet y (n)

Principal Function

Yes (No)

Floodflow Alteration

Watershed Information

Land cover in catchment area? H M L
Watershed position y (n)
Other catchment storage y (n)
Watercourse associated y (n)
Contains hydric A soils y (n)
Function Present y (n)

Topographic Information

Topography of watershed: adjacent slopes flat
Topography of wetland: y (n)
Constricted outlet y (n)
High degree of impervious surfaces in wetland watershed y (n)
Provides downstream protection y (n) Yes (No)

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils y (n)
Broad boundary transition y (n)

Vegetation

Herbaceous vegetation y (n)
Dense vegetation y (n)
Function Present y (n)

Setting & Hydrology

Upstream sources of pollution y (n) nearby driveway
Erosion/sedimentation observed y (n)
Diffuse flow/slow moving water y (n)
Does wetland flood y (n)
Long water retention y (n)
Yes (No)

Nutrient Removal/Retention Transformation

Hydrology

Open water present y (n)
Slow moving water y (n)
Nutrients upslope y (n)
Function Present y (n)

Transformers

Organic soils y (n)
Aquatic vegetation y (n)
Abundant vegetation y (n)
Yes (No)

Production Export

Vegetation

Density H (M) L
Interspersion H (M) L
Diversity H (M) L
Food source y (n)
Function Present y (n)

Export

Detritus y (n)
Aquatic plants y (n)
Berry producing shrubs y (n)
Nectar sources y (n)
Seed/mast sources y (n) Yes (No)

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent (intermittent)

Characteristics of Stream

Elevation change present y (n)
High seasonal flows y (n)
Channelized flow y (n)
Open water fetch y (n)

Description of Bank

Bank present y (n)
Bank vegetated y (n)
Bank eroded y (n)
Steep bank y (n)
Stabilized Bank y (n)

Function Present y (n)

Yes (No)

Note: Wetland # 4 and # 3 are connected by seasonal stream - also refer to Functional/Value Assessment Data Form for wetland # 3

Wetland ID: #4

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: emergent marsh
scrub/shrub component

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: (same)

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present

☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Adjacent forest

☒ Yes ☐ No

Vegetated Buffer

Type: forest/urban Width: 50-500'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 15%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or other habitat ☒ y ☐ n

Other:

nearby driveway + residences;
prior logging road
rotting

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value

H M ☒ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value

H M ☒ L

Comments/Notes

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: # 5

Size: 18.2

Date: 8/07

WEI Project # 06-076NH

Classification: PEM1/SSIE

Aerial Photograph #: 24933-4-32

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n

Subsoil type: sandy loam

Other geologic features:

Function Present ☒ y ☐ n**Hydrology**Groundwater relationship present ☒ y ☐ nVariable water levels observed ☒ y ☐ nSprings or seeps observed ☒ y ☐ nContains only inlet or outlet ☒ y ☐ n**Principal Function**☒ Yes ☐ No**Floodflow Alteration****Watershed Information**

Land cover in catchment area? field

Watershed position H ☒ M ☐ LOther catchment storage ☒ y ☐ n nearby pondsWatercourse associated ☒ y ☐ nContains hydric A soils ☒ y ☐ nFunction Present ☒ y ☐ n**Topographic Information**

Topography of watershed: relatively flat

Topography of wetland: (same)

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ nProvides downstream protection ☒ y ☐ n☒ Yes ☐ No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ y ☐ nBroad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ nDense vegetation ☒ y ☐ nFunction Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ nErosion/sedimentation observed ☒ y ☐ nDiffuse flow/slow moving water ☒ y ☐ nDoes wetland flood ☒ y ☐ nLong water retention ☒ y ☐ nadjacent fertilized fields
storm damaged access road

occasionally

☒ Yes ☐ No**Nutrient Removal/Retention Transformation****Hydrology**Open water present ☒ y ☐ nSlow moving water ☒ y ☐ nNutrients upslope ☒ y ☐ nFunction Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ nAquatic vegetation ☒ y ☐ nAbundant vegetation ☒ y ☐ n☒ Yes ☐ No**Production Export****Vegetation**Density H ☒ M ☐ LInterspersion H ☒ M ☐ LDiversity H ☒ M ☐ LFood source ☒ y ☐ nFunction Present ☒ y ☐ n**Export**Detritus ☒ y ☐ nAquatic plants ☒ y ☐ nBerry producing shrubs ☒ y ☐ nNectar sources ☒ y ☐ nSeed/mast sources ☒ y ☐ n☒ Yes ☐ No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop) Perennial or intermittent

Characteristics of StreamElevation change present ☒ y ☐ nHigh seasonal flows ☒ y ☐ nChannelized flow ☒ y ☐ nOpen water fetch ☒ y ☐ nFunction Present ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ nBank vegetated ☒ y ☐ nBank eroded ☒ y ☐ nSteep bank ☒ y ☐ nStabilized Bank ☒ y ☐ n☒ Yes ☐ No

Wetland ID: #6

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub/shrub habitat
Extensive adjacent grasslands

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☐ y ☐ n (?)

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Specific Features: potential habitat for spotted & Blundings turtles, several bird species, green
Connectivity snake and northern leopard frog

Wildlife Corridor (through or adjacent) ☐ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat: The size of the extensive grasslands

Function Present ☐ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: Field Width: 500+

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: (5%)

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or other habitat

Other:

☒ y ☐ n

☒ y ☐ n

☒ y ☐ n

Brown Brook/wetland is bisected by Martin Road. the southern section of this wetland is also bisected by a field access road

Wetland Values

Recreational Value

Parking available

Watercraft access

Fishing available

Hunting permitted

Walking/biking trails

Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size: Recent storm events have caused some sedimentation in the southern

H2O Degradation

Present

☒ y ☐ n

wetland/seasonal stream; some evident degradation by cows

Educational/Scientific Value

Unique habitats/plant species

Diverse wildlife habitat

Parking/access

Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity

Rapid development upland

Critical habitat/threatened or endangered species

Archaeological sites

Stonewalls present

Historic sites

Ecological health/vigor

Value

☒ y ☐ n
☐ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H ☒ M ☐ L

Comments/Notes

nearby cemetery

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: 6 Size: 6.1
Classification: PUBHDate: 8/07
Aerial Photograph #: 24933-3-32

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present y(n)
Subsoil type: silt loam
Other geologic features:
Function Present y(n)**Hydrology**Groundwater relationship present y(n)
Variable water levels observed y(n)
Springs or seeps observed y(n)
Contains only inlet or outlet y(n)**Principal Function**

Yes No

Floodflow Alteration**Watershed Information**Land cover in catchment area? field
Watershed position H(M)L
Other catchment storage y(n)
Watercourse associated y(n)
Contains hydric A soils y(n) (?)
Function Present y(n)**Topographic Information**Topography of watershed: flat
Topography of wetland: flat
Constricted outlet y(n)
High degree of impervious surfaces in wetland watershed y(n)
Provides downstream protection y(n)

Yes No

Sediment/Toxicant/Pathogen Retention**Soils**Organic Soils y(n)
Broad boundary transition y(n)**Vegetation**Herbaceous vegetation y(n)
Dense vegetation y(n)
Function Present y(n)**Setting & Hydrology**Upstream sources of pollution y(n)
Erosion/sedimentation observed y(n)
Diffuse flow/slow moving water y(n)
Does wetland flood y(n)
Long water retention y(n)

Yes No

adjacent fields
may receive fertilizer
applications**Nutrient Removal/Retention Transformation****Hydrology**Open water present y(n)
Slow moving water y(n)
Nutrients upslope y(n)
Function Present y(n)**Transformers**Organic soils y(n)
Aquatic vegetation (sparse) y(n)
Abundant vegetation y(n)

Yes No

Production Export**Vegetation**Density H M L
Interspersion H M L
Diversity H M L
Food source y(n)
Function Present y(n)**Export**Detritus y(n)
Aquatic plants y(n)
Berry producing shrubs y(n)
Nectar sources y(n)
Seed/mast sources y(n)

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present y(n) (slight)
High seasonal flows y(n)
Channelized flow y(n)
Open water fetch y(n)**Description of Bank**Bank present y(n)
Bank vegetated y(n)
Bank eroded y(n)
Steep bank y(n)
Stabilized Bank y(n)

Yes No

cows are utilizing
pond for drinking
causing some erosion

Function Present y(n)

Wetland ID: #6

Wildlife Habitat

Existing Critical Habitat y(n)

Type:

Principal Function

Critical Habitat Features y(n)

Specific Features:

Diversity Features

Aquatic insect habitat (y)n
Amphibian habitat (y)n
Fisheries habitat y n (?)
Cavity trees (y)n
Food sources (limited) (y)n
Cover (y)n

Connectivity

Wildlife Corridor (through or adjacent) y(n)
Wetland connectivity (y)n
Upland connectivity (y)n

Strengths of Upland Habitat:

The adjacent upland contains large open fields
Yes (No)

Function Present (y)n

Vegetated Buffer

Type: field Width: 500'
Buffer stream or wetland (y)n
Does buffer provide shade y(n)
Does buffer adequately safeguard wetland y(n)

Habitat Degradation

Percentage of wetland buffer with encroachment: 33% (prior soil disturbance)
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct animal movement (y)n
Significant disturbance (y)n (erosion by cows seeking water)
Proximity to beaver, mink, or otter habitat y(n)
Other:

Wetland Values

Recreational Value

Parking available (y)n
Watercraft access (y)n
Fishing available y n ?
Hunting permitted (y)n
Walking/biking trails (y)n

Restoration Stabilization Potential

(y)n
Restoration area size: 6± - possibly fill-in man-made excavation, create wetland w/ vegetation layer
H2O Degradation (y)n
Present (y)n (potentially, by cars, fertilizer applications, and summer snowmobile runs)

Value H M (L)

Educational/Scientific Value

Unique habitats/plant species (y)n
Diverse wildlife habitat (y)n
Parking/access (y)n
Value H M (L)

Invasive Species Present: (y)n

Type: Barberry (spr.) noted

Uniqueness/Heritage

Urban upland/proximity (y)n
Rapid development upland (y)n
Critical habitat/threatened or endangered species y n (?)
Archaeological sites (y)n
Stonewalls present (y)n
Historic sites (y)n
Ecological health/vigor y n
Value H M (L)

Comments/Notes

(?) potentially in nearby uplands; open water component may be utilized occasional turtle

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #7 Size: 7.6
Classification: Pemi/SSIEDate: 6/12/07
Aerial Photograph #: 24933-3-31

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present y n

Subsoil type: gray sand

Other geologic features:

Function Present y n

Hydrology

Groundwater relationship present y n

Variable water levels observed y n

Springs or seeps observed y n

Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? field - forest

Watershed position H M L

Other catchment storage y n

Watercourse associated y n

Contains hydric A soils y n

Function Present y n

Topographic Information

Topography of watershed: relatively flat

Topography of wetland: " "

Constricted outlet y n

High degree of impervious

surfaces in wetland watershed y n

Provides downstream protection y n

Yes No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils y n

Broad boundary transition y n

Vegetation

Herbaceous vegetation y n

Dense vegetation y n

Function Present y n

Setting & Hydrology

Upstream sources of pollution y n

Erosion/sedimentation observed y n

Diffuse flow/slow moving water y n

Does wetland flood y n

Long water retention y n

Yes No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present y n

Slow moving water y n

Nutrients upslope y n

Function Present y n

Transformers

Organic soils y n

Aquatic vegetation y n

Abundant vegetation y n

Yes No

Production Export**Vegetation**

Density H M L

Interspersion H M L

Diversity H M L

Food source y n

Function Present y n

Export

Detritus y n

Aquatic plants y n

Berry producing shrubs y n

Nectar sources y n

Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present y n

High seasonal flows y n

Channelized flow y n

Open water fetch y n

Function Present y n

Description of Bank

Bank present y n

Bank vegetated y n

Bank eroded y n

Steep bank y n

Stabilized Bank y n

Yes No

Wetland ID: # 7

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub-shrub;
Sedge meadow

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Tussock sedge that is preferred by spotted turtle

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n ? (most likely)

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Nearby upland field

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest / field Width: 500⁺

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or other habitat ☒ y ☐ n

Other:

☒ y ☐ n ; abandoned railroad bisects wetland length-wise

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n potentially by application of fertilizer in nearby upland field & self contamination along North Road

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value

H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value

H ☒ M ☐ L

Comments/Notes

potentially (see above)

adjacent to abandoned railroad

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #8 Size: 13.7

Date: 6/12/07

WEI Project # 06-076NH

Classification: PSS1/EMIE

Aerial Photograph #: 24933-3-31
24933-3-30**Wetland Functions****Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n
Subsoil type: *grzy-sand*
Other geologic features:
Function Present ☒ y ☐ n**Principal Function****Hydrology**Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n **Yes** No**Floodflow Alteration****Watershed Information**Land cover in catchment area? *forest*
Watershed position *H M L*
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n**Topographic Information**Topography of watershed: *relatively flat*
Topography of wetland:
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n **Yes** No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n **Yes** No**Nutrient Removal/Retention Transformation****Hydrology**Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n **Yes** **No****Production Export****Vegetation**Density *H M L*
Interspersion *H M L*
Diversity *H M L*
Food source ☒ y ☐ n
Function Present ☒ y ☐ n**Export**Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n **Yes** No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n
Function Present ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ n (*within wetland*)
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n **Yes** No

Wetland ID: #8

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: *Sarothamnus*
Sedge meadow

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: *Evident tussock sedge that is preferred by spotted turtle*

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n *most likely*
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

*potential adjacent
moss trees*

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: *forest* Width:
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: *33%*

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct
animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
other habitat (previously) ☒ y ☐ n
Other:

*North Road situated
on north;
an abandoned
railroad bed divide
wetland*

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value

H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☒ M ☐ L

Invasive Species Present: ☒ y ☐ n

Type: *Bzberry (spp.)*

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☒ M ☐ L

Comments/Notes

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #9 Size: 22.2
Classification: PFOIE/SSIEDate: 8/31/07 WEI Project # 06-076NH
Aerial Photograph #: 24933-3-32**Wetland Functions****Groundwater Recharge/Discharge****Geology**Restrictive layer present y(n)
Subsoil type: grey sandy loam
Other geologic features:

Function Present y(n)

Principal Function**Hydrology**Groundwater relationship present y(n)
Variable water levels observed y(n)
Springs or seeps observed y(n)
Contains only inlet or outlet y(n)

Yes (No)

Floodflow Alteration**Watershed Information**Land cover in catchment area? forest
Watershed position (H) M L
Other catchment storage y(n)
Watercourse associated y(n)
Contains hydric A soils y(n)

Function Present y(n)

Topographic InformationTopography of watershed: relatively flat
Topography of wetland: (same)
Constricted outlet y(n) no outlet/self-contained
High degree of impervious surfaces in wetland watershed y(n) (nearby Brown Brook Circle)
Provides downstream protection y(n) Yes No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils y(n)
Broad boundary transition y(n)**Vegetation**Herbaceous vegetation y(n)
Dense vegetation y(n)

Function Present y(n)

Setting & HydrologyUpstream sources of pollution y(n)
Erosion/sedimentation observed y(n)
Diffuse flow/slow moving water y(n)
Does wetland flood y(n)
Long water retention y(n)

(Yes) No

Nutrient Removal/Retention Transformation**Hydrology**Open water present y(n)
Slow moving water y(n)
Nutrients upslope y(n)
Function Present y(n)**Transformers**Organic soils y(n)
Aquatic vegetation y(n)
Abundant vegetation y(n)

Yes (No)

Production Export**Vegetation**Density H (M) L
Interspersion H (M) L
Diversity H (M) L
Food source y(n)
Function Present y(n)**Export**Detritus y(n)
Aquatic plants y(n)
Berry producing shrubs y(n)
Nectar sources y(n)
Seed/mast sources y(n)

Yes (No)

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent

Characteristics of StreamElevation change present y(n)
High seasonal flows y(n)
Channelized flow y(n)
Open water fetch y(n)

Function Present y(n)

Description of BankBank present y(n)
Bank vegetated y(n)
Bank eroded y(n)
Steep bank y(n)
Stabilized Bank y(n)

Yes (No)

Wetland ID: # 9

Wildlife Habitat

Existing Critical Habitat y n

Type:

Principal Function

Critical Habitat Features y n

Specific Features:

Diversity Features

Aquatic insect habitat y n
Amphibian habitat y n
Fisheries habitat y n
Cavity trees y n
Food sources y n
Cover y n

Connectivity

Wildlife Corridor (through or adjacent) y n
Wetland connectivity y n
Upland connectivity y n

Strengths of Upland Habitat:

Scrub/shrub
understory provides good cover

Function Present y n

Yes No

Vegetated Buffer

Type: forest/urban Width: 0-500'

Buffer stream or wetland y n
Does buffer provide shade y n
Does buffer adequately
safeguard wetland y n

Habitat Degradation

Percentage of wetland buffer with encroachment: 40%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct
animal movement y n

Significant disturbance y n

Proximity to beaver, mink, or
otter habitat y n

Other:

nearby Brown Brook
Circle & adjacent
development

Wetland Values

Recreational Value

Parking available y n
Watercraft access y n
Fishing available y n
Hunting permitted y n
Walking/biking trails y n

Value

H M L

Restoration Stabilization Potential

y n

Restoration area size:

H2O Degradation

Present

y n

Educational/Scientific Value

Unique habitats/plant species y n
Diverse wildlife habitat y n
Parking/access y n
Value H M L

Invasive Species Present:

y n

Type:

Uniqueness/Heritage

Urban upland/proximity y n
Rapid development upland y n
Critical habitat/threatened or
endangered species y n
Archaeological sites y n
Stonewalls present y n
Historic sites y n
Ecological health/vigor y n
Value H M L

Comments/Notes

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #10 Size: 38.9
Classification: PEM1/SS.EDate: 8/07
Aerial Photograph #: 24933-3-32
24033-2-33

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present y n
Subsoil type: peat
Other geologic features: thick "o" layer
Function Present y n**Principal Function****Hydrology**Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Yes

No

Floodflow Alteration**Watershed Information**Land cover in catchment area? forest/urban
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n**Topographic Information**Topography of watershed: relatively flat
Topography of wetland: (sandy)
Constricted outlet y n
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n (moderate residential build-out)
Yes No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils y n
Broad boundary transition y n**Vegetation**Herbaceous vegetation y n
Dense vegetation y n
Function Present y n**Setting & Hydrology**Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes

No

Nutrient Removal/Retention Transformation**Hydrology**Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n**Transformers**Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes

No

Production Export**Vegetation**Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n**Export**Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes

No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n**Description of Bank**Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Yes

No

Function Present y n

Wetland ID: # 10

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Potential relationship
of fassac edge w/ spotted turtle

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Scrub/shrub component

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☐ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Cover, white pine seed source

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest ^{50 -} Width: 500 ft

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately

safeguard wetland ☒ y ☐ n

(moderately)

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

adjacent roads +
development

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

(i.e. forestry access
Value ☒ H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present ☐ y ☐ n

(potential
contamination
from nearby
residential roads)

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value ☒ H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value ☒ H ☒ M ☐ L

Comments/Notes

potential high valued
turtle habitat

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: 11
Classification: PFO1/SS1E

Size: 9.1 AC.

Date: 8/31/07

WEI Project # 06-076NH

Aerial Photograph #: 24933-2-33

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ n

Subsoil type: mucky peat

Other geologic features: thick "0" layer

Function Present ☒ n**Hydrology**Groundwater relationship present ☒ nVariable water levels observed ☒ nSprings or seeps observed ☒ nContains only inlet or outlet ☒ n**Principal Function**Yes ☒ No**Floodflow Alteration****Watershed Information**

Land cover in catchment area? forest

Watershed position ☒ H ☒ M ☒ LOther catchment storage ☒ nWatercourse associated ☒ nContains hydric A soils ☒ nFunction Present ☒ n**Topographic Information**

Topography of watershed: relatively flat

Topography of wetland: (same)

Constricted outlet ☒ n

High degree of impervious

surfaces in wetland watershed ☒ nProvides downstream protection ☒ nYes ☒ No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ nBroad boundary transition ☒ n**Vegetation**Herbaceous vegetation ☒ nDense vegetation ☒ nFunction Present ☒ n**Setting & Hydrology**Upstream sources of pollution ☒ nErosion/sedimentation observed ☒ nDiffuse flow/slow moving water ☒ nDoes wetland flood ☒ nLong water retention ☒ nYes ☒ No**Nutrient Removal/Retention Transformation****Hydrology**Open water present ☒ nSlow moving water ☒ nNutrients upslope ☒ nFunction Present ☒ n**Transformers**Organic soils ☒ nAquatic vegetation ☒ nAbundant vegetation ☒ nYes ☒ No**Production Export****Vegetation**Density ☒ H ☒ M ☒ LInterspersion ☒ H ☒ M ☒ LDiversity ☒ H ☒ M ☒ LFood source ☒ nFunction Present ☒ n**Export**Detritus ☒ nAquatic plants ☒ nBerry producing shrubs ☒ nNectar sources ☒ nSeed/mast sources ☒ nYes ☒ No**Sediment/Shoreline Stabilization**Is wetland associated with surface water? (if no, stop), Perennial or intermittent ☒ Yes**Characteristics of Stream**Elevation change present ☒ nHigh seasonal flows ☒ nChannelized flow ☒ nOpen water fetch ☒ nFunction Present ☒ n**Description of Bank**Bank present ☒ nBank vegetated ☒ nBank eroded ☒ nSteep bank ☒ nStabilized Bank ☒ nYes ☒ No

Wetland ID: # 11

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Potential vernal pool

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Scrub/shrub wetland

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

- Scrub/shrub wetland component
- Vernal pool potential ☒ Yes ☐ No

Vegetated Buffer

Type: Forest/Urban Width: 0-500'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

(generally)

Habitat Degradation

Percentage of wetland buffer with encroachment: 40%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

otter habitat ☒ y ☐ n

Other:

Urban encroachments like deposition of lawn clippings, brush piles, ATV usage

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

adjacent logging trail

Value H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

minimal ATV influence

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value H ☒ M ☐ L

Comments/Notes

- potential vernal pool

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #12 Size: 6
Classification: PFO1/SS1EDate: 2/20/07 WEI Project # 06-076NH
Aerial Photograph #: 24933-1-33**Wetland Functions****Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n
Subsoil type: brown sand
Other geologic features:
Function Present ☒ y ☐ n**Principal Function****Hydrology**Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n ☒ Yes ☐ No**Floodflow Alteration****Watershed Information** residential/
Land cover in catchment area? forest
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n**Topographic Information**Topography of watershed: relatively flat
Topography of wetland: (same)
Constricted outlet ☒ y ☐ n
High degree of impervious
surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n ☒ Yes ☐ No**Nutrient Removal/Retention Transformation****Hydrology**Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n ☒ Yes ☐ No**Production Export****Vegetation**Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n**Export**Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n ☒ Yes ☐ No**Sediment/Shoreline Stabilization**Is wetland associated with surface water? (if no, stop), Perennial or intermittent**Characteristics of Stream**Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ n within wetland
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ nFunction Present ☒ y ☐ n ☒ Yes ☐ No

Wetland ID: # 12

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Seaside shrub

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Vegetated Buffer

Type: Width:
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Specific Features: This wetland provides a critical winter habitat to a small group of white-tailed deer

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Nearby mast trees

☒ Yes ☐ No

Habitat Degradation

Percentage of wetland buffer with encroachment: 75%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or other habitat

Other:

☒ y ☐ n

☒ y ☐ n

☒ y ☐ n

This wetland lies adjacent to (3) roads and residential build-out

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

potentially from salt runoff from nearby roads

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H M ☒ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H M ☒ L

Comments/Notes

Helps to demonstrate that even "small" wetlands may provide critical habitat to certain wildlife species

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: #13 Size: 8
Classification: PFO1/SSIE

Date: 2/26/07 WEI Project # 06-076NH
Aerial Photograph #: 24933-1-33

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: mucky peat
Other geologic features:
Function Present ☒ y ☐ n

Principal Function

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n ☒ Yes ☐ No

Floodflow Alteration

Watershed Information residential/
Land cover in catchment area? forest
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: (relatively flat)
Topography of wetland: (same)
Constricted outlet ☒ y ☐ n
High degree of impervious
surfaces in wetland watershed ☒ y ☐ n (relatively so)
Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n ☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n
☒ Yes ☒ No

Production Export

Vegetation

Density ☒ H ☒ M ☐ L
Interspersion ☒ H ☒ M ☐ L
Diversity ☒ H ☒ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n ☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n (within wetland)
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Function Present ☒ y ☐ n

☒ Yes ☐ No

Wetland ID: #13

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub-shrub wetland

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: cover

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Nearby mast trees

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest Width: 150'
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or other habitat

Other:

☒ y ☐ n heavy traffic flow on Beede Hill
☒ y ☐ n cumulative effect by adjacent residential build-out and nearby roads; note small fill encroachment
☒ y ☐ n

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

1000± sq ft — remove fill from wetland

H2O Degradation

Present

☒ y ☐ n

Value

H M ☒ L

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H M ☒ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H M ☒ L

Comments/Notes

This wetland may contain exemplary plant community — a closer inspection is warranted

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #14

Size: 34.9

Date: 2/21/09

WEI Project # 06-076NH

Classification: REVIEW

Aerial Photograph #: 24933-1-33

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n

Subsoil type: peat

Other geologic features: thick "O" layer

Function Present ☒ y ☐ n**Hydrology**Groundwater relationship present ☒ y ☐ nVariable water levels observed ☒ y ☐ nSprings or seeps observed ☒ y ☐ nContains only inlet or outlet ☒ y ☐ n**Principal Function**

Yes

No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? forest

Watershed position ☒ H ☐ M ☐ LOther catchment storage ☒ y ☐ nWatercourse associated ☒ y ☐ nContains hydric A soils ☒ y ☐ nFunction Present ☒ y ☐ n**Topographic Information**

Topography of watershed: relatively flat

Topography of wetland: (same)

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ nProvides downstream protection ☒ y ☐ n

Yes

No

Sediment/Toxicant/Pathogen Retention**Soils**Organic Soils ☒ y ☐ nBroad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ nDense vegetation ☒ y ☐ nFunction Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ nErosion/sedimentation observed ☒ y ☐ nDiffuse flow/slow moving water ☒ y ☐ nDoes wetland flood ☒ y ☐ nLong water retention ☒ y ☐ n

Yes

No

Nutrient Removal/Retention Transformation**Hydrology**Open water present ☒ y ☐ nSlow moving water ☒ y ☐ nNutrients upslope ☒ y ☐ nFunction Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ nAquatic vegetation ☒ y ☐ nAbundant vegetation ☒ y ☐ n

Yes

No

Production Export**Vegetation**Density ☒ H ☐ M ☐ LInterspersion ☒ H ☐ M ☐ LDiversity ☒ H ☐ M ☐ LFood source (frogs) ☒ y ☐ nFunction Present ☒ y ☐ n**Export**Detritus ☒ y ☐ nAquatic plants ☒ y ☐ nBerry producing shrubs ☒ y ☐ nNectar sources ☒ y ☐ nSeed/mast sources ☒ y ☐ n

Yes

No

Sediment/Shoreline StabilizationIs wetland associated with surface water? (if no, stop), Perennial or intermittent**Characteristics of Stream**Elevation change present ☒ y ☐ nHigh seasonal flows ☒ y ☐ nChannelized flow ☒ y ☐ nOpen water fetch ☒ y ☐ nFunction Present ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ nBank vegetated ☒ y ☐ nBank eroded ☒ y ☐ nSteep bank ☒ y ☐ nStabilized Bank ☒ y ☐ n

Yes

No

new stream
channel being formed

Wetland ID: # 14

Wildlife Habitat

Existing Critical Habitat (y) n

Type: Great blue heron rookery

Principal Function

Critical Habitat Features (y) n

Specific Features: dead snags for nesting purposes

Diversity Features

Aquatic insect habitat (y) n
Amphibian habitat (y) n
Fisheries habitat (y) n
Cavity trees (y) n
Food sources (y) n
Cover (y) n

Connectivity

Wildlife Corridor (through or adjacent) (y) n
Wetland connectivity (y) n
Upland connectivity (y) n

Strengths of Upland Habitat:

Function Present (y) n

(Yes) No

Vegetated Buffer

Type: forest Width: 500ft+
Buffer stream or wetland (y) n
Does buffer provide shade (y) n
Does buffer adequately safeguard wetland (y) n

Habitat Degradation

Percentage of wetland buffer with encroachment: 5%
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct animal movement (y) n nearby Beede Hill Rd & Shinken Rd.
Significant disturbance (y) n
Proximity to beaver, mink, or otter habitat (y) n
Other:

Wetland Values

Recreational Value

Parking available (y) n
Watercraft access (y) n
Fishing available (y) n
Hunting permitted (y) n
Walking/biking trails (y) n
Value H (M) L

Restoration Stabilization Potential

(y) n
Restoration area size:

H2O Degradation

Present (y) n

Educational/Scientific Value

Unique habitats/plant species (y) n
Diverse wildlife habitat (y) n
Parking/access (y) n
Value H (M) L

Invasive Species Present:

(y) n

Type:

Uniqueness/Heritage

Urban upland/proximity (y) n
Rapid development upland (y) n
Critical habitat/threatened or endangered species (y) n
Archaeological sites (y) n
Stonewalls present (y) n
Historic sites (y) n
Ecological health/vigor (y) n
Value H (M) L

Comments/Notes

Active Great blue heron rookery w/ a nests

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #15

Size: 81.1

Date: 8/07

WEI Project # 06-076NH

Classification:

Aerial Photograph #: 24933-1-32, 31, 30

PEMIED; PUBH; PEMI/PEO5B; PFO1/4E/SSIE

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present y n

Subsoil type: peat

Other geologic features: thick "0" layer

Function Present (y) n

Hydrology

Groundwater relationship present (y) n

Variable water levels observed (y) n

Springs or seeps observed (y) n

Contains only inlet or outlet (y) n

Principal Function

proximity to aquifer

(Yes)

No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? Forest/Field

Watershed position (H) M L

Other catchment storage (y) n

Watercourse associated (y) n

Contains hydric A soils (y) n

Function Present (y) n

Topographic Information

Topography of watershed: flat

Topography of wetland: flat

Constricted outlet (y) n

High degree of impervious

surfaces in wetland watershed (y) n

Provides downstream protection (y) n

(Yes)

No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils (y) n

Broad boundary transition (y) n

Vegetation

Herbaceous vegetation (y) n

Dense vegetation (y) n

Function Present (y) n

Setting & Hydrology

Upstream sources of pollution (y) n

Erosion/sedimentation observed (y) n

Diffuse flow/slow moving water (y) n

Does wetland flood (y) n

Long water retention (y) n

(Yes)

No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present (y) n

Slow moving water (y) n

Nutrients upslope (y) n

Function Present (y) n

Transformers

Organic soils (y) n

Aquatic vegetation (y) n

Abundant vegetation (y) n

(Yes)

No

Production Export**Vegetation**

Density (H) M L

Interspersion (H) M L

Diversity (H) M L

Food source (y) n

Function Present (y) n

Export

Detritus (y) n

Aquatic plants (y) n

Berry producing shrubs (y) n

Nectar sources (y) n

Seed/mast sources (y) n

(Yes)

No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present (y) n

High seasonal flows (y) n

Channelized flow (y) n

Open water fetch (y) n

Function Present (y) n

Description of Bank

Bank present (y) n

Bank vegetated (y) n

Bank eroded (y) n

Steep bank (y) n

Stabilized Bank (y) n

(Yes)

No

Wetland ID: #15

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Potential spotted turtle habitat w/ presence of tussock sedge

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: deep marsh component, scrub/shrub

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat: Existing mast trees, Adjacent field habitat

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: Forest/Field Width: 500' +
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 3%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

Wetland is situated between Beards Hill Rd. and Ridge Rd.

Active beaver colony

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails (old logging trail) ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Invasive Species Present: ☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Comments/Notes

active beaver colony

many colonial homes

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 16 Size: 70 ac. Date: 9/07 WEI Project # 06-076NH
Classification: PFO1/SSIE PEMIEB Aerial Photograph #: 11-31
PSSI/FOIE

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ n
Subsoil type: gravel
Other geologic features: eskers, over aquifer
Function Present ☒ n

Hydrology

Groundwater relationship present ☒ n
Variable water levels observed ☒ n
Springs or seeps observed ☒ n
Contains only inlet or outlet ☒ n ☒ Yes No

Principal Function

Floodflow Alteration

Watershed Information Forest/Res.

Land cover in catchment area? ☒
Watershed position ☒ H ☒ M ☒ L
Other catchment storage ☒ n
Watercourse associated ☒ n
Contains hydric A soils ☒ n
Function Present ☒ n

Topographic Information

Topography of watershed: gentle to moderate slopes
Topography of wetland: flat
Constricted outlet Beaverdams ☒ n
High degree of impervious surfaces in wetland watershed ☒ n
Provides downstream protection ☒ n ☒ Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ n
Broad boundary transition ☒ n

Vegetation

Herbaceous vegetation ☒ n
Dense vegetation ☒ n
Function Present ☒ n

Setting & Hydrology

Upstream sources of pollution ☒ n very minor.
Erosion/sedimentation observed ☒ n west to ATV trails.
Diffuse flow/slow moving water ☒ n
Does wetland flood ☒ n
Long water retention ☒ n
☒ Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ n minor.
Slow moving water ☒ n
Nutrients upslope ☒ n minor
Function Present ☒ n

Transformers

Organic soils ☒ n
Aquatic vegetation ☒ n
Abundant vegetation ☒ n
☒ Yes No

Production Export

Vegetation

Density ☒ H ☒ M ☒ L
Interspersion ☒ H ☒ M ☒ L
Diversity ☒ H ☒ M ☒ L
Food source ☒ n
Function Present ☒ n

Export

Detritus ☒ n
Aquatic plants ☒ n
Berry producing shrubs ☒ n
Nectar sources ☒ n
Seed/mast sources ☒ n ☒ Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent yes.

Characteristics of Stream

Elevation change present ☒ n
High seasonal flows ☒ n
Channelized flow ☒ n
Open water fetch ☒ n

Description of Bank

Bank present ☒ n
Bank vegetated ☒ n
Bank eroded ☒ n
Steep bank ☒ n
Stabilized Bank ☒ n
☒ Yes No

Function Present ☒ n

Wetland ID:

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: *Shallow marsh habitat.*

Principal Function:

Critical Habitat Features ☐ y ☐ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

*large forested areas
Eschers.*

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: *Forest.*

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Width: *100-500*

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct
animal movement

Significant disturbance

Proximity to beaver, mink, or
otter habitat

Other:

☒ y ☐ n
☒ y ☐ n

☒ y ☐ n

*50% ATV trails.
old road bed.*

Wetland Values

Recreational Value

Parking available
Watercraft access
Fishing available
Hunting permitted
Walking/biking trails
+ ATV trails

Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H M L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

old road bed?

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species
Diverse wildlife habitat
Parking/access
Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H M L

Invasive Species Present:

☒ y ☐ n

Type: *small amounts of purple loosestrife.*

Uniqueness/Heritage

Urban upland/proximity
Rapid development upland
Critical habitat/threatened or
endangered species
Archaeological sites
Stonewalls present
Historic sites
Ecological health/vigor
Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
H M L

Comments/Notes

*Large diverse complex that
drain is fed by wetland 17
and drains into wetland 15*

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 17 Size: 18 Date: 8/07 WEI Project # 06-076NH
Classification: PUB/EM/H Aerial Photograph #: 10-31

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y n
Subsoil type: sand + gravel
Other geologic features: over aquifer
Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n Yes No

Principal Function

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest.
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: flat.
Constricted outlet y n beaver dam
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n Yes No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n
Function Present y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n Yes No

Wetland ID: 17

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: deep / shallow marsh
for secretive wading
birds

Principal Function

Critical Habitat Features ☐ y ☐ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Function Present ☒ y ☐ n

Strengths of Upland Habitat:

very high - large buffers with
venal pools present.

☒ Yes ☐ No

Vegetated Buffer

Type: Paved Width: 500+
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 0%
Existing structure(s) that obstruct
animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
otter habitat ☒ y ☐ n
Other: Beautiful isolated beaver pond with
well established marsh.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

Value

H ☒ M ☐ L

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☒ M ☐ L

Comments/Notes

potential Blanding Turtle habitat.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 18/19 Size: 13.1
Classification: PFO4E

Date: 8/07
Aerial Photograph #: 8-28.

WEI Project # 06-076NH

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: gravel over ledge
Other geologic features:
Function Present ☒ y ☐ n

Principal Function

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Yes ☐ No ☒

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest.
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: gentle to moderate slopes
Topography of wetland: flat to gentle slopes
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n
pit & mound.

Yes ☐ No ☒

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n
RR bed.
very shallow.

Yes ☐ No ☒

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

Yes ☐ No ☒

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

Yes ☐ No ☒

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent NO

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Function Present ☒ y ☐ n

Yes ☐ No ☒

Wetland ID: 18/19.

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☒ n
Amphibian habitat ☒ y ☒ n
Fisheries habitat ☒ y ☒ n
Cavity trees ☒ y ☒ n
Food sources ☒ y ☒ n
Cover ☒ y ☒ n

Function Present

☒ y ☒ n

Connectivity

Wildlife Corridor (through or adjacent) y ☒ n
Wetland connectivity ☒ y ☒ n
Upland connectivity ☒ y ☒ n

Strengths of Upland Habitat:

Diverse forest types.

☒ Yes ☒ No

Vegetated Buffer

Type: Forest Width: 500

Buffer stream or wetland ☒ y ☒ n

Does buffer provide shade ☒ y ☒ n

Does buffer adequately

safeguard wetland ☒ y ☒ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

0%

Existing structure(s) that obstruct

animal movement

☒ y ☒ n

Significant disturbance

☒ y ☒ n

Proximity to beaver, mink, or

otter habitat

☒ y ☒ n

Other:

Wetland Values

Recreational Value

Parking available

☒ y ☒ n

Watercraft access

☒ y ☒ n

Fishing available

☒ y ☒ n

Hunting permitted

☒ y ☒ n

Walking/biking trails

☒ y ☒ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☒ n

Restoration area size:

H2O Degradation

Present

☒ y ☒ n

Educational/Scientific Value

Unique habitats/plant species

☒ y ☒ n

Diverse wildlife habitat

☒ y ☒ n

Parking/access

☒ y ☒ n

Value

H M ☒ L

Invasive Species Present:

☒ y ☒ n

Type:

Uniqueness/Heritage

Urban upland/proximity

☒ y ☒ n

Rapid development upland

☒ y ☒ n

Critical habitat/threatened or

endangered species

☒ y ☒ n

Archaeological sites

☒ y ☒ n

Stonewalls present

☒ y ☒ n

Historic sites

☒ y ☒ n

Ecological health/vigor

☒ y ☒ n

Value

H M ☒ L

Comments/Notes

Basic Hemlock Swamp.
with low diversity

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 20 Size: 61 Date: _____ WEI Project # 06-076NH
Classification: PUB PEMI/SSIE Aerial Photograph #: 9-32
+ PFOHE

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y n
Subsoil type: sands & gravel
Other geologic features: over aquifer
Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest Residue
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topographic Information

Topography of watershed: gentle to moderate slopes
Topography of wetland: flat
Constricted outlet y n
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n

Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Function Present y n

Yes No

Wetland ID: 20

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: isolated open water with deep + shallow marsh Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: open water surrounded by wetland.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

No houses or pond/mahoe forest

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest

Width: 50-500

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 10%

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat

☒ y ☐ n

Other:

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value:

☒ H ☐ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value

☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value

☒ H ☐ M ☐ L

Comments/Notes

Blandings Turtle habitat.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 21 Size: 12 ~~17.8~~ Date: 8/07 WEI Project # 06-076NH
Classification: PSS1/FOIE Aerial Photograph #: 9-33

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☒ y ☐ n
Subsoil type: ledge/gmwel.
Other geologic features: None
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n Yes ☒ No

Principal Function**Floodflow Alteration****Watershed Information**

Land cover in catchment area? Forest.
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: gentle to moderate slopes
Topography of wetland: flat.
Constricted outlet ☒ y ☐ n culvert under trail
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n Yes ☒ No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n along ATV trail
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n Yes ☒ No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n Yes ☒ No

Production Export**Vegetation**

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n Yes ☒ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent ☒ Perennial ☐ Intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n
Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n Yes ☒ No

Wetland ID: 21

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☒ n
Amphibian habitat ☒ y ☒ n
Fisheries habitat ☒ y ☒ n
Cavity trees ☒ y ☒ n
Food sources ☒ y ☒ n
Cover ☒ y ☒ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☒ n
Wetland connectivity ☒ y ☒ n
Upland connectivity ☒ y ☒ n

Strengths of Upland Habitat:

mostly mixed forest.

Function Present

y ☒ n

Yes . No

Vegetated Buffer

Type: Forested

Width: 200+ ~~250~~

Buffer stream or wetland ☒ y ☒ n
Does buffer provide shade ☒ y ☒ n
Does buffer adequately safeguard wetland ☒ y ☒ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 10%

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or other habitat

Other:

☒ y ☒ n along ATV trail only.

Wetland Values

Recreational Value

Parking available
Watercraft access
Fishing available
Hunting permitted
Walking/biking trails

☒ y ☒ n
☒ y ☒ n
☒ y ☒ n
☒ y ☒ n
☒ y ☒ n

Value

H ☒ M ☒ L

Restoration Stabilization Potential

y ☒ n

Restoration area size:

H2O Degradation

Present

☒ y ☒ n from ATV trail minor.

Educational/Scientific Value

Unique habitats/plant species
Diverse wildlife habitat
Parking/access
Value

☒ y ☒ n
☒ y ☒ n
☒ y ☒ n
H ☒ M ☒ L

Invasive Species Present:

y ☒ n

Type:

Uniqueness/Heritage

Urban upland/proximity
Rapid development upland
Critical habitat/threatened or endangered species
Archaeological sites
Stonewalls present
Historic sites
Ecological health/vigor
Value

☒ y ☒ n
☒ y ☒ n
☒ y ☒ n ?
☒ y ☒ n ?
☒ y ☒ n ?
☒ y ☒ n
H ☒ M ☒ L

Comments/Notes

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 22 Size: 20.6 Date: 8/07 WEI Project # 06-076NH
Classification: PFOI/4E Aerial Photograph #: 9-31

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☒ y ☐ n
Subsoil type: ledge/gravel.
Other geologic features: Eskers.
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

Yes

☒ No**Floodflow Alteration****Watershed Information**

Land cover in catchment area? Forest.
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate slopes.
Topography of wetland: Flat.
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n

Yes

No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

Yes

No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

Yes

☒ No**Production Export****Vegetation**

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

Yes

☒ No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop), Perennial or intermittent ☒ NO

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n
Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Yes

☒ No

Wetland ID: 22

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat y ☒ n
Amphibian habitat y ☒ n
Fisheries habitat y ☒ n
Cavity trees y ☒ n
Food sources y ☒ n
Cover y ☒ n

Connectivity

Wildlife Corridor (through or adjacent) y ☒ n
Wetland connectivity y ☒ n
Upland connectivity y ☒ n

Strengths of Upland Habitat:

matrue Forest with eskers.

Function Present

y ☒ n

Yes ☒ No

Vegetated Buffer

Type: Forest Width: 500

Buffer stream or wetland y ☒ n
Does buffer provide shade y ☒ n
Does buffer adequately safeguard wetland y ☒ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

0%

Existing structure(s) that obstruct

animal movement

y ☒ n

Significant disturbance

y ☒ n

Proximity to beaver, mink, or

otter habitat

y ☒ n

Other:

Wetland Values

Recreational Value

Parking available y ☒ n
Watercraft access y ☒ n
Fishing available y ☒ n
Hunting permitted y ☒ n
Walking/biking trails y ☒ n

Restoration Stabilization Potential

y ☒ n

Restoration area size:

Value

H M ☒ L

H2O Degradation

Present

y ☒ n

Educational/Scientific Value

Unique habitats/plant species y ☒ n
Diverse wildlife habitat y ☒ n
Parking/access y ☒ n
Value H M ☒ L

Invasive Species Present:

y ☒ n

Type:

Uniqueness/Heritage

Urban upland/proximity y ☒ n
Rapid development upland y ☒ n
Critical habitat/threatened or endangered species y ☒ n
Archaeological sites y ☒ n
Stonewalls present y ☒ n
Historic sites y ☒ n
Ecological health/vigor y ☒ n
Value H M ☒ L

Comments/Notes

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 23 Size: 4.6 Date: 8/07 WEI Project # 06-076NH
 Classification: P1-01/4-SSIE Aerial Photograph #: 9-31

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
 Subsoil type: ledge / gravel
 Other geologic features: Estuaries
 Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
 Variable water levels observed ☒ y ☐ n
 Springs or seeps observed ☒ y ☐ n
 Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest.
 Watershed position ☒ H ☐ M ☐ L
 Other catchment storage ☒ y ☐ n
 Watercourse associated ☒ y ☐ n
 Contains hydric A soils ☒ y ☐ n
 Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate slopes
 Topography of wetland: flat.
 Constricted outlet ☒ y ☐ n
 High degree of impervious surfaces in wetland watershed ☒ y ☐ n
 Provides downstream protection ☒ y ☐ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
 Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
 Dense vegetation ☒ y ☐ n
 Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
 Erosion/sedimentation observed ☒ y ☐ n
 Diffuse flow/slow moving water ☒ y ☐ n
 Does wetland flood ☒ y ☐ n
 Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
 Slow moving water ☒ y ☐ n
 Nutrients upslope ☒ y ☐ n
 Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
 Aquatic vegetation ☒ y ☐ n
 Abundant vegetation ☒ y ☐ n

☐ Yes ☒ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
 Interspersion ☒ H ☐ M ☐ L
 Diversity ☒ H ☐ M ☐ L
 Food source ☒ y ☐ n
 Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
 Aquatic plants ☒ y ☐ n
 Berry producing shrubs ☒ y ☐ n
 Nectar sources ☒ y ☐ n
 Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent NO.

Characteristics of Stream

Elevation change present ☐ y ☐ n
 High seasonal flows ☐ y ☐ n
 Channelized flow ☐ y ☐ n
 Open water fetch ☐ y ☐ n

Description of Bank

Bank present ☐ y ☐ n
 Bank vegetated ☐ y ☐ n
 Bank eroded ☐ y ☐ n
 Steep bank ☐ y ☐ n
 Stabilized Bank ☐ y ☐ n

Function Present ☐ y ☐ n

☐ Yes ☒ No

Wetland ID: 23

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: vernal pool habitat. Principal Function

Critical Habitat Features y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Vegetated Buffer

Type: Forest Width: 500
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Specific Features:

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Eskers and Mature Forest

☒ Yes ☐ No

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 0%
Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

There is a cleared Road? to the west and north of the wetland for Future Development?

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n
Value H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H ☒ M ☐ L

Comments/Notes

vernal pool

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 24 Size: 9.8 Date: 8/07 WEI Project # 06-076NH
Classification: PROIEb Aerial Photograph #: 9-31

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☐ y ☐ n
Subsoil type: Lodgepole pines
Other geologic features: estuaries
Function Present ☐ y ☐ n

Hydrology

Groundwater relationship present ☐ y ☐ n
Variable water levels observed ☐ y ☐ n
Springs or seeps observed ☐ y ☐ n
Contains only inlet or outlet ☐ y ☐ n

Principal Function

Yes

☐ No**Floodflow Alteration****Watershed Information**

Land cover in catchment area?
Watershed position ☐ H ☐ M ☐ L
Other catchment storage ☐ y ☐ n
Watercourse associated ☐ y ☐ n
Contains hydric A soils ☐ y ☐ n
Function Present ☐ y ☐ n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: flat
Constricted outlet ☐ y ☐ n
High degree of impervious surfaces in wetland watershed ☐ y ☐ n
Provides downstream protection ☐ y ☐ n

Yes

☐ No**Sediment/Toxicant/Pathogen Retention****Soils**

Organic Soils ☐ y ☐ n
Broad boundary transition ☐ y ☐ n

Vegetation

Herbaceous vegetation ☐ y ☐ n
Dense vegetation ☐ y ☐ n
Function Present ☐ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☐ y ☐ n
Erosion/sedimentation observed ☐ y ☐ n
Diffuse flow/slow moving water ☐ y ☐ n
Does wetland flood ☐ y ☐ n
Long water retention ☐ y ☐ n

Yes

☐ No**Nutrient Removal/Retention Transformation****Hydrology**

Open water present ☐ y ☐ n
Slow moving water ☐ y ☐ n
Nutrients upslope ☐ y ☐ n
Function Present ☐ y ☐ n

Transformers

Organic soils ☐ y ☐ n
Aquatic vegetation ☐ y ☐ n
Abundant vegetation ☐ y ☐ n

Yes

☐ No**Production Export****Vegetation**

Density ☐ H ☐ M ☐ L
Interspersion ☐ H ☐ M ☐ L
Diversity ☐ H ☐ M ☐ L
Food source ☐ y ☐ n
Function Present ☐ y ☐ n

Export

Detritus ☐ y ☐ n
Aquatic plants ☐ y ☐ n
Berry producing shrubs ☐ y ☐ n
Nectar sources ☐ y ☐ n
Seed/mast sources ☐ y ☐ n

Yes

☐ No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop). Perennial or intermittent ☐ N ☐ O

Characteristics of Stream

Elevation change present ☐ y ☐ n
High seasonal flows ☐ y ☐ n
Channelized flow ☐ y ☐ n
Open water fetch ☐ y ☐ n

Description of Bank

Bank present ☐ y ☐ n
Bank vegetated ☐ y ☐ n
Bank eroded ☐ y ☐ n
Steep bank ☐ y ☐ n
Stabilized Bank ☐ y ☐ n

Yes

☐ No

Wetland ID:

24

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☒ n

Amphibian habitat ☒ y ☒ n

Fisheries habitat ☒ y ☒ n

Cavity trees ☒ y ☒ n

Food sources ☒ y ☒ n

Cover ☒ y ☒ n

Connectivity

Wildlife Corridor (through or adjacent) y ☒ n

Wetland connectivity ☒ y ☒ n

Upland connectivity ☒ y ☒ n

Strengths of Upland Habitat:

No very strong due to adjacent development

Function Present ☒ y ☒ n

☒ Yes ☒ No

Vegetated Buffer

Type: Woodland Width: 0-200

Buffer stream or wetland ☒ y ☒ n

Does buffer provide shade ☒ y ☒ n

Does buffer adequately safeguard wetland ☒ y ☒ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 60%

Existing structure(s) that obstruct animal movement ☒ y ☒ n

Significant disturbance ☒ y ☒ n

Proximity to beaver, mink, or other habitat ☒ y ☒ n

Other: New house with driveway that crosses wetland. Lots of old fill + trash on south side of wetland.

Wetland Values

Recreational Value

Parking available ☒ y ☒ n

Watercraft access ☒ y ☒ n

Fishing available ☒ y ☒ n

Hunting permitted ☒ y ☒ n

Walking/biking trails ☒ y ☒ n

Value

H M ☒ L

Restoration Stabilization Potential

y ☒ n

Restoration area size:

H2O Degradation

Present

☒ y ☒ n Stagnant water runoff. trash.

Educational/Scientific Value

Unique habitats/plant species ☒ y ☒ n

Diverse wildlife habitat ☒ y ☒ n

Parking/access ☒ y ☒ n

Value H M ☒ L

Invasive Species Present:

☒ y ☒ n

Type:

minor purple loosestrife

Uniqueness/Heritage

Urban upland/proximity ☒ y ☒ n

Rapid development upland ☒ y ☒ n

Critical habitat/threatened or endangered species ☒ y ☒ n

Archaeological sites ☒ y ☒ n

Stonewalls present ☒ y ☒ n

Historic sites ☒ y ☒ n ?

Ecological health/vigor ☒ y ☒ n

Value H M ☒ L

Comments/Notes

wetland degraded by adjacent development.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 25 * Size: 19.3 Date: 9/07 WEI Project # 06-076NH
Classification: PFO1/4E Aerial Photograph #: 9-31

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: *Ledge/gravel*
Other geologic features: *Eschers*
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? *Fresh Res.*
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: *Moderate slopes*
Topography of wetland: *Flat.*
Constricted outlet ☒ y ☐ n *woods roads/Eschers.*
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n *to the west.*
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent *NO.*

Characteristics of Stream

Elevation change present ☐ y ☐ n
High seasonal flows ☐ y ☐ n
Channelized flow ☐ y ☐ n
Open water fetch ☐ y ☐ n

Description of Bank

Bank present ☐ y ☐ n
Bank vegetated ☐ y ☐ n
Bank eroded ☐ y ☐ n
Steep bank ☐ y ☐ n
Stabilized Bank ☐ y ☐ n

Function Present ☐ y ☐ n

☐ Yes ☒ No

Wetland ID: 25

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: vernal pool habitat

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: large forested wetland with vernal pool habitat.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Function Present

☒ y ☐ n

Strengths of Upland Habitat:

Native forest w/ Eskers and 500+ buffers around most of the wetland
☒ Yes ☐ No

Vegetated Buffer

Type: Forest/Res. Width: 100-500

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 10%
Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n
Value: H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value: H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value: H ☒ M ☐ L

Comments/Notes

Black Gum and ¹ Spruce.
Red Spruce present in canopy
vernal pool habitat.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 26* Size: 162 Date: 8/07 WEI Project # 06-076NH
Classification: PFOS/EMIE Aerial Photograph #: 10-29

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n

Subsoil type: sand + gravel

Other geologic features: over aquifer

Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n

Variable water levels observed ☒ y ☐ n

Springs or seeps observed ☒ y ☐ n

Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Fescue

Watershed position ☒ H ☐ M ☐ L

Other catchment storage ☒ y ☐ n

Watercourse associated ☒ y ☐ n

Contains hydric A soils ☒ y ☐ n

Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate to gentle slopes

Topography of wetland: flat

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ n

Provides downstream protection ☒ y ☐ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n

Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n

Dense vegetation ☒ y ☐ n

Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n

Erosion/sedimentation observed ☒ y ☐ n

Diffuse flow/slow moving water ☒ y ☐ n

Does wetland flood ☒ y ☐ n

Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n

Slow moving water ☒ y ☐ n

Nutrients upslope ☒ y ☐ n

Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n

Aquatic vegetation ☒ y ☐ n

Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L

Interspersion ☒ H ☐ M ☐ L

Diversity ☒ H ☐ M ☐ L

Food source ☒ y ☐ n

Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n

Aquatic plants ☒ y ☐ n

Berry producing shrubs ☒ y ☐ n

Nectar sources ☒ y ☐ n

Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent yes.

Characteristics of Stream

Elevation change present ☒ y ☐ n

High seasonal flows ☒ y ☐ n

Channelized flow ☒ y ☐ n

Open water fetch ☒ y ☐ n

Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n

Bank vegetated ☒ y ☐ n

Bank eroded ☒ y ☐ n

Steep bank ☒ y ☐ n

Stabilized Bank ☒ y ☐ n

☒ Yes ☐ No

Wetland ID: 26

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Secretive wading
bird habitat.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Mature Forest with vernal pools.

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: Forest. Width: 400 ft
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 57%
Existing structure(s) that obstruct
animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
other habitat ☒ y ☐ n
Other:

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

Value

H M ☒ L

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value

Invasive Species Present:

☒ y ☐ n

Type:

phragmites + purple loosestrife
minor anants.

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value

Comments/Notes

Large shallow/deep marsh.
well protected at present.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: 27 * Size: 14
Classification: PFOI/EMIE
PUBL + PEMIEDate: 8/07 WEI Project # 06-076NH
Aerial Photograph #: 11-28 + 11-29**Wetland Functions****Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ y ☐ n
Subsoil type: sand/gravel
Other geologic features: over aquifer
Function Present ☒ y ☐ n**Hydrology**Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n ☒ Yes ☐ No**Principal Function****Floodflow Alteration****Watershed Information**Land cover in catchment area? Res/Fun
Watershed position H M L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n**Topographic Information**Topography of watershed: moderate slopes.
Topography of wetland: flat to gentle slope
Constricted outlet yes ☒ y ☐ n beaver dams.
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n**Vegetation**Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n ☒ Yes ☐ No**Nutrient Removal/Retention Transformation****Hydrology**Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n**Transformers**Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n ☒ Yes ☐ No**Production Export****Vegetation**Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n**Export**Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n ☒ Yes ☐ No**Sediment/Shoreline Stabilization**Is wetland associated with surface water? (if no, stop), Perennial or ☒ intermittent ☐ yes.**Characteristics of Stream**Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n**Description of Bank**Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n in a few places.
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ nFunction Present ☒ y ☐ n ☒ Yes ☐ No

Wetland ID: 27

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: potential Blandings
Turtle habitat

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: deep marsh & open water habitat

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present

☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Thick Coniferous Forest
with some development.

☒ Yes ☐ No

Vegetated Buffer

Type: Forest

Width: 0-250'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately

safeguard wetland ☒ y ☐ n

not in southern end.
adjacent to new road.

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

majority of wetland protected by
buffer.

20%

Wetland Values

Recreational Value

Parking available

☒ y ☐ n

Watercraft access

☒ y ☐ n

Fishing available

☒ y ☐ n

Hunting permitted

☒ y ☐ n

Walking/biking trails

☒ y ☐ n

Value

H M L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size: south of new road

H2O Degradation

Present

☒ y ☐ n

potentially
associated w/new road.

Educational/Scientific Value

Unique habitats/plant species

☒ y ☐ n

Diverse wildlife habitat

☒ y ☐ n

Parking/access

☒ y ☐ n

Value

H M L

Invasive Species Present:

☒ y ☐ n

Type: purple loosestrife

Uniqueness/Heritage

Urban upland/proximity

☒ y ☐ n

Rapid development upland

☒ y ☐ n

Critical habitat/threatened or

endangered species

☒ y ☐ n

Archaeological sites

☒ y ☐ n

Stonewalls present

☒ y ☐ n

Historic sites

☒ y ☐ n

Ecological health/vigor

☒ y ☐ n

Value

H M L

Comments/Notes

high degree of disturbance
along south end
of wetland.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 28 Size: 4.5 Date: 8/07 WEI Project # 06-076NH
Classification: PRO1/4E Aerial Photograph #: 11-29.

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☒ n
Subsoil type: sand & gravel
Other geologic features:
Function Present ☒ n

Principal Function**Hydrology**

Groundwater relationship present ☒ n
Variable water levels observed ☒ n
Springs or seeps observed ☒ n
Contains only inlet or outlet ☒ n ☒ Yes ☐ No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? Forest Res
Watershed position H M L
Other catchment storage ☒ n
Watercourse associated ☒ n
Contains hydric A soils ☒ n
Function Present ☒ n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: flat.
Constricted outlet ☒ n driveway culvert.
High degree of impervious surfaces in wetland watershed ☒ n
Provides downstream protection ☒ n ☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils ☒ n
Broad boundary transition ☒ n

Vegetation

Herbaceous vegetation ☒ n
Dense vegetation ☒ n
Function Present ☒ n

Setting & Hydrology

Upstream sources of pollution ☒ n
Erosion/sedimentation observed ☒ n
Diffuse flow/slow moving water ☒ n
Does wetland flood ☒ n
Long water retention ☒ n ☒ Yes ☐ No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present ☒ n
Slow moving water ☒ n
Nutrients upslope ☒ n
Function Present ☒ n

Transformers

Organic soils ☒ n
Aquatic vegetation ☒ n
Abundant vegetation ☒ n
☐ Yes ☒ No

Production Export**Vegetation**

Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ n
Function Present ☒ n

Export

Detritus ☒ n
Aquatic plants ☒ n
Berry producing shrubs ☒ n
Nectar sources ☒ n
Seed/mast sources ☒ n ☐ Yes ☒ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent NO

Characteristics of Stream

Elevation change present ☒ n
High seasonal flows ☒ n
Channelized flow ☒ n
Open water fetch ☒ n

Description of Bank

Bank present ☒ n
Bank vegetated ☒ n
Bank eroded ☒ n
Steep bank ☒ n
Stabilized Bank ☒ n

Function Present ☒ n

☐ Yes ☒ No

Wetland ID: 28

Wildlife Habitat

Existing Critical Habitat y n

Type:

Principal Function

Critical Habitat Features y n

Specific Features:

Diversity Features

Aquatic insect habitat y n
Amphibian habitat y n
Fisheries habitat y n
Cavity trees y n
Food sources y n
Cover y n

Connectivity

Wildlife Corridor (through or adjacent) y n
Wetland connectivity y n
Upland connectivity y n

Function Present

y n

Strengths of Upland Habitat:

Mixed mature forest
same one house w/ driveway
Yes No

Vegetated Buffer

Type: Forest Width: 75'
Buffer stream or wetland y n
Does buffer provide shade y n
Does buffer adequately safeguard wetland y n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 30%
Existing structure(s) that obstruct animal movement y n driveway
Significant disturbance y n
Proximity to beaver, mink, or other habitat y n
Other:

Wetland Values

Recreational Value

Parking available y n
Watercraft access y n
Fishing available y n
Hunting permitted y n
Walking/biking trails y n
Value H M L

Restoration Stabilization Potential

y n
Restoration area size:

H2O Degradation

Present y n

Educational/Scientific Value

Unique habitats/plant species y n
Diverse wildlife habitat y n
Parking/access y n
Value H M L

Invasive Species Present:

y n

Type:

Uniqueness/Heritage

Urban upland/proximity y n
Rapid development upland y n
Critical habitat/threatened or endangered species y n
Archaeological sites y n
Stonewalls present y n
Historic sites y n
Ecological health/vigor y n
Value H M L

Comments/Notes

Now Spectacular Hemlock. Red Map Swamp.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 29 Size: 9.840 Date: 8/07 WEI Project # 06-076NH
Classification: PEM1/SSIE Aerial Photograph #: 11-29.
PUBH

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present y n
Subsoil type: sand/gravel
Other geologic features:

Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? Res/Facet
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topographic Information

Topography of watershed: gentle to moderate slopes.
Topography of wetland: Flat. w/ Bank at Pond.
Constricted outlet y n
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n

Yes No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export**Vegetation**

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent NO.

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Function Present y n

Yes

No

Wetland ID: 29.

Wildlife Habitat

Existing Critical Habitat y(n)

Type:

Principal Function

Critical Habitat Features y(n)

Specific Features:

Diversity Features

Aquatic insect habitat y(n)
Amphibian habitat y(n)
Fisheries habitat y(n)
Cavity trees y(n)
Food sources y(n)
Cover y(n)

Connectivity

Wildlife Corridor (through or adjacent) y(n)
Wetland connectivity y(n)
Upland connectivity y(n)

Function Present

y(n)

Strengths of Upland Habitat:

Native Forest
Driveways & ~~beaver~~ houses surround wetland.
(Yes) No

Vegetated Buffer

Type: ~~Forest~~ / Res Width: 0-200
Buffer stream or wetland y(n)
Does buffer provide shade y(n)
Does buffer adequately safeguard wetland y(n)

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct animal movement y(n) driveway culvert.
Significant disturbance y(n)
Proximity to beaver, mink, or other habitat y(n)
Other: historically abandoned beaver pond.

Wetland Values

Recreational Value

Parking available y(n)
Watercraft access y(n)
Fishing available y(n)
Hunting permitted y(n)
Walking/biking trails y(n)

Restoration Stabilization Potential

y(n)
Restoration area size:

Value

H M L

H2O Degradation

Present

y(n) some trash in pond.

Educational/Scientific Value

Unique habitats/plant species y(n)
Diverse wildlife habitat y(n)
Parking/access y(n)
Value H M L

Invasive Species Present:

y(n)

Type:

Uniqueness/Heritage

Urban upland/proximity y(n)
Rapid development upland y(n)
Critical habitat/threatened or endangered species y(n)
Archaeological sites y(n)
Stonewalls present y(n)
Historic sites y(n)
Ecological health/vigor y(n)
Value H M L

Comments/Notes

4 houses around small wetland w/ driveway crossing bisecting wetland

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 30 Size: 10 acres. Date: 9/07 WEI Project # 06-076NH
 Classification: PFOIE, PFO5/E, PUB/SS1/Hb. Aerial Photograph #: 11-30.

Wetland Functions

Groundwater/Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
 Subsoil type: Sand + gravel
 Other geologic features: Eskers
 Function Present ☒ y ☐ n

Principal Function

Hydrology

Groundwater relationship present ☒ y ☐ n
 Variable water levels observed ☒ y ☐ n
 Springs or seeps observed ☒ y ☐ n
 Contains only inlet or outlet ☒ y ☐ n ☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest.
 Watershed position ☒ H ☐ M ☐ L
 Other catchment storage ☒ y ☐ n
 Watercourse associated ☒ y ☐ n
 Contains hydric A soils ☒ y ☐ n
 Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: gentle to moderate slopes.
 Topography of wetland: Flat
 Constricted outlet ☒ y ☐ n woods roads / beaver dams
 High degree of impervious surfaces in wetland watershed ☒ y ☐ n
 Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
 Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
 Dense vegetation ☒ y ☐ n
 Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
 Erosion/sedimentation observed ☒ y ☐ n
 Diffuse flow/slow moving water ☒ y ☐ n
 Does wetland flood ☒ y ☐ n
 Long water retention ☒ y ☐ n ☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
 Slow moving water ☒ y ☐ n
 Nutrients upslope ☒ y ☐ n
 Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
 Aquatic vegetation ☒ y ☐ n
 Abundant vegetation ☒ y ☐ n ☒ Yes ☐ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
 Interspersion ☒ H ☐ M ☐ L
 Diversity ☒ H ☐ M ☐ L
 Food source ☒ y ☐ n
 Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
 Aquatic plants ☒ y ☐ n
 Berry producing shrubs ☒ y ☐ n
 Nectar sources ☒ y ☐ n
 Seed/mast sources ☒ y ☐ n ☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no. stop). Perennial or intermittent yes

Characteristics of Stream

Elevation change present ☒ y ☐ n
 High seasonal flows ☒ y ☐ n
 Channelized flow ☒ y ☐ n
 Open water fetch ☒ y ☐ n
 Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
 Bank vegetated ☒ y ☐ n
 Bank eroded ☒ y ☐ n
 Steep bank ☒ y ☐ n
 Stabilized Bank ☒ y ☐ n ☒ Yes ☐ No

Wetland ID: 30

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Blandings Turtle
Habitat.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Deep marsh open water.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Mix of thick conifers and
deciduous woodland w/ woods roads

Yes No

Function Present ☒ y ☐ n

Vegetated Buffer

Type: Forest Width: 500+
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 570 Woods Road
Existing structure(s) that obstruct
animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
other habitat ☒ y ☐ n
Other: woods roads have culverts or
stone fords that do not limit
movement because of lack of
traffic.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n
Value H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n or iron oxides
naturally occurring

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H ☒ M ☐ L

Comments/Notes

Diverse series of beaver
ponds with a variety of
habitat and ~~of~~ cranberry
present.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 3132 Size: 13
Classification: PEM/Fb/PEMIEb

Date:
Aerial Photograph #: 24933-1-28

WEI Project # 06-076NH

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: mucky peat
Other geologic features:
Function Present ☒ y ☐ n

Principal Function

Hydrology

Groundwater relationship present ☒ y ☐ n proximity to aquifer
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n(?) Yes No

Floodflow Alteration

Watershed Information

Land cover in catchment area? forest
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n ?
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: relatively flat
Topography of wetland: relatively flat
Constricted outlet ☒ y ☐ n (current activity by beaver)
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n (activity by ATVs)
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n
Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n
Yes No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n
Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent (?) - not confirmed due to late winter conditions (Aerial photo suggests the presence of 1 or 2 streams)

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n
Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Yes No

Wetland ID: 31/22

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Deep marsh

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Vegetated Buffer

Type: forest Width:

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately

safeguard wetland ☒ y ☐ n

Specific Features: Provides potential habitat to American & least bittern; and Bladderwort & Spotted turtles

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Adjacent to large unbroken forested areas. ☒ Yes ☐ No

Habitat Degradation

Percentage of wetland buffer with encroachment: 5% -

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

Ridge Road is currently under water

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Restoration/Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present ☒ y ☐ n

possibly by ATV & 4-wheel drive activity

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Comments/Notes

(possibly)

Wetland is bisected by an old town Rd. (i.e., Ridge Road)

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 33 Size: 7.5 Date: 9/07 WEI Project # 06-076NH
Classification: PSSIE Aerial Photograph #: 11-28.

Wetland Functions**Groundwater (Recharge/Discharge)****Geology**

Restrictive layer present y n
Subsoil type: Sand + gravel
Other geologic features: over aquifer
Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration**Watershed Information** Res/Sand Pit **Topographic Information**

Land cover in catchment area? Forest
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topography of watershed: gentle to moderate slopes
Topography of wetland: Flat
Constricted outlet y n Beede Hill Road.
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n Yes No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export**Vegetation**

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n * lots.
Nectar sources y n
Seed/mast sources y n Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent No

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Function Present y n

Yes No

Wetland ID: 33

Wildlife Habitat

Existing Critical Habitat y n

Type:

Principal Function

Critical Habitat Features y n

Specific Features:

Diversity Features

Aquatic insect habitat y n

Amphibian habitat y n

Fisheries habitat y n

Cavity trees y n

Food sources y n

Cover y n

Function Present y n

Connectivity

Wildlife Corridor (through or adjacent) y n

Wetland connectivity y n

Upland connectivity y n

Strengths of Upland Habitat:

Mixed Forest.

Yes No

Vegetated Buffer

Type: Forest/Res. Sand Pit Width: 0-200

Buffer stream or wetland y n

Does buffer provide shade y n

Does buffer adequately safeguard wetland y n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 60%

Existing structure(s) that obstruct

animal movement y n

Significant disturbance y n

Proximity to beaver, mink, or

other habitat y n

Other:

Road directly adjacent to south side of wetland leading to houses + Sand Pit.

Wetland Values

Recreational Value

Parking available y n

Watercraft access y n

Fishing available y n

Hunting permitted y n

Walking/biking trails y n

Value

H M L

Restoration Stabilization Potential

y n

Restoration area size:

possible in southeast finger

H2O Degradation

Present

y n from Sand pit.

Educational/Scientific Value

Unique habitats/plant species y n

Diverse wildlife habitat y n

Parking/access y n

Value

H M L

Invasive Species Present:

y n

Type:

Uniqueness/Heritage

Urban upland/proximity y n

Rapid development upland y n

Critical habitat/threatened or endangered species y n

Archaeological sites y n

Stonewalls present y n

Historic sites y n

Ecological health/vigor y n

Value

H M L

Comments/Notes

Very thick scrub-shrub wetland. bordered by road and sand pit.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 34 * Size: 6 Date: 8/07 WEI Project # 06-076NH
Classification: PPOS/SSI/EMIE Aerial Photograph #: 11-26

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y n
Subsoil type: sand + gravel
Other geologic features: Eskers
Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: Bowl
Constricted outlet y n
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n

Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent NO

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Yes No

Function Present y n

Wetland ID: 34.

Wildlife Habitat

Existing Critical Habitat y (n)

Type:

Principal Function

Critical Habitat Features y (n)

Specific Features:

Diversity Features

Aquatic insect habitat y (n)
Amphibian habitat y (n)
Fisheries habitat y (n)
Cavity trees y (n)
Food sources y (n)
Cover y (n)

Connectivity

Wildlife Corridor (through or adjacent) y (n)
Wetland connectivity y (n)
Upland connectivity y (n)

Strengths of Upland Habitat:

Function Present y (n)

(Yes) No

Vegetated Buffer

Type: Forested. Width: 500

Buffer stream or wetland y (n)
Does buffer provide shade y (n)
Does buffer adequately safeguard wetland y (n)

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 090

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or otter habitat

Other:

Wetland Values

Recreational Value

Parking available y (n)
Watercraft access y (n)
Fishing available y (n)
Hunting permitted y (n)
Walking/biking trails y (n)

Restoration Stabilization Potential

y (n)

Restoration area size:

Value

H (M) L

H2O Degradation

Present

y (n)

Educational/Scientific Value

Unique habitats/plant species y (n)
Diverse wildlife habitat y (n)
Parking/access y (n)
Value

Invasive Species Present:

y (n)

Type:

near library

Uniqueness/Heritage

Urban upland/proximity y (n)
Rapid development upland y (n)
Critical habitat/threatened or endangered species y (n)
Archaeological sites y (n)
Stonewalls present y (n)
Historic sites y (n)
Ecological health/vigor y (n)
Value

Comments/Notes

lots of trails in Carlsbad
Land surrounding this
wetland.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 35 Size: 28 Date: 8/07 WEI Project # 06-076NH
Classification: PEMI/UBH + PFOIE Aerial Photograph #: 11-26

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☒ y ☐ n
Subsoil type: Sand & gravel
Other geologic features: above aquifer
Function Present ☒ y ☐ n Esks.

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? Forest/Re
Watershed position H M L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: gentle to moderate slopes with some steep slopes
Topography of wetland: flat.
Constricted outlet ☒ y ☐ n under Rte 107
High degree of impervious surfaces in wetland watershed ☒ y ☐ n on west side.
Provides downstream protection ☒ y ☐ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export**Vegetation**

Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent NO

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Function Present ☒ y ☐ n

Yes ☒ No

Wetland ID:

35.

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Secretive marsh birds

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Blanding's habitat.
Turtle.

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present

☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Forest in Causeway Land with
Trail System.

☒ Yes ☐ No

Vegetated Buffer

Type: Forest / Res. Width: 0-500

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately

safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 50%

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

at 107 culvert.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

☒ H ☐ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n Run Road Runoff

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type: Small amount of purple loosestrife
Near Library

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Comments/Notes

Large open water marsh in
center of Tam with high
recreation value.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 36 Size: 8.3 Date: 9/07 WEI Project # 06-076NH
 Classification: PFD5/EM1/UBH6 Aerial Photograph #: # 11-26.

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
 Subsoil type: sand / gravel
 Other geologic features: over aquifer
 Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
 Variable water levels observed ☒ y ☐ n
 Springs or seeps observed ☒ y ☐ n
 Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Res / woods
 Watershed position ☒ H ☐ M ☐ L
 Other catchment storage ☒ y ☐ n
 Watercourse associated ☒ y ☐ n
 Contains hydric A soils ☒ y ☐ n
 Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate slopes.
 Topography of wetland: flat
 Constricted outlet ☒ y ☐ n
 High degree of impervious surfaces in wetland watershed ☒ y ☐ n
 Provides downstream protection ☒ y ☐ n

beaver dam.
 but gravel.
☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
 Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
 Dense vegetation ☒ y ☐ n
 Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
 Erosion/sedimentation observed ☒ y ☐ n
 Diffuse flow/slow moving water ☒ y ☐ n
 Does wetland flood ☒ y ☐ n
 Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
 Slow moving water ☒ y ☐ n
 Nutrients upslope ☒ y ☐ n
 Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
 Aquatic vegetation ☒ y ☐ n
 Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
 Interspersion ☒ H ☐ M ☐ L
 Diversity ☒ H ☐ M ☐ L
 Food source ☒ y ☐ n
 Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
 Aquatic plants ☒ y ☐ n
 Berry producing shrubs ☒ y ☐ n
 Nectar sources ☒ y ☐ n
 Seed/mast sources ☒ y ☐ n

Yes ☒ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

NO

Characteristics of Stream

Elevation change present ☒ y ☐ n
 High seasonal flows ☒ y ☐ n
 Channelized flow ☒ y ☐ n
 Open water fetch ☒ y ☐ n
 Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
 Bank vegetated ☒ y ☐ n
 Bank eroded ☒ y ☐ n
 Steep bank ☒ y ☐ n
 Stabilized Bank ☒ y ☐ n

Yes

☒ No

Wetland ID: 36

Wildlife Habitat

Existing Critical Habitat y (n)

Type:

Principal Function

Critical Habitat Features y (n)

Specific Features:

Diversity Features

Aquatic insect habitat y (n)

Amphibian habitat y (n)

Fisheries habitat y (n)

Cavity trees y (n)

Food sources y (n)

Cover y (n)

Function Present y (n)

Connectivity

Wildlife Corridor (through or adjacent) y (n)

Wetland connectivity y (n)

Upland connectivity y (n)

Strengths of Upland Habitat:

Not too strong due to Development

Yes (n) No

Vegetated Buffer

Type: Woodland (Cleared land) Width: 50-100

Buffer stream or wetland y (n)

Does buffer provide shade y (n)

Does buffer adequately safeguard wetland y (n)

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 70%

Existing structure(s) that obstruct animal movement y (n)

Significant disturbance y (n)

Proximity to beaver, mink, or other habitat y (n)

Other:

Lumber yard abuts wetland to the South.

Wetland Values

Recreational Value

Parking available y (n)

Watercraft access y (n)

Fishing available y (n)

Hunting permitted y (n)

Walking/biking trails y (n)

Value

H M L

Restoration Stabilization Potential

y (n)

Restoration area size:

H2O Degradation

Present

Very cloudy water, from runoff?

Educational/Scientific Value

Unique habitats/plant species y (n)

Diverse wildlife habitat y (n)

Parking/access y (n)

Value

H M L

Invasive Species Present: y (n)

Type: purple loosestrife.

Uniqueness/Heritage

Urban upland/proximity y (n)

Rapid development upland y (n)

Critical habitat/threatened or endangered species y (n)

Archaeological sites y (n)

Stonewalls present y (n)

Historic sites y (n)

Ecological health/vigor y (n)

Value

H M L

Comments/Notes

Degraded / abandoned
beaver pond adjacent
industrial / Lumber yard.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 37.* Size: 60
 Classification: PSS1/EMIE b.
 PFOIE, PEMIE

Date: 9/07
 Aerial Photograph #: 11-24

WEI Project # 06-076NH

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
 Subsoil type: Sand & Gravel
 Other geologic features: over aquifer
 Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
 Variable water levels observed ☒ y ☐ n
 Springs or seeps observed ☒ y ☐ n
 Contains inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Res/Forest
 Watershed position H M ☒ L
 Other catchment storage ☒ y ☐ n
 Watercourse associated ☒ y ☐ n
 Contains hydric A soils ☒ y ☐ n
 Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: gentle to moderate slopes.
 Topography of wetland: flat
 Constricted outlet yes ☒ y ☐ n beaver dams.
 High degree of impervious surfaces in wetland watershed ☒ y ☐ n north of wetland.
 Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No
 100 year floodplain associated with Exeter River

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
 Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
 Dense vegetation ☒ y ☐ n
 Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
 Erosion/sedimentation observed ☒ y ☐ n
 Diffuse flow/slow moving water ☒ y ☐ n
 Does wetland flood ☒ y ☐ n
 Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
 Slow moving water ☒ y ☐ n
 Nutrients upslope ☒ y ☐ n
 Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
 Aquatic vegetation ☒ y ☐ n
 Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export

Vegetation

Density H M ☒ L
 Interspersion H M ☒ L
 Diversity H M ☒ L
 Food source ☒ y ☐ n
 Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
 Aquatic plants ☒ y ☐ n
 Berry producing shrubs ☒ y ☐ n
 Nectar sources ☒ y ☐ n
 Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) ☒ Perennial or intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n
 High seasonal flows ☒ y ☐ n
 Channelized flow ☒ y ☐ n
 Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
 Bank vegetated ☒ y ☐ n
 Bank eroded ☒ y ☐ n
 Steep bank ☒ y ☐ n
 Stabilized Bank ☒ y ☐ n

☒ Yes ☐ No

Function Present ☒ y ☐ n

Exeter River + Tributary

Wetland ID: 37.

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Blandings Turtle
Brook Floater?

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Deep/shallow marsh
open water.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Function Present ☒ y ☐ n

Strengths of Upland Habitat:

Diverse upland habitat. with large
hayfields and
Mature Forests. ☒ Yes ☐ No

Vegetated Buffer

Type: Woods + Field Width: 25-500

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

in most places.

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 25%

Existing structure(s) that obstruct
animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or
other habitat ☒ y ☐ n

Other:

Most of Disturbance is Ball fields
+ Parking Lot on Northeast side.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n
ATV Trail
Value ☒ H ☐ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

From RR Bed runoff and to 7 + Parking Lot.

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Invasive Species Present: ☒ y ☐ n

Type: purple loosestrife.

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Comments/Notes

Large, diverse River floodplain
wetland with excellent
wildlife habitat.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 38. Size: 3 Date: 8/07 WEI Project # 06-076NH
Classification: PEMI/SSIE Aerial Photograph #: 10-25.

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: gravel / ledge.
Other geologic features:
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

Yes ☒ No ☐

Floodflow Alteration

Watershed Information

Land cover in catchment area? Res
Watershed position H ☒ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: gentle slope to flat.
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n

Yes ☐ No ☒

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

Yes ☒ No ☐

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

Yes ☒ No ☐

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

Yes ☐ No ☒

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) ☒ Perennial ☐ or intermittent

yes

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Yes ☒ No ☐

Function Present ☒ y ☐ n

Wetland ID: 38

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat ☒ y n
Amphibian habitat ☒ y n
Fisheries habitat ☒ y n
Cavity trees ☒ y n
Food sources ☒ y n
Cover ☒ y n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y n
Wetland connectivity ☒ y n
Upland connectivity ☒ y n

Function Present

☒ y n

☒ Yes No

Vegetated Buffer

Type: Forest/scrub shrub.

Width: 25-100

Buffer stream or wetland ☒ y n

Does buffer provide shade ☒ y n

Does buffer adequately safeguard wetland ☒ y n?

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y n

Significant disturbance ☒ y n

Proximity to beaver, mink, or

otter habitat ☒ y n

Other:

Lawns from houses on N. side
drain into wetland.

Wetland Values

Recreational Value

Parking available ☒ y n
Watercraft access ☒ y n
Fishing available ☒ y n
Hunting permitted ☒ y n
Walking/biking trails ☒ y n

Restoration Stabilization Potential

☒ y n

Restoration area size:

Value

H M ☒ L

H2O Degradation

Present ☒ y n

Educational/Scientific Value

Unique habitats/plant species ☒ y n
Diverse wildlife habitat ☒ y n
Parking/access ☒ y n
Value ☒ H M ☒ L

Invasive Species Present: ☒ y n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y n
Rapid development upland ☒ y n
Critical habitat/threatened or
endangered species ☒ y n
Archaeological sites ☒ y n
Stonewalls present ☒ y n
Historic sites ☒ y n
Ecological health/vigor ☒ y n
Value ☒ H M ☒ L

Comments/Notes

Small marsh/wet meadow
helps protect downstream
from Exeter River.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 39 Size: 76. Date: 9/07 WEI Project # 06-076NH
Classification: PFO1/SS1E Aerial Photograph #: 9-26
PSS1/EM1Hb

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: gravel / ledge.
Other geologic features:
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information Res / Forest.

Land cover in catchment area?
Watershed position ☒ H ☐ M ☐ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed:
Topography of wetland:
Constricted outlet ☒ y ☐ n
High degree of impervious
surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n

Moderate to Gentle Slopes
Pit + mounded to flat.
beaver dams.

Nath of wetland.

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) ☒ Perennial ☐ intermittent

yes

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

☒ Yes ☐ No

Function Present ☒ y ☐ n

Wetland ID: 39

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Blandings Turtle
habitat.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Deep / shallow marsh.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Thick Coniferous Forest.

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: Forest Width: 50-500
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function: 20%
Existing structure(s) that obstruct
animal movement ☒ y ☐ n Sandown Rd + driveway
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
otter habitat ☒ y ☐ n
Other:

Most of wetland is protected
by adequate buffer.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n
Value H M L ☒ M

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H M L ☒ M

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H M L ☒ M

Comments/Notes

Large wetland transitioning
to wooded swamp
with beaver pond.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 40 Size: 12 Date: 8/07 WEI Project # 06-076NH
Classification: PFO1/SS1E Aerial Photograph #: 8-26

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n

Subsoil type: ledge/gneiss

Other geologic features:

Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n?

Variable water levels observed ☒ y ☐ n

Springs or seeps observed ☒ y ☐ n

Contains only inlet or outlet ☒ y ☐ n

Principal Function

Yes ☒ No ☐

Floodflow Alteration

Watershed Information

Land cover in catchment area?

Watershed position ☒ H ☐ M ☐ L

Other catchment storage ☒ y ☐ n

Watercourse associated ☒ y ☐ n

Contains hydric A soils ☒ y ☐ n

Function Present ☒ y ☐ n

Res/Faes

Topographic Information

Topography of watershed: Moderate slopes

Topography of wetland: flat

Constricted outlet ☒ y ☐ n

High degree of impervious

surfaces in wetland watershed ☒ y ☐ n

Provides downstream protection ☒ y ☐ n

Yes ☒ No ☐

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n

Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n

Dense vegetation ☒ y ☐ n

Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n

Erosion/sedimentation observed ☒ y ☐ n

Diffuse flow/slow moving water ☒ y ☐ n

Does wetland flood ☒ y ☐ n

Long water retention ☒ y ☐ n

Yes ☒ No ☐

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n

Slow moving water ☒ y ☐ n

Nutrients upslope ☒ y ☐ n

Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n

Aquatic vegetation ☒ y ☐ n

Abundant vegetation ☒ y ☐ n

Yes ☒ No ☐

Production Export

Vegetation

Density ☒ H ☒ M ☐ L

Interspersion ☒ H ☒ M ☐ L

Diversity ☒ H ☒ M ☐ L

Food source ☒ y ☐ n

Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n

Aquatic plants ☒ y ☐ n

Berry producing shrubs ☒ y ☐ n

Nectar sources ☒ y ☐ n

Seed/mast sources ☒ y ☐ n

Yes ☒ No ☐

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

yes

Characteristics of Stream

Elevation change present ☒ y ☐ n

High seasonal flows ☒ y ☐ n

Channelized flow ☒ y ☐ n

Open water fetch ☒ y ☐ n

Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n

Bank vegetated ☒ y ☐ n

Bank eroded ☒ y ☐ n

Steep bank ☒ y ☐ n

Stabilized Bank ☒ y ☐ n

Yes ☒ No ☐

Wetland ID: 40

Wildlife Habitat

Existing Critical Habitat y ☒ n

Type:

Principal Function

Critical Habitat Features y ☒ n

Specific Features:

Diversity Features

Aquatic insect habitat

☒ y ☒ n

Amphibian habitat

☒ y ☒ n

Fisheries habitat

☒ y ☒ n

Cavity trees

☒ y ☒ n

Food sources

☒ y ☒ n

Cover

☒ y ☒ n

Function Present

☒ y ☒ n

Connectivity

Wildlife Corridor (through or adjacent)

☒ y ☒ n

Wetland connectivity

☒ y ☒ n

Upland connectivity

☒ y ☒ n

Strengths of Upland Habitat:

Surrounded by development.

☒ Yes ☒ No

Vegetated Buffer

Type: Forest / Cleared land

Buffer stream or wetland

☒ y ☒ n

Does buffer provide shade

☒ y ☒ n

Does buffer adequately

☒ y ☒ n

safeguard wetland

☒ y ☒ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement

☒ y ☒ n

Significant disturbance

☒ y ☒ n

Proximity to beaver, mink, or

otter habitat

☒ y ☒ n

Other:

Wetland Values

Recreational Value

Parking available

☒ y ☒ n

Watercraft access

☒ y ☒ n

Fishing available

☒ y ☒ n

Hunting permitted

☒ y ☒ n

Walking/biking trails

☒ y ☒ n

Value

H M L

Restoration Stabilization Potential

☒ y ☒ n

Restoration area size:

Educational/Scientific Value

Unique habitats/plant species

☒ y ☒ n

Diverse wildlife habitat

☒ y ☒ n

Parking/access

☒ y ☒ n

Value

H M L

Invasive Species Present:

☒ y ☒ n

Type:

purple loosestrife.

Uniqueness/Heritage

Urban upland/proximity

☒ y ☒ n

Rapid development upland

☒ y ☒ n

Critical habitat/threatened or

endangered species

☒ y ☒ n

Archaeological sites

☒ y ☒ n

Stonewalls present

☒ y ☒ n

Historic sites

☒ y ☒ n

Ecological health/vigor

☒ y ☒ n

Value

H M L

Comments/Notes

Degraded Forested wetland that has stream flowing through it.

Adjacent pond dirty + turbid trash in part of wetland

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 41 * Size: 88
Classification: PSS1/EMIEb
PFO14Eb.

Date: WEI Project # 06-076NH
Aerial Photograph #: 8-23 + 9-24

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ n
Subsoil type: sand & gravel
Other geologic features: over aquifer
Function Present ☒ n

Hydrology

Groundwater relationship present ☒ n
Variable water levels observed ☒ n
Springs or seeps observed ☒ n
Contains only inlet or outlet ☒ n ☒ Yes No

Principal Function

Floodflow Alteration

Watershed Information
Land cover in catchment area? Pasture/Forest
Watershed position H M L
Other catchment storage ☒ n
Watercourse associated ☒ n
Contains hydric A soils ☒ n
Function Present ☒ n

Topographic Information

Topography of watershed: gentle to Moderate slopes.
Topography of wetland: Flat to gentle slope.
Constricted outlet ☒ n
High degree of impervious surfaces in wetland watershed ☒ n
Provides downstream protection ☒ n ☒ Yes No
beaver dams!

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ n
Broad boundary transition ☒ n

Vegetation

Herbaceous vegetation ☒ n
Dense vegetation ☒ n
Function Present ☒ n

Setting & Hydrology

Upstream sources of pollution ☒ n
Erosion/sedimentation observed ☒ n
Diffuse flow/slow moving water ☒ n
Does wetland flood ☒ n
Long water retention ☒ n

Pastureland.

☒ Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ n
Slow moving water ☒ n
Nutrients upslope ☒ n
Function Present ☒ n

Transformers

Organic soils ☒ n
Aquatic vegetation ☒ n
Abundant vegetation ☒ n

☒ Yes No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ n
Function Present ☒ n

Export

Detritus ☒ n
Aquatic plants ☒ n
Berry producing shrubs ☒ n
Nectar sources ☒ n
Seed/mast sources ☒ n

☒ Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent yes (lower end)

Characteristics of Stream

Elevation change present ☒ n
High seasonal flows ☒ n
Channelized flow ☒ n
Open water fetch ☒ n

Description of Bank

Bank present ☒ n
Bank vegetated ☒ n
Bank eroded ☒ n
Steep bank ☒ n
Stabilized Bank ☒ n

in places.

☒ Yes No

Wetland ID:

41

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type:

Secretive
marsh birds
Blandings Turtle.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features:

large shallow marsh.
deep marsh pockets.

Diversity Features

Aquatic insect habitat

☒ y ☐ n

Amphibian habitat

☒ y ☐ n

Fisheries habitat

☒ y ☐ n

Cavity trees

☒ y ☐ n

Food sources

☒ y ☐ n

Cover

☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity

☒ y ☐ n

Upland connectivity

☒ y ☐ n

Strengths of Upland Habitat:

Diverse Forest and Pastureland.

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: Pasture/Woodland

Width: 50-500

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

570

Existing structure(s) that obstruct
animal movement

☒ y ☐ n chester Rd culvert.

Significant disturbance

☒ y ☐ n

Proximity to beaver, mink, or
otter habitat

☒ y ☐ n

Other: Pasture in wetland cattle go out
in marsh.

Wetland Values

Recreational Value

Parking available

☒ y ☐ n

Watercraft access

☒ y ☐ n

Fishing available

☒ y ☐ n

Hunting permitted

☒ y ☐ n

Walking/biking trails

☒ y ☐ n

Value

H M L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

possible associated
with Ram to the
south.

H2O Degradation

Present

☒ y ☐ n

from manure.

Educational/Scientific Value

Unique habitats/plant species

☒ y ☐ n

Diverse wildlife habitat

☒ y ☐ n

Parking/access

☒ y ☐ n

Value

H M L

Invasive Species Present:

☒ y ☐ n

Type:

phragmites, purple loosestrife
European Glossy leaved buckthorn

Comments/Notes

Largest marsh system outside
Spruce Swamp. which feeds tributary
to Exeter River.

Uniqueness/Heritage

Urban upland/proximity

☒ y ☐ n

Rapid development upland

☒ y ☐ n

Critical habitat/threatened or
endangered species

☒ y ☐ n

Archaeological sites

☒ y ☐ n

Stonewalls present

☒ y ☐ n

Historic sites

☒ y ☐ n

Ecological health/vigor

☒ y ☐ n

Value

H M L

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 412 Size: 277 Date: 8/07 WEI Project # 06-076NH
Classification: PRO1/SSI/EMIEB Aerial Photograph #: 7-21, 8-21, 9-21

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: Sand + gravel
Other geologic features: over aquifer
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest/Res. Field
Watershed position H M L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: moderate slopes
Topography of wetland: flat
Constricted outlet ☒ y ☐ n beaver dams.
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n
100 year Flood plain ☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n Res. + Farm.
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n
☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n
☒ Yes ☐ No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n
☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? yes (if no, stop), Perennial or intermittent Exeter River

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n
Function Present ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

☒ Yes ☐ No

Wetland ID: 42

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Blandings Turtle
Habitat.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Slow moving water in
scrub shrub marsh.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Variety of Forest types with some
hay fields

☒ Yes ☐ No

Function Present ☒ y ☐ n

Vegetated Buffer

Type: Forest/Rich Width: 75-500

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function: 15%

Existing structure(s) that obstruct
animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or
other habitat ☒ y ☐ n

Other:

Majority of wetland boundary
is protected by wooded
buffer.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

Value

H ☒ M ☐ L

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Comments/Notes

2nd Largest wetland in Fremont.
Floodplain of Exeter River
> possible.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 43. Size: 44 acres Date: 8/07 WEI Project # 06-076NH
Classification: PSS1/3 BMIT Aerial Photograph #: 10-21
+ PUB it.

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y n
Subsoil type: sand & gravel
Other geologic features: over aquifer
Function Present y n

Hydrology

Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Principal Function

Yes No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest/fields
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n
Function Present y n

Topographic Information

Topography of watershed: gentle slopes.
Topography of wetland: flat.
Constricted outlet y n beaver dams.
High degree of impervious surfaces in wetland watershed y n
Provides downstream protection y n

Yes No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils y n
Broad boundary transition y n

Vegetation

Herbaceous vegetation y n
Dense vegetation y n
Function Present y n

Setting & Hydrology

Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation

Hydrology

Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n

Transformers

Organic soils y n
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n

Export

Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) Perennial or intermittent

yes.

Characteristics of Stream

Elevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n

Description of Bank

Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Yes No

Function Present

y n

Wetland ID: # 43

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Blandings Turtle
observed.

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: deep marsh.
scub shrub marsh.

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Mixed Forest.
Old RR bed used as ATV trail
☒ Yes ☐ No

Function Present ☒ y ☐ n

Vegetated Buffer

Type: Forest. Width: 100-500
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 590
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct
animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or
otter habitat ☒ y ☐ n
Other:

ATV trail causes some minor
erosion into wetland.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value

H ☒ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n minor. ☒ y ☐ n from runoff
RR bed.

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Invasive Species Present: ☒ y ☐ n

Type: purple loosestrife/minor.

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Comments/Notes

Bog like habitat with
high diversity
Blandings Turtle observed.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: #44 Size: 11.1
Classification: PEMIE; PFOI/SSIE;
PFOI/4; PUEHb

Date: 9/07
Aerial Photograph #: 24933-1-22

WEI Project # 06-076NH

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: gravelly loamy sand
Other geologic features: drainage way
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n ☒ Yes ☐ No

Principal Function

Floodflow Alteration

Watershed Information residential/forest
Land cover in catchment area? forest
Watershed position H M ☒ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: adjacent moderate slopes
Topography of wetland: relatively flat
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n ☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n ☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n
☒ Yes ☒ No

Production Export

Vegetation

Density ☒ H ☐ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n (winter-berry)
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n
☒ Yes ☒ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

Function Present ☒ y ☐ n

☒ Yes ☐ No nearby moderate slopes

Wetland ID: H 44

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: scrub-shrub

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: cover

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

w/ Exeter River

Strengths of Upland Habitat:

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: residential/forest Width: 50'

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

Taylor Rd bisects wetland by surrounding residential development historical evidence of beaver

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n(?)
Hunting permitted deer stand noted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

replace elevated culvert at road crossing to restore potential fish passage potential road salt run-off

H2O Degradation

Present

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H ☒ M ☐ L

Comments/Notes

potential tussock sedge and spotted turtle affinity

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #45 Size: 12.8
Classification: PSS1/EMIEDate: 9/67
Aerial Photograph #: 24933-1-22

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present y(n)
Subsoil type: mucky peat
Other geologic features: thick "O" layer
Function Present y(n)**Hydrology**Groundwater relationship present y(n) proximity to aquifer
Variable water levels observed y(n)
Springs or seeps observed y(n)
Contains only inlet or outlet y(n) (Yes) No**Principal Function****Floodflow Alteration** reclaimed
Watershed Information gravel pit/forestLand cover in catchment area?
Watershed position H M (L)
Other catchment storage y(n)
Watercourse associated y(n)
Contains hydric A soils y(n)
Function Present y(n)**Topographic Information**Topography of watershed: flat
Topography of wetland: flat
Constricted outlet y(n)
High degree of impervious surfaces in wetland watershed y(n)
Provides downstream protection y(n) (Yes) No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils y(n)
Broad boundary transition y(n)**Vegetation**Herbaceous vegetation y(n)
Dense vegetation y(n)
Function Present y(n)**Setting & Hydrology**Upstream sources of pollution y(n) potential road run-off
Erosion/sedimentation observed y(n)
Diffuse flow/slow moving water y(n)
Does wetland flood y(n)
Long water retention y(n)
(Yes) No**Nutrient Removal/Retention Transformation****Hydrology**Open water present y(n)
Slow moving water y(n)
Nutrients upslope y(n)
Function Present y(n)**Transformers**Organic soils y(n)
Aquatic vegetation y(n)
Abundant vegetation y(n)
Yes (No)**Production Export****Vegetation**Density H (M) L
Interspersion H (M) L
Diversity H (M) L
Food source (frogs) y(n)
Function Present y(n)**Export**Detritus y(n)
Aquatic plants y(n)
Berry producing shrubs y(n) (= few)
Nectar sources y(n)
Seed/mast sources y(n)
(Yes) No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop). Perennial or intermittent

Characteristics of StreamElevation change present y(n)
High seasonal flows y(n)
Channelized flow y(n)
Open water fetch y(n)**Description of Bank**Bank present y(n)
Bank vegetated y(n)
Bank eroded y(n)
Steep bank y(n)
Stabilized Bank y(n)
(Yes) No

Function Present y(n)

Wetland ID: * 45

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub-shrub

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: Cover

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: residential/forest Width: 50'

Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 75%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

residential development, nearby road, reclaimed gravel pit adjacent riparian zone

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access (i.e. to access) ☒ y ☐ n
Fishing available adjacent ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value

☒ H ☐ M ☐ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

H2O Degradation

Present

☒ y ☐ n

potentially by re-suspension development

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value

☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value

☒ H ☐ M ☐ L

Comments/Notes

potential turtle habitat

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #46 Size: 35.8 Date: 9/26/07 WEI Project # 06-076NH
Classification: PFOI/SSIE/EMIEB Aerial Photograph #: 29433-1-22

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present ☒ y ☐ n
Subsoil type: peat
Other geologic features: thick 8" layer
Function Present ☒ y ☐ n

Hydrology

Groundwater relationship present ☒ y ☐ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☒ y ☐ n
Contains only inlet or outlet ☒ y ☐ n

Principal Function

proximity to aquifer

☒ Yes ☐ No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? reclamation gravel pit / Forest
Watershed position H M ☒ L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: flat
Topography of wetland: flat
Constricted outlet ☒ y ☐ n
High degree of impervious surfaces in wetland watershed ☒ y ☐ n
Provides downstream protection ☒ y ☐ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☒ y ☐ n
Erosion/sedimentation observed ☒ y ☐ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n

☒ Yes ☐ No

nearby prior gravel operations

Nutrient Removal/Retention Transformation**Hydrology**

Open water present ☒ y ☐ n
Slow moving water ☒ y ☐ n
Nutrients upslope ☒ y ☐ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☒ y ☐ n
Aquatic vegetation ☒ y ☐ n
Abundant vegetation ☒ y ☐ n

☒ Yes ☐ No

Production Export**Vegetation**

Density H ☒ M ☐ L
Interspersion ☒ H ☐ M ☐ L
Diversity ☒ H ☐ M ☐ L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☒ y ☐ n
Aquatic plants ☒ y ☐ n
Berry producing shrubs ☒ y ☐ n
Nectar sources ☒ y ☐ n
Seed/mast sources ☒ y ☐ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) ☒ Perennial ☐ or intermittent

Characteristics of Stream

Elevation change present ☒ y ☐ n
High seasonal flows ☒ y ☐ n
Channelized flow ☒ y ☐ n
Open water fetch ☒ y ☐ n

Description of Bank

Bank present ☒ y ☐ n
Bank vegetated ☒ y ☐ n
Bank eroded ☒ y ☐ n
Steep bank ☒ y ☐ n
Stabilized Bank ☒ y ☐ n

☒ Yes ☐ No

Function Present ☒ y ☐ n

Wetland ID: #40

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub-shrub

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: cover

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n (?)

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: reclaimed gravel pit / forest Width: 10'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or other habitat ☒ y ☐ n

Other: ☒ y ☐ n

adjacent large open area @ reclaimed gravel pit w/ no vegetation cover.

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available (posted) ☒ y ☐ n

Hunting permitted (posted) ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size: 10 acres - establish wetland buffer by planting trees

H2O Degradation

Present

☒ y ☐ n

by prior gravel operations

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Comments/Notes

potential tussock sedge and spotted turtle affinity; also potential habitat for Blandings Turtle

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #41

Size: 13.6

Date: 5/3/07

WEI Project # 06-076NH

Classification: PSS1E6/PF01E6

Aerial Photograph #: 24933-2-25

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☐ y ☐ n

Subsoil type: peat

Other geologic features: thick O layer

Function Present ☐ y ☐ n**Hydrology**Groundwater relationship present ☐ y ☐ nVariable water levels observed ☐ y ☐ nSprings or seeps observed ☐ y ☐ nContains only inlet or outlet ☐ y ☐ n**Principal Function**

proximity to aquifer

Yes No

Floodflow Alteration**Watershed Information**

Land cover in catchment area? forest

Watershed position H M ☒ LOther catchment storage ☐ y ☐ nWatercourse associated ☐ y ☐ nContains hydric A soils ☐ y ☐ nFunction Present ☐ y ☐ n**Topographic Information**

Topography of watershed: relatively flat

Topography of wetland: flat

Constricted outlet ☐ y ☐ n

High degree of impervious

surfaces in wetland watershed ☐ y ☐ nProvides downstream protection ☐ y ☐ n

Copp Drive nearby

Yes No

Sediment/Toxicant/Pathogen Retention**Soils**Organic Soils ☐ y ☐ nBroad boundary transition ☐ y ☐ n**Vegetation**Herbaceous vegetation ☐ y ☐ nDense vegetation ☐ y ☐ nFunction Present ☐ y ☐ n**Setting & Hydrology**Upstream sources of pollution ☐ y ☐ nErosion/sedimentation observed ☐ y ☐ nDiffuse flow/slow moving water ☐ y ☐ nDoes wetland flood ☐ y ☐ nLong water retention ☐ y ☐ n

Copp Drive nearby

Yes No

Nutrient Removal/Retention Transformation**Hydrology**Open water present ☐ y ☐ nSlow moving water ☐ y ☐ nNutrients upslope ☐ y ☐ nFunction Present ☐ y ☐ n**Transformers**Organic soils ☐ y ☐ nAquatic vegetation ☐ y ☐ nAbundant vegetation ☐ y ☐ n

Yes No

Production Export**Vegetation**Density H M ☒ LInterspersion H M ☒ LDiversity H M ☒ LFood source ☐ y ☐ nFunction Present ☐ y ☐ n**Export**Detritus ☐ y ☐ nAquatic plants ☐ y ☐ nBerry producing shrubs ☐ y ☐ nNectar sources ☐ y ☐ nSeed/mast sources ☐ y ☐ n

Yes No

Sediment/Shoreline StabilizationIs wetland associated with surface water? (if no, stop). Perennial or ☒ intermittent**Characteristics of Stream**Elevation change present ☐ y ☐ nHigh seasonal flows ☐ y ☐ nChannelized flow ☐ y ☐ nOpen water fetch ☐ y ☐ nFunction Present ☐ y ☐ n**Description of Bank**Bank present ☐ y ☐ nBank vegetated ☐ y ☐ nBank eroded ☐ y ☐ nSteep bank ☐ y ☐ nStabilized Bank ☐ y ☐ n

Yes No

Wetland ID: # 47

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: *Scrub-shrub*

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: *cover*

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

nearby nest

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: *forested* Width: *100+*
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment:
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct animal movement ☒ y ☐ n
Significant disturbance ☒ y ☐ n
Proximity to beaver, mink, or other habitat ☒ y ☐ n
Other:

*nearby Copp Drive
nearby development
scholarship house
colony*

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration/Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value ☒ H ☐ M ☐ L

Comments/Notes

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #48

Size: 14.7

Date: 5/2/07

WEI Project # 06-076NH

Classification: PSS1/EMIE; PFOSEB

Aerial Photograph #: 24933-3-22

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present y (n)

Subsoil type: peat

Other geologic features: thick O layer

Function Present y (n)

Hydrology

Groundwater relationship present y (n)

Variable water levels observed y (n)

Springs or seeps observed y (n)

Contains only inlet or outlet y (n)

Principal Function

aquifer proximity

Yes No

Floodflow Alteration**Watershed Information** reclaimed gravel

Land cover in catchment area? P/forest

Watershed position H M L

Other catchment storage y (n) nearby pond

Watercourse associated y (n)

Contains hydric A soils y (n)

Function Present y (n)

Topographic Information

Topography of watershed: flat

Topography of wetland: flat

Constricted outlet y (n)

High degree of impervious surfaces in wetland watershed y (n)

Provides downstream protection y (n)

Yes No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils y (n)

Broad boundary transition y (n)

Vegetation

Herbaceous vegetation y (n)

Dense vegetation y (n)

Function Present y (n)

Setting & Hydrology

Upstream sources of pollution y (n)

Erosion/sedimentation observed y (n)

Diffuse flow/slow moving water y (n)

Does wetland flood y (n)

Long water retention y (n)

Yes No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present y (n)

Slow moving water y (n)

Nutrients upslope y (n)

Function Present y (n)

Transformers

Organic soils y (n)

Aquatic vegetation y (n)

Abundant vegetation y (n)

Yes No

Production Export**Vegetation**

Density H (M) L

Interspersion H (M) L

Diversity H (M) L

Food source y (n)

Function Present y (n)

Export

Detritus y (n)

Aquatic plants y (n)

Berry producing shrubs y (n)

Nectar sources y (n)

Seed/mast sources y (n)

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop). Perennial or intermittent

Characteristics of Stream

Elevation change present y (n)

High seasonal flows y (n)

Channelized flow y (n)

Open water fetch y (n)

Function Present y (n)

Description of Bank

Bank present y (n)

Bank vegetated y (n)

Bank eroded y (n)

Steep bank y (n)

Stabilized Bank y (n)

Yes No

(within wetland)

Wetland ID: # 48

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: scrub/shrub

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Vegetated Buffer

Type: forest/residential Width: 50'

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n

Specific Features: cover; tussock sedge; potential nesting by turtles in reclaimed gravel pit

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

large adjacent reclaimed gravel pit

☒ Yes ☐ No

Habitat Degradation

Percentage of wetland buffer with encroachment: 25%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

☒ y ☐ n nearby Rics 107/111-A

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

otter habitat ☒ y ☐ n

Other:

by prior gravel operations historical evidence

Wetland Values

Recreational Value

Parking available ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n posted

Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size: 2-3 acres; replace wetland buffer on southeastern perimeter

H2O Degradation

Present ☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value ☒ H ☐ M ☐ L

Comments/Notes

The nearby reclaimed gravel pit may accommodate turtle nesting. The presence of tussock sedge within the wetland may attract spotted turtles. Active American toad calling was noted in a small emergent wetland adjacent this wetland.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: #40 Size: 38
Classification: PSSIE/PEWIE

Date: 5/2/07
Aerial Photograph #: 24933-3-20

WEI Project # 06-076NH

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present y/n
Subsoil type: peat
Other geologic features: thick O layer

Function Present (y) n

Hydrology

Groundwater relationship present (y) n
Variable water levels observed (y) n
Springs or seeps observed (y) n
Contains only inlet or outlet (y) n

Principal Function

proximity to aquifer

(Yes) No

Floodflow Alteration

Watershed Information

Land cover in catchment area? forest

Watershed position H M (L)

Other catchment storage (y) n

Watercourse associated (y) n

Contains hydric A soils (y) n

Function Present (y) n

Topographic Information

Topography of watershed: flat

Topography of wetland: flat

Constricted outlet (y) n

High degree of impervious surfaces in wetland watershed (y) n

Provides downstream protection (y) n

(Yes) No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils (y) n

Broad boundary transition (y) n

Vegetation

Herbaceous vegetation (y) n

Dense vegetation (y) n

Function Present (y) n

Setting & Hydrology

Upstream sources of pollution (y) n

Erosion/sedimentation observed (y) n

Diffuse flow/slow moving water (y) n

Does wetland flood (y) n

Long water retention (y) n

(Yes) No

Nutrient Removal/Retention Transformation

Hydrology

Open water present (y) n

Slow moving water (y) n

Nutrients upslope (y) n

Function Present (y) n

Transformers

Organic soils (y) n

Aquatic vegetation (y) n

Abundant vegetation (y) n

(Yes) No

Production Export

Vegetation

Density H (M) L

Interspersion (H) M L

Diversity H (M) L

Food source (y) n

Function Present (y) n

Export

Detritus (y) n

Aquatic plants (y) n

Berry producing shrubs (y) n

Nectar sources (y) n

Seed/mast sources (y) n

(Yes) No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop) Perennial or intermittent

Characteristics of Stream

Elevation change present (y) n

High seasonal flows (y) n

Channelized flow (y) n

Open water fetch y n

Function Present y n

Description of Bank

Bank present (y) n

Bank vegetated (y) n

Bank eroded (y) n

Steep bank (y) n

Stabilized Bank (y) n

(Yes) No

Wetland ID: # 49

Wildlife Habitat

Existing Critical Habitat (y) n

Type: Scrub/shrub

Principal Function

Deep emergent marsh

Critical Habitat Features (y) n

Diversity Features

Aquatic insect habitat (y) n

Amphibian habitat (y) n

Fisheries habitat (y) n

Cavity trees (y) n

Food sources (y) n

Cover (y) n

Function Present (y) n

Vegetated Buffer

Type: residential/forest Width: 50'

Buffer stream or wetland (y) n

Does buffer provide shade (y) n

Does buffer adequately safeguard wetland (y) n

Specific Features: cover; tussock sedge; affinity by Spotted & Blanding's turtles to associated habitat

Connectivity

Wildlife Corridor (through or adjacent) (y) n

Wetland connectivity (y) n

Upland connectivity (y) n

Strengths of Upland Habitat:

large unfragmented forest adjacent south & east section of this wetland

Yes No

Habitat Degradation

Percentage of wetland buffer with encroachment: 66%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement (y) n

Significant disturbance (y) n

Proximity to beaver, mink, or

other habitat (y) n

Other:

Adjacent old Denville Rd. and residential development

Wetland Values

Recreational Value

Parking available (y) n

Watercraft access (y) n

Fishing available (y) n

Hunting permitted (y) n

Walking/biking trails (y) n

Value

H (M) L

Restoration Stabilization Potential

(y) n

Restoration area size: 5' x 20' - replant buffer at adjacent gravel pit

H2O Degradation

Present

(y) n

Educational/Scientific Value

Unique habitats/plant species (y) n

Diverse wildlife habitat (y) n

Parking/access (y) n

Value

H (M) L

Invasive Species Present:

(y) n

Type:

Uniqueness/Heritage

Urban upland/proximity (y) n

Rapid development upland (y) n

Critical habitat/threatened or endangered species (y) n

Archaeological sites (y) n

Stonewalls present (y) n

Historic sites (y) n

Ecological health/vigor (y) n

Value

H (M) L

Comments/Notes

The wetland is directly associated with the Exeter River. The wetland provides excellent habitat for the rarer spotted and Blandings Turtle. Prior/active gravel operations potentially accommodate turtle egg laying as well.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: #50

Size: 3.0

Date: 6/9/07

WEI Project # 06-076NH

Classification: PFOIE/SSIE

Aerial Photograph #: 24955-3-29

Wetland Functions**Groundwater Recharge/Discharge****Geology**

Restrictive layer present (y) n

Subsoil type: grey sandy loam

Other geologic features: thick "O" layer

Function Present (y) n

Hydrology

Groundwater relationship present (y) n

Variable water levels observed (y) n

Springs or seeps observed (y) n

Contains only inlet or outlet (y) n

Principal Function

Yes

(No)

Floodflow Alteration**Watershed Information**

Land cover in catchment area? forest/urban

Watershed position H M L

Other catchment storage (y) n

Watercourse associated (y) n

Contains hydric A soils (y) n

Function Present (y) n

Topographic Information

Topography of watershed:

Topography of wetland:

Constricted outlet (y) n

High degree of impervious

surfaces in wetland watershed (y) n

Provides downstream protection (y) n

adjacent slopes
relatively flat

nearby development

(Yes)

No

Sediment/Toxicant/Pathogen Retention**Soils**

Organic Soils (y) n

Broad boundary transition (y) n

Vegetation

Herbaceous vegetation (y) n

Dense vegetation (y) n

Function Present (y) n

Setting & Hydrology

Upstream sources of pollution (y) n

Erosion/sedimentation observed (y) n

Diffuse flow/slow moving water (y) n

Does wetland flood (y) n

Long water retention (y) n

(Yes)

No

Nutrient Removal/Retention Transformation**Hydrology**

Open water present (y) n

Slow moving water (y) n

Nutrients upslope (y) n

Function Present (y) n

Transformers

Organic soils (y) n

Aquatic vegetation (y) n

Abundant vegetation (y) n

(Yes)

No

Production Export**Vegetation**

Density H M L

Interspersion H M L

Diversity H M L

Food source (y) n

Function Present (y) n

Export

Detritus (y) n

Aquatic plants (y) n

Berry producing shrubs (y) n

Nectar sources (y) n

Seed/mast sources (y) n

(Yes)

No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of Stream

Elevation change present (y) n

High seasonal flows (y) n

Channelized flow (y) n

Open water fetch (y) n

Function Present (y) n

Description of Bank

Bank present (y) n

Bank vegetated (y) n

Bank eroded (y) n

Steep bank (y) n

Stabilized Bank (y) n

Yes

(No)

Wetland ID: #50

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Scrub-shrub wetland components

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: (same)

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

existing wildlife corridor

Function Present

☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest/urban (25 to 125 ft)
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately safeguard wetland ☒ y ☐ n

Habitat Degradation

Percentage of wetland buffer with encroachment: 80%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

☒ y ☐ n

nearby road and respective development

Significant disturbance

☒ y ☐ n

Proximity to beaver, mink, or other habitat

☒ y ☐ n

nearby abandoned beaver flowage; evidence of river otter (scat)

Other:

Wetland Values

Recreational Value

Parking available
Watercraft access
Fishing available
Hunting permitted
Walking/biking trails

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

remove existing culvert to maintain nutrient stability

H2O Degradation

Present

☒ y ☐ n

(potentially)

Value

H M ☒ L

Educational/Scientific Value

Unique habitats/plant species
Diverse wildlife habitat
Parking/access
Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity
Rapid development upland
Critical habitat/threatened or endangered species
Archaeological sites
Stonewalls present
Historic sites
Ecological health/vigor
Value

☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ y ☐ n
☒ H ☒ M ☐ L

Comments/Notes

This wetland is unique, only its small size prevents an exemplary status.

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 52 Size: 3.2 Date: 8/07 WEI Project # 06-076NH
Classification: PF05/EM1Eb Aerial Photograph #: 10-29

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ y ☐ n
Subsoil type: gravel on ledge
Other geologic features:
Function Present ☐ y ☐ n

Hydrology

Groundwater relationship present ☐ y ☒ n
Variable water levels observed ☒ y ☐ n
Springs or seeps observed ☐ y ☒ n
Contains only inlet or outlet ☐ y ☒ n Yes ☒ No

Principal Function

Floodflow Alteration

Watershed Information

Land cover in catchment area? Forest
Watershed position H (M) L
Other catchment storage ☒ y ☐ n
Watercourse associated ☒ y ☐ n
Contains hydric A soils ☒ y ☐ n
Function Present ☒ y ☐ n

Topographic Information

Topography of watershed: Moderate slopes
Topography of wetland: bowl shaped
Constricted outlet ☒ y ☐ n beaver dam
High degree of impervious surfaces in wetland watershed ☐ y ☒ n
Provides downstream protection ☒ y ☐ n Yes ☒ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ y ☐ n
Broad boundary transition ☒ y ☐ n

Vegetation

Herbaceous vegetation ☒ y ☐ n
Dense vegetation ☒ y ☐ n
Function Present ☒ y ☐ n

Setting & Hydrology

Upstream sources of pollution ☐ y ☒ n
Erosion/sedimentation observed ☐ y ☒ n
Diffuse flow/slow moving water ☒ y ☐ n
Does wetland flood ☒ y ☐ n
Long water retention ☒ y ☐ n Yes ☒ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☐ y ☒ n
Slow moving water ☐ y ☒ n
Nutrients upslope ☐ y ☒ n
Function Present ☒ y ☐ n

Transformers

Organic soils ☐ y ☒ n
Aquatic vegetation ☐ y ☒ n
Abundant vegetation ☐ y ☒ n Yes ☒ No

Production Export

Vegetation

Density H (M) L
Interspersion H M L
Diversity H M L
Food source ☒ y ☐ n
Function Present ☒ y ☐ n

Export

Detritus ☐ y ☒ n
Aquatic plants ☐ y ☒ n
Berry producing shrubs ☐ y ☒ n
Nectar sources ☐ y ☒ n
Seed/mast sources ☒ y ☐ n Yes ☒ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent NO

Characteristics of Stream

Elevation change present ☐ y ☐ n
High seasonal flows ☐ y ☐ n
Channelized flow ☐ y ☐ n
Open water fetch ☐ y ☐ n

Description of Bank

Bank present ☐ y ☐ n
Bank vegetated ☐ y ☐ n
Bank eroded ☐ y ☐ n
Steep bank ☐ y ☐ n
Stabilized Bank ☐ y ☐ n

Function Present ☐ y ☐ n

Yes ☒ No

Wetland ID: 52

Wildlife Habitat

Existing Critical Habitat y n

Type:

Principal Function

Critical Habitat Features y n

Specific Features:

Diversity Features

Aquatic insect habitat y n
Amphibian habitat y n
Fisheries habitat y n
Cavity trees y n
Food sources y n
Cover y n

Connectivity

Wildlife Corridor (through or adjacent) y n
Wetland connectivity y n
Upland connectivity y n

Function Present y n

Strengths of Upland Habitat:

Diverse forest with some cleared areas

Yes No

Vegetated Buffer

Type: Fresh/cleared areas Width: 300

Buffer stream or wetland y n
Does buffer provide shade y n
Does buffer adequately safeguard wetland y n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

0%

Existing structure(s) that obstruct animal movement

y n

Significant disturbance

y n

Proximity to beaver, mink, or other habitat

y n

Other:

Wetland Values

Recreational Value

Parking available y n
Watercraft access y n
Fishing available y n
Hunting permitted y n
Walking/biking trails y n

Value

H M L

Restoration Stabilization Potential

y n

Restoration area size:

H2O Degradation

Present

y n

Educational/Scientific Value

Unique habitats/plant species y n
Diverse wildlife habitat y n
Parking/access y n
Value

y n

y n

y n

H M L

Invasive Species Present:

y n

Type:

Uniqueness/Heritage

Urban upland/proximity y n
Rapid development upland y n
Critical habitat/threatened or endangered species y n
Archaeological sites y n
Stonewalls present y n
Historic sites y n
Ecological health/vigor y n
Value

y n

y n

y n

y n

y n

y n

y n

y n

H M L

Comments/Notes

small abandoned beaver pond.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: #53 Size: 6
Classification: PEM1BDate: 6/07
Aerial Photograph #: 24933-3-31

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present (y) n
Subsoil type: silty
Other geologic features: "O" layer
Function Present (y) n**Hydrology**Groundwater relationship present (y) n
Variable water levels observed (y) n
Springs or seeps observed (y) n
Contains only inlet or outlet (y) n (Yes) No**Principal Function****Floodflow Alteration****Watershed Information**Land cover in catchment area? field
Watershed position H (M) L
Other catchment storage (y) n
Watercourse associated (y) n
Contains hydric A soils (y) n
Function Present (y) n**Topographic Information**Topography of watershed: moderately sloped to flat
Topography of wetland: (same)
Constricted outlet (y) n
High degree of impervious surfaces in wetland watershed (y) n
Provides downstream protection (y) n (Yes) No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils (y) n
Broad boundary transition (y) n**Vegetation**Herbaceous vegetation (y) n
Dense vegetation (y) n
Function Present (y) n**Setting & Hydrology**Upstream sources of pollution (y) n
Erosion/sedimentation observed (y) n
Diffuse flow/slow moving water (y) n
Does wetland flood (y) n
Long water retention (y) n
(Yes) No**Nutrient Removal/Retention Transformation****Hydrology**Open water present (y) n
Slow moving water (y) n
Nutrients upslope (y) n
Function Present (y) n**Transformers**Organic soils (y) n
Aquatic vegetation (y) n
Abundant vegetation (y) n
(predominantly grasses)
(Yes) No**Production Export****Vegetation**Density H (M) L
Interspersion H (M) L
Diversity H (M) L
Food source (y) n
Function Present (y) n**Export**Detritus (y) n
Aquatic plants (y) n
Berry producing shrubs (y) n
Nectar sources (y) n
Seed/mast sources (y) n
(scattered flowering herbs)
(Yes) No**Sediment/Shoreline Stabilization**

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present (y) n
High seasonal flows (y) n
Channelized flow (y) n
Open water fetch (y) n
Function Present (y) n**Description of Bank**Bank present (y) n
Bank vegetated (y) n
Bank eroded (y) n
Steep bank (y) n
Stabilized Bank (y) n

(Yes) No

Wetland ID: # 53

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Wet/sedge meadow

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n

Amphibian habitat ☒ y ☐ n

Fisheries habitat ☒ y ☐ n

Cavity trees ☒ y ☐ n

Food sources ☒ y ☐ n

Cover ☒ y ☐ n

Function Present ☐ y ☐ n

Vegetated Buffer

Type: field Width:

Buffer stream or wetland ☐ y ☐ n

Does buffer provide shade ☐ y ☐ n

Does buffer adequately safeguard wetland ☐ y ☐ n

Specific Features: nesting potential; possible connection w/ the sedge area

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

The size of the adjacent field area

☒ Yes ☐ No

Habitat Degradation

Percentage of wetland buffer with encroachment: (20%)

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

☒ y ☐ n adjacent Martin Road

Significant disturbance

☒ y ☐ n

Proximity to beaver, mink, or other habitat

☒ y ☐ n

Other:

Wetland Values

Recreational Value

Parking available

☒ y ☐ n

Watercraft access

☒ y ☐ n

Fishing available

☒ y ☐ n

Hunting permitted

☒ y ☐ n

Walking/biking trails

☒ y ☐ n

Value

H M L

Restoration Stabilization Potential

☒ y ☐ n (potentially) refill historical ditches to allow field to revert to scrub-shrub

H2O Degradation

Present

☒ y ☐ n

potential nitrite introduction by agricultural fertilizer

Educational/Scientific Value

Unique habitats/plant species

☒ y ☐ n

Diverse wildlife habitat

☒ y ☐ n

Parking/access

☒ y ☐ n

Value

H M L

Invasive Species Present:

☒ y ☐ n

Type: (Non-native grasses evident)

Uniqueness/Heritage

Urban upland/proximity

☒ y ☐ n

Rapid development upland

☒ y ☐ n

Critical habitat/threatened or endangered species

☒ y ☐ n

Archaeological sites

☒ y ☐ n

Stonewalls present

☒ y ☐ n

Historic sites

☒ y ☐ n

Ecological health/vigor

☒ y ☐ n

Value

H M L

Comments/Notes

This wet meadow is adjacent to a large open grassed area. This wet meadow may provide specific nesting requirements to certain ground nesters.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**Wetland ID: 54 Size: 4.2
Classification: PFOIEDate: 9/07
Aerial Photograph #: 24433-3-2

WEI Project # 06-076NH

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present y n
Subsoil type: sandy loam
Other geologic features:
Function Present y n**Principal Function****Hydrology**Groundwater relationship present y n
Variable water levels observed y n
Springs or seeps observed y n
Contains only inlet or outlet y n

Yes No

Floodflow Alteration**Watershed Information** new developmt.
Land cover in catchment area? forest
Watershed position H M L
Other catchment storage y n
Watercourse associated y n
Contains hydric A soils y n (?)
Function Present y n**Topographic Information**Topography of watershed: adjacent moderate slopes
Topography of wetland: relatively flat
Constricted outlet y n
High degree of impervious surfaces in wetland watershed y n same adjacent development
Provides downstream protection y n Yes No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils y n (?)
Broad boundary transition y n**Vegetation**Herbaceous vegetation y n
Dense vegetation y n
Function Present y n**Setting & Hydrology**Upstream sources of pollution y n
Erosion/sedimentation observed y n
Diffuse flow/slow moving water y n
Does wetland flood y n
Long water retention y n

Yes No

Nutrient Removal/Retention Transformation**Hydrology**Open water present y n
Slow moving water y n
Nutrients upslope y n
Function Present y n**Transformers**Organic soils y n (?)
Aquatic vegetation y n
Abundant vegetation y n

Yes No

Production Export**Vegetation**Density H M L
Interspersion H M L
Diversity H M L
Food source y n
Function Present y n**Export**Detritus y n
Aquatic plants y n
Berry producing shrubs y n
Nectar sources y n
Seed/mast sources y n

Yes No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? (if no, stop), Perennial or intermittent

Characteristics of StreamElevation change present y n
High seasonal flows y n
Channelized flow y n
Open water fetch y n**Description of Bank**Bank present y n
Bank vegetated y n
Bank eroded y n
Steep bank y n
Stabilized Bank y n

Function Present y n

Yes No

Wetland ID: 54

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type:

Principal Function

Critical Habitat Features ☒ y ☐ n

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Function Present ☒ y ☐ n

Vegetated Buffer

Type: forest / road Width: 25⁺

Buffer stream or wetland ☒ y ☐ n

Does buffer provide shade ☒ y ☐ n

Does buffer adequately safeguard wetland ☒ y ☐ n - generally

Specific Features:

white pine understory provides excellent cover for wildlife

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n

Wetland connectivity ☒ y ☐ n

Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

Unfragmented forest to the north

Yes No

Habitat Degradation

Percentage of wetland buffer with encroachment: 50%

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct

animal movement ☒ y ☐ n

Significant disturbance ☒ y ☐ n

Proximity to beaver, mink, or

other habitat ☒ y ☐ n

Other:

nearby road adjacent development

Wetland Values

Recreational Value

Parking available at out-dock ☒ y ☐ n

Watercraft access ☒ y ☐ n

Fishing available ☒ y ☐ n

Hunting permitted ☒ y ☐ n

Walking/biking trails ☒ y ☐ n

Value

H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n

Restoration area size:

(2 ac) - restore logging cutting within wetland

H2O Degradation

Present

☒ y ☐ n

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n

Diverse wildlife habitat ☒ y ☐ n

Parking/access ☒ y ☐ n

Value

H M ☒ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n

Rapid development upland ☒ y ☐ n

Critical habitat/threatened or

endangered species ☒ y ☐ n

Archaeological sites ☒ y ☐ n

Stonewalls present ☒ y ☐ n

Historic sites ☒ y ☐ n

Ecological health/vigor ☒ y ☐ n

Value

H M ☒ L

Comments/Notes

West Environmental, Inc.

Town of Fremont Inventory Functional/Value Assessment Data Form

Wetland ID: 55. Size: 6132 Date: 8/07 WEI Project # 06-076NH
Classification: PFOIC Aerial Photograph #: 8/28 8-28

Wetland Functions

Groundwater Recharge/Discharge

Geology

Restrictive layer present ☒ n
Subsoil type: Sands & Gravel
Other geologic features: over aquifer
Function Present ☒ n

Hydrology

Groundwater relationship present ☒ n
Variable water levels observed ☒ n
Springs or seeps observed ☒ n
Contains only inlet or outlet ☒ n

Principal Function

☒ Yes ☐ No

Floodflow Alteration

Watershed Information

Land cover in catchment area? Residual Forest
Watershed position H M L
Other catchment storage ☒ n
Watercourse associated ☒ n
Contains hydric A soils ☒ n
Function Present ☒ n

Topographic Information

Topography of watershed: gentle to moderate slopes
Topography of wetland: flat.
Constricted outlet ☒ n
High degree of impervious surfaces in wetland watershed ☒ n
Provides downstream protection ☒ n

☒ Yes ☐ No

Sediment/Toxicant/Pathogen Retention

Soils

Organic Soils ☒ n
Broad boundary transition ☒ n

Vegetation

Herbaceous vegetation ☒ n
Dense vegetation ☒ n
Function Present ☒ n

Setting & Hydrology

Upstream sources of pollution ☒ n
Erosion/sedimentation observed ☒ n
Diffuse flow/slow moving water ☒ n
Does wetland flood ☒ n
Long water retention ☒ n

☒ Yes ☐ No

Nutrient Removal/Retention Transformation

Hydrology

Open water present ☒ n
Slow moving water ☒ n
Nutrients upslope ☒ n
Function Present ☒ n

Transformers

Organic soils ☒ n
Aquatic vegetation ☒ n
Abundant vegetation ☒ n

☒ Yes ☐ No

Production Export

Vegetation

Density H M L
Interspersion H M L
Diversity H M L
Food source ☒ n
Function Present ☒ n

Export

Detritus ☒ n
Aquatic plants ☒ n
Berry producing shrubs ☒ n
Nectar sources ☒ n
Seed/mast sources ☒ n

☒ Yes ☐ No

Sediment/Shoreline Stabilization

Is wetland associated with surface water? yes (if no, stop). Perennial or intermittent

Exeter River

Characteristics of Stream

Elevation change present ☒ n
High seasonal flows ☒ n
Channelized flow ☒ n
Open water fetch ☒ n

Description of Bank

Bank present ☒ n
Bank vegetated ☒ n
Bank eroded ☒ n
Steep bank ☒ n
Stabilized Bank ☒ n

☒ Yes ☐ No

Function Present ☒ n

Wetland ID: 55

Wildlife Habitat

Existing Critical Habitat y n

Type:

Principal Function

Critical Habitat Features y n

Specific Features:

River Floodplain

Diversity Features

Aquatic insect habitat y n
Amphibian habitat y n
Fisheries habitat y n
Cavity trees y n
Food sources y n
Cover y n

Connectivity

Wildlife Corridor (through or adjacent) y n
Wetland connectivity y n
Upland connectivity y n

Strengths of Upland Habitat:

South side of River Forested.

Function Present

y n

Yes No

Vegetated Buffer

Type: Forested / Rais Width: 0-500

Buffer stream or wetland y n
Does buffer provide shade y n
Does buffer adequately safeguard wetland y n

Habitat Degradation

Percentage of wetland buffer with encroachment:

Activities that adversely affect wildlife function:

Existing structure(s) that obstruct animal movement

Significant disturbance

Proximity to beaver, mink, or otter habitat

Other:

One side of wetland disturbed, mostly upstream in Raymond

Wetland Values

Recreational Value

Parking available
Watercraft access
Fishing available
Hunting permitted
Walking/biking trails

y n
y n
y n
y n
y n

Value

H M L

Restoration Stabilization Potential

y n

Restoration area size:

H2O Degradation

Present

y n

Educational/Scientific Value

Unique habitats/plant species
Diverse wildlife habitat
Parking/access
Value

y n
y n
y n
H M L

Invasive Species Present:

y n

Type:

Uniqueness/Heritage

Urban upland/proximity
Rapid development upland
Critical habitat/threatened or endangered species
Archaeological sites
Stonewalls present
Historic sites
Ecological health/vigor
Value

y n
y n
y n
y n
y n
H M L

Comments/Notes

upstream intense development in Raymond adjacent River.
Remnant stretch better protected.

West Environmental, Inc.**Town of Fremont Inventory Functional/Value Assessment Data Form**

Wetland ID: 56 Size: 5.0

Date: 8/31/07

WEI Project # 06-076NH

Classification: PFOIE/SSIE

Aerial Photograph #: 24933-2-33

Wetland Functions**Groundwater Recharge/Discharge****Geology**Restrictive layer present ☒ n

Subsoil type: muddy peat

Other geologic features:

Function Present ☒ n**Principal Function****Hydrology**Groundwater relationship present ☒ nVariable water levels observed ☒ nSprings or seeps observed ☒ nContains only inlet or outlet ☒ n

Yes No

Floodflow Alteration**Watershed Information**

Land cover in catchment area?

Watershed position ☒ H ☐ M ☐ LOther catchment storage ☒ nWatercourse associated ☒ nContains hydric A soils ☒ nFunction Present ☒ n**Topographic Information**

Topography of watershed:

Topography of wetland:

Constricted outlet

High degree of impervious

surfaces in wetland watershed

Provides downstream protection

moderately flat
(same)☒ n (4ft x 3ft) culvert
underneath Shirkin Rd.☒ n Yes No**Sediment/Toxicant/Pathogen Retention****Soils**Organic Soils ☒ nBroad boundary transition ☒ n**Vegetation**Herbaceous vegetation ☒ nDense vegetation ☒ nFunction Present ☒ n**Setting & Hydrology**Upstream sources of pollution ☒ nErosion/sedimentation observed ☒ nDiffuse flow/slow moving water ☒ nDoes wetland flood ☒ nLong water retention ☒ n

Yes No

nearby roads

Nutrient Removal/Retention Transformation**Hydrology**Open water present ☒ nSlow moving water ☒ nNutrients upslope ☒ nFunction Present ☒ n**Transformers**Organic soils ☒ nAquatic vegetation ☒ nAbundant vegetation ☒ n

Yes No

Production Export**Vegetation**Density ☒ H ☐ M ☐ LInterspersion ☒ H ☐ M ☐ LDiversity ☒ H ☐ M ☐ LFood source ☒ nFunction Present ☒ n**Export**Detritus ☒ nAquatic plants ☒ nBerry producing shrubs ☒ nNectar sources ☒ nSeed/mast sources ☒ n

Yes No

Sediment/Shoreline StabilizationIs wetland associated with surface water? (if no, stop), Perennial or intermittent**Characteristics of Stream**Elevation change present ☒ nHigh seasonal flows ☒ nChannelized flow ☒ nOpen water fetch ☒ nFunction Present ☒ n**Description of Bank**Bank present ☒ nBank vegetated ☒ nBank eroded ☒ nSteep bank ☒ nStabilized Bank ☒ n

Yes No

Wetland ID: 56

Wildlife Habitat

Existing Critical Habitat ☒ y ☐ n

Type: Potential
turtle habitat

Principal Function

Critical Habitat Features ☒ y ☐ n

Specific Features: scrub-shrub wetland;
tussock sedge component

Diversity Features

Aquatic insect habitat ☒ y ☐ n
Amphibian habitat ☒ y ☐ n
Fisheries habitat ☒ y ☐ n
Cavity trees ☒ y ☐ n
Food sources ☒ y ☐ n
Cover ☒ y ☐ n

Connectivity

Wildlife Corridor (through or adjacent) ☒ y ☐ n
Wetland connectivity ☒ y ☐ n
Upland connectivity ☒ y ☐ n

Strengths of Upland Habitat:

stream channel w/ associated
scrub-shrub wetland

Function Present ☒ y ☐ n

☒ Yes ☐ No

Vegetated Buffer

Type: forest
Buffer stream or wetland ☒ y ☐ n
Does buffer provide shade ☒ y ☐ n
Does buffer adequately
safeguard wetland ☒ y ☐ n -
generally

Habitat Degradation

Percentage of wetland buffer with encroachment: 25%
Activities that adversely affect wildlife function:
Existing structure(s) that obstruct
animal movement ☒ y ☐ n (house, nearby
Significant disturbance ☒ y ☐ n Shinken Road)
Proximity to beaver, mink, or
otter habitat ☒ y ☐ n (potentially)
Other: nearby
earlier logging activity

Wetland Values

Recreational Value

Parking available ☒ y ☐ n
Watercraft access ☒ y ☐ n
Fishing available ☒ y ☐ n
Hunting permitted ☒ y ☐ n
Walking/biking trails -
(nearby logging trail) ☒ y ☐ n
Value H M ☒ L

Restoration Stabilization Potential

☒ y ☐ n
Restoration area size:

H2O Degradation

Present ☒ y ☐ n

potential road-
runoff

Educational/Scientific Value

Unique habitats/plant species ☒ y ☐ n
Diverse wildlife habitat ☒ y ☐ n
Parking/access ☒ y ☐ n
Value H ☒ M ☐ L

Invasive Species Present:

☒ y ☐ n

Type:

Uniqueness/Heritage

Urban upland/proximity ☒ y ☐ n
Rapid development upland ☒ y ☐ n
Critical habitat/threatened or
endangered species ☒ y ☐ n
Archaeological sites ☒ y ☐ n
Stonewalls present ☒ y ☐ n
Historic sites ☒ y ☐ n
Ecological health/vigor ☒ y ☐ n
Value H ☒ M ☐ L

Comments/Notes

- existing scrub-shrub plant community
- old logging crossing situated just upstream

Appendix B

Natural Heritage Bureau List for Fremont



Town	Flag	Species or Community Name	Listed? Federal	State	# reported last 20 Town	State
<u>Fremont</u>						
Natural Communities - Palustrine						
**		Medium level fen system	--	-	1	58
**		Poor level fen/bog system	--	-	1	27
Plants						
		Green Adder's Mouth (<i>Malaxis unifolia</i>)	--	T	Historical	56
*		Separated Sedge (<i>Carex seorsa</i>)	--	E	1	2
		Tufted Loosestrife (<i>Lysimachia thyrsiflora</i>)	--	T	Historical	9
Vertebrates - Reptiles						
**		Blanding's Turtle (<i>Emydoidea blandingii</i>)	--	-	2	111
Invertebrates - Mollusks						
		Brook Floater (<i>Alasmodonta varicosa</i>)	--	E	Historical	31
<u>Gilford</u>						
Vertebrates - Birds						
**		Bald Eagle (<i>Haliaeetus leucocephalus</i>)	M	E	2	21
<u>Gilmanton</u>						
Plants						
		American Plum (<i>Prunus americana</i>)	--	E	Historical	7
		Awlwort (<i>Subularia aquatica</i> var. <i>americana</i>)	--	T	Historical	4
		Climbing Fumitory (<i>Adlumia fungosa</i>)	--	E	Historical	17
		Coast-blite Goosefoot (<i>Chenopodium rubrum</i>)	--	E	Historical	6
		Fringed Gentian (<i>Gentianopsis crinita</i>)	--	T	Historical	25
		Goodenough's Sedge (<i>Carex nigra</i>)	--	T	Historical	2
		Inflated Sedge (<i>Carex bullata</i>)	--	E	Historical	4
		Leafy Pondweed (<i>Potamogeton foliosus</i>)	--	E	Historical	5
		Mossy-cup Oak (<i>Quercus macrocarpa</i>)	--	E	Historical	2
Vertebrates - Birds						
**		Common Loon (<i>Gavia immer</i>)	--	T	3	225
Vertebrates - Reptiles						
**		Wood Turtle (<i>Glyptemys insculpta</i>)	--	-	1	111

Listed?	E = Endangered	T = Threatened	W = Special concern (watch list)	M = Monitored
Flags	**** = Highest importance *** = Extremely high importance ** = Very high importance * = High importance	These flags are based on a combination of (1) how rare the species or community is and (2) how large or healthy its examples are in that town. Please contact the Natural Heritage Bureau at (603) 271-2214 to learn more about approaches to setting priorities.		

Appendix C

Maps & Excerpts from The Land Conservation Plan for New Hampshire's Coastal Watersheds

**The Land Conservation Plan for New Hampshire's Coastal Watersheds:
Conservation Focus Area Description**

Name:	Upper Exeter River	
Location		
Town(s)	Chester, Danville, Fremont, Sandown	
Watershed (HUC 10)	Exeter River, Merrimack River	
	CORE AREA	SUPPORTING NATURAL LANDSCAPE
Size	3,010 acres	2,110 acres
Significant Ecological Resources		
Forest Ecosystem		
Unfragmented forest block	a 740 acre block, a portion (~50%) of an 800 acre block; a portion (~25%) of a 2,110 acre block and a 1,300 acre block (in its entirety) identified as Tier 2 priorities in the 2005 Wildlife Action Plan	a 740 acre block, an 800 acre block; a 2,110 acre block and a 1,300 acre block identified as Tier 2 priorities in the 2005 Wildlife Action Plan
Aggregated forest blocks	located within a 24,700 acre block	
Freshwater Systems		
High quality stream watersheds	none	none
Important stream reaches	none	none
Presence/absence of dams (within high quality watersheds)	none	none
River & stream miles	6.5 miles of 1st order, 1.9 miles of 2nd order, 7.1 miles of 4th order	3.6 miles of 1st order, 0.5 miles of 4th order
Coastal & Estuarine Resources		
Coastal and estuarine shoreline	not a coastal / estuarine area	not a coastal / estuarine landscape
Tidal rivers & streams		
Coastal forest blocks		
Tidal wetlands		
Important Plant & Wildlife Habitat		
Plants of conservation concern	none known	none known
Animals of conservation concern	Ardea herodias (Great Blue Heron (Rookery), G5, S4B) Pooecetes gramineus (Vesper Sparrow, G5, S2-S3)	Accipiter cooperii (Cooper's Hawk, threatened, G5, S2B) Ardea herodias (Great Blue Heron (Rookery), G5, S4B) Enneacanthus obesus (Banded Sunfish, G5, S3) Pooecetes gramineus (Vesper Sparrow, G5, S2B)
Significant wildlife habitats	floodplain forest, grassland, marsh, peatland, ridge / talus	grassland, marsh, peatland, ridge / talus
Exemplary natural communities and systems	none known	none known
Other Resource Features & Public Values		
Water Supply		
High yield aquifer (maximum transmissivity >1,000 ft2 / day)	299.8 acres	220.0 acres
Surface water intakes	none	none
Wells	Colby Pond (1 community well) Mill Pine Village (2 community wells)	none
Wellhead protection areas	Barnyard Buddies (18.3 acres) Colby Pond (420.9 acres) Cornerstone Estates (433.3 acres) Mill Pine Village (228.7 acres) Playmates Learning Center (3.5 acres)	Colby Pond (519.1 acres) Danville Four Seasons (61.5 acres) Sandown Central School (1.2 acres) Stoneford (43.5 acres)
Favorable gravel well sites	162.7 acres	101.9 acres
Agricultural Lands		
Prime or statewide importance farm soils	71.2 acres of prime farmland and 72.3 acres of farmland of statewide importance	21.4 acres of prime farmland and 8.2 acres of farmland of statewide importance

The Land Conservation Plan for New Hampshire's Coastal Watersheds:
Conservation Focus Area Description

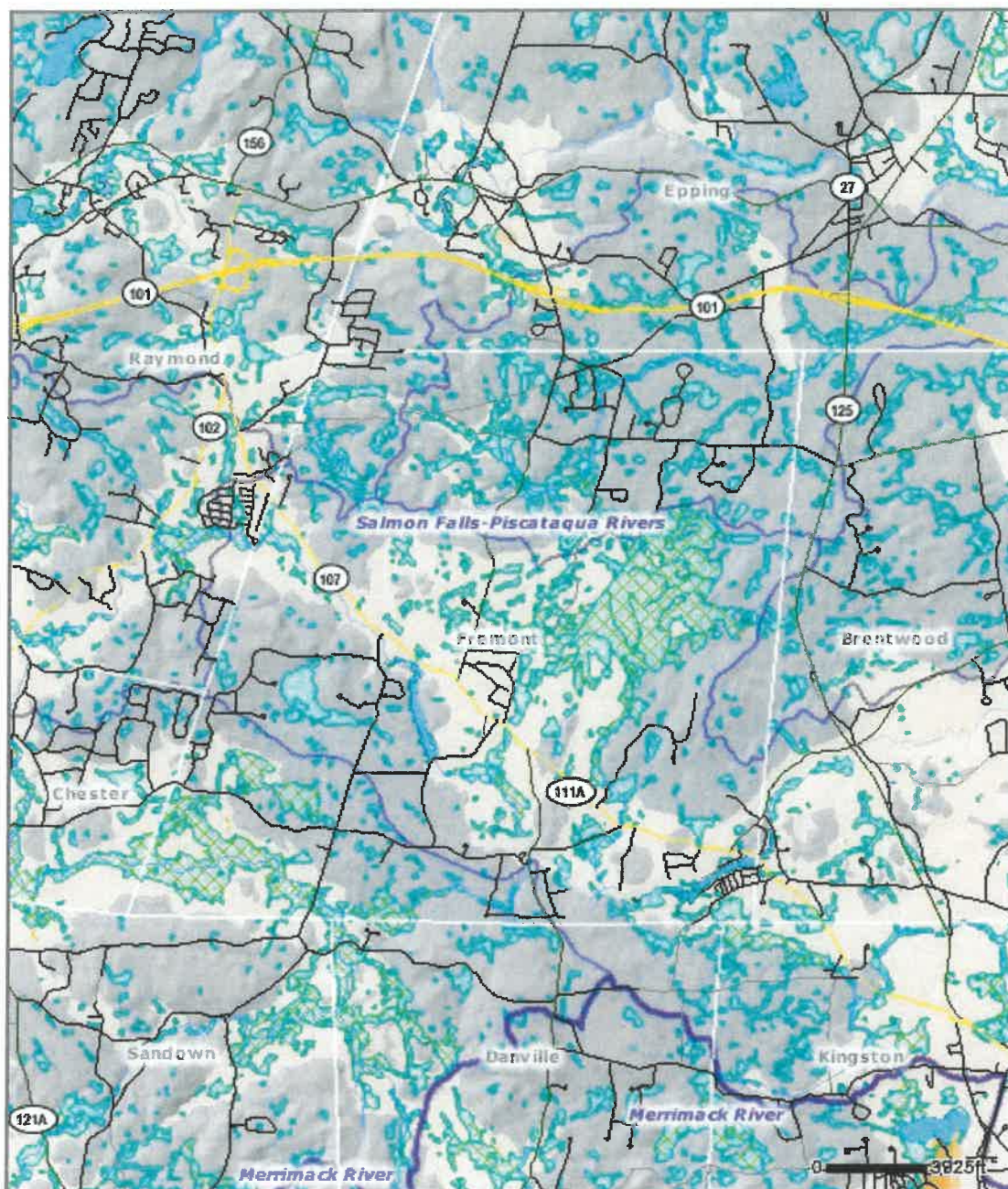
Landscape Connectivity	Low to moderate connectivity value between conservation lands, and forest blocks	Low to moderate connectivity value between conservation lands, and forest blocks
	High potential connectivity along watercourse.	High potential connectivity along watercourse.
Other Documented		
Current Conservation Status		
<i>Permanently Protected, Managed as natural area or ecological reserve (GAP 1 & 2)</i>	4 acres	-
<i>Permanently Protected, Managed primarily as working forest (GAP 3)</i>	207 acres	411 acres
<i>Not permanently protected, but in public or institutional ownership (GAP 3a)</i>	30 acre	46 acres
<i>Managed primarily (more than 50% by area) for extractive uses (GAP 4)</i>	-	-
<i>Total conserved</i>	241 acres	457 acres
Relationship to other Plans		
<i>Area identified in other planning initiatives</i>	Upper Exeter River tributaries specifically mentioned in Fremont and Sandown master plans. Specific mention of Sargent Road vicinity in Sandown plan. No specific mention in Danville master plan.	Upper Exeter River tributaries specifically mentioned in Fremont and Sandown master plans. Specific mention of Sargent Road vicinity in Sandown plan. No specific mention in Danville master plan.
	Focus of the Exeter River Local Advisory Committee.	

Appendix D

Aquifer Maps

NH GRANIT DATA MAPPER

Water Resources: Fremont Water Resources



Location Map

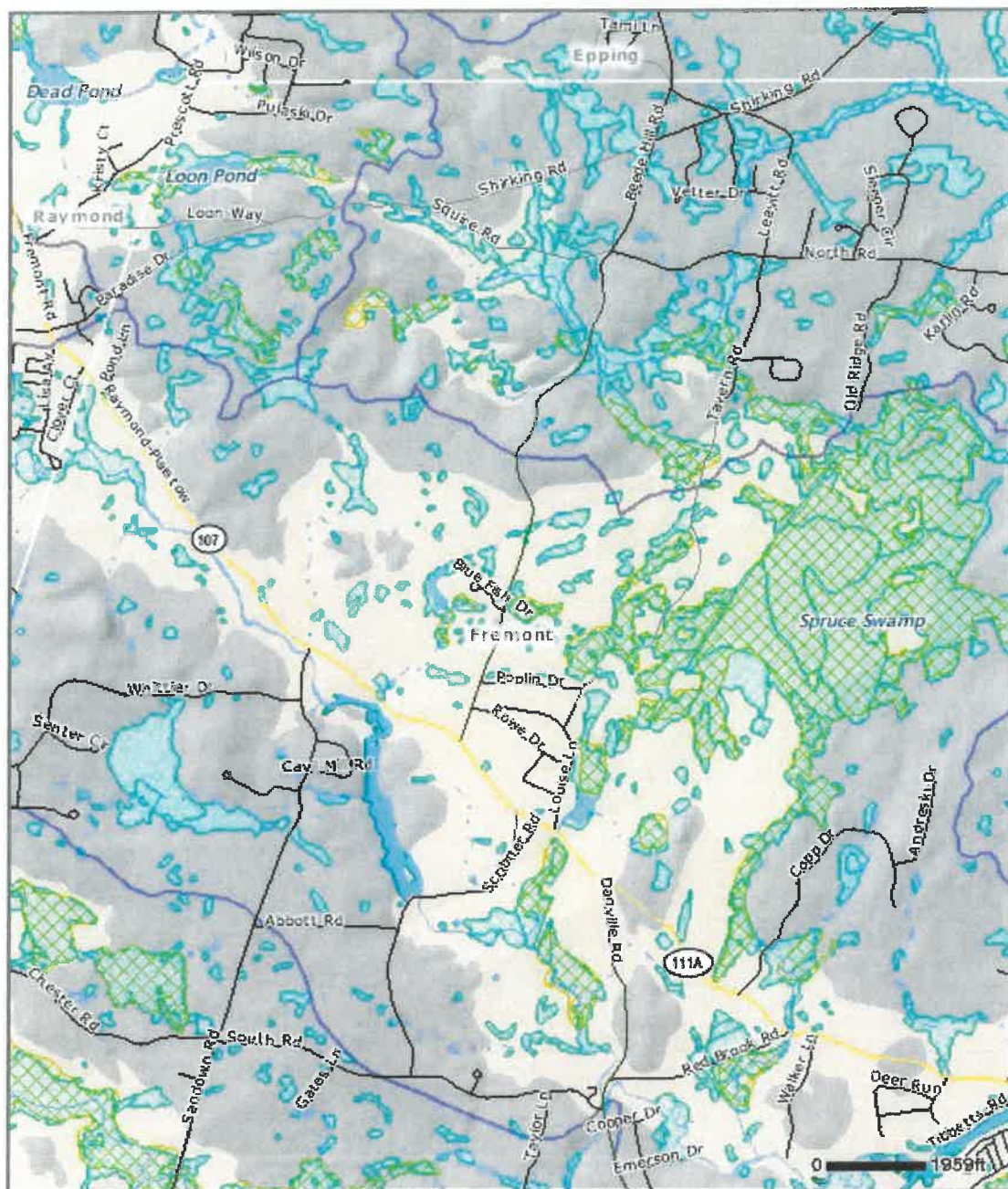


Map Produced:
September 09, 2007



NH GRANIT DATA MAPPER

Water Resources: Fremont Water Resources



Location Map



Map Produced:
September 09, 2007



NH GRANIT DATA MAPPER

Water Resources: Fremont Water Resources

Legend

Roads		Other Water Features	
	Class I: primary system		River
	Class II: secondary system		Spillway
	Class III: state recreational		Inundation Area
	Class IV: within compacts		Dam/Weir
	Class V: municipal		Canal/Ditch
	Class VI: unmaintained municipal		Rapids
Political Boundaries		Wetlands	
	State		Estuarine
	County		Lacustrine
	Town		Marine
	Watersheds		Palustrine
	Subwatersheds		Riverine
Stream Network		Aquifer Transmissivity	
	Perennial Stream		Less than 2000 ft ² /day
	Intermittent Stream		2000-4000 ft ² /day
	Canal/Ditch		Greater than 4000 ft ² /day
Water Bodies			
	Lake/Pond		
	Reservoir		
	Swamp/Marsh		

Data Sources

All data are maintained and/or distributed by NH GRANIT. See www.granit.sr.unh.edu for detailed documentation on individual data layers.

Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center, under contract to the NH Office of Energy and Planning, and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.