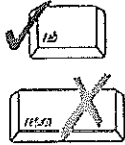


# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 1. Summary Sheet

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



The Residences at Johnson Farm

Project Name

189 Landham Road, Sudbury

Location

(See below)

Size of Area Being Impacted

9/16/11

Date

Impact Areas (linear feet, square feet, or acres for each of the impact areas within the site)

Name	Waterbody/ Waterway	Wetland	Upland*	Total Area
1. Per. Stream Crossing	94 linear feet	10,485	0	10,485
2. Int. Stream Crossing	36 linear feet	0	0	0
3. Project RA Impacts			49,920	49,920
4.				
5.				
6.				
7.				

\*Riverfront Area/BLSF

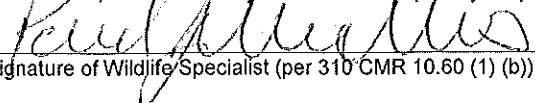
Attach Sketch map and/or photos of the Impact Areas

Narrative Description of Site (attach separate page if necessary)

(see Wetland Permitting Summary by EcoTec, attached)

### Certification

I hereby certify that this project has been designed to avoid, minimize, and mitigate adverse effects on wildlife habitat, and that it will not, following two growing seasons of project completion and thereafter, substantially reduce its capacity to provide important wildlife habitat functions.

  
Signature of Wildlife Specialist (per 310 CMR 10.60 (1) (b))

Paul Mcmanus, PWS  
Typed or Printed Name



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (for each wetland or non-wetland resource area)

#### I. General Information

189 Landham Road, Sudbury  
Project Location (from NOI page 1)  
Access (perennial and intermittent streams)  
Impact Area (number/name)  
September 16, 2011  
Date(s) of Site Visit(s) and Data Collection  
Partly cloudy,  
Weather Conditions During Site Visit (if snow cover, include depth)  
Scott Morrison  
Person completing form per 310 CMR 10.60(1)(b)  
9/13/11  
Date this form was completed

The information on this data sheet is based on my observations unless otherwise indicated

*Scott Morrison*  
Signature

#### II. Site Description (complete A or B under Classification - see instructions for full description)

##### A. Classification

##### 1. For Wetland Resource Areas, complete the following:

System: Paustrine Subsystem: none  
Class: Forested Wetland Subclass: Broad-leaved Deciduous

##### Hydrology/Water Regime

- |   |  |
|---|--|
| <input type="checkbox"/> Permanently flooded      | <input checked="" type="checkbox"/> Saturated              |
| <input type="checkbox"/> Intermittently exposed   | <input type="checkbox"/> Temporarily flooded               |
| <input type="checkbox"/> Semi-permanently flooded | <input checked="" type="checkbox"/> Intermittently flooded |
| <input type="checkbox"/> Seasonally flooded       | <input type="checkbox"/> Artificially flooded              |

##### 2. For Riverfront or Bordering Land Subject to Flooding Resource Areas, complete the following.

Use a terrestrial classification system such as one of the two listed below:

- "Classification of the Natural Communities of Massachusetts (Draft)" by Patricia C. Swain and Jennifer B. Kearsley, MA DFW NHESP, Westborough, MA. July 2000. (Department of Fish & Game Website)
- "New England Wildlife: Habitat, Natural History, and Distribution" by Richard M. DeGraaf and Deborah D. Rudis, USDA Forest Service, Northeastern Forest Experiment Station. General Technical Report NE-108. August 1992. 491 pages.

See Wetland permitting Summary by EcoTec

Community Name

Vegetation Description

Physical Description



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

#### B. Inventory (Plant community)

% Cover: 10 70 5 5 5  
Trees (> 20') Shrubs (< 20') Woody vines Mosses Herbaceous

Plant Lists (species that comprise 10% or more of the vegetative cover in each strata; "\*" designates a dominant plant species for the strata):

Strata	Plant Species	Strata	Plant Species
Tree	<u>norway spruce</u>	Herbaceous	<u>mowed grass</u>
	<u>black walnut</u>		<u>jewelweed</u>
Shrub	<u>european buckthorn</u>		<u>virginia creeper</u>
	<u>silky dogwood</u>		<u>goldenrod</u>
	<u>arrow-wood</u>		<u>joe-pye-weed</u>

#### C. Inventory (Soils)

<u>Scarboro</u>	<u>very poorly drained</u>
Soil Survey Unit	Drainage Class
<u>mucky fine sandy loam/sand</u>	<u>more than 80 inches to restrictive layer</u>
Texture (upper part)	Depth
<u>0-6 inches</u>	
Depth to Water Table	

### III. Important Habitat Features (complete for all resource areas)

If the following habitat characteristics are present, describe & quantify them on a separate sheet & attach.

Wildlife Food

Important Wetland/Aquatic Food Plants (smartweeds, pondweeds, wild rice, bulrush, wild celery)

Abundant       Present       Absent

Important Upland/Wetland Food Plants (hard mast and fruit/berry producers)

Abundant       Present       Absent

Shrub thickets or streambeds with abundant earthworms (American woodcock)

Present       Absent

Shrub and/or herbaceous vegetation suitable for veery nesting

Present       Absent



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

Number of trees (live or dead) > 30" DBH: 0

Number (or density) of Standing Dead Trees (potential for cavities and perches):

0 0 0 0  
6-12" dbh 12-18" dbh 18-24" dbh > 24" dbh

Number of Tree Cavities in trunks or limbs of:

0  
6-12" diameter (e.g., tree swallow, saw whet owl, screech owl, bluebird, other songbirds)

0  
12-18" diameter (e.g., hooded merganser, wood duck, common goldeneye, mink)

0  
>18" diameter (e.g., hooded merganser, wood duck, common goldeneye, common merganser, barred owl, mink, raccoon, fisher)

Small mammal burrows

Abundant  Present  Absent

Cover/Perches/Basking/Denning/Nesting Habitat

Dense herbaceous cover (voles, small mammals, amphibians & reptiles)

Large woody debris on the ground (small mammals, mink, amphibians & reptiles)

Rocks, crevices, logs, tree roots or hummocks under water's surface (turtles, snakes, frogs)

Rocks, crevices, fallen logs, overhanging branches or hummocks at, or within 1m above the water's surface (turtles, snakes, frogs, wading birds, wood duck, mink, raccoon)

Rock piles, crevices, or hollow logs suitable for:

otter  mink  porcupine  bear  bobcat  turkey vulture

Live or dead standing vegetation overhanging water or offering good visibility of open water (e.g., osprey, kingfisher, flycatchers, cedar waxwings)

Depressions that may serve as seasonal (vernal/autumnal) pools

Present  Absent

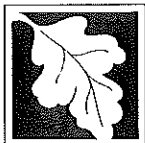
Standing water present at least part of the growing season, suitable for use by

Breeding amphibians  Non-breeding amphibians (foraging, re-hydration)

Turtles  Foraging waterfowl

Sphagnum hummocks or mats, moss-covered logs or saturated logs, overhanging or directly adjacent to pools of standing water in spring (four-toed salamander)

Present  Absent



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

Important habitat characteristics (if present, describe and quantify them on a separate sheet)

Medium to large (> 6"), flat rocks within a stream (cover for stream salamanders and nesting habitat for spring & two-lined salamanders)

Present  Absent

Flat rocks and logs on banks or within exposed portions of streambeds (cover for stream salamanders and nesting habitat for dusky salamanders)

Present  Absent

Underwater banks of fine silt and/or clay (beaver, muskrat, otter)

Present  Absent

Undercut or overhanging banks (small mammals, mink, weasels)

Present  Absent

Vertical sandy banks (bank swallow, kingfisher)

Present  Absent

Areas of ice-free open water in winter

Present  Absent

Mud flats

Present  Absent

Exposed areas of well-drained, sandy soil suitable for turtle nesting

Present  Absent

Wildlife dens/nests (if present, describe & quantify them on the back of this sheet)

Turtle nesting sites

Present  Absent

Bank swallow colony

Present  Absent

Nest(s) present of

Bald Eagle  Osprey  Great Blue Heron

Den(s) present of

Otter  Mink  Beaver



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

Project area is within:

- 100' of beaver, mink or otter den, bank swallow colony or turtle nesting area
- 200' of Great Blue Heron or osprey nest(s)
- 1400' of a Bald Eagle nest<sup>1</sup>

Emergent Wetlands (if present, describe & quantify them on a separate sheet)

Emergent wetland vegetation at least seasonally flooded during the growing season (wood duck, green heron, black-crowned night heron, king rail, Virginia rail, coot, etc.)

Flooded > 5 cm  Present  Absent

Flooded > 25 cm (pied-billed grebe)  Present  Absent

Persistent emergent wetland vegetation at least seasonally flooded during the growing season (mallard, American bittern, sora, common snipe, red-winged blackbird, swamp sparrow, marsh wren)

Flooded > 5 cm  Present  Absent

Flooded > 25 cm (least bittern, common moorhen)  Present  Absent

Cattail emergent wetland vegetation at least seasonally flooded during the growing season

Flooded > 5 cm (marsh wren)  Present  Absent

Flooded > 25 cm (least bittern, common moorhen)  Present  Absent

Fine-leaved emergent vegetation (grasses and sedges) at least seasonally flooded during the growing season (common snipe, spotted sandpiper, sedge wren)

Flooded > 5 cm  Present  Absent

Flooded > 25 cm (least bittern, common moorhen)  Present  Absent

#### IV. Landscape Context

A. **Habitat Continuity** (if present, describe the landscape context on a separate sheet and its importance for area-sensitive species)

Is the impact area part of an emergent marsh at least 1.0 acre in size?  Yes  No

(marsh and waterbirds) 2.0 acres in size?  Yes  No

5.0 acres in size?  Yes  No

10.0 acres in size?  Yes  No

<sup>1</sup> 1400 feet is the distance used by NHESP for evaluating potential disturbance impacts on eagle nests under MESA. Keep in mind, however, that this doesn't give jurisdiction within 1400' of an eagle's nest; it only identifies it on the checklist so that adverse effects can be avoided if work in a resource area is within 1400 feet.



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

- Is the impact area part of a wetland complex at least 2.5 acres in size?  Yes  No  
(turtles, frogs, waterfowl, mammals)
- 5.0 acres in size?  Yes  No  
10.0 acres in size?  Yes  No  
25.0 acres in size?  Yes  No

For upland resource areas is the impact area part of contiguous forested habitat at least

- (forest interior nesting birds)
- 50 acres in size?  Yes  No  
100 acres in size?  Yes  No  
250 acres in size?  Yes  No  
500 acres in size?  Yes  No
- (grassland nesting birds)
- > 1.0 acre in size?  Yes  No  
(special habitat such as gallery floodplain forest, alder thicket, etc.)
- > 1.0 acre in size?  Yes  No

### B. Connectivity with adjoining natural habitats

- No direct connections to adjacent areas of wildlife habitat (little connectivity function)
- Connectors numerous or impact area is embedded in a large area of natural habitat (limited connectivity function)
- Impact area contributes to a limited number of connectors to adjacent areas of habitat (somewhat important for connectivity function)
- Impact area serves as *part of* a sole connector to adjacent areas of habitat (important for connectivity function)
- Impact area serves as *only* connector to adjacent areas of habitat (very important for connectivity function)

### V. Habitat Degradation (describe degradation and wildlife impacts on the back of the sheet)

- Evidence of significant chemical contamination
- Evidence of significant levels of dumping
- Evidence of significant erosion or sedimentation problems
- Significant invasion of exotic plants (e.g., purple loosestrife, *Phragmites*, glossy buckthorn)
- Disturbance from roads or highways  Other human disturbance
- Is the site the only resource area in the vicinity of an otherwise developed area

Note: These are not the only important habitat features that may be observed on a site. If the wildlife specialist identifies other features they should be noted in the application.



# Wildlife Habitat Protection Guidance

## Appendix B: Detailed Wildlife Habitat Evaluation

### Part 2. Field Data Form (continued)

#### VI. Quantification Table for Important Habitat Characteristics

Habitat Characteristic	Amount Impacted in Impact Area	Current (entire site)	Post-Construction (entire site)
Example: standing dead trees 6-12" dbh	4	12	8
Bank of Stream with overhanging	45 linear feet	Common 2,240+/- 1.ft	Common (negligible impact)