

July 8, 2025

Email [bschmitt@wellesleyma.gov]

Mr. Brandon Schmitt, Director
Wellesley Natural Resources Commission
888 Worcester Street, Suite 160
Wellesley, MA 02482

Re: Wildlife Habitat and Invasive Species Evaluation
Wight Pond
25 Hundreds Road (Map 62, Lot 26)
Wellesley, Massachusetts

[LEC File #: WNRC\25-206.02]

Dear Mr. Schmitt:

LEC Environmental Consultants, Inc., (LEC) conducted a Wildlife Habitat and Invasive Species Evaluation at the above-referenced property in Wellesley, Massachusetts on June 5, 2025. During the evaluation, LEC canvassed the site to document important wildlife habitat features, actual wildlife habitat utilization, and GPS-locate major or significant occurrences of non-native invasive and notable non-invasive plant species.

General Site Description

The 5.5-acre± property is located northeast of Cliff Road, south of Glen Road, and west of the Charles River, within the northeastern portion of Wellesley (Attachment A, Figures 1 and 2). Wight Pond, more specifically, is located off the west side of Hundreds Road and across the street from the Wellesley Farms MBTA commuter rail station and parking lot. Cold Stream Brook, a USGS-mapped perennial stream, flows southward into the north-central portion of the property and meanders through a forested wetland, a stone culvert, and a shrub swamp before emptying into Wight Pond. The Brook flows out of the Pond at a narrow dam into a spillway at the east-central end of the Pond, and continues eastward through an armored culvert under Hundreds Road, under the railroad tracks, into Farm Station Pond, and eventually joins the Charles River north of Ledyard Street. The Pond is also fed by a natural seep at the far western end of the property and by discharge from a culvert in the southwestern side of the property. Both culvert locations and the seep are indicated on Attachment A, Figure 4.

Residential land use associated with Carisbrooke Road occurs to the west, while residential homes associated with Glen Road and Hundreds Road occur to the north and southwest, respectively.

The upland tree canopy is dominated by northern red oak (*Quercus rubra*), red maple (*Acer rubrum*), eastern white pine (*Pinus strobus*), and Norway maple (*Acer platanoides*), with scattered patches of black birch (*Betula lenta*), black cherry (*Prunus serotina*) and eastern hemlock (*Tsuga canadensis*). The

sapling/shrub layer is dominated by saplings from the canopy, as well as a variety of native and non-native woody species including burning bush (*Euonymus alatus*), crabapple (*Malus sp.*), blackberry (*Rubus allegheniensis*), Japanese knotweed (*Reynoutria japonica*), and Japanese barberry (*Berberis vulgaris*). The ground cover is also quite variable throughout the property, containing localized patches of Canada mayflower (*Maianthemum canadense*), wild sarsaparilla (*Aralia nudicaulis*), poison ivy (*Toxicodendron radicans*), and New York fern (*Thelypteris noveboracensis*), as well as various grasses and sedges. The woody vine stratum contains Asiatic bittersweet (*Celastrus orbiculatus*), wisteria (*Wisteria sp.*), and poison ivy (*Toxicodendron radicans*). Site topography gently descends towards Wight Pond from all directions.

The forested wetland canopy is dominated by American elm (*Ulmus americana*), and red maple. The shrub/sapling layer contains scattered patches of highbush blueberry (*Vaccinium corymbosum*), glossy buckthorn (*Frangula alnus*), spicebush (*Lindera benzoin*), arrowwood (*Viburnum dentatum*), and sweet pepperbush (*Clethra alnifolia*). The groundcover is dominated by skunk cabbage (*Symplocarpus foetidus*), cinnamon fern (*Osmundastrum cinnamomeum*), royal fern (*Osmunda regalis*), lady fern (*Athyrium filix-femina*), and sensitive fern (*Onoclea sensibilis*). This layer also contains patches of jewelweed (*Impatiens capensis*) and poison ivy, with patches of sedges and rushes.

Natural Heritage and Endangered Species Program Designation

According to the 15th edition of the Massachusetts Natural Heritage Atlas (effective August 1, 2021) published by the Natural Heritage & Endangered Species Program (NHESP), the project is not located within a *Priority Habitat of Rare Species* or *Estimated Habitat of Rare Wildlife* (Attachment A, Figure 1). No certified vernal pools are located on the site. Wight Pond is mapped as a potential vernal pool (PVP; PVP #27155); however, LEC observed that the Pond does not qualify as a “certifiable” vernal pool, due to the presence of permanent standing water and reproducing fish, as described further below in the Existing Wildlife Habitat section.

FEMA Floodplain Designation

According to the July 8, 2025 *Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map* (FIRM) for Wellesley, Massachusetts (Community Panel Number: 25021C0009E), portions of the property are located within Zone A - *Areas with a 1% annual chance of flooding*, therefore, portions of the site are located within the 100-year floodplain (Attachment A, Figure 3).

Existing Wildlife Habitat

The site contains habitats suitable for use by a variety of common mammalian, avian, reptile, amphibian, fish, and invertebrate wildlife species, but there are no wildlife habitat features that are unique to the overall surrounding landscape. The most notable wildlife habitat features observed include Wight Pond, an emergent marsh wetland at the western end of the Pond, a confined basin depression wetland southwest of the Pond, Cold Stream Brook which flows into and out of the Pond, mature forested uplands throughout the site, and a mature patch of Rhododendron northwest of the Pond.

Wight Pond

Wight Pond, approximately 2 acres in extent, is the central wildlife habitat feature within the property. The Pond likely holds water throughout the year, allowing multiple species of fish to persist and reproduce, and providing turtles a year-round habitat including basing, foraging, sheltering, and over-wintering. The Pond also provides a breeding habitat for amphibians and waterfowl, and a potential source of hydration for mammals during the hot/dry summer months when many nearby wetlands are completely dry. Photos 1-5 show the Pond from different vantage points. See Attachment A – Figure 4 for the locations of photos and wildlife habitat features discussed in this report.

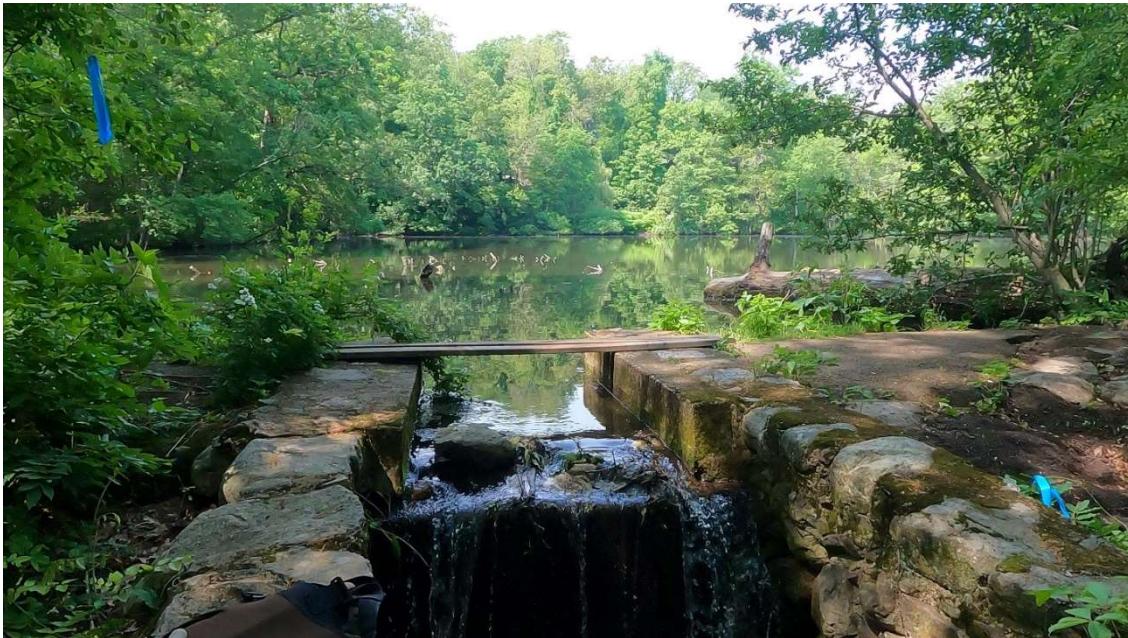


Photo 1 - Spillway outlet at the east-central portion of Wight Pond, facing west.

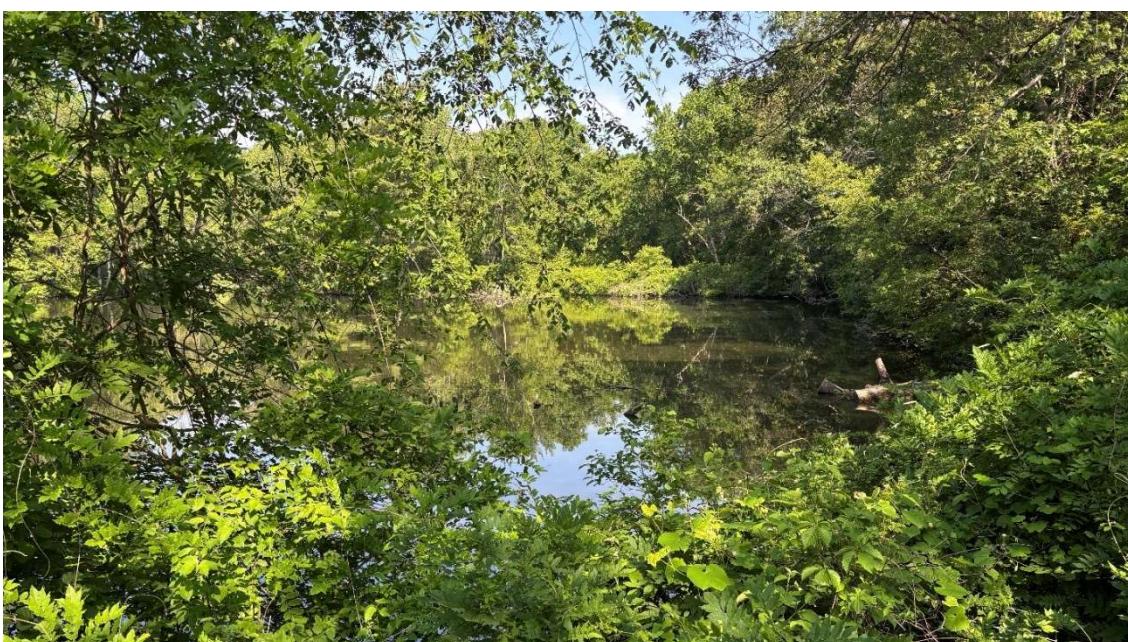


Photo 2 – View of the Pond from along Hundreds Road, south of the spillway.



Photo 3 – View of the Pond from the southern end.



Photo 4 – View of the Pond from the western end.



Photo 5 – View of the Pond from the northeastern shoreline.

Numerous fish, some exceeding 16 inches, were observed within the Pond from the shoreline. LEC did not capture any fish for identification, but the observed species were likely largemouth bass (*Micropterus salmoides*), pumpkinseed (*Lepomis gibbosus*), and bluegill (*Lepomis macrochirus*). Additional common species that may be present in the Pond include golden shiner (*Notemigonus crysoleucas*), white sucker (*Catostomus commersoni*), yellow bullhead (*ameiurus natalis*), brown bullhead (*A. nebulosus*), banded sunfish (*Enneacanthus obesus*), and yellow perch (*Perca flavescens*). Photo 6 shows a typical view of the largemouth bass and sunfish that are commonly observed from shore.



Photo 6 – Large fish observed at the northwestern side of the Pond.

Painted turtles (*Chrysemys picta*) were observed swimming in the pond, and they are likely abundant. Snapping turtles (*Chelydra serpentina*) are another species likely present in high numbers in the Pond, and a large individual was observed within the spillway to the east of the dam, presumably having migrated out of Farm Station Pond to the east, through the multiple culverts, in an effort to get into Wight Pond. The turtle retreated during the course of our site evaluation, as the route was ultimately blocked by a sheer wall at the dam outlet of Wight Pond. Photo 7 shows the snapping turtle within the spillway. Notably, the turtle's head had become entangled in some abandoned fishing line, but it appears likely that it freed itself before migrating back toward Farm Station Pond.



Photo 7 – A snapping turtle within the spillway E of the Pond. Note the fishing line entangling the turtle.

The heavily forested site does not have any sunny openings with exposed sandy soils that could provide turtle nesting habitat and, therefore, migration by turtles into the forested uplands is unlikely.

Green frogs (*Lithobates clamitans*) were heard calling, and tadpoles were observed along the edges of the Pond. Pickerel frogs (*L. palustris*) and bullfrogs (*L. catesbeianus*), though not observed, are common frog species that may also breed in the Pond. These three frog species do not utilize upland forest other than as migration habitat between permanent or semi-permanent aquatic habitats, so would be confined to the Pond and adjacent wetland habitats. Spring peeper (*Pseudacris crucifer*) and gray treefrog (*Hyla versicolor*) are two additional frog species that may breed within the pond in spring and inhabit the nearby forested uplands for the majority of the year. Northern water snakes (*Nerodia sipedon*) are likely to inhabit the Pond edges and adjacent marsh and stream systems.

Common bird species likely to find suitable foraging, sheltering, and/or nesting habitat conditions on or adjacent to the Pond include red-winged blackbird (*Agelaius phoeniceus*), great blue heron (*Ardea herodias*), Canada goose (*Branta canadensis*), and wood duck (*Aix sponsa*).

Emergent Marsh

At the western end of the Pond, a shallow, vegetated emergent marsh is present. The marsh comprises a transitional habitat type between the relatively deep, permanent Pond and seasonally flooded forested wetlands to the west and northwest of the Pond. The marsh contains shallow water, a soft mucky substrate, and a dense cover of emergent herbaceous species composed primarily of creeping buttercup (*Ranunculus repens*) and water forget-me-not (*Myosotis scorpioides*). These species are non-native and discussed below in the invasive species section. Photo 8 shows a view of the emergent marsh habitat, facing westward from the western end of the Pond. See also Photo 18 for a close-up view of the two dominant species comprising the marsh.



Photo 8 – Shallow emergent marsh habitat at the western end of the Pond.

The shallow, densely vegetated habitat within the emergent marsh provides cover and breeding habitat for smaller fish and ducks. American toad (*Anaxyrus americanus*) tadpoles were observed in the marsh (Photo 9). This species typically breeds in shallow, ephemeral swamps, marshes, and vernal pools, and are rarely observed breeding in areas where fish have access, due to the likely predation of the tadpoles. Their presence suggests that the marsh microhabitat is effectively separated from the Pond and its abundant fish.



Photo 9 – American toad tadpoles observed in the emergent marsh at the western end of the Pond.

Confined Basin Depression

This habitat feature is located west of the Pond and south of the emergent marsh habitat (Photo 10). It consists of a shallow basin depression, with a mucky substrate and large woody debris and vegetation adapted to prolonged inundation or flooding including skunk cabbage and sensitive fern, embedded within a surrounding forested wetland. It contains several areas with shallow pockets/depressions (generally less than 12 inches deep) that could contain standing water during spring high water that *may* be suitable for breeding by vernal pool indicator amphibians, including the wood frog (*Lithobates sylvaticus*) or spotted salamander (*Ambystoma maculatum*).



Photo 10 – A confined basin depression southwest of the Pond.

This basin is not mapped as a vernal pool and is rather small in extent, so any breeding by the listed amphibian species would be in small numbers. Confirmation of vernal pool habitat would need to be performed during the spring vernal pool breeding season, typically from late March through early May. Even if its surface water dries up, this basin may provide hydration and sheltering habitat for amphibians and reptiles during the hottest and driest periods of summer, so it is an important habitat feature for the property.

Cold Stream Brook

The Brook is mapped on the most recent USGS topographic map as a perennial stream, indicating that it remains flowing throughout the year, except during extended periods of drought. The Brook, judging from its name, likely has much cooler water than the Pond during most of the year, which would provide habitat for fish more typical of streams such as redfin pickerel (*Esox americanus*). The Brook meanders through dense, variable vegetation types, including forested wetland and shrub/scrub as it approaches the Pond. The cooler water temperature and more oxygenated water provides a valuable habitat to aquatic invertebrates and small fish like the redfin pickerel, which in turn provide a food source for foraging

small mammals such as raccoon (*Procyon lotor*) and mink (*Neogale vison*). A female mallard and seven ducklings were observed within the Brook (Photo 11), indicating its value as a sheltering habitat for waterfowl.



Photo 11 – A female mallard and ducklings foraging and sheltering in the Brook.

Mature Forested Uplands

The large standing oak, maple, and pine trees throughout the onsite uplands are an important wildlife habitat due to their expansive canopy and structural diversity, which may provide foraging, sheltering, and nesting habitat for birds and arboreal mammals, and their ability to produce large quantities of acorns, which are an important food source for a variety of birds and mammals. An adult barred owl was observed perched on a branch in the western side of the property (Photo 12).



Photo 12 – An adult barred owl perched in a tree in the western side of the property.

In addition to the barred owl, the property is likely utilized by a variety of bird species for foraging, sheltering, nesting, and migratory stopover habitat. Table 1 shows the bird species observed during the site evaluation. All the observed species may nest within the property or its immediate vicinity.

Table 1 – Bird Species Observed During 2025 Site Investigation

Common Name	Scientific Name
American robin	<i>Turdus migratorius</i>
Baltimore oriole	<i>Icterus galbula</i>
Barred owl	<i>Strix varia</i>
Black-capped chickadee	<i>Poecile atricapillus</i>
Blue jay	<i>Cyanocitta cristata</i>
Carolina wren	<i>Thryothorus ludovicianus</i>
Chimney swift	<i>Chaetura pelagica</i>
Common grackle	<i>Quiscalus quiscula</i>
Downy woodpecker	<i>Picoides pubescens</i>
Gray catbird	<i>Dumetella carolinensis</i>
House finch	<i>Haemorhous mexicanus</i>
Mallard	<i>Anas platyrhynchos</i>
Song sparrow	<i>Melospiza melodia</i>
Tufted titmouse	<i>Baeolophus bicolor</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>

The following additional avian species, though not observed, are likely to breed and/or forage within the forested portions of the site: northern cardinal (*Cardinalis cardinalis*), American goldfinch (*Spinis tristis*), wild turkey (*Meleagris gallopavo*), American crow (*Corvus brachyrhynchos*), hairy woodpecker (*Dryobates villosus*), red-bellied woodpecker (*Melanerpes carolinus*), chipping sparrow (*Spizella passerina*), and brown creeper (*Certhia americana*).

Dead and decaying limbs and trunks on the forest floor provide a valuable source of cover and food for decomposers. Large dead standing trees and associated cavities (Photo 13) provide sheltering for woodpeckers and other cavity-nesting birds, plus foraging and shelter for arboreal mammals.



Photo 13 – A notable cavity in a large dead tree in the southwestern portion of the property.

In the Upland Forest, the most common amphibian is likely to be the eastern red-backed salamander (*Plethodon cinereus*), which lives and breeds in terrestrial, upland habitat such as leaf litter and under rotting logs. American toads, confirmed as breeding on the site, inhabit leaf litter and dense herbaceous vegetation within the onsite forested uplands for the majority of the year. Eastern garter snakes (*Thamnophis sirtalis*) are likely to be fairly common, foraging, basking, and migrating through portions of the site and finding shelter under rotting logs and rocks.

The following mammals are likely to be regular inhabitants of the upland forest within the property: gray squirrel (*Sciurus carolinensis*), red squirrel (*Tamiasciurus hudsonicus*), eastern chipmunk (*Tamias striatus*), moles (*Scalopus* sp.), deer mice (*Peromyscus* spp.), masked shrews (*Sorex cinereus*), short-tailed shrew (*Blarina brevicauda*), eastern coyote (*Canis latrans*), red fox (*Vulpes vulpes*), white-tailed deer (*Odocoileus virginianus*), skunk (*Mephitis mephitis*), eastern cottontail (*Sylvilagus floridanus*), Virginia opossum (*Didelphis virginiana*), and fisher (*Martes pennanti*), and common bat species such as big brown bat (*Eptesicus fuscus*) and eastern red bat (*Lasionycteris borealis*).

To determine if any Federally listed plant or wildlife species are mapped within the property, LEC generated an official species list from the US Fish & Wildlife Service IPaC Website on June 2, 2025 which indicated that the Northern Long-eared Bat (*Myotis septentrionalis*) (“NLEB,” Endangered), Tricolored Bat (*Perimyotis subflavus*) (“TCB,” Proposed Endangered), and the Monarch Butterfly (*Danaus plexippus*) (Proposed Threatened) may be present in the area of the property (excerpted figure below).

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

While habitat for the monarch butterfly does not exist within the property (open meadows with abundant milkweed and wildflowers), according to the MA DFW NHESP NLEB viewer (<https://www.mass.gov/info-details/the-northern-long-eared-bat>), there are two known NLEB hibernacula nearby to the southeast, approximately 1.5 and 2 miles away from the property, respectively. Although the property is embedded in a fragmented suburban landscape, the onsite forested habitat could potentially support foraging, breeding or sheltering by the NLEB or TCB. Note that since the site is not mapped as NHESP priority habitat, no local records are officially known; therefore, it is unlikely that either species utilizes the property.

Rhododendron Patch

Northwest of the Pond and north of the emergent marsh habitat is a substantial patch of Rhododendron, which was observed in full flower (Photo 14). LEC did not identify this to species, so it may be a non-native; however, the abundant flowers provide an important pollen and nectar source to pollinators and birds.

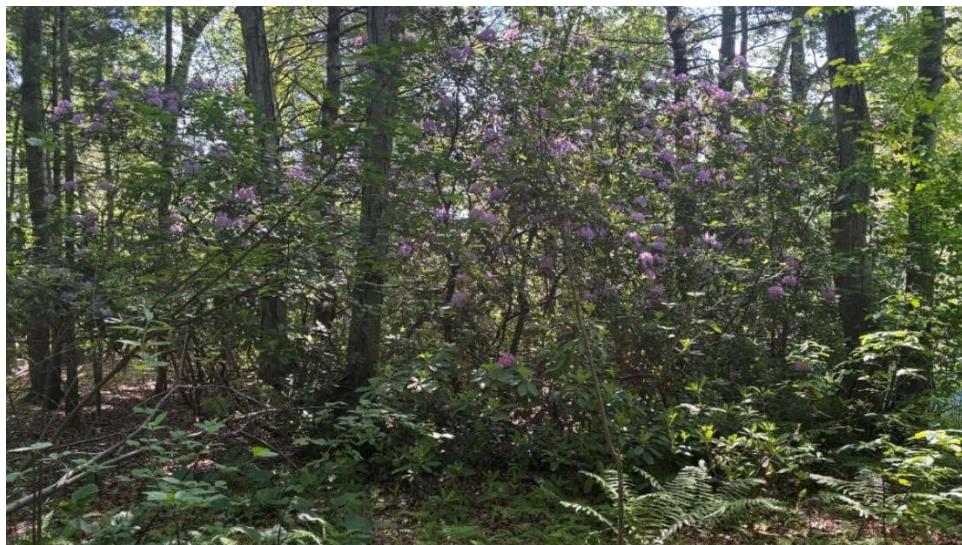


Photo 14 – A large patch of Rhododendron northwest of the Pond.

Invasive Species

A variety of non-native invasive species were observed within the property, including Asiatic bittersweet, burning bush, garlic mustard (*Alliaria petiolata*), Japanese barberry, Japanese knotweed, multiflora rose (*Rosa multiflora*), and Norway maple. All these species are listed among the 36 Statewide “invasive” plants by the Massachusetts Invasive Plant Advisory Group (MIPAG)¹. As defined by MIPAG: “Invasive” plants are non-native species that have spread into native or minimally managed plant systems in Massachusetts. These plants cause economic or environmental harm by developing self-sustaining populations and becoming dominant and/or disruptive to those systems.

Attachment A – Figure 5 shows major locations of Asiatic bittersweet, burning bush, garlic mustard, Japanese barberry, and Japanese knotweed. Also indicated on Figure 5 is a localized, smaller patch of multiflora rose that has not spread broadly beyond the indicated observation location.

Note that Norway maple is common throughout the site’s tree canopy, so LEC did not GPS-locate the numerous individual trees or create defined polygons designating significant stands of the species on Attachment A – Figure 5.

The following are representative photos of most of the non-native invasive species observed during the evaluation.



Photo 15 – Japanese knotweed stand southwest of Wight Pond.

¹ <https://www.massnrc.org/mipag/invasive.htm>



Photo 16 – Garlic mustard patch in western side of property.



Photo 17 – Multiflora rose patch, west of Wight Pond.

Two additional observed species, creeping buttercup (*Ranunculus repens*) and water forget-me-not (*Myosotis scorpioides*), are on the MIPAG “Likely Invasive” list, which is defined as *non-native species that are naturalized in Massachusetts but do not meet the full criteria that would trigger an “Invasive plant” designation*. These plants were growing together in the Emergent Marsh area, and the buttercup was also present at the edge of the Pond where the perennial stream enters (near Photo 20 location).



Photo 18 – Creeping buttercup (yellow) and water forget-me-not (light blue) in marsh west of Pond.

Non-Native Non-Invasive Species

Notable non-native species observed that are not considered “invasive” according to MIPAG include: wisteria (*Wisteria* sp.²), linden arrowwood (*Viburnum dilatatum*), Japanese primrose (*Primula japonica*), Japanese pieris (*Pieris japonica*), Japanese mountain-spurge (aka pachysandra) (*Pachysandra terminalis*), and European lily-of-the-valley (*Convallaria majalis*). Selected photos of most of these non-native but non-invasive species follow.



Photo 19 – Wisteria between Pond and Hundreds Road.

² According to the Native Plant Trust’s Go Botany website (<https://gobotany.nativeplanttrust.org/>), there are three species of wisteria in Massachusetts. *Wisteria floribunda* is native to Japan, *W. frutescens* is native to the southeastern United States, and *W. sinensis* is native to China. LEC did not identify the wisteria to species level.



Photo 20 – Japanese primrose, located where Cold Spring Brook joins Wight Pond.



Photo 21 – A large patch of Pachysandra northwest of Wight Pond.



Photo 22 – A small patch of lily of the valley, southeast of Wight Pond.

Summary

LEC has prepared this Wildlife Habitat and Invasive Species Evaluation report for 25 Hundreds Road in Wellesley. LEC documented and created maps of important wildlife habitat features, actual wildlife habitat utilization, and major or significant occurrences of non-native invasive and notable non-invasive plant species.

Should you have any questions or comments, I may be contacted in the Wakefield Office at 781-245-2500 or at dwells@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

A handwritten signature in black ink that reads "Daniel L. Wells".

Daniel L. Wells

Senior Wildlife/Wetland Scientist

Attachment A

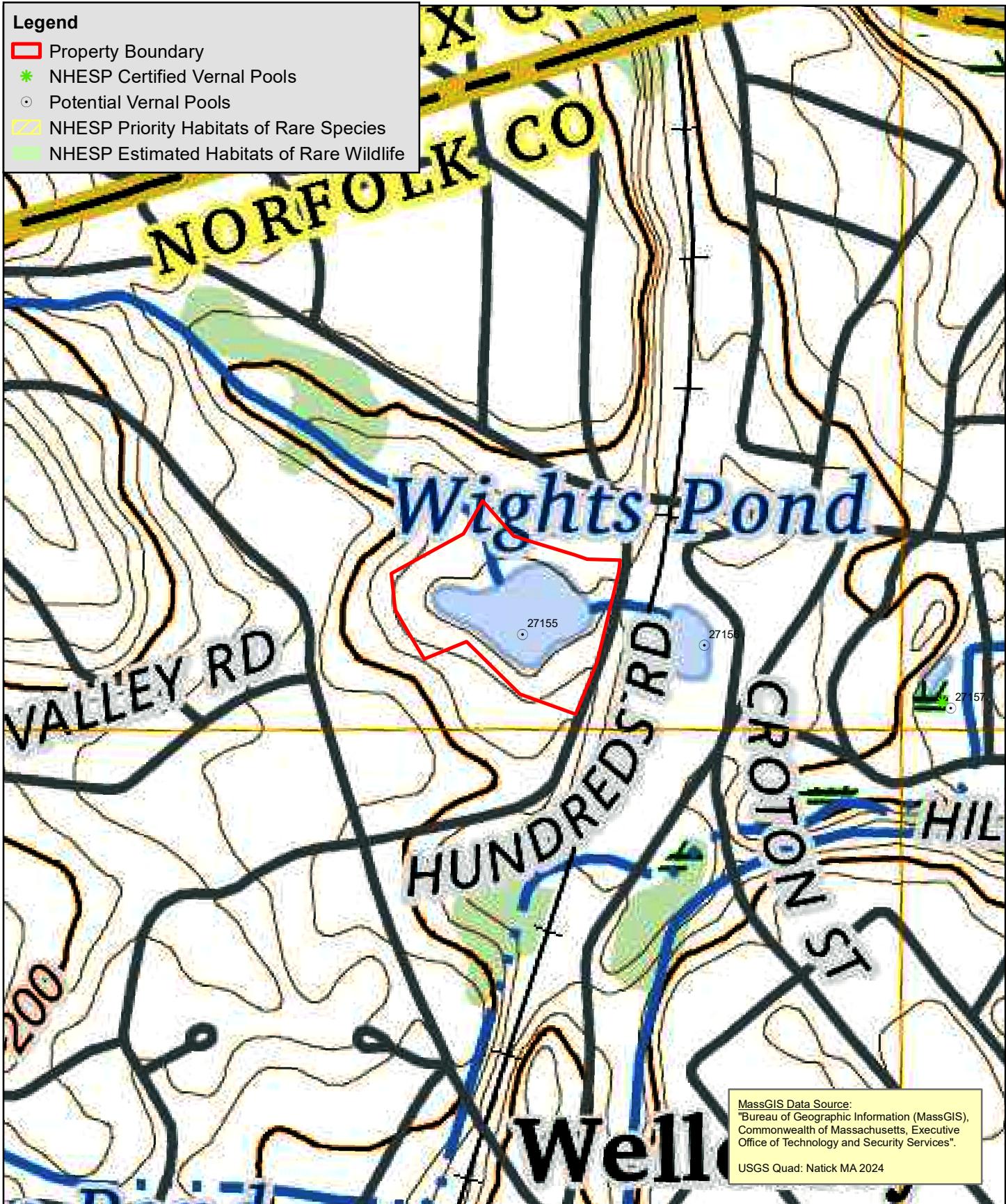
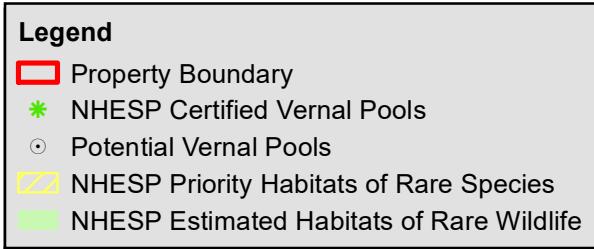
Figure 1 – USGS Topographic Map

Figure 2 – Orthophoto Map

Figure 3 – FEMA FIRMette

Figure 4 – Photo Locations of Pond and Important Wildlife Habitat Features

Figure 5 – Invasive and Non-Native Species and Photo Locations



LEC Environmental Consultants, Inc.
Wakefield, MA 781.245.2500
www.lecenvironmental.com

Figure 1
USGS Topographic Map

25 Hundreds Road
Wellesley, MA

Date: 6/2/2025

N

1 inch = 400 feet
0 100 200 400 Feet



Figure 2
Orthophoto and NHESP Map

National Flood Hazard Layer FIRMette



71°16'43"W 42°19'35"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs

- Area of Undetermined Flood Hazard Zone D

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

- Digital Data Available
- No Digital Data Available
- Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/8/2025 at 9:40 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

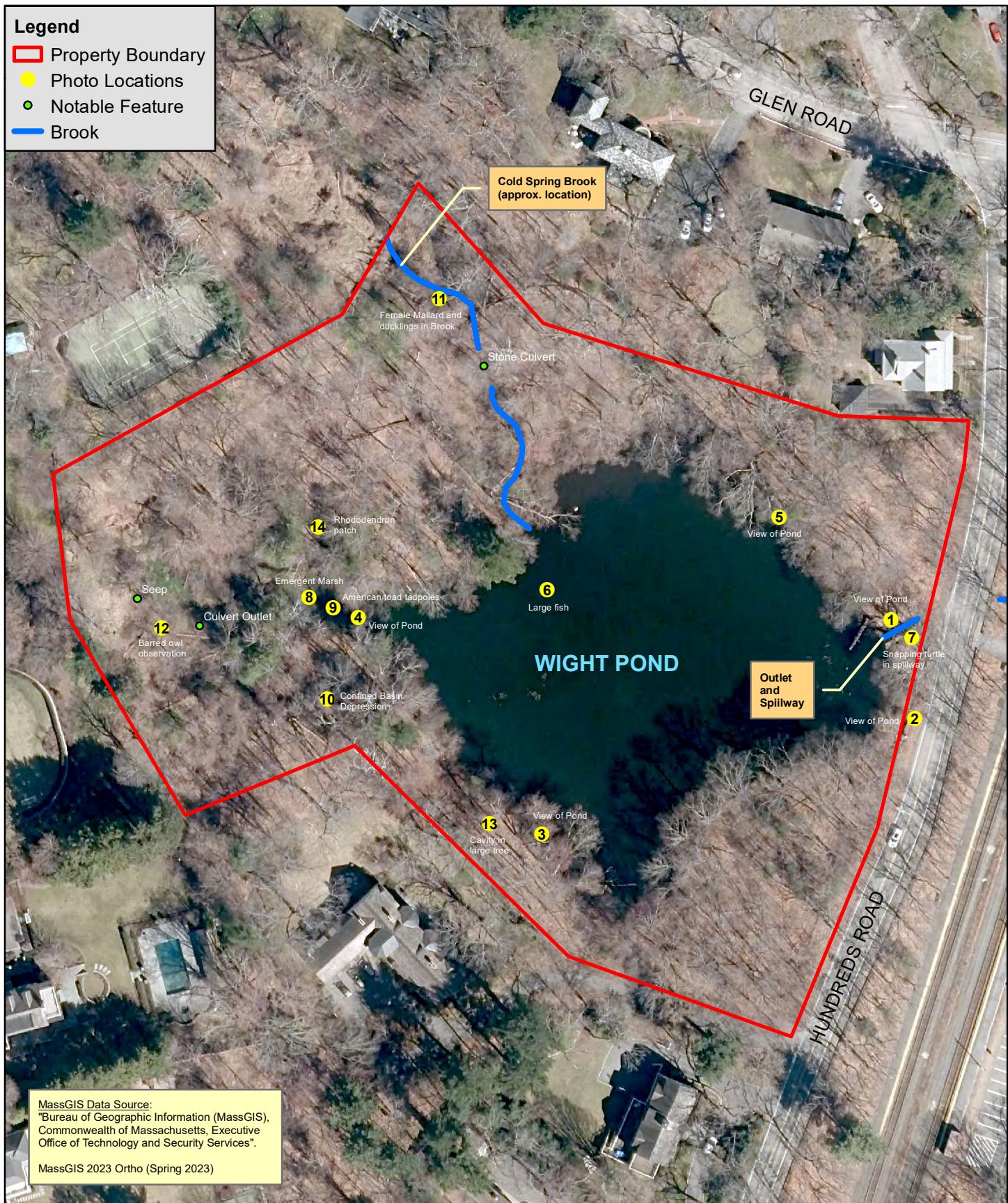


Figure 4 - Photo Locations of Pond and Important Wildlife Habitat Features

LEC Environmental Consultants, Inc.
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25 Hundreds Road
Wellesley, MA

Date: 7/7/2025



1 inch = 100 feet

0 25 50 100 Feet

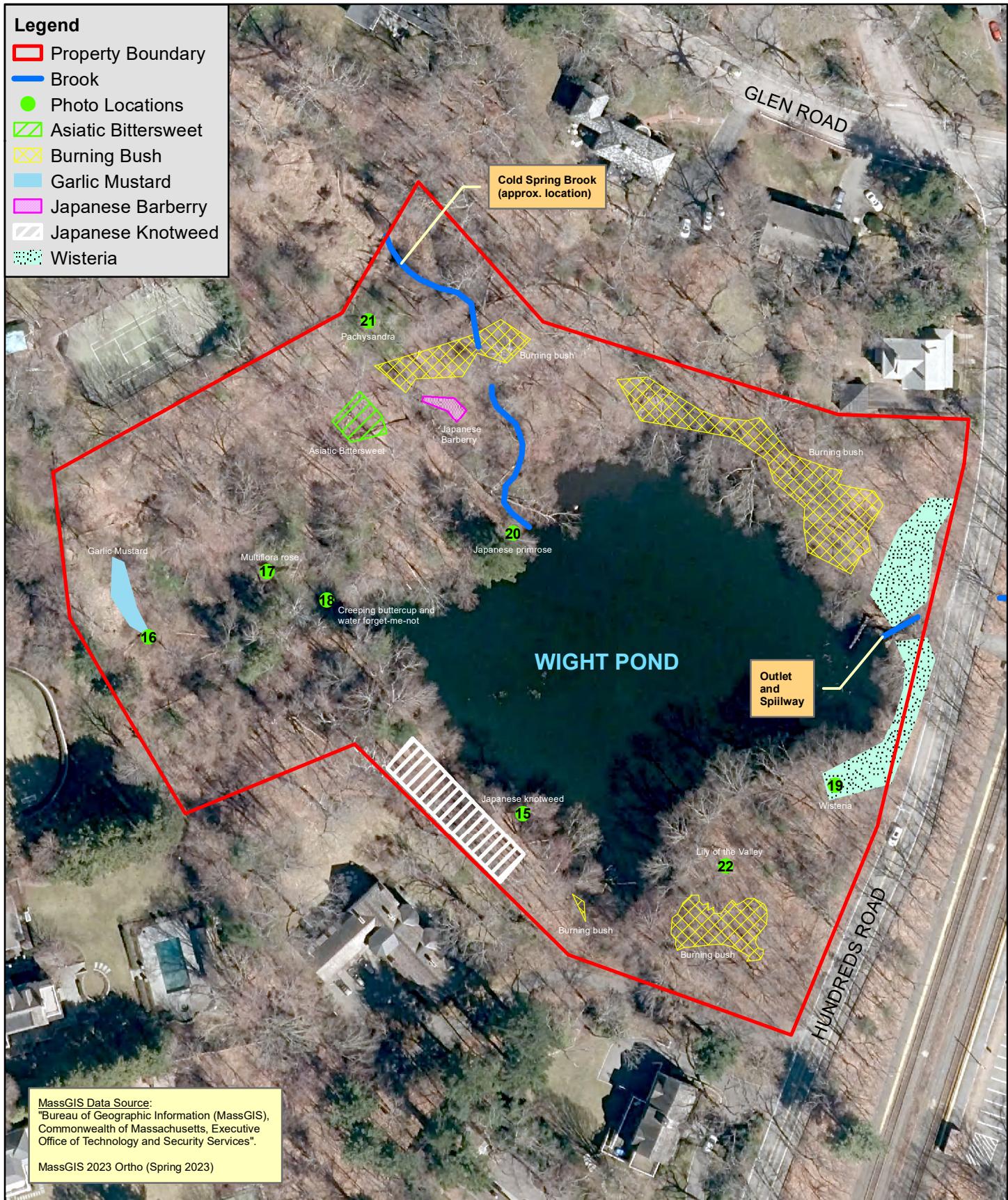


Figure 5 - Invasive and Non-Native Species and Photo Locations



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25 Hundreds Road
Wellesley, MA

Date: 7/7/2025

N

1 inch = 100 feet

0 25 50 100 Feet