Species and Habitat Evaluation

State-Listed Species Surveys and Habitat Evaluation

446 Hopmeadow Street

Simsbury, CT

Submitted To:
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Vessel Technologies, Inc.
46 West 55th Street
New York, NY 10019

Submittal Date:
11/24/2022

Contents

Executive Summary

Project:	State-listed species surveys and habitat evaluation
NDDB Determination:	Preliminary Assessment No. 202209266 dated September 29, 2022
Survey Location:	446 Hopmeadow Street, Simsbury
Target Species:	Vertebrates: slimy sculpin, leopard frog and eastern box turtle Invertebrates: dwarf wedgemussel, eastern pondmussel, eastern pearlshell Plants: Davis' sedge, Wiegand's wild rye, Virginia waterleaf
Survey Dates/Duration:	October 19, 2022, 6 hours
Survey Results:	No target species found. Marginal habitat present for Virginia waterleaf. No suitable habitat for eastern box turtle, leopard frog or slimy sculpin.

General Site Characteristics

The survey area consists of an approximately 2-acre residential property located at 446 Hopmeadow Street in Simsbury. The area is comprised of a single-family residence with a paved driveway and outbuildings. Most of the site consists of mowed turf, surrounded by shrub and woodland edge habitat (Appendix A: Photos 1, 2 and 3).

Second Brook and the associated floodplain is located approximately 120 feet north of the property, and the Farmington River is located approximately 300 feet to the east. The property elevation ranges from 180' to 185' above mean sea level with a relatively flat slope from southwest to northeast (Appendix B: Figures 1 and 2).

The property is primarily mowed turf, covering approximately 75% of the 2-acre property. The dominant groundcover on the northwest side of the property and along the border of the driveway and existing residence is dense Pachysandra (Appendix A: Photo 8). Along the southeastern edge, the Forsythia (*Forsythia suspensa*) and Oriental Bittersweet (*Celastrus orbiculatus*) were locally dense and along the eastern wooded edge the Garlic mustard (*Alliaria petiolate*) and Poison ivy were heavily concentrated. The perimeter forested area included a mix of Black oak (*Quercus velutina*), White oak (*Quercus alba*), Pin oak (*Quercus palustris*), Red maple (*Acer rubrum*), Hemlock (*Tsuga canadensis*), Black cherry (*Prunus serotina*), Sugar maple (*Acer saccharum*), and black birch (*Betula lenta*).

The site lies within the Central Valley Ecoregion, within the Farmington River Valley. The Site lies approximately 300 feet from the western banks of the Farmington River at its closest point. The Site borders Hopmeadow Street to the west, and the Farmington River Trail to the east.

Surficial geology consists of glacial outwash sand and gravel overlying fines. Native soils are Hinckley gravelly sandy loam, although much of the soils are anthopogenic in nature, having been altered due to property development.

Botanical Surveys

Surveys were conducted by botanists James Cowen. Field surveys were conducted by slowly walking and methodically visually searching the survey area. Botanists utilized field keys, a 10X hand lens, with photographs and/or specimens of companion species collected as needed for identification. Technical keys and a microscope were used in the office as needed to confirm field identifications.

Prior to field work, identification information and representative photographs of target species were reviewed. Davis sedge (*Carex davisii*) is a State-Listed Threatened species.[1] It is a member of the *Hymenochlaenae* section of the Carex genus, and one of seven members of the genus found in Connecticut. This section is distinguished from the rest of the Carex genus by having one or more spikes per stem, leaf blades that are M-shaped in cross-section, with two marginal

[1] Dreyer G.D., C. Jones, et al. 2014. *Native and Naturalized Vascular Plants of Connecticut Checklist*. Connecticut Botanical Society. New Haven, CT.

veins that are more prominent than the midvein, and the bract of the lowest carpellate spike consisting of a blade and a prolonged, closed sheath. They also have trigonous to terete achenes and glabrous perigynia 1.5-6.8 (-9.5) mm long with two prominent marginal veins and usually with a beak often nearly as long as the perigynia itself and terminated by two hyaline teeth. Davis sedge is distinguished from other members of its section by having an uppermost spike that is usually gynecandrous staminate, with 4.5 to 6 mm long perigynia that have two prominent marginal veins and seven to fifteen distinct additional veins which are often resin-dotted and become dull orange-brown at maturity. The carpellate scales have an awn between 2.5 and 3 mm long. It has dark red to purple-brown basal leaf sheaths; however, this trait is shared with some of its more common close congeners, and as such is not diagnostic. Davis sedge grows in riparian forests and meadows.2 It occurs in wetlands or non-wetlands (Wetland indicator status of facultative). The plants start to fruit in early June and the perigynia stay on the plants until mid-July although towards the end of this season the perigynia shed easily. Therefore, surveys are most successful from early June to early July.[3]

Wiegand's wild-rye (*Elymus wiegandii*) is a State-listed species and a member of the *Poaceae* family. It is one of 18 species of Elymus present in Connecticut[1]. It can be distinguished from other species, including its congener *Elymus canadensis*, by its more robust and broader leaves as well as by its tall leafy steam and long, thick spike that droops from near the base[2]. The flowering period is from mid-July to early August and can be found in non-wetland and wetland areas including floodplains and forests.

Virginia waterleaf (*Hydrophyllum virginianum*) is a State-listed species and a member of the *Boraginaceae* family. It is the only species of *Hydrophyllum* present in Connecticut[1]. It can be distinguished by the white mottling on the leaves that gives them a water-stained look and by the sharp teeth on the edge of the leaf blade. It is often found in moist, riparian and deciduous forested environments in Connecticut.

[2] Haines, A., 2011. *Flora Novae Angliae*. New England Wildflower Society. Westford, MA. pg. 104-111, 130-131.
[3] Davis' Sedge Guide - New York Natural Heritage Program: https://guides.nynhp.org › davis-sedge

The survey was conducted on October 19, 2022, as detailed in Table 1. All herbaceous plants with dissected leaves and all graminoids were searched for in detail within the property boundary. The survey was conducted before a killing frost. Grasses and sedges were in leaf, though most had dehisced. A complete species list of all plants identified is in Appendix C.

Table 1: Survey dates, weather and effort

Survey Date	Weather	Survey Duration (Total Person Hours)
10/19/2022	Mostly sunny, temperatures in the mid-50s	6 person hours

No Davis' sedge was found throughout the survey. There were other sedges observed and inspected in detail, including some early season narrow leafed sedges along the northern and eastern edges of the property that showed remnants of small erect spikelets. One sedge with a larger leaf blade was observed but the basal sheaths were not dark red to purple brown. None were determined to be Davis' sedge (Appendix A: Photos 4, 5 and 6).

No Wiegand's wild-rye (*Elymus wiegandii*) was observed during the survey. No Virginia waterleaf (*Hydrophyllum virginianum*) was found during the survey. Even though it flowers in early summer, no plants with its characteristic leaves were observed. However, if plants may have senesced, they would not been observable. Due to the persistent drought conditions throughout the latter half of the 2022 growing season, that possibility is heightened. There was a cluster of approximately 15 Celandine poppy (*Stylophorum diphyllum*) plants that were identified on the southwest edge of the property in a bed of Japanese pachysandra (*Pachysandra terminalis*) bordering the mowed turf (Appendix A: Photo 7). The leaf shape of the celandine poppy is like Virginia waterleaf but there are five leaflets present that show rounded tips, as opposed to Virginia waterleaf's sharp pointed teeth at the edge of the leaf blade.

Amphibians and Reptiles

Due to the late timing of initiation of this work, targeted surveys for eastern box turtle and leopard frog were not possible. Therefore, the property was evaluated based on the presence of suitable habitat.

Eastern box turtle are known to occur in this region of the State[4]. Box turtle utilize a mosaic of habitats seasonally. During the spring and early summer (ca. April through June), they favor early and late successional habitats (e.g., old field, regenerating forest) and are often found along the edges of wetlands and small streams, with a shift to forested habitats during the late summer and fall seasons. Nesting occurs in sparsely vegetated early successional habitat, and hibernation occurs almost exclusively in forested uplands. In June, activity is concentrated within sunny areas where turtles can maximize basking opportunities. Additionally, females are actively moving to and utilizing nesting areas which consist of friable soils with sparse vegetation. Nesting areas typically lack a well-developed topsoil and associated "duff" layer (i.e., O Horizon) with fine roots which can restrict digging. Favored nesting areas are often the result of natural or anthropogenic disturbance that has scarified the soil surface and reduced vegetative density.

While box turtle are known to occur in the vicinity of the property, no suitable habitat was observed. The property consists almost entirely of residential land use – a home with driveway, accessory buildings, and mowed lawn and landscaping. While box turtle are known to inhabit areas around residential development, that habitat use is typically within the naturalized portions of residential properties, particularly when such developments have encroached upon and fragmented habitat in which a population occurs. The subject property contains no long-term viable habitat and is too small (two acres) to support box turtle in and of itself. It contains no suitable hibernation habitat, as it lacks forest cover or soil conditions suitable for hibernation. Moreover, it is bordered by a busy road that would strictly limit movement into and out of the site from the west. There is additional habitat to the east along the Farmington River floodplain, but there is no habitat feature present on the property that is not present in the Farmington River corridor, such that it would necessitate movement into the property.

The northern leopard frog (*Rana pipiens*) is a State-listed species of special concern. It is abundant in the floodplain wetlands along this segment of the Farmington River[5]. Statewide, it found in open, grassy, low-elevation wetlands and floodplain forests adjacent to riparian systems, within the Connecticut and Housatonic River drainage basins. Northern leopard frogs typically

[4] Klemens, M.W. Gruner, H.J. Quinn, D.P. and Davison, E.R. 2021. Conservation of Amphibians and Reptiles in Connecticut. Department of Energy and Environmental Protection. Revision to State Geological and Natural History Bulletin 112.
[5] Ibid.

breed in seasonally flooded early successional wetlands, including marshes and shrub swamps. These agile frogs are well known for moving across the landscape, and during the summer months they are frequently observed in habitats bordering breeding wetlands, including fields, lawns, and other grassland habitats, and mesic floodplain forests.

No suitable habitat is present on the property as there are no wetlands and watercourses present. Although leopard frog are known to move into and through uplands adjacent to breeding wetlands, such areas typically occur in the same topographic area of the breeding wetland, and usually consist of dense herbaceous vegetation. This property occurs on the elevated terrace above the Farmington River floodplain, well beyond breeding habitat, and contains sparsely vegetated uplands that would not be within the upland movement corridor habitat utilized by the species outside of breeding wetlands.

Fish and Shellfish

Fish and freshwater mussel habitats were evaluated by Fisheries Biologist Alex Malvezzi. The slimy sculpin (*Cottus cognatus*) is a State-listed species of special concern. The Slimy sculpin is a small (adults typically 2-3 inches) native fish limited to cold-water headwater streams, primarily in northern parts of the state. It can be identified by the mottled brown and dark blotches throughout the entire body. There are three pelvic fin rays, and the pectoral fins usually have an orange color. Males tend to turn darker during spawning periods, with their dorsal fin becoming bright red. They prefer clear, cold-water streams with a substrate of gravel and cobble, and they are bottom dwelling fish that are heavily camouflaged in their environments and populations can be restricted to very limited areas[6].

The eastern pondmussel (*Ligumia nasuta*) and eastern pearlshell (*Margaritifera margaritifera*) are State-listed species of special concern, and the dwarf wedgemussel (*Alasmidonta heterodon*) is a State-listed endangered species. All three species are freshwater mussels known to inhabit the Farmington River. Because there are no wetlands or watercourses present on the property, no freshwater mussels would be present.

[6] https://portal.ct.gov/DEEP/Fishing/Freshwater/Freshwater-Fishes-of-Connecticut/Slimy-Sculpin..

There are no streams or watercourses on the property. Therefore, no Slimy sculpin or freshwater mussels would occur on the property. The most recent known record of Slimy sculpin in proximity to 446 Hopmeadow Road is from July 2022 in Barkhamsted, CT in the Farmington River[7]. There is a tributary to the Farmington River (Second Brook) located approximately 105 feet from the northern edge of the property line. In the early 2000's, Eric Davison observed slimy sculpin in the upper reaches of Second Brook in the Powder Forest property located immediately west of Hopmeadow Street.

Discussion and Recommendations

This is a small site in long-term residential use. Native undisturbed habitats are lacking. Such conditions present low potential for habitat use or occurrence by any of the target species. The property does lie in close proximity to Second Brook, known habitat for the slimy sculpin and the Farmington River (and its associated floodplain wetlands), known habitat for leopard frog, freshwater mussels and box turtle. Development of this property will not impact these adjacent habitats, but the properties proximity makes consideration of secondary effects of development necessary. Proper management of stormwater and a native landscaping plan that prevents the likelihood of establishment or dispersal of invasive plant species is critical.

Appendices

A: Site Photographs
B: Mapping
C: NDDB Determination
D: Plant Species List
E: Summary of Qualifications

[7] http://www.fishmap.org/species/Slimy-Sculpin.html

APPENDIX A
Site Photographs

Photo 1: Eastern side of property, looking across mowed lawn.

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Photo 2: Eastern side of property looking west at house.

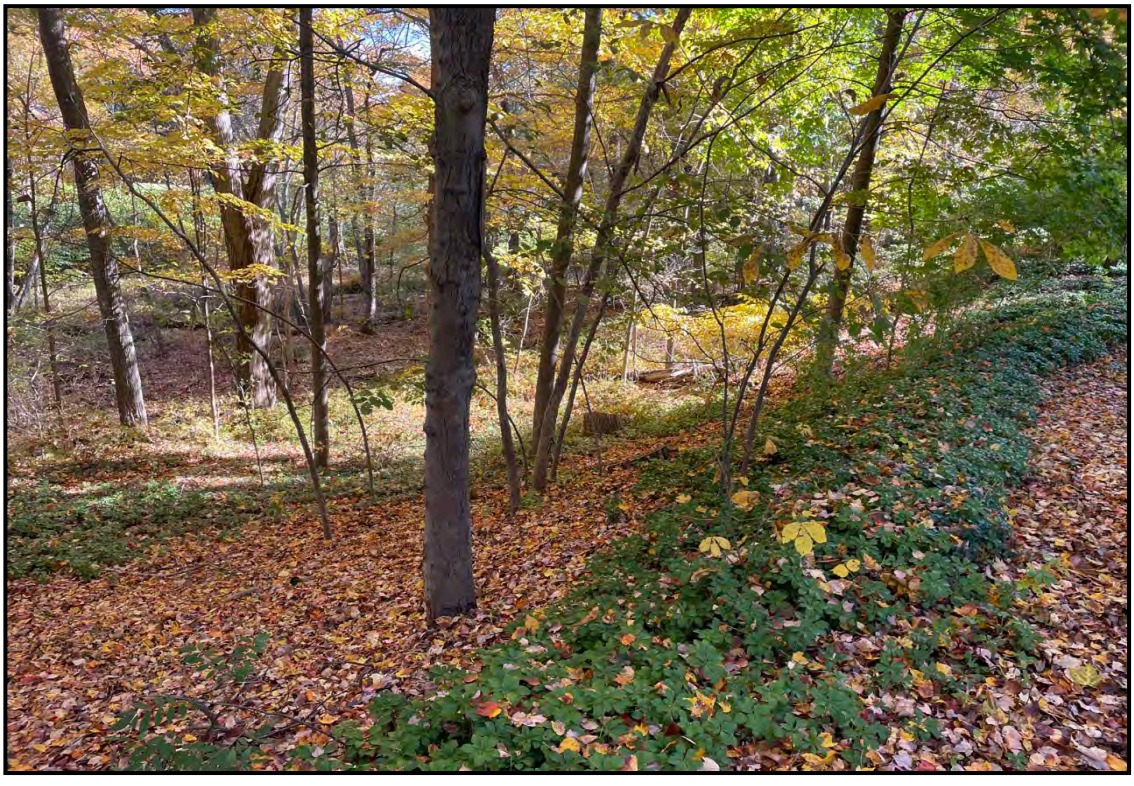

Photo 3: Northern edge of property on top of the bank looking toward Second brook

Photo 4: Early season sedges along the northern property boundary.

Photo 5: Early season sedges along the northwestern corner of the property

Photo 6: Early season sedges along the northeastern corner of the property.

Photo 7: Celandine poppy southwestern edge of property

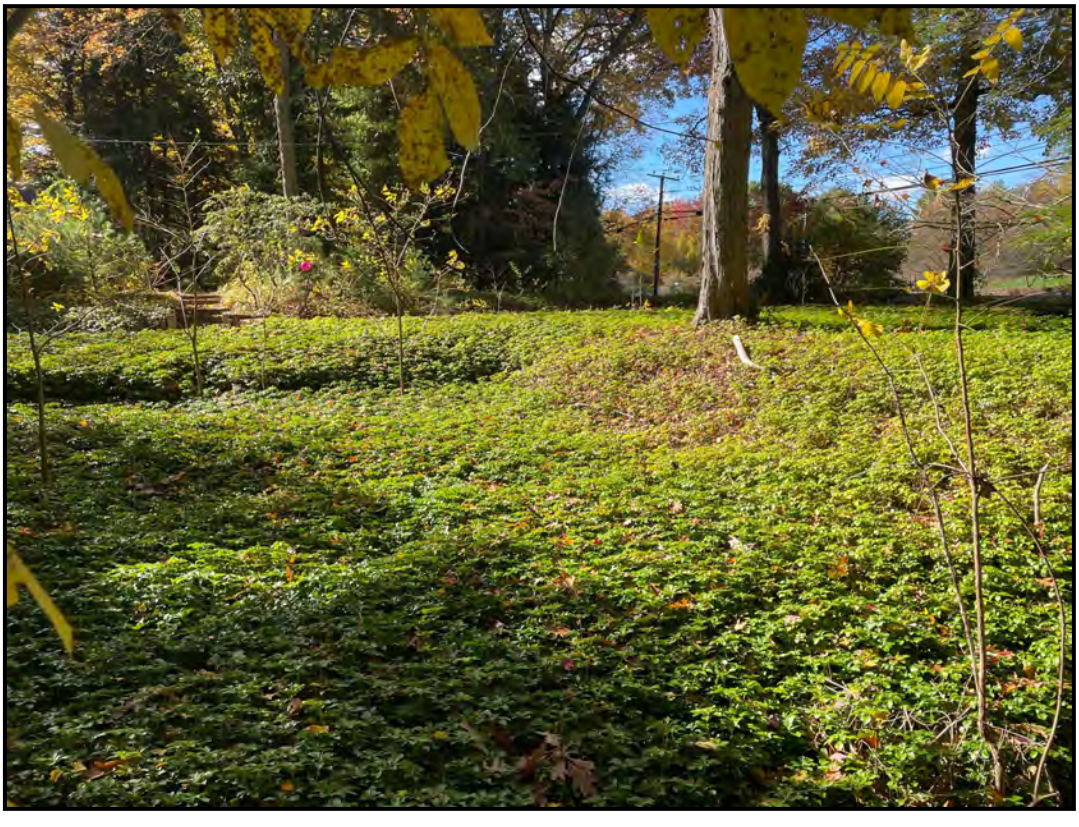

Photo 8: Northwest corner of the property dominated by Pachysandra.

APPENDIX B
Mapping

Figure 1: Topographic Location Map
446 Hopmeadow Street
Simsbury, CT

Legend

- Site
- Municipal Boundary
- Stream

Map Notes:
Base Map: ESRI USA Topo Maps
Map Date: November, 2022

SCALE

1 inch = 2,000 feet

0 1,000 2,000 Feet

DAVISON ENVIRONMENTAL, LLC
10 MAPLE STREET
CHESTER, CT 06412
860-803-0938

DAVISON ENVIRONMENTAL

Figure 2: Aerial Map
446 Hopmeadow Street
Simsbury, CT

Legend

- Site
- Approximate Parcel Boundary
- Stream
- Trail
- 5' Contour
- 1' Contour

Map Notes/Disclaimer:
This map was created using GIS/GIS level data, and is NOT a survey. This map should be used for graphical and informational purposes only.
Base Map: CTECO 2019 Aerial Imagery
Map Date: November, 2022

SCALE

1 inch = 200 feet

0 100 200 Feet

DAVISON ENVIRONMENTAL, LLC
10 MAPLE STREET
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APPENDIX C
NDDB Determination

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

September 29, 2022

Seamus Moran PE
H&H Engineering Associations LLC
232 Greenmanville Ave
Mystic, CT 06353
smoarn@hh-engineers.com

Project: Preliminary Assessment of Multi-family Residential Development, 446 Hopmeadow St, Simsbury, CT
NDDB Preliminary Assessment No.: 202209266

Dear Seamus Moran,

I have reviewed Natural Diversity Database maps and files regarding the area provided for a preliminary assessment of 446 Hopmeadow St, Simsbury, Connecticut.

According to our records there are known extant populations of State Listed Species that occur in the vicinity of this property. I have attached a list of species known from this area. We have not visited this site. Depending on the habitat available, these or other species may be present. Please be advised that this is a preliminary review and not a final determination. A more detailed review will be necessary to move forward with any environmental permit applications submitted to DEEP for the proposed project. **This preliminary assessment letter cannot be used or submitted with permit applications at DEEP**. This letter is valid for one year.

To better evaluate the property and to plan for management activities that may enhance habitat or prevent impacts to State-listed species, field surveys of the site should be performed by a qualified biologist(s) with the appropriate scientific collecting permits at a time when these target species are identifiable. A report summarizing the results of such surveys should include:

1. Survey date(s) and duration
2. Site descriptions and photographs
3. List of component vascular plant and animal species within the survey area (including scientific binomials)
4. Data regarding population numbers and/or area occupied by State-listed species
5. Detailed maps of the area surveyed including the survey route and locations of State listed species
6. Conservation strategies or protection plans that indicate how impacts may be avoided for all state listed species present on the site
7. Statement/résumé indicating the biologist's qualifications. Please be sure when you hire a consulting qualified biologist to help conduct this site survey that they have the proper experience with target taxon and have a CT scientific collectors permit to work with state listed species for this specific project.

The site surveys report should be sent to our CT DEEP-NDDB Program (deep.nddbrequest@ct.gov) for further review by our program biologists along with an updated request for another NDDB review. Incomplete reports may not be accepted.

If you do not intend to do site surveys to determine the presence or absence of state-listed species, then you should presume species are present and let us know how you will protect the state-listed species from being impacted by this project. You may submit these best management practices or protection plans with your new request for an NDDB review. After reviewing your new NDDB request form and the documents describing how you will protect this species from project impacts we will make a final determination and provide you with a letter from our program to use with DEEP-Permits.

Natural Diversity Database information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3378, or karen.zyko@ct.gov . Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Karen Zyko
Environmental Analyst

Species List for NDDB Request

Scientific Name	Common Name	State Status
Vertebrate Animal		
Cottus cognatus	Slimy sculpin	SC
Rana pipiens	Leopard frog	SC
Terrapene carolina carolina	Eastern box turtle	SC
Invertebrate Animal		
Alasmidonta heterodon	Dwarf wedgemussel	E/FE
Ligumia nasuta	Eastern pondmussel	SC
Margaritifera margaritifera	Eastern pearlshell	SC
Vascular Plant		
Carex davisii	Davis' sedge	T
Elymus wiegandii	Wiegand's wild rye	SC
Hydrophyllum virginianum	Virginia waterleaf	SC

E = State Endangered, T = State Threatened, SC = State Special Concern
FE = Federally Endangered, FT = Federally Threatened

APPENDIX D
Plant Species List

SCIENTIFIC NAME	STRATUM	COMMON NAME	WETLAND INDICATOR STATUS	STATUS
Acalypha rhomboidea	Herbs	Three-Seeded Mercury	FACU	native
Acer platanoides	Trees	Norway Maple	UPL	invasive
Acer rubrum	Trees	Red Maple	FAC	native
Acer saccharum	Trees	Sugar Maple	FACU	native
Achillea millefolium	Herbs	Yarrow	FACU	native
Ageratina altissima	Herbs	White Snakeroot	FACU	native
Ajuga reptans	Herbs	Carpet Bugle	NC	introduced
Alliaria petiolata	Herbs	Garlic Mustard	FACU	invasive
Amelanchier sp.	Shrubs	Shadbush		
Artemisia vulgaris	Herbs	Common Mugwort	UPL	invasive
Athyrium angustum	Herbs	Northern Lady-Fern	FAC	native
Benthamidia florida	Trees	Flowering Big-Bracted Dogwood	FACU	native
Berberis thunbergii	Shrubs	Japanese Barberry	FACU	invasive
Betula lenta	Trees	Black Birch	FACU	native
Carex festucacea	Herbs	Fescue Sedge	FAC	native
Carex pensylvanica	Herbs	Pennsylvania Sedge	NC	native
Carex spp.	Herbs	sedges		native
Carya ovata	Trees	Shagbark Hickory	FACU	native
Catalpa bignonioides	Trees	Common Catalpa	FACU	introduced
Celastrus orbiculatus	Vines	Asiatic Bittersweet	UPL	invasive
Chelidonium majus	Herbs	Greater Celandine	UPL	introduced
Clematis virginiana	Herbs	Virgin's Bower	FAC	native
Cyperus esculentus	Herbs	Nut Flatsedge	FACW	introduced
Daucus carota	Herbs	Queen Anne's Lace	NC	introduced
Dichanthelium clandestinum	Herbs	Deer-Tongue Rosette-Panicgrass	FACW	native
Digitaria sanguinalis	Herbs	Hairy Crabgrass	FACU	introduced
Erigeron canadensis	Herbs	Horseweed	FACU	native
Euonymus alatus	Shrubs	Burning Bush	NC	invasive
Eurybia divaricata	Herbs	White Wood-Aster	NC	native
Euthamia graminifolia	Herbs	Common Grass-Leaved Goldenrod	FAC	native

SCIENTIFIC NAME	STRATUM	COMMON NAME	WETLAND INDICATOR STATUS	STATUS
Eutrochium dubium	Herbs	Coastal Plain Joe-Pye Weed	FACW	native
Forsythia viridissima	Shrubs	Green-Stemmed Forsythia	NC	introduced
Fraxinus pensylvanica	Trees	Green Ash	FACW	native
Hemerocallis fulva	Herbs	Orange Daylily	UPL	introduced
Hieracium caespitosum	Herbs	Field Hawkweed	NC	introduced
Leonurus cardiaca	Herbs	Motherwort	NC	introduced
Lepidium campestre	Herbs	Field Pepperweed	NC	introduced
Lonicera morrowii	Shrubs	Morrow's Honeysuckle	FACU	invasive
Magnolia grandiflora	Trees	Southern Magnolia	FAC	introduced
Microstegium vimineum	Herbs	Japanese Stiltgrass	FAC	invasive
Muhlenbergia schreberi	Herbs	Nimblewill Muhly	FAC	native
Onoclea sensibilis	Herbs	Sensitive Fern	FACW	native
Osmunda claytoniana	Herbs	Interrupted Fern	FAC	native
Oxalis stricta	Herbs	Common Wood-Sorrel	FACU	native
Pachysandra terminalis	Herbs	Japanese Pachysandra	NC	introduced
Parathelypteris noveboracensis	Herbs	New York Fern	FAC	native
Parthenocissus quinquefolia	Vines	Virginia Creeper	FACU	native
Persicaria longiseta	Herbs	Long-Bristled Smartweed	FAC	invasive
Persicaria virgnianum	Herbs	Jumpseed	FAC	native
Phlox divaricata	Herbs	Wild Blue Phlox	FACU	native
Plantago major	Herbs	Common Plantain	FACU	introduced
Poaceae spp.	Herbs	Miscellaneous Grasses		
Polystichum acrostichoides	Herbs	Christmas Fern	FACU	native
Polytrichum commune	Herbs	Haircap Moss	NC	native
Potentilla canadensis	Herbs	Dwarf Cinquefoil	NC	native
Prunus serotina	Trees	Black Cherry	FACU	native
Quercus alba	Trees	White Oak	FACU-	native
Quercus palustris	Trees	Pin Oak	FACW	native
Quercus velutina	Trees	Black Oak	UPL	native
Ranunculus ficaria	Herbs	Fig Buttercup	FACW	invasive

SCIENTIFIC NAME	STRATUM	COMMON NAME	WETLAND INDICATOR STATUS	STATUS
Rhus glabra	Shrubs	Smooth Sumac	NC	native
Rosa multiflora	Shrubs	Multiflora Rose	FACU	invasive
Rubus allegheniensis	Shrubs	Common Blackberry	FACU	native
Rubus flagellaris	Shrubs	Northern Dewberry	FACU	native
Rubus occidentalis	Shrubs	Black Raspberry	NC	native
Rubus phoenicolasius	Shrubs	Wineberry	FACU	invasive
Setaria faberii	Herbs	Chinese Foxtail	FACU	introduced
Solidago patula	Herbs	Rough-Leaved Goldenrod	OBL	native
Swida racemosa	Shrubs	Gray Dogwood	FAC	native
Symphyotrichum cordifolium	Herbs	Heart-Leaved Aster	NC	native
Symphyotrichum racemosum	Herbs	Small White Aster	FACW	native
Syringa vulgaris	Shrubs	Common Lilac	NC	introduced
Taraxacum officinale	Herbs	Common Dandelion	FACU	introduced
Toxicodendron radicans	Vines	Poison Ivy	FAC	native
Tsuga canadensis	Trees	Eastern Hemlock	FACU	native
Verbascum thapsus	Herbs	Common Mullein	UPL	introduced
Viburnum acerifolium	Shrubs	Maple-Leaved Viburnum	UPL	native
Viola sororia	Herbs	Common Blue Violet	FAC	native
Vitis labrusca	Vines	Fox Grape	FACU	native
Vitis riparia	Vines	Riverbank Grape	FAC	native
Wisteria sinesnsis	Vines	Chinese Wisteria	NC	introduced
Yucca filamentosa	Herbs	Yucca	NC	introduced

APPENDIX E
Summary of Qualifications

Davison Environmental, LLC provides consulting services in the areas of biological, wetland, and soil sciences. In addition to identification, description, and classification of natural resources, the firm also provides functional evaluation of wetlands and other biological systems, guidelines for mitigation of potential adverse impacts, and permit support through expert testimony and public representation. Services provided revolve around the impact of human activities on terrestrial, wetland, aquatic, and marine resources. The firm specializes in biological and wetland surveys, impact assessment, and mitigation planning.

James Cowen

James Cowen has over 20 years of experience conducting botanical surveys in Connecticut. He is a Registered Soil Scientist, Certified Professional Wetland Scientist, and has previously served on the Board of Directors for the Connecticut Botanical Society. Mr. Cowen maintains a Connecticut Department of Energy and Environmental Protection Scientific Collector's Permit for the collection of plants. He holds a bachelor's degree in Biology and master's degree in Landscape Design.

Alex Malvezzi

Alex Malvezzi has a bachelor's degree in Biology from Quinnipiac University and a Master of Science in Marine Biology from Stony Brook University. He is currently working to become a registered Soil Scientist, and a Certified Professional Wetland Scientist. He has worked in environmental consulting for 10 years and has experience working on a variety of Federal Energy Regulatory Commission (FERC) and private projects serving as a Biologist and Project Manager.

Eric Davison

Eric Davison holds a bachelor's degree in Wildlife Conservation and Management with post-graduate certifications as a wetland and soil scientist. For 23 years he has conducted amphibian and reptile surveys throughout Connecticut and Eastern New York. His work has included habitat management planning and regional biodiversity studies for municipalities, land trusts and conservation organizations.