DELINEATION OF APA REGULATED AQUATIC RESOURCES

Woodward Lake Properties

Towns of Northampton and Mayfield Fulton County, New York

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1.0 INTRODUCTION

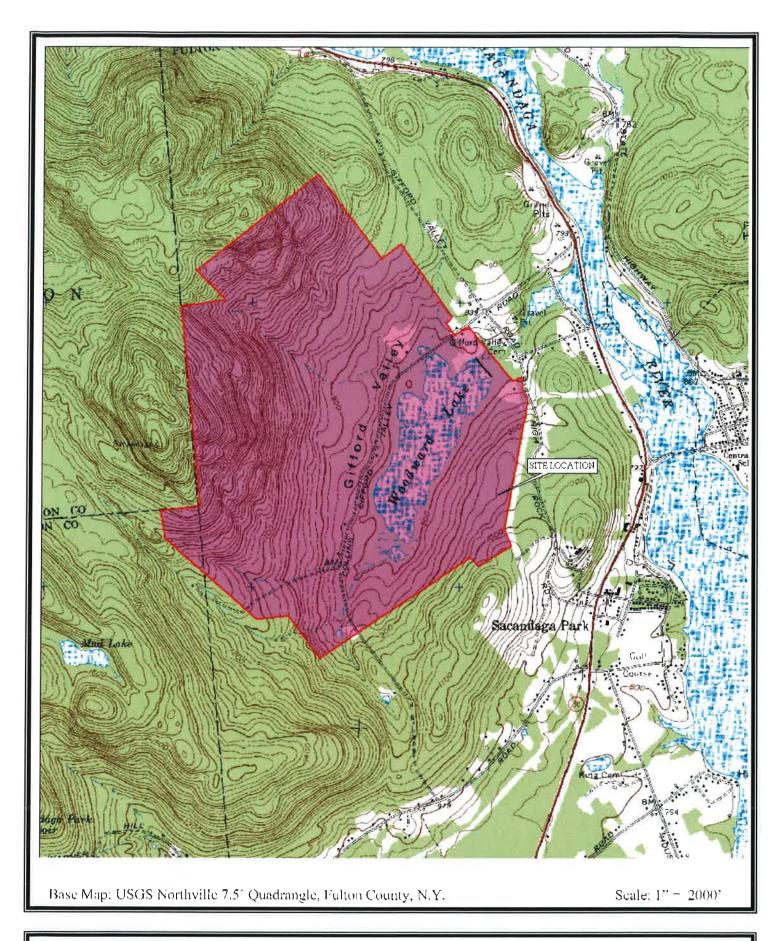
At the request of New York Land & Lakes and its subsidiary Woodward Lake Properties, LLC (the "Owner"), North Country Ecological Services, Inc. (NCES) completed an onsite delineation of Waters of the United States (WOTUS), including freshwater wetlands, on a portion of a 1,169.63± acre property known as "Woodward Lake Properties" (the "Site") (Figure 1). The Site is comprised of four (4) separate parcels as follows:

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Parcel 1 (Tax ID 17.0-1-23) -784.52 \pm acres
Parcel 2 (Tax ID 31.0-1-2) -339.85 \pm acres
Parcel 3 (Tax ID 31.2-1-25) -34.32 \pm acres
Parcel 4 (Tax ID 31.0-2-1) -10.94 \pm acres
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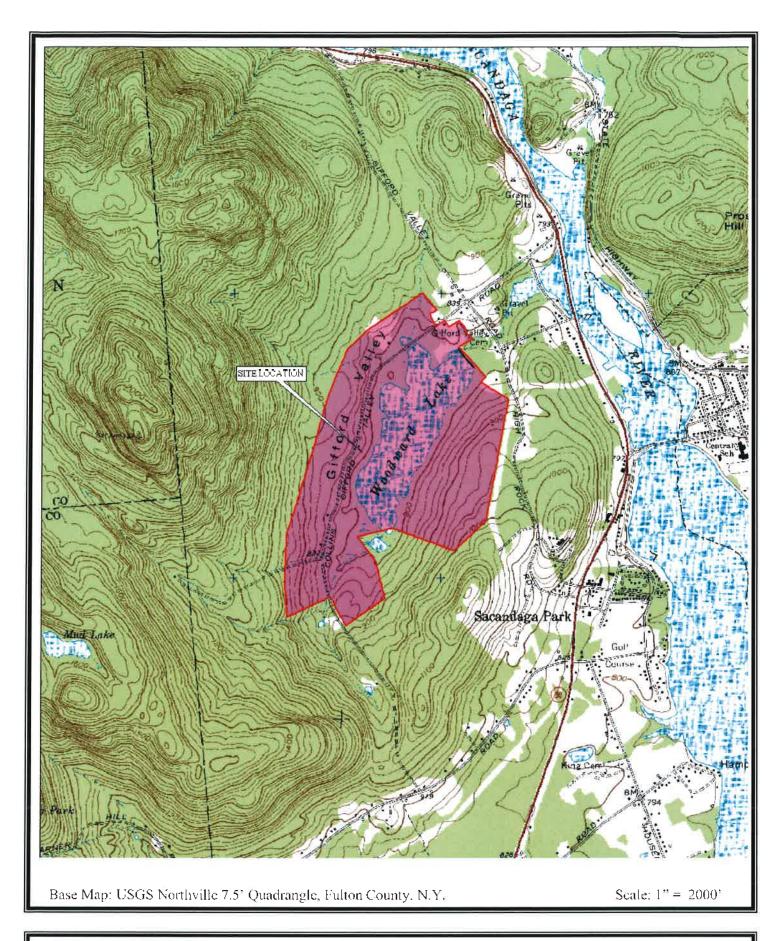
At the further request of the Owner, based on consultation with the Adirondack Park Agency (APA), the formal field delineation was limited to only the lands immediately surrounding Woodward Lake and the portion of the property that is found within 800' of the western side of Collins-Gifford Valley Road (the "Review Area") (Figure 1A). Consequently, the Review Area is roughly 708.9± acres in size and encompasses 60% of the entire Site.

The Review Area includes portions of Parcels 1 and 2 and all of Parcel 3. No portion of Parcel 4 is found within the Review Area. The portions of the Site found outside of the Review Area were not evaluated for the presence of wetlands or other regulated waters. It was determined by the Owner (based on direct consultation with the Adirondack Park Agency - APA) that the portions of the Site that are found outside of the Review Area did not need to be reviewed, as those lands are not included in any planned future development.

After a review of the Fulton County Soil Survey, the USGS 7.5' topographic map (Northville Quadrangle), aerial photographs, and other technical information for the Review Area, NCES identified and delineated the limits of wetlands and watercourses that would be subject to the regulatory jurisdiction of the APA, pursuant to Sections 578 and









801 of the Adirondack Park Agency Act. NCES also identified wetlands and other WOTUS that would fall under the regulatory authority of the U.S. Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act (CWA). Given the fact that the Review Area is located within the Adirondack Park, the New York State Department of Environmental Conservation (DEC) does not have regulatory jurisdiction of wetlands. The APA administers Article 24 within the Adirondack Park.

The wetland delineation was completed with several field visits that were undertaken during the late 2017 and early 2018 field seasons. The delineated wetland boundaries and defined stream channels were field located by NCES utilizing Global Positioning System (GPS) technology. The collected GPS point file information was then provided to Steven E. Smith Engineering and Architecture and Lawson Surveying, who together formally mapped the wetland and stream locations.

As a result of the delineation, a total of 96.01± acres of vegetated wetland and 62.00± acres of open water (Woodward Lake) were identified within the boundaries of the Review Area. In addition to the vegetated wetlands and open water resources, a cumulative total of 25,960± linear feet of defined perennial stream channels and 22,522± linear feet of intermittent stream channels (Relatively Permanent Waterways – RPW's) were also documented. All streams identified are confined within the wetland boundaries and flow directly into Woodward Lake.

2.0 SITE LOCATION & DESCRIPTION

The Site is located between Gifford Valley Road, High Rock Road and Collins-Gifford Valley Road, in the Towns of Northampton and Mayfield, Fulton County, New York. The centralized coordinates of the Review Area are 43° 13' 28.7" N Latitude and 74° 12' 10.4" W Longitude. Elevations within the Review Area range from 1,210± feet above Mean Sea Level (MSL), found along an upland ridge that is located in the southwest corner of the Review Area, to 797± feet above MSL (the elevation of Woodward Lake), resulting in an elevation difference of 413± feet.

The Review Area is currently undeveloped, with the exception of a single-family home that is found off of Gifford-Valley Road. Collins-Gifford Valley Road is an un-paved, gravel road that bisects the Site and provides access to the western half of the Site and eventually converges with NYS Rt. 30. The eastern half of the Site is accessed from High-Rock Road, which borders the northeastern boundary of the Site. The southeastern boundary of the Site is defined by an overhead utility corridor that crosses, and extends parallel to, High Rock Road. Robert Sweet Road, located in the southwest corner of the Site, is a Town of Northampton road that extends off of Collins-Gifford Valley Road. It provides access to a remote hunting camp that is found on private land and State land located to the west of the property.

Portions of the Review Area have been previously developed. Prior to the 1930's, a few single-family residences were built on the property, off of Collins-Gifford Valley Road. The developed areas have been long since abandoned. Previously cleared areas have gone fallow and most structures have been removed or fallen down on their own. Old house, barn, and silo foundations, stone fireplaces, and concrete hearths are still visible and are all that remain of these previous structures. However, a modern residence, with an outdoor tennis court are located in the northwest corner of the Review Area, immediately adjacent to the concrete dam and the northern end of Woodward Lake. This dam was constructed in the early 1900's to create an open body of water for the original owner to land float planes on. The lake is contained within the center of the Review Area.

Currently, the Review Area is predominantly wooded and is now only utilized for outdoor recreational purposes. The undeveloped components of the Site have been previously logged with the last cutting having occurred approximately 20-25 years ago by the land owner at that time. The logging was conducted on the portion of the Site that is positioned to the west of Collins-Gifford Valley Road. The land immediately surrounding Woodward Lake and the portions of the Site located to the east of it, was not part of that last logging operation, as that land was under separate ownership. However, all portions of the Site have been subjected to logging activities and old log roads exist throughout the property.

Based on the definitions presented in the *Ecological Communities of New York State* (Edinger, 2014) and the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, 1979), the following ecological communities exist within the boundaries of the Review Area:

- Hemlock Northern hardwood forest (Edinger, 2014)
- Pine Northern hardwood forest (Edinger, 2014)
- Beech Maple mesic forest (Edinger, 2014)
- Pine plantation (Edinger, 2014)
- Successional old field (Edinger 2014)
- Mowed lawn with trees (Edinger, 2014)
- Mesotrophic dimictic lake (Edinger, 2014)
- Shrub-swamp (Edinger, 2014)**
- Shallow emergent marsh (Edinger, 2014)**
- Hemlock-hardwood swamp (Edinger, 2014)**
- Palustrine Forested Wetland (Cowardin, 1979)**
- Palustrine Scrub-Shrub Wetland (Cowardin, 1979)**
- Palustrine Emergent Wetland (Cowardin 1979)**

The extent of the individual ecological community types identified are outlined in Table 1 below:

Table 1
Existing Ecological Community Types

Ecological Community Type	Size in Acres	Percentage of the Site
Hemlock-Northern hardwood forest	141.84± acres	13.5± %
Pine-Northern hardwood forest	168.65± acres	14.5± %
Beech-Maple mesic forest	618.40± acres	52.5± %
Pine Plantation	51.69± acres	5.00± %
Successional old field	4.80± acres	0.05± %
Mowed lawn with trees	12.71± acres	1.50± %
Gravel pit	0.84± acres	0.10± %
Mesotrophic dimictic lake	85.32± acres	7.35± %
Rocky headwater stream	12.70± acres	0.90± %
Shrub Swamp / PSS	26.13± acres	2.10± %
Hemlock-hardwood swamp / PFO	25.27± acres	0.80± %
Shallow emergent marsh / PEM	21.28± acres	1.70± %
Totals for Site	1,169.63± acres	100.0 %

PEM - Palustrine emergent wetland, PSS - Palustrine scrub-shrub wetland, PFO - Palustrine forested wetland

^{**} The Shrub swamp, shallow emergent marsh and Hemlock-hardwood swamp ecological communities identified by Edinger are the same as the Palustrine scrub-shrub, Palustrine emergent and Palustrine forested wetland communities as defined by Cowardin.

Land use surrounding the Site includes other single-family (seasonal and year-round) residential homes and undeveloped forest. The individual residences found adjacent to the Site are located along Collins-Gifford Valley and High Rock Roads. Undeveloped forested land borders the Site to the south and west. General photographs of the property, taken during the delineation to document the existing ecological conditions observed, are contained in Appendix A.

3.0 DELINEATION METHODOLOGY

Wetland boundaries were delineated using the three-parameter methodology as outlined in the Corps of Engineers Wetland Delineation Manual, 1987 (1987 manual). The 1987 manual was used in accordance with the Corps of Engineers Appropriation Bill and the Johnson Amendment of August 17, 1991, which states that until revisions to the January 1989, Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989 manual) are finalized, the Corps will apply the 1987 manual to identify and delineate wetlands potentially subject to regulation under Section 404 of the Clean Water Act.

NCES also employed additional information presented within the *Interim Regional supplement to the Corps of Engineers Wetland Delineation Manual – Northcentral and Northeast Region* ("Interim Regional Supplement", October 2009) as further guidance for assessing and defining wetland boundaries. According to the 1987 Manual and Interim Regional Supplement, in order for an area to be classified as a wetland, it must exhibit the following characteristics: hydrophytic vegetation, hydric soils, and proper wetland hydrology.

The routine on-site determination method was used to determine the wetland boundaries on the Site. Vegetative, soils, and hydrologic data were examined and collected along the upland/wetland transitions. Vegetation was sampled using the quadrant sampling procedure. Transects were established perpendicular to the wetland boundaries in order to document the vegetation, soils, and hydrology of the on-site wetlands and uplands.

The Fish and Wildlife Service issued the *National List of Plant Species That Occur in Wetlands*, (Federal Interagency Committee for Wetland Delineation, 1989), which lists species of vascular plants that are likely to occur in a wetland. The list separates plants into five categories that determine the "wetland indicator status." A species indicator status is based upon its frequency of occurrence in wetlands and are defined as follows:

- *Obligate wetland* plants (OBL) occur almost always (estimated probability >99%) in wetlands under natural conditions;
- facultative wetland plants (FACW) usually occur in wetlands (estimated probability 67-99%), but are occasionally found in upland;
- facultative plants (FAC) are equally likely to occur in wetlands or uplands (estimated probability 34-66%);
- facultative upland plants (FACU) are those species that normally occur in uplands but occasionally occur in wetlands (estimated probability 67-99%); and,
- upland (UPL) species occur almost always in uplands (estimated probability >99%) under natural conditions.

Dominant plant species were determined for each vegetative stratum by estimating aerial cover. Dominant plants are defined as those that, when ranked in decreasing order of abundance and cumulatively totaled, exceed 50% of the total dominance measure, plus those species that comprise 20% or more of the dominance measure.

Soils were analyzed to depths of 18±" inches and/or below the A-horizon. Samples were taken with a combination type hand held soil auger and/or spade shovel. Soil samples were checked in the field to determine their Munsell Soil Color Chart designation and hydric soils were identified by color. Field indicators of wetland hydrology were noted on the field data sheets. Vegetation, soils, and hydrology were analyzed concurrently to determine the wetland boundary.

Perennial, intermittent and ephemeral streams were identified by the formation of banks, apparent streambeds, and high-water marks where extended hydrologic input has formed eroded channels in the adjacent soils. Copies of the field data sheets used to document the vegetation, soils, and hydrology at select wetlands found within the Review Area are contained in Appendix B.

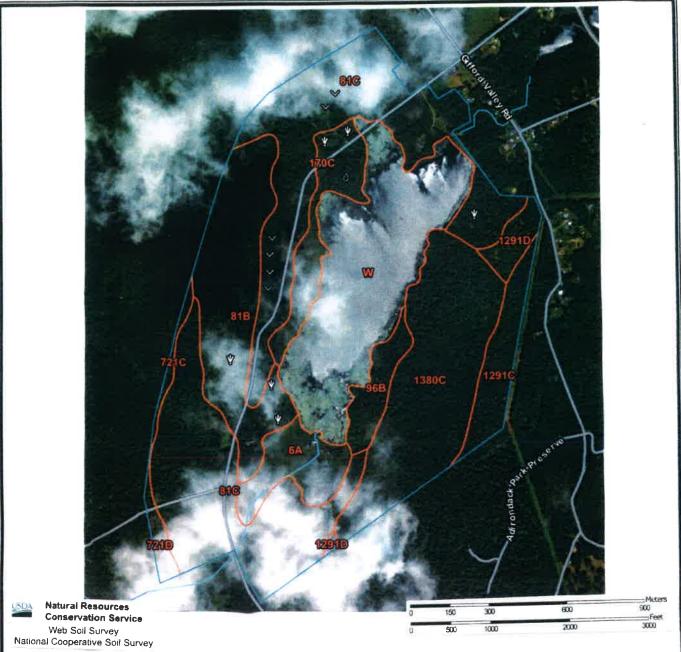
4.0 EXISTING CONDITIONS

4.1 Soils

According to the USDA Natural Resources Conservation Service Web Soil Survey 2.3 for Fulton County, New York (the "Soil Survey"), there are (10) separate soil series that occur within the boundaries of the Site. The soils are as follows: Saprists and Aquents, with 0-2% slopes, frequently ponded (6A); Charlton fine sandy loam, with 3-15 percent slopes (81B & 81C); Ridgebury loam, somewhat poorly drained, with 0-8% slopes (96B); Windsor loamy sand, with 8-15% slopes (170C); Becket-Tunbridge-Skerry complex, with 3-60% slopes, very rocky and bouldery (721C, 721D & 721F); Becket sandy loam with 3-15% slopes, very bouldery (723C); Tunbridge-Lyman complex, with 15 to 35% slopes, very rocky, very bouldery (831D); Lyman-Knob Lock complex, with 35 to 60% sloes, very rocky, very bouldery (851F); Becket-Lyman-Tunbridge complex, with 8-35% slopes, very rocky, very bouldery (1291C & 1291D); and, Becket-Skerry complex with 3-15% slopes, very bouldery (1380C) (Figure 2). The Soil Survey also identifies a large area of open water (W), which is correlated with Woodward Lake.

4.2 Vegetation

During the site reviews, NCES identified ten (10) different ecological communities within the boundaries of the Site. These ecological communities include Hemlock-Northern hardwood forest, Pine – Northern hardwood forest, Beech-maple mesic forest, Pine plantation, Successional old field, Mowed lawn with trees, Hemlock-hardwood swamp (Palustrine forested wetland); Shrub-swamp (Palustrine scrub-shrub wetland); Shallow



Soils Legend

6A = Saprists and Aquents, 0-2% percent slopes, ponded 81B = Charlton fine sandy loam, 3-8% slopes 1291 81C = Charlton fine sandy loam, 8-15% slopes 1290 96B = Ridgebury loam, 0-8% slopes 1386 170C = Windsor loamy sand, 8-15% slopes W 721C = Becket-Tunbridge-Skerry complex, 3-15% slopes	D - Becket-Lyman-Tunbridge complex, 15-35% slopes C - Becket-Lyman-Tunbridge complex, 8-15% slopes
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Base Map: Web Soil Survey 3.2 - Fulton County Soil Survey, N.Y.

Scale: As Noted



emergent marsh (Palustrine emergent wetland); and, Mesotrophic dimictic lake/pond. Each of these communities, including the Mesotrophic dimictic lake/pond, possess distinct species of vegetation that assists in defining them. The open water components of the Woodward Lake contain submergent and emergent vegetation out to a depth of 4-6'. The fringes of the open water are vegetated with submerged aquatic vegetation. The dominant species of vegetation identified in each community are identified below:

The dominant species of vegetation observed within the Hemlock-Northern hardwood forest ecological community included, but are not limited to: eastern hemlock (*Tsuga canadensis*), American beech (*Fagus grandifolia*), northern red oak (*Quercus rubra*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), black birch (*Betula lenta*), hawthorn (*Crataegus* spp.), hobblebush (*Viburnum alnifolium*), wood fern (*Dryopteris intermedia*), Christmas fern (*Polystichum agrostichoides*), Virginia creeper (*Parthenocissus quinquefolia*), common blue violet (*Viola sororia*), and partridge berry (*Mitchella repens*). Tatarian honeysuckle (*Lonicera tatarica*) was dominant in the shrub component of this forest community.

The dominant species of vegetation observed within the Pine-northern hardwood forest ecological community included, but are not limited to: white pine (*Pinus strobus*), eastern hemlock, red pine (*Pinus resinosa*), black cherry, striped maple (*Acer pensylvanicum*), American beech, wood fern, Virginia creeper, raspberry (*Rubus spp.*), and partridge berry.

The dominant species of vegetation observed within the Beech-Maple mesic forest ecological community included, but are not limited to: American beech, sugar maple, red maple, striped maple, yellow birch (*Betula allegheniensis*), witch hobble (*Viburnum lantanoides*), Japanese barberry (*Berberis thunbergii*), wood fern, braken fern (*Pteridium aquilinum*), and trout lily (*Erythronium americanum*).

The dominant species of vegetation observed within the Pine plantation ecological community included, but are not limited to: white pine, red pine (*Pinus resinosa*), Scotch pine (*Pinus sylvestris*), hobblebush, striped maple, and partridgeberry.

The dominant species of vegetation observed within the Successional old field community include, but are not limited to: tatarian honeysuckle, common buckthorn (*Rhamnus cathartica*), staghorn sumac (*Rhus typhina*), quaking aspen (*Populus tremuloides*), multiflora rose (*Rosa multiflora*), gray dogwood (*Cornus racemosa*), Canada goldenrod (*Solidago canadensis*), wild carrot (*Daucus carota*), spotted knapweed (*Centaurea maculosa*), common burdock (*Arctium minus*), evening primrose (*Oenothera biennis*), and chickory (*Cichorinum intybus*).

The dominant species of vegetation observed within the Mowed lawn with trees ecological community included, but are not limited to, white pine, eastern hemlock, American beech, sugar maple, grasses (graminae), dandelion (*Taraxacum officinale*), red clover (*Trifolium pratense*), bedstraw (Galium spp.), Canada thistle (Cirsium arvense), white clover (*Trifolium repens*), and common plantain (*Plantago major*).

The dominant species of vegetation observed within the Hemlock-hardwood swamp/Palustrine forested wetland ecological community include, but are not limited to: eastern hemlock, black spruce (*Picea mariana*), tamarack (*Larix laricina*), yellow birch, red maple (*Acer rubrum*), speckled alder (*Alnus rugosa*), northern wild raisin (*Viburnum cassinoides*), highbush blueberry (*Vaccinium corymbosum*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensibilis*), royal fern (*Osmunda regalis*), Sphagnum moss (*Sphagnum* spp.), and fowl manna grass (*Glyceria canadensis*).

The dominant species of vegetation observed within the Shrub Swamp/Palustrine scrub-shrub wetland ecological community included, but are not limited to: arrowwood (Viburnum recognitum), nannyberry (Viburnum lentago), black willow (Salix nigra), pussy willow (Salix discolor), silky dogwood (Cornus amomum), gray dogwood, speckled alder, steeplebush (Spirea tomentosa), meadowsweet (Spirea latifolia), cinnamon fern, sensitive fern, Sphagnum moss, and lakebank sedge (Carex lacustris).

The dominant species of vegetation observed within the Shallow emergent marsh/ Palustrine emergent wetlands included, but are not limited to; cattail (*Typha latifolia*), purple loosestrife (*Lythrum salicaria*), soft rush (*Juncus effusus*), dark green bulrush (Scirpus atrovirens), wool grass (Scirpus cyperinus), spike rush (Eleocharis spp.), path rush (Juncus tenuis), fox sedge (Carex vulpinoidea), jewelweed (Impatiens capensis), water smartweed (Polygonum amphibium), moneywort (Lysimachia nummularia), sensitive fern, cinnamon fern, meadowsweet, tussock sedge (Carex stricta), lakebank sedge, slender goldenrod (Solidago tenuifolia), duckweed (Lemna minor), and yellow water lily (Nymphaea odorata).

The dominant species of vegetation observed in the Mesotrophic dimictic lake/pond community included, but are not limited to: water celery (Vallisneria americana), white waterlily (Nymphaea odorata), watershield (Brasenia schreberi), large-leaf pondweed (Potamogeton amplifolius), bladderwort (Utricularia spp.), muskgrass (Chara spp.), pipewort (Eriocaulon sp.), and large stem bulrush (Schoenoplectus sp.). The lake community also possessed some of the same species of emergent wetland vegetation identified above.

4.3 Hydrology

The main sources of hydrology that influence the wetlands on the property appear to originate from direct precipitation, surface water runoff, and groundwater discharge. Precipitation events generate runoff from adjacent, steeper upland ridges that, via overland flow, funnel surface water into natural topographic areas that form intermittent and perennial streams. Scour patterns in leaf litter located on hill slopes was noted leading into these defined drainages.

Ground water discharge was noted in various locations throughout the Site where water flows on top of bedrock and/or out of highly porous sands and gravels and daylights at the ground surface. These discharge points are primarily located along the toe-of-slope of the upland ridges and where subsurface soils or bedrock interface with the ground. Surface water run-off from the adjacent uplands was also noted.

The ground water discharge and surface water runoff, feeds the streams that are found on the property. All of the streams identified are located in natural, eroded drainages that extend from the adjacent uplands toward Woodward Lake. Some of the streams flow directly into the lake while others percolate into porous soils. Woodward Lake is impounded by the concrete dam; a spillway is set at elevation 797' MSL. During high water events, excess water flows northeast over the spillway of the dam and directly into a perennial tributary of the Sacandaga River. The Sacandaga River flows to the southeast and dispenses directly into Great Sacandaga Lake.

5.0 WETLAND DELINEATION FINDINGS

During the field delineation, a total of forty-three (43) individual aquatic resources were identified within the Review Area. The cumulative acreage of the vegetated wetlands identified is 96.01± acres. In addition to the vegetated wetlands, a total of 48,482± linear feet of stream and 62.00± acres of open water (Woodward Lake) were also documented.

The locations and configurations of all aquatic resources identified, are shown on the drawings prepared by Steven E. Smith Engineering titled, "Woodward Lake Properties, LLC – Wetland Delineation" (Sheets: Cover and W-1 through W-8). A complete set of these drawings is provided as Attachment 1. Supplemental delineation information is contained in Appendix C.

6.0 JURISDICTIONAL DETERMINATIONS

6.1 APA Regulated Wetlands

Wetlands within the Adirondack Park boundaries are subject to the regulatory jurisdiction of the APA, pursuant to Sections 578 and 801 of the Adirondack Park Agency Act. Consequently, the APA was directly consulted by the Owner and the agency was provided with a copy of the conceptual wetland delineation map along with a request for APA jurisdictional confirmation.

On June 6, 2019, NCES, the Owners, and representatives from Steven E. Smith Engineering and Architecture met with staff from the APA and conducted the wetland confirmation visit. The purpose of the confirmation visit was to allow the staff from the APA to validate the boundaries of the aquatic resources and to make a formal determination of the extent of areas regulated by the APA.

As a result of the confirmation visit, it was determined by APA staff that the wetlands, streams and open water areas had been accurately delineated by NCES and correctly portrayed on the mapping provided. However, a few additional extensions of existing wetland areas were requested to be added onto the mapping for the Site. These areas were subsequently delineated and GPS located by NCES on June 14, 2019. These areas were added to the mapping that is contained in Attachment 1.

Based on the site visit with the APA Staff, it was determined that all wetlands that are 1.0± acres in size or larger, or wetlands that physically abut the open water component of Woodward Lake are regulated. In addition, all tributaries that have been identified as perennial, are also regulated. The APA regulated resources are defined in Table 2 below:

Table 2

APA Regulated Aquatic Resources

Resource Area	Wetland Acreage	Vegetative Cover Type Present
1	0.15 ± acres	PFO, PSS
2/2a	$0.09 \pm acres$	PFO, PSS
3	0.10 ± acres	PFO, PSS
4	$0.03 \pm acres$	PFO, PSS
5	$0.01 \pm acres$	PFO, PSS
6	0.02 ± acres	PFO, PSS
7	0.01 ± acres	PFO, PSS
8	$0.13 \pm acres$	PFO, PSS
9	0.12 ± acres	PFO, Rocky Headwater Stream
10	$2.23 \pm acres$	PFO, PSS, PEM
16	43.98 ± acres	PFO, PSS, PEM, Stream
16c	$1.95 \pm acres$	PFO, Rocky Headwater Stream
17	0.75 ± acres	PFO, PSS, Stream
18	0.33 ± acres	PFO, PSS, Stream
19	0.03 ± acres	PFO, PSS, Stream

Total	159.56± acres	
Lake	$85.32 \pm acres$	Woodward Lake
38	$0.81 \pm acres$	PFO
37	$0.92 \pm acres$	PFO
33	$1.74 \pm acres$	PFO
31	1.94 ± acres	PFO, PSS, Stream
29	8.46 ± acres	PFO, PSS, PEM, Stream
28	$0.08 \pm acres$	PSS
27	$0.04 \pm acres$	PSS
26	$0.002 \pm acres$	PSS
25	$0.03 \pm acres$	PSS
24/24a	2.47 ± acres	PFO, PSS, PEM
23a	6.99 ± acres	PFO, Rocky Headwater Stream
23	$0.23 \pm acres$	PSS, PEM, Stream
21	$0.60 \pm acres$	PFO, PSS, PEM

PEM = Palustrine Emergent, PSS = Palustrine Scrub Shrub, PFO = Palustrine Forested

6.2 USACE Jurisdictional Waters

Based on the observations made by NCES during the wetland delineation process, a direct hydrological connection with a tributary system of a Traditional Navigable Waterway (TNW) was identified between all of the on-site aquatic resources and off-site waters of the United States.

On October 9, 2019, NCES met with Mr. Adam Labatore of the USACE at the property to review the wetland boundaries established. The USACE concluded that the wetlands were delineated accurately and no changes to the wetland boundary map were required. Therefore, the areas identified in Table 3 fall under the regulatory jurisdiction of the USACE:

Table 3
USACE Jurisdictional Waters

Area	Size	Stream Length (Linear Feet)	Vegetative Cover Type Present
1	$0.20 \pm acres$	$217 \pm L.F.$	PFO, PSS, Stream
2/2a	0.61 ± acres	286 ± L.F.	PFO, PSS, Stream
3	$0.10 \pm acres$	$0 \pm \text{L.F.}$	PFO, PSS

4	$0.03 \pm acres$	0 ± L.F.	PFO, PSS
5	$0.03 \pm acres$ $0.01 \pm acres$	$0 \pm \text{L.F.}$ $0 \pm \text{L.F}$	PFO, PSS
6		$0 \pm \text{L.F.}$	PFO, PSS
7	$0.02 \pm acres$	0 ± L.F.	PFO, PSS
	$0.01 \pm acres$		PFO, PSS
8	$0.13 \pm acres$	192 ± L.F.	
9	0.80 ± acres	1,862 ± L.F.	Rocky Headwater Stream
10	2.23 ± acres	576 ± L.F.	PFO, PSS, PEM
11	$0.06 \pm acres$	0 ± L.F.	PFO
12	$0.14 \pm acres$	0 ± L.F.	PFO
13	$1.13 \pm acres$	1,805 ± L.F.	PSS, PEM, Stream
14	$0.21 \pm acres$	$153 \pm L.F.$	PFO, PEM, Stream
15	$0.23 \pm acres$	191 ± L.F.	PFO, Stream
16	44.68 ± acres	5,429 ± L.F.	PFO, PSS, PEM, Stream
16a	$0.23 \pm acres$	$2,102 \pm L.F.$	Rocky Headwater Stream
16b	$0.21 \pm acres$	792 ± L.F.	Rocky Headwater Stream
16c	$3.27\pm$ acres	$3,292 \pm L.F.$	PFO, Stream
17	$0.76 \pm acres$	$548 \pm L.F.$	PFO, PSS, Stream
17a	$0.09 \pm acres$	194 ± L.F.	Rocky Headwater Stream
17b	$0.17 \pm acres$	$3,311 \pm L.F.$	Rocky Headwater Stream
18	$0.46 \pm acres$	466 ± L.F.	PFO, PSS, Stream
18a	$0.33 \pm acres$	$1,860 \pm L.F.$	Rocky Headwater Stream
19	$0.16 \pm acres$	382 ± L.F.	PFO, PSS, Stream
19a	$0.38 \pm acres$	864 ± L.F.	Rocky Headwater Stream
20	$0.07 \pm acres$	$156 \pm L.F.$	Rocky Headwater Stream
21	$0.60 \pm acres$	$0 \pm L.F.$	PFO, PSS, PEM
22	0.001 ± acres	158 ± L.F.	PSS
23	0.26 ± acres	266 ± L.F.	PSS, PEM, Stream
23a	7.74 ± acres	$5,750 \pm L.F.$	PFO, Stream
24/24a	2.47 ± acres	$301 \pm L.F.$	PFO, PSS, PEM
25	$0.03 \pm acres$	$0 \pm \text{L.F.}$	PSS
26	$0.002 \pm acres$	$0 \pm L.F.$	PSS
27	$0.04 \pm acres$	$0 \pm L.F.$	PSS
28	$0.08 \pm acres$	0 ± L.F.	PSS, PEM
29	10.46 ± acres	5,136 ± L.F.	PFO, PSS, PEM, Pond
30	$0.02 \pm acres$	$0 \pm \text{L.F.}$	PFO
31	$2.26 \pm acres$	$8,525 \pm L.F.$	PFO, PSS, Stream
32	$1.04 \pm acres$	$1,852 \pm L.F.$	Rocky Headwater Stream
33	$1.74 \pm acres$	$599 \pm L.F.$	Rocky Headwater Stream
37	$0.92 \pm acres$	$604 \pm L.F.$	PFO
38	$0.81 \pm acres$	$613 \pm L.F.$	PFO
Lake	85.32 ± acres	N/A	PEM/Woodward Lake

(PEM - Palustrine Emergent, PSS - Palustrine Scrub Shrub, PFO - Palustrine Forested

6.3 DEC Regulated Resources

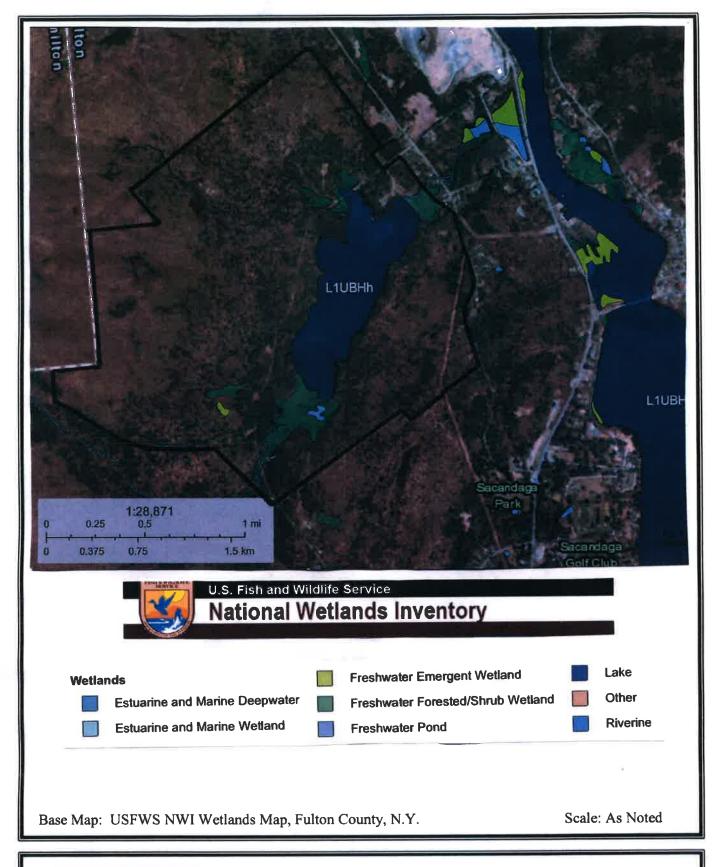
As previously stated, given the fact that the Site is contained within the boundaries of the Adirondack Park, the DEC does not have regulatory jurisdiction with regard to Article 24 regulated freshwater wetlands. Instead, wetlands within the Adirondack Park are subject to state regulation imposed by the APA.

However, the DEC was contacted by NCES to obtain information regarding the potential for presence of Article 15 regulated streams within the boundaries of the Site. Based on the review of the Article 15 Stream information that was obtained from the DEC's Environmental Resource Mapper (ERM), it has been determined that all of the streams identified on the Site are classified by the DEC as Class C or Class D streams. Therefore, they are not subject to regulation pursuant to Article 15 of the Environmental Conservation Law.

6.4 NWI Mapped Aquatic Resources

As required by the USACE, NCES visited the U.S. Fish and Wildlife Service (USFWS) website and reviewed the National Wetland Inventory (NWI) Mapper to determine if wetlands identified by the USFWS Aquatic Resource Mapping Program are present on the Site. Based on the information obtained from the NWI Mapper, several wetlands are identified as PFO1E (Palustrine, forested, Broad-leaved deciduous and seasonally flooded) and PEM1/SS1C (Palustrine emergent and scrub-shrub, broad-leaved deciduous, seasonally flooded) exist on the property (Figure 3).

When compared with the formal delineation completed by NCES, the NWI wetland map correlate directly with several of wetland areas that were delineated by NCES. In addition to the wetland communities, the NWI Mapper also identifies an open water body (Woodward Lake) on the Site. This area is specifically identified as L1UBHh (Lacustrine, limnetic, unconsolidated bottom, permanently flooded, diked/impounded). This Lacustrine system specifically correlates directly with Woodward Lake.

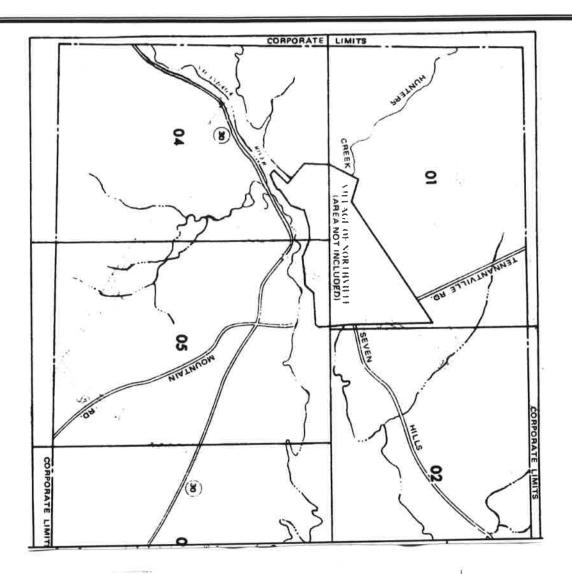




The NWI maps were generated by the USFWS to assist with identifying aquatic resources and are intended as a reference tool only. The USFWS does not regulate wetlands or streams. Therefore, no further consultation with the USFWS, with regard to regulated wetlands or streams, is required.

6.5 FEMA Flood Hazard Zone Information

As required by the USACE, NCES has reviewed the Federal Emergency Management Agency (FEMA) website for detailed information on known Flood Hazard Zones within the immediate vicinity of the Site. Based on the information obtained, the FEMA website indicates that detailed studies of the general geographic area have not been conducted. However, no currently mapped flood zones are found on, or within the immediate vicinity of the Site (Figure 4).



federal emergency management agency

FIRM FLOOD INSURANCE RATE MAP 01-08 MAPINDEX

TOWN OF NORTHAMPTON, NY FULTON COUNTY

COMMUNITY NUMBER 361400 B

Base Map: FEMA Flood Hazard Areas, Fulton County, N.Y.

Scale: None



7.0 REFERENCES

- Cowardin, L.M., V. Carter, F.C. Gocet and E.T. Laroe. December 1979. Classification of Wetlands and Deepwater Habitats of the United States. USFWS Office of Biological Service, FWS/IOBL-79/31.
- Edinger, Gregory. 2014. The Ecological Communities of New York State. New York State Department of Environmental Conservation Natural Heritage Program.
 97 pp.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.
- Federal Emergency Management Agency. 2019. Flood Hazard Areas Mapping. Great Sacandaga Lake Basin, Fulton County, New York. www.fema.gov
- New York State Department of Environmental Conservation. Environmental Resource Mapper - Article 15 Stream Information for Fulton County, New York. www.dec.ny.gov.
- U. S. Department of Agriculture, Soil Conservation Service. Web Soil Survey 3.2. Soil Survey of Fulton County, New York.
- U.S. Fish and Wildlife Service. National Wetland Inventory Mapper. NWI Wetland Mapping for Fulton County, New York. www.fws.gov/wetlands.

Appendix A

Site Photographs



Photograph 1) View of Woodward Lake, as observed from a point on the northern shore, while looking southeast across the Lake.



Photograph 2) View of Woodward Lake, as observed from a point on the eastern shore, while looking west across the Lake.



Photograph 3) View of Woodward Lake, as observed from a point on the southeastern shore, while looking northwest across the Lake.



Photograph 4) View of the forested wetlands that exist along the fringes of Woodward Lake.



Photograph 5) View of an intermittent drainage that is found on the east side of Woodward Lake. The drainage flows directly into the lake.



Photograph 6) View of a perennial stream that flows thorough Wetland Area 29.



Photograph 7) View of a perennial stream that flows through Wetland Area 31.



Photograph 8) View of an intermittent stream that is located on the western side of Woodward Lake.



Photograph 9) View of the perennial stream located in Wetland Area 16C. The culvert connects Area 16C with Wetland Area 16, which is located to the east of Collins-Gifford Valley Road.



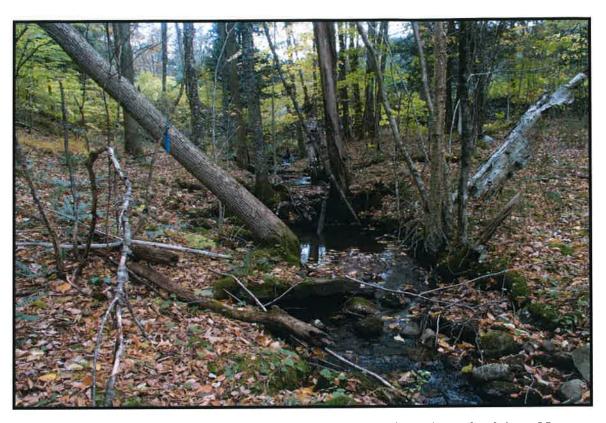
Photograph 10) View of the intermittent drainage that was flagged as Area 18A.



Photograph 11) View of the culvert and the intermittent stream that was identified as Area 18.



Photograph 12) View of the stream channel that flows through Wetland Area 19.



Photograph 13) View of the perennial stream that flows through Wetland Area 29.



Photograph 14) View of the scrub-shrub portion of Wetland Area 16C. This picture was obtained while looking south along the boundary of the wetland.



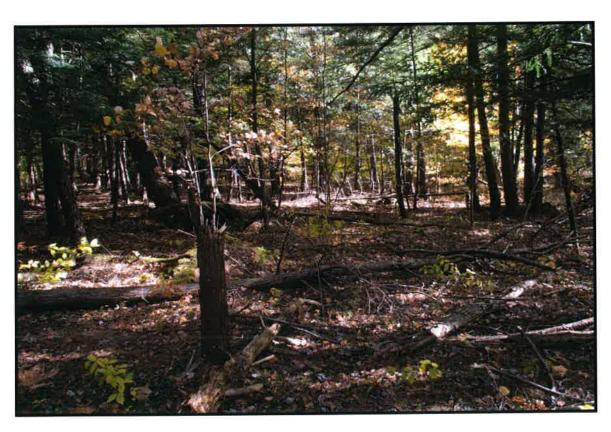
Photograph 15) View of the scrub-shrub component of Wetland Area 16C. This photograph shows the transition from scrub-shrub wetland to forested upland.



Photograph 16) View of an old stone structure that exists along the boundary of Wetland Area 16C.



Photograph 17) View of a portion of Wetland Area 23A.



Photograph 18) View of a portion of Wetland Area 33.



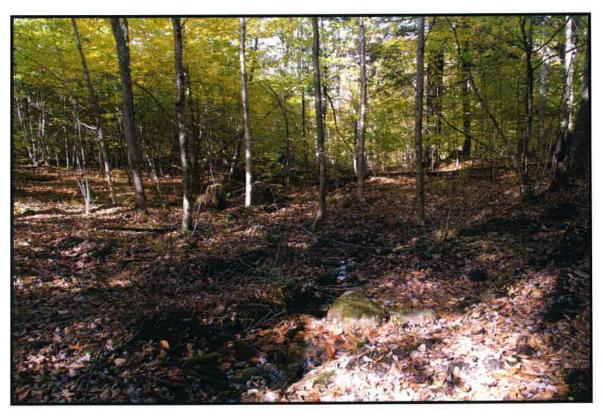
Photograph 19) View of the wetland/upland interface found along the boundary of Wetland Area 29.



Photograph 20) View of the forested wetland component of Wetland Area 29.



Photograph 21) View of an intermittent stream that flows into Wetland Area 31.



Photograph 22) View of an intermittent stream that flows into Wetland Area 17B.



Photograph 23) View of an old logging road that extends through the forested uplands located to the west of Collins-Gifford Valley Road.



Photograph 24) View of the typical conditions observed in the forested upland component of the property that is located to the east of Woodward Lake.



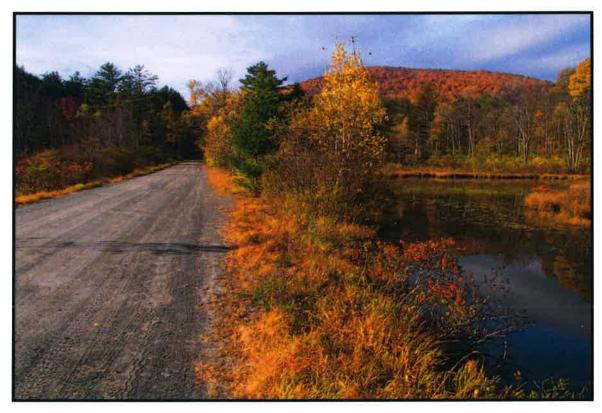
Photograph 25) View of Wetland Area 1.



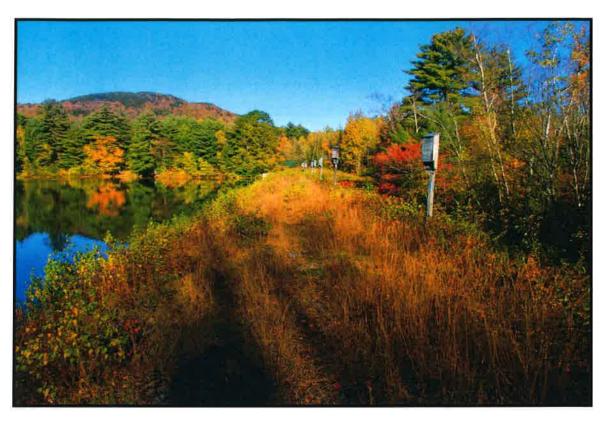
Photograph 26) of the perennial stream and adjacent wetlands that extend between Collins-Gifford Valley Road and Woodward Lake.



Photograph 27) View of the portion of Woodward Lake that has been separated from the lake property by Collins-Gifford Valley Road.



Photograph 28) View of Collins-Gifford Valley Road and the adjacent wetlands located to the west of it.



Photograph 29) View of the earthen berm that extends along the dam at the northern end of Woodward Lake.



Photograph 30) View of the existing residence that is found at the northern end of Woodward Lake.

Appendix B

Field Data Sheets

Project/Site: Woodward Lake	City/County: Fulton County	Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC		Sampling Point: 1
Investigator(s): NCES	Section, Township, Range: Town of North	
Landform (hillslope, terrace, etc.): Lake Edge	Local relief (concave, convex, none): concave	Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:		
Soil Map Unit Name: Charlton fine sandy loam (81C)		sification:
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes No (If no, explain i	n Remarks.)
Are Vegetation, Soil, or Hydrology significal	ntly disturbed? Are "Normal Circumstance	s" present? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes V No	Is the Sampled Area	7
Hydric Soil Present? Yes V No	within a Wetland? Yes	
Wetland Hydrology Present? Yes V No	If yes, optional Wetland Site ID: Wet	land Area 29
Remarks: (Explain alternative procedures here or in a separate re	eport.)	
This sample plot was obtained along the nor	•	
found along the fringe of the portion of Wood	lward Lake that is separated by	Collins-Gifford Valley
Road.		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app		Soil Cracks (B6)
Surface Water (A1) Water-Stain		Patterns (B10)
High Water Table (A2)		n Lines (B16)
☐ Saturation (A3) ☐ Marl Deposi ☐ Water Marks (B1) ☐ Hydrogen S	· '	on Water Table (C2) Burrows (C8)
		n Visible on Aerial Imagery (C9)
		or Stressed Plants (D1)
Algal Mat or Crust (B4)	Reduction in Tilled Soils (C6) Geomorp	hic Position (D2)
Iron Deposits (B5)		Aquitard (D3)
		ographic Relief (D4) tral Test (D5)
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neu	trai lest (D5)
Surface Water Present? Yes Vo Depth (inch	es): 2.5 Inches	
	es): at surface	
Saturation Present? Yes No Depth (inch		sent? Yes V No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:	
and the state of t		
Remarks:		
	hward Laka In addition two sen	arato etroame also
This area is located along the fringe of Wood dispense into the wetland community. These		
dispense into the wettand community. These	s streams are located to the wes	

VEGETATION -	· Use	scientific	names	of plants

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
Betula populifolia	5	no species:	FAC	Number of Dominant Species That Are OBL FACW or FAC 5
Acer rubrum	20	ves	FAC	That Are OBL, FACW, or FAC: 5 (A)
Ulmus americana	5	no	FACW	Total Number of Dominant Species Across All Strata: 5 (B)
Fraxinus pennsylvanica	_ 	no	FACW	
· i				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B
5.				
			5 -1	Prevalence Index worksheet: Total % Cover of: Multiply by:
	35	= Total Co		OBL species 60 x 1 = 60
Sapling/Shrub Stratum (Plot size: 15' radius)		- rotal Co	vei	FACW species 130 x 2 = 260
Alnus rugosa	35	yes	FACW	FAC species 25 x 3 = 75
Viburnum dentatum	10			FACU species $0 \times 4 = 0$
		no	FACW	UPL species $0 \times 5 = 0$
Cornus amomum	_ 25	yes		Column Totals: 215 (A) 395 (B)
Salix discolor	10	no	FACW	Prevalence Index = B/A = 1.83
i				
i		-		Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
			-	✓ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50%
	80	= Total Co	ver	3 - Prevalence Index is ≤3.0¹
lerb Stratum (Plot size: 5' radius)				4 - Morphological Adaptations¹ (Provide supporting
_ Typha latifolia	_ 10	no	OBL	data in Remarks or on a separate sheet)
Carex stricta	35	ves	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
Onoclea sensibilis	25	yes	FACW	
. Glyceria canadensis	15	по	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Impatiens capensis	5	no	FACW	Definitions of Vegetation Strata:
Solidago gigantea	10	no	FACW	
•				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
		:=		
		•		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardless
0		-		of size, and woody plants less than 3.28 ft tall.
1	-			Woody vines – All woody vines greater than 3.28 ft in
2	100			height.
4.El es dive	100	= Total Co	/er	
Voody Vine Stratum (Plot size: 15' radius)				
				
. <u>N/A</u>	-			
				Hydrophytic
				Vegetation Present? Yes ✓ No □
	0	= Total Cov	<i>i</i> er	

SOIL

Sampling Point: 1

Depth			pth needed to docu			r or contin	m the absence	of indicators.)
(inches)	Matrix Color (moist)	%	Color (moist)	ox Feature	_Type ¹	Loc ²	<u>Texture</u>	Remarks
0-4	10yr 3/1	100	None				sediment	High organic content
4-12	10yr 3/1	90	10yr 4/1	5	D	M	sandy loam	·
		_	10yr 4/6	5		PL_		
12-29	10yr 4/1	75	10yr 3/1	20	С	_ M	sandy loam	Depleted matrix
			10yr 4/6	5	<u>C</u>	PL		
¹Type: C=C	oncentration, D=D	epletion, RM	=Reduced Matrix, N	 IS=Maske	d Sand G	rains.		n: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Black H Hydroge Stratifier Deplete Thick Da Sandy M Sandy F Stripped	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R		Polyvalue Beld MLRA 149E Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark St Depleted Dark Redox Depres Redox Depres	iace (S9) (Mineral (F Matrix (F2 x (F3) urface (F6) Surface (f	LRR R, M 1) (LRR 2)	ILRA 1498	2 cm M Coast 5 cm M Dark S Polyva Thin D Iron-M Piedm Mesic Red P Very S	Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L) Salue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L, R) Park Surface (T12) (MLRA 144A, 145, 149B) Parent Material (F21) Park Surface (TF12) Park Surface (TF12) Park Surface (TF12)
	f hydrophytic veger Layer (if observed		etland hydrology mu	st be pres	ent, unle	ss disturbed	d or problemation	С.
Type:	Layer (IT observed	a):						
Depth (in	ches):						Hydric Soil	Present? Yes 📝 No 🔲
Remarks:								

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: U1
Investigator(s): NCES	Section, Township, Range: Town of Northampton
Landform (hillslope, terrace, etc.): Lake Edge	cal relief (concave, convex, none): concave Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:	Long: Datum:
Soil Map Unit Name: Charlton fine sandy loam (81C)	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of ye Are Vegetation, Soil, or Hydrology significantly Are Vegetation, Soil, or Hydrology naturally pro-	disturbed? Are "Normal Circumstances" present? Yes V
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc. $\\$
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No V Yes No V	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID:
	ern boundary of the wetland. The wetland area is ard Lake that is separated by Collins-Gifford Valley
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Rec Recent Iron Rec Thin Muck Surfa	B13) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Iduction in Tilled Soils (C6) Idec (C7) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos	Wetland Hydrology Present? Yes No No
Remarks: No indicators of hydrology were observed.	

VEGETATION – Use scientific names of plants.

Cover	Dominar Species? no yes		Dominance Test worksheet:
			Number of Dominant Species
	yes	FAC	That Are OBL, FACW, or FAC: 1 (A)
<u> </u>	1/00		Total Number of Dominant
2	yes	FACU	Species Across All Strata: (B)
<u> </u>	yes	FACU	Percent of Dominant Species That Are OBL FACW or FAC: 20%
)	no	FACU	That Are OBL, FACW, or FAC: 20% (A/B)
	no	FACU	Prevalence Index worksheet:
		-	Total % Cover of:Multiply by:
	= Total Co	ver	OBL species $\frac{0}{x} \times 1 = \frac{0}{0}$
			FACW species 0 $x = 0$ $EAC species 45$ $x_3 = 135$
)	no		170 apecies x 3 =
)	yes		FACU species 0 $x = 0$ $x = 0$ $x = 0$ $x = 0$
)	no	FACU	Column Totals: 185 (A) 695 (B)
			Prevalence Index = B/A = 3.75
		·	Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
) -	= Total Co	ver	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations¹ (Provide supporting
			data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation¹ (Explain)
	no	FACU	Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in, DBH
		·	and greater than or equal to 3.28 ft (1 m) tall.
		:	Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
	=====		Woody vines – All woody vines greater than 3.28 ft in height.
	Total Co	ver	neight.
			Hydrophytic
			Vegetation Present? Yes No V
		/er	
		= Total Co	= Total Cover no FAC yes FACU no FACU = Total Cover yes FACU no FAC no FACU

Sampling Point: U1

	cription: (Describe	to the de	pth needed to docu			or confirm	n the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Red Color (moist)	ox Feature	es	_Loc²	T-1411-	Downards
0-2	10yr 3/1	- <u>~~</u> 100	None	%	_Type ¹	LOC	Texture sediment	Remarks High organic content
4-12	10yr 3/3	90	10yr 3/1	5	C		sandy loam	
			10yr 4/4	5	С	M		X
12-18	10yr 4/4	75	10yr 3/1	20	С	M	sandy loam	
	\		10yr 4/6	5	С	M		
		-						
						,		
-				-			22	
	 		511 	-0-			; 	-
	-		e					
	ā1————————————————————————————————————		, -					
¹Type: C=Ce		oletion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belo	w Surface	(S8) (LR I	R,	1	Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep Black Hi	oipedon (A2)		MLRA 149B Thin Dark Surf		DD D MI	DA 440D		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky					Surface (S7) (LRR K, L)
	d Layers (A5)	- (444)	Loamy Gleyed		2)			lue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Matri Redox Dark Su		ı			ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F			Piedm	ont Floodplain Soils (F19) (MLRA 149B)
	Gleyed Matrix (S4) Redox (S5)		Redox Depress	sions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	Matrix (S6)							Shallow Dark Surface (TF12)
☐ Dark Sui	rface (S7) (LRR R, I	ILRA 149	B)				Other	(Explain in Remarks)
			etland hydrology mu	st be pres	ent, unless	disturbed	or problemation	D.
Restrictive L Type:	_ayer (if observed):							
Depth (inc			<u> </u>				Hydric Soil	Present? Yes No V
Remarks:								

Project/Site: Woodward Lake	City/County: Fulton County	Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC		State: NY Sampling Point: 2
	Section, Township, Range: Tow	
		<u>concave</u> Slope (%): <u>0-3%</u>
Subregion (LRR or MLRA): MLRA Lat:		
Soil Map Unit Name: Charlton fine sandy loam (81C)		NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes 🔽 No 🔲 (If i	no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Ci	rcumstances" present? Yes 📝 No 📗
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations	s, transects, important features, et
Hydrophytic Vegetation Present? Yes ✓ No ✓	Is the Sampled Area	
Hydric Soil Present? Yes V No	within a Wetland?	Yes No No
Wetland Hydrology Present? Yes V No No	If yes, optional Wetland Si	te ID: Wetland Area 29
Remarks: (Explain alternative procedures here or in a separate repo		thand. The wetlend eroo is
This sample plot was obtained along the west		
found along a perennial tributary that is located	to the west of Collins	-Gillord Valley Road
HYDROLOGY		
Wetland Hydrology Indicators:	Se	econdary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)		Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna And Deposits		Moss Trim Lines (B16) Dry-Season Water Table (C2)
Saturation (A3) Marl Deposits Water Marks (B1) Hydrogen Sulfi		Crayfish Burrows (C8)
1 	spheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
	educed Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	duction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	· · ·	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Uother (Explain	in Remarks)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) Field Observations:		1 AC-Neutral Test (EG)
Surface Water Present? Yes Vo Depth (inches): 0.75 Inches	
Water Table Present? Yes V No Depth (inches		
Saturation Present? Yes No Depth (inches): N/A Wetland Hyd	Irology Present? Yes 🔽 No 🔔
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if availal	ole:
Remarks:		
This wetland area is located within the floodpla	in of the perennial trib	utary that extends through it.
This wettaria area is isolated within the needpt	in or the perenner the	3

VEGETATION –	Use	scientific	names	of	plants.
---------------------	-----	------------	-------	----	---------

Domina Species no yes no yes	FAC FAC FACW FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index worksheet:
yes no yes = Total C	FAC FACW FACW	That Are OBL, FACW, or FAC: 5 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
no yes = Total C	FACW	Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
yes = Total C	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
= Total C		That Are OBL, FACW, or FAC: 100% (A/B)
= Total C	Cover	mative oblition, or the control (AB)
= Total C	Cover	Prevalence Index worksheet:
= Total C	over	Trovalence mask workeness
	Cover	Total % Cover of: Multiply by:
yes		OBL species 65 x 1 = 65
yes		FACW species $\frac{105}{100}$ x 2 = $\frac{210}{100}$
	FACW	FAC species $\frac{25}{}$ x 3 = $\frac{75}{}$
no	FACW	FACU species $0 x4 = 0$
·		UPL species $0 \times 5 = 0$
		Column Totals: 195 (A) 350 (B)
		Prevalence Index = B/A = 1.79
-		Hydrophytic Vegetation Indicators:
-	=	1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
= Fotal C	over	3 - Prevalence Index is ≤3.0¹
	ODL	4 - Morphological Adaptations ¹ (Provide supporting
/=		data in Remarks or on a separate sheet)
		Problematic Hydrophytic Vegetation ¹ (Explain)
9		¹ Indicators of hydric soil and wetland hydrology must
no		be present, unless disturbed or problematic.
no		Definitions of Vegetation Strata:
по	OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
G		at breast height (DBH), regardless of height.
		Sapling/shrub – Woody plants less than 3 in. DBH
		and greater than or equal to 3.28 ft (1 m) tall.
-		Herb – All herbaceous (non-woody) plants, regardless
		of size, and woody plants less than 3.28 ft tall.
		Woody vines - All woody vines greater than 3.28 ft in
= Total C	over	height.
		Hydrophytic
		Vegetation Present? Yes V No L
= Total C	over	
	= Total Conormo	= Total Cover no OBL yes OBL yes FACW no OBL no FACW no OBL

SOIL Sampling Point: 2

Profile Descripti	ion: (Describe	to the de	pth needed to docu	ment the	indicator	or confirm	n the absence of indicators.)		
Depth Matrix		0.	Redox Features						
	Color (moist) Dyr 3/1	<u>%</u> 100	Color (moist) None	%	_Type ¹	_Loc ²	Texture Remarks sediment High organic content		
	Oyr 3/1	90	10yr 4/1	5			sandy loam		
			10yr 4/6	5	C	PL			
9-17 10)yr 4/1	75	10yr 3/1	20	C	M	sandy loam Depleted matrix		
			10yr 4/6	5	C	PL			
17+	H		X. ************************************		-		gravel		
			·	***		-			
			102						
			08-						
			05-						
			W-						
		n	::::::::::::::::::::::::::::::::::::::	16.					
		letion, RN	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :		
Hydric Soil Indic			Polyvalue Belo	w Surface	e (S8) (LR I	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Epiped	lon (A2)		MLRA 149B	J)			Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (Hydrogen Su			Thin Dark Surf				5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L)		
Stratified Lay			Loamy Gleyed			., -/	Polyvalue Below Surface (S8) (LRR K, L)		
	ow Dark Surface	e (A11)	Depleted Matri		,		Thin Dark Surface (S9) (LRR K, L)		
Thick Dark So			Redox Dark Su				Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mucky Sandy Gleyer	y Mineral (S1)		Depleted Dark Redox Depress		-		Piedmont Floodplain Soils (F19) (MLRA 1498 Mesic Spodic (TA6) (MLRA 144A, 145, 1498)		
Sandy Redox			(Todax Bepicos	0.01.0 (1.0)			Red Parent Material (F21)		
Stripped Mate	rix (S6)						Very Shallow Dark Surface (TF12)		
☐ Dark Surface	(S7) (LRR R, N	ILRA 149	B)				Other (Explain in Remarks)		
			etland hydrology mu	st be pres	ent, unles:	s disturbed	d or problematic.		
Restrictive Layer Type:	r (if observed):								
Depth (inches)							Hydric Soil Present? Yes 🗸 No 🔲		
Remarks:							1		

Project/Site: Woodward Lake	_ City/County: Fulton County	Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC		Sampling Point: U2
Investigator(s): NCES	Section, Township, Range: Town of Northan	npton
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave	Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:		
Soil Map Unit Name: Charlton fine sandy loam (81C)		cation:
Are climatic / hydrologic conditions on the site typical for this time of		
Are Vegetation, Soil, or Hydrology significan		present? Yes No
Are Vegetation, Soil, or Hydrology naturally		
SUMMARY OF FINDINGS - Attach site map showing		
Hydrophytic Vegetation Present?	Is the Sampled Area	1 7
Hydric Soil Present? Yes No	within a Wetland? Yes	No <u>✓</u>
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate re	,	
This sample plot was obtained along the nort	hern boundary of Wetland Area 2	9. The wetland is
bordered by forested upland.		
HADBOLOGA		
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply		I Cracks (B6)
		atterns (B10)
High Water Table (A2) Aquatic Faur		ines (B16)
Saturation (A3) Marl Deposit		Water Table (C2)
	ulfide Odor (C1) Crayfish Bu	• •
	, ,	/isible on Aerial Imagery (C9) Stressed Plants (D1)
	` ′	Position (D2)
Iron Deposits (B5)		
Inundation Visible on Aerial Imagery (B7) Other (Expla	in in Remarks)	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	☐ FAC-Neutra	l Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inche		
Water Table Present? Yes No Depth (inche Saturation Present? Yes No Depth (inche		nt? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:	
Remarks:		
No indicators of hydrology were observed.		

TEGET TO COO CONTINUE HARRIES OF Plants	Absoluto	Dominan	t Indicator	
Tree Stratum (Plot size: 30' radius	Absolute <u>% Cover</u>		t Indicator Status	Dominance Test worksheet:
1. Fagus grandifolia	35	yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	no	FAC	
3. Quercus rubra	20	yes	FACU	Total Number of Dominant Species Across All Strata: 6 (B)
4. Prunus serotina	15	no	FACU	
5. Acer saccharum	20	ves	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
			/	
6.	- ()	· i <u>—</u> ——		Prevalence Index worksheet:
7	90	T.10	-	
1El radius	-	= Total Co	over	OBL species 0 $x = 0$ $x = 0$ $x = 0$
Sapling/Shrub Stratum (Plot size: 15' radius)	25		EAGLI	FAC species 20 x 3 = 60
1. Berberis thunbergii	25	yes	FACU	FACU species 170 x 4 = 680
2. Fagus grandifolia		yes	FACU	UPL species $\frac{0}{240}$ $x = \frac{0}{740}$
3				Column Totals: 190 (A) 740 (B)
4				
5				Prevalence Index = B/A = 3.89
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	45	= Total Co	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				3 - Prevalence Index is ≤3.0¹
1. Dryopteris intermedia	10	no	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Polystichum agrostichoides	35	ves	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
3 Lycopodium clavatum	10	no	FAC	
				Indicators of hydric soil and wetland hydrology must
4		====		be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7.				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10		<i></i>		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				9
12				Woody vines – All woody vines greater than 3.28 ft in height.
	55	= Total Co	over	neight.
Woody Vine Stratum (Plot size: 15' radius)				
1/2				
2. N/A				
3.				Hydrophytic
4				Vegetation
	0	= Total Co	over	Present? Yes No V
Remarks: (Include photo numbers here or on a separate				
	-1.7017707070			

Matrix			dox Feature					
			%	Type'	Loc*		Remarks Ligh organic content	
							High organic content	
10yr 4/4	90	· — — —		-	\ =	sandy loam		
40. 414		61		-	-		(2	
Toyr 4/4	80 	10yr 3/2	20		M	sandy loam		
77								
oncentration D=D	enletion RM	=Reduced Matrix	MS=Macker	d Sand G	raine	² l ocation	: PL=Pore Lining, M=Matrix.	
pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R	, MLRA 149	MLRA 149 Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dari Redox Depres	B) rface (S9) (I y Mineral (F d Matrix (F2 rix (F3) Surface (F6) k Surface (F8)	LRR R, N 1) (LRR I 2)	ILRA 149B) (, L)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)		
		etland hydrology m	ust be prese	ent, unles	s disturbed	or problematic	<u>, </u>	
ches):						Hydric Soil	Present? Yes No V	
	Color (moist) 10yr 3/1 10yr 4/4	Color (moist) % 10yr 3/1 100 10yr 4/4 90 10yr 4/4 80 10yr 4/4 80 Indicators: (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface (A11) ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, MLRA 149) If hydrophytic vegetation and we Layer (if observed):	Color (moist)	Color (moist) %	Color (moist) % Type 10 yr 3/1 100 None 10yr 4/4 90 10yr 3/1 5 C 10yr 3/2 5 C 10yr 4/4 80 10yr 3/2 20 C 10yr 4/4 80 10yr 3/2 20 C 10yr 4/4 80 10yr 3/2 20 C Polyvalue Below Surface (S8) (LR MLRA 149B) Sen Sulfide (A4) Camp Mucky Mineral (F1) (LRR R MLRA 149B) Camp Surface (A12) Camp Surface (A12) Camp Surface (A13) Camp Surface (A14) Camp Surface (A15) Camp Surface (A16) Camp Surface (A17) Camp Surface (A18) Camp Surface (A19) Camp Surface	Color (moist) %	Color (moist) %	

Project/Site: Woodward Lake	City/County: Fulton County		Sampling Date: 6/24/19						
Applicant/Owner: Woodward Lake Properties, LLC			Sampling Point: 3						
	Section, Township, Range: To								
Landform (hillslope, terrace, etc.): Lake Edge	Local relief (concave, convex, nor	_{ie):} concave	Slone (%): 0-3%						
LAI DA	Long:								
Soil Map Unit Name: Charlton fine sandy loam (81B)			ation;						
Are climatic / hydrologic conditions on the site typical for this time o									
Are Vegetation, Soil, or Hydrology significal			resent? Yes V No No						
Are Vegetation, Soil, or Hydrology naturally									
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
	Is the Sampled Area								
Hydrophytic Vegetation Present? Yes V No Hydric Soil Present? Yes V No	within a Wetland?	Yes	No						
Wetland Hydrology Present?	If yes, optional Wetland	Site ID: Wetland	i Area 23A						
Remarks: (Explain alternative procedures here or in a separate re	:port.)								
This sample plot was obtained along the eas	tern boundary of the po	ortion of the	wetland that is						
located on a small bench found on the hillsid	e that exists west of Co	ollins-Gifford	Valley Road.						
HYDROLOGY									
Wetland Hydrology Indicators:	and the second s		ors (minimum of two required)						
Primary Indicators (minimum of one is required; check all that appl		Surface Soil (` ′						
☐ Surface Water (A1) ☐ Water-Stain ☐ High Water Table (A2) ☐ Aquatic Faul		Drainage Patt Moss Trim Lir	` '						
Saturation (A3) Aduatic Fauli Marl Deposit			Vater Table (C2)						
	ulfide Odor (C1)	Crayfish Burn							
	izospheres on Living Roots (C3)		sible on Aerial Imagery (C9)						
☑ Drift Deposits (B3) ☑ Presence of	Reduced Iron (C4)	Stunted or Str	ressed Plants (D1)						
	Reduction in Tilled Soils (C6)	Geomorphic F	Position (D2)						
Iron Deposits (B5)	i i	Shallow Aquit	' '						
	in in Remarks)		phic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral	i est (U5)						
Surface Water Present? Yes No Depth (inch	es): 2.5 Inches								
	es): at surface								
Saturation Present? Yes No Depth (inch	The state of the s	drology Present	? Yes 1 No 1						
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos previous inspections) if avail	able:							
garage, memoring want, contain pri	stoo, provides inspectionely, in area								
Remarks:									
		l							
This area is located along a small bench that			· · · · · · · · · · · · · · · · · · ·						
streams also dispense into the wetland community adjacent forested hillside.	nunity. These originate	e at ground v	water weeps along						
the adjacent lorested filliside.									

VECETATION		!	
VEGETATION -	· Use	scientific names	of plants

Sampling	Point:	3	
Sampling	Point:		

	Absolute	Dominar	nt Indicator	
Tree Stratum (Plot size: 30' radius)	% Cover	Species'		Dominance Test worksheet:
1. Betula populifolia	5	no	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	20	yes	FAC	
3. Ulmus americana	15	yes	FACW	Total Number of Dominant Species Across All Strata: 6 (B)
4. Fraxinus pennsylvanica	5	no	FACW	
5. Tsuga canadensis	10	no	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6	-	-		
		-		Prevalence Index worksheet:
7	55	T 4 1 0	-:	Total % Cover of: Multiply by: OBL species 50
6 % vol. 15' radius		= Total Co	over	OBE species
Sapling/Shrub Stratum (Plot size: 15' radius) 1. Hamamelis virginiana	25		EA 014/	FACW species 95 x 2 = 190 FAC species 50 x 3 = 150
V8-	25	yes	FACW	FACU species 10 x 4 = 40
2. Betula populifolia	_ 25	yes	FAC	UPL species 0 x 5 = 0
3. Cornus amomum	5	no	FACW	Column Totals: 205 (A) 430 (B)
4. Salix discolor	5	no	FACW	
5		5		Prevalence Index = B/A = 2.10
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
=	60	= Total Co	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				3 - Prevalence Index is ≤3.0¹
1 Carex crinita	10	no	OBL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex stricta	25	ves	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
3. Onoclea sensibilis	25	ves	FACW	
4. Glyceria canadensis	10	no	OBL	¹Indicators of hydric soil and wetland hydrology must
5. Impatiens capensis	5			be present, unless disturbed or problematic.
		no	FACW	Definitions of Vegetation Strata:
6. Solidago gigantea	10	no	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Osmunda regalis	5	no	OBL	at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines - All woody vines greater than 3.28 ft in
	90	= Total Co	ver	height.
Woody Vine Stratum (Plot size: 15' radius	2			
1.				
2. N/A	-			
3.			-	I bedes about a
4				Hydrophytic
4.	0	T-4-1 O-		Present? Yes V. No V.
Remarks: (Include photo numbers here or on a separate		= Total Co	over	
Remarks. (include prioto numbers here or on a separate :	sileet.)			

Sampling Point: 3

		e to the de	pth needed to doc			or confirm	n the absence	of indicators.)	
Depth (inches)	Depth Matrix (inches) Color (moist) %		Color (moist)	lox Feature %	Type [†]	Loc²	Texture	Remarks	
0-3	10yr 3/1	100	None				sediment	High organic content	
3-10	10yr 3/1	90	10yr 4/1	5	D	M	sandy loam		
	(i)		10yr 4/6	5	<u>C</u>	PL	-		
10-19	10yr 4/1	75	10yr 3/1	_ 20	<u>C</u>	_M	sandy loam	Depleted matrix	
			10yr 4/6	5	<u>C</u>	PL			
			25						
¹Type: C=C Hydric Soil		pletion, RN	I=Reduced Matrix, N	/IS=Maske	d Sand Gr	ains.		r: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :	
Black H Hydroge Stratified Depleted Thick Di Sandy M Sandy F Stripped Dark Su	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R,		3) face (S9) (Mineral (F Matrix (F2 ix (F3) urface (F6) c Surface (I esions (F8)	LRR R, M 1) (LRR K 2)) F7)	LRA 149B , L)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)			
	f hydrophytic veget Layer (if observed		etland hydrology mu	ust be pres	ent, unles	disturbed	or problemation	с.	
Туре:		,. 					Hydric Soil Present? Yes V No		
Depth (in Remarks:	cnes):						,		

Project/Site: Woodward Lake	County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: U3
Investigator(s): NCES Secti	on Township Range. Town of Northampton
Landform (hillslope, terrace, etc.): hillslope Local rel	ief (concave, convex, none). concave Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:	Long: Datum:
Soil Map Unit Name: Charlton fine sandy loam (81B)	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem.	
SUMMARY OF FINDINGS – Attach site map showing san	
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No V	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	in year, optional violating one ib
This sample plot was obtained within forested upla Wetland 23A that is positioned on a small bench of Valley Road.	nds that are located adjacent to the portion of the n the hillside that exists west of Collins-Gifford
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
☐ Surface Water (A1) ☐ Water-Stained Leave ☐ High Water Table (A2) ☐ Aquatic Fauna (B13)	s (B9) Urainage Patterns (B10) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	` '
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7)	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	rious inspections), if available:
Remarks:	
No indicators of hydrology were observed.	
•	
	I

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Domina Species	nt Indicator ? Status	Dominance Test worksheet:
1. Fagus grandifolia	20	ves	FACU	Number of Dominant Species That Are ORL FACILY or FAC:
2. Tsuga canadensis	10	no	FACU	That Are OBL, FACW, or FAC:
2. Quercus rubra	20	ves	FACU	Total Number of Dominant Species Across All Strata: 6 (8)
4. Prunus serotina		no	FACU	Species Across Air Strata.
5. Acer saccharum	30	ves	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
		-))	1700	That Are Obe, 1 Aov, of tho.
6		- K		Prevalence Index worksheet:
7.		0.		Total % Cover of: Multiply by:
	95	= Total C	over	OBL species $\frac{0}{100}$ x 1 = $\frac{0}{100}$
Sapling/Shrub Stratum (Plot size: 15' radius)				FACW species $\frac{0}{2}$ $\times 2 = \frac{0}{0}$
1. Berberis thunbergii	25	yes	FACU	FAC species $0 \times 3 = 0$
2. Fagus grandifolia	20	yes	FACU	FACU species $\frac{185}{0}$ $x = 4 = \frac{740}{0}$
3.				UPL species X3 =
4				Column Totals: 185 (A) 740 (B)
5				Prevalence Index = B/A = 4.0
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
	45	= Total C	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		, rotar o		3 - Prevalence Index is ≤3.0¹
1. Dryopteris intermedia	10	no	FACU	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Polystichum agrostichoides	35	yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Vegetation Strata:
6.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8	=>=			Sapling/shrub – Woody plants less than 3 in. DBH
9	->			and greater than or equal to 3.28 ft (1 m) tall.
10			-:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12,			-,	Woody vines – All woody vines greater than 3.28 ft in height.
	45	= Total C	over	neight.
Woody Vine Stratum (Plot size: 15' radius)				
1				
2. N/A				
3.				Hydrophytic
4.				Vegetation
T(0	= Total C	over	Present? Yes No V
Remarks: (Include photo numbers here or on a separate	sheet.)	101010		
Tremand. (modes prote name of the street separate				

SOIL

Sampling Point, U3

Depth	cription: (Describ Matrix		pth needed to docu			or confirn	n the absence	of indicators.)
(inches)	Color (moist)	%	Color (moist)	ox Feature %	Type ¹	_Loc²	Texture	Remarks
0-3	10yr 3/1	100	None				sediment	High organic content
3-8	10yr 3/4	90	10yr 3/1	5	С	M	sandy loam	
	10.5		10yr 4/4	5	<u>C</u>	<u>M</u>		
8-16	10yr 4/4	80	10yr 3/2		<u>C</u>	<u>M</u>	sandy loam	
	· · · · · · · · · · · · · · · · · · ·							
	9 		-					
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Thick Dark Surface (S7) (LRR R, MLRA 149B) Thick Dark Surface (S7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Thick Dark Surface (S7) (LRR R, MLRA 149B)							Indicators 2 cm M Coast 5 cm M Dark S Polyva Thin D Iron-M Piedm Mesic Red Pi Very S Other or problematic	
Depth (inc Remarks:	ches);)				Hydric Soil	Present? Yes No 🗸

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: 4
	Section, Township, Range: Town of Northampton
	ocal relief (concave, convex, none): concave Slope (%): 0-2%
MUDA	Long: Datum:
Soil Map Unit Name: Saprists and Aquents, 0 to 2% slopes (6.	
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significant	
Are Vegetation Soil or Hydrology naturally	
	ng sampling point locations, transects, important features, etc.
	Is the Sampled Area
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No	within a Wetland? Yes No No
Wetland Hydrology Present? Yes ✓ No	If yes, optional Wetland Site ID: Wetland Area 16
Remarks: (Explain alternative procedures here or in a separate rep	oort.)
This sample plot was obtained along the north	nern boundary of the wetland
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stainer	
a delices valor (vi)	
High Water Table (A2) Saturation (A3) Aquatic Faun Marl Deposits	
	fide Odor (C1) Crayfish Burrows (C8)
, , , , , , , , , , , , , , , , , , ,	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Total I	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7) Uther (Explain	
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
	s): 1.5 Inches
	s):_at surface
Saturation Present? Yes No Depth (inche	
(includes capillary fringe)	·
Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if available:
Remarks:	
• .	ributary of Woodward Lake. The wetland exists
between Collins-Gifford Valley Road and the I	ake proper.

VEGETATION –	Use	scientific	names	of plants.

Tree Stratum (Plot size: 30' radius

Sapling/Shrub Stratum (Plot size: 15' radius

1. Platanus occidentalis

4. Fraxinus pennsylvanica

2. Acer rubrum

1. Alnus rugosa

4. Salix discolor

6....

2. N/A

2. Viburnum dentatum

5. Rhamnus cathartica

1. Osmunda regalis

3. Onoclea sensibilis

4. Glyceria canadensis

5. Impatiens capensis

6. Solidago gigantea

2. Carex stricta

Herb Stratum (Plot size: 5' radius

Woody Vine Stratum (Plot size: 15' radius

Remarks: (Include photo numbers here or on a separate sheet.)

3. Cornus amomum

3. Ulmus americana

5

			Sampling Point: 4
Absolute	Dominant	Indicator	
	Species?		Dominance Test worksheet:
5	no	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
30	yes	FAC	Total Number of Dominant _
15	no	FACW	Species Across All Strata: 7 (B)
<u>25</u>	yes ———	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:
			Prevalence Index worksheet: Total % Cover of: Multiply by:
75	= Total Co	ver	
25	yes	FACW	FAC species 40 x 3 = 120
10	no	FACW	FACU species $0 \times 4 = 0$
20	yes	FACW	UPL species $\frac{0}{240}$ $x = \frac{0}{475}$
10	no	FACW	Column Totals: 240 (A) 4/5 (B)
5	no	FAC	Prevalence Index = B/A = 1.97
15 5 25 25 20 5	no ves ves	OBL OBL FACW OBL FACW FACW	Hydrophytic Vegetation Indicators: √ 1 - Rapid Test for Hydrophytic Vegetation √ 2 - Dominance Test is >50% √ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
0 =	- Total Cov	er	Hydrophytic Vegetation Present? Yes Ves No Ves

1	10	A	Cama	of Engine	

	^		
-	r 1	п	4

Sampling Point: 4

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	the absence	of indicators.)	
Depth	Matrix	0/	Redo	x Feature	es + - 1	12	T 4	Demode	
(inches) 0-3	Color (moist) 10yr 3/1	<u>%</u> 100	Color (moist) None	%	Type ¹	Loc²	Texture sediment	Remarks High organic content	
4-12	10yr 3/1	90	10yr 4/1	5	D	M	sandy loam		
			10yr 4/6	5	C	PL			
12-18	10yr 4/1	75	10yr 3/1	20	С	M	sandy loam	Depleted matrix	
			10yr 4/6	5	C	PL			
	-	-	55						
			·						
		-	\ 				.——		
		-	-			-	-		
		-	· · · · · · · · · · · · · · · · · · ·	-					
			V		7/	ŭ		-	
		letion, RM	1=Reduced Matrix, MS	S=Maske	d Sand Gra	ains.		: PL=Pore Lining, M=Matrix.	
Hydric Soil I				0 6	(On) (I BE		_	for Problematic Hydric Soils ³ :	
Histosol Histic Ep	(A1) iipedon (A2)		Polyvalue Belov MLRA 149B)		e (S8) (LRF	¢κ,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)	
Black His	stic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4) i Layers (A5)		Loamy Mucky N			, L)		Surface (S7) (LRR K, L) Ilue Below Surface (S8) (LRR K, L)	
	Below Dark Surface	e (A11)	Depleted Matrix		-,		Thin 🗅	ark Surface (S9) (LRR K, L)	
	rk Surface (A12)		Redox Dark Su					anganese Masses (F12) (LRR K, L, R)	
	ucky Mineral (S1) leyed Matrix (S4)		Depleted Dark				Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	edox (S5)		Nedox Depress	10110 (1 0)			Red P	arent Material (F21)	
=	Matrix (S6)	AI DA 140	ID)				_	Shallow Dark Surface (TF12) (Explain in Remarks)	
	face (S7) (LRR R, N						115-55		
	hydrophytic vegetat .ayer (if observed):		etland hydrology mus	t be pres	ent, unless	disturbed	or problemation	G	
Туре:									
Depth (inc	hes):						Hydric Soil	Present? Yes V No No	
Remarks:									

Project/Site: Woodward Lake	City/County: Fulton County	Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY	Sampling Point: U4
Investigator(s): NCES	Section, Township, Range: Town of Northam	pton
Landform (hillslope, terrace, etc.): hillslope	ocal relief (concave, convex, none): concave	Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:		Datum:
Soil Map Unit Name: Saprists and Aquents, 0 to 2% slopes (6/	A) NWI dassifi	cation:
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🚺 No 🔲 (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circumstances"	present? Yes 🗸 No 🔲
Are Vegetation, Soil, or Hydrology naturally p		
SUMMARY OF FINDINGS - Attach site map showin	ng sampling point locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate rep	d uplands that exist along the nort	
portion of Wetland Area 16 that exists between	n Woodward Lake and Collins-G	ifford Valley Road.
HYDROLOGY	6 1 1 1	1 /- i-i
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Surface Soil d Leaves (B9) a (B13) brainage Pa Moss Trim L Dry-Season Crayfish Bur Cospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6) Inface (C7) Surface Soil Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu	ines (B16) Water Table (C2) rrows (C8) fisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) iitard (D3) aphic Relief (D4)
Field Observations: Surface Water Present? Yes No Depth (inche	s):	
	s):	
Saturation Present? Yes No Depth (inche (includes capillary fringe)	s): Wetland Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:	
Remarks:		
No indicators of hydrology were observed.		

VEGETATION – Use scientific names of plants.

	41 1 .	<u> </u>	4 1 2 1	
Tree Stratum (Plot size: 30' radius)	Absolute % Cover		nt Indicator Status	Dominance Test worksheet:
1 Fagus grandifolia	15	no	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	5	no	FAC	That Are OBL, FACVV, or FAC.
Pinus strobus	25	ves	FACU	Total Number of Dominant Species Across All Strata: 7 (B)
J		-	FACU	Species Across All Strata:
4. Prunus serotina	20	yes		Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5. Acer saccharum	20	yes	FACU	That Are OBL, FACW, or FAC: 0% (A/B)
6. Pinus resinosa	15	no	FACU	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	100	= Total Co	over	OBL species 0 x1 = 0
Sapling/Shrub Stratum (Plot size: 15' radius)				FACW species 0 x 2 = 0
Berberis thunbergii	20	γes	FACU	FAC species 5 x 3 = 15
2. Fagus grandifolia	5	no	FACU	FACU species 205 x 4 = 820
- 	20	ves	FACU	UPL species 0 x 5 = 0
3. Acer pennsylvanicum	20	· YCS	1700	Column Totals: 210 (A) 835 (B)
4				Prevalence Index = B/A = 3.97
5		-		
6				Hydrophytic Vegetation Indicators:
7		-		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
	45	= Total Co	over	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5' radius)				4 - Morphological Adaptations¹ (Provide supporting
1. Dryopteris intermedia	20	ves	FACU	data in Remarks or on a separate sheet)
2. Polystichum agrostichoides	45	yes	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				
				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11,		-		
12		-	-	Woody vines – All woody vines greater than 3.28 ft in height.
	65	= Total Co	over	•
Woody Vine Stratum (Plot size: 15' radius)				
1				
2. N/A				
3				Hydrophytic
4				Vegetation
7	0	= Total Co	over	Present? Yes L No U
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Depth	Matrix		=	dox Featur		. 0. 00	ii tiic abaciicc	of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture	Remarks
0-3	10yr 3/1	100	None				pine duff	High organic content
3-10	10yr 4/4	90	10yr 3/1	5	<u>C</u>	<u>M</u>	sandy loam	
		-)	10yr 3/2	5	<u>C</u>	_ <u>M</u>	-	
10-18	10yr 4/6	80	10yr 4/4	20	<u>C</u>	M	sandy loam	
Hydric Soil Histosol Histic E _I Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy R Stripped	Indicators: (A1) pipedon (A2)	ace (A11)	Polyvalue Be MLRA 149 Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre	low Surface B) rface (S9) (Mineral (F Matrix (F: rix (F3) Surface (F6 k Surface (e (S8) (LF LRR R, M 1) (LRR 2)) F7)	RR R, ILRA 149B	Indicators 2 cm M Coast 5 cm M Dark S Polyva Thin D Iron-M Piedm Mesic Red P	n: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ : Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L) slue Below Surface (S8) (LRR K, L) oark Surface (S9) (LRR K, L) langanese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks)
	f hydrophytic veget _ayer (if observed		etland hydrology m	ust be pres	ent, unles	ss disturbed	f or problemation	C.
Туре:		· 						
Depth (inc	ches):						Hydric Soil	Present? Yes No V
Remarks:								

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: 5
Investigator(s): NCES	Section, Township, Range: Town of Northampton
Landform (hillslope, terrace, etc.): Old Impoundment	ocal relief (concave, convex, none): concave Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:	Long: Datum:
Soil Map Unit Name: Charlton fine sandy loam (81C)	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of the same vegetation, Soil, or Hydrology significant are Vegetation, Soil, or Hydrology naturally processes a showing strong strong showing strong showi	ly disturbed? Are "Normal Circumstances" present? Yes 🚺 No 🔲
SOMMANT OF FINDINGS - Attach site map shown	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes ✓ No ✓ N	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: Wetland Area 16C
Remarks: (Explain alternative procedures here or in a separate rep	
stream corridor that is located to the southwe	rithin an old impoundment, located along a perennial st of Collins-Gifford Valley Road, in the southwest
corner of the Site.	St of Commis Chicke Valley Road, in the Countries
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	The state of the s
✓ Surface Water (A1) ✓ Water-Staine High Water Table (A2) ✓ Aquatic Faun	
Saturation (A3) Marl Deposits	
	lfide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1) Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck St.	
	n in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes V No Depth (inche	os). 0.5 Inches
	at surface
Saturation Present? Yes No Depth (inche	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos previous inspections) if available:
Describe Recorded Data (Stream gadge, monitoring well, aerial pric	nos, previous inspections), in available.
Remarks:	n years prior. An old stone structure and earthen herm
are located in northern portion of this part of t	n years prior. An old stone structure and earthen berm
	ne wettaria complex.

VEGETATION – Use scientific names of plants.				Sampling Point: 5
<u>Tree Stratum</u> (Plot size: 30' radius)	Absolute % Cover	Dorninant Species?	Indicator Status	Dominance Test worksheet:
1. Betula populifolia	5	no	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
2. Acer rubrum	5	no	FAC	
3. Ulmus americana	5	no	FACW	Total Number of Dominant Species Across All Strata: 5 (B)
4				Percent of Dominant Species That Are ORL FACW or FAC: 100% (A/R)
5				That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	15	= Total Co	ver	OBL species 25 x 1 = 25
Sapling/Shrub Stratum (Plot size: 15' radius)				FACW species 115 $\times 2 = ^{230}$
1 Alnus rugosa	25	yes	FACW	FAC species $30 \times 3 = 90$
2. Viburnum dentatum	5	no	FACW	FACU species 0 x 4 = 0
3. Cornus amomum	15	ves	FACW	UPL species $0 \times 5 = 0$
4. Salix discolor	10	no	FACW	Column Totals: 170 (A) 335 (B)
		110	INOV	Prevalence Index = B/A = 1.97
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	55		-	2 - Dominance Test is >50%
El radius	55	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5' radius) 1. Typha latifolia	20	no	OBL	4 - Morphological Adaptations (Provide supporting
2. Scirpus atrovirens	5		OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
3. Onoclea sensibilis	20		FACW	Problematic rydrophytic vegetation (Explain)
3. Scircus cyperinus	15		FACW	¹ Indicators of hydric soil and wetland hydrology must
5. Solidago tenuifolia	20		FAC	be present, unless disturbed or problematic.
6. Solidago gigantea	20	ves	FACW	Definitions of Vegetation Strata:
438				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10	/			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12	100			Woody vines – All woody vines greater than 3.28 ft in height.
45 madius	100	= Total Cov	er	-
Woody Vine Stratum (Plot size: 15' radius				
1				
2. <u>N/A</u>				
3			-	Hydrophytic
4				Vegetation Present? Yes ✓ No ☐
:	0	Total Cov	er	
Remarks: (Include photo numbers here or on a separate sh	neet.)			

SOIL

Sampling Point: 5

Profile Desc	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix			ox Feature				Demode
(inches) 0-6	Color (moist)	<u>%</u> 100	Color (moist)	%	Type ¹	Loc²	Texture sediment	Remarks Ligh organic content
	10yr 3/1		None					High organic content
6-16	10yr 3/1	90	10yr 4/1	5	D	<u>M</u>	sandy loam	
			10yr 4/6	5	C	PL		
16-20	10yr 4/1	60	10yr 3/1	30	<u>C</u>	<u>M</u>	sandy loam	Depleted matrix
	=======================================		10yr 4/6	10	<u>C</u>	PL		
	01							
			V-1	T . T				
			()= 					
	33		15					
	·	×	Ø	-6	z <u></u>			
			1					
		letion, RM	I=Reduced Matrix, M	S=Masked	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil			D Salandar Sala	0	(OO) (LD)		-	for Problematic Hydric Soils ³ :
Histosol Histic Er	(A1) Dipedon (A2)		Polyvalue Belo		(S8) (LR	κк,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	, ace (S9) () 🔲 5 cm N	flucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky I			, L)		Surface (S7) (LRR K, L)
	i Layers (A5) i Below Dark Surfac	ο (Δ11)	Loamy Gleyed Depleted Matri		2)			lue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L)
	ark Surface (A12)	C (A11)	Redox Dark Su)			anganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Depleted Dark	Surface (F				ont Floodplain Soils (F19) (MLRA 149B)
	Gleyed Matrix (S4)		Redox Depress	sions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	ledox (S5) Matrix (S6)							hallow Dark Surface (TF12)
	rface (S7) (LRR R, N	/ILRA 149	B)					(Explain in Remarks)
³ Indicators of	f hydrophytic vegetat	tion and w	etland hydrology mu	st be pres	ent, unies	s disturbed	l or problemation	o .
	_ayer (if observed):							
Type:							Hydric Soil	Present? Yes
Depth (inc	ches):						riyuric 30ii	rresenti 103 <u>La</u> No
Remarks:								

Project/Site: Woodward Lake	City/County: Fulton County	_ Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY	Sampling Point: U6
Investigator(s): NCES	Section, Township, Range: Town of Northan	npton
Landform (hillslope, terrace, etc.): hillslope Lo	ocal relief (concave, convex, none): concave	Slope (%): 0-3%
	Long:	
Soil Map Unit Name: Charlton fine sandy loam (81C)	NWI dassifi	
Are climatic / hydrologic conditions on the site typical for this time of ye		
Are Vegetation, Soil, or Hydrology significantly		present? Yes V No
Are Vegetation, Soil, or Hydrology naturally pro		
SUMMARY OF FINDINGS – Attach site map showing		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No ✓ No ✓ No ✓	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repo		
This sample plot was obtained within forested southern portion of Woodward Lake.	uplands that border the wetlands	s located along the
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Leaves (B9) (B13) (B15) de Odor (C1) spheres on Living Roots (C3) educed Iron (C4) duction in Tilled Soils (C6) Face (C7) Surface Soil Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Geomorphic Shallow Aqu	Cracks (B6) atterns (B10) Lines (B16) Water Table (C2) rrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) Litard (D3) aphic Relief (D4)
Field Observations:		
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Yes No Depth (inches) Yes No Depth (inches)):): Wetland Hydrology Prese	nt? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:	
Remarks: No indicators of hydrology were observed.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius	Absolute		nt Indicator	Dominance Test worksheet:
1 Fagus grandifolia	<u>% Cover</u> 20			Number of Dominant Species
	+)	yes	FACU	That Are OBL, FACW, or FAC: 1 (A)
2. Acer rubrum	10	no	FAC	Total Number of Dominant
3. Larix laricina		yes	FAC	Species Across All Strata: 6 (B)
4. Pinus strobus	25	no	FACU	Percent of Dominant Species
5. Acer saccharum	20	yes	FACU	That Are OBL, FACW, or FAC: 16% (A/B)
6				Bassalanaa laday warkahaati
7.	-			Prevalence Index worksheet:
	95	T.1.10		
15' rodius		= Total C	over	
Sapling/Shrub Stratum (Plot size: 15' radius)	0.5			00
1. Berberis thunbergii	25	yes	FACU	440 560
2. Fagus grandifolia	5	yes	FACU	
3				UPL species 0 $x = 5$ 650 (B)
4				
5.				Prevalence Index = B/A = 3.82
			- 33	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7,				2 - Dominance Test is >50%
	_30 = Total Cover		over	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5' radius)				4 - Morphological Adaptations¹ (Provide supporting
1. Dryopteris intermedia	10	по	FACU	data in Remarks or on a separate sheet)
2. Polystichum agrostichoides	35	yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7	. ——	·		at breast height (DBH), regardless of height.
8			÷:	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
		**	*	Woody vines - All woody vines greater than 3.28 ft in
12	45	T		height.
15' radius	-10	= Total C	over	
Woody Vine Stratum (Plot size: 15' radius)				
1,	-			
2. N/A				
3				Hydrophytic
4.				Vegetation
1.	0	= Total C	over	Fresenti 103 NO
Remarks: (Include photo numbers here or on a separate	sheet.)			
Contains (indiana prints in the repair of	····,			
				κ.

Sampling Point: U6

pth	Matrix			lox Feature		Loc ²	Texture		Remarks	
ches)	Color (moist)	%	Color (moist)	%	Type	Loc	sediment	High orga	anic content	<u> </u>
4	10yr 3/1	100	None					111911 0191		
4-8 10yr 3/2 90	10yr 3/2	90	10yr 3/1	_ 5	<u>C</u>	<u>M</u>	sandy loam			
		10yr 4/4	5	C	_ <u>M</u>					
18	10yr 4/4	70	10yr 3/2	20	С	_ <u>M</u>	sandy loam			
	-		10yr 5/6	10	<u>C</u>	<u>M</u>	sand			
					-					
C=	Concentration D=	Depletion R	M=Reduced Matrix,	MS=Maske	ed Sand	Grains.	² Locatio	n: PL=Pore L	ining, M=Matrix	C.
dric Soi	I Indicators:	ocpiciion, 1	Polyvalue Be				Indicator	s for Problem	natic Hydric Sc LRR K, L, MLR	DIIS : Δ 1/10P\
Stratifi Deplet Thick Sandy Sandy Sandy Stripp	gen Sulfide (A4) ed Layers (A5) ed Below Dark Su Dark Surface (A12) Mucky Mineral (S) Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR	() 1) 4)	Loamy Muck Loamy Gleyo Depleted Ma Redox Dark Depleted Da Redox Depro	ed Matrix (F atrix (F3) Surface (F6 ark Surface	F2) 6) (F7)		Thin Iron-Pied Mesi	Dark Surface Manganese M mont Floodpla c Spodic (TA6 Parent Materi	Surface (TF12	.) RR K, L, R MLRA 149 , 145, 149E
ndicators	of hydrophytic ve	getation and	wetland hydrology i	must be pre	esent, un	ess disturb	ed or problema	itic.		
estrictiv	e Layer (if observ	/ed):								. [7]
							Undeig Sa	oil Present?	Yes	No 🔽
Туре:	(inches):						Hydric 3	Jii Piesenti		

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: 7
Investigator(s): NCES	Section, Township, Range: Town of Northampton
Landform (hillslope, terrace, etc.): Hillside Drainage	Local relief (concave, convex, none): concave Slope (%): 0-3%
Subregion (LRR or MLRA); MLRA Lat:	
Soil Map Unit Name: Charlton fine sandy loam (81C)	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significan	
Are Vegetation, Soil, or Hydrology naturally	
•	ng sampling point locations, transects, important features, etc.
	Is the Sampled Area
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No	within a Wetland? Yes No No
Wetland Hydrology Present? Yes ✓ No	If yes, optional Wetland Site ID: Wetland Area 2 / 2A
Remarks: (Explain alternative procedures here or in a separate re	port.)
This sample plot was obtained along the north	thern boundary of the wetland.
	•
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stains	
☐ Surface Water (A1) ☐ Water-Staine ☐ High Water Table (A2) ☐ Aquatic Faur	
Saturation (A3) Marl Deposit	
prompt to the state of the stat	ulfide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) 🔲 Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Si	
Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)	in in Remarks)
Field Observations:	
Surface Water Present? Yes No Depth (inche	es): <u>2.5 Inches</u>
Water Table Present? Yes No Depth (inche	es): at surface
Saturation Present? Yes No Depth (inche	es): N/A Wetland Hydrology Present? Yes V No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
	e wetland. The wetland drains into an intermittent
stream that flows west into Woodward Lake.	5 Wetland. The Wetland drains into an intermitent
official file flows west file treatment bake.	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 7
Tree Stratum (Plot size: 30' radius	Absolute % Cover		t Indicator Status	Dominance Test worksheet:
1. Betula populifolia	25	yes	FAC	Number of Dominant Species 7
2. Acer rubrum	20	ves	FAC	That Are OBL, FACW, or FAC: 7 (A)
3. Ulmus americana	5	no	FACW	Total Number of Dominant Species Across All Strata: 7 (B)
4. Fraxinus pennsylvanica	5	no	FACW	(0)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	55	= Total Co	ver	OBL species 30 x 1 = 30
Sapling/Shrub Stratum (Plot size: 15' radius				FACW species 140 x 2 = 280
1 Hamamelis virginiana	35	yes	FACW	FAC species 45 x 3 = 90
2. Viburnum dentatum	5	no	FACW	FACU species _0 x 4 = _0
3 Cornus amomum	20	ves	FACW	UPL species 0 x 5 = 0
4 Salix discolor	5	no	FACW	Column Totals: 215 (A) 400 (B)
***************************************			$\overline{}$	Prevalence Index = B/A = 1.86
5.				
6				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7	-			1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
	65	= Total Co	ver	✓ 2 - Dominance Test is >50% ✓ 3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5' radius)				4 - Morphological Adaptations ¹ (Provide supporting
1. Typha latifolia	5	no	OBL	data in Remarks or on a separate sheet)
2. Carex stricta	20	γes	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
3. Onoclea sensibilis	35	yes	FACW	
4. Glyceria canadensis	5	no	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Impatiens capensis	20	yes	FACW	Definitions of Vegetation Strata:
6. Solidago gigantea	10	no	FACW	_
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8.				
9.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
12.			-	Woody vines – All woody vines greater than 3.28 ft in
	95 .	= Total Co		height.
Woody Vine Stratum (Plot size: 15' radius)		- Total Co	vei	
1 2. N/A			-	
2.				
3	 			Hydrophytic Vegetation — —
4	-		-	Present? Yes V No V
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sh		= Total Cov	ver	

SOIL

Sampling Point: 7

Depth	Matrix		pth needed to doo	ument the dox Feature		r or contir	n the absence	of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type	_Loc ²	Texture	Remarks
0-2	10yr 3/1	100	None	-27			sediment	High organic content
2-10	10yr 3/1	90	10yr 4/1	5	D	M	sandy loam	
40.40	40 444	7.5	10yr 4/6	5	- <u>C</u>	PL	·	
10-18	10yr 4/1	75	10yr 3/1	20	_ <u>C</u>	_ <u>M</u>	sandy loam	Depleted matrix
			10yr 4/6	<u>5</u>	<u>C</u>	PL		
	5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00							
¹ Type: C=C Hydric Soil	oncentration, D=De	epletion, RM	=Reduced Matrix, I	MS=Maske	d Sand G	rains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy R Stripped Dark Sui	bipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa erk Surface (A12) flucky Mineral (S1) fleyed Matrix (S4) tedox (S5) Matrix (S6) rface (S7) (LRR R,	MLRA 149	Polyvalue Bel MLRA 149 Thin Dark Sul Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dari Redox Depres	B) face (S9) (Mineral (F) Min	LRR R, N 1) (LRR 1 2) 1 =7)	ILRA 149B K, L)	Coast 5 cm M Dark S Polyva Thin D Iron-Mail Mesic Red Pail Very S Other (Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L) Idue Below Surface (S8) (LRR K, L) Iark Surface (S9) (LRR K, L) Iark Surface (S9) (LRR K, L) Iarguese Masses (F12) (LRR K, L, R) Interpretation of the surface (TA6) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) Interpretation of the surface (TF12) Ideal (Explain in Remarks)
	ayer (if observed		onana nyararagy m	201 20 p. 00	J. 11, 211101			
Type: Depth (inc	ches):						Hydric Soil	Present? Yes 📝 No 🔲
Remarks:								

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: U7
Investigator(s): NCES	Section, Township, Range: Town of Northampton
Landform (hillslope, terrace, etc.): Hillside Drainage	Local relief (concave, convex, none): concave Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:	Long: Datum:
Soil Map Unit Name: Charlton fine sandy loam (81C)	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significan	tly disturbed? Are "Normal Circumstances" present? Yes Ve No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report of the sample plot was obtained within forested Wetland Area 2/2A.	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: port.) d upland that exists along the northern boundary of
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Aquatic Faur Aquatic Faur Marl Deposits Oxidized Rhi: Presence of I Recent Iron F Thin Muck St Other (Explain	Drainage Pattems (B10) Moss Trim Lines (B16) S (B15) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Reduced Iron (C4) Reduction in Tilled Soils (C6) Drainage Pattems (B10) Moss Trim Lines (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Field Observations: Surface Water Present? Yes No Depth (inche	
	es):
Saturation Present? Yes No Depth (inche	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	
Describe Recorded Data (Stream gauge, monitoring well, aerial pric	nos, previous inspections), ir available.
No indicators of hydrology were observed.	

Tree Stratum (Plot size: 30' radius)	Absolute % Cover		nt Indicator ? Status	Dominance Test worksheet:
1. Fagus grandifolia	35	ves	FACU	Number of Dominant Species That Are ORL FACW or FAC: 0
2. Acer rubrum	10	no	FAC	That Are OBL, FACW, or FAC: (A)
3. Quercus rubra	5	no	FACU	Total Number of Dominant Species Across All Strata: 5 (B)
Prunus serotina	15	no	FACU	
5. Acer saccharum	25	ves	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6. Tsuga canadensis	10	no	FACU	
		-110	17100	Prevalence Index worksheet:
7,	100			Total % Cover of: Multiply by:
15! radius	100	= Total C	over	OBL species 0 $x = 0$ FACW species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 15' radius)	25		FAOU	FACW species $\frac{0}{20}$ $x = \frac{0}{60}$
1. Berberis thunbergii	<u>25</u>	yes	_FACU_	FACU species 180 x 4 = 720
2. Fagus grandifolia	_ 20	ves	_ FACU	UPL species 0 x 5 = 0
3				Column Totals: 200 (A) 780 (B)
4				
5				Prevalence Index = B/A = 3.90
6				Hydrophytic Vegetation Indicators:
7.		3.5		1 - Rapid Test for Hydrophytic Vegetation
3	45	= Total C	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius	-	, otal o	•••	3 - Prevalence Index is ≤3.01
1. Dryopteris intermedia	10	no	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Polystichum agrostichoides	35	ves	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Lycopodium clavatum	10	no	FAC	~
4	- ,	-		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			-	
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.		s 		
12	4			Woody vines – All woody vines greater than 3.28 ft in height.
	55	= Total C	over	noight.
Woody Vine Stratum (Plot size: 15' radius				
1		:-		
2. N/A				
3				Hydrophytic
4		~=		Vegetation Present? Yes □ No ☑
	0	= Total Co	over	Present? Yes L No V
Remarks: (Include photo numbers here or on a separate	sheet.)			J

Sampling Point: U7

Profile Desc	ription: (Describe	to the de	pth needed to docun	nent the	indicator	or confirm	n the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (maint)	x Feature		_Loc2	Touturo	Domarka
0-2	10yr 3/1	100	Color (moist) None	%	_Type ¹	Loc	Texture sediment	Remarks High organic content
2-8	10yr 4/4	90	10yr 3/1	5	\overline{C}	M	sandy loam	
			10yr 3/2	5	C	M	-	
8-18	10yr 4/4	90	10yr 4/6	10	С	M	sandy loam	
k		·	W 					
			/. 					
		£):	00					
			53 4					
			(r a	-			4	
			-					
'Type: C=Co		letion, RM	I=Reduced Matrix, MS	=Masked	d Sand Gra	ins.		n: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below		(S8) (LRF	R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep Black His	ipedon (A2) stic (A3)		MLRA 149B) Thin Dark Surface		LRR R. MI	RA 149B)	-	Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Loamy Mucky M	lineral (F	1) (LRR K,		Dark S	Surface (S7) (LRR K, L)
	Layers (A5)	- (0.44)	Loamy Gleyed N		2)			alue Below Surface (S8) (LRR K, L)
	Below Dark Surface rk Surface (A12)	e (ATT)	Depleted Matrix Redox Dark Sur					ark Surface (S9) (LRR K, L) langanese Masses (F12) (LRR K, L, R)
Sandy M	ucky Mineral (S1)		Depleted Dark S	Surface (F			Piedm	ont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4) edox (S5)		Redox Depressi	ons (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	Matrix (S6)							Shallow Dark Surface (TF12)
☐ Dark Sur	face (S7) (LRR R, N	ILRA 149	B)				Other	(Explain in Remarks)
			etland hydrology must	t be prese	ent, unless	disturbed	or problemation	с.
	ayer (if observed):							
Type: Depth (inc	hes):						Hydric Soil	Present? Yes No V
Remarks:	nes).							

Project/Site: Woodward Lake	City/County: Fulton County Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC	State: NY Sampling Point: 8
Investigator(s): NCES	Section, Township, Range: Town of Northampton
Landform (hillslope, terrace, etc.): Hillslope	ocal relief (concave, convex, none): concave Slope (%): 3-1
Subregion (LRR or MLRA): MLRA Lat:	
Soil Map Unit Name: Becket-Tunbridge-Skerry complex (7210	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal Circumstances" present? Yes V
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, e
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate rep	
This sample plot was obtained along the sout	heastern boundary of the wetland.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna Aquatic Fauna	· ·
Saturation (A3) Water Marks (B1) Hydrogen Sul	it (B15)
	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7) Dther (Explain	n in Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inche:	s): 3.5 Inches
Surface Water Present? Yes V No Depth (inche: Yes V No Depth (inche: Yes V)	s):
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo-	tos, previous inspections), if available:
Remarks:	
This area is located along a tributary that exte	ends downslope and into Wetland Area 16A.

Sampling	Point:	8	

30' radius	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' radius) Betula populifolia	<u>% Cover</u> 15		Status FAC	Number of Dominant Species
	35	no	FAC	That Are OBL, FACW, or FAC: 5 (A)
1 Illustration	- 55	yes	FACW	Total Number of Dominant
3. Ulmus americana	: 	no		Species Across All Strata: 5 (B)
4. Fraxinus pennsylvanica	5	no	FACW	Percent of Dominant Species
5. Betula allegheniensis	15	no	FAC	That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7			s 	Total % Cover of: Multiply by:
	75	= Total Co	ver	OBL species 70 x 1 = 70
Sapling/Shrub Stratum (Plot size: 15' radius)				FACW species 40 x 2 = 80
1. Betula populifolia	35	yes	FAC	FAC species 100 x 3 = 300
2		·		FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
3				450
4.				
5.				Prevalence Index = B/A = 2.14
6.				Hydrophytic Vegetation Indicators:
7.		-		1 - Rapid Test for Hydrophytic Vegetation
··-	35	= Total Co	vor	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		- Total Co	vei	3 - Prevalence Index is ≤3.0¹
1. Symplocarpus foetidus	20	yes	OBL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex stricta	35		OBL	Problematic Hydrophytic Vegetation (Explain)
3. Onoclea sensibilis	25	yes	FACW	Troblematic Hydrophytic regulation (Explain)
4. Glyceria canadensis	15	no	OBL	¹ Indicators of hydric soil and wetland hydrology must
5. Impatiens capensis	5		FACW	be present, unless disturbed or problematic.
VW 	·	no	FACVV	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	· · · · · · · · · · · · · · · · · · ·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9			-	and greater than or equal to 3.28 ft (1 m) tall.
10				Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				71
12.,		.——		Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Co	ver	neight.
Woody Vine Stratum (Plot size: 15' radius)				
1,				
2. N/A				
3				Hydrophytic
4.				Vegetation
2	0	= Total Co	ver	Present? Yes V No V
Remarks: (Include photo numbers here or on a separate	sheet.)			

(inches)	Matrix Color (moist)	%	Color (moist)	dox Featur	Type ¹	Loc ²	Texture	Remarks
0-4	10yr 3/1	100	None				sediment	High organic content
4-10	10yr 3/1	90	10yr 4/1	5	D	М	sandy loam	
			10yr 4/6	5	С	PL		
10-18	10yr 4/1	75	10yr 3/1	20	С	M	sandy loam	Depleted matrix
	el		10yr 4/6	5	C	PL		
	10		1887		-			
	×		0.22					<u> </u>
	·		·					
	· ·		88					
	R i-		-					***
	·							*************************************
	oncentration, D=D	epletion, RM	I=Reduced Matrix,	MS=Maske	d Sand Gr	ains		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be	low Surface	e (S8) (LR	R.	-	Muck (A10) (LRR K, L, MLRA 149B)
Histic E	oipedon (A2)		MLRA 149	B)			Coast	Prairie Redox (A16) (LRR K, L, R)
17 (0)	istic (A3) en Sulfide (A4)		Thin Dark Su					Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L)
	d Layers (A5)		Loamy Gleye	•		, -)		lue Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ace (A11)	Depleted Mat	rix (F3)			Thin D	ark Surface (S9) (LRR K, L)
	ark Surface (A12) Iucky Mineral (S1)		Redox Dark S Depleted Dar					anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149E
	Gleyed Matrix (S4)		Redox Depre		-			Spodic (TA6) (MLRA 144A, 145, 149B
Sandy R	Redox (S5)						Red Pa	arent Material (F21)
	Matrix (S6)							hallow Dark Surface (TF12)
T Dark Su	rface (S7) (LRR R	, MLRA 149	В)				U Other ((Explain in Remarks)
			etland hydrology m	ust be pres	ent, unles	disturbed	or problemation).
Type:	_ayer (if observed	1):						
Depth (inc	ches):						Hydric Soil	Present? Yes V No No
emarks:	11.5							

Project/Site: Woodward Lake	City/County: Fulton County	Sampling Date: 6/24/19
Applicant/Owner: Woodward Lake Properties, LLC		Sampling Point: U8
Investigator(s): NCES	Section, Township, Range: Town of Northam	ipton
Landform (hillslope, terrace, etc.): hillslope	ocal relief (concave, convex, none): concave	Slope (%): 0-3%
Subregion (LRR or MLRA): MLRA Lat:	Long:	
Soil Map Unit Name: Becket-Tunbridge-Skerry complex (721C) NWI classific	cation:
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation, Soil, or Hydrology significant! Are Vegetation, Soil, or Hydrology naturally possible to the site map showing the site site site site site site site sit	year? Yes No (If no, explain in R ly disturbed? Are "Normal Circumstances" problematic? (If needed, explain any answe	present? Yes No
		, , , , , , , , , , , , , , , , , , , ,
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area within a Wetland? Yes	No 🔽
Hydric Soil Present? Wetland Hydrology Present? Yes No V	•	
Remarks: (Explain alternative procedures here or in a separate repr	If yes, optional Wetland Site ID:ort.)	
This sample plot was obtained within forested boundary of Wetland 37.		ne southeastern
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
Surface Water (A1) Water-Stained		
High Water Table (A2) Aquatic Fauna Saturation (A3) Marl Deposits		Water Table (C2)
Water Marks (B1) Hydrogen Sulf		
Sediment Deposits (B2) Oxidized Rhizo	ospheres on Living Roots (C3) 🔲 Saturation Vi	isible on Aerial Imagery (C9)
		itressed Plants (D1)
		Position (D2)
│		aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral	
Field Observations:		,
Surface Water Present? Yes No Depth (inches	s):	
Water Table Present? Yes No Depth (inches		
Saturation Present? Yes No Depth (inches (includes capillary fringe)	s): Wetland Hydrology Presen	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:	
Remarks:		
No indicators of hydrology were observed.		
•		

Tree Stratum (Plot size: 30' radius	Absolute		nt Indicator	Dominance Test worksheet:
1. Fagus grandifolia	<u>% Cover</u> 35	<u>Species</u> ves	? Status FACU	Number of Dominant Species
2. Acer rubrum	10	no	FAC	That Are OBL, FACW, or FAC: 0 (A)
3. Tsuga canadensis	25		FACU	Total Number of Dominant
4. Prunus serotina	5	yes	FACU	Species Across All Strata: 5 (B)
		no		Percent of Dominant Species That Are ORL FACIAL or FAC: 0%
5. Acer saccharum	_ 10	no ———	FACU	That Are OBL, FACW, or FAC: 070 (A/B)
6			163	Prevalence Index worksheet:
7			-	Total % Cover of: Multiply by:
	85	= Total C	over	OBL species $0 \times 1 = 0$
Sapling/Shrub Stratum (Plot size: 15' radius				FACW species $0 \times 2 = 0$
1. Berberis thunbergii	25	yes	FACU	FAC species 20 x 3 = 60
2. Fagus grandifolia	20	yes	FACU	FACU species 165 $x = 660$ UPL species 0 $x = 660$ 0
3				700
4.				Column Totals: (A) (B)
5.				Prevalence Index = B/A = 3.89
6.				Hydrophytic Vegetation Indicators:
7		9 =		1 - Rapid Test for Hydrophytic Vegetation
	45	= Total C		2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)	,	- Total C	over	3 - Prevalence Index is ≤3.0¹
1. Dryopteris intermedia	10	no	FACU	4 - Morphological Adaptations ¹ (Provide supporting
2 Polystichum agrostichoides	35	ves	FACU	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Viola sororia	10	no no	FAC	Problematic Hydrophytic Vegetation (Explain)
	4	2	-1710	¹ Indicators of hydric soil and wetland hydrology must
4		% =	-	be present, unless disturbed or problematic.
5.		<u> </u>		Definitions of Vegetation Strata:
6		÷		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7.		:	-:	at breast height (DBH), regardless of height.
8	=		-247	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	55	= Total Co	over	height.
Woody Vine Stratum (Plot size: 15' radius				
1.				
2. N/A				
3.			100	Mindrophysia
4				Hydrophytic Vegetation — —
7-	0	- Total Co		Present? Yes No 🗸
Remarks: (Include photo numbers here or on a separate		= Total Co	over	
Tremarks. (Include photo humbers here of our a separate a	sileet.)			

Sampling Point: U8

C		i	ı
J	u	ı	ь

Profile Desc	cription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redo	x Feature %	Type ¹	Loc ²	Texture	Remarks
0-3	10yr 3/1	100	None				sediment	High organic content
3-8	10yr 3/2	80	10yr 3/1	5			sandy loam	
			10yr 4/4	15	C		-	
8-18	10yr 4/4	80	10yr 3/2	20	C	M	sandy loam	-
0-10	10y1 4/4	- 00	10yl 3/2		<u> </u>	IVI	Sandy Idani	
=======================================			·	-	S			
			s 	3				
	·		S-1		·			·
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	×		000					
	·		(-			
Type: C=Co	oncentration D=Den	letion RM	I=Reduced Matrix, MS	S=Masker	d Sand Gra	ains	2l ocation	: PL=Pore Lining, M=Matrix.
Hydric Soil I		ionory	- Noddodd Indilia, inic	, maono	u 04/15 0/1			for Problematic Hydric Soils ³ :
Histosol	, ,		Polyvalue Belov		(S8) (LRF	RR,		Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	nipedon (A2) stic (A3)		MLRA 149B) Thin Dark Surfa		LRR R. MI	RA 149B		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky N	lineral (F	1) (LRR K		Dark S	Surface (S7) (LRR K, L)
_	Layers (A5)	- (0.44)	Loamy Gleyed I		2)			alue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L)
	l Below Dark Surfac irk Surface (A12)	e (A11)	Depleted Matrix Redox Dark Sui)			langanese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark				· ·	ont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	edox (S5) Matrix (S6)							Shallow Dark Surface (TF12)
	face (S7) (LRR R, N	ILRA 149	B)					(Explain in Remarks)
³ Indicators of	hydronhytic vegetal	ion and w	etland hydrology mus	t he nres	ent unless	disturbed	Lor problematic	a.
	ayer (if observed):		Charle Hydrology mas	t be pres	crit, dinese	diotalboo	or probleman	
Туре:			=======					
Depth (inc	thes):						Hydric Soil	Present? Yes No V
Remarks:								

Appendix C

Supplemental Wetland Information

Supplemental Information for USACE Jurisdictional Determination - Woodward Lake Subdivision

Project Name:

Woodward Lake Subdivision

Current Property Owner:

Woodward Lake Properties, LLC

c/o Mr. Robert Lesperence 155 Main Street – Suite D Oneonta, New York 13820

(607) 434-2678

Project Applicant:

Same as Owner

Environmental Consultant

Wetland Delineator:

North Country Ecological Services, Inc.

25 West Fulton Street

Gloversville, New York 12078

(518) 725-1007

Total Property Acreage:

 $1,169.63 \pm acres$

Total Acreage of

Limits of Jurisdiction

 $708.9 \pm acres$

Site Coordinates:

43° 13' 28.7" N Latitude and 74° 12' 10.4" W Longitude.

Historic Land Use:

Residential Retreat

Current Land Use:

Fallow, wooded land. Recreational usage only

Average Annual Rainfall:

46.0 Inches

Average Annual Snowfall:

73.0 Inches

Site Location Map: Review Area Map: See Figure 1 in the Delineation Report See Figure 1A in the Delineation Report

DEC Wetlands Map:

The subject property is within the boundaries of the Adirondack Park Agency (APA) and therefore, there are no NYS Dept. of Environmental Conservation (DEC)

iurisdictional wetlands.

Soil Survey Map:

See Figure 2 in the Delineation Report

Regulated Wetlands: See Table 2 of the Wetland Delineation Report

On-Site Streams: 48,482± linear feet

Traditional Navigable

Waterways: $0\pm$ linear feet

Perennial Streams: 25,960± linear feet

Intermittent Streams: 22,522± linear feet

Wetland Connectivity with RPW's and TNW's:

The main sources of hydrology that influence the wetlands on the property appear to originate from direct precipitation, groundwater discharge, and surface water runoff. All of the streams identified are located in natural, eroded drainages that extend from the adjacent uplands toward Woodward Lake. Each of the streams dispense directly into the lake. Woodward Lake is impounded by the concrete dam with the spillway set at elevation 797'. Water flows over the dam, flows northeast and directly into the Sacandaga River. The Sacandaga River flows to the southeast and dispenses directly into the Great Sacandaga Lake.

The Great Sacandaga Lake is a man-made reservoir that was constructed to regulate floodwater water within the Hudson River basin. Its primary purpose is flood control of downstream locations. The Hudson River is classified by the USACE as a Traditional Navigable Waterway (TNW). Being that the reservoir is hydrologically contiguous with a tributary system of a TNW, all wetlands and waters that are hydrologically connected with it are subject to the regulatory jurisdiction of the USACE.

Potential Pollutants:

During the field review NCES did not identify any visible contaminants or direct point sources of pollution on the property.

Habitat for Species:

During the site assessments, NCES documented a variety of wildlife species on the property that included: white-tailed deer, black bear, beaver, ruffed grouse, barred owl, raven, crow, wild turkey, coyote, raccoon, muskrat, mink, cottontail rabbit, snowshoe hare, woodchuck, wood duck, mallard duck, green heron, blue heron as well as various songbirds and common amphibians such as green frog, wood frog, American toad and spring peepers. Woodward Lake supports largemouth bass, chain pickerel, bluegill, and a variety of minnows associated with a warm water fishery.