Appendix 22-4:

Wetland and Stream Delineation Report

WETLAND AND STREAM DELINEATION REPORT

GARNET ENERGY CENTER PROJECT

TOWN OF CONQUEST
CAYUGA COUNTY, NEW YORK

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Table of Contents

TABLES

APPENDICES

1.0 INTRODUCTION

1.1 Project Description and Purpose

Garnet Energy Center, LLC, (Garnet Energy Center) a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (NEER), is proposing construction of the Garnet Energy Center (the Project) in the Town of Conquest, Cayuga County, New York (see Appendix A: Figure 1). The Project Area consists of approximately 2,288 acres within the Town of Conquest. The proposed Project will consist of a 200 megawatt (MW) solar energy center with a 20-MW/four-hour energy storage system located on land leased or purchased from private property landowners. Proposed components include commercial-scale solar arrays, access roads, buried (and possibly overhead) electric collection lines, energy storage components, and electrical interconnection facilities. The final solar array specification, as well as locations of arrays, will be finalized as part of ongoing environmental studies and engineering efforts. The Project Area consists predominantly of active agricultural land and forestland.

1.2 Report Purpose

TRC Companies, Inc. (TRC) conducted a wetland and stream delineation of the Project Area on behalf of Garnet Energy Center on June 15 through June 23, 2020 and November 3 through November 6, 2020. This report details the wetlands and surface waters (including rivers, streams, ponds, and lakes) within the Project Area, regardless of jurisdictional status. This report lends itself toward assessing and implementing setbacks as required by State and Garnet Energy Center's internal process during Project planning, to the extent practical.

Delineation efforts included the following tasks:

1. A desktop review of existing, publicly available federal and state agency resources;

2. A field delineation of all aquatic features within the Project Area using a handheld Global Positioning System (GPS) with reported sub-meter accuracy; and,

3. Documentation of the delineated aquatic features, based on hydrology, vegetation, and hydric soils data collected in the field; including the assumed agency jurisdiction for each resource.

Conclusions proposed herein provide information necessary to support a permit/certificate applications to the United States Army Corps of Engineers (USACE) and the New York State Board on Electric Generation Siting and the Environment (Siting Board).

2.0 REGULATORY AUTHORITY

2.1 United States Army Corps of Engineers

In accordance with Section 404 of the Clean Water Act, the USACE asserts jurisdiction over Waters of the United States (WOTUS). WOTUS are defined as wetlands, streams, and other aquatic resources under the regulatory authority of Title 33 Code of Federal Regulations (CFR) Part 328 and the United States Environmental Protection Agency (EPA), per Title 40 CFR Part 230.3(s). Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[c]).

On June 22, 2020, the Navigable Waters Protection Rule took effect, replacing the prior Clean Water Rule. The Navigable Waters Protection Rule outlines categories of waters considered jurisdictional, as well as those considered non-jurisdictional. The four categories of waters that are considered WOTUS, and thus jurisdictional to the USACE, include the following:

Territorial seas and traditional navigable waters (TNWs)

• Under the final rule, the territorial seas and traditional navigable waters include large rivers and lakes—such as the Mississippi River, the Great Lakes, Chesapeake Bay, and the Erie Canal—and tidally-influenced waterbodies used in interstate or foreign commerce.

Tributaries of such waters;

• Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year.

• These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.

• Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

• Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

Lakes, ponds, and impoundments of jurisdictional waters

• Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

• Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a "water of the United States" in a typical year.

Adjacent wetlands

• Wetlands that physically touch other jurisdictional waters are "adjacent wetlands."

• Wetlands separated from a "water of the United States" by only a natural berm, bank or dune are also "adjacent."

• Wetlands inundated by flooding from a "water of the United States" in a typical year are "adjacent."

• Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

• An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland if the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

Exclusions:

Twelve exclusions from the WOTUS definition, or non-jurisdictional waters, include: groundwater; ephemeral streams; stormwater runoff and stormwater control features; ditches that are not jurisdictional; prior converted cropland; artificial lakes and ponds; and artificially irrigated areas, including agricultural areas that would revert to uplands were the irrigation to cease.

2.1.1 Navigable Waters

The USACE also regulates navigable waters under Section 10 of the Rivers and Harbor Act (33 U.S.C. 401 et seq.), which requires a permit be issued by the USACE prior to the construction of any structure in or over a navigable water of the United States, as well as any proposed action (such as excavation/dredging or deposition of materials) that would affect the course, location, condition, or capacity of the navigable water, even if the proposed activity is outside the boundaries of the stream in associated wetlands.

2.2 New York State Department of Environmental Conservation

The Freshwater Wetlands Act [Article 24 and Title 23 of Article 71 of the Environmental Conservation Law (ECL)] gives the NYSDEC jurisdiction (in an Article10 proceeding, the Siting Board) over state-protected mapped wetlands and an adjacent 100-foot protective upland buffer area. To implement this Act, regulations were promulgated by the state under 6 New York Codes, Rules, and Regulations (NYCRR) Parts 663 and 664.

Part 663 establishes regulations that, (1) define the procedural requirements to be followed in undertaking different activities in mapped wetlands and in areas adjacent to mapped wetlands; (2) establish standards governing the issuance of permits by the NYSDEC pursuant to the act; and (3) govern the NYSDEC's implementation of the act. Part 664 of the regulations designates wetlands into four class ratings, with Class I being the highest or best quality wetland and Class IV being the lowest. In general, wetlands regulated by the NYSDEC are those that meet the definition provided in section 24-0107(1) of Article 24 and have an area of at least 12.4 acres (5 hectares) in size or larger. The NYSDEC can regulate smaller wetlands, including those without connections to other aquatic resources if they are considered to be of "unusual local importance." The Freshwater Wetlands Act requires the NYSDEC to map all state-protected wetlands to allow landowners and other interested parties a means of determining where state jurisdictional wetlands exist. Authority under an Article 24 permit is required from the NYSDEC for any disturbance to a state-protected mapped wetland or the adjacent buffer area, including the removal of vegetation. Article 10, however, supplants the issuance of the Article 24 permit by NYSDEC. Instead, the Siting Board enforces the applicable substantive requirements of the Parts 663 and 664 regulations through the approval of Article 10 certificate conditions with respect to a specific major electric generating facility such as the Garnet Energy Center.

Article 15 of the ECL (Protection of Waters), and its implementing regulations under 6 NYCRR Part 608, provides the NYSDEC with regulatory jurisdiction (in an Article 10 proceeding ,the Siting Board) over activities disturbing the bed or banks of protected streams, including small lakes and ponds with a surface area of 10 acres or less, located within the course of a protected stream. A protected stream is defined in the ECL as any stream, or particular portion of a stream, that has been assigned by the NYSDEC any of the following classifications or standards: AA, A, B, C(T), or C(TS) (6 NYCRR Part 701). State water quality classifications of unprotected watercourses include Class C and Class D streams. The classifications are defined below.

- A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing.

- The best usages of Class B waters are primary and secondary contact recreation and fishing.

- The best usage of Class C waters is fishing. Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

- Waters with a classification of D are generally suitable for fishing and non-contact recreation.

It should be noted, per 6 NYCRR Chapter X, Subchapter B, "*All streams or other bodies of water which are not shown on the reference maps herein shall be assigned to Class D, as set forth in Part 701, supra, except that any continuous flowing natural stream which is not shown on the reference maps shall have the same classification and assigned standards as the waters to which it is directly tributary.*" Article 15 of the ECL and 6 NYCRR Part 608 also provide NYSDEC jurisdiction over navigable waters of the State, including contiguous marshes, estuaries, tidal marshes and wetlands that are inundated at mean high water level or tide. Article 10, however, supplants the issuance of the Article 15 permit by NYSDEC. Instead, the Siting Board enforces the applicable substantive requirements of the Parts 608 and 701 regulations through the approval of Article 10 certificate conditions with respect to a specific major electric generating facility such as the Garnet Energy Center.

3.0 WETLAND AND STREAM DELINEATION METHODOLOGY

Prior to initiating field investigations, TRC conducted a desktop review of publicly available data to determine the potential presence of federal and state mapped wetlands and streams within the Project Area. TRC wetland scientists subsequently performed field investigations to identify aquatic features within the Project Area. Delineations for wetlands and streams were performed in accordance with criteria set forth in the 1987 Manual (Environmental Laboratory, 1987) and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (USACE, 2012) (Supplement). Data was collected from a sample plot in each delineated wetland. Depending on the size of the delineated area and any change in cover type, multiple sample plots of the delineated wetland may have been taken. Delineation data was recorded on USACE Wetland Determination Data Forms (Appendix C). The boundaries of wetlands were demarcated with pink survey ribbon labeled "wetland delineation" and located with a GPS unit with reported sub-meter accuracy.

3.1 Hydrology

The presence of wetland hydrology is determined based on primary and secondary indicators established by the USACE. The 1987 Manual defines the presence of wetland hydrology when at least one primary indicator or two secondary indicators are identified. Wetland hydrology is present if one or more primary indicators are present; however, if primary indicators are absent, two or more secondary indicators are required to determine the presence of wetland hydrology. If other probable wetland hydrology evidence was found on-site, then such characteristics were subsequently documented on the USACE Wetland Determination Data Form. Wetland hydrology indicators are grouped into 18 primary and 11 secondary indicators as presented in the Supplement.

Wetland hydrology may influence the characteristics of vegetation and soils due to anaerobic and reducing conditions (Environmental Laboratory, 1987). This influence is dependent on the frequency and duration of soil inundation or saturation which, in turn, is dependent on a variety of factors including topography, soil stratigraphy, and soil permeability, in conjunction with precipitation, runoff, and stormwater and groundwater influence.

3.2 Vegetation

Hydrophytic vegetation is defined in the 1987 USACE Manual as:

"*…the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present.*"

Plants are categorized according to their occurrence in wetlands. Scientific names and wetland indicator statuses for vegetation are those listed in *The National Wetland Plant List: 2018 Wetland Ratings* (USACE, 2018) (NWPL). Due to regional differences in wetland vegetation, among other characteristics, the USACE divided the United States into regions to improve the accuracy and efficiency of wetland delineations. The indicator statuses specific to the "Northcentral and

Northeast Region" as defined by the USACE apply to the Project Area. The official short definitions for wetland indicator statuses are as follows.

- Obligate Wetland (OBL): Almost always occur in wetlands.
- Facultative Wetland (FACW): Usually occur in wetlands but may occur in non-wetlands.
- Facultative (FAC): Occur in wetlands and non-wetlands (50/50 Mix).
- Facultative Upland (FACU): Usually occur in non-wetlands but may occur in wetlands.
- Upland (UPL): Almost never occur in wetlands.

For species with no indicator status in the Project Area's region, the indicator status assigned to the species in the nearest adjacent region is applied. Plants that are not included on the NWPL within the Project Area's region, nor an adjacent region, are given no indicator status, and are not included in dominance calculations. Plants that are not listed in any region on the NWPL are considered as UPL on USACE Wetland Determination Data Forms.

Vegetation in both upland and wetland communities was characterized using areal methods for instituting plot measurement. In accordance with USACE methodology, a plot radius of 30 feet around the soil sample location was applied to tree species, a 15- foot radius for saplings/shrubs, and a five-foot radius was utilized for herbaceous plants. After the measurement of percent coverage was determined for each species, an application of the 50/20 rule of dominance determination was utilized to define the presence or absence of overall hydrophytic dominance at sample plots. In using the 50/20 rule, the plants that comprise each stratum are ranked from highest to lowest in percent cover. The species that cumulatively equal or exceed 50 percent of the total percent cover for each stratum are dominant species, and any additional species that individually provides 20 percent or more percent cover is also considered a dominant species of its respective strata. The total cover for each stratum, and subsequently the plot, could exceed 100 percent due to vegetation overlap.

Cover types are also assigned to each wetland. The delineated resources were classified in accordance with the system presented in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (Federal Geographic Data Committee [FGDC], 2013). Field biologists assign cover types to wetlands based on this classification standard and utilize this document.

3.3 Soils

Hydric soil indicators were determined utilizing the Supplement with added provision from the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils*, Version 8.2 (USDA NRCS, 2018). Soil characteristics were documented, such as matrix color, layer depth, presence of organic/peat layers, and evidence of redoximorphic features, which may include indicators such as saturation, redoxification, gleyed matrices, manganese mottling, and hydrogen sulfide odor. Soil test pits were dug using a spade shovel to a depth of

approximately 20 inches or more. Refusal of soil sample to 20 inches occurred in some instances due to the presence of hardpan layer, rock, or hard fill materials and was documented. Soil color was described using the Munsell Soil Color Book (Munsell Color, 2015) and texture was determined using the USDA feel method (Thien, 1979).

Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin (MLRA Handbook) (USDA NRCS, 2006) was referenced to determine the hydric soil indicators that apply to the Project Area. Per the MLRA Handbook, the Project Area is within Major Land Resource Area 144A (New England and Eastern New York Upland, Southern Part) of Land Resource Region (LRR) R (Northeastern Forage and Forest Region). Hydric soil indicators that do not apply to this MLRA were not considered.

3.4 Streams

Streams and other non-wetland aquatic features (e.g., lakes and ponds, if any) within the Project Area were identified by the presence of standing surface water or confined flow, and, with the exception of some ephemeral streams, a bed and bank containing an ordinary high water mark (OHWM) (33 CFR 328.3). The OHWM is formed by the fluctuations of water, and where not established and available by public record, is determined. by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other characteristics of the surrounding areas.

Stream points of the delineated boundaries were located with a handheld GPS unit set for sub-meter accuracy. Streams greater than six feet wide were delineated bank to bank. Streams less than six feet wide, sub-meter GPS point capture and post-processing (differential correction) still yields imprecise stream bank measurements due to the narrow nature of the stream. In these circumstances, centerline delineations were applied to maintain accurate representation of stream sinuosity for planning and impact calculation purposes. Stream widths were measured and documented within Stream Data Forms (Appendix C).

Steams are identified as to their flow regime of perennial, intermittent or ephemeral. Perennial streams tend to flow throughout the year, except during severe drought conditions. They can flow below the water table and receive groundwater sources from springs or groundwater seepages on slopes. Intermittent streams flow only during certain times of year from alternating springs, snow melt, or from seasonal precipitation runoff. Ephemeral streams flow sporadically and are entirely dependent on precipitation from storm events or periodic snow melts. They tend to flow above the water table and are often found as drainage features adjacent to or within the headwaters of a more major stream system. Identification in the field was based on characteristics including degree of channel formation, volume of flow, landscape setting, position relative to groundwater table, and presence/absence of aquatic fauna.

4.0 PROJECT AREA CHARACTERISTICS

4.1 Resources

The following publicly available resources were used in the investigation, delineation, and report preparation:

- United States Geological Survey (USGS) Victory, Cato, Montezuma, and Weedsport, New York 7.5 minute quadrangles;
- United States Department of Agriculture (USDA) Ecoregion Maps;
- NYSDEC Ecozone Mapping;
- USGS National Hydrography Dataset;
- USGS Hydrologic Unit Maps;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 36011C0145E effective 8/2/2007; 36011C0165E effective 8/2/2007; and 36011C0226E effective 8/2/2007;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping;
- NYSDEC Environmental Resource Mapper (ERM);
- NYSDEC Freshwater Wetlands Mapping;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey; and
- Recent aerial orthoimagery.

4.2 Vegetation and Ecological Communities

The Project Area resides in the Eastern Broadleaf Forest (Continental) Province and the Erie-Ontario Lake Plain Section ecoregions of the United States as defined by the USDA Forest Service (Bailey et al., 1995). Ecoregions are ecosystems of regional extent. The USDA identifies ecoregions by ecosystem characteristics into the following classifications:

- Domains: the largest ecosystem, which are groups of related climates and are differentiated based on precipitation and temperature.

- Divisions: represent the climates within domains and are differentiated based on precipitation levels and patterns, as well as temperature.

- Provinces: Subdivisions of divisions, which are differentiated based on vegetation or other natural land covers.

- Sections: Subdivisions of provinces based on terrain features, sections are the finest level of detail described for each subregion.

- Mountainous Areas: Mountainous regions that exhibit different ecological zones based on elevation.

The Eastern Broadleaf Forest (Continental) Province climate is characterized by hot summers with most precipitation occurring in the growing season. Average annual temperatures range from 40 to 65 degrees Fahrenheit. Altitudes range from 80 to 1,650 feet above mean sea level (AMSL). The vegetation is dominated by broadleaf deciduous forest. Forest vegetation consists of oak-hickory communities, with intermixed maple, beech, and basswood in northern regions (Bailey, 1995).

The Erie-Ontario Lake Plain is characterized by flat and somewhat rolling plains. Elevation ranges from 245 to 1,000 feet AMSL. Forest communities include northern hardwoods, beech-maple, and elm-ash forest. Regionally important forest communities include Beech-maple mesic forest, maple-basswood, hemlock-northern hardwood, oak openings, and pitch pine barrens (McNab and Avers, 1994).

Similarly, the NYSDEC has divided New York State into specific ecological regions (Ecozones). Boundaries of the Ecozones of New York State were derived from Will et al. (1982) and Dickinson (1983) and then further modified by the NYSDEC. The Ecozones of New York State have been classified into Major and Minor Zones. The Project Area is located within the Great Lakes Plain—Major Zone B and more specifically the Drumlin minor zone.

The Great Lakes Plain—Major Zone B's topography is mostly a flat plain with some horizontal rock formations. Elevation in most of this zone is up to 800 feet. AMSL. Soils are generally situated over glacial till on undulating landscapes, with limy soil composition, and tend to be medium to fine in texture. Natural vegetation in the Great Lakes Plain is elm-red maple and northern hardwoods (Will et al., 1982 and Dickinson, 1983).

The Drumlin Minor Zone's elevation can be up to 800 feet. This minor zone is characterized by drumlins, or elongated hills, resulting from glacial deposits (Will et al., 1982 and Dickinson, 1983).

Recent aerial orthoimagery of the Project Area and surrounding vicinity indicates that the site is covered predominantly by agricultural land and upland forest. Agricultural fields, secondary roads, paved roads and unimproved farm roads are evident. Streams, drainage ditches, and undeveloped forest are depicted throughout the Project Area. The following ecological communities, as defined by *Ecological Communities of New York State* (Edinger et al., 2014), were identified on the Project Area at the time of the delineation:

- Beech-maple mesic forest
- Cropland/field crops
- Cropland/row crops
- Deep emergent marsh
- Ditch/artificial intermittent stream
- Farm ponds/artificial pond
- Hemlock-northern hardwood forest
- Intermittent stream
- Mowed lawn
- Mowed roadside/pathway
- Pastureland
- Paved road/path
- Red maple-hardwood swamp
- Rural structure exterior
- Shallow emergent marsh
- Shrub swamp
- Successional southern hardwoods
- Successional old field
- Successional shrubland
- Unpaved road/path

4.3 Physiography and Soil Characteristics

4.3.1 Physiography and Topography

The Project Area is located within the Erie-Ontario Lowlands Physiographic Province of New York State (New York State Department of Transportation, 2013). This Physiographic Province is defined by a pattern of drumlins and low hills, surrounded by lacustrine soils.

The landforms of the Project Area are hills and irregular plains. As shown on the USGS Victory, Cato, Montezuma, and Weedsport NY 7.5-minute quadrangles, (USGS, 2016), the Project Area is characterized by a rolling landscape. The highest elevation of the Project Area is approximately 578 feet AMSL near the southwestern corner of the Project Area. The lowest elevation is approximately 440 feet AMSL through the central portion of the Project Area.

4.3.2 Site Soils

The USDA NRCS Web Soil Survey is an online resource mapping tool that provides soil data and information for the vast majority of the nation. This information is produced by the National Cooperative Soil Survey (NCSS), in partnership with federal, regional, state, and local agencies, and private entities and institutions.

A total of 42 soil map units were identified within the Project Area. Soil map units represent a type of soil, a combination of soils, or miscellaneous land types. Soil map units are usually named for the predominant soil series or land types within the map unit. Due to limitations imposed by the small scale of the soil survey mapping, it is not uncommon to identify wetlands within areas not mapped as hydric soil, while areas mapped as hydric often do not support wetlands. This concept is emphasized by the NRCS:

"*Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.*"

Soil drainage in the Project Area is variable, with approximately 55 percent well drained, 27 percent classified as very poorly drained, 10 percent moderately well drained, 5 percent somewhat poorly drained, 2 percent somewhat excessively, and 1 percent poorly drained. Also, soils within the Project Area have been listed as not prime farmland (41.7 percent), prime farmland (31.2 percent), farmland of statewide importance (22.5 percent), and prime farmland if drained (4.6 percent).

All soil map units identified within the Project Area by the NRCS soil survey are outlined in Table 1. Refer to Figure 2 of Appendix A for graphically depicted soil map units of the Project Area.

Hydric Soil

The Web Soil Survey of the Project Area was consulted prior to conducting the delineation to determine the extent of soils meeting hydric criteria as defined by the NRCS. The NRCS definition of a hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories, 1987) (1987 Manual) is compatible, defining a hydric soil as "*a soil that in its undrained condition, is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.*"

Of the Project soils, 10 of the soils mapped within the Project Area contain higher percentages (33 percent or more) of mapping units with hydric soil inclusions. These map units comprise approximately 30 percent of the Project Area (see Table 1 and Figure 2). These higher rating percentages indicate the potential presence of a wetland feature on site. Hydric Soil Rating indicates the percentage of map units that meet the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric or

not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher positions on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower positions on the landform. As such, each map unit is rated based on its respective components and the percentage of each component within the map unit. Although a soil series will be given a general hydric soil rating on the Web Soil Survey, this rating is for reference only and does not supersede site-specific conditions documented in the field that constitute hydric soil presence in located wetlands.

Table 1. Mapped Soils within the Project Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Project Area	Percent of Project Area
Ac	Alden mucky silt loam	0 to 3	Very poorly drained	95	40.1	1.8
Ad	Alden mucky silt loam, till substratum	0 to 3	Very poorly drained	88	10.7	0.5
Al	Alluvial land	0 to 5	Very poorly drained	55	3.1	0.1
AnB	Alton gravelly sandy loam	3 to 8	Well drained	0	24.5	1.1
AnC	Alton gravelly sandy loam	8 to 15	Somewhat excessively drained	0	17.5	0.8
AsB	Appleton and Lyons soils	0 to 3	Somewhat poorly drained	53	41.3	1.8
CeB	Cazenovia silt loam	2 to 8	Well drained	5	12.9	0.6
CeC	Cazenovia silt loam	8 to 14	Well drained	5	5.2	0.2
CeC3	Cazenovia silt loam, eroded	5 to 14	Well drained	5	6.5	0.3
ClA	Collamer silt loam	0 to 2	Moderately well drained	5	12.8	0.6
ClB	Collamer silt loam	2 to 6	Moderately well drained	5	1.3	0.1
CmC	Colonie loamy fine sand	6 to 12	Somewhat excessively drained	0	3.2	0.1
CnB	Colonie fine sandy loam	1 to 6	Well drained	0	7.0	0.3
Fo	Fonda mucky silt loam	0 to 1	Very poorly drained	95	2.5	0.1

Table 1. Mapped Soils within the Project Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Project Area	Percent of Project Area
GaB	Galen fine sandy loam	2 to 6	Moderately well drained	0	37.4	1.6
HlA	Hilton loam	0 to 3	Moderately well drained	0	16.1	0.7
HlB	Hilton loam	3 to 8	Moderately well drained	0	154.7	6.8
Lf	Lamson mucky sine sandy loam	0 to 3	Very poorly drained	90	92.9	4.1
Mb	Madalin silt loam, sandy subsoil variant	0 to 3	Poorly drained	95	18.1	0.8
Mf	Minoa fine sandy loam	0 to 3	Somewhat poorly drained	10	11.6	0.5
Mr	Muck, deep	0 to 2	Very poorly drained	100	344.4	15.0
Ms	Muck, shallow	0 to 3	Very poorly drained	100	122.7	5.4
Na	Niagara fine sandy loam	0 to 3	Somewhat poorly drained	10	41.9	1.8
Nc	Niagara and Canandaigua silt loams	0 to 3	Somewhat poorly drained	45	12.0	0.5
OfB	Ontario fine sandy loam	3 to 8	Well drained	0	114.0	5.0
OfC	Ontario fine sandy loam	8 to 15	Well drained	0	102.3	4.5
OnB	Ontario loam	3 to 8	Well drained	0	266.2	11.6
OnC	Ontario loam	8 to 15	Well drained	0	257.5	11.3
OnD	Ontario loam	14 to 20	Well drained	0	174.3	7.6
OtE	Ontario, Honeoye, and Lansing soils	20 to 35	Well drained	0	130.4	5.7
OvB	Ovid silt loam	2 to 6	Somewhat poorly drained	5	1.1	0.1

Table 1. Mapped Soils within the Project Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Project Area	Percent of Project Area
PaB	Palmyra gravelly sandy loam	3 to 8	Well drained	0	7.8	0.3
PaC	Palmyra gravelly sandy loam	8 to 15	Well drained	0	11.8	0.5
PgB	Palmyra gravelly sandy loam	3 to 8	Well drained	0	50.1	2.2
PgC	Palmyra gravelly loam	8 to 15	Well drained	0	81.5	3.6
PmD	Palmyra soils	15 to 25	Somewhat excessively drained	0	7.7	0.3
PnE	Palmyra, Howard, and Alton soils	25 to 40	Somewhat excessively drained	0	12.8	0.6
Pv	Phelps gravelly silt loam	0 to 3	Moderately well drained	0	6.0	0.3
RgB	Riga and Lairdsville silt loams	2 to 6	Moderately well drained	0	13.3	0.6
RlC3	Riga and Lairdsville silty clay loams, eroded	6 to 12	Moderately well drained	0	5.4	0.2
St	Stafford fine sandy loam	0 to 3	Somewhat poorly drained	5	5.1	0.2
W	Water	N/A	N/A	0	1.0	0.0

4.4 Hydrology

4.4.1 Hydrologic Mapping

The USGS has divided and sub-divided the country into hydrologic units based primarily on drainage basins and watershed boundaries. The main hydrologic unit levels are regions, sub-regions, basins, sub-basins, watersheds, and sub-watersheds. The hydrologic units are nested within each other, from the largest geographic area (regions) to the smallest geographic area (sub-watersheds). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to twelve digits based on the six levels of classification in the hydrologic unit system. In addition to the hydrologic unit codes, each hydrologic unit is assigned a name

corresponding to the unit's principal hydrologic feature, or to a cultural or political feature within the unit.

The region hydrologic unit level contains either the drainage area of a major river or the combined drainage areas of a series of rivers. Regions receive a two-digit code. The following hydrologic unit levels are designated by the addition of another two digits with each level. Each sub-region includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin or basins, or a group of streams forming a coastal drainage area.

The Project Area is located within the USGS defined Seneca River (HUC 04140201) and Irondequoit-Ninemile (HUC 04140101) sub-basins. At the watershed level, the Project Area is located within the Ontario-Sterling Creek (HUC 0414010102), Lower Seneca River (HUC 0414020116), and Middle Seneca River (HUC 0414020114) watersheds. At the sub-watershed level, the Project Area is located within the Headwaters Sterling Creek (HUC 041401010202), Stark Pond-Seneca River (HUC 041402011607), and Howland Island-Seneca River (HUC 041402011409) sub-watersheds.

The NYSDEC also classifies watersheds more generally within the State of New York. Unlike mapping efforts outlined by the USGS above, the NYSDEC uses the definitions of watersheds and drainage basins interchangeably. New York's waters (e.g., lakes, rivers, wetlands, and streams) fall within one of seventeen major drainage basins as defined by the NYSDEC. The NYSDEC defines these drainage basins or watersheds as an area of land that drains water into a specific body of water within or adjacent to New York State and includes networks of rivers, streams, lakes, and the surrounding lands. The NYSDEC-classified watersheds are separated by high elevation geographic features (e.g., mountains, hills, and ridges). Each major drainage basin corresponds to one or more USGS sub-basins (USGS HUC 8-digit codes).

Part of the Project Area is located within the Seneca River major drainage basin of New York. This major drainage basin drains an area of 2,213,746 acres and ranges in elevation from 358 to 2,286 feet above sea level, making this the largest watershed in New York State (NRCS, 2010). Cayuga County comprises 18 percent of the Seneca River sub-basin, a total of 398,980 acres. Average annual precipitation is between 34 to 40 inches and an average annual temperature ranges from 55.4 to 45.36 Fahrenheit. Wetlands and open water constitute 13.3 percent of the sub-basin (USDA NRCS, 2010).

The rest of the Project Area is located within the Lake Ontario and Minor Tributaries major drainage basin of New York. This major drainage basin drains an area of 449,088 acres and ranges in elevation from 243 to 1,102 feet above sea level (NRCS, 2010). Cayuga County comprises 15 percent of the Irondequoit-Ninemile sub-basin, a total of 70,043 acres. Average annual precipitation is between 36 to 40 inches and an average annual temperature ranges from 42 to 50 Fahrenheit. Wetlands and open water constitute 11.2 percent of the sub-basin (USDA NRCS, 2010). Within this major drainage basin, the Project is located in the Irondequoit-Ninemile sub-basin (HUC 04140101) as previously mentioned.

4.4.2 Hydrologic Character

The predominant surface waterbody within close proximity to the Project Area is Mud Pond, located approximately 0.25 miles west of the Project. The Project Area has two dominant surface waterbodies: a tributary of Glen Creek and Vanzandt Hollow, and a tributary of Shequaga Creek, all of which flow to Seneca Lake. Two NWI mapped ponds exist within the Project Area. Most aquatic features within the Project Area act primarily as drainages to Glen Creek and Shequaga Creek.

The Project Area receives, on average, 42.26 inches of rainfall annually based on information from the City of Auburn, New York, located approximately 15 miles from the Project Area (U.S. Climate Data, 2019).

The Project Area wetlands drain relatively to the northeast, with the majority of the identified streams flowing to the south towards the Seneca River.

4.4.3 FEMA Flood Zone Mapping

FEMA maintains materials developed to support flood hazard mapping for the National Flood Insurance Program (NFIP). According to FIRM panel 36011C0165E, effective August 2, 2007. the Project Area is located within a flood zone designated Zone A. (see Figure 3).

4.5 Federal and State Mapped Wetlands and Streams

The USFWS is the principal US federal agency tasked with providing information to the public on the status and trends of wetlands on a national scale. The USFWS NWI is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of nationwide wetlands (where mapped). NWI mapping data is offered in an effort to promote the understanding, conservation, and restoration of wetlands. Note, unlike NYSDEC wetland maps, NWI wetland maps do not denote federal jurisdiction with their mapped boundaries. NWI wetlands are used as a reference guide by TRC field biologists to conduct a more informed site survey in the demarcation or delineation of wetlands and streams, which could be subject to federal jurisdiction under the CWA within the target Project Area.

Review of the NWI mapping during the preliminary desktop analysis indicated 43 federally mapped features within the Project Area, totaling 576.16 acres (see Figure 3). NWI mapping data indicates that Freshwater Forested Wetland (PFO1A, PFO1C, PFO1E, and PFO4) features are the dominant NWI features present within the Project Area (481.02 acres). Other common cover types include Freshwater Emergent Wetlands (PEM1E) (44.33 acres), Freshwater Shrub-Scrub Wetlands (PSS1E) (47.10 acres), Freshwater Riverine (R4SBC and R5UBH) (3.09 acres) features, and Freshwater Ponds (PUBFx and PUBH) (0.62 acre).

The number of field-delineated aquatic features within the Project Area are greater than the number of features represented by the NWI mapping for the Project Area. Moreover, a number of

field-delineated NWI mapped features are significantly larger than their mapped depictions and have more specific sinuosity to their boundaries.

Review of the NYSDEC ERM indicated that there are seven NYSDEC freshwater wetlands and their 100-foot adjacent areas mapped within the Project Area, which are regulated under Article 24 of the ECL (Figure 3 of Appendix A). Table 2 provides a summary of the NYSDEC-regulated wetlands mapped within the Project Area.

Table 2. NYSDEC-Mapped Freshwater Wetlands within the Project Area

NYSDEC Wetland ID	Wetland Class (I, II, III, or IV)[1]	Total Wetland Area (Acres)	Wetland Area within the Project Area (Acres)
C-33	II	11,318	319.34
M-2	II	8,665	4.01
M-4	II	1,453	2.12
V-19	III	250	21.82
V-20	II	141	3.52
W-1	II	416	28.82
W-2	III	321	1.71

[1]The NYSDEC classification system of freshwater wetlands designates wetlands into four class ratings, with Class I being the highest or best quality wetland and Class IV being the lowest quality.

Based on NYSDEC stream classification mapping, there are seven mapped NYSDEC Class C streams are within the Project Area. State-protected streams rated as Class C(t) and higher are protected per Article 15 of the ECL (Section 2.2). Table 3 below provides a detailed summary of the NYSDEC-classified priority (protected and unprotected) streams within the Project Area.

Table 3. NYSDEC-Mapped Streams within the Project Area

NYSDEC Stream Name and Regulatory ID Number	NYS Major Drainage Basin	USGS Sub-basin HUC 8 and Name	NYSDEC Classification[1] and Standard[2]	Cumulative Linear Feet within the Project Area
Sterling Creek, Upper, and Tribs (847-490)	Lake Ontario	04140101 (Irondequoit-Ninemile)	C	11,387
Sterling Creek, Upper, and Tribs (847-500)	Lake Ontario	04140101 (Irondequoit-Ninemile)	C	14,443
Minor Tribs to Lower Seneca River (898-106)	Oswego River/Finger Lakes	04140201 (Seneca)	C	3,544

Table 3. NYSDEC-Mapped Streams within the Project Area

NYSDEC Stream Name and Regulatory ID Number	NYS Major Drainage Basin	USGS Sub-basin HUC 8 and Name	NYSDEC Classification[1] and Standard[2]	Cumulative Linear Feet within the Project Area
Minor Tribs to Lower Seneca River (898-31)	Oswego River/Finger Lakes	04140201 (Seneca)	C	9,584

[1]A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.
[2] Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

5.0 RESULTS

5.1 General Overview

The Project Area contains primarily agricultural land and upland forest. The Project Area also contains several tree lines between agricultural fields and riparian corridors. The estimated average diameter at breast height (DBH) of the trees ranged from 12 to 30 inches. Dominant upland vegetation included, corn (*Zea mays*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), garlic mustard (*Alliaria petiolata*), American witch-hazel (*Hamamelis virginiana*), white lettuce (*Nabalus albus*), mayapple (*Podophyllum peltatum*), silvery spleenwort (*Deparia acrostichoides*), basswood (*Tillia americana*), coltsfoot (*Tussilago farfara*), lesser burdock (*Arctium minus*), painted trillium (*Trillium undulatum*), Virginia creeper (*Parthenocissus quinquefolia*), eastern black walnut (*Juglans nigra*), bitternut hickory (*Carya cordiformis*), American hornbeam (*Carpinus caroliniana*), shagbark hickory (*Carya ovata*), northern spicebush (*Lindera benzoin*), tulip poplar (*Liriodendron tulipifera*), Morrow's honeysuckle (*Lonicera morrowii*), Carolina horsenettle (*Solanum carolinense*), Eastern hemlock (*Tsuga canadensis*), yellow birch (*Betula alleghaniensis*), American elm (*Ulmus americana*), Himalayan knotweed (*Persicaria wallichii*), annual ragweed (*Ambrosia artemisiifolia*), multiflora rose (*Rosa multiflora*), red raspberry (*Rubus ideaus*), eagle fern (*Pteridium aquilinum*), Canada goldenrod (*Solidago canadensis*), common blackberry (*Rubus allegheniensis*), fragrant sumac (*Fragaria vesca*), Jack pine (*Pinus banksiana*), giant goldenrod (*Solidago gigantea*), tall goldenrod (*Solidago altissima*), boxelder (*Acer negundo*), reed-canary grass (*Phalaris arundinacea*), fire cherry (*Prunus pensylvanica*), meadow foxtail (*Alopecurus pratensis*), pokeweed (*Phytolacca americana*), American basswood (*Tilia americana*), jewelweed (*Impatiens capensis*), stickywilly (*Galium aparine*), rough bedstraw (*Galium asprellum*), hedge bedstraw (*Galium molugo*), wild carrot (*Daucus carota*), poison ivy (*Toxicodendron radicans*), common dandelion (*Taraxacum officinale*), summer grape (*Vitis aestivalis*), quaking aspen (*Populus tremuloides*), white clover (*Trifolium repens*), alsike clover (*Trifolium hybridum*), ribwort plantain (*Plantago lanceolata*), broadleaf plantain (*Plantago major*), common milkweed (*Asclepias syriaca*), soybean (*Glycine max*), European buckthorn (*Rhamnus cathartica),* asters (*Asteraceae*), eastern white pine (*Pinus strobus*), white ash (*Fraxinus americana*), green ash (*Fraxinus pennsylvanica*), black cherry (*Prunus serotina*), and Kentucky bluegrass (*Poa pratensis*).

TRC identified and delineated 45 wetlands and 24 streams within the Project Area on June 15 through June 23, 2020 as well as November 3 through November 6, 2020 (Figure 4). Some of these wetlands have multiple cover types, as described in Table 4. Approximately 26.07 percent (596.57 acres) of the 2,288-acre Project Area is delineated as wetland. Tables 4 and 5 below detail the wetlands and streams delineated at the Project Area.

Representative photographs taken of each delineated wetland and stream within the Project Area are provided in Appendix B. Completed USACE Routine Wetland Determination Forms and TRC Stream Inventory Data Forms are provided in Appendix C.

5.2 Delineated Wetlands

Palustrine Emergent wetlands (PEM) – Twenty five mapped wetlands delineated within the Project Area contain characteristics representative of the emergent wetland classification. PEM wetlands are dominated by an herbaceous layer of hydrophytic (water-tolerant) plant species. PEM wetlands typically contain deep, nutrient rich soils that remain heavily saturated or even inundated throughout the year. Emergent wetlands encountered in the Project area contained the following dominant plant species: by reed canary grass, eastern black walnut, green ash, quaking aspen, broadleaf cattail (*Typha latifolia*), giant goldenrod, field horsetail (*Equisetum arvense*), white dogwood (*Cornus alba*), common reed (*Phragmites australis*), great manna grass (*Glyceria maxima*), yellow nutsedge (*Cyperus esculentus*), soft rush (*Juncus effusus*), corn, purple loosestrife (*Lythrum salicaria*), jewelweed, water smartweed (*Persicaria amphibia*), narrowleaf cattail (*Typha angustifolia*), woolgrass (*Scirpus atrovirens*), sweet Joe-Pye-weed (*Eutrochium purpeum*), showy milkweed (*Asclepias speciosa*), dame's rocket (*Hesperis matronalis*), common nettle (*Urtica dioica*), grass-leaved goldenrod (*Euthamia gramifolia*), northern spicebush, northern water plantain (*Alisma triviale*), peachleaf willow (*Salix amygdaloides*), black willow (*Salix nigra*), porcupine sedge (*Carex hystericina*), rice cutgrass (*Leersia oryzoides*), American bur-reed (*Sparganium americanum*), Canada goldenrod, fox sedge (*Carex vulpinoidea*), multiflora rose, common boneset (*Eupatorium perfoliatum*), Indian hemp (*Apocynum cannabinum*), great bulrush (*Schoenoplectus tabernaemontani*), New England aster (*Symphyotrichum novae-angliae*), lake sedge (*Carex lacustris*), hop sedge (*Carex lupulina*), Eastern cottonwood (*Populus deltoides*), fowl bluegrass (*Poa palustris*), shallow sedge (*Carex luridia*), and sensitive fern (*Onoclea sensibilis*). Evidence of wetland hydrology for these wetlands included surface water, saturation, high water table, sediment deposits, water marks, aquatic fauna, oxidized rhizospheres on living roots, inundation visible on aerial imagery, algal mat or crust, sparsely vegetated concave surface, water stained leaves, hydrogen sulfide odor, recent iron reduction in tilled soils, surface soil cracks, drainage patterns, geomorphic position, shallow aquitard, microtopographic relief, and passing, the FAC-neutral test. Although hydric soils indications were variable, emergent wetlands within the Study Area typically displayed loam, clay, clay loam, sandy clay loam, rocky loam, sand, and silty loam soils. Variations of characteristics in the soil matrices generally demonstrated Histosol (A1), Depleted Matrix (F3), Redox Dark Surface (F6), and Hydrogen Sulfide (A4) hydric soil indicators.

Palustrine Scrub/Shrub (PSS) – Three wetlands delineated within the Project Area contain characteristics representative of the scrub/shrub wetland classification. Scrub-shrub wetlands are dominated by woody shrub vegetation that stand less than 20 feet tall. Shrub species dominating the wetland could include true shrubs, a mixture of young trees and shrubs, or trees that are small or stunted due to stressors from explicit environmental conditions.

Scrub-shrub wetlands encountered in the Project Area were typically dominated in the understory by arrowwood viburnum (*Viburnum dentatum*) and silky dogwood (*Cornus amomum*). Herbaceous species included sensitive fern, reed-canary grass, shallow sedge, and sweet Joe-Pye-weed. Evidence of hydrology for these wetlands included saturation, geomorphic position, and FAC-neutral test. Although hydric soils indications were variable, scrub-shrub wetlands within

the Study Area typically displayed sandy loam soils. Variations of characteristics in the soil matrices generally demonstrated Redox Dark Surface (F6) hydric soil indicators.

Palustrine Forested Wetland (PFO) – Twenty nine wetlands delineated within the Project Area contain characteristics representative of the forested wetland classification. Forested wetlands are sometimes referred to as swamps and are dominated by tree species 20 feet or taller, typically with an understory of shrub and herbaceous species. Understory vegetation presence readily varies, as the upper canopy of tree species may block sufficient light for extensive vegetative growth in the understory. Coniferous swamps, lowland hardwood swamps, and floodplain forests are common types of forested wetlands. Soils in forested wetlands are typically inundated or saturated early spring into summer. Some forested wetlands may dry up entirely, which reveal water stain marks along the trunks of exposed tree species and also shallow, buttressed root systems indicative of periods of heavy inundation events.

Forested wetlands encountered in the Project Area were typically dominated by red maple, green ash, American elm, American hornbeam, yellow birch, Eastern hemlock, silver maple (*Acer saccharinum*), black ash (*Fraxinus nigra*), slippery elm (*Ulmus rubra*), Eastern cottonwood and arborvitae (*Thuja occidentailis*). Understory vegetation typically included saplings including northern spicebush, silky dogwood, common buckthorn, arrowwood viburnum, southern arrowwood (*Viburnum recognitum*), American elm, and American hornbeam. Herbaceous species included meadow horsetail (*Equisetum pratense*), jewelweed, garlic mustard, creeping jenny (*Lysimachia nummularia*), sensitive fern, yellow jewelweed (*Impatiens pallida*), white avens (*Geum canadense*), lizard's tail (*Saururus cernuus*), yellow iris, giant goldenrod, reed-canary grass, swamp smartweed (*Persicaria hydropiperoides*), spinulose woodfern (*Dryopteris carthusiana*), wrinkleaf goldenrod (*Solidago rugosa*), Virginia creeper, common nettle, field horsetail, poison ivy, common duckweed (*Lemna minor*), royal fern (*Osmunda spectabilis*), rice cutgrass, creeping thistle (*Cirsium arvense*), crested sedge (*Carex cristatella*), brome-like sedge (*Carex bromoides*), eastern skunk cabbage (*Symplocarpus foetidus*), rosy sedge (*Carex rosea*), broom sedge (*Carex scoparia*), hop sedge, soft rush, fowl bluegrass, woolgrass, and narrowleaf blue-eyed-grass (*Sisyrinchium angustifolium*). Evidence of hydrology for these wetlands included surface water, saturation, a high water table, sediment deposits, algal mat or crust, water marks, aquatic fauna, inundation visible on aerial imagery, sparsely vegetated concave surface, surface soil cracks, moss trim lines, oxidized rhizospheres on living roots, drainage patterns, drift deposits, geomorphic position, water stained leaves, thin muck surface, stunted or stressed plants, saturation visible on aerial imagery, geomorphic position, microtopographic relief, and FAC-neutral test. Although hydric soils indications were variable, forested wetlands within the Study Area typically displayed silt loam, muck, mucky silt loam, fibric silt loam, sandy loam, silty clay loam, and loam soils. Variations of characteristics in the soil matrices generally demonstrated Historic Epipedon (A2), Redox Dark Surface (F6), Sandy Mucky Mineral (S1), Depleted Matrix (F3), Depleted Below Dark Surface (A11), Thin Dark surface (S9), and Thick Dark Surface (A12) hydric soil indicators.

Palustrine Unconsolidated Bottom (PUB) – Four wetlands delineated within the Study Area contain characteristics representative of unconsolidated bottom wetlands. Unconsolidated bottom wetlands are characterized by surface water and have less than 30 percent vegetative cover and

at least 25 percent cover of particles less than stones. As these are bodies of standing water, evidence of wetland hydrology was decisively present with standing water ranging from approximately 2–4 feet in depth.

Evidence of wetland hydrology in PUB wetlands included surface water, high water table, saturation, algal mat or crust, thin muck surface, inundation visible on aerial imagery, saturation visible on aerial imagery, stunted or stressed plants, water-stained leaves, aquatic fauna, moss trim lines, geomorphic position, microtopographic relief, and FAC-neutral test. Dominant vegetation observed within PUB wetlands and along the perimeter included silver maple, yellow birch, northern spicebush, rice cutgrass, yellow iris, arrowwood viburnum, white ash, Devil's beggarstick (*Bidens frondosa*), gray dogwood (*Cornus racemosa*), great water dock (*Rumex britannica*), dotted smartweed (*Persicaria punctata*), green arrow arum, cinnamon fern, European frogbit (*Hydrocharis morsus-ranae*), green arrow arum (*Peltandra virginica*), royal fern, narrowleaf cattail, common reed, hydrilla (*Hydrilla verticillata*), red maple, common duckweed, and great bulrush.

Table 4. Delineated Wetlands within the Project Area

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Project Area	NWI Cover Type[2]	Overlapping NYSDEC Wetland ID	Overlapping NYSDEC Wetland Class	Latitude of Centroid	Longitude of Centroid
	PEM	PSS	PFO	PUB						
W-BTF-1	0.74	-	49.08	-	49.82	PFO1E	V-19	III	43.13219	-76.64289
W-BTF-2	0.07	-	-	-	0.07	-	-	-	43.13596	-76.63955
W-BTF-3	0.14	-	-	-	0.14	-	-	-	43.13757	-76.64845
W-BTF-4	0.26	-	-	-	0.26	-	-	-	43.13799	-76.64712
W-BTF-5	0.29	-	-	-	0.29	-	-	-	43.13636	-76.64662
W-BTF-6	0.28	-	-	-	0.28	-	-	-	43.13778	-76.64495
W-BTF-7	0.74	-	3.72	-	4.46	R5UBH	M-2	II	43.13216	-76.65489
W-BTF-8	-	-	1.54	-	1.54	-	M-2	II	43.13359	-76.65509
W-BTF-9	-	-	3.94	-	3.94	PFO1E	-	-	43.13764	-76.65510
W-BTF-10	0.46	-	-	-	0.46	R5UBH	-	-	43.13300	-76.64964
W-BTF-11	-	-	4.97	-	4.97	PFO1E	-	-	43.13809	-76.65154
W-BTF-12	-	-	1.36	-	1.36	PFO1E, R5UBH	-	-	43.14234	-76.65051
W-BTF-13	-	-	10.23	-	10.23	PFO1E	M-2	II	43.14135	-76.65602
W-BTF-14	0.94	-	-	-	0.94	-	-	-	43.13582	-76.65434
W-BTF-15	-	-	0.23	-	0.23	-	-	-	43.13593	-76.65126
W-BTF-16	-	-	1.23	-	1.23	-	-	-	43.14691	-76.63813
W-BTF-17	0.84	-	18.87	-	19.71	PFO1E, R5UBH, PSS1/ EM5E	V-20	II	43.14623	-76.63173

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Project Area	NWI Cover Type[2]	Overlapping NYSDEC Wetland ID	Overlapping NYSDEC Wetland Class	Latitude of Centroid	Longitude of Centroid
	PEM	PSS	PFO	PUB						
W-BTF-18	1.52	-	6.32	-	7.85	PFO1E	-	-	43.14191	-76.63434
W-BTF-19	-	-	2.36	-	2.36	PFO1E	-	-	43.15088	-76.62571
W-JJB-1	-	-	1.24	-	1.24	PFO1E	-	-	43.13883	-76.59703
W-JJB-2	-	-	9.71	-	9.71	PFO1E	C-33	II	43.13156	-76.60668
W-JJB-3	31.35	5.67	289.21	3.61	329.85	PFO1E, R4SBC, R5UBH, PFO4/1A, PFO1/ SS1E, PSS1/ EM5E, PEM5E	C-33	II	43.13867	-76.62956
W-JJB-4	24.05	6.31	7.16	16.94	54.46	PFO1E, PEM5E	C-33	II	43.14832	-76.59680
W-JJB-5	0.26	-	-	-	0.26	-	-	-	43.15368	-76.59990
W-JJB-6	0.36	1.47	2.85	-	4.69	PFO1E	-	-	43.14589	-76.60292
W-JJB-7	-	-	0.68	-	0.68	-	-	-	43.61750	-76.61750
W-JJB-8	1.28	-	19.05	-	20.32	PSS1E/ EM5A, PEM5E	-	-	43.10440	-76.62257
W-NSD-1	0.89	-	-	35.28	36.17	PFO1E, PUBH	C-33	II	43.11734	-76.59959
W-NSD-2	0.50	-	-	-	0.50	-	C-33	II	43.11708	-76.60339
W-NSD-3	-	-	0.13	-	0.13	-	-	-	43.11413	-76.60065
W-NSD-4	4.18	-	-	-	4.18	PFO1E, PSS1/ EM5E	-	-	43.11334	-76.60299
W-NSD-5	-	-	0.30	-	0.30	PFO1A	-	-	43.11685	-76.60724
W-NSD-6	-	-	1.61	-	1.61	R5UBH, PFO1E	W-2	III	43.11229	-76.60696

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Project Area	NWI Cover Type[2]	Overlapping NYSDEC Wetland ID	Overlapping NYSDEC Wetland Class	Latitude of Centroid	Longitude of Centroid
	PEM	PSS	PFO	PUB						
W-NSD-7	-	-	-	0.29	0.29	PUBFx	-	-	43.13080	-76.62199
W-NSD-8	0.90	-	1.49	-	2.39	PEM5E	-	-	43.13032	-76.61995
W-NSD-9	1.19	-	-	-	1.19	PFO1E	-	-	43.12415	-76.62056
W-NSD-10	2.30	-	11.73	-	14.02	PFO1E, PEM5E, PSS1/ EM5E	W-1	II	43.11465	-76.61962
W-NSD-11	1.33	-	-	-	1.33	-	M-4	II	43.12429	-76.62856
W-NSD-12	-	-	0.24	-	0.24	PFO1E	M-4	II	43.11646	-76.62812
W-NSD-13	-	-	0.75	-	0.75	PFO1E	C-33	II	43.13721	-76.63020
W-NSD-14	-	-	0.61	-	0.61	-	-	-	43.15168	-76.62298
W-NSD-15	0.11	-	-	-	0.11	-	-	-	43.14223	-76.62953
W-NSD-16	-	-	1.01	-	1.01	-	-	-	43.13431	-76.63333
W-NSD-17	-	-	0.08	-	0.08	-	-	-	43.13491	-76.63370
W-NSD-18	0.31	-	-	-	0.31	PFO1C, PFO1/ SS1E	-	-	43.13565	-76.63049
Total Wetland Acreage Delineated:					**596.57**					

1PEM – palustrine emergent; PSS – palustrine scrub-shrub; PFO – palustrine forested; PUB – palustrine unconsolidated bottom
2PUBH – palustrine unconsolidated bottom, permanently flooded; PUBFx – palustrine unconsolidated bottom, semi permanently flooded, excavated; PFO1A – palustrine forested, broad-leaved deciduous, temporarily flooded; PFO1C – palustrine forested, broad-leaved deciduous, seasonally flooded; PFO1E – palustrine forested, broad-leaved deciduous, seasonally flooded/saturated; PFO4A – palustrine forested, needle-leaved evergreen, temporarily flooded; PSS1E – palustrine scrub-shrub, broad-leaved deciduous, seasonally flooded/saturated; PEM5A – palustrine emergent, *Phragmites australis*, temporarily flooded; PEM5E – palustrine emergent, *Phragmites australis*, seasonally flooded/saturated; R4SBC – riverine intermittent, streambed, seasonally flooded; R5UBH – riverine, unconsolidated bottom, permanently flooded

5.3 Delineated Streams

Streams (RUP, RIN, REPH) – Twenty four streams were delineated within the Project Area. Classification of streams were dependent on a temporal description of their usual level of flow regimes. Perennial streams (RUP) tend to flow all year, except during severe drought conditions. Perennial streams can flow below the water table and receive groundwater flow sources from springs or groundwater seepages on slopes. Intermittent streams (RIN) flow only during certain times of the year from alternating springs, snow melts, or from runoff from seasonal precipitation events. Intermittent streams can flow above or below the water table. Ephemeral streams (REPH) flow sporadically and are entirely dependent on transient precipitation from storm events or from periodic snow melts. These streams tend to flow above the water table and are often found as drainage features adjacent to, or within, the headwaters of a more major stream system.

Streams encountered on the Project Area were mostly intermittent in nature along gentle to moderate gradients (0 to 10 percent). Stream widths ranged from 2 to 6 feet. They generally contained channel substrates of silt, clay, cobble, gravel, and sand with probed stream depths in the range of 0 to 6 inches. Most streams were determined to lack substantial features to permit the prevalence of aquatic ecologies. Only a small number of streams within the Project Area were determined to contain significant aquatic habitat to establish and support fish and wildlife populations. Most of the stream systems supporting aquatic habitats were found to be perennial in nature, as an annual flow regime allows for a more readily established life cycle.

Table 5. Delineated Streams within the Project Area

Stream Field Designation	Flow Regime Classification	Linear Feet within Project Area	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard[2]	Potential Jurisdiction Under Rapanos	Associated Buffer	Latitude of Centroid	Longitude of Centroid
S-BTF-1	Perennial	4,890	847-106	Class C	USACE	None	43.13129	-76.64351
S-BTF-2	Intermittent	183	-	-	USACE	None	43.13302	-76.63943
S-BTF-3	Intermittent	361	-	-	USACE	None	43.13266	-76.63985
S-BTF-4	Ephemeral	366	-	-	Non-Jurisdictional	None	43.12964	-76.63876
S-BTF-5	Intermittent	712	-	-	USACE	None	43.13345	-76.65470
S-BTF-6	Ephemeral	184	-	-	Non-Jurisdictional	None	43.13287	-76.64990
S-BTF-7	Ephemeral	1,930	-	-	Non-Jurisdictional	None	43.13613	-76.65095
S-BTF-8	Perennial	922	847-106	Class C	USACE	None	43.14222	-76.65047
S-BTF-9	Intermittent	746	-	-	USACE	None	43.14626	-76.63486
S-BTF-10	Perennial	2,401	847-490	Class C	USACE	None	43.14636	-76.63363
S-BTF-11	Intermittent	1,129	-	-	USACE	None	43.14220	-76.63431
S-JJB-1	Intermittent	329	-	-	USACE	None	43.13887	-76.59695
S-JJB-2	Intermittent	1,157	-	-	USACE	None	43.13150	-76.60698
S-JJB-3	Intermittent	2,097	898-31	Class C	USACE	None	43.10420	-76.62259
S-JJB-4	Intermittent	1,624	898-31	Class C	USACE	None	43.10479	-76.61878
S-NSD-1	Intermittent	263	-	-	USACE	None	43.11777	-76.60332
S-NSD-2	Ephemeral	311	-	-	Non-Jurisdictional	None	43.11467	-76.60080
S-NSD-3	Intermittent	2,372	898-31	Class C	USACE	None	43.11266	-76.60710
S-NSD-4	Intermittent	1,172	-	-	USACE	None	43.13084	-76.62174

Stream Field Designation	Flow Regime Classification	Linear Feet within Project Area	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard[2]	Potential Jurisdiction Under Rapanos	Associated Buffer	Latitude of Centroid	Longitude of Centroid
S-NSD-5	Intermittent	2,696	898-31	Class C	USACE	None	43.11795	-76.62033
S-NSD-6	Intermittent	372	-	-	USACE	None	43.12458	-76.62871
S-NSD-7	Intermittent	3,131	847-500	Class C	USACE	None	43.13634	-76.62988
S-NSD-8	Ephemeral	1,564	847-500	Class C	Non-Jurisdictional	None	43.13948	-76.62899
S-NSD-9	Intermittent	1,541	847-490	Class C	USACE	None	43.14256	-76.62742
Total Stream Length Delineated:		**32,452**						

[1]A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.
[2] Streams designated within a standard of (T) indicate that they support trout, while those designated (TS) support trout spawning.

6.0 CONCLUSIONS

TRC identified and delineated a total of 45wetlands (596.57 acres) in the Project Area. Of these, 29 wetlands had PFO characteristics (451.70 acres), 25 wetlands had PEM characteristics (75.29 acres), four wetlands had PUB characteristics (56.12 acres), and three wetlands had PSS characteristics (13.45 acres), including combinations thereof. TRC assumes that 30 of the delineated wetlands would be under USACE jurisdiction, as they appear to be hydrologically connected to a traditional navigable water. Fifteen wetlands appear to be isolated and are therefore presumed non-jurisdictional to the USACE. Of the delineated wetlands, 15 overlap NYSDEC-mapped freshwater wetlands, and therefore portions of those wetlands are assumed likely jurisdictional under the ECL, as would be the 100-foot adjacent area around these mapped wetlands.

TRC identified and delineated 24 streams in the Project Area, including three perennial streams, 16 intermittent streams, and five ephemeral streams. TRC assumes that the three perennial streams and 16 intermittent streams will be likely under USACE jurisdiction, as they appear to be hydrologically connected to a traditional navigable water. Five of the delineated streams are likely non-jurisdictional to the USACE, as ephemeral streams are considered non-jurisdictional under the Navigable Waters Protection Rule. Of the 24 delineated streams, 10 streams coincide with NYSDEC-mapped Class C streams. These streams are not considered protected, per Article 15 of the ECL (Protection of Waters).

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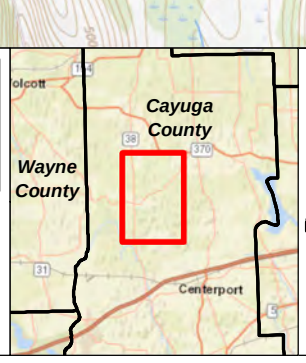
APPENDIX A
Figures

Project Area

0 1,000 2,000 Feet

N

Base Map: USGS/The National Map



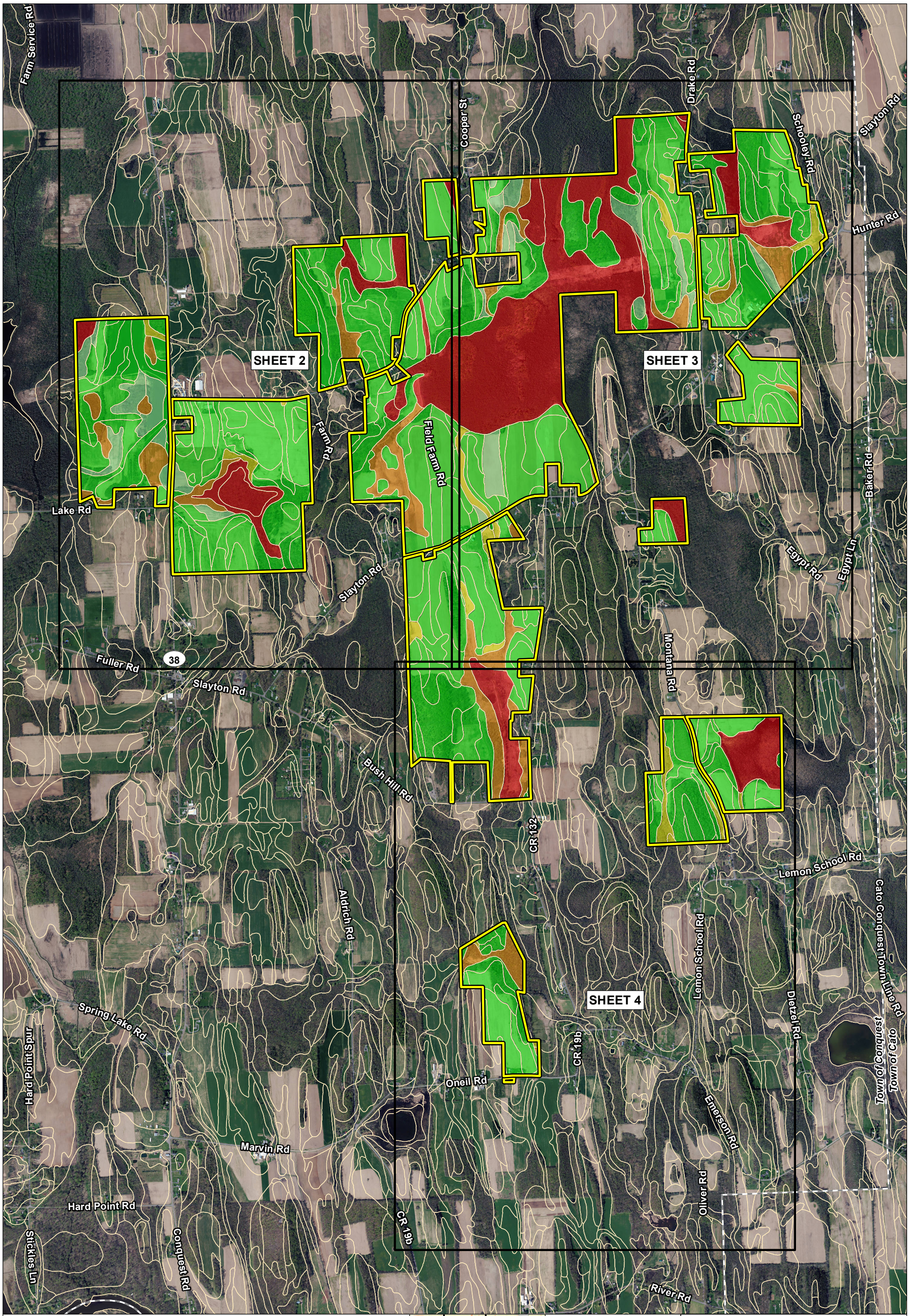
NEXTera ENERGY

SITE LOCATION MAP

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 1	DECEMBER 2020

Map Produced by TRC


Farm Service Rd
Cooper St
Drake Rd
Schooley Rd
Slayton Rd
Hunter Rd
SHEET 2
SHEET 3
Farm Rd
Field Farm Rd
Lake Rd
Slayton Rd
Egypt Rd
Egypt Ln
38
Fuller Rd
Slayton Rd
Montana Rd
Bush Hill Rd
CR 132
Lemon School Rd
Aldrich Rd
Lemon School Rd
Cato Conquest Town Line Rd
SHEET 4
Spring Lake Rd
Hard Point Spur
Dietzel Rd
Town of Conquest
Town of Cato
CR 19b
Oneil Rd
Emerson Rd
Marvin Rd
Oliver Rd
Hard Point Rd
CR 19b
Stickles Ln
Conquest Rd
River Rd
Project Area
Mapped Soils
Municipal Boundary
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Hydric (1 to 32%)
Not Hydric (0%)
N
Cayuga County
Wayne County
Centerport
New York
0
1,000
2,000
Feet
Data: USDA NRCS, 2019
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors
NEXTera ENERGY
MAPPED SOILS
IN THE PROJECT AREA
GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
SHEET 1 OF 4
FIGURE 2
JANUARY 2021
Map Produced by TRC

Soils in the Project Area	
Map Unit	**Soil Name**
Ac	Alden mucky silt loam
Ad	Alden mucky silt loam, till substratum
Al	Alluvial land
AsB	Appleton and Lyons soils, 0 to 3 percent slopes
ClA	Collamer silt loam, 0 to 2 percent slopes
ClB	Collamer silt loam, 2 to 6 percent slopes
CmC	Colonie loamy fine sand, 6 to 12 percent slopes
Fo	Fonda mucky silt loam
GaB	Galen fine sandy loam, 2 to 6 percent slopes
HlA	Hilton loam, 0 to 3 percent slopes
HlB	Hilton loam, 3 to 8 percent slopes
Lf	Lamson mucky fine sandy loam
Mb	Madalin silt loam, sandy subsoil variant
Mf	Minoa fine sandy loam
Mr	Muck, deep
Ms	Muck, shallow
Na	Niagara fine sandy loam
OfB	Ontario fine sandy loam, 3 to 8 percent slopes
OfC	Ontario fine sandy loam, 8 to 15 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OnC	Ontario loam, 8 to 15 percent slopes
OnD	Ontario loam, 14 to 20 percent slopes
OtE	Ontario, Honeoye, and Lansing soils, 20 to 35 percent slopes
PaB	Palmyra gravelly sandy loam, 3 to 8 percent slopes
PaC	Palmyra gravelly sandy loam, 8 to 15 percent slopes
PgB	Palmyra gravelly loam, 3 to 8 percent slopes
PgC	Palmyra gravelly loam, 8 to 15 percent slopes
PmD	Palmyra soils, 15 to 25 percent slopes
PnE	Palmyra, Howard, and Alton soils, 25 to 40 percent slopes
Pv	Phelps gravelly silt loam
RgB	Riga and Lairdsville silt loams, 2 to 6 percent slopes
RlC3	Riga and Lairdsville silty clay loams, 6 to 12 percent slopes, eroded

Project Area
Mapped Soils
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Hydric (1 to 32%)
Not Hydric (0%)

N

0 900 Feet

Data: USDA NRCS, 2019
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

2 3 4

NEXTera ENERGY

MAPPED SOILS IN THE PROJECT AREA

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
SHEET 2 OF 4

FIGURE 2 | JANUARY 2021

Map Produced by TRC

Soils in the Project Area	
Map Unit	**Soil Name**
Ac	Alden mucky silt loam
Ad	Alden mucky silt loam, till substratum
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes
AnC	Alton gravelly sandy loam, 8 to 15 percent slopes
AsB	Appleton and Lyons soils, 0 to 3 percent slopes
CeB	Cazenovia silt loam, 2 to 8 percent slopes
CeC3	Cazenovia silt loam, 5 to 14 percent slopes, eroded
CnB	Colonie fine sandy loam, 1 to 6 percent slopes
HlA	Hilton loam, 0 to 3 percent slopes
HlB	Hilton loam, 3 to 8 percent slopes
Lf	Lamson mucky fine sandy loam
Mf	Minoa fine sandy loam
Mr	Muck, deep
Ms	Muck, shallow
Na	Niagara fine sandy loam
Nc	Niagara and Canandaigua silt loams
OfB	Ontario fine sandy loam, 3 to 8 percent slopes
OfC	Ontario fine sandy loam, 8 to 15 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OnC	Ontario loam, 8 to 15 percent slopes
OnD	Ontario loam, 14 to 20 percent slopes
OtE	Ontario, Honeoye, and Lansing soils, 20 to 35 percent slopes
OvB	Ovid silt loam, 2 to 6 percent slopes
PgC	Palmyra gravelly loam, 8 to 15 percent slopes
PmD	Palmyra soils, 15 to 25 percent slopes
St	Stafford fine sandy loam
W	Water

Project Area
Mapped Soils
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Hydric (1 to 32%)
Not Hydric (0%)

N

0 900 Feet

Data: USDA NRCS, 2019
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

2 3 4

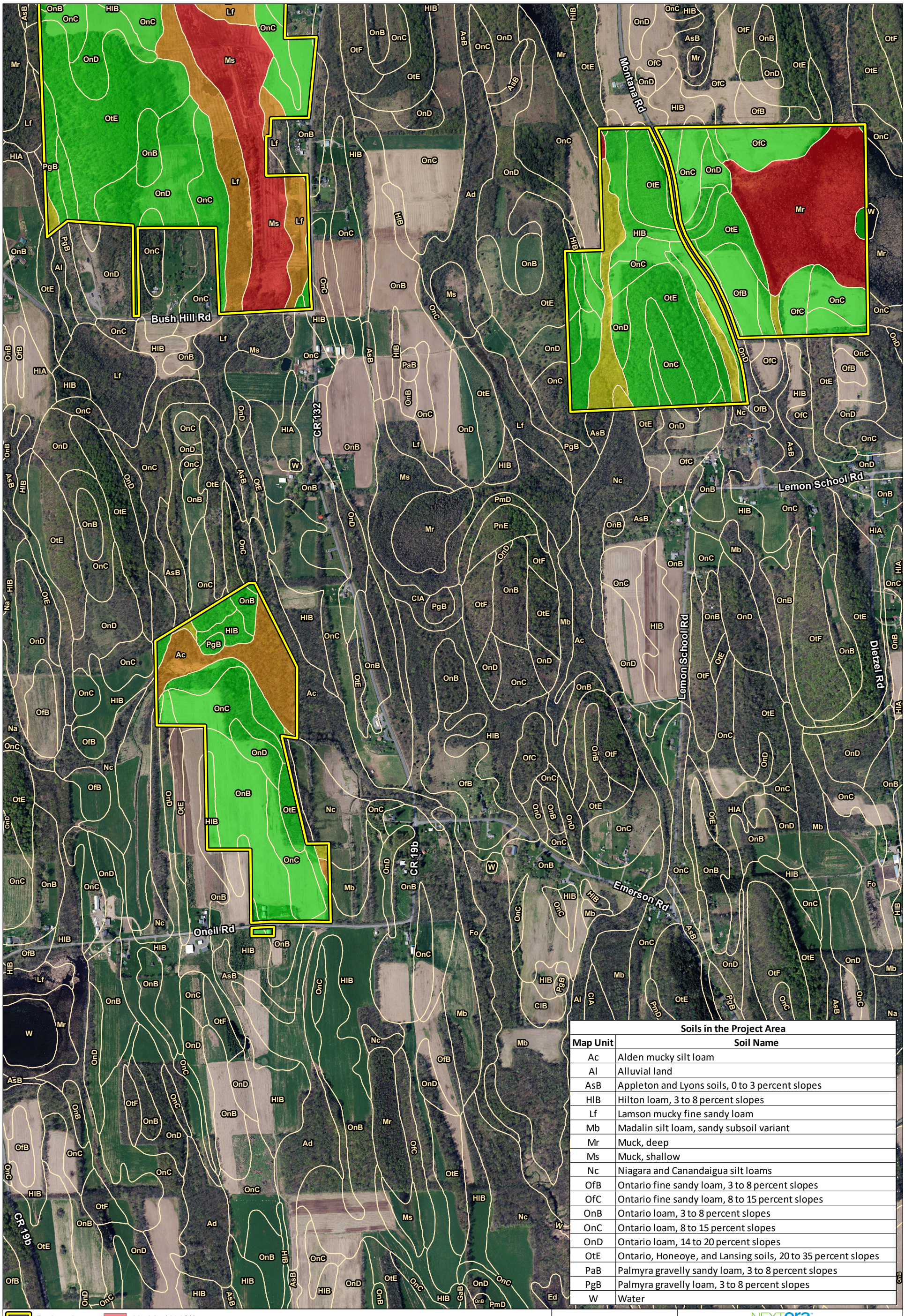
NEXTera ENERGY

MAPPED SOILS IN THE PROJECT AREA

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
SHEET 3 OF 4

FIGURE 2 | JANUARY 2021

Map Produced by TRC



Soils in the Project Area	
Map Unit	Soil Name
Ac	Alden mucky silt loam
Al	Alluvial land
AsB	Appleton and Lyons soils, 0 to 3 percent slopes
HlB	Hilton loam, 3 to 8 percent slopes
Lf	Lamson mucky fine sandy loam
Mb	Madalin silt loam, sandy subsoil variant
Mr	Muck, deep
Ms	Muck, shallow
Nc	Niagara and Canandaigua silt loams
OfB	Ontario fine sandy loam, 3 to 8 percent slopes
OfC	Ontario fine sandy loam, 8 to 15 percent slopes
OnB	Ontario loam, 3 to 8 percent slopes
OnC	Ontario loam, 8 to 15 percent slopes
OnD	Ontario loam, 14 to 20 percent slopes
OtE	Ontario, Honeoye, and Lansing soils, 20 to 35 percent slopes
PaB	Palmyra gravelly sandy loam, 3 to 8 percent slopes
PgB	Palmyra gravelly loam, 3 to 8 percent slopes
W	Water

Project Area
Mapped Soils
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Not Hydric (0%)

N

0 900 Feet

Data: USDA NRCS, 2019
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

2 3 4

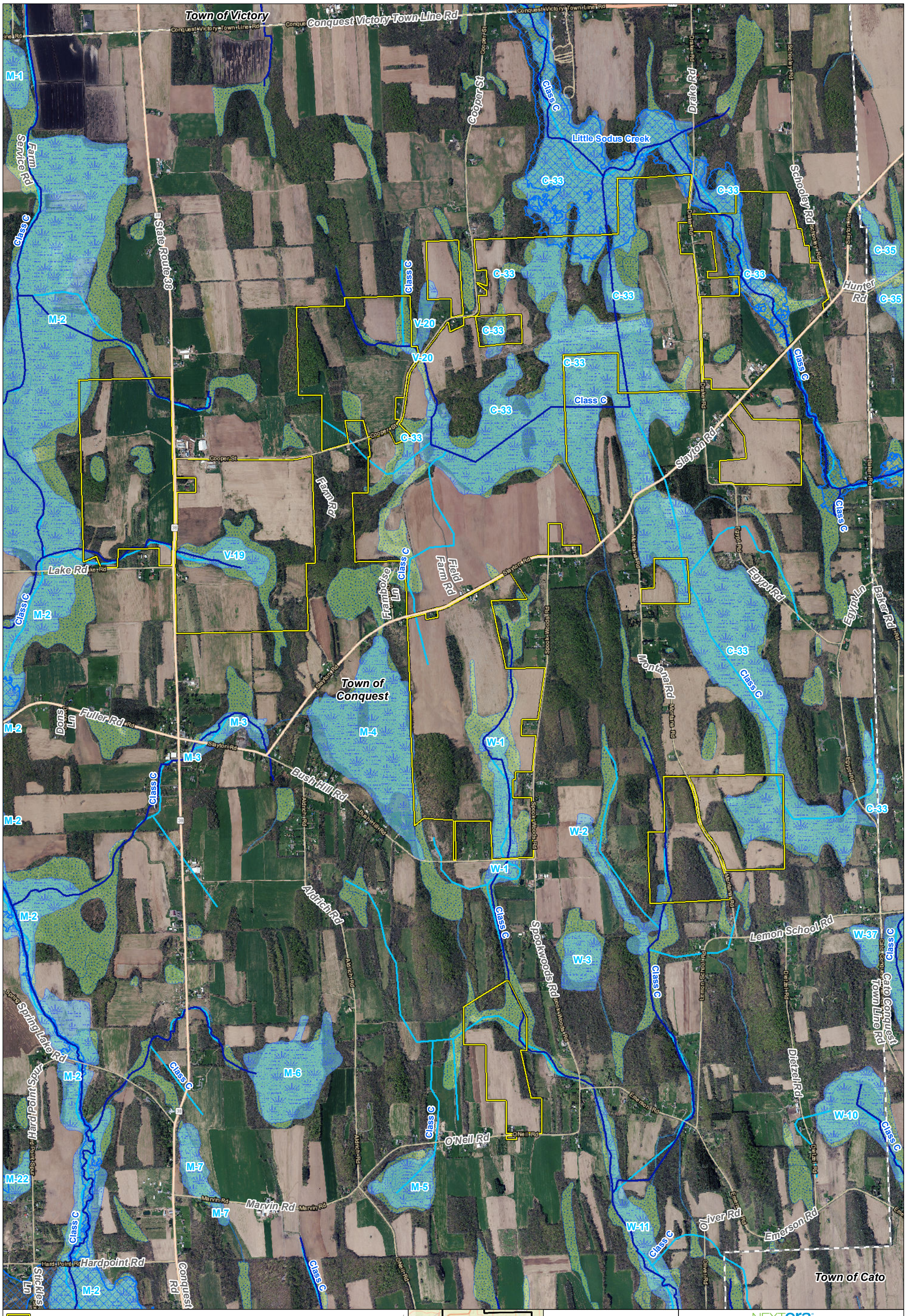
NEXTera ENERGY

MAPPED SOILS IN THE PROJECT AREA

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
SHEET 4 OF 4

FIGURE 2 | JANUARY 2021

Map Produced by TRC


Town of Victory
Conquest Victory Town Line Rd
Cooper St
Class C
Drake Rd
Schooley Rd
Little Sodus Creek
C-33
C-35
Hunter Rd
State Route 38
Class C
M-1
Farm Service Rd
Class C
M-2
V-20
V-19
Cooper St
Fram Rd
Class C
Field Farm Rd
Slayton Rd
Drake Rd
Class C
Slayton Rd
Egypt Rd
Baker Rd
Lake Rd
Class C
M-2
Town of Conquest
Montana Rd
Class C
Fuller Rd
Doris Ln
M-2
M-3
M-4
W-1
Slayton Rd
M-3
Bush Hill Rd
Class C
Aldrich Rd
M-2
W-2
W-1
Aldrich Rd
Class C
Spookwoods Rd
Lemon School Rd
W-37
Class C
M-2
W-3
Class C
Spring Lake Rd
Hard Point Spur
M-2
Class C
M-6
Class C
O'Neil Rd
Dietzel Rd
W-10
Class C
M-22
M-7
M-5
Marvin Rd
Marvin Rd
M-7
Class C
W-11
Oliver Rd
Emerson Rd
Hardpoint Rd
Class C
Conquest Rd
Stickles Ln
M-2
Town of Cato
Project Area
Municipal Boundary
NHD Stream
NYSDEC Classified Stream
NWI Wetland
NYSDEC Wetland
Special Flood Hazard Area
Data: NYSDEC, USFWS NWI, USGS NHD, FEMA
Base Map: Esri and its contributors
0
1,000
2,000
Feet
N
Cayuga County
Wayne County
Centerport
New York
NEXTera ENERGY
FEDERAL AND STATE WETLAND, WATERBODY, AND FLOODPLAIN MAPPING
GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
FIGURE 3
FEBRUARY 2021
Map Produced by TRC

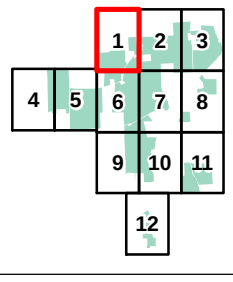
Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

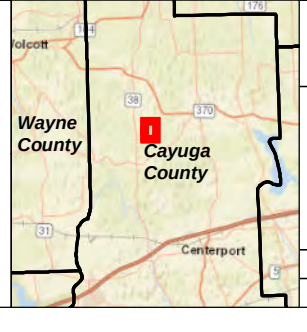
N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX





NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 1 OF 12	FEBRUARY 2021

Map Produced by TRC

Town of Conquest

W-NSD-14 PFO

W-JJB-3 PFO

W-JJB-3 PFO

W-JJB-3 PFO

W-JJB-3 PFO

W-JJB-3 PUB

W-JJB-3 PFO

W-JJB-3 PEM

W-JJB-3 PFO

W-JJB-3 PEM

W-JJB-3 PSS

W-JJB-3 PEM

W-JJB-3 PUB

W-JJB-3 PFO

W-JJB-3 PFO

W-JJB-3 PFO

W-JJB-3 PEM

W-JJB-3 PUB

Cooper St

Project Area

Municipal Boundary

Culvert

Delineated Stream

Delineated Wetland Line

Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX

	1	2	3
4	5	6	7	8
	9	10	11
		12	

Wayne County

Cayuga County

Volcott

Centerport

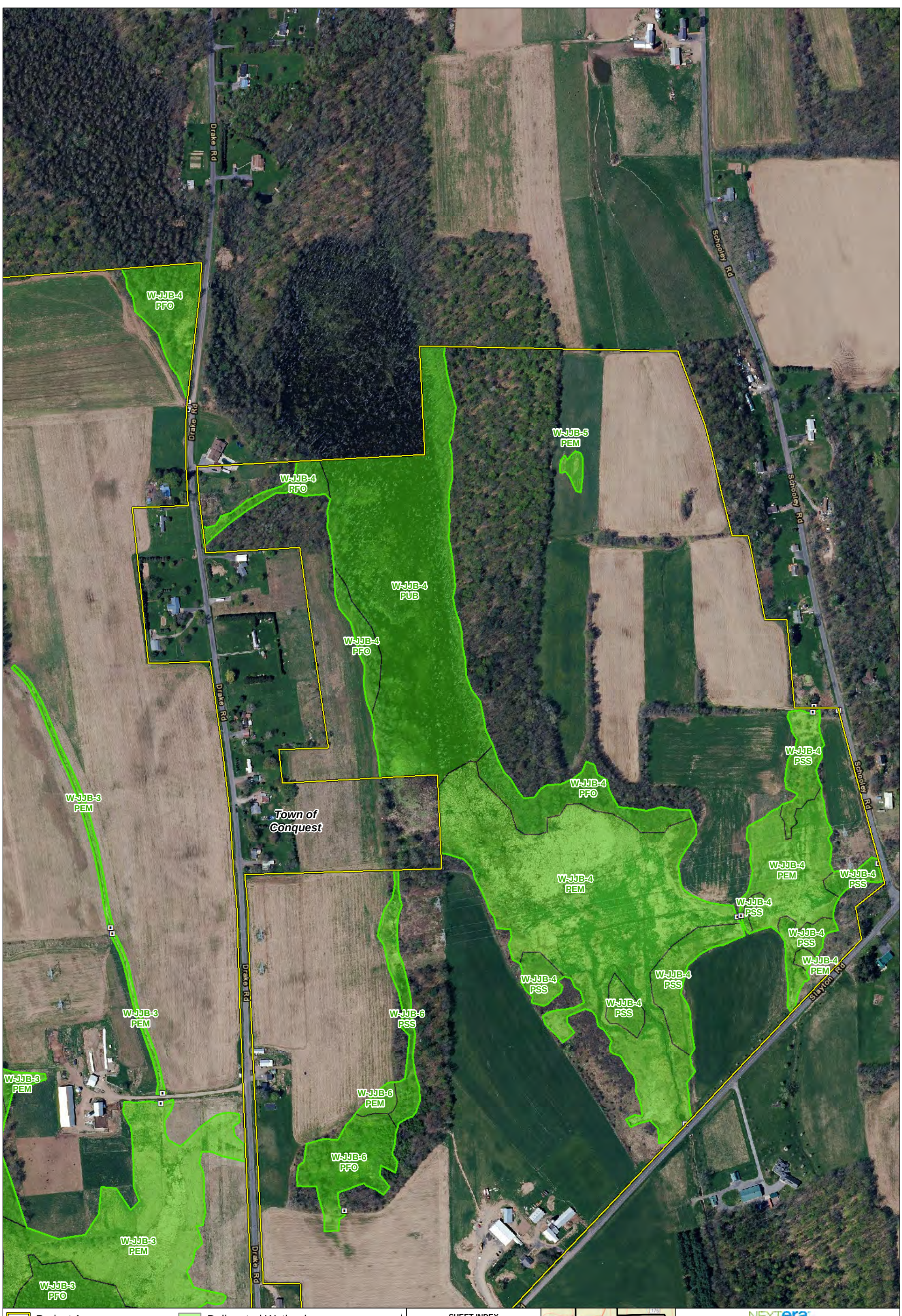
NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 2 OF 12	FEBRUARY 2021

Map Produced by TRC


Drake Rd
Schooley Rd
W-JJB-4
PFO
W-JJB-5
PEM
W-JJB-4
PUB
W-JJB-4
PSS
W-JJB-3
PEM
Town of
Conquest
W-JJB-6
PSS
W-JJB-6
PEM
W-JJB-6
PFO
W-JJB-3
PFO
Slayton Rd
Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland
N
0 200 400 Feet
Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors
SHEET INDEX
1 2 3 4 5 6 7 8 9 10 11 12
Wayne County
Cayuga County
Centerport
NEXTera ENERGY
DELINEATED RESOURCES
GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
FIGURE 4 | SHEET 3 OF 12 | FEBRUARY 2021
Map Produced by TRC

W-BTF-13
PFO

W-BTF-9
PFO

W-BTF-14
PEM

Town of
Conquest

W-BTF-8
PFO

S-BTF-5

W-BTF-7
PFO

W-BTF-7
PEM

W-BTF-7
PFO

S-BTF-1

W-BTF-7
PEM

Peachblow Rd

Peachblow Rd

Lake Rd

Lake Rd

Lake Rd

Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX

	1	2	3
4	5	6	7	8
		9	10	11
			12	

Wayne County
Cayuga County
Wolcott
Centerport

NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 4 OF 12	FEBRUARY 2021

Map Produced by TRC


W-BTF-12
PFO
S-BTF-8
RT-38
Town of
Conquest
Cooper St
Cooper St
W-BTF-11
PFO
W-BTF-4
PEM
W-BTF-6
PEM
W-BTF-3
PEM
S-BTF-7
RT-38
W-BTF-5
PEM
W-BTF-15
PFO
W-BTF-2
PEM
S-BTF-7
S-BTF-5
S-BTF-1
W-BTF-10
PEM
S-BTF-6
S-BTF-1
S-BTF-2
W-BTF-1
PFO
W-BTF-7
PFO
S-BTF-1
S-BTF-6
S-BTF-3
Lake Rd
W-BTF-7
PEM
S-BTF-1
W-BTF-1
PEM
S-BTF-4
W-BTF-1
PFO
S-BTF-1
RT-38
Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland
Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services,
GIS Program Office, 2018; Esri and its contributors
0
200
400
Feet
N
SHEET INDEX
1
2
3
4
5
6
7
8
9
10
11
12
Wayne
County
Cayuga
County
Centerport
NEXTera
ENERGY
DELINEATED RESOURCES
GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST
FIGURE 4
SHEET 5 OF 12
FEBRUARY 2021
Map Produced by
TRC

W-BTF-18
PEM
W-BTF-18
PFO
S-BTF-11
W-NSD-15
PEM
W-JJB-3
PEM
W-JJB-3
PFO
S-NSD-9
W-JJB-3
PFO
Cooper St
W-JJB-3
PEM
S-NSD-9
S-NSD-8
Cooper St
W-JJB-3
PFO
S-NSD-8
Cooper St
S-NSD-7
W-NSD-13
PFO
S-NSD-7
W-NSD-18
PEM
W-NSD-17
PFO
W-NSD-16
PFO
S-NSD-7
Town of
Conquest
S-BTF-4
Dusty Ln
Slayton Rd
W-BTF-1
PFO
Rd

Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX

	1	2	3
4	5	6	7	8
	9	10	11
		12	

Wayne County
Cayuga County
Centerport

NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 6 OF 12	FEBRUARY 2021

Map Produced by TRC

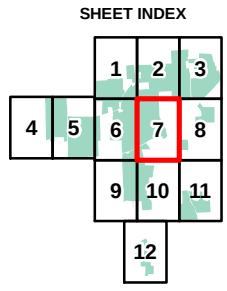
Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

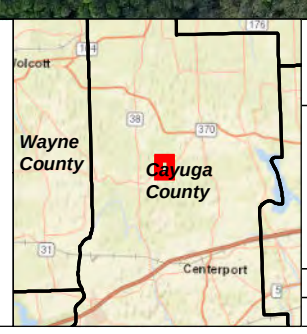
N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX





NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 7 OF 12	FEBRUARY 2021

Map Produced by TRC

Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

0 200 400 Feet

N

SHEET INDEX

	1	2	3	
4	5	6	7	8
	9	10	11	
		12		

Wayne County
Cayuga County
Centerport

NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 8 OF 12	FEBRUARY 2021

Map Produced by TRC

Slayton Rd
Slayton Rd
S-NSD-6
W-NSD-11
PEM
Town of
Conquest
W-NSD-12
PFO
Aldrich Rd
Bush Hill Rd
Aldrich Rd
Bush Hill Rd
Bush Hill Rd
Aldrich Rd

Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX

NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 9 OF 12	FEBRUARY 2021

Map Produced by TRC

W-NSD-9
PEM

S-NSD-5

S-NSD-5

Town of
Conquest

W-NSD-10
PFO

Spook Woods Rd

W-NSD-10
PEM

Bush Hill Rd

Spook Woods Rd

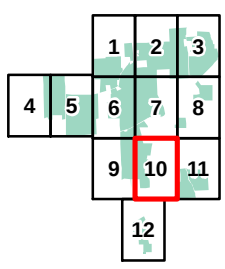
Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

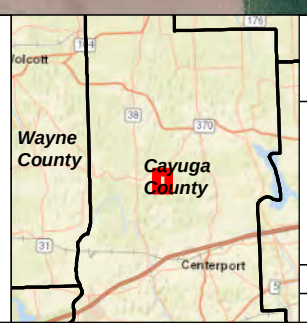
N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX





NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 10 OF 12	FEBRUARY 2021

Map Produced by TRC

Montana Rd

Town of Conquest

W-NSD-1
PEM

S-NSD-1

W-NSD-2
PEM

W-NSD-1
PUB

W-NSD-5
PFO

S-NSD-3

S-NSD-2

W-NSD-3
PFO

W-NSD-4
PEM

W-NSD-6
PFO

Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
Base Map: NYS Office of Information Technology Services, GIS Program Office, 2018; Esri and its contributors

SHEET INDEX

	1	2	3	
4	5	6	7	8
		9	10	11
		12		

Wayne County
Cayuga County
Centerport

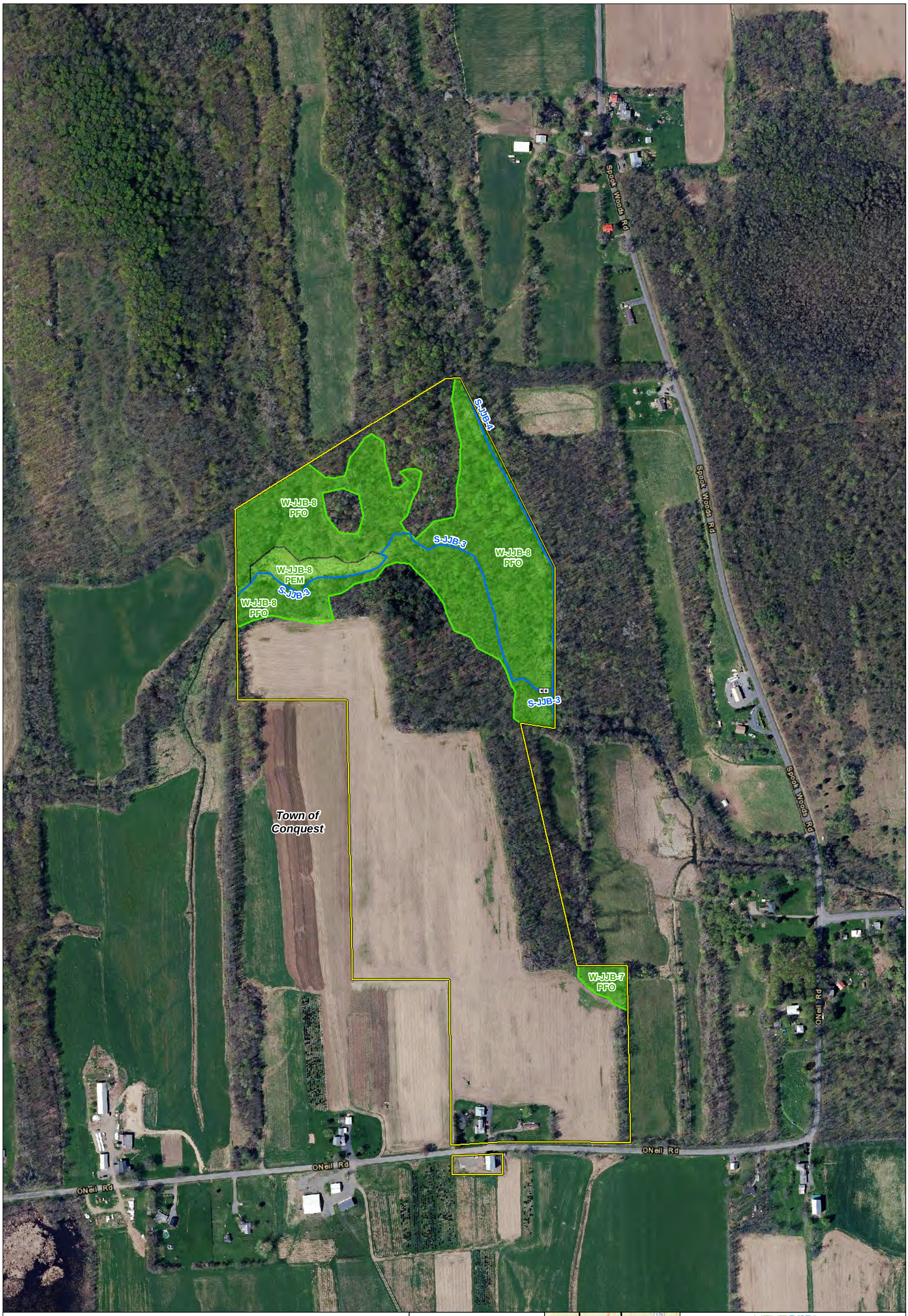
NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 11 OF 12	FEBRUARY 2021

Map Produced by TRC



Project Area
Municipal Boundary
Culvert
Delineated Stream
Delineated Wetland Line
Delineated Wetland

N

0 200 400 Feet

Data: TRC, Esri and its contributors
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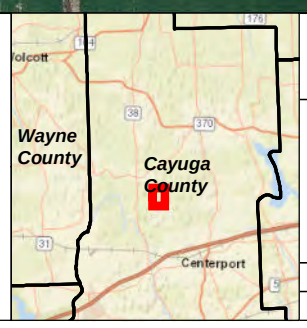
SHEET INDEX

		1	2	3
4	5	6	7	8
		9	10	11
			12	



NEXTera ENERGY

DELINEATED RESOURCES

GARNET ENERGY CENTER, LLC
TOWN OF CONQUEST

FIGURE 4	SHEET 12 OF 12	FEBRUARY 2021

Map Produced by TRC