

# WETLAND AND STREAM DELINEATION REPORT FLAT CREEK SOLAR

# TOWNS OF CANAJOHARIE AND ROOT MONTGOMERY COUNTY, NEW YORK

## **Prepared For:**

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## 1.0 INTRODUCTION

#### 1.1 Facility Description and Purpose

Flat Creek Solar NY LLC (Applicant) proposes the construction of the Flat Creek Solar Project (Facility), an up to 300-megawatt (MW) photovoltaic solar energy generation facility in the Towns of Root and Canajoharie, Montgomery County, New York. The Facility will be located on private land totaling approximately 3,788 acres that are owned by multiple participating landowners consisting of cultivated crops, hay/pasture, woody wetlands, and mixed forests (Facility Site; Figure 1). The Facility will include commercial-scale solar arrays, access roads, buried (and possibly overhead) electric collection lines, and electrical interconnection facilities (i.e., a collection substation and point of interconnection (POI) switchyard). The final solar array specification, as well as locations of arrays, will be finalized as part of ongoing environmental studies and engineering efforts.

## **1.2 Background and Report Summary**

TRC Companies, Inc. (TRC) conducted a wetland and stream delineation within an approximately 3,229-acre Survey Area located in the Facility Site, and within additional parcels outside of the current Facility Site that were previously considered, between 2020 and 2024. This Wetland and Stream Delineation Report was submitted to New York State Office of Renewable Energy Siting (ORES) on March 17, 2023. Pursuant to NYCRR Section 900-1.3 (e-f), ORES conducted a site visit on May 31, 2023. Additional parcels were added to the Survey Area subsequent to the submission of this Wetland and Stream Delineation Report was submitted on July 28, 2023 to ORES and the United States Army Corps of Engineers (USACE). ORES conducted an additional site visit on August 31, 2023 to review delineation efforts within the additional parcels added to the Survey Area. An official jurisdictional determination was made by ORES on September 27, 2023.

This report includes additional wetlands and stream segments that were delineated in 2021 that were not previously included in prior submissions. TRC identified two additional wetlands (W-EES-01 and W-EES-02), two additional intermittent streams (S-EES-05 and S-EES-06), and extended three previously delineated streams (S-EES-03, S-EES-07, and S-EES-08). Additional delineation efforts that occurred in November 2023 and February 2024 identified one new wetland (W-RDS-19), extended two previously delineated wetlands (W-JMP-25 and W-EES-06), and extended one previously delineated intermittent stream (S-NSD-23). This report details all of the wetlands and surface waters (including rivers, streams, ponds, and lakes) identified within the Survey Area, including the newly identified resources from August 2021, November 2023, and February 2024.

Delineation efforts included the following tasks:

- 1. A desktop review of existing, publicly available federal and state agency resources;
- 2. Documentation of the delineated aquatic features which includes hydrology, vegetation, and hydric soils data collected in the field.



Wetland and stream resources documented during all previous site visits are included in this report. Conclusions proposed herein provide information necessary to understand what wetland and waterbody resources exist within the Survey Area and to support permit applications to the ORES and the USACE. Final determination of the jurisdictional status of the wetlands and streams identified within the Project Area are made by the USACE and ORES in consultation with the New York State Department of Environmental Conservation (NYSDEC).



# 2.0 REGULATORY AUTHORITY

#### 2.1 United States Army Corps of Engineers

In accordance with Section 404 of the Clean Water Act (CWA), 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 (USEPA) 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" (USEPA, 2001).

On June 22, 2020, the Navigable Waters Protection Rule (NWPR) took effect, replacing the prior Clean Water Rule that was established in 2015. The NWPR outlined categories of waters considered jurisdictional, as well as those considered non-jurisdictional. However, on August 30, 2021, the U.S. District Court for the District of Arizona issued an order vacating and remanding the NWPR nationwide.

In accordance with a September 2, 2021 directive from the Acting Assistant Secretary of the Army for Civil Works, the USACE resumed conducting approved jurisdictional determinations (AJDs) nationwide, consistent with the pre-2015 WOTUS regulatory regime. The pre-2015 regulatory regime is the 1986 WOTUS regulation, as informed by previously issued 2003 SWANCC and 2008 Rapanos guidance documents resulting from US Supreme Court decisions.

The USACE and the USEPA issued a final rule on January 18, 2023, revising the definition of "Waters of the United States" pursuant to the CWA, replacing the 2020 NWPR. The 2023 WOTUS rule largely reinstated the pre-2015 definitions with some refinements to incorporate Supreme Court case law, including a standard that extends CWA jurisdiction to waters that meet either the Rapanos plurality's "relatively permanent" test or the "significant nexus" test for tributaries, streams, wetlands, and intrastate lakes and ponds. The 2023 rule also required that protected wetlands be "reasonably close such that the wetland can modulate water quantity or quality" in another jurisdictional waterway (Petersen & Ward, 2023).

However, on May 25, 2023, the US Supreme Court struck down the "significant nexus" standard and wrote a more narrow definition of what is considered a WOTUS which states that a wetland is a WOTUS only if an adjacent body of water is a relatively permanent body of water connected to a traditional interstate navigable water and the wetland has a continuous surface connection with water, making it difficult to distinguish where the water ends and the wetland begins.

On August 29, 2023, the USEPA and USACE issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register on January 18, 2023. This final rule conforms the definition of WOTUS to the U.S. Supreme Court's May 25, 2023, decision in the case of Sackett v. Environmental Protection Agency. Parts of the January 2023 Rule are invalid under the Supreme Court's interpretation of the CWA in the Sackett



decision. Therefore, the agencies have amended key aspects of the regulatory text to conform it to the Court's decision. The conforming rule, "Revised Definition of 'Waters of the United States'; Conforming," was published in the Federal Register and became effective on September 8, 2023 (USEPA, 2023).

#### Summary of Key Points:

The USACE (and the USEPA) will typically only assert jurisdiction over the following waters:

- Traditional interstate navigable waters;
- Relatively permanent bodies of water connected to traditional navigable waters;
- Wetlands that directly abut such bodies of water.

The agencies will typically not assert jurisdiction over:

- Prior converted cropland, adopting the United States Department of Agriculture's (USDA) definition and generally excluding wetlands that were converted to cropland prior to December 23, 1985.
- Waste treatment systems, including treatment ponds or lagoons that are designed to meet the requirements of the CWA.
- Ditches (including roadside ditches), excavated wholly in and draining only dry land, and that do not carry a relatively permanent flow of water.
- Artificially irrigated areas, that would revert to dry land if the irrigation ceased.
- Artificial lakes or ponds, created by excavating or diking dry land that are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- Artificial reflecting pools or swimming pools, and other small ornamental bodies of water created by excavating or diking dry land.
- Waterfilled depressions, created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction operation is abandoned and the resulting body of water meets the definition of WOTUS.
- Swales and erosional features (e.g., gullies, small washes), that are characterized by low volume, infrequent, or short duration flow.

#### 2.2 New York State Department of Environmental Conservation and Office of Renewable Energy Siting

In accordance with New York Codes, Rules, and Regulations (NYCRR) Section 900-1.3 (e-f), ORES will review State-regulated features as part of the pre-application phase of a Section 94-c project. In order to delineate potentially State jurisdictional features, New York State Department



of Environmental Conservation's (NYSDEC's) regulatory authority was reviewed and is summarized here.

The Freshwater Wetlands Act (Act; Article 24 and Title 23 of Article 71 of the Environmental Conservation Law [ECL]) gives the NYSDEC jurisdiction over State-protected wetlands and adjacent areas, typically extending 100 feet from the wetland perimeter. To implement this Act, regulations were promulgated by the State under 6 NYCRR Parts 663 and 664. Part 664 designates wetlands into four class ratings, with Class I being the highest or best quality wetland and Class IV being the lowest. Wetlands regulated by the State are those 12.4 acres (5 hectares) in size or larger, as well as those smaller than 12.4 acres, deemed to be of "unusual local importance." The Act requires the NYSDEC to map all State-protected wetlands. This allows landowners and other interested parties a means of determining where the State-jurisdictional wetlands exist, although the maps are legally only approximations—thus the need for on-site delineations. Under Part 663, approval under an Article 24 permit is required from the NYSDEC prior to most disturbances to a State-protected wetland or its protected 100-foot adjacent area, including the removal of vegetation.

In April 2022, the Act was amended to expand NYSDEC wetlands authority which will no longer be limited to mapped freshwater wetlands beginning on January 1, 2025. The NYSDEC Freshwater Wetlands Maps will become informational, and any wetlands that meet the applicable definition and criteria of a freshwater wetland will be regulated by the State and is subject to permitting, regardless of whether they appear on the informational maps (NYSDEC, 2024a). The NYSDEC will be relying on available remote data and aerial imagery if there are State-regulated freshwater wetlands located on parcels (NYSDEC, 2024b). In addition, smaller wetlands of "unusual importance" will be regulated beginning on January 1, 2025, if they meet one or more of 11 newly established statutory criteria. Future regulations expected to begin on January 1, 2028, will include threshold changes for State-regulated wetlands which will decrease from 12.4 acres to 7.4 acres (NYSDEC, 2024a).

Article 15 of the ECL (Protection of Waters), and its implementing regulations under 6 NYCRR Part 608, provides the NYSDEC with regulatory jurisdiction over any activity that disturbs 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. This law also provides the 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. 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 and 608). The NYSDEC has jurisdiction over the bed and banks of a protected stream. From the Protection of Waters, a "bank" is defined as "land area immediately adjacent to and which slopes toward the bed of a watercourse and which is necessary to maintain the integrity of the watercourse. A bank will not be considered to extend more than 50 feet horizontally from the mean water line; with the following exceptions: Where a generally uniform slope of 45 degrees or greater adjoins the bed of a watercourse, the bank is extended to the crest of the slope or the first definable break in slope, either a natural or constructed feature lying parallel to the watercourse." Unprotected waters are regulated by the NYSDEC up to the mean high water line if the stream is navigable-in-fact. NYSDEC water quality classifications of unprotected watercourses include Class C and Class D waterbodies. These 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 (perennial) 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."

# 3.0 FACILITY SITE CHARACTERISTICS

#### 3.1 Resources

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

- United States Geological Survey (USGS) Canajoharie, Randall, Sharon Springs, and Carlisle New York 7.5-minute quadrangles;
- USDA Ecoregion Maps;
- USGS National Hydrography Dataset (NHD);
- USGS Hydrologic Unit Maps;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 36057C0310E, effective on 01/19/2018; and 36057C0330E, effective on 01/19/2018; 36057C0143E, effective 1/19/2018; and 36057C0444E, effective 1/19/2018;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping;
- NYSDEC Environmental Resource Mapper (ERM) (NYSDEC, 2024c);
- NYSDEC Freshwater Wetlands Mapping;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey; and
- Recent aerial imagery.

## 3.2 Vegetation and Ecological Communities

The Facility Site resides within the Eastern Great Lakes Lowlands Level III Ecoregion (83) and the Mohawk Valley Level IV Ecoregion (83f) (Bailey, 1995; Bryce et al., 2010). 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 sub-region.
- Mountainous Areas: Mountainous regions that exhibit different ecological zones based on elevation.

Recent aerial imagery of the Facility Site and surrounding vicinity indicates that the Facility Site is predominantly covered by forested components and agricultural land. Agricultural fields, residences, farm buildings, farm ponds, and farm roads are evident. Streams, drainage ditches and forests are depicted throughout the Facility Site. The following ecological communities, as defined by *Ecological Communities of New York State* (Edinger et al., 2014), were identified within the Facility Site at the time of the delineations:

- Mowed grass
- Shrub swamp
- Pastureland
- Paved road/ path
- Intermittent stream
- Eutrophic pond
- Red maple-hardwood swamp
- Beech- maple mesic forest

- Red maple-swamp white oak swamp
- Rural structure exterior
- Shallow emergent marsh
- Successional northern hardwoods
- Successional old field
- Successional shrubland
- Unpaved road/ path
- Urban structure exterior

## 3.3 Hydrology

#### 3.3.1 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 HUCs, 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 Facility Site is located within the following drainage basins and watersheds:

- Mohawk River Basin major drainage basin;
- Mohawk River sub-basin (HUC 02020004);
- Canajoharie Creek Mohawk River (HUC 0202000409);
- Cayadutta Creek Mohawk River watersheds (HUC 0202000410);



- Flat Creek Mohawk River (HUC 020200041002;)
- Yatesville Creek Mohawk River (HUC 020200041003);
- Headwaters Flat Creek (HUC 020200041001); and
- Lower Canajoharie Creek sub-watersheds (HUC 020200040908) (USEPA 2017).

The NYSDEC also classifies watersheds more generally within the State. 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).

The Facility Site is located within Mohawk River watershed. The Mohawk River Watershed drainage originates in the valley between the western Adirondacks and the Tug Hill Plateau and flows 140 miles to the east where it joins the Hudson River. At its most downstream point, the Mohawk River drains an area of 3,460 square miles. The watershed is comprised of 4,086 miles of freshwater streams and rivers including Schoharie Creek, West Canada Creek, and East Canada Creek (NYSDEC, 2024d).

## 3.3.2 Hydrologic Character

The dominant surface water feature within the Facility Site is Flat Creek which originates in the southeast and flows northwest, and its minor tributaries which are primarily located within the central portion of the Facility Site. Yatesville Creek and Minor tributaries to the Mohawk River are present on the eastern portion of the Facility Site. Streams within the Facility Site generally flow north towards the Mohawk River. Most aquatic features found within the Facility Site appear to receive surface waters from precipitation events or agricultural runoff. The wetlands on-site act as ground water recharge and discharge features, as do the streams and drainage features.

The Facility Site receives, on average, 45.72 inches of rainfall annually based on information for the Town of Cherry Valley (U.S. Climate Data, 2024). The Town of Cherry Valley is approximately 13 miles southwest of the Facility Site. In addition to direct precipitation, on-site hydrology appears to originate from agricultural runoff, and subsurface flow.

## 3.3.3 FEMA Flood Zone Mapping

FEMA maintains material developed to support flood hazard mapping for the National Flood Insurance Program (NFIP). According to FIRM panels 36057C0310E, effective on 01/19/2018; 36057C0330E, effective on 01/19/2018; 36057C0143E, effective 1/19/2018; and 36057C0444E, effective 1/19/2018, most of the parcels are within Zone X (outside of the 0.2% annual change floodplain) (FEMA, 2021). Several of the parcels contained sections within Zone AE which notes



a floodway channel of a stream that must be kept free of encroachment so the 1% annual change flood can be carried without substantial increases in flood heights (Figure 3).

#### 3.4 Federal and State Mapped Wetlands and Streams

The USFWS is the principal 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 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.

Review of the NWI mapping during the preliminary desktop analysis indicated 72 NWI wetland areas are mapped within the Facility Site (Figure 3). This includes 29 freshwater pond (PUB, PUBH, PUBHx) wetlands, 27 riverine (R2UBH, R2USC, R4SBA, R4SBC) wetlands, 11 freshwater emergent (PEM1A, PEM1E) wetlands, and five freshwater forested/shrub (PFO1A, PSS1E) wetlands. There is one NYSDEC mapped wetland feature identified as freshwater wetland CA-1 within the Facility Site (Table 1; NYSDEC, 2021).

| NYSDEC Wetland ID   | Wetland Class<br>(I, II, III, or IV) <sup>1</sup> | Total Wetland<br>Area (Acres) | Wetland Area within the<br>Facility Site (Acres) |  |  |  |  |  |  |  |
|---|---|-------------------------------|--|--|--|--|--|--|--|--|
| CA-1  | CA-1 III 54.7 27.15                               |                               |  |  |  |  |  |  |  |  |
| <sup>1</sup> 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. |   |                               |  |  |  |  |  |  |  |  |

Table 1. NYSDEC-Mapped Freshwater Wetlands within the Facility Site

There are several NWI and USGS National Hydrography Dataset (NHD) mapped riverine features within the Facility Site (Figure 3; USFWS, 2021; USGS, 2018).

Based on NYSDEC stream classification mapping, there are five Class C NYSDEC streams mapped within the Facility Site (Figure 3). Table 2 provides a detailed summary of the NYSDEC-classified priority (protected and unprotected) streams within the Facility Site.

| NYSDEC Stream Name<br>and Regulatory<br>Number | NYS Major<br>Drainage Basin | USGS Sub-<br>basin HUC 8<br>and Name | NYSDEC<br>Classification <sup>1</sup><br>and Standard <sup>2</sup> | Cumulative<br>Linear Feet<br>within the<br>Facility Site |
|--|-----------------------------|--------------------------------------|--|--|
| 876-252<br>Lasher Creek                        | Mohawk River                | Mohawk<br>02020004                   | C/C  | 4,889.21   |
| 876-253<br>Lasher Creek and tribs              | Mohawk River                | Mohawk<br>02020005                   | C/C  | 3,511.17   |
| 876-258<br>Flat Creek and tribs                | Mohawk River                | Mohawk<br>02020008                   | C/C  | 12,640.52  |
| 876-259<br>Flat Creek and tribs                | Mohawk River                | Mohawk<br>02020009                   | C/C  | 23,453.91  |
| 876-260<br>Mohawk River and Tribs              | Mohawk River                | Mohawk<br>02020010                   | C/C  | 10,745.56  |

| Table 2. NYSDEC-Mapped Streams within the Facility S | Site |
|--|------|
|--|------|

<sup>1</sup>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.

<sup>2</sup>Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

While these resources provide general information about the location, size, and quality of wetlands and waterways, field verification is required to confirm the presence or absence and the extent of aquatic features within the Facility Site. During field surveys, TRC scientists delineated additional unmapped wetlands and waterways. These results are discussed in detail in Section 5.0.

# 3.5 Topography and Soil Characteristics

# 3.5.1 Topography

The landforms of the Facility Site are rolling hills and steep valleys created by glacial activity and water and ice erosion. The valleys are covered by mainly glacial till which contains considerable amounts of shale chips and fragments. As shown on the USGS Canajoharie, Randall, Sharon Springs and Carlisle NY 7.5-minute-quadrangles, the Facility Site consists of rolling hills used for agriculture production (approximately 1 to 3 percent slope) sloping down to steep valleys containing riverine features (USGS, 2021). The Facility Site slopes to the north, with topography ranging from 950 feet to 600 feet above mean sea level (AMSL).

# 3.5.2 Site Soils

The USDA NRCS Web Soil Survey is an online resource mapping tool that provides soil data and information for United States. 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 46 soil map units were identified within the Facility Site. 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 Facility Site is primarily very poorly drained to somewhat poorly drained, with 69.03 percent of mapped soils classified as either very poorly drained, poorly drained, or somewhat poorly drained. Approximately 30.87 percent of soils were either moderately well drained, well drained, or somewhat excessively drained. Three soil map units accounting for the remaining 0.10 percent of soils were not assigned drainage classes.

Soils within the Facility Site include prime farmland, prime farmland if drained, farmland of statewide importance, and not prime farmland classifications. Prime farmland soils comprise 485.67 acres (12.80%), soils that are classified as prime farmland if drained comprise 1,895.45 acres (49.96%) with soils associated with farmland of statewide importance comprising 923.62 acres (24.34%). Soils considered as not prime farmland account for 489.23 acres (12.89%) (USDA NRCS, 2019). The 46 soil map units identified within the Facility Site by the NRCS are outlined in Table 3 below. Refer to Figure 2 for graphically depicted soil map units of the Facility Site.

| Map Unit<br>Symbol | Map Unit Name                              | Slope<br>(%) | Drainage<br>Class       | Hydric<br>Rating<br>(%) | Acres in<br>Facility<br>Site | Percent<br>of<br>Facility<br>Site (%) |
|--------------------|--|--------------|-------------------------|-------------------------|------------------------------|---------------------------------------|
| AIB                | Alton gravelly loam, 3 to 8 percent slopes | 6            | Well drained            | 5                       | 9.71                         | 0.26                                  |
| AnB                | Angola silt loam, 3 to 8 percent slopes    | 5            | Somewhat poorly drained | 10                      | 79.39                        | 2.09                                  |

#### Table 3. Mapped Soils within the Facility Site



| Map Unit<br>Symbol | Map Unit Name   | Slope<br>(%) | Drainage<br>Class                  | Hydric<br>Rating<br>(%) | Acres in<br>Facility<br>Site | Percent<br>of<br>Facility<br>Site (%) |
|--------------------|---|--------------|------------------------------------|-------------------------|------------------------------|---------------------------------------|
| АрА                | Appleton silt loam, 0 to 3 percent slopes                   | 2            | Somewhat poorly drained            | 4                       | 38.95                        | 1.03                                  |
| АрВ                | Appleton silt loam, 3 to 8 percent slopes                   | 5            | Somewhat poorly drained            | 5                       | 292.55                       | 7.71                                  |
| BuB                | Burdett channery silt loam,<br>3 to 8 percent slopes        | 5            | Somewhat poorly drained            | 8                       | 158.60                       | 4.18                                  |
| BuC                | Burdett channery silt loam,<br>8 to 15 percent slopes       | 12           | Somewhat poorly drained            | 8                       | 43.90                        | 1.16                                  |
| CFL                | Cut and fill land   | 8            | Somewhat<br>excessively<br>drained | 10                      | 7.31                         | 0.19                                  |
| ChA                | Churchville silty clay loam,<br>0 to 3 percent slopes       | 2            | Somewhat poorly drained            | 10                      | 67.44                        | 1.78                                  |
| ChB                | Churchville silty clay loam,<br>3 to 8 percent slopes       | 4            | Somewhat poorly drained            | 10                      | 196.62                       | 5.18                                  |
| DaA                | Darien silt loam, 0 to 3<br>percent slopes                  | 2            | Somewhat poorly drained            | 10                      | 42.89                        | 1.13                                  |
| DaB                | Darien silt loam, 3 to 8<br>percent slopes                  | 5            | Somewhat poorly drained            | 10                      | 937.02                       | 24.70                                 |
| DaC                | Darien silt loam, 8 to 15<br>percent slopes                 | 12           | Somewhat poorly drained            | 5                       | 4.99                         | 0.13                                  |
| FBD                | Farmington-Rock outcrop<br>association, moderately<br>steep | 13           | -                                  | 0                       | 3.84                         | 0.10                                  |
| FL                 | Fluvaquents, loamy  | 1            | Poorly drained                     | 90                      | 153.38                       | 4.04                                  |
| Fo                 | Fonda mucky silty clay<br>loam                              | 2            | Very poorly<br>drained             | 85                      | 28.40                        | 0.75                                  |
| Fr                 | Fredon silt loam  | 1            | Poorly drained                     | 60                      | 59.89                        | 1.58                                  |
| HrA                | Howard gravelly silt loam, 0<br>to 3 percent slopes         | 2            | Well drained                       | 0                       | 5.00                         | 0.13                                  |



| Map Unit<br>Symbol | Map Unit Name  | Slope<br>(%) | Drainage<br>Class          | Hydric<br>Rating<br>(%) | Acres in<br>Facility<br>Site | Percent<br>of<br>Facility<br>Site (%) |
|--------------------|--|--------------|----------------------------|-------------------------|------------------------------|---------------------------------------|
| HrB                | Howard gravelly silt loam, 3<br>to 8 percent slopes    | 6            | Well drained               | 0                       | 3.30                         | 0.09                                  |
| HrC                | Howard gravelly silt loam, 8<br>to 15 percent slopes   | 12           | Well drained               | 0                       | 6.43                         | 0.17                                  |
| IIA                | llion silt loam, 0 to 3 percent slopes                 | 2            | Poorly drained             | 90                      | 138.21                       | 3.64                                  |
| IIB                | llion silt loam, 3 to 8<br>percent slopes              | 6            | Poorly drained             | 90                      | 193.18                       | 5.09                                  |
| LaB                | Lansing silt loam, 3 to 8 percent slopes               | 5            | Well drained               | 0                       | 178.00                       | 4.69                                  |
| LaC                | Lansing silt loam, 8 to 15 percent slopes              | 11           | Well drained               | 0                       | 258.52                       | 6.81                                  |
| LaD                | Lansing silt loam, 15 to 25 percent slopes             | 20           | Well drained               | 0                       | 111.68                       | 2.94                                  |
| LMF                | Lansing and Mohawk soils,<br>25 to 60 percent slopes   | 43           | Well drained               | 0                       | 97.20                        | 2.56                                  |
| LoB                | Lordstown gravelly silt loam, 3 to 8 percent slopes    | 6            | Well drained               | 0                       | 10.47                        | 0.28                                  |
| Ма                 | Madalin silty clay loam, 0 to<br>3 percent slopes      | 1            | Poorly drained             | 95                      | 161.22                       | 4.25                                  |
| Md                 | Madalin silty clay loam,<br>moderately shallow variant | 2            | Poorly drained             | 85                      | 0.13                         | <0.01                                 |
| MmB                | Manheim silt loam, 3 to 8<br>percent slopes            | 5            | Somewhat poorly drained    | 5                       | 5.15                         | 0.14                                  |
| MsB                | Mohawk silt loam, 3 to 8 percent slopes                | 6            | Well drained               | 0                       | 14.38                        | 0.38                                  |
| MsD                | Mohawk silt loam, 15 to 25 percent slopes              | 20           | Well drained               | 0                       | 10.81                        | 0.28                                  |
| NuB                | Nunda channery silt loam, 3<br>to 8 percent slopes     | 5            | Moderately well<br>drained | 0                       | 7.08                         | 0.19                                  |



| Map Unit<br>Symbol | Map Unit Name  | Slope<br>(%) | Drainage<br>Class          | Hydric<br>Rating<br>(%) | Acres in<br>Facility<br>Site | Percent<br>of<br>Facility<br>Site (%) |
|--------------------|--|--------------|----------------------------|-------------------------|------------------------------|---------------------------------------|
| NuC                | Nunda channery silt loam, 8<br>to 15 percent slopes  | 12           | Moderately well<br>drained | 0                       | 23.21                        | 0.61                                  |
| NuD                | Nunda channery silt loam,<br>15 to 25 percent slopes | 20           | Moderately well<br>drained | 0                       | 12.67                        | 0.33                                  |
| PaB                | Palatine silt loam, 3 to 8 percent slopes            | 6            | Well drained               | 0                       | 126.32                       | 3.33                                  |
| PaC                | Palatine silt loam, 8 to 15 percent slopes           | 12           | Well drained               | 0                       | 83.13                        | 2.19                                  |
| PaD                | Palatine silt loam, 15 to 25 percent slopes          | 20           | Well drained               | 0                       | 51.88                        | 1.37                                  |
| РрА                | Phelps gravelly loam, 0 to 3 percent slopes          | 2            | Moderately well<br>drained | 5                       | 15.29                        | 0.40                                  |
| РрВ                | Phelps gravelly loam, 3 to 8 percent slopes          | 6            | Moderately well<br>drained | 0                       | 16.78                        | 0.44                                  |
| Pr                 | Phelps gravelly loam, fan                            | 4            | Moderately well<br>drained | 0                       | 89.59                        | 2.36                                  |
| RhA                | Rhinebeck silty clay loam, 0<br>to 3 percent slopes  | 2            | Somewhat poorly drained    | 10                      | 2.45                         | 0.06                                  |
| RhB                | Rhinebeck silty clay loam, 3<br>to 8 percent slopes  | 4            | Somewhat poorly drained    | 10                      | 14.50                        | 0.38                                  |
| RLF                | Rock outcrop-Farmington association, very steep      | 48           | -                          | 0                       | 8.10                         | 0.21                                  |
| W                  | Water  | 0            | -                          | 0                       | 3.96                         | 0.10                                  |
| WaB                | Wassaic silt loam, 3 to 8 percent slopes             | 6            | Moderately well<br>drained | 0                       | 9.74                         | 0.26                                  |
| WaC                | Wassaic silt loam, 8 to 15 percent slopes            | 12           | Moderately well drained    | 0                       | 10.69                        | 0.28                                  |



#### <u>Hydric Soil</u>

The Web Soil Survey of the Facility Site was consulted prior to conducting field delineations to determine the extent of soils meeting hydric criteria as defined by the NRCS. The *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) (Environmental Laboratories, 1987) defines 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."

Soil map units are composed of one or more components or soil types, each of which can be rated as hydric or non-hydric. A map unit's hydric rating is based on the percentage of hydric soil components that make up the map unit. Thus, map units with a greater proportion of hydric components have a greater hydric soil rating. Map units with relatively high hydric soil ratings are more likely to correspond with potential wetland areas. Of the 46 soil map units mapped within the Facility Site, 734.41 acres (19.35 percent) were identified as having a relatively high proportion (33 percent or greater) of hydric components (Figure 2; USDA NRCS, 2021). These higher rating percentages indicate the potential presence of a wetland feature on-site. 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.



## 4.0 DELINEATION METHODOLOGY

Prior to initiating field investigations, TRC conducted a desktop review of publicly available data to determine the potential presence of federally and State mapped wetlands and streams within the Survey Area, alongside other potential environmental constraints, which could impact the Facility. TRC wetland scientists subsequently performed field investigations to identify aquatic features within the Survey Area. Delineations for wetlands and streams were performed in accordance with criteria set forth in the 1987 Manual and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (Supplement) (USACE, 2012). Data was collected from a sample plot in each delineated wetland and depending on the size of the delineated area and any change in cover type, multiple sample plots of the delineated wetland may have been gathered. Delineation data was recorded on USACE Routine Wetland Determination 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.

#### 4.1 Hydrology

The presence of wetland hydrology was 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 was present if one or more primary indicator is 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 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.

## 4.2 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 by USACE according to their occurrence in wetlands. Scientific names and wetland indicator statuses for vegetation are those listed in *The National Wetland Plant List:* 2020 Wetland Ratings (USACE, 2021) (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 Survey 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.
- 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 Survey Area's region, the indicator status assigned to the species in the nearest adjacent region was applied. Plants that are not included on the NWPL within the Survey Area's region, nor an adjacent region, were given no indicator status, and are not included in dominance calculations. Plants that are not listed in any region on the NWPL were 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 and vines, a 15-foot radius for saplings/shrubs, and a 5-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 followed to determine hydrophytic dominance at sample plots. In using the 50/20 rule, the plants that comprise each stratum were 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 were dominant species, and any additional species that individually provides 20 percent or more percent cover were also considered dominant species of its respective strata. The total cover for each stratum, and subsequently the plot, could exceed 100 percent due to vegetation overlap.

It should be noted that where the wetland boundary results of this approach differ meaningfully from the approach outlined within the *New York State Freshwater Wetland Delineation Manual* (Browne et al., 1995), the difference is described within this report if needed to address State jurisdiction. Though not common, two wetland boundaries, a State, and a federal boundary, may arise from subtle differences in the definition of vegetative strata, sampling technique, and wetland indicators between the USACE and the NYSDEC. See Section 5.0 for more detail.

Cover types are also assigned to each wetland. The delineated resources are 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 use this document. TRC biologists use the definitions for perennial and intermittent streams found in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (FGDC, 2013).



2013) when classifying delineated streams. Ephemeral streams have flowing water primarily from rainfall runoff and are above the water table.

#### 4.3 Soils

Hydric soil indicators are 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 color, texture, layer depth, presence of organic-layers, and evidence of redoximorphic features, which may include indicators such as reduction, oxidation, gleyed matrices, manganese features. Soil test pits are dug using a spade shovel to a depth of approximately 20 inches. If refusal of a soil sample occurred due to the presence of hardpan layer, rock, or hard fill materials, this occurrence is documented. Soil color is described using the *Munsell Soil Color Book* (Munsell Color, 2022) and texture was determined using the USDA feel method (Thien, 1979).

Hydric soil indicators applicable to the Survey Area were determined using the *Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin* (USDA NRCS, 2006) (MLRA Handbook). Per the MLRA Handbook, the Survey Area is within Major Land Resource Area 101 – Ontario Plain and Finger Lakes Region of Land Resource Region (LRR) L (Lake States Fruit, Truck, and Dairy Region). Hydric soil indicators that do not apply to this MLRA were not considered.

#### 4.4 Streams

Streams and other non-wetland aquatic features (e.g., lakes and ponds) within the Survey Area were field identified by the presence of an ordinary high water mark (OHWM), which is the line established by the fluctuations of water (33 CFR 328.3). The OHWM line, where not established and available by public record, is indicated 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.

Streams greater than 6 feet wide were delineated from bank to bank and points of the delineated boundaries were located with a handheld GPS unit set for sub-meter accuracy. In streams less than 6 feet wide, sub-meter GPS point capture and post-processing (differential correction) may yield 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 attributes including width, bank height, and water depth were measured and documented on TRC's Stream Data Forms (Appendix C).

Steams were 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. 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 (FGDC, 2013). 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, which generally require sustained hydrology to survive.

# 5.0 RESULTS

#### 5.1 General Overview

TRC delineated 144 wetlands and 123 streams (Figure 4). A total of 14% percent (457.42 acres) of the 3,229-acre Survey Area was identified as wetland. Tables 4 and 5 detail the wetlands and streams delineated in the Survey Area. Representative photographs taken of delineated wetland and stream communities within the Survey Area are provided in Appendix B. Completed USACE Routine Wetland Determination Forms and TRC Stream Delineation Forms with additional photographic documentation are provided in Appendix C.

## 5.2 Delineated Wetlands

**Palustrine Emergent wetlands (PEM)** – A total of 110 wetlands delineated within the Survey Area characteristics representative of a palustrine emergent (PEM) wetland community. PEM wetland communities are dominated by herbaceous vegetation, comprising woody or non-woody plants that are generally less than 3.28 feet tall with at least 30 percent areal coverage (FGDC, 2013).

PEM wetlands delineated within the Survey Area were typically dominated by *Impatiens capensis* (spotted touch-me-not) and *Phalaris arundinacea* (reed canary grass). Primary hydrology indicators typically recorded within these wetlands included high water table (A2), saturation (A3), sparsely vegetated concave surface (B8), water-stained leaves (B9), and thin muck surface (C7). Secondary indicators of hydrology typically observed within these wetlands included drainage patterns (B10), saturation visible on aerial imagery (C9), geomorphic position (D2), and a positive FAC-neutral test (D5). PEM wetlands within the Survey Area commonly contained clay, silt, and loamy soils and typically demonstrated loamy mucky mineral (F1), redox dark surface (F6), and dark surface (F7) hydric soil indicators (Appendix C).

**Palustrine Scrub-shrub wetlands (PSS)** – A total of 34 wetlands delineated within the Survey Area contained characteristics representative of a palustrine scrub-shrub (PSS) wetland community. PSS wetlands are dominated by woody shrub vegetation less than 3 inches in diameter at breast height (DBH) and vegetation that stands less than 20 feet tall, including tree shrubs, a mixture of young trees and shrubs, or trees that are small or stunted due to stressors from environmental conditions (FGDC, 2013).

PSS wetlands observed within the Survey Area were dominated by *Tsuga canadensis* (Eastern hemlock) and *Ulmus americana* (American elm) in the tree stratum; *Cornus racemosa* (gray dogwood), *Cornus amomum* (silky dogwood), and *Salix alba* (white willow) in the shrub stratum; and *Impatiens capensis*, *Onoclea sensibilis* (sensitive fern), and *Solidago gigantea* (late goldenrod) in the herb stratum. Evidence of hydrology observed within these wetlands typically included saturation (A3) and water-stained leaves (B9) as primary indicators of hydrology. Common secondary hydrology indicators observed included microtopographic relief (D4), geomorphic position (D2), and a positive FAC-neutral test (D5). Silty clay loam and silt loam soils were typically recorded within these wetlands and soils demonstrated depleted below dark

surface (A11), depleted matric (F3), redox dark surface (F6), and sandy redox (S5) hydric soil indicators.

**Palustrine Forested wetlands (PFO)** – A total of 36 wetlands identified within the Survey Area contain characteristics representative of a palustrine forested (PFO) wetland. PFO wetlands are dominated by woody vegetation that is at least 3 inches in DBH, regardless of height, with an understory of shrub and herbaceous species (FGDC, 2013).

PFO wetlands with the Survey Area were dominated by *Tsuga canadensis* (Eastern hemlock), *Populus deltoides* (Eastern cottonwood), and *Fraxinus pennsylvanica* (green ash), in the tree stratum; *Carpinus caroliniana* (American hornbeam), *Rhamnus cathartica* (European buckthorn), and *Cornus racemosa* in the shrub stratum; sensitive fern, touch-me-not, and *Osmundastrum cinnamomeum* (cinnamon fern) in the herb stratum. Primary hydrology indicators included high water table (A2), saturation (A3), water-stained leaves (B9), hydrogen sulfide odor (C1), and thin muck surface (C7). The secondary hydrology indicators included drainage patterns (B10), saturation visible on aerial imagery (C9), geomorphic position (D2), microtopographic relief (D4), and a positive FAC-neutral test (D5). The hydric soil indicators observed included thick dark surface (A12), redox dark surface (F6), sandy mucky mineral (S1), and thin dark surface (S9). Soils within these wetlands were typically silty clay loam, silt loam and clay loam soils.

**Palustrine Unconsolidated Bottom wetlands (PUB)** – A total of 20 wetlands delineated within the Survey Area contain characteristics representative of a palustrine unconsolidated bottom (PUB) wetland. PUB wetlands include wetland and deep-water habitats with at least 25 percent cover of particles smaller than stone, and a vegetative cover of less than 30 percent. Because these are bodies of standing water, evidence of hydrology is decisively present (FGDC, 2013).

PUB wetlands within the Survey Area were dominated by *Lemna minor* (common duckweed), *Typha angustifolia* (narrow-leaf cattail) and *Typha latifolia* (broad-leaf cattail) in the herb stratum. Primary hydrology indicators included surface water (A1), high water table (A2), saturation (A3), water-stained leaves (B9), inundation visible on aerial imagery (B7), and aquatic fauna (B13). Secondary hydrology indicators included saturation visible on aerial imagery (C9), geomorphic position (D2), and a positive FAC-neutral test (D5). Soils were assumed hydric in these wetlands as the soils were saturated from inundation.

| Table 4. Defineated Wetlands Within the Survey Are | Table 4. | Delineated | Wetlands | within | the | Survey | Area |
|--|----------|------------|----------|--------|-----|--------|------|
|--|----------|------------|----------|--------|-----|--------|------|

| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassific:<br>creage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|---------------------|--------------------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                 | PUB                |   |                                     |   |                         |   |                            |                             |
| W-ABL-01                        | -     | -                | 0.02                | 0.21               | 0.23  | -                                   | -   | -                       | -   | 42.90226                   | -74.55485                   |
| W-ABL-02                        | 0.02  | -                | -                   | -                  | 0.02  | -                                   | -   | -                       | -   | 42.90171                   | -74.55312                   |
| W-ABL-03                        | 5.10  | -                | -                   | -                  | 5.10  | S-ABL-03, S-ABL-04                  | 1,506   | -                       | -   | 42.89814                   | -74.55224                   |
| W-ABL-04                        | 0.42  | -                | -                   | -                  | 0.42  | -                                   | -   | -                       | -   | 42.89611                   | -74.54952                   |
| W-ABL-05                        | 0.34  | -                | -                   | -                  | 0.34  | -                                   | -   | -                       | -   | 42.89780                   | -74.55238                   |
| W-ABL-06                        | 8.48  | -                | 3.51                | -                  | 11.99   | S-ABL-06, S-ABL-07                  | 3,189   | -                       | -   | 42.89286                   | -74.54994                   |
| W-ABL-07                        | 0.30  | -                | 0.22                | -                  | 0.52  | S-ABL-05                            | 240   | -                       | -   | 42.89097                   | -74.55071                   |
| W-ABL-08                        | 0.05  | -                | -                   | -                  | 0.05  | -                                   | -   | -                       | -   | 42.88983                   | -74.55155                   |
| W-ABL-09                        | 1.74  | -                | -                   | -                  | 1.74  | S-ABL-08                            | 304   | -                       | -   | 42.88961                   | -74.55842                   |
| W-ABL-10                        | -     | -                | -                   | 0.27               | 0.27  | -                                   | -   | -                       | -   | 42.88702                   | -74.55685                   |
| W-DJB-01                        | -     | 0.07             | -                   | -                  | 0.07  | -                                   | -   | -                       | -   | 42.84708                   | -74.46438                   |
| W-DJB-02                        | 0.19  |                  | -                   | -                  | 0.19  | -                                   | -   | -                       | -   | 42.84778                   | -74.46845                   |
| W-DJB-03                        | -     | 0.34             | -                   | -                  | 0.34  | -                                   | -   | -                       | -   | 42.84748                   | -74.46918                   |
| W-DJB-04                        | 1.13  | -                | -                   | -                  | 1.13  | -                                   | -   | -                       | -   | 42.85436                   | -74.53364                   |
| W-DJB-05                        | 0.10  | -                | -                   | -                  | 0.10  | -                                   | -   | -                       | -   | 42.85508                   | -74.53539                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>reage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|--------------------|--------------------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                | PUB                |   |                                     |   |                         |   |                            |                             |
| W-DJB-06                        | 0.11  | -                | -                  | -                  | 0.11  | -                                   | -   | -                       | -   | 42.87232                   | -74.53567                   |
| W-DJB-07                        | 1.05  |                  | -                  | -                  | 1.05  | -                                   | -   | -                       | -   | 42.87166                   | -74.53855                   |
| W-DJB-08                        | 1.70  | -                | -                  | -                  | 1.70  | -                                   | -   | -                       | -   | 42.87035                   | -74.54015                   |
| W-DJB-09                        | 0.20  | 0.43             | 4.58               |                    | 5.21  | -                                   | -   | -                       | -   | 42.87440                   | -74.54286                   |
| W-DJB-10                        | 0.05  | 0.15             | -                  | -                  | 0.20  | -                                   | -   | -                       | -   | 42.87434                   | -74.54185                   |
| W-DJB-11                        | -     | 8.67             | 10.59              | -                  | 19.26   | S-DJB-01, S-DJB-02,<br>S-DJB-03     | 1,394   | -                       | -   | 42.87691                   | -74.53695                   |
| W-DJB-12                        | 0.85  | 0.53             | -                  | -                  | 1.38  | S-DJB-03                            | 467   | -                       | -   | 42.88165                   | -74.53011                   |
| W-DJB-13                        | 0.13  | -                | -                  | -                  | 0.13  | -                                   | -   | -                       | -   | 42.88168                   | -74.52840                   |
| W-DJB-14                        | 0.77  | -                | -                  | -                  | 0.77  | -                                   | -   | -                       | -   | 42.88422                   | -74.52635                   |
| W-DJB-15                        | 0.09  | -                | -                  | -                  | 0.09  | -                                   | -   | -                       | -   | 42.88665                   | -74.52751                   |
| W-DJB-16                        | 0.13  | -                | -                  | -                  | 0.13  | -                                   | -   | -                       | -   | 42.88600                   | -74.52574                   |
| W-DJB-17                        | 0.15  | -                | -                  | -                  | 0.15  | -                                   | -   | -                       | -   | 42.88559                   | -74.52465                   |
| W-DJB-18                        | 0.37  | -                | -                  | -                  | 0.37  | -                                   | -   | -                       | -   | 42.87964                   | -74.53939                   |
| W-DJB-19                        | 0.61  | -                | -                  | 1.79               | 2.40  | -                                   | -   | -                       | -   | 42.88127                   | -74.54387                   |
| W-EES-01                        | 0.38  | -                | -                  | -                  | 0.38  | S-EES-05                            | 184   | -                       | -   | 42.860876                  | -74.536143                  |
| W-EES-02                        | 0.17  | -                | -                  | 0.23               | 0.40  | -                                   | -   | -                       | -   | 42.86074                   | -74.539675                  |



| Wetland<br>Field<br>Designation | Cover Type Classification <sup>1</sup><br>and Acreage |       |     |      | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland                              | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|---|-------|-----|------|---|--|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS   | PFO | PUB  |   |  |   |                         |   |                            |                             |
| W-EES-04                        | 0.06  | -     | -   | -    | 0.06  | -  | -   | -                       | -   | 42.86061                   | -74.54024                   |
| W-EES-05                        | 2.94  | -     | -   | -    | 2.94  | S-EES-07   | 184   | -                       | -   | 42.85957                   | -74.54119                   |
| W-EES-06                        | 23.08   | 59.48 | -   | 0.66 | 83.22   | S-EES-09, S-EES-10,<br>S-EES-12, S-EES-14,<br>S-EES-15, S-NSD-23 | 4,327   | -                       | -   | 42.85128                   | -74.53618                   |
| W-EES-07                        | 0.04  | -     | -   | -    | 0.04  | -  | -   | -                       | -   | 42.85342                   | -74.53493                   |
| W-EES-08                        | 0.04  | -     | -   | -    | 0.04  | S-EES-11   | 2   | -                       | -   | 42.85400                   | -74.53449                   |
| W-EES-09                        | 0.04  | -     | -   | -    | 0.04  | S-EES-13   | 17  | -                       | -   | 42.85337                   | -74.53385                   |
| W-EES-10                        | 0.56  | -     | -   | -    | 0.56  | S-EES-13   | 119   | -                       | -   | 42.852783                  | -74.533971                  |
| W-EES-12                        | 16.70   | 2.18  | -   | -    | 18.88   | -  | -   | -                       | -   | 42.86222                   | -74.54829                   |
| W-EES-13                        | 14.64   | -     | -   | -    | 14.64   | -  | -   | -                       | -   | 42.86409                   | -74.54445                   |
| W-EES-14                        | 4.83  | -     | -   | -    | 4.83  | -  | -   | -                       | -   | 42.86636                   | -74.54365                   |
| W-EES-15                        | 0.57  | -     | -   | -    | 0.57  | -  | -   | -                       | -   | 42.86490                   | -74.54072                   |
| W-EES-16                        | 0.25  | -     | -   | -    | 0.25  | -  | -   | -                       | -   | 42.86831                   | -74.54337                   |
| W-EES-17                        | 2.14  | -     | -   | -    | 2.14  | -  | -   | -                       | -   | 42.86760                   | -74.54072                   |
| W-EES-18                        | -   | -     | -   | 0.37 | 0.37  | -  | -   | -                       | -   | 42.86850                   | -74.54081                   |
| W-EES-19                        | 1.70  | -     | -   | 1.14 | 2.84  | -  | -   | -                       | -   | 42.86879                   | -74.54245                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>creage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland   | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|---------------------|--------------------|---|---|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                 | PUB                |   |   |   |                         |   |                            |                             |
| W-EES-20                        | 0.32  | -                | -                   | -                  | 0.32  | -   | -   | -                       | -   | 42.84784                   | -74.49534                   |
| W-EES-21                        | 0.18  | -                | -                   | -                  | 0.18  | -   | -   | -                       | -   | 42.84768                   | -74.49398                   |
| W-EES-22                        | 0.29  | -                | -                   | -                  | 0.29  | -   | -   | -                       | -   | 42.84501                   | -74.49631                   |
| W-EES-23                        | 2.71  | -                | 3.36                | -                  | 6.07  | S-EES-22, S-EES-23,<br>S-EES-24   | 1,962   | -                       | -   | 42.84253                   | -74.49405                   |
| W-EES-24                        | 1.78  | -                | -                   | -                  | 1.78  | S-EES-20, S-EES-25  | 617   | -                       | -   | 42.84320                   | -74.49722                   |
| W-EES-25                        | 0.41  | -                | -                   | -                  | 0.41  | -   | -   | -                       | -   | 42.83368                   | -74.50940                   |
| W-EES-26                        | 2.27  | -                | 11.01               | -                  | 13.28   | S-EES-03, S-EES-26,<br>S-EES-27, S-EES-28,<br>S-EES-29, S-EES-30,<br>S-EES-31 | 2,947   | -                       | -   | 42.83257                   | -74.50600                   |
| W-EES-27                        | 3.36  | -                | -                   | -                  | 3.36  | -   | -   | -                       | -   | 42.83679                   | -74.50362                   |
| W-EES-28                        | 0.27  | -                | -                   | -                  | 0.27  | -   | -   | -                       | -   | 42.83302                   | -74.50120                   |
| W-EES-29                        | 0.47  | -                | -                   | -                  | 0.47  | -   | -   | -                       | -   | 42.83714                   | -74.49881                   |
| W-EES-30                        | 2.29  | 0.35             | -                   | -                  | 2.64  | -   | -   | -                       | -   | 42.84096                   | -74.50602                   |
| W-IBP-01                        | -     | 0.59             | 15.15               | -                  | 15.74   | S-EES-03, S-NSD-25  | 2,654   | -                       | -   | 42.85025                   | -74.51986                   |
| W-IBP-02                        | 0.42  | -                | -                   | -                  | 0.42  | -   | -   | -                       | -   | 42.84936                   | -74.52398                   |
| W-IBP-03                        | -     | -                | 0.43                | -                  | 0.43  | -   | -   | -                       | -   | 42.84748                   | -74.51702                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>creage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|---------------------|--------------------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                 | PUB                |   |                                     |   |                         |   |                            |                             |
| W-IBP-04                        | 1.76  | 0.44             | -                   | -                  | 2.20  | -                                   | -   | -                       | -   | 42.84369                   | -74.50778                   |
| W-IBP-05                        | 1.29  | 0.89             | -                   | -                  | 2.18  | -                                   | -   | -                       | -   | 42.84174                   | -74.51181                   |
| W-IBP-06                        | 3.03  | 1.77             | -                   | -                  | 4.80  | -                                   | -   | -                       | -   | 42.84116                   | -74.50923                   |
| W-JMP-01                        | 1.20  | 3.66             | 2.01                | -                  | 6.87  | S-JMP-01, S-JMP-02                  | 4,657   | -                       | -   | 42.85572                   | -74.47645                   |
| W-JMP-02                        | -     | -                | -                   | 0.41               | 0.41  | -                                   | -   | -                       | -   | 42.85243                   | -74.47378                   |
| W-JMP-03                        | -     | -                | 2.56                | -                  | 2.56  | -                                   | -   | -                       | -   | 42.84942                   | -74.47381                   |
| W-JMP-04                        | 0.21  | -                | 0.16                | 0.31               | 0.68  | S-JMP-03                            | 316   | -                       | -   | 42.85085                   | -74.47862                   |
| W-JMP-05                        | -     | -                | 0.80                | 2.66               | 3.46  | -                                   | -   | -                       | -   | 42.84981                   | -74.47821                   |
| W-JMP-06                        | 0.71  | -                | -                   | -                  | 0.71  | -                                   | -   | -                       | -   | 42.85065                   | -74.47610                   |
| W-JMP-07                        | -     | 1.59             | -                   | 0.33               | 1.92  | S-JMP-05, S-JMP-06,<br>S-JMP-07     | 1,770   | -                       | -   | 42.85791                   | -74.46876                   |
| W-JMP-08                        | 5.61  | 0.21             | -                   | -                  | 5.82  | -                                   | -   | CA-6                    | II  | 42.85519                   | -74.45685                   |
| W-JMP-11                        | -     | -                | 0.37                | -                  | 0.37  | -                                   | -   | -                       | -   | 42.85518                   | -74.51800                   |
| W-JMP-12                        | 7.49  | 1.76             | -                   | -                  | 9.25  | S-JMP-09                            | 1,454   | -                       | -   | 42.85312                   | -74.51715                   |
| W-JMP-13                        | -     | -                | 0.61                | -                  | 0.61  | S-JMP-09                            | 148   | -                       | -   | 42.85701                   | -74.51624                   |
| W-JMP-14                        | -     | 0.46             | 0.65                | 0.35               | 1.46  | S-JMP-10                            | 92  | -                       | -   | 42.85445                   | -74.51013                   |
| W-JMP-15                        | -     | -                | -                   | 3.06               | 3.06  | -                                   | -   | -                       | -   | 42.85310                   | -74.50521                   |



| Wetland<br>Field<br>Designation | Cover Type Classification <sup>1</sup><br>and Acreage |      |      |      | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|---|------|------|------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS  | PFO  | PUB  |   |                                     |   |                         |   |                            |                             |
| W-JMP-16                        | 0.11  | -    | 1.16 | -    | 1.27  | -                                   | -   | -                       | -   | 42.85196                   | -74.50229                   |
| W-JMP-17                        | -   | -    | 0.22 | -    | 0.22  | -                                   | -   | -                       | -   | 42.85329                   | -74.50918                   |
| W-JMP-18                        | 2.04  | -    | -    | -    | 2.04  | -                                   | -   | -                       | -   | 42.86151                   | -74.51340                   |
| W-JMP-19                        | -   | -    | 1.19 | -    | 1.19  | S-JMP-15, S-JMP-17,<br>S-JMP-20     | 1,613   | -                       | -   | 42.84016                   | -74.49256                   |
| W-JMP-20                        | 0.46  | 0.02 | -    | -    | 0.48  | S-JMP-16                            | 11  | -                       | -   | 42.84120                   | -74.49172                   |
| W-JMP-21                        | -   | -    | 0.55 | -    | 0.55  | S-JMP-21                            | 18  | -                       | -   | 42.84147                   | -74.49787                   |
| W-JMP-22                        | 0.10  | -    | -    | -    | 0.10  | S-JMP-23                            | 43  | -                       | -   | 42.83857                   | -74.49500                   |
| W-JMP-23                        | 0.29  | -    | -    | 0.43 | 0.72  | -                                   | -   | -                       | -   | 42.84675                   | -74.48848                   |
| W-JMP-24                        | 0.39  | -    | -    | -    | 0.39  | -                                   | -   | -                       | -   | 42.84438                   | -74.48881                   |
| W-JMP-25                        | 2.91  | 1.85 | -    | -    | 4.76  | -                                   | -   | -                       | -   | 42.85933                   | -74.51801                   |
| W-JMP-26                        | 0.14  | -    | -    | -    | 0.14  | -                                   | -   | -                       | -   | 42.85889                   | -74.52034                   |
| W-JMP-27                        | 0.08  | -    | -    | -    | 0.08  | -                                   | -   | -                       | -   | 42.85780                   | -74.51736                   |
| W-JMP-28                        | 0.63  | -    | -    | -    | 0.63  | S-JMP-28                            | 375   | -                       | -   | 42.85611                   | -74.51222                   |
| W-JMP-29                        | 1.13  | -    | -    | -    | 1.13  | -                                   | -   | -                       | -   | 42.85469                   | -74.52160                   |
| W-JMP-30                        | 0.87  | -    | -    | -    | 0.87  | -                                   | -   | -                       | -   | 42.85711                   | -74.52092                   |
| W-MLM-01                        | 3.55  | 0.95 | -    | -    | 4.50  | -                                   | -   | -                       | -   | 42.88772                   | -74.55013                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>creage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland                    | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|---------------------|--------------------|---|--|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                 | PUB                |   |  |   |                         |   |                            |                             |
| W-MLM-02                        | 2.40  | -                | -                   | -                  | 2.40  | S-ABL-06   | 56  | -                       | -   | 42.88850                   | -74.55263                   |
| W-MLM-03                        | 6.99  | -                | -                   | -                  | 6.99  | -  | -   | -                       | -   | 42.84824                   | -74.46034                   |
| W-MLM-04                        | 3.56  | -                | 15.36               | -                  | 18.92   | S-MLM-01,<br>S-MLM-02                                  | 1,275   | CA-5                    | Ξ   | 42.84291                   | -74.46147                   |
| W-MLM-05                        | -     | -                | 0.57                | -                  | 0.57  | -  | -   | -                       | -   | 42.84157                   | -74.45972                   |
| W-MLM-06                        | -     | -                | 0.05                | -                  | 0.05  | -  | -   | -                       | -   | 42.84007                   | -74.46006                   |
| W-MLM-07                        | -     | -                | 0.53                | -                  | 0.53  | -  | -   | -                       | -   | 42.83963                   | -74.46241                   |
| W-MLM-08                        | -     | -                | 0.08                | -                  | 0.08  | -  | -   | -                       | -   | 42.83992                   | -74.46325                   |
| W-MLM-09                        | -     | -                | 0.28                | -                  | 0.28  | -  | -   | -                       | -   | 42.84032                   | -74.46307                   |
| W-MLM-10                        | 0.88  | -                | 30.13               | -                  | 31.01   | S-MLM-01, S-MLM-02,<br>S-MLM-03                        | 965   | CA-1                    | =   | 42.85799                   | -74.49437                   |
| W-NSD-01                        | 0.33  | -                | -                   | -                  | 0.33  | -  | -   | -                       | -   | 42.86768                   | -74.47893                   |
| W-NSD-02                        | 0.05  | -                | -                   | -                  | 0.05  | -  | -   | -                       | -   | 42.87006                   | -74.47812                   |
| W-NSD-03                        | <0.01 | -                | -                   | -                  | <0.01   | -  | -   | -                       | -   | 42.87162                   | -74.47763                   |
| W-NSD-04                        | 0.05  | -                | -                   | -                  | 0.05  | S-NSD-04   | 126   | -                       | -   | 42.87078                   | -74.47592                   |
| W-NSD-05                        | 8.80  | 0.83             | -                   | 0.94               | 10.57   | S-NSD-06, S-NSD-08,<br>S-NSD-09, S-NSD-13,<br>S-NSD-14 | 3,461   | -                       | -   | 42.86464                   | -74.48301                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>reage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|--------------------|--------------------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                | PUB                |   |                                     |   |                         |   |                            |                             |
| W-NSD-06                        | -     | -                | 0.03               | -                  | 0.03  | S-NSD-11                            | 60  | -                       | -   | 42.86298                   | -74.48891                   |
| W-NSD-07                        | -     | -                | -                  | 0.33               | 0.33  | -                                   | -   | -                       | -   | 42.86331                   | -74.48953                   |
| W-NSD-08                        | -     | -                | -                  | 2.80               | 2.80  | -                                   | -   | -                       | -   | 42.86530                   | -74.48295                   |
| W-NSD-09                        | 0.31  | -                | -                  | -                  | 0.31  | S-NSD-15                            | 496   | -                       | -   | 42.86388                   | -74.48674                   |
| W-NSD-10                        | 0.66  | 1.06             | -                  | -                  | 1.72  | -                                   | -   | -                       | -   | 42.86612                   | -74.48741                   |
| W-NSD-11                        | 1.02  | -                | -                  | -                  | 1.02  | -                                   | -   | -                       | -   | 42.86528                   | -74.48078                   |
| W-NSD-12                        | 0.10  | 0.74             | -                  | -                  | 0.84  | S-NSD-16                            | 74  | -                       | -   | 42.84297                   | -74.52502                   |
| W-NSD-13                        | 2.08  | -                | 4.34               | -                  | 6.42  | S-NSD-17                            | 1,236   | -                       | -   | 42.83960                   | -74.52691                   |
| W-NSD-14                        | 4.82  | 3.07             | 0.66               | -                  | 8.55  | S-NSD-19, S-NSD-20                  | 351   | -                       | -   | 42.84189                   | -74.53275                   |
| W-NSD-15                        | -     | -                | -                  | 1.04               | 1.04  | -                                   | -   | -                       | -   | 42.84184                   | -74.53427                   |
| W-NSD-16                        | 0.31  | 0.87             | -                  | -                  | 1.18  | S-NSD-21                            | 8   | -                       | -   | 42.84263                   | -74.53917                   |
| W-NSD-17                        | -     | 0.50             | -                  | -                  | 0.50  | S-NSD-22                            | 127   | -                       | -   | 42.84395                   | -74.53889                   |
| W-NSD-18                        | 0.09  | -                | -                  | -                  | 0.09  | -                                   | -   | -                       | -   | 42.84368                   | -74.53790                   |
| W-NSD-19                        | 0.29  | 0.21             | -                  | -                  | 0.50  | -                                   | -   | -                       | -   | 42.84556                   | -74.53471                   |
| W-NSD-20                        | 0.63  | -                | -                  | -                  | 0.63  | -                                   | -   | -                       | -   | 42.84424                   | -74.53224                   |
| W-NSD-21                        | 0.02  | -                | -                  | -                  | 0.02  | S-NSD-23                            | 59  | -                       | -   | 42.84515                   | -74.52602                   |
| W-NSD-23                        | 0.98  | 2.30             | -                  | 0.48               | 3.76  | S-NSD-24                            | 4   | -                       | -   | 42.84576                   | -74.52102                   |



| Wetland<br>Field<br>Designation | Cover | Type C<br>and Ac | lassifica<br>creage | ation <sup>1</sup> | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland       | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|---------------------------------|-------|------------------|---------------------|--------------------|---|---|---|-------------------------|---|----------------------------|-----------------------------|
|                                 | PEM   | PSS              | PFO                 | PUB                |   |   |   |                         |   |                            |                             |
| W-NSD-24                        | 0.01  | -                | -                   | -                  | 0.01  | -   | -   | -                       | -   | 42.84477                   | -74.51689                   |
| W-NSD-25                        | 0.07  | 0.22             | -                   | -                  | 0.29  | -   | -   | -                       | -   | 42.84205                   | -74.51710                   |
| W-NSD-26                        | -     | 0.59             | -                   | -                  | 0.59  | S-NSD-26, S-NSD-27                        | 662   | -                       | -   | 42.84302                   | -74.51681                   |
| W-NSD-27                        | -     | 1.41             | -                   | -                  | 1.41  | S-NSD-28                                  | 655   | -                       | -   | 42.84118                   | -74.51831                   |
| W-NSD-28                        | 2.82  | -                | 3.53                | -                  | 6.35  | S-NSD-29                                  | 572   | -                       | -   | 42.83812                   | -74.51757                   |
| W-NSD-29                        | 2.12  | 5.10             | -                   | 0.04               | 7.26  | S-NSD-30, S-RDS-01                        | 1,015   | -                       | -   | 42.84342                   | -74.51284                   |
| W-RDS-01                        | 1.70  | -                | -                   | -                  | 1.70  |   |   | -                       | -   | 42.83386                   | -74.51193                   |
| W-RDS-02                        | 0.57  | -                | -                   | -                  | 0.57  | S-RDS-01                                  | 192   | -                       | -   | 42.83762                   | -74.51494                   |
| W-RDS-03                        | 1.27  | -                | -                   | -                  | 1.27  | -   | -   | -                       | -   | 42.83910                   | -74.51289                   |
| W-RDS-04                        | 3.09  | -                | -                   | -                  | 3.09  | S-RDS-05                                  | 1,437   | -                       | -   | 42.82920                   | -74.48625                   |
| W-RDS-05                        | 3.16  | -                | 17.54               | -                  | 20.70   | S-RDS-06, S-RDS-08,<br>S-RDS-10, S-RDS-11 | 3,741   | -                       | -   | 42.83357                   | -74.48610                   |
| W-RDS-09                        | -     | -                | 0.54                | -                  | 0.54  | S-RDS-09                                  | 465   | -                       | -   | 42.83901                   | -74.48910                   |
| W-RDS-10                        | 0.41  | -                | 5.50                | -                  | 5.91  | -   | -   | -                       | -   | 42.83763                   | -74.48728                   |
| W-RDS-11                        | -     | 0.24             | -                   | -                  | 0.24  | S-RDS-06                                  | 224   | -                       | -   | 42.83453                   | -74.49153                   |
| W-RDS-12                        | -     | -                | 2.56                | -                  | 2.56  | S-EES-03, S-RDS-06                        | 1,291   | -                       | -   | 42.83554                   | -74.49468                   |
| W-RDS-13                        | 0.96  | -                | -                   | -                  | 0.96  | -   | -   | -                       | -   | 42.83433                   | -74.49510                   |



| Wetland<br>Field<br>Designation   | Cover Type Classification <sup>1</sup><br>and Acreage |     |                                   |                    | Total<br>Wetland<br>Acreage<br>within<br>Survey<br>Area | Stream(s) Present<br>Within Wetland | Linear<br>Feet of<br>Stream(s)<br>Within<br>Wetland | NYSDEC<br>WETLAND<br>ID | WETLAND<br>CLASS <sup>2</sup><br>(I, II, III, IV) | Latitude<br>of<br>Centroid | Longitude<br>of<br>Centroid |
|-----------------------------------|---|-----|-----------------------------------|--------------------|---|-------------------------------------|---|-------------------------|---|----------------------------|-----------------------------|
|                                   | PEM   | PSS | PFO                               | PUB                |   |                                     |   |                         |   |                            |                             |
| W-RDS-14                          | -   | -   | 0.14                              | -                  | 0.14  | -                                   | -   | -                       | -   | 42.88509                   | -74.54231                   |
| W-RDS-15                          | 0.13  | -   | -                                 | -                  | 0.13  | S-RDS-15                            |   | -                       | -   | 42.88591                   | -74.54456                   |
| W-RDS-16                          | 0.04  | -   | -                                 | -                  | 0.04  | S-RDS-17                            | 43  | -                       | -   | 42.88626                   | -74.54612                   |
| W-RDS-17                          | 0.88  | -   | -                                 | -                  | 0.88  | -                                   | -   | -                       | -   | 42.85608                   | -74.51027                   |
| W-RDS-18                          | 1.16  | -   | -                                 | -                  | 1.16  | -                                   | -   | -                       | -   | 42.85177                   | -74.50029                   |
| W-RDS-19                          | 1.30  | -   | -                                 | -                  | 1.30  | -                                   | -   | -                       | -   | 42.857957                  | -74.512999                  |
| Total Wetland Acreage Delineated: |   |     | <b>457.42</b><br>PEO – palustrine | Total Linear Feet: | 49,205  | n (EGDC, 2013)                      |   |                         |   |                            |                             |

<sup>2</sup> 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.

## 5.3 Delineated Streams

Fifty-one ephemeral streams are present within the Survey Area (Table 5). These streams have channel substrates comprised of silt, clay, gravel, and boulders with bank substrates of silt/clay and gravel. The channels have a gently sloping (less than 2 percent) to moderate sloping (2-4 percent) gradient. The banks have a gradient of gentle sloping to steeply sloping (0-5 to 15-25 percent gradient). The observed depth of the channels ranges from 0 to 6 inches. Most of the streams were dry at the time of delineation.

Sixty-two intermittent streams are present within the Survey Area (Table 5). These streams have a channel substrate of silt, clay, and boulders with bank substrates of silt, cobble, and gravel. The channels have a gently sloping (less than 2 percent) to moderate sloping (2-4 percent) gradient. The banks have a gradient of gentle sloping to steeply sloping (0-5 to 15-25 percent gradient). The observed depth of the channels ranges from 0 to 6 inches, with clear water usually flowing north/northwest within the channels.

Ten perennial streams are present in the Survey Area (Table 5). These streams have a channel substrate of cobble, boulders, gravel and clay and a bank substrate of silt/clay, cobble, and gravel. The banks have a gentle sloping to steeply sloping (0-5 to 15-25 percent gradient). The channel gradients are predominately gentle with a less than two percent gradient. Channel depth ranges between 0-24 inches with clear water usually flowing north. Streams S-EES-03 and S-RDS-06 are considered one stream and are identified as Flat Creek.
| Table 5. Delineated Streams with | nin the Survey Area |
|----------------------------------|---------------------|
|----------------------------------|---------------------|

| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)                                    | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|--|-------------------------|--------------------------|
| S-ABL-01                    | EPHEMERAL                     | 431  | -                        | -  | 42.90184                | -74.55297                |
| S-ABL-02                    | EPHEMERAL                     | 31   | -                        | -  | 42.90236                | -74.55514                |
| S-ABL-03                    | INTERMITTENT                  | 1,853                                      | -                        | -  | 42.89951                | -74.55273                |
| S-ABL-04                    | EPHEMERAL                     | 124  | -                        | -  | 42.90022                | -74.55468                |
| S-ABL-05                    | EPHEMERAL                     | 701  | -                        | -  | 42.89095                | -74.55182                |
| S-ABL-06                    | INTERMITTENT                  | 2,182                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.89164                | -74.55470                |
| S-ABL-07                    | INTERMITTENT                  | 2,238                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.89298                | -74.54932                |
| S-ABL-08                    | INTERMITTENT                  | 978  | -                        | -  | 42.89091                | -74.55841                |
| S-DJB-01                    | EPHEMERAL                     | 231  | -                        | -  | 42.87786                | -74.53851                |
| S-DJB-02                    | PERENNIAL                     | 594  | -                        | -  | 42.87698                | -74.53302                |
| S-DJB-03                    | PERENNIAL                     | 3,975                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.87834                | -74.53308                |
| S-EES-01                    | INTERMITTENT                  | 522  | -                        | -  | 42.86350                | -74.53685                |
| S-EES-02                    | EPHEMERAL                     | 449  | -                        | -  | 42.86342                | -74.53655                |
| S-EES-03                    | PERENNIAL                     | 10,942                                     | С                        | H-240-102, Flat Creek and tribs                              | 42.85197                | -74.52353                |
| S-EES-04                    | INTERMITTENT                  | 3  | -                        | -  | 42.86313                | -74.53343                |
| S-EES-05                    | INTERMITTENT                  | 184  | -                        | -  | 42.860943               | -74.536059               |
| S-EES-06                    | INTERMITTENT                  | 1,314                                      | -                        | -  | 42.859602               | -74.53739                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)       | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|---------------------------------|-------------------------|--------------------------|
| S-EES-07                    | INTERMITTENT                  | 410  | -                        | -                               | 42.85924                | -74.53865                |
| S-EES-08                    | INTERMITTENT                  | 571  | -                        | -                               | 42.85879                | -74.53614                |
| S-EES-09                    | EPHEMERAL                     | 480  | -                        | -                               | 42.85238                | -74.54061                |
| S-EES-10                    | EPHEMERAL                     | 1,111                                      | -                        | -                               | 42.85416                | -74.54246                |
| S-EES-11                    | INTERMITTENT                  | 958  | -                        | -                               | 42.85410                | -74.53432                |
| S-EES-12                    | PERENNIAL                     | 3,159                                      | С                        | H-240-102, Flat Creek and tribs | 42.85271                | -74.53492                |
| S-EES-13                    | EPHEMERAL                     | 333  | -                        | -                               | 42.85328                | -74.53368                |
| S-EES-14                    | EPHEMERAL                     | 88   | -                        | -                               | 42.85402                | -74.53479                |
| S-EES-15                    | EPHEMERAL                     | 271  | -                        | -                               | 42.85319                | -74.53538                |
| S-EES-16                    | EPHEMERAL                     | 233  | -                        | -                               | 42.84549                | -74.50070                |
| S-EES-17                    | EPHEMERAL                     | 237  | -                        | -                               | 42.84570                | -74.50135                |
| S-EES-18                    | EPHEMERAL                     | 119  | -                        | -                               | 42.84592                | -74.50288                |
| S-EES-19                    | EPHEMERAL                     | 111  | -                        | -                               | 42.84622                | -74.50393                |
| S-EES-20                    | EPHEMERAL                     | 2,752                                      | -                        | -                               | 42.84424                | -74.49438                |
| S-EES-21                    | INTERMITTENT                  | 96   | -                        | -                               | 42.84348                | -74.49935                |
| S-EES-22                    | INTERMITTENT                  | 1,507                                      | -                        | -                               | 42.84227                | -74.49675                |
| S-EES-23                    | EPHEMERAL                     | 701  | -                        | -                               | 42.84162                | -74.49621                |
| S-EES-24                    | INTERMITTENT                  | 903  | -                        | -                               | 42.84207                | -74.49468                |
| S-EES-25                    | EPHEMERAL                     | 49   | -                        | -                               | 42.84312                | -74.49767                |
| S-EES-26                    | INTERMITTENT                  | 394  | -                        | -                               | 42.83219                | -74.50536                |
| S-EES-27                    | INTERMITTENT                  | 672  | -                        | -                               | 42.83268                | -74.50561                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)                                    | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|--|-------------------------|--------------------------|
| S-EES-28                    | INTERMITTENT                  | 2,225                                      | -                        | -  | 42.83350                | -74.50535                |
| S-EES-29                    | INTERMITTENT                  | 185  | -                        | -  | 42.83455                | -74.50454                |
| S-EES-30                    | EPHEMERAL                     | 91   | -                        | -  | 42.83419                | -74.50336                |
| S-EES-31                    | EPHEMERAL                     | 84   | -                        | -  | 42.83430                | -74.50327                |
| S-EES-32                    | INTERMITTENT                  | 758  | -                        | -  | 42.83483                | -74.50126                |
| S-IBP-01                    | INTERMITTENT                  | 153  | -                        | -  | 42.84276                | -74.51170                |
| S-JMP-01                    | EPHEMERAL                     | 628  | -                        | -  | 42.85823                | -74.47683                |
| S-JMP-02                    | INTERMITTENT                  | 4,028                                      | -                        | -  | 42.85204                | -74.47588                |
| S-JMP-03                    | INTERMITTENT                  | 473  | -                        | -  | 42.85088                | -74.47837                |
| S-JMP-04                    | EPHEMERAL                     | 1,754                                      | -                        | -  | 42.85008                | -74.47530                |
| S-JMP-05                    | PERENNIAL                     | 1,296                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.85742                | -74.46850                |
| S-JMP-06                    | INTERMITTENT                  | 96   | -                        | -  | 42.85738                | -74.46828                |
| S-JMP-07                    | INTERMITTENT                  | 401  | -                        | -  | 42.85827                | -74.46832                |
| S-JMP-09                    | INTERMITTENT                  | 1,801                                      | -                        | -  | 42.85221                | -74.51812                |
| S-JMP-10                    | INTERMITTENT                  | 92   | -                        | -  | 42.85478                | -74.51046                |
| S-JMP-11                    | EPHEMERAL                     | 139  | -                        | -  | 42.83992                | -74.49047                |
| S-JMP-12                    | EPHEMERAL                     | 116  | -                        | -  | 42.83999                | -74.49132                |
| S-JMP-13                    | INTERMITTENT                  | 155  | -                        | -  | 42.83966                | -74.49343                |
| S-JMP-14                    | EPHEMERAL                     | 176  | -                        | -  | 42.84039                | -74.49572                |
| S-JMP-15                    | EPHEMERAL                     | 415  | -                        | -  | 42.84024                | -74.49714                |
| S-JMP-15                    | PERENNIAL                     | 3,024                                      | -                        | -  | 42.84024                | -74.49714                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)                                    | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|--|-------------------------|--------------------------|
| S-JMP-16                    | EPHEMERAL                     | 464  | -                        | -  | 42.84090                | -74.49232                |
| S-JMP-17                    | EPHEMERAL                     | 73   | -                        | -  | 42.84046                | -74.49249                |
| S-JMP-18                    | INTERMITTENT                  | 1,197                                      | -                        | -  | 42.84120                | -74.49066                |
| S-JMP-19                    | EPHEMERAL                     | 244  | -                        | -  | 42.84056                | -74.49073                |
| S-JMP-20                    | EPHEMERAL                     | 63   | -                        | -  | 42.84017                | -74.49083                |
| S-JMP-21                    | EPHEMERAL                     | 18   | -                        | -  | 42.84158                | -74.49823                |
| S-JMP-22                    | EPHEMERAL                     | 115  | -                        | -  | 42.84005                | -74.49687                |
| S-JMP-23                    | EPHEMERAL                     | 346  | -                        | -  | 42.83834                | -74.49551                |
| S-JMP-24                    | EPHEMERAL                     | 229  | -                        | -  | 42.83630                | -74.49383                |
| S-JMP-25                    | EPHEMERAL                     | 219  | -                        | -  | 42.83572                | -74.49277                |
| S-JMP-26                    | EPHEMERAL                     | 198  | -                        | -  | 42.83510                | -74.49185                |
| S-JMP-28                    | INTERMITTENT                  | 375  | -                        | -  | 42.85647                | -74.51246                |
| S-MLM-01                    | INTERMITTENT                  | 278  | -                        | -  | 42.84380                | -74.45959                |
| S-MLM-02                    | INTERMITTENT                  | 996  | -                        | -  | 42.84363                | -74.46081                |
| S-MLM-03                    | INTERMITTENT                  | 471  | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.856413               | -74.485478               |
| S-MLM-04                    | INTERMITTENT                  | 165  | -                        |  | 42.856527               | -74.485946               |
| S-MLM-05                    | INTERMITTENT                  | 329  | -                        |  | 42.858176               | -74.494828               |
| S-NSD-01                    | INTERMITTENT                  | 5  | -                        | -  | 42.86786                | -74.47900                |
| S-NSD-04                    | INTERMITTENT                  | 1,542                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.87093                | -74.47615                |
| S-NSD-05                    | INTERMITTENT                  | 396  | -                        | -  | 42.87061                | -74.47511                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)                                    | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|--|-------------------------|--------------------------|
| S-NSD-06                    | INTERMITTENT                  | 74   | -                        | -  | 42.86517                | -74.47781                |
| S-NSD-07                    | EPHEMERAL                     | 375  | -                        | -  | 42.86203                | -74.47664                |
| S-NSD-08                    | PERENNIAL                     | 623  | -                        | -  | 42.86144                | -74.48086                |
| S-NSD-09                    | PERENNIAL                     | 1,084                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.86315                | -74.48399                |
| S-NSD-10                    | EPHEMERAL                     | 801  | -                        | -  | 42.86211                | -74.48553                |
| S-NSD-11                    | INTERMITTENT                  | 523  | -                        | -  | 42.86289                | -74.48842                |
| S-NSD-12                    | EPHEMERAL                     | 401  | -                        | -  | 42.86100                | -74.47694                |
| S-NSD-13                    | EPHEMERAL                     | 269  | -                        | -  | 42.86164                | -74.48342                |
| S-NSD-14                    | PERENNIAL                     | 4,828                                      | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.86399                | -74.48326                |
| S-NSD-15                    | INTERMITTENT                  | 808  | -                        | -  | 42.86332                | -74.48705                |
| S-NSD-16                    | INTERMITTENT                  | 74   | -                        | -  | 42.84298                | -74.52677                |
| S-NSD-17                    | INTERMITTENT                  | 1,448                                      | -                        | -  | 42.83997                | -74.52715                |
| S-NSD-18                    | EPHEMERAL                     | 32   | -                        | -  | 42.84078                | -74.53367                |
| S-NSD-19                    | INTERMITTENT                  | 290  | -                        | -  | 42.84380                | -74.53221                |
| S-NSD-20                    | INTERMITTENT                  | 61   | -                        | -  | 42.84236                | -74.53331                |
| S-NSD-21                    | INTERMITTENT                  | 125  | -                        | -  | 42.84247                | -74.53947                |
| S-NSD-22                    | INTERMITTENT                  | 127  | -                        | -  | 42.84412                | -74.53884                |
| S-NSD-23                    | INTERMITTENT                  | 2,217                                      | -                        | -  | 42.84596                | -74.52436                |
| S-NSD-24                    | INTERMITTENT                  | 158  | -                        | -  | 42.84545                | -74.52224                |
| S-NSD-25                    | INTERMITTENT                  | 1,200                                      | С                        | H-240-102, Flat Creek and tribs                              | 42.84736                | -74.51800                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)       | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|---------------------------------|-------------------------|--------------------------|
| S-NSD-26                    | INTERMITTENT                  | 1,267                                      | С                        | H-240-102, Flat Creek and tribs | 42.84305                | -74.51682                |
| S-NSD-27                    | EPHEMERAL                     | 151  | -                        | -                               | 42.84236                | -74.51677                |
| S-NSD-28                    | INTERMITTENT                  | 839  | -                        | -                               | 42.84111                | -74.51845                |
| S-NSD-29                    | INTERMITTENT                  | 606  | -                        | -                               | 42.83884                | -74.51617                |
| S-NSD-30                    | EPHEMERAL                     | 71   | -                        | -                               | 42.84174                | -74.51496                |
| S-NSD-31                    | INTERMITTENT                  | 79   | -                        | -                               | 42.84343                | -74.51020                |
| S-RDS-01                    | INTERMITTENT                  | 3,883                                      | С                        | H-240-102, Flat Creek and tribs | 42.83996                | -74.51440                |
| S-RDS-02                    | EPHEMERAL                     | 108  | -                        | -                               | 42.83812                | -74.51560                |
| S-RDS-03                    | EPHEMERAL                     | 246  | -                        | -                               | 42.83948                | -74.51554                |
| S-RDS-04                    | EPHEMERAL                     | 197  | -                        | -                               | 42.83938                | -74.51483                |
| S-RDS-05                    | PERENNIAL                     | 1,616                                      | С                        | H-240-102, Flat Creek and tribs | 42.82927                | -74.48558                |
| S-RDS-06                    | PERENNIAL                     | 6,617                                      | С                        | H-240-102, Flat Creek and tribs | 42.83284                | -74.48893                |
| S-RDS-07                    | EPHEMERAL                     | 236  | -                        | -                               | 42.83040                | -74.48510                |
| S-RDS-08                    | EPHEMERAL                     | 95   | -                        | -                               | 42.83145                | -74.48691                |
| S-RDS-09                    | PERENNIAL                     | 486  | С                        | H-240-102, Flat Creek and tribs | 42.83901                | -74.48862                |
| S-RDS-10                    | INTERMITTENT                  | 886  | -                        | -                               | 42.83256                | -74.48528                |
| S-RDS-11                    | INTERMITTENT                  | 215  | -                        | -                               | 42.83170                | -74.48447                |
| S-RDS-12                    | EPHEMERAL                     | 72   | -                        | -                               | 42.83159                | -74.48429                |
| S-RDS-13                    | EPHEMERAL                     | 314  | -                        | -                               | 42.88545                | -74.54171                |
| S-RDS-14                    | INTERMITTENT                  | 310  | -                        | -                               | 42.88577                | -74.54292                |
| S-RDS-15                    | INTERMITTENT                  | 349  | -                        | -                               | 42.88610                | -74.54433                |



| Stream Field<br>Designation | Flow Regime<br>Classification | Linear<br>Feet<br>within<br>Survey<br>Area | NYSDEC<br>Classification | Waterbody ID Number (WIN)                                    | Latitude of<br>Centroid | Longitude of<br>Centroid |
|-----------------------------|-------------------------------|--|--------------------------|--|-------------------------|--------------------------|
| S-RDS-16                    | INTERMITTENT                  | 331  | -                        | -  | 42.88645                | -74.54531                |
| S-RDS-17                    | INTERMITTENT                  | 262  | -                        | -  | 42.88648                | -74.54585                |
| S-RDS-18                    | INTERMITTENT                  | 380  | -                        | -  | 42.8869                 | -74.54675                |
| S-RDS-19                    | INTERMITTENT                  | 586  | С                        | H-240- 90 thru 126 (selected) Minor<br>Tribs to Mohawk River | 42.88545                | -74.54171                |
| Total Str<br>Deline         | eam Length<br>eated (ft):     | 103,440                                    |                          |  |                         |                          |



#### 6.0 CONCLUSIONS

TRC delineated a total of 144 wetlands, comprising 457.42 acres, within the Survey Area. This includes 110 wetlands with PEM characteristics (195.05 acres), 34 wetlands with PSS characteristics (103.53 acres), 36 wetlands with PFO characteristics (140.99 acres), and 20 wetlands with PUB characteristics (17.85 acres). Wetland W-MLM-10 overlaps NYSDEC mapped wetland CA-1 (a Class III wetland); Wetland W-JMP-08 overlaps NYSDEC mapped wetland CA-6; (a Class II wetland); and wetlands W-DJB-02 and W-MLM-04 overlap NYSDEC mapped wetland CA-5 (a Class III wetland). Wetlands W-DJB-11, W-EES-06, W-EES-12, W-EES-13, W-EES-26, W-IBP-01, and W-RDS-05 are larger than 12.4 acres and unmapped by the NYSDEC.

TRC delineated a total of 123 streams, comprising approximately 103,440 linear feet within the Survey Area. Streams S-ABL-06, S-ABL-07, S-DJB-03, S-EES-03, S-EES-12, S-JMP-05, S-MLM-03 S-NSD-04, S-NSD-09, S-NSD-14, S-NSD-25, S-NSD-26, S-RDS-01, S-RDS-05, S-RDS-06, S-RDS-09 and S-RDS-19 are associated with Class C NYSDEC mapped streams.

The ultimate authority to determine wetland and waterway boundaries and jurisdiction for this Facility lies with ORES and the USACE New York District. Decisions made by agency staff may result in modifications to the conclusions stated in this report.

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#### APPENDIX A

Figures



Rotat Map ŝ Ś Z UTM **UAD** ŝ I B(11"x17") Flat Creek : ANSI I PRX/FI GCORYELL à AM 11:32:05 4/2024, 튭





FACILITY SITE

| VILLAGE BOUNDARY  |
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| MUNICIPAL BOUNDAR |

MUNICIPAL BOUNDARY

COUNTY BOUNDARY

SOILS - HYDRIC RATING

PREDOMINANTLY NON-HYDRIC (1% - 33%)

PARTIALLY HYDRIC (34% - 66%)

PREDOMINANTLY HYDRIC (67% - 99%)

HYDRIC (100%)



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| APPROVED BY: | MELANIE MUSARRA |            |   |
| DATE:        | MARCH 2024      |            | PAGE 1 OF 16  |
| <b>~</b>     | RC              | 3 C        | DRPORATE DRIVE, SUITE 202<br>CLIFTON PARK, NY 12065<br>518-348-1190<br>www.trccompanies.com |
| FILE NO .:   |                 |            | Flat Creek WDR FEB2024.mxd  |





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FACILITY SITE

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SOILS - HYDRIC RATING

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WATERBODIES (NHD)

WETLANDS (NYSDEC)

NYDEC WETLAND 100-FOOT ADJACENT AREA

STREAM (NYSDEC)

STREAM (NHD)

WETLANDS (NWI)

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PROJECT:

FLAT CREEK SOLAR TOWNS OF CANAJOHARIE AND ROOT MONTGOMERY COUNTY, NY

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FEDERAL AND STATE WATER RESOURCES

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| DATE:        | MARCH 2024      |            | PAGE 12 OF 16   |
| $\diamond$   | <b>IRC</b>      | 3 C        | ORPORATE DRIVE, SUITE 202<br>CLIFTON PARK, NY 12065<br>518-348-1190<br>www.trccompanies.com |
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- STREAM (NYSDEC)

STREAM (NHD)

WETLANDS (NWI)

VILLAGE BOUNDARY

MUNICIPAL BOUNDARY

COUNTY BOUNDARY



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VILLAGE BOUNDARY

MUNICIPAL BOUNDARY

COUNTY BOUNDARY







FACILITY SITE

FEMA NATIONAL FLOOD HAZARD LAYER A

WATERBODIES (NHD)

STREAM (NYSDEC)

STREAM (NHD)

WETLANDS (NWI)

- VILLAGE BOUNDARY
- MUNICIPAL BOUNDARY

COUNTY BOUNDARY



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# FLAT CREEK SOLAR TOWNS OF CANAJOHARIE AND ROOT MONTGOMERY COUNTY, NY

TITLE:

FEDERAL AND STATE WATER RESOURCES

| DRAWN BY:    | GILMAN CORYELL  | PROJ NO .: | 427281.0000.0000  |
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| CHECKED BY:  | JEFF FREDENBURG |            | FIGURE 3  |
| APPROVED BY: | MELANIE MUSARRA |            | FIGURE 3  |
| DATE:        | MARCH 2024      |            | PAGE 15 OF 16   |
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FACILITY SITE FEMA NATIONAL FLOOD HAZARD LAYER A

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| CHECKED BY:  | JEFF FREDENBURG |            | FIGURE 3  |
| APPROVED BY: | MELANIE MUSARRA |            |   |
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**R4SBA** Darrow Rd





# LEGEND ACILITY SITE SURVEY AREA DELINEATED STREAM DELINEATED WETLAND PEM PFO PSS PUB DELINEATED WETLAND BOUNDARY VETLAND OPEN END VILLAGE BOUNDARY MUNICIPAL BOUNDARY COUNTY BOUNDARY











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|        | PUB                         |
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| PEM |
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Map Rotati ŝ Ē US ( Foot S Zone UTM 983 **IAD** B(11"x1' AYOUT / GCORYELL 81\_Flat\_Creek β Ы

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#### LEGEND

FACILITY SITE

SURVEY AREA

DELINEATED STREAM

DELINEATED WETLAND

| PEM                             |
|---------------------------------|
| PFO                             |
| PSS                             |
| PUB                             |
| <br>DELINEATED WETLAND BOUNDARY |

WETLAND OPEN END

VILLAGE BOUNDARY

MUNICIPAL BOUNDARY







| LEGEND             |                             |  |
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|                    | FACILITY SITE               |  |
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|                    | WETLAND OPEN END            |  |
|                    | VILLAGE BOUNDARY            |  |
|                    | MUNICIPAL BOUNDARY          |  |
|                    | COUNTY BOUNDARY             |  |







FACILITY SITE

SURVEY AREA

DELINEATED STREAM

DELINEATED WETLAND

| PEM |
|-----|
| PFO |

PSS

PUB

DELINEATED WETLAND BOUNDARY

WETLAND OPEN END

VILLAGE BOUNDARY

MUNICIPAL BOUNDARY

COUNTY BOUNDARY







| LEGEND             | <u>.</u>                    |  |
|--------------------|-----------------------------|--|
|                    | FACILITY SITE               |  |
|                    | SURVEY AREA                 |  |
|                    | DELINEATED STREAM           |  |
| DELINEATED WETLAND |                             |  |
|                    | PEM                         |  |
|                    | PFO                         |  |
|                    | PSS                         |  |
|                    | PUB                         |  |
|                    | DELINEATED WETLAND BOUNDARY |  |
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|                    | VILLAGE BOUNDARY            |  |
|                    | MUNICIPAL BOUNDARY          |  |
| 티그                 | COUNTY BOUNDARY             |  |





# **APPENDIX B**

Photograph Log





**1.** Overview of the Palustrine scrub shrub (PSS) cover type portion of wetland W-DJB-01. Photograph taken November 17, 2021.



 Overview of the Palustrine forested (PFO) cover type portion of wetland W-DJB-2. Photograph taken November 17, 2021.





**3.** Overview of the Palustrine emergent (PEM) cover type portion of wetland W-DJB-4. Photograph taken November 17, 2021.



**4.** Overview of the upland (UPL) cover type portion of upland W-DJB-7. Photograph taken November 17, 2021.





Overview of the PEM cover type portion of wetland W-DJB-9.
 Photograph taken November 16, 2021.



6. Overview of the PEM cover type portion of wetland W-DJB-13.Photograph taken November 6, 2021.



7. Overview of the PFO cover type portion of wetland W-DJB-11.Photograph taken November 19, 2021.



Overview of the PUB cover type portion of wetland W-DJB-19.
 Photograph taken December 7, 2021.





**9.** Overview of the PEM cover type portion of wetland W-EES-2. Photograph taken August 17, 2021.



**10.** Overview of the PUB cover type portion of wetland W-EES-2 Photograph taken August 17, 2021.





**11.** Overview of the PSS cover type portion of wetland W-EES-6. Photograph taken August 26, 2021.



Overview of the PUB cover type portion of wetland W-EES-6.
 Photograph taken August 26, 2021.





**9.** Overview of the PEM cover type portion of wetland W-EES-13. Photograph taken August 26, 2021.



**10.** Overview of the PUB cover type portion of wetland W-EES-18. Photograph taken Septebember 3, 2021.





**11.** Overview of the PFO cover type portion of wetland W-EES-23. Photograph taken Septebember 15, 2021.



**16.** Overview of the PSS cover type portion of wetland W-EES-30. Photograph taken Septebember 23, 2021.





**12.** Overview of the PFO cover type portion of wetland W-IBP-1. Photograph taken Septebember 21, 2021.



**13.** Overview of the PEM cover type portion of wetland W-IBP-2. Photograph taken Septebember 22, 2021.





**14.** Overview of the PSS cover type portion of wetland W-IBP-4. Photograph taken Septebember 22, 2021.



**20.** Overview of the PEM cover type portion of wetland W-JMP-1. Photograph taken August 31, 2021.




**21.** Overview of the PUB cover type portion of wetland W-JMP-2. Photograph taken August 31, 2021.



**15.** Overview of the PEM cover type portion of wetland W-JMP-6. Photograph taken September 2, 2021.





**16.** Overview of the PSS cover type portion of wetland W-JMP-8. Photograph taken September 3, 2021.



**17.** Overview of the PFO cover type portion of wetland W-JMP-11. Photograph taken September 8, 2021.





**18.** Overview of the PSS cover type portion of wetland W-JMP-14. Photograph taken September 9, 2021.



**19.** Overview of the PFO cover type portion of wetland W-JMP-17. Photograph taken September 9, 2021.





**20.** Overview of the PSS cover type portion of wetland W-JMP-20. Photograph taken September 13, 2021.



**21.** Overview of the PEM cover type portion of wetland W-JMP-24. Photograph taken September 15, 2021.





**9.** Overview of the PEM cover type portion of wetland W-JMP-29. Photograph taken September 16, 2021.



**30.** Overview of the PSS cover type portion of wetland W-JMP-31. Photograph taken September 17, 2021.





**22.** Overview of the PEM cover type portion of wetland W-NSD-1. Photograph taken August 25, 2021.



**23.** Overview of the PEM cover type portion of wetland W-NSD-4. Photograph taken August 25, 2021.





**33.** Overview of the PUB cover type portion of wetland W-NSD-8. Photograph taken August 27, 2021.



**24.** Overview of the PSS cover type portion of wetland W-NSD-10. Photograph taken September 9, 2021.



**25.** Overview of the PEM cover type portion of wetland W-NSD-12. Photograph taken September 9, 2021.



**26.** Overview of the PFO cover type portion of wetland W-NSD-14. Photograph taken September 10, 2021.





**27.** Overview of the PSS cover type portion of wetland W-NSD-14. Photograph taken September 10, 2021.



**38.** Overview of the PEM cover type portion of wetland W-NSD-18. Photograph taken September 13, 2021.





**39.** Overview of the PSS cover type portion of wetland W-NSD-19. Photograph taken September 13, 2021.



**40.** Overview of the PUB cover type portion of wetland W-NSD-23. Photograph taken September 14, 2021.





**41.** Overview of the PFO cover type portion of wetland W-NSD-28. Photograph taken September 16, 2021.



28. Overview of the PFO cover type portion of wetland W-NSD-29.Photograph taken September 17, 2021.





**29.** Overview of the PUB cover type portion of wetland W-NSD-29. Photograph taken September 17, 2021.



**30.** Overview of the PEM cover type portion of wetland W-RDS-1. Photograph taken September 7, 2021.





**31.** Overview of the PFO cover type portion of wetland W-RDS-5. Photograph taken September 8, 2021.



**32.** Overview of the PFO cover type portion of wetland W-RDS-8. Photograph taken September 9, 2021.





**33.** Overview of the PSS cover type portion of wetland W-RDS-11. Photograph taken September 10, 2021.



**48.** Overview of the PEM cover type portion of wetland W-RDS-13. Photograph taken September 10, 2021.





**49.** Overview of ephermeral stream S-DJB-01. Photograph taken November 19, 2021.



**34.** Overview of perennial stream S-DJB-03. Photograph taken December 6, 2021.





**35.** Overview of intermittent stream S-EES-01. Photograph taken August 16, 2021.



**36.** Overview of perennial stream S-EES-03. Photograph taken August 16, 2021.





**37.** Overview of ephemeral stream S-EES-07. Photograph taken August 18, 2021.



**38.** Overview of ephemeral stream S-EES-10. Photograph taken August 26, 2021.



**55.** Overview of ephemeral stream S-EES-14. Photograph taken August 26, 2021.



**39.** Overview of ephemeral stream S-EES-17. Photograph taken September 14, 2021.





**40.** Overview of intermittent stream S-EES-22. Photograph taken September 15, 2021.



**58.** Overview of intermittent stream S-EES-27. Photograph taken September 16, 2021.





**59.** Overview of intermittent stream S-EES-32. Photograph taken September 21, 2021.



**41.** Overview of intermittent stream S-IBP-01. Photograph taken September 22, 2021.





**42.** Overview of ephemeral stream S-JMP-01. Photograph taken August 31, 2021.



**43.** Overview of ephemeral stream S-JMP-04. Photograph taken September 1, 2021.





**44.** Overview of intermittent stream S-JMP-09. Photograph taken September 1, 2021.



**45.** Overview of intermittent stream S-JMP-13. Photograph taken September 10, 2021.





**46.** Overview of ephemeral stream S-JMP-16. Photograph taken September 10, 2021.



**47.** Overview of ephemeral stream S-JMP-25. Photograph taken September 14, 2021.





**48.** Overview of intermittent stream S-JMP-28. Photograph taken September 16, 2021.



**68.** Overview of intermittent stream S-KCF-05. Photograph taken August 17, 2021.





**49.** Overview of perennial stream S-KCF-12. Photograph taken August 18, 2021.



**50.** Overview of intermittent stream S-KCF-16. Photograph taken August 19, 2021.





**51.** Overview of intermittent stream S-KCF-19. Photograph taken August 20, 2021.



**52.** Overview of ephemeral stream S-KCF-24. Photograph taken August 20, 2021.





**53.** Overview of intermittent stream S-NSD-2. Photograph taken August 25, 2021.



**54.** Overview of intermittent stream S-NSD-6. Photograph taken August 25, 2021.





**55.** Overview of ephemeral stream S-NSD-12. Photograph taken August 27, 2021.



**56.** Overview of intermittent stream S-NSD-20. Photograph taken September 10, 2021.





**57.** Overview of intermittent stream S-NSD-24. Photograph taken September 14, 2021.



**58.** Overview of intermittent stream S-NSD-31. Photograph taken September 17, 2021.





**59.** Overview of ephemeral stream S-RDS-3. Photograph taken September 7, 2021.



**60.** Overview of intermittent stream S-RDS-10. Photograph taken September 7, 2021.





**61.** Overview of the ephemeral stream S-RDS-12. Photograph taken September 10, 2021.



84. Overview of the PFO cover type portion of wetland W-RDS-14.Photograph taken May 3, 2023.





**85.** Overview of the PFO cover type portion of wetland W-RDS-15. Photograph taken May 3, 2023.



**86.** Overview of the PFO cover type portion of wetland W-RDS-16. Photograph taken May 3, 2023.





**87.** Overview of the PEM cover type portion of wetland W-RDS-17. Photograph taken May 3, 2023.



88. Overview of the PEM cover type portion of wetland W-RDS-19.Photograph taken November 20, 2023.





**89.** Overview of the PEM cover type portion of wetland W-JMP-25. Photograph taken November 20, 2023.



**90.** Overview of the UPL cover type between W-JMP-25 and W-RDS-19. Photograph taken November 20, 2023.



## APPENDIX C

## **Data Forms**

A printed copy of Stream and Wetland Data Forms can be provided upon request.