WETLAND AND STREAM DELINEATION REPORT

MILL POINT SOLAR PROJECT

TOWN OF GLEN
MONTGOMERY COUNTY, NEW YORK

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1.0 INTRODUCTION

1.1 Project Description

ConnectGen Montgomery County LLC, a wholly-owned subsidiary of ConnectGen LLC (ConnectGen), is proposing to construct the Mill Point Solar Project ("Mill Point" or "Project"), a 350-megawatt (MW) utility-scale photovoltaic (PV) solar facility located in the Town of Glen, Montgomery County, New York. The footprint of the Project is proposed on land leased from owners of private property. Wetland delineations were conducted within a Survey Area encompassing a total of approximately 4,360 acres (see Figure 1 of Appendix A). This Project is subject to permitting under Section 94-c of the New York State Executive Law through the Office of Renewable Energy Siting (ORES) and therefore coordination with ORES will be required.

1.2 Report Purpose

This document presents the results of a wetland and stream delineation conducted by TRC on behalf of ConnectGen from October 26 through November 20, 2020, May 10 through May 21, 2021, June 1 through June 3, 2021, November 1 through November 3, 2021, April 20 through April 21, 2022, April 28, 2022, and August 9, 2022. This report was prepared to document wetlands and surface waters (including rivers, streams, ponds, lakes, etc.), regardless of jurisdictional status.

Specific tasks undertaken to prepare this report included:

(1) A desktop review of existing and publicly available federal and state agency resources;

(2) A field delineation of all surveyed aquatic features within the Survey Area utilizing a handheld Global Positioning System (GPS) with reported sub-meter accuracy; and

(3) The development of a detailed description of the delineated wetlands and other aquatic features, including those assumed to have State jurisdiction, based on hydrology, vegetation, and hydric soils data collected in the field.

Wetland and stream resources documented during the site visits are included in this report. Conclusions proposed herein provide information necessary to support permitting efforts with ORES under Section 94-c and with the U.S. Army Corps of Engineers (USACE) New York District, as appropriate.

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 (EPA) per Title 40 CFR Part 230.3(s). Wetlands are defined as *"those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA, 2021).*

On June 22, 2020, the Navigable Waters Protection Rule (NWPR) took effect, replacing the prior Clean Water Rule, itself established in 2015. The Navigable Waters Protection Rule 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 Corps 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 (Tanaka, et al., 2023).

The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency issued a final rulemaking on Jan. 18, 2023, revising the definition of "Waters of the United States" (WOTUS) pursuant to the Clean Water Act (CWA), replacing the 2020 Navigable Waters Protection Rule (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 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 EPA and Department of the Army 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 Clean Water Act

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 Environmental Protection Agency—EPA) will 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 not assert jurisdiction over:

- Prior converted cropland, adopting USDA's 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 Clean Water Act.
- 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 "waters of the United States."
- 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 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 (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 Freshwater Wetlands Act requires the NYSDEC to map all the 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 adjacent area, including the removal of vegetation.

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 and regulation also provide NYSDEC jurisdiction over navigable waters of the State, including contiguous marshes, estuaries, tidal marshes, and wetlands that are inundated at mean high water level or tide. 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*."

This report was submitted to ORES on October 20, 2022. Pursuant to NYCRR Section 900-1.3 (e-f), ORES conducted a site visit on November 10, 2022. An official jurisdictional determination was made by ORES on January 10, 2023. This report reflects the agency's jurisdictional determination for each delineated feature on site.

3.0 WETLAND AND STREAM DELINEATION METHODOLOGY

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

Where this wetland boundary determination approach differs 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 NYSDEC Article 24 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 State. See Section 5.0 for more detail.

The delineated resources were classified in accordance with the system presented in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (Federal Geographic Data Committee [FGDC], 2013). Field biologists assign cover types to wetlands based on this classification standard and utilize this document. TRC biologists used the definitions for perennial and intermittent streams found in *The Classification of Wetlands and Deepwater Habitats of the United States, Second Edition* (FGDC, 2013) when classifying delineated streams. Ephemeral streams have flowing water primarily from rainfall runoff and are above the water table.

3.1 Hydrology

The presence of wetland hydrology is determined based on primary and secondary indicators established by the USACE. The 1987 Manual defines the presence of wetland hydrology when at least one primary indicator or two secondary indicators are identified. Wetland hydrology is present if one or more primary 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.

3.2 Vegetation

Hydrophytic vegetation is defined in the 1987 USACE Manual as:

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

Plants are categorized according to their occurrence in wetlands. Scientific names and wetland indicator statuses for vegetation are those listed in *The National Wetland Plant List: 2018 Wetland Ratings* (Lichvar et al., 2018) (NWPL). Due to regional differences in wetland vegetation, among other characteristics, the USACE divided the United States into regions to improve the accuracy and efficiency of wetland delineations. The indicator statuses specific to the "Northcentral and Northeast Region" as defined by the USACE apply to the 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 is applied. Plants that are not included on the NWPL within the Survey Area's region, nor an adjacent region, are given no indicator status, and are not included in dominance calculations. Plants that are not listed in any region on the NWPL are considered as UPL on USACE Wetland Determination Forms.

Vegetation in both upland and wetland communities was characterized using aerial 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 five-foot radius was utilized for herbaceous plants. After the measurement of percent coverage was determined for each species, an application of the 50/20 rule of dominance determination was utilized to determine hydrophytic dominance at sample plots. In using the 50/20 rule, the plants that comprise each stratum are ranked from highest to lowest in percent cover. The species that cumulatively equal or exceed 50 percent of the total percent cover for each stratum are dominant species, and any additional species that individually provides 20 percent or more percent cover is also considered a dominant species of its respective strata. The total cover for each stratum, and subsequently the entire plot, could exceed 100 percent due to vegetation overlap.

3.3 Soils

Hydric soil indicators were determined utilizing the Supplement with added provision from the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils*, Version 8.2 (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA NRCS], 2018). Soil characteristics were documented, such as matrix color, layer depth, presence of organic/peat layers, and evidence of redoximorphic features, which may include indicators such as saturation, redoxification, gleyed matrices, manganese mottling, and hydrogen sulfide odor. Soil test pits were dug using a spade shovel to a depth of approximately 20 inches or more. Refusal of soil sample to 20 inches occurred in some instances due to the presence of hardpan layer, rock, or hard fill materials and was documented. Soil color was described using the Munsell Soil Color Book (Munsell Color, 2015) and texture was determined using the USDA feel method (Thien, 1979).

Hydric soil indicators applicable to the Survey Area were determined using the Land Resource Regions (LRRs) and Major Land Resource Areas (MLRAs) of the United States, the Caribbean, and the Pacific Basin (NRCS, 2006) (MLRA Handbook). Per the MLRA Handbook, the Survey Area is within the MLRA Area 140 (Glaciated Allegheny Plateau and Catskill Mountains) of LLR R (Northeastern Forage and Forest Region). Hydric soil indicators that do not apply to this MLRA were not considered.

3.4 Streams

Streams and other non-wetland aquatic features within the Survey Area were 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 accuracies. For streams less than six feet wide, only the centerline was mapped to maintain accurate representation of stream sinuosity for planning and impact calculation purposes as sub-meter GPS point capture and post-processing (differential correction) may yield imprecise stream bank measurements due to the narrow nature of the stream. Stream attributes including width, bank height, and water depth are measured and documented on TRC's Stream Data Forms (Appendix C).

4.0 PHYSICAL AREA CHARACTERISTICS

4.1 Resources

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

- United States Geological Survey (USGS) Randall New York 7.5-minute quadrangle; USGS Tribes Hill 7.5-minute quadrangle;
- USDA Ecoregion Maps;
- USGS National Hydrography Dataset;
- USGS Hydrologic Unit Maps;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 36057C0170E, effective 1/19/2018; 36057C0190E, effective 1/19/2018; 36057C0187E, effective 1/19/2018;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping;
- NYSDEC Environmental Resource Mapper (ERM);
- NYSDEC Freshwater Wetlands Mapping;
- USDA NRCS Web Soil Survey; and
- Recent aerial imagery.

4.2 Vegetation and Ecological Communities

The Survey Area resides in the Mohawk Valley (83f) Level IV Ecoregion located within the Eastern Great Lakes Lowlands (83) Level III Ecoregion within the Mixed Wood Plains (8.1) Level II Ecoregion in the Eastern Temperate Forest (8) Level I Ecoregion of the United States as defined by the USDA Forest Service (Bailey et al., 1995, Bryce et al., 2010). The Mohawk Valley Ecoregion is characterized by a broad irregular valley with significant variations in topography that includes rolling hills, river terraces, low mountains, and deeply eroded flat narrow floodplains.

Aerial imagery of the Survey Area and vicinity indicates that the Survey Area is covered by crops, pasture, and other agricultural land, as well as forests and shrublands in the northwest. An in-depth site review conducted during the delineation effort identified the following ecological communities, as defined by *Ecological Communities of New York State* (Edinger et al., 2014), within the Survey Area.

- Beech-maple forest
- Confined river
- Cropland/field crops
- Cropland/row crops
- Ditch/artificial intermittent stream
- Farm pond/artificial pond
- Hemlock-northern hardwood forest
- Interior of barn/agricultural building

- Intermittent stream
- Mowed lawn
- Mowed lawn with trees
- Mowed roadside/pathway
- Pastureland
- Paved road/path
- Purple loosestrife marsh
- Red maple-hardwood swamp
- Rural structure exterior
- Shallow emergent marsh
- Shrub swamp
- Successional old field
- Successional shrubland
- Successional southern hardwoods
- Unpaved road/path

4.3 Physiography and Soil Characteristics

4.3.1 Physiography and Topography

The Survey Area is within the Mohawk Lowlands Physiographic Province of New York State (New York State Geological Survey, 2018). This Physiographic Province is defined by the river valleys of the Mohawk and Black Rivers, as well as the broad band of crystalline rocks of the Adirondack Mountains and the steep slopes of Tug Hill and Glaciated Allegheny Plateau uplands. Major landforms within this physiographic province are bedrock-controlled erosion features such as the inner river valleys and relatively level lacustrine terraces. The Mohawk and Black River valleys are separated by an unconsolidated glacial moraine.

As shown on the USGS Randall NY 7.5-minute quadrangle, and the USGS Tribes Hill NY 7.5-minute quadrangle, the terrain generally slopes down from the southwest at approximately 600 feet above mean sea level (AMSL) to the northeast at approximately 460 feet AMSL. Auries Creek flows through the eastern and southern portions of the Survey Area and is surrounded by steep slopes, as it is about 100 feet lower than the surrounding land to the north and the west. The average slope is approximately 9.5 percent, and the Survey Area topography is considered moderately sloping. The highest elevation of the Survey Area is approximately 760 feet AMSL in the southwestern corner, south of Pryne Road.

4.3.2 Site Soils

A total of 43 soil map units were identified within the Survey Area using the USDA NRCS Web Soil Survey. Soil map units can 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 Survey Area is variable, with approximately 40.4 percent of the mapped soils classified as well drained, less than one percent moderately well drained, 43.6 percent as

somewhat poorly drained, 13.2 percent as poorly drained, 1.5 percent as very poorly drained, less than one percent as somewhat excessively drained, and less than one percent as excessively drained.

The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories 1987) (1987 Manual) 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.*"

Seven of the soil map units within the Survey Area contain 33% or more of mapping units with hydric soil inclusions suggestive of the presence of a wetland feature on-site (Figure 2 of Appendix A). Hydric Soil Rating indicates the percentage of map units that meet the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher positions on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower positions on the landform. As such, each map unit is rated based on its respective components and the percentage of each component within the map unit. Although a soil series is given a general hydric soil rating on the online databases, this is for reference only and does not supersede site specific conditions in the field documenting hydric soil presence.

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

Table 1. Mapped Soils within the Survey Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Survey Area	Percent of Survey Area (%)
AnB	Angola silt loam, 3 to 8 percent slopes	5	Somewhat poorly drained	10	16.17	0.4
ApA	Appleton silt loam, 0 to 3 percent slopes	2	Somewhat poorly drained	4	3.90	0.1
ApB	Appleton silt loam, 3 to 8 percent slopes	5	Somewhat poorly drained	5	607.70	13.9
AtC	Arnot channery silt loam, 8 to 15 percent slopes, rocky	12	Well drained	0	28.90	0.7
AtD	Arnot channery silt loam, 15 to 25 percent slopes, rocky	20	Well drained	0	1.90	0.0
AZF	Arnot-Rock outcrop association, very steep	48	Well drained	0	14.80	0.3
CFL	Cut and fill land	8	Somewhat excessively drained	10	0.03	0.0
ChA	Churchville silty clay loam, 0 to 3 percent slopes	2	Somewhat poorly drained	10	160.20	3.7

Table 1. Mapped Soils within the Survey Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Survey Area	Percent of Survey Area (%)
ChB	Churchville silty clay loam, 3 to 8 percent slopes	4	Somewhat poorly drained	10	478.40	11.0
DaB	Darien silt loam, 3 to 8 percent slopes	5	Somewhat poorly drained	10	426.7	9.8
DaC	Darien silt loam, 8 to 15 percent slopes	12	Somewhat poorly drained	5	2.87	0.1
FL	Fluvaquents, loamy	1	Poorly drained	90	108.90	2.5
Fo	Fonda mucky silty clay loam	2	Very poorly drained	85	67.10	1.5
GP	Gravel pits	2	Somewhat excessively drained	10	0.21	0.0
Gr	Granby loamy fine sand	2	Poorly drained	85	9.36	0.2
Ha	Hamlin silt loam	2	Well drained	0	24.26	0.6
HoB	Hornell silt loam, 3 to 8 percent slopes	6	Somewhat poorly drained	5	13.71	0.3
HrB	Howard gravelly silt loam, 3 to 8 percent slopes	6	Well drained	0	61.22	1.4
HrC	Howard gravelly silt loam, 8 to 15 percent slopes	12	Well drained	0	6.72	0.2
HuB	Hudson silty clay loam, 3 to 8 percent slopes	4	Moderately well drained	0	9.17	0.2
IlA	Ilion silt loam, 0 to 3 percent slopes	2	Poorly drained	90	72.50	1.7
IlB	Ilion silt loam, 3 to 8 percent slopes	6	Poorly drained	90	65.5	1.5
LaB	Lansing silt loam, 3 to 8 percent slopes	5	Well drained	0	152.7	3.5
LaC	Lansing silt loam, 8 to 15 percent slopes	11	Well drained	0	563.0	12.9
LaD	Lansing silt loam, 15 to 25 percent slopes	20	Well drained	0	100.9	2.3
LMF	Lansing and Mohawk soils, 25 to 60 percent slopes	43	Well drained	0	194.80	4.5
Ma	Madalin silty clay loam, 0 to 3 percent slopes	1	Poorly drained	95	313.5	7.2
Md	Madalin silty clay loam, moderately shallow variant	2	Poorly drained	85	3.20	0.1
MmB	Manheim silt loam, 3 to 8 percent slopes	5	Somewhat poorly drained	5	50.58	1.2
MsB	Mohawk silt loam, 3 to 8 percent slopes	6	Well drained	0	132.52	3.0

Table 1. Mapped Soils within the Survey Area

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Survey Area	Percent of Survey Area (%)
MsC	Mohawk silt loam, 8 to 15 percent slopes	12	Well drained	0	260.02	6.0
MsD	Mohawk silt loam, 15 to 25 percent slopes	20	Well drained	0	58.25	1.3
PaB	Palatine silt loam, 3 to 8 percent slopes	6	Well drained	0	58.99	1.4
PaC	Palatine silt loam, 8 to 15 percent slopes	12	Well drained	0	44.16	1.0
PaD	Palatine silt loam, 15 to 25 percent slopes	20	Well drained	0	47.69	1.1
PmC	Palmyra gravelly silt loam, 8 to 15 percent slopes	12	Well drained	0	7.75	0.2
PpB	Phelps gravelly loam, 3 to 8 percent slopes	6	Moderately well drained	0	12.24	0.3
Pr	Phelps gravelly loam, fan	4	Moderately well drained	0	7.28	0.2
PsB	Plainfield loamy sand, 3 to 10 percent slopes	7	Excessively drained	0	28.66	0.7
RhA	Rhinebeck silty clay loam, 0 to 3 percent slopes	2	Somewhat poorly drained	10	59.00	1.4
RhB	Rhinebeck silty clay loam, 3 to 8 percent slopes	4	Somewhat poorly drained	10	75.75	1.7
Te	Teel silt loam	2	Moderately well drained	5	4.72	0.1
W	Water	-	-	0	4.93	0.1

4.4 Hydrology

4.4.1 Hydrologic Mapping

The USGS has divided and sub-divided the country into hydrologic units based primarily on drainage basins and watershed boundaries. The Survey Area is located within the USGS defined Mohawk sub-basin hydrologic unit code (HUC) 02020004, Cayadutta Creek-Mohawk River watershed (HUC 0202000410), and the Yatesville Creek-Mohawk River sub-watershed (HUC 020200041003) and the Auries Creek-Mohawk River sub-watershed (HUC 020200041006).

The NYSDEC also classifies watersheds more generally within the State of New York. Unlike mapping efforts outlined by the USGS above, the NYSDEC utilizes the definitions of watersheds and drainage basins interchangeably. New York's waters (lakes, rivers, wetlands, streams, etc.) were determined to fall within one of 17 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 key body of water within or adjacent to the State of New York and includes networks of

rivers, streams, and lakes and the land area surrounding them. The NYSDEC classified watersheds are separated by high elevation geographic features (mountains, hills, ridges). Each major drainage basin corresponds to one or more USGS sub-basins (USGS HUC 8-digit codes).

The Survey Area is located within the Mohawk River Basin major drainage basin of New York. This major drainage basin is in Central New York State and occupies 3,460 square miles. The basin begins near the Adirondacks and the Tug Hill Plateau and follows the Mohawk River east for about 140 miles to connect with the Hudson River. The Survey Area is located within the Yatesville Creek-Mohawk River sub-watershed and the Auries Creek-Mohawk River sub-watershed. The drainage basin encompasses 3,460 square miles of land, 4,086 miles of freshwater rivers and streams, and 18,315 acres of lakes, ponds, and reservoirs.

4.4.2 Hydrologic Character

The dominant surface water feature on-site are tributaries to the Mohawk River. These streams flow from the Survey Area to the north into the Mohawk River, then continue flowing east towards Albany to connect with the Hudson River. Most aquatic features found within the Survey Area receive waters from precipitation events and agricultural runoff. Multiple NYSDEC Class C streams that extend from the Mohawk River are located within the Survey Area. The Mohawk River is located approximately 1.5 miles north of the Survey Area.

The Survey Area receives 44.8 inches of precipitation annually on 1981-2020's average based on information stored for the nearby town of Gloversville, New York located 8.5 miles north of the Survey Area (U.S. Climate Data, 2020). In addition to precipitation, hydrology on-site originates from agricultural runoff and subsurface flow. The Survey Area predominantly drains to the northeast towards the Mohawk River.

4.4.3 FEMA Flood Zone Mapping

FEMA maintains materials developed to support flood hazard mapping for the National Flood Insurance Program (NFIP). According to FIRM panels 36057C0170E, effective 1/19/2018; 36057C0190E, effective 1/19/2018; 36057C0187E, effective 1/19/2018 (FEMA 2008), the Survey Area is located within Zone X, an area of minimal flood hazard (Figure 3, Appendix A).

4.5 Federal and State Mapped Wetlands and Streams

The USFWS is the principal 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). Unlike NYSDEC wetland maps, NWI wetlands do not exclusively carry any federal jurisdiction with their mapped boundaries. NWI wetlands are used as a reference guide by TRC field biologists to conduct a more informed site survey in the demarcation or delineation of wetlands and streams, which could be subject to federal jurisdiction under the CWA within in the Survey Area.

Review of the NWI mapping during the preliminary desktop analysis indicated 37 features within the Survey Area. NWI mapping data indicates that riverine features (R5UBh, R2UBH, R4SBC) are the dominant NWI features present within the Survey Area totaling 40.46 acres. The remaining

NWI features are palustrine unconsolidated shore (PUS) features, totaling 18.24 acres within the Survey Area (Figure 3 of Appendix A).

Review of NYSDEC mapping through access to the online NYSDEC ERM indicates that there are two NYSDEC-mapped freshwater wetlands within the Survey Area. A 15.9-acre portion of Wetland R-20, as well as the regulated adjacent area, is mapped within the southwestern portion of the Survey Area. Wetland R-20 is designated as a Class II wetland and is mapped as 20.5 acres in total, 4.6 of which lies outside of the Survey Area. A 9.9-acre portion of Wetland TH-17 is mapped within the central portion of the Survey Area. Wetland TH-17 is a Class II wetland and is mapped as 68.9 acres in total, 59.0 of which falls outside the Survey Area. These features are regulated under Article 24 of the ECL (Figure 3 of Appendix A). Table 2 provides a summary of the NYSDEC regulated wetlands found within the Survey Area.

Table 2. NYSDEC Mapped Freshwater Wetlands within the Survey Area

NYSDEC Wetland ID	Class (I, II, III, IV)	Mapped Size (Acres)	Size within Survey Area (Acres)
TH-17	II	68.9	9.9
R-20	II	20.5	15.9

Based on available NYSDEC stream classification mapping, there are six mapped streams within the Survey Area. State-mapped streams Class C(T), Class C(TS) and higher, are protected per Article 15 of the ECL (See Section 2.2). Table 3 below provides a detailed summary of NYSDEC classified (protected and unprotected) streams mapped within the Survey Area.

Table 3. NYSDEC Mapped Streams within the Survey Area

Stream Name and NYSDEC Regulatory ID Number	NYS Major Drainage Basin	USGS Sub-basin HUC 8 and Name	NYSDEC Classification and Standard[1]	Cumulative Linear Feet within Survey Area
UNT to Mohawk River 876-182	Mohawk River	Mohawk 02020004	C/C	5,089
Auries Creek 876-183	Mohawk River	Mohawk 02020004	C/C	9,889
UNT to Auries Creek 876-185	Mohawk River	Mohawk 02020004	C/C	32,885
UNT to Mohawk River 876-189	Mohawk River	Mohawk 02020004	C/C	4,533
UNT to Mohawk River 876-238	Mohawk River	Mohawk 02020004	C/C	5,021
Van Wie Creek 876-243	Mohawk River	Mohawk 02020004	C/C	2,206

[1] NYSDEC Stream Classification refers to the water quality of the water or waterway segment of existing or expected best usage for each water or waterway segment. NYSDEC Stream Standard refers to the quality and purity established for each water or waterway segment.

5.0 RESULTS

5.1 General Overview

The Survey Area contains primarily agricultural land, hedgerows, and forest stands. Dominant vegetation at the Survey Area includes eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), black willow (*Salix nigra*), ash-leaf maple (*Acer negundo*), and sugar maple (*Acer saccharum*) in the tree strata; American hornbeam (*Carpinus caroliniana*), Morrow's honeysuckle (*Lonicera morrowii*), and gray dogwood (*Cornus racemosa*) in the sapling and shrub strata; and reed canary grass (*Phalaris arundinacea*), flat-top goldenrod (*Euthamia graminifolia*), Canada goldenrod (*Solidago canadensis*), sensitive fern (*Onoclea sensibilis*), and cat-tail sedge (*Carex typhina*) in the herbaceous strata.

Weather conditions were normal for the 2020 season during the delineation effort, with the region receiving 3.94 inches of precipitation from October 26 through November 20, 2020, and receiving 0.13 inch of precipitation in the week before delineations began (U.S. Climate Data, 2021).

Weather conditions were normal for the 2021 season during the delineation effort, with the region receiving 0.26 inches of precipitation during the delineations in May and receiving 1.06, 1.5, and 2.85 inches of precipitation in the week before delineations began in May, June, and November 2021 respectively (U.S. Climate Data, 2021).

Weather conditions were normal for the April 2022 season during the delineation effort, with the region receiving 1.08 inches of precipitation the week prior to the delineation in April, but no precipitation during the delineations on April 20, 21, and 28, 2022. During the August 2022 delineation, the region received 1.64 inches of precipitation the week prior to the delineation, and 0.08 inches of precipitation during the delineation on August 9, 2022 (U.S. Climate Data, 2022).

From October 26 to November 20, 2020, May 10 to May 21, 2021, June 1 to June 3, 2021, November 1 to November 3, 2021, April 20 through April 21, 2022, April 28, 2022, and August 9, 2022. TRC identified and delineated 171 wetlands and 135 streams within the Survey Area (see Figure 4). Approximately 8.2 percent (358.5 acres) of the 4,360-acre Survey Area is classified as wetland. Approximately 44 acres of the additional Survey Area included as part of the August 2022 delineation was delineated via desktop using current and historic aerial imagery as well as site reconnaissance from public rights of way or neighboring properties where land access had been granted. Features delineated via desktop include wetlands W-NSD-87, W-NSD-88, W-NSD-89; an extension of wetlands W-JMP-42, W-NSD-21, W-NSD-22, and W-NSD-23; and extensions of streams S-NSD-67 and S-NSD-1. Representative photographs were taken of each delineated wetland community and stream within the Survey Area and are included in Appendix B. Representative descriptions of each wetland cover type and stream are provided below. Completed wetland determination data forms and TRC stream data forms are provided in Appendix C. Tables 4 and 5 below detail the wetlands and streams delineated at the Survey Area.

5.2 Delineated Wetlands

Palustrine Emergent wetlands (PEM) – A total of 122 wetlands delineated within the Survey Area contain characteristics representative of a palustrine emergent (PEM) wetland community.

PEM wetlands are dominated by herbaceous vegetation that comprises woody and non-woody plants that are less than 3.28 feet tall. PEM wetlands typically contain deep, nutrient rich soils that remain heavily saturated or even inundated throughout the year.

PEM wetlands encountered in the Survey Area are typically dominated by reed canary grass, narrow-leaf cattail (*Typha angustifolia*), New England-American aster (*Symphyotrichum novae-angliae*), purple loosestrife (*Lythrum salicaria*), sensitive fern, Devil's pitchfork (*Bidens frondosa),* common boneset (*Eupatorium perfoliatum),* cat-tail sedge, rice cut grass (*Leersia oryzoides*), and creeping jenny (*Lysimachia nummularia*). Primary hydrology indicators observed within these wetlands include surface water (A1), high water table (A2), saturation (A3), inundation visible on aerial imagery (B7), water-stained leaves (B9), oxidized rhizospheres on living roots (C3), and presence of reduced iron (C4). Secondary hydrology indicators observed within these wetlands include drainage patterns (B10), moss trim lines (B16), saturation visible on aerial imagery (C9), geomorphic position (D2), microtopographic relief (D4), and FAC-neutral test (D5). The soil within PEM wetlands within the Survey Area contained loam, clay loam, silt loam, silty clay loam, sandy loam, sandy clay loam, and silty clay soils, and typically demonstrated depleted below dark surface (A11), depleted matrix (F3), and redox dark surface (F6) indicators.

See Appendix B (Photograph Log) images 2, 3, 4, 7, 8, 9, 10, 12, 13, 16, 17, 18, 20, 21, 22, 23, 24, and 25 for representative PEM photographs.

Palustrine Scrub-shrub wetlands (PSS) – A total of 30 wetlands delineated within the Survey Area contain 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.

PSS wetlands encountered on the Survey Area are typically dominated by black willow, white willow (*Salix alba*), red osier dogwood (*Cornus alba*), Morrow's honeysuckle, gray dogwood, gray willow (*Salix bebbiana*), cottongrass bulrush (*Scirpus cyperinus),* cinnamon fern (*Osmundastrum cinnamomeum*), flat-top goldenrod, and purple loosestrife. Primary hydrology indicators observed within these wetlands include high water table (A2), saturation (A3), inundation visible on aerial imagery (B7), water-stained leaves (B9), and presence of reduced iron (C9). Secondary hydrology indicators include drainage patterns (B10), moss trim lines (B16), saturation visible on aerial imagery (C9), geomorphic position (D2), microtopographic relief (D4), and FAC-neutral test (D5). The soil within PSS wetlands within the Survey Area contained silty clay loam, silt loam, clay loam, and silty clay soils, and typically demonstrated depleted matrix (F3) and redox dark surface (F6) indicators.

See Appendix B (Photograph Log) image 6 for a representative PSS photograph.

Palustrine Forested wetlands (PFO) – A total of 36 wetlands 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. Understory vegetation presence readily varies, as the upper canopy of tree species may block light for extensive vegetative growth in the understory.

Coniferous swamps, lowland hardwood swamps, and floodplain forests are common types of forested wetlands. Soils in PFO wetlands are typically inundated or saturated early spring into summer. Some PFO wetlands may dry up entirely, which reveal water stain marks along the trunks of exposed tree species and shallow, buttressed root systems indicative of a period of heavy inundation events.

PFO wetlands encountered on the Survey Area are typically dominated by swamp white oak (*Quercus bicolor*), black ash (*Fraxinus nigra*), ash-leaf maple, green ash (*Fraxinus pennsylvanica*), eastern hemlock (*Tsuga canadensis*), red maple (*Acer rubrum*), eastern cottonwood, American hornbeam, Morrow's honeysuckle, red osier dogwood, Japanese barberry (*Berberis thunbergii*), sensitive fern, rice cut grass, spinulose wood fern (*Dryopteris carthusiana*), early meadow-rue (*Ribes americanum*), hooded blue violet (*Viola sororia*), sweet wood-reed (*Cinna arundinacea*), wrinkle-leaf goldenrod (*Solidago rugosa*), and marsh horsetail (*Equisetum palustre*). Primary hydrology indicators observed include surface water (A1), high water table (A2), saturation (A3), water marks (B1), inundation visible on aerial imagery (B7), sparsely vegetated concave surface (B8), water-stained leaves (B9), oxidized rhizospheres on living roots (C3), and presence of reduced iron (C4). Secondary hydrology indicators observed include drainage patterns (B10), moss trim lines (B16), saturation visible on aerial imagery (C9), geomorphic position (D2), microtopographic relief (D4), and FAC-neutral test (D5). The soil within PFO wetlands within the Survey Area contained silt loam, silty clay, silty clay loam, clay loam, loam, loamy sand, and sandy loam soils, and typically demonstrated depleted matrix (F3) and redox dark surface (F6) indicators.

See Appendix B (Photograph Log) images 3, 5, 15, 26, and 27 for representative PFO photographs.

Palustrine Unconsolidated Bottom wetlands (PUB) – A total of 26 wetlands delineated within the Survey Area contain characteristics representative of palustrine unconsolidated bottom (PUB) wetland communities. PUB wetlands include wetland and deep-water habitats with at least 25 percent cover of particles smaller than stone, and a vegetative cover less than 30 percent. As these are bodies of standing water, evidence of wetland hydrology was decisively present with standing water ranging from approximately 2 to 4 feet in depth. Water regimes are restricted to subtidal, permanently flooded, intermittently exposed, and semi permanently flooded (Cowardin et al., 1979).

PUB wetlands are predominantly unvegetated, however, dominant vegetation observed on the borders of PUB wetlands include narrow-leaf cattail, purple loosestrife, and reed canary grass. Primary hydrology indicators observed include surface water (A1), high water table (A2), saturation (A3), and inundation visible on aerial imagery (B7). Secondary hydrology indicators observed include saturation on aerial imagery (C9) and geomorphic position (D2). PUB wetlands in the Survey Area observed inundation with water in the soils.

See Appendix B (Photograph Log) images 1, 11, 14, 19, and 28 for representative PUB photographs.

Table 4. Delineated Wetlands within the Survey Area

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-CIW-1	-	-	-	0.14	0.14	PUS	-	-	NON-JURISDICTIONAL	-	-	46	42.9063, -74.3453
W-CIW-2	0.58	-	-	0.28	0.86	PUS	-	-	USACE	-	-	60,61	42.8986, -74.3436
W-CIW-3	1.06	-	-	-	1.06	-	-	-	NON-JURISDICTIONAL	-	-	60,61	42.8975, -74.3436
W-CIW-4	0.81	-	-	-	0.81	-	-	-	USACE	-	-	61	42.8991, -74.3416
W-CIW-5	1.88	-	2.47	-	4.35	R5UBH	-	-	USACE	S-CIW-2	380	53,54	42.9041, -74.3525
W-CIW-6	0.26	-	-	-	0.26	-	-	-	USACE	-	-	53,54	42.9017, -74.3533
W-CIW-7	0.91	-	-	-	0.91	-	-	-	USACE	-	-	62	42.8939, -74.3500
W-CIW-8	0.09	-	-	-	0.09	-	-	-	NON-JURISDICTIONAL	-	-	60,62	42.8947, -74.3492
W-EHM-1	69.85	1.82	19.59	-	91.26	R5UBH	R-20	II	USACE/State	S-EHM-1 S-EHM-3 S-EHM-4 S-EHM-5 S-EHM-7 S-NSD-58 S-NSD-60	3,096	67,68,69, 71,72,73	42.8871, -74.3929
W-EHM-2	0.06	-	-	-	0.06	-	-	-	NON-JURISDICTIONAL	-	-	68	42.8895, -74.3932
W-EHM-3	1.74	-	-	-	1.74	R5UBH	-	-	NON-JURISDICTIONAL	-	-	66	42.8958, -74.3851
W-EHM-4	0.42	-	-	-	0.42	-	-	-	NON-JURISDICTIONAL	-	-	66	42.8973, -74.3862
W-EHM-5	0.56	-	-	-	0.56	-	-	-	NON-JURISDICTIONAL	-	-	65,68	42.8924, -74.3841
W-EHM-6*	-	0.84	0.08	-	0.92	-	-	-	USACE/State	S-EHM-6	133	68	42.8913, -74.3955

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-EHM-7	0.03	-	-	-	0.03	-	-	-	NON-JURISDICTIONAL	-	-	68	42.8913, -74.3921
W-EHM-9	0.13	-	-	-	0.13	-	-	-	USACE	-	-	69	42.8926, -74.3843
W-EHM-10	1.31	-	-	-	1.31	-	-	-	USACE	S-NSD-40	47	69,70	42.8924, -74.3841
W-KCF-1	0.09	-	-	0.80	0.89	PUS	-	-	USACE	S-CIW-12	811	59,60	42.8959, -74.3513
W-KCF-2	-	-	0.16	-	0.16	-	-	-	NON-JURISDICTIONAL	S-KCF-3	17	59	42.8965, -74.3570
W-KCF-3	0.21	-	-	-	0.21	-	-	-	NON-JURISDICTIONAL	-	-	58	42.8980, -74.3657
W-KCF-4	0.11	-	-	-	0.11	-	-	-	NON-JURISDICTIONAL	-	-	58	42.8984, -74.3641
W-KCF-5	-	1.22	-	-	1.22	R5UBH	-	-	USACE	S-KCF-4	1,260	58	42.8985, -74.3666
W-KCF-6	2.28	-	-	-	2.28	-	-	-	USACE	-	-	52,58	42.8996, -74.3675
W-KCF-7	0.54	-	-	-	0.54	-	-	-	NON-JURISDICTIONAL	-	-	52	42.9019, -74.3677
W-KCF-8	0.02	-	-	-	0.02	-	-	-	NON-JURISDICTIONAL	-	-	52	42.9010, -74.3683
W-KCF-9	0.96	-	-	-	0.96	-	-	-	USACE	-	-	51,52	42.9021, -74.3702
W-KCF-10	1.89	-	-	0.65	2.54	R5UBH PUS	-	-	USACE	-	-	51,52	42.9043, -74.3710
W-KCF-11	0.02	-	-	-	0.02	-	-	-	USACE	-	-	58	42.8973, -74.3663
W-KCF-12	0.41	-	-	-	0.41	-	-	-	USACE	-	-	43	42.9078, -74.3734
W-KCF-13	2.44	-	-	-	2.44	R5UBH	TH-17	II	USACE/State	S-KCF-5 S-KCF-6	3,240	34,35,36,43,	42.9144, -74.3676
W-KCF-14	0.59	0.83	-	-	1.43	-	-	-	USACE	-	-	33,42	42.9110, -74.3833
W-KCF-15	5.68	-	-	-	5.68	R5UBH	TH-17	II	USACE/State	-	-	26,27	42.9177,

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
													-74.3699
W-KCF-16	0.59	-	-	-	0.59	R5UBH	-	-	USACE	-	-	26	42.9200, -74.3781
W-KCF-18	1.26	0.68	-	0.38	2.32	PUS	-	-	USACE	S-KCF-10 S-KCF-11	289	74,79,80	42.8805, -74.3736
W-KCF-19	0.26	-	-	-	0.26	-	-	-	USACE	-	-	79	42.8803, -74.3757
W-KCF-20	0.04	-	-	-	0.04	-	-	-	USACE	-	-	79	42.8814, -74.3755
W-KCF-21	-	-	0.52	-	0.52	-	-	-	NON-JURISDICTIONAL	-	-	74	42.8859, -74.3773
W-KCF-22	0.54	-	3.60	-	4.14	-	-	-	NON-JURISDICTIONAL	S-KCF-13	477	70,73,74	42.8867, -74.3789
W-KCF-23	0.71	-	1.20	-	1.91	R5UBH	-	-	USACE	S-EHM-2	1,315	69,70,73,74	42.8883, -74.3799
W-MJR-1	0.17	-	-	0.14	0.31	PUS	-	-	USACE	S-MJR-2	135	80	42.8816, -74.3686
W-MJR-2	0.21	-	-	-	0.21	-	-	-	USACE	S-MJR-1	25	70	42.8888, -74.3739
W-MJR-3	-	-	1.25	-	1.25	-	-	-	USACE	S-MJR-4	257	80	42.8823, -74.3673
W-MJR-4	-	1.09	-	-	1.09	R5UBH	-	-	USACE	S-MJR-3 S-MJR-5 S-MJR-6 S-MJR-7	683	74	42.8849, -74.3747
W-MJR-5	-	-	0.64	-	0.64	R5UBH	-	-	USACE	S-MJR-3	136	74	42.8826, -74.3760
W-MJR-6	-	-	0.36	-	0.36	R5UBH	-	-	USACE	S-MJR-3	274	74	42.8822, -74.3778
W-MJR-7	-	0.12	-	-	0.12	R5UBH	-	-	USACE	S-MJR-3 S-MLM-2	356	74	42.8821, -74.3801
W-MLM-5	0.80	-	-	-	0.80	-	-	-	NON-JURISDICTIONAL	-	-	11	42.9307, -74.3962
W-MLM-7	2.29	-	-	-	2.29	-	-	-	USACE	S-MLM-2	197	26,34	42.9163, -74.3766

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-MLM-8	-	0.18	-	-	0.18	-	-	-	USACE	S-MLM-3	210	34	42.9141, -74.3789
W-MLM-10	0.36	-	-	-	0.36	PUS	-	-	NON-JURISDICTIONAL	-	-	46	42.9065, -74.3459
W-NSD-1	1.41	0.58	-	-	1.99	-	-	-	USACE/State	S-NSD-7	1	30	42.9203, -74.3403
W-NSD-2	0.21	-	-	-	0.21	-	-	-	USACE	-	-	30	42.9214, -74.3401
W-NSD-3	-	-	-	0.78	0.78	PUS	-	-	NON-JURISDICTIONAL	-	-	21	42.9241, -74.3368
W-NSD-4	-	0.84	-	-	0.84	-	-	-	USACE	-	-	21	42.9225, -74.3376
W-NSD-5	0.09	-	-	-	0.09	-	-	-	NON-JURISDICTIONAL	-	-	22	42.9230, -74.3325
W-NSD-6	0.20	-	-	-	0.20	-	-	-	NON-JURISDICTIONAL	-	-	22	42.9226, -74.3326
W-NSD-7	0.05	-	-	-	0.05	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9217, -74.3327
W-NSD-8	0.15	-	-	-	0.15	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9212, -74.3330
W-NSD-9	0.05	-	0.18	-	0.23	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9207, -74.3325
W-NSD-10	0.03	-	-	-	0.03	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9205, -74.3322
W-NSD-11	0.32	-	-	-	0.32	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9216, -74.3322
W-NSD-12	0.29	-	-	-	0.29	-	-	-	NON-JURISDICTIONAL	-	-	22	42.9227, -74.3320
W-NSD-13	0.44	0.69	-	-	1.13	-	-	-	NON-JURISDICTIONAL	-	-	22,31	42.9213, -74.3315
W-NSD-14	0.05	-	-	-	0.05	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9212, -74.3306
W-NSD-15	0.04	-	-	-	0.04	-	-	-	NON-JURISDICTIONAL	-	-	31	42.9216, -74.3301

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-NSD-16	0.15	-	-	-	0.15	-	-	-	NON-JURISDICTIONAL	-	-	22	42.9225, -74.3302
W-NSD-17	0.14	-	-	-	0.14	-	-	-	NON-JURISDICTIONAL	-	-	22	42.9223, -74.3296
W-NSD-18	0.12	-	-	-	0.12	-	-	-	NON-JURISDICTIONAL	-	-	22,31	42.9221, -74.3282
W-NSD-19	-	0.06	-	-	0.06	-	-	-	NON-JURISDICTIONAL	-	-	21	42.9200, -74.3477
W-NSD-20	10.36	-	-	0.35	10.71	PUS	-	-	USACE/State	S-NSD-14	1,722	38,39	42.9129, -74.3319
W-NSD-21	-	1.38	-	-	1.38	-	-	-	NON-JURISDICTIONAL	-	-	7,8	42.9352, -74.3934
W-NSD-22	1.23	-	-	-	1.23	-	-	-	USACE	-	-	7,8	42.9340, -74.3936
W-NSD-23	7.91	-	-	-	7.91	-	-	-	USACE	-	-	7,8,11	42.9338, -74.3915
W-NSD-24	0.04	-	-	-	0.04	-	-	-	NON-JURISDICTIONAL	S-NSD-19	6	4,5	42.9425, -74.3889
W-NSD-25	0.03	-	-	-	0.03	R2UBH	-	-	NON-JURISDICTIONAL	-	-	4	42.9420, -74.3904
W-NSD-26	-	0.01	-	-	0.01	-	-	-	NON-JURISDICTIONAL	-	-	8	42.9354, -74.3900
W-NSD-28	0.01	-	-	-	0.01	-	-	-	USACE	S-NSD-23	55	5	42.9399, -74.3861
W-NSD-29	-	0.02	-	-	0.02	-	-	-	NON-JURISDICTIONAL	-	-	8	42.9355, -74.3884
W-NSD-30	0.42	0.70	-	-	1.12	-	-	-	USACE	S-NSD-22	122	8	42.9356, -74.386
W-NSD-31	0.17	-	-	-	0.17	-	-	-	NON-JURISDICTIONAL	-	-	8	42.9379, -74.3877
W-NSD-32	0.02	-	-	-	0.02	-	-	-	USACE	-	-	9	42.9338, -74.3827
W-NSD-33	-	0.07	-	-	0.07	-	-	-	USACE	S-NSD-22	70	8,9	42.9355, -74.3843

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-NSD-34	0.70	-	-	-	0.70	-	-	-	NON-JURISDICTIONAL	-	-	8	42.9373, -74.3897
W-NSD-35	0.11	0.54	-	-	0.65	R2UBH	-	-	USACE	S-NSD-22	599	5,9	42.9386, -74.3814
W-NSD-36	0.14	-	-	-	0.14	-	-	-	NON-JURISDICTIONAL	-	-	5	42.9403, -74.3812
W-NSD-37	0.19	-	-	-	0.19	-	-	-	NON-JURISDICTIONAL	-	-	5	42.9410, -74.3849
W-NSD-38	0.12	-	-	-	0.12	-	-	-	USACE	-	-	5	42.9419, -74.3840
W-NSD-39	0.35	-	-	-	0.35	-	-	-	NON-JURISDICTIONAL	-	-	73	42.8848, -74.3835
W-NSD-40	0.20	-	-	-	0.20	-	-	-	NON-JURISDICTIONAL	-	-	73	42.8843, -74.3838
W-NSD-41	1.41	-	-	-	1.41	-	-	-	USACE	-	-	73	42.8831, -74.3881
W-NSD-42	1.96	0.87	-	0.41	3.24	R5UBH	-	-	USACE	S-NSD-28 S-NSD-32	785	73,77,78	42.8815, -74.3861
W-NSD-43	1.88	0.66	-	-	2.54	R5UBH	-	-	USACE	S-NSD-29 S-NSD-30	201	78	42.8801, -74.3883
W-NSD-44	-	-	0.04	-	0.04	-	-	-	USACE	S-NSD-32	81	77	42.8802, -74.3914
W-NSD-45	0.01	-	-	-	0.01	-	-	-	USACE	S-NSD-32	51	77	42.8797, -74.3950
W-NSD-46	-	-	1.89	-	1.89	-	-	-	USACE	-	-	76,81,82	42.8781, -74.3998
W-NSD-47	0.12	-	-	-	0.12	-	-	-	NON-JURISDICTIONAL	-	-	64	42.8967, -74.4002
W-NSD-48	0.11	-	-	-	0.11	-	-	-	NON-JURISDICTIONAL	-	-	65	42.8986, -74.3958
W-NSD-49	1.44	-	-	-	1.44	R2UBH	-	-	USACE	S-NSD-38	1,159	63,64	42.9002, -74.4017
W-NSD-50	-	-	-	0.46	0.46	PUS	-	-	NON-JURISDICTIONAL	-	-	63	42.9012, -74.4005

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-NSD-51	-	-	1.96	-	1.96	-	-	-	NON-JURISDICTIONAL	S-NSD-39	200	65	42.8957, -74.3931
W-NSD-52	0.89	-	-	-	0.89	-	-	-	NON-JURISDICTIONAL	-	-	77	42.8822, -74.3968
W-NSD-53	-	-	3.76	-	3.76	-	-	-	USACE/State	-	-	20	42.9228, -74.3556
W-NSD-54	0.06	-	-	3.27	3.33	PUS	-	-	USACE	S-NSD-41	184	44	42.9088, -74.3689
W-NSD-55	0.45	-	-	-	0.45	-	-	-	USACE	-	-	44	42.9096, -74.3665
W-NSD-56	0.55	-	-	-	0.55	R5UBH	-	-	USACE	S-KCF-5	381	35,36	42.9118, -74.3621
W-NSD-57	-	-	-	2.81	2.81	-	-	-	NON-JURISDICTIONAL	-	-	45,53	42.9054, -74.3596
W-NSD-58	0.15	-	-	-	0.15	-	-	-	NON-JURISDICTIONAL	-	-	44	42.9064, -74.3628
W-NSD-59	-	-	-	0.44	0.44	PUS	-	-	NON-JURISDICTIONAL	-	-	44	42.9068, -74.3655
W-NSD-60	0.71	-	-	0.6	1.31	PUS R2UBH R5UBH	-	-	USACE	-	-	11	42.928205, -74.397838
W-NSD-61	0.03	-	-	-	0.03	-	-	-	NON-JURISDICTIONAL	-	-	11	42.92926, -74.401473
W-NSD-62	0.48	-	-	-	0.48	-	-	-	NON-JURISDICTIONAL	-	-	10	42.930971, -74.403258
W-NSD-63	0.11	-	-	-	0.11	-	-	-	USACE	-	-	11	42.931335, -74.398801
W-NSD-64	-	-	-	0.04	0.04	PUS	-	-	USACE	-	-	11	42.932593, -74.400117
W-NSD-65	0.17	-	-	0.59	0.76	PUS	-	-	NON-JURISDICTIONAL	-	-	6,7	42.933326, -74.402639
W-NSD-66	0.31	-	0.81	-	1.12	-	-	-	NON-JURISDICTIONAL	-	-	11	42.931518, -74.401228
W-NSD-67	0.12	-	-	-	0.12	-	-	-	NON-JURISDICTIONAL	-	-	10,11	42.93132, -74.402017

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-NSD-68	0.07	-	-	-	0.07	-	-	-	NON-JURISDICTIONAL	-	-	10,11	42.930694, -74.402056
W-NSD-69	0.15	5.04	-	1.34	6.53	PUS	-	-	USACE	-	-	7,11	42.933459, -74.397704
W-NSD-70	-	-	-	0.43	0.43	PUS	-	-	NON-JURISDICTIONAL	-	-	7	42.934228, -74.40048
W-NSD-71	1.19	-	-	-	1.19	-	-	-	NON-JURISDICTIONAL	-	-	11	42.932475, -74.395403
W-NSD-72	1.67	-	0.78	-	2.45	-	-	-	USACE	-	-	11	42.931775, -74.396968
W-NSD-73	0.17	-	-	-	0.17	-	-	-	NON-JURISDICTIONAL	-	-	11	42.931584, -74.394806
W-NSD-74	-	-	-	0.13	0.13	-	-	-	NON-JURISDICTIONAL	-	-	11	42.929079, -74.395345
W-NSD-75	0.18	-	0.69	-	0.87	-	-	-	USACE	S-NSD-57	52	11	42.928392, -74.395167
W-NSD-76	-	-	-	0.32	0.32	-	-	-	NON-JURISDICTIONAL	-	-	11	42.931404, -74.397733
W-NSD-77	0.84	-	3.08	-	3.92	-	-	-	USACE	-	-	11	42.929729, -74.396469
W-NSD-78	1.92	0.06	-	-	1.99	-	-	-	USACE	-	-	71	42.884435, -74.399873
W-NSD-79	0.39	-	-	-	0.39	-	-	-	USACE	-	-	71	42.885239, -74.400858
W-NSD-81	3.40	2.46	-	-	5.86	-	-	-	USACE	S-NSD-61	268	24,25	42.920652, -74.390578
W-NSD-82	5.72	8.96	38.24	3.87	56.79	PUS R5UBH	-	Unmapped	USACE/State	S-NSD-62	870	20,28,29,30	42.920659, -74.35383
W-NSD-83	0.2	-	-	-	0.2	-	-	-	USACE	-	-	29	42.917395, -74.347541
W-NSD-84	41.45	-	-	-	41.45	R2UBH	-	Unmapped	USACE/State	S-NSD-65	2,918	12,13,14,15	42.93347, -74.356149
W-NSD-85	-	-	0.33	-	0.33	-	-	-	USACE	S-NSD-66	400	13	42.935808, -74.352365
W-NSD-86	-	-	0.71	-	0.71	-	-	-	USACE	-	-	13	42.935267,

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
													-74.350757
W-NSD-87	0.75	-	-	-	0.75	-	-	-	USACE	S-NSD-67	734	41	42.906088 -74.394143
W-NSD-88	0.03	-	-	-	0.03	-	-	-	NON-JURISDICTIONAL	-	-	42	42.908574 -74.387406
W-NSD-89	0.11	-	-	-	0.11	-	-	-	NON-JURISDICTIONAL	-	-	42	42.908588 -74384759
W-JMP-1	-	-	0.26	-	0.26	-	-	-	USACE	-	-	56, 61	42.900006, -74.33617
W-JMP-2	-	-	0.11	-	0.11	-	-	-	USACE	-	-	56	42.902886, -74.331888
W-JMP-3	-	-	0.23	1.17	1.4	R2UBH	-	-	USACE	S-JMP-4	309	56, 57	42.903836, -74.328014
W-JMP-5	3.44	-	-	-	3.44	R2UBH	-	-	USACE	S-JMP-4 S-JMP-5 S-JMP-6 S-JMP-7	2,404	57	42.903555, -74.323875
W-JMP-9	-	-	-	0.64	0.64	PUS	-	-	NON-JURISDICTIONAL	-	-	49	42.905942, -74.325033
W-JMP-10	0.21	-	-	-	0.21	-	-	-	NON-JURISDICTIONAL	-	-	49, 57	42.90578, -74.324314
W-JMP-11	-	2.03	-	-	2.03	-	-	-	USACE	-	-	40	42.912301, -74.323511
W-JMP-14	-	-	0.02	-	0.02	-	-	-	NON-JURISDICTIONAL	S-JMP-13	3	39	42.91228, -74.328121
W-JMP-15	-	-	-	0.12	0.12	PUS	-	-	NON-JURISDICTIONAL	-	-	47	42.90797, -74.338107
W-JMP-16	-	0.13	-	-	0.13	-	-	-	NON-JURISDICTIONAL	S-JMP-17	365	47	42.907357, -74.338489
W-JMP-18	0.73	-	-	-	0.73	-	-	-	NON-JURISDICTIONAL	-	-	47	42.908611, -74.337834
W-JMP-21	-	-	0.13	-	0.13	-	-	-	USACE	-	-	38	42.913127, -74.342352
W-JMP-22	0.12	-	-	-	0.12	-	-	-	NON-JURISDICTIONAL	-	-	47	42.909951, -74.336848

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									
W-JMP-23	0.12	-	-	-	0.12	-	-	-	USACE	S-NSD-13	115	38	42.912775, -74.340406
W-JMP-24	0.004	-	-	-	0.004	-	-	-	USACE	-	-	38	42.912767, -74.340407
W-JMP-25	-	-	0.04	-	0.04	-	-	-	USACE	S-NSD-13	8	38	42.913836, -74.342438
W-JMP-26	-	-	0.07	-	0.07	-	-	-	USACE	-	-	38	42.913163, -74.343099
W-JMP-27	-	-	0.53	-	0.53	-	-	-	NON-JURISDICTIONAL	-	-	46, 47	42.910829, -74.343741
W-JMP-28	-	-	2.18	-	2.18	-	-	-	NON-JURISDICTIONAL	-	-	38	42.911603, -74.342451
W-JMP-29	0.02	-	-	1.76	1.78	PUS	-	-	USACE	-	-	47	42.909254, -74.341085
W-JMP-30	0.2	-	0.27	-	0.47	-	-	-	USACE	S-JMP-10	193	47	42.90914, -74.343256
W-JMP-31	0.21	-	-	-	0.21	-	-	-	USACE	-	-	47	42.907614, -74.34344
W-JMP-32	0.04	-	-	-	0.04	-	-	-	NON-JURISDICTIONAL	-	-	47	42.909385, -74.339285
W-JMP-33	0.15	-	-	-	0.15	-	-	-	USACE	-	-	79	42.878131, -74.380048
W-JMP-34	-	0.14	-	-	0.14	-	-	-	USACE	S-NSD-1	164	23	42.924349, -74.324496
W-JMP-35	0.18	-	-	-	0.18	R5UBH	-	-	USACE	S-NSD-1	62	23	42.927814, -74.323374
W-JMP-36	-	-	0.12	-	0.12	R5UBH	-	-	USACE	S-JMP-15	299	23	42.927734, -74.324696
W-JMP-37	1.3	-	2.22	0.76	4.28	R5UBH	-	-	USACE	S-JMP-16 S-NSD-3	1,426	22	42.925484, -74.329343
W-JMP-38	-	-	0.02	-	0.02	-	-	-	USACE	S-JMP-18	137	22	42.926654, -74.329456
W-JMP-39	-	0.13	-	-	0.13	-	-	-	USACE	S-JMP-19	68	22	42.926518, -74.331786
W-JMP-41	1.65	0.94	-	-	2.59	-	-	-	USACE	-	-	41, 63	42.904494,

Wetland Field Designation	Cover Type Classification[1] and Acreage				Total Wetland Acreage within Survey Area	NWI Cover Type[2]	NYSDEC Wetland ID	NYSDEC Wetland Class	Potential Jurisdiction[3]	Stream(s) Present within Wetlands	Linear Feet of Stream(s) Present within Wetland	Figure 4 Page #	Centroid Coordinates
	PEM	PSS	PFO	PUB									-74.401048
W-JMP-42	-	1.43	-	-	1.43	-	-	-	USACE	-	-	41, 42	42.910008, -74.387713
W-JMP-44	0.19	-	-	-	0.19	-	-	-	USACE	-	-	17	42.926161, -74.394147
W-JMP-45	0.95	-	5.07	-	6.02	R5UBH	-	-	USACE	S-KCF-7 S-MLM-1	1,209	17, 18, 25	42.925149, -74.391978
Total Wetland Acreage Delineated:					**357.4**	**Total Linear Feet of Stream Within Wetlands**					**30,804**		

[1] PEM – palustrine emergent; PSS – palustrine scrub-shrub; PFO – palustrine forested; PUB – palustrine unconsolidated bottom
[2] PUS – palustrine unconsolidated shore; R5UBH – riverine unknown perennial, unconsolidated bottom, permanently flooded; R2UBH – riverine lower perennial, unconsolidated bottom, permanently flooded.
[3] Potential jurisdictions were determined using the Revised 2023 Conforming Rule and Article 24 of the New York ECL. This information is not an official determination of the jurisdictional status of the wetland and stream features within the Survey Area and is subject to agency review and approval. The ultimate authority to determine wetland and stream boundaries and jurisdiction lies with the USACE and the State.
*Note that only the PSS portion of W-EHM-6 is USACE/State jurisdictional, the PFO portion of this wetland is only USACE jurisdictional.

5.3 Delineated Streams

A total of 135 streams (or segments of streams) were delineated within the Survey Area (Table 5). Classification of streams was dependent on a temporal description of their usual flow regimes. Perennial streams flow year-round, except during severe drought conditions. Perennial streams can flow below the water table and receive groundwater flow from springs or other groundwater seepages and slopes. Intermittent streams flow only during certain times of the year from alternating springs, snow melts, or from runoff from seasonal precipitation events. Intermittent streams can flow above or below the water table. Ephemeral streams flow sporadically and are entirely dependent on transient precipitation from storm events or from periodic snow melts. These streams tend to flow above the water table and are often found as drainage features adjacent to, or within, the headwaters of a more major stream system. See Appendix B (Photograph Log) images 41 and 43 for representative ephemeral stream photographs. See images 29, 31, 33, 34, 35, 36, 42, 44, 45, 46, 48, 49, and 50 for representative intermittent stream photographs. See images 30, 32, 37, 38, 39, 40, and 47 for representative perennial stream photographs.

Streams encountered in the Survey Area are perennial (16), intermittent (64), and ephemeral (55). Stream widths range from 1 to 30 feet wide. Stream substrates include cobble, gravel, silt, clay, boulders, and bedrock. Stream depths range from 0 to 24 inches. The ephemeral streams were determined to only function as drainage features and lacked the width, depth, and relative permanence to permit the prevalence of aquatic ecologies, such as undercut banks, plunge pools, or riffle-pool sequences. Several of the streams within the Survey Area were determined to contain significant aquatic habitat to establish and support fish populations.

Table 5. Delineated Streams within the Survey Area

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-CIW-1	INTERMITTENT	614	-	-	USACE	-	1	60	42.899 -74.345
S-CIW-2	PERENNIAL	2,987	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	53, 54 60	42.904 -74.350
S-CIW-3	PERENNIAL	2,590	Auries Creek 876-183	C	USACE/State	H-240-84	3	45, 53, 54, 59,	42.902 -74.354
S-CIW-4	INTERMITTENT	152	-	-	USACE	-	1	53	42.901 -74.354
S-CIW-5	INTERMITTENT	354	-	-	USACE	-	1,2	53	42.901 -74.354
S-CIW-6	INTERMITTENT	199	-	-	Non-Jurisdictional	-	1	53, 54	42.902 -74.353
S-CIW-7	EPHEMERAL	92	-	-	Non-Jurisdictional	-	1,2	53, 54	42.902 -74.353
S-CIW-8	INTERMITTENT	342	-	-	Non-Jurisdictional	-	1	54	42.902 -74.352
S-CIW-9	INTERMITTENT	229	-	-	USACE	-	1	53, 54	42.901 -74.352
S-CIW-10	EPHEMERAL	207	-	-	Non-Jurisdictional	-	1	59	42.899 -74.353
S-CIW-11	EPHEMERAL	369	-	-	Non-Jurisdictional	-	1,2	59	42.899 -74.355
S-CIW-12	INTERMITTENT	2,475	-	-	USACE	-	1	59, 60	42.895 -74.354
S-EHM-1	INTERMITTENT	644	-	-	USACE	-	1	73	42.886 -74.388
S-EHM-2	PERENNIAL	2,654	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	69, 70	42.888 -74.377
S-EHM-3	INTERMITTENT	158	-	-	USACE	-	1	72	42.886 -74.391

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-EHM-4	INTERMITTENT	2,302	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1,2	72, 73	42.888 -74.391
S-EHM-5	EPHEMERAL	661	-	-	Non-Jurisdictional	-	1	69, 72	42.892 -74.390
S-EHM-6	INTERMITTENT	782	-	-	USACE	-	1	68	42.891 -74.393
S-EHM-7	INTERMITTENT	258	-	-	USACE	-	1	72	42.888 -74.394
S-KCF-1	INTERMITTENT	752	-	-	Non-Jurisdictional	-	1,2	59	42.896 -74.355
S-KCF-2	EPHEMERAL	289	-	-	Non-Jurisdictional	-	1	59	42.896 -74.355
S-KCF-3	EPHEMERAL	283	-	-	Non-Jurisdictional	-	1	59	42.896 -74.357
S-KCF-4	INTERMITTENT	1,279	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	58	42.898 -74.366
S-KCF-5	PERENNIAL	3,269	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	28, 35, 36	42.916 -74.357
S-KCF-6	INTERMITTENT	1,853	-	-	USACE	-	1	34, 35, 43	42.912 -74.371
S-KCF-7	PERENNIAL	543	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	18, 25	42.922 -74.385
S-KCF-8	EPHEMERAL	155	-	-	Non-Jurisdictional	-	1	79	42.878 -74.375
S-KCF-9	EPHEMERAL	136	-	-	Non-Jurisdictional	-	1	79	42.878 -74.374
S-KCF-10	INTERMITTENT	1,310	-	-	USACE	-	1	74, 79, 80	42.881 -74.371
S-KCF-11	INTERMITTENT	43	-	-	USACE	-	1	79	42.881 -74.372

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-KCF-12	EPHEMERAL	98	-	-	Non-Jurisdictional	-	1	80	42.880 -74.372
S-KCF-13	INTERMITTENT	727	-	-	Non-Jurisdictional	-	1	74	42.886 -74.370
S-MJR-1	PERENNIAL	4,340	Auries Creek and Tribs 876-185	C	USACE/State	H-240-84	2,3	70, 74, 75, 80	42.885 -74.368
S-MJR-2	INTERMITTENT	1,504	-	-	USACE	-	1,2	75, 80	42.882 -74.369
S-MJR-3	PERENNIAL	2,960	Auries Creek 876-183	C	USACE/State	H-240-84	3	70, 74	42.884 -74.374
S-MJR-4	INTERMITTENT	278	-	-	USACE	-	1	80	42.882 -74.367
S-MJR-5	PERENNIAL	182	-	-	USACE/State	-	3	74	42.885 -74.374
S-MJR-6	INTERMITTENT	112	-	-	USACE	-	1	74	42.884 -74.375
S-MJR-7	INTERMITTENT	47	-	-	USACE	-	1	74	42.884 -74.375
S-NSD-1	PERENNIAL	10,863	Auries Creek 876-183	C	USACE/State	H-240-84	3	23, 30, 31, 32, 37, 38, 46	42.916 -74.339
S-NSD-2	EPHEMERAL	77	-	-	Non-Jurisdictional	-	1	21	42.922 -74.338
S-NSD-3	EPHEMERAL	2,375	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1,2	21, 22	42.923 -74.333
S-NSD-4	INTERMITTENT	1,743	-	-	USACE	-	1	21, 22	42.924 -74.335
S-NSD-5	EPHEMERAL	811	-	-	Non-Jurisdictional	-	1	21, 30	42.921 -74.337
S-NSD-6	EPHEMERAL	210	-	-	Non-Jurisdictional	-	1	22	42.923 -74.333

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-NSD-7	EPHEMERAL	1,715	-	-	Non-Jurisdictional	-	1	22, 30, 31	42.920 -74.336
S-NSD-8	EPHEMERAL	754	-	-	Non-Jurisdictional	-	1	22, 31	42.922 -74.333
S-NSD-9	EPHEMERAL	217	-	-	Non-Jurisdictional	-	1	22	42.923 -74.332
S-NSD-10	EPHEMERAL	127	-	-	Non-Jurisdictional	-	1	22	42.924 -74.331
S-NSD-11	EPHEMERAL	208	-	-	Non-Jurisdictional	-	1	22	42.923 -74.329
S-NSD-12	EPHEMERAL	437	-	-	Non-Jurisdictional	-	1	30, 38	42.916 -74.341
S-NSD-13	INTERMITTENT	1,375	-	-	USACE	-	1	38	42.914 -74.342
S-NSD-14	INTERMITTENT	1,722	-	-	USACE	-	1	38, 39	42.913 -74.332
S-NSD-15	EPHEMERAL	170	-	-	Non-Jurisdictional	-	1	38	42.915 -74.337
S-NSD-16	INTERMITTENT	1,219	-	-	USACE	-	1	38	42.915 -74.339
S-NSD-17	EPHEMERAL	1,424	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1,2	4	42.938 -74.394
S-NSD-18	EPHEMERAL	475	-	-	Non-Jurisdictional	-	1	4,7	42.938 -74.395
S-NSD-19	EPHEMERAL	1,070	-	-	Non-Jurisdictional	-	1	2, 4, 5	42.973 -74.389
S-NSD-20	EPHEMERAL	703	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1	2, 4	42.943 -74.390
S-NSD-21	EPHEMERAL	163	-	-	Non-Jurisdictional	-	1	4	42.938 -74.393

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-NSD-22	INTERMITTENT	3,376	Minor Tribs to Mohawk River 876-189	C	USACE	-	1,2	5, 8, 9	42.937 -74.388
S-NSD-23	INTERMITTENT	2,304	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1,2	3, 5	42.941 -74.386
S-NSD-24	INTERMITTENT	798	-	-	USACE	-	1	8, 9	42.933 -74.386
S-NSD-25	EPHEMERAL	567	-	-	Non-Jurisdictional	-	1	8	42.934 -74.383
S-NSD-26	INTERMITTENT	864	-	-	USACE	-	1	5	42.942, -74.385
S-NSD-27	INTERMITTENT	412	-	-	USACE	-	1	73	42.883 -74.388
S-NSD-28	PERENNIAL	1,620	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1,2	73, 78	42.882 -74.384
S-NSD-29	INTERMITTENT	64	-	-	USACE	-	1	78	42.880 -74.387
S-NSD-30	PERENNIAL	1,568	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1,2	77, 78	42.881 -74.389
S-NSD-31	INTERMITTENT	102	-	-	USACE	-	1	77	42.880 -74.390
S-NSD-32	INTERMITTENT	1,576	-	-	USACE	-	1	77	42.879 -74.393
S-NSD-33	INTERMITTENT	2,525	-	-	USACE	-	1	81, 82	42.877 -74.393
S-NSD-34	EPHEMERAL	427	-	-	Non-Jurisdictional	-	1	78	42.878 -74.387
S-NSD-35	INTERMITTENT	426	-	-	USACE	-	1	72, 77	42.883 -74.390
S-NSD-36	EPHEMERAL	100	-	-	Non-Jurisdictional	-	1	64	42.897 -74.400

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-NSD-37	INTERMITTENT	903	-	-	USACE	-	1,2	64, 65	42.897 -74.399
S-NSD-38	PERENNIAL	1,912	Van Wie Creek and Tribs 876-243	C	USACE	H-240-93	1	63, 64	42.900 -74.400
S-NSD-39	EPHEMERAL	366	-	-	Non-Jurisdictional	-	1	65	42.895 -74.382
S-NSD-40	INTERMITTENT	1,019	-	-	USACE	-	1	70	42.892 -74.376
S-NSD-41	PERENNIAL	535	-	-	USACE	-	1	43, 44	42.908 -74.370
S-NSD-42	INTERMITTENT	2,088	-	-	USACE	-	1	35, 44	42.913 -74.365
S-NSD-43	INTERMITTENT	169	-	-	USACE	-	1	35, 36	42.914 -74.362
S-NSD-44	INTERMITTENT	1,183	-	-	USACE	-	1	45, 46	42.910 -74.335
S-NSD-45	EPHEMERAL	479	-	-	Non-Jurisdictional	-	1	45	42.907 -74.354
S-NSD-46	EPHEMERAL	1,723	-	-	Non-Jurisdictional	-	1	45	42.906 -74.354
S-NSD-47	INTERMITTENT	402	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	44	42.907 -74.366
S-NSD-48	EPHEMERAL	314	-	-	Non-Jurisdictional	-	1	11	42.932227, -74.40047
S-NSD-49	INTERMITTENT	1,764	Minor Tribs to Mohawk River 876-238	C	USACE	H-240- 90 thru 126 (selected)	1	10, 11	42.932346, -74.403728
S-NSD-50	EPHEMERAL	171	-	-	Non-Jurisdictional	-	1	10	42.932196, -74.402869
S-NSD-51	EPHEMERAL	336	-	-	Non-Jurisdictional	-	1	10	42.93267, -74.403434

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-NSD-52	EPHEMERAL	396	-	-	Non-Jurisdictional	-	1	10	42.932007, -74.404368
S-NSD-53	EPHEMERAL	257	-	-	Non-Jurisdictional	-	1	6	42.935537, -74.405059
S-NSD-54	EPHEMERAL	204	-	-	Non-Jurisdictional	-	1	6, 7	42.937026, -74.401938
S-NSD-55	INTERMITTENT	264	-	-	USACE	-	1	7, 11	42.933039, -74.399139
S-NSD-56	INTERMITTENT	40	-	-	USACE	-	1	11	42.932552, -74.398469
S-NSD-57	INTERMITTENT	189	-	-	USACE	-	1	11	42.928341, -74.39479
S-NSD-58	INTERMITTENT	117	-	-	USACE	-	1	71	42.885085, -74.406137
S-NSD-59	EPHEMERAL	45	-	-	Non-Jurisdictional	-	1	71	42.885112, -74.406259
S-NSD-60	INTERMITTENT	225	-	-	USACE	-	1	71	42.885256, -74.399884
S-NSD-61	INTERMITTENT	263	-	-	USACE	-	1	24	42.920106, -74.390345
S-NSD-62	PERENNIAL	843	Auries Creek and Tribs 876-185	C	USACE/State	H-240- 84	1	28	42.917998, -74.357302
S-NSD-65	PERENNIAL	2,625	Minor Tribs to Mohawk River 876-189	C	USACE	H-240- 71 thru 88 (selected)	1, 2	12, 13, 15	42.934959, -74.354384
S-NSD-66	EPHEMERAL	568	-	-	Non-Jurisdictional	-	1	13	42.935992, -74.352517
S-NSD-67	INTERMITTENT	539	-	-	USACE	-	1	41	42.905897 -74.393977
S-JMP-4	INTERMITTENT	1,063	Minor Tribs to Mohawk River 876-182	C	USACE	-	1	41, 56	42.903972, -74.325089

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
S-JMP-5	INTERMITTENT	281	-	-	USACE	-	1	57	42.903238, -74.323138
S-JMP-6	INTERMITTENT	120	-	-	USACE	-	1	57	42.90308, -74.324065
S-JMP-7	PERENNIAL	1,278	Minor Tribs to Mohawk River 876-189	C	USACE	H-240- 71 thru 88 (selected)	2	57	42.903457, -74.323878
S-JMP-9	INTERMITTENT	170	-	-	USACE	-	1	38	42.913487, -74.343277
S-JMP-10	INTERMITTENT	1,330	-	-	USACE	-	1	46, 47	42.909296, -74.343717
S-JMP-11	EPHEMERAL	639	-	-	Non-Jurisdictional	-	1	47, 48	42.910674, -74.328871
S-JMP-12	EPHEMERAL	203	-	-	Non-Jurisdictional	-	1	23	42.927283, -74.323648
S-JMP-13	EPHEMERAL	25	-	-	Non-Jurisdictional	-	1	39	42.926966, -74.323777
S-JMP-14	INTERMITTENT	851	-	-	USACE	-	1	22, 23	42.927832, -74.324092
S-JMP-15	INTERMITTENT	240	Auries Creek and Tribs 876-185	C	USACE	H-240- 84	2	23	42.927747, -74.324746
S-JMP-16	EPHEMERAL	606	-	-	Non-Jurisdictional	-	1	22	42.925425, -74.329592
S-JMP-17	EPHEMERAL	365	-	-	Non-Jurisdictional	-	1	47	42.907385, -74.338542
S-JMP-18	INTERMITTENT	639	-	-	USACE	-	1	22	42.926774, -74.329955
S-JMP-19	INTERMITTENT	563	-	-	USACE	-	1	22	42.926545, -74.33113
S-JMP-20	INTERMITTENT	162	-	-	USACE	-	1	38	42.913516, -74.342055
S-JMP-22	EPHEMERAL	171	-	-	Non-Jurisdictional	-	1	31	42.921553,

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
									-74.327822
S-JMP-23	EPHEMERAL	192	-	-	Non-Jurisdictional	-	1	31	42.920498, -74.329863
S-JMP-24	EPHEMERAL	173	-	-	Non-Jurisdictional	-	1	31	42.919709, -74.330775
S-JMP-25	EPHEMERAL	197	-	-	Non-Jurisdictional	-	1	31	42.919551, -74.331119
S-JMP-26	EPHEMERAL	120	-	-	Non-Jurisdictional	-	1	23	42.926913, -74.323742
S-MLM-1	INTERMITTENT	692	-	-	USACE	-	1	17, 18	42.925027, -74.3899
S-MLM-2	INTERMITTENT	197	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	26, 34	42.916677, -74.376504
S-MLM-3	INTERMITTENT	205	-	-	USACE	-	1	34	42.914205, -74.378921
S-MLM-5	EPHEMERAL	18	-	-	Non-Jurisdictional	-	1	46	42.90638, -74.352778
S-MLM-6	EPHEMERAL	21	-	-	Non-Jurisdictional	-	1	46	42.907356, -74.35237
S-MLM-7	EPHEMERAL	405	-	-	Non-Jurisdictional	-	1	46	42.907783, -74.349155
S-MLM-8	EPHEMERAL	554	-	-	Non-Jurisdictional	-	1	46	42.909115, -74.346097
S-MLM-10	EPHEMERAL	321	-	-	Non-Jurisdictional	-	1	46	42.907421, -74.346834
S-MLM-11	INTERMITTENT	516	-	-	USACE	-	1	46	42.907744, -74.347445
S-MLM-12	INTERMITTENT	1,503	-	-	USACE	-	1	46, 54	42.904534, -74.347623
Total Stream Length Delineated:		**116,748**							

Stream Field Designation[4]	Flow Regime Classification	Linear Feet within Survey Area[5]	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification[1] and Standard	Potential Jurisdiction[3]	Waterbody ID Number (WIN)	Stream Order[2]	Figure 4 Page #	Centroid Coordinates
	[1] A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation. [2] Stream order is reference to the Strahler stream order method. [3] Potential jurisdictions were determined using the Revised 2023 Conforming Rule and Article 24 of the New York ECL. This information is not an official determination of the jurisdictional status of the wetland and stream features within the Survey Area and is subject to agency review and approval. The ultimate authority to determine wetland and stream boundaries and jurisdiction lies with the USACE and the State. [4] Note that streams S-CIW-3, S-MJR-3, S-MJR-5, and S-NSD-1 flow contiguously although they have unique stream field designations. [5] Note that stream calculations differed slightly between TRC and the ORES jurisdictional determination. Although discrepancies may occur, the entirety of each feature identified as State jurisdictional by ORES are herein State jurisdictional. Differences in length calculations will not affect the jurisdiction of these features.								

6.0 CONCLUSIONS

TRC identified and delineated a total of 171 wetlands within the Survey Area during the field studies. In total these features comprise 357.4 acres of wetland within the Survey Area. Of these wetlands, there are 122 with PEM characteristics (206.59 acres), 30 with PSS characteristics (34.53 acres), 36 with PFO characteristics (93.60 acres), and 26 with PUB characteristics (22.68 acres), including some wetlands that have multiple classifications (i.e., PSS/PEM). Three field delineated wetlands overlap with the two identified NYSDEC-mapped freshwater wetlands.

TRC identified and delineated a total of 135 streams totaling 116,966 linear feet of streams within the Survey Area, including 16 perennial streams, 64 intermittent streams, and 55 ephemeral streams. There are six NYSDEC-mapped streams within the Survey Area.

The “potential jurisdiction” information included herein is not an official determination of the jurisdictional status of the wetland and stream features within the Survey Area and is subject to agency review and approval. The ultimate authority to determine wetland and stream boundaries and jurisdiction lies with the USACE and the State. TRC recommends consultation with the USACE to verify the findings presented in this report and to obtain documentation of concurrence with these findings. As the Project is subject to permitting under Section 94-c of the New York State Executive Law, coordination with ORES will also be required. Decisions made by the USACE, NYSDEC, and/or ORES staff may result in modifications to the conclusions stated in this report.

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