

Memorandum

To: Office of Renewable Energy Siting and Electric Transmission (ORES)

From: Environmental Design & Research, Landscape Architecture, Engineering &

Environmental Services, D.P.C. (EDR)

Date: September 20, 2024

Reference: Hoffman Falls Wind Project

Cover Letter to Wetland and Stream Delineation Report - Revision 1

EDR Project No: 21028

The Hoffman Falls Wind Project is a proposed wind energy generating facility located in the Towns of Fenner, Nelson, Eaton, and Smithfield, Madison County, New York (the Facility). The Facility is being reviewed under Article VIII of the Public Service Law (Article VIII), which is being administered by the Office of Renewable Energy Siting (ORES).

A Wetland Delineation Report (WDR) was sent to ORES on October 6, 2023, and on December 15, 2023, ORES staff issued a Surface Water Jurisdictional Determination (JD) and a Wetland JD for the Facility. A revised WDR was provided to ORES with the February 15, 2024, Article VIII Siting Permit Application to capture Facility layout changes and small shifts in the limits of disturbance (LOD). On April 12, 2024, ORES staff issued revised Surface Water and Wetland JDs for the Facility.

Following the receipt of ORES's August 5, 2024, Notice of Incomplete Application (NOIA), the Applicant made small changes to the layout and design of the Facility. The layout and design changes affected the LOD and increased the Study Area by approximately 3 acres.

To support these layout changes, EDR conducted additional wetland delineations in August 2024. One new wetland was identified within the updated Study Area (see Table 1 and Figure 1). The newly delineated wetland is less than 0.1 acres in size, hydrologically isolated, not located within 50 meters of any adjacent wetland, and not anticipated to fall under New York State jurisdiction (see Table 1 and Figure 7, Sheet 35 of the revised WDR [Appendix 14-A – Revision 1]). The revised WDR summarizes the results of all delineation efforts to date.

Table 1. Newly Delineated Wetlands

Wetland Delineation ID1	Wetla	nd Acre	age Withi Type²	n Study <i>A</i>	Area by	NYS Wetland ID/NYSDEC Wetland	Anticipated Federal Jurisdiction ⁴	Rationale for Federal Jurisdiction ⁵	Anticipated State Jurisdiction ⁶
	PEM	PSS	PFO POW Total Class ³		Class				
18-W001	0.07	-	-	-	0.07		No	Isolated	No

¹ Field ID assigned by EDR.

² Wetland community types are based upon the Cowardin et al. (1979) classification system: open water wetland (POW), palustrine emergent wetland (PEM), palustrine forested wetland (PFO), palustrine scrub-shrub wetland (PSS).

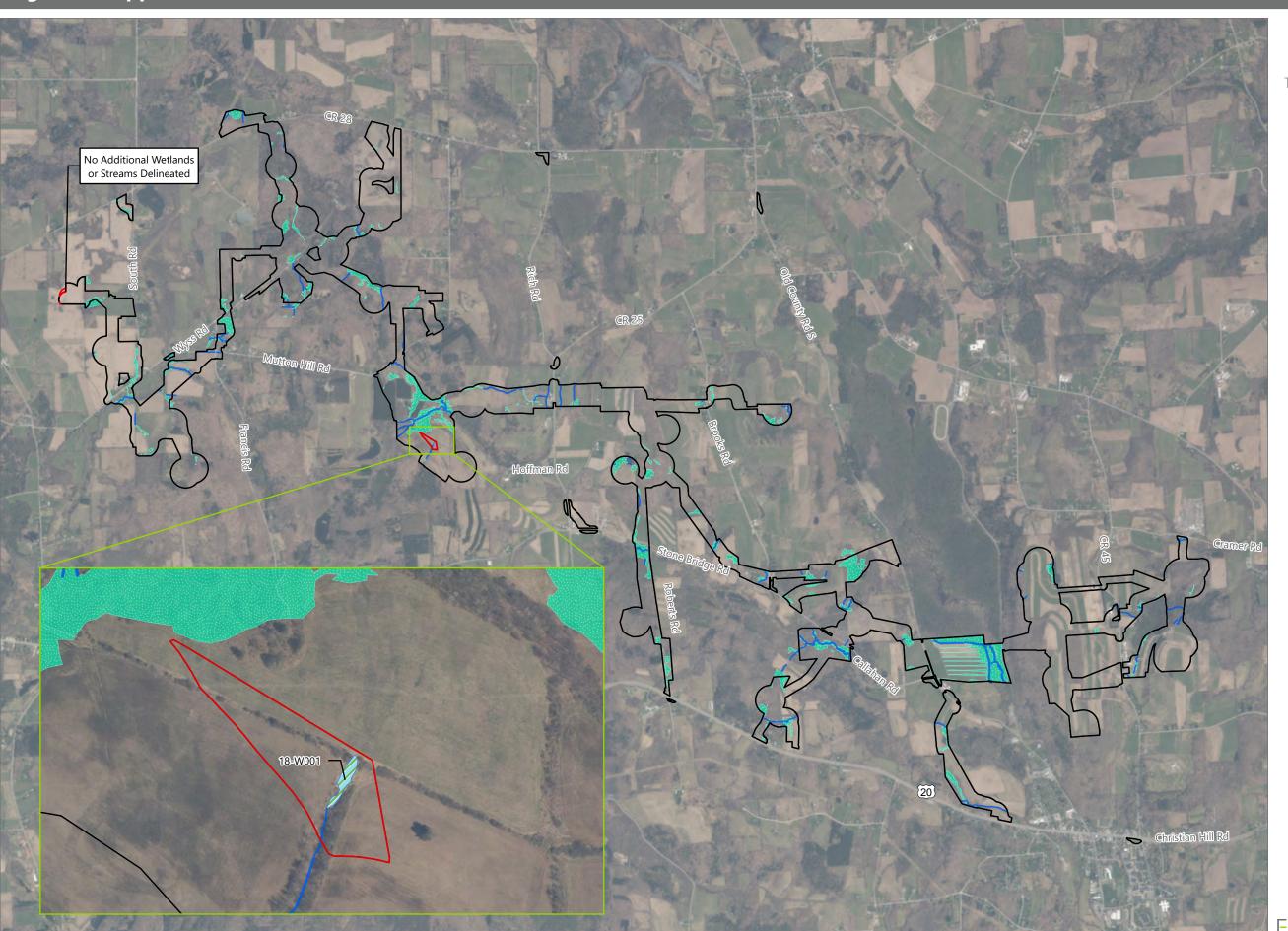
³ If applicable.

⁴ Based on visual observation of hydrologic connectivity in the field and review of available spatial data. Final jurisdictional determination to be made by the USACE.

⁵ Based on the May 2023 Supreme Court ruling in Sackett v. EPA regarding wetlands having a direct surface connection to a WOTUS as designated according to the relative permanence test.

⁶ Based on estimated wetland size and/or existing NYSDEC mapping of freshwater wetlands. See Sections 2.2 and 3.2.1 of the Wetland and Stream Delineation Report for additional information. Final jurisdictional determination to be made by ORES and/or the NYSDEC.

Figure 1. Supplemental Wetland and Stream Delineations



Hoffman Falls Wind Project

Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report



Previously Delineated Wetland

Previously Delineated Stream

August 2024 Study Area

Previous Study Area



Prepared September 4, 2024 Basemap: NYSDOP "2022" orthoimagery map service

EDR

Wetland and Stream Delineation Report - Revision 1

Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield Madison County, New York

Prepared for:



90 State Street, Suite 700 Albany, New York 12207 Contact: Meg Lee mlee@liberty-renewables.com

Prepared by:



Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
www.edrdpc.com

September 2024

TABLE OF CONTENTS

	LIS	T OF TAI	BLES	iii
	LIS	T OF AP	PENDICES	iii
1.0	INTE	ODUCT	TION	1
	1.1	Projec	t Location and Description	1
	1.2)SE	
2.0	REGI	JLATOR	RY AUTHORITIES AND PERMITS	2
	2.1	Water	rs of the United States	2
	2.2	New Y	York State Freshwater Wetlands and Protected Streams	5
3.0	REVI	EW OF I	BACKGROUND DATA AND MAPPING	7
	3.1	Physic	ography and Soils	7
	3.2	Hydro	ology	10
		3.2.1	Federal and State Mapped Wetlands and Streams	11
		3.2.2	Mapped Floodplains	11
	3.3	Марр	ed Vegetation	11
4.0	ON-	SITE WE	TLAND AND STREAM DELINEATION	13
	4.1	Metho	odology	13
	4.2	Result	ts	15
		4.2.1	Wetlands	39
		4.2.2	Streams	41
		4.2.3	Uplands	42
5.0	CON	CLUSIO	NS	43
REFE	RENC	ES		44

LIST OF TABLES

Table 3. Stud	y Area Soi	l Mapping Units8
Table 4. Vege	etation/La	nd Cover Within the Study Area11
Table 5. Delir	neated We	tlands16
Table 6. Delir	neated Stre	eams
		LIST OF APPENDICES
Appendix A.	Figures	
	Figure 1.	Regional Project Location
	Figure 2.	Topographic Mapping
	Figure 3.	Study Area Soil Mapping Units
	Figure 4.	Mapped Wetlands and Streams
	Figure 5.	FEMA Floodplains
	Figure 6.	National Land Cover Dataset Mapping
	Figure 7.	Delineated Wetlands and Streams

Appendix B. Routine Wetland Determination Data Sheets and OHWM Data Forms

Appendix C. Photo Documentation

1.0 INTRODUCTION

On behalf of Hoffman Falls Wind LLC, a subsidiary of Liberty Renewables Inc., Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) conducted an on-site wetland and stream delineation for the Hoffman Falls Wind Project (the Facility). This *Wetland and Stream Delineation Report* summarizes the results of on-site delineations.

1.1 PROJECT LOCATION AND DESCRIPTION

In 2023, Hoffman Falls Wind LLC, a wholly owned subsidiary of Liberty Renewables, was formed for the purposes of permitting the Hoffman Falls Wind Project. Hoffman Falls Wind LLC is proposing a wind energy generation facility of up to 100 MW and associated necessary infrastructure on approximately 60 parcels that total 3,897 acres in the Towns of Fenner, Nelson, Eaton, and Smithfield, Madison County, New York (Figure 1; all figures are in Appendix A). The Facility is roughly bounded by NYS Route 20 to the south, Nelson Road to the west, Cody Road to the north, and Fearon Road to the east. The Facility will consist of wind turbines, a point of interconnection substation, temporary construction laydown areas, access road, and electrical collection lines.

EDR was retained to identify all wetlands and streams within and adjacent to the proposed Facility components described above, hereafter referred to as the Study Area. Specifically, the Study Area totals 1,897.2 acres and includes all land where Facility components may be sited, plus areas within 100 feet of the proposed limits of disturbance, where accessible. Wetland and stream delineations were conducted within the Study Area between May and September 2023.

1.2 PURPOSE

The purpose of this study was to delineate and describe all wetlands and streams that occur within the Study Area and determine their anticipated state and/or federal jurisdiction. Specific tasks performed for this study included: 1) reviewing background resource data/mapping, 2) field delineating and flagging wetlands and streams, 3) surveying delineated wetland and stream boundaries using a Global Positioning System unit, 4) quantifying the area of on-site wetlands and streams, and 5) describing delineated wetlands and streams based on hydrology, vegetation, soils and/or other data collected in the field.

This report describes the relevant regulatory authorities and potential permits required, summarizes the desktop review, and presents the results of the on-site wetland and stream delineations conducted by EDR. It provides the necessary information on anticipated jurisdictional areas in support of any required permit applications to the U.S. Army Corps of Engineers (USACE) and the NYS Office of Renewable Energy Siting (ORES), along with other impact evaluations that may be conducted in support of the Facility (e.g., the Section 94-c Application).

2.0 REGULATORY AUTHORITIES AND PERMITS

Wetlands, streams, and other surface water features are regulated by both federal and state authorities. This section discusses the regulatory frameworks applicable to surface waters in New York State.

2.1 WATERS OF THE UNITED STATES

In accordance with Section 404 of the Clean Water Act (CWA), the USACE has regulatory jurisdiction over waters of the United States (WOTUS). According to the USACE, WOTUS include lakes, ponds, streams (as defined by an ordinary high water mark [OHWM]), tidal waters, and wetlands. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] § 328.3). Such areas are indicated by the presence of three conditions: 1) a dominance of hydrophytic vegetation, 2) the presence of hydric soils, and 3) evidence of wetland hydrology during the growing season (Environmental Laboratory, 1987).

The Clean Water Rule: Definition of "Waters of the United States" (the 2015 Rule), effective August 28, 2015, was adopted to provide a clear and consistent approach to defining the scope of the CWA and WOTUS. However, on December 30, 2022, the USEPA and USACE announced a final rule founded upon the pre-2015 definition of WOTUS and updated to reflect consideration of Supreme Court decisions, the scientific record, and the agencies' technical expertise. The Revised Definition of "Waters of the United States" (the 2023 Rule) became effective on March 20, 2023 (USACE and USEPA, 2023a). On May 25, 2023, the Supreme Court issued a decision in the Sackett v. USEPA case that narrowed the scope of federally protected wetlands according to the CWA. Subsequently on August 29, 2023, the USEPA and USACE issued a final rule that amends the 2023 Rule to conform key aspects of the regulatory text to the Supreme Court's decision in the Sackett v. USEPA case. 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 (USACE and USEPA, 2023b).

Broadly, this conforming amendment:

- 1. Removes the significant nexus standard from the definition of adjacent wetlands, tributaries, and other waters categories of WOTUS.
- 2. Leaves in place the relatively permanent standard in determining WOTUS.
- 3. Revises the definition of "adjacent wetlands" to include only those wetlands with a direct surface water connection to a WOTUS that meets the relatively permanent standard.
- 4. Removes interstate wetlands from the interstate waters category of WOTUS.

This updated definition of WOTUS includes the original seven jurisdictional categories (Table 1) and eight categories that are specifically not considered WOTUS (Table 2). Due to ongoing litigation, the 2023 Rule, as amended, is only active in 23 states plus the District of Columbia. The pre-2015 regulatory regime, consistent with the Sackett v. USEPA case that defines WOTUS similar to the amended 2023 Rule, is in effect in the remainder of the 27 states. As such, jurisdictional results are functionally the same when the amended

2023 Rule is applied. New York is included in the list of states where the 2023 Rule, as amended, is in effect (USEPA, 2023). As a result, anticipated jurisdiction in this report is consistent with the 2023 Rule, as amended effective September 8, 2023.

Table 1. Jurisdictional Waters as Defined in 2023 Rule, as Amended

Water Type	Regulatory Definition
Traditional navigable water (TNW)	A waterbody that is "navigable-in-fact." TNWs include large rivers and lakes that could be used in interstate or foreign commerce, as well as waterbodies affected by tides.
Territorial seas	Territorial seas that extend 3 miles out to sea from the coast.
Interstate waters	Waters such as streams or lakes that cross or form part of state boundaries.
Impoundments of WOTUS	Impoundments created by impounding one of the WOTUS that was jurisdictional under this rule's definition at the time the impoundment was created, and impoundments of waters that at the time of assessment meet the definition of WOTUS under the rule as a TNW, the territorial seas, interstate water, jurisdictional tributary, or jurisdictional adjacent wetland, regardless of the water's jurisdictional status at the time the impoundment was created.
Tributaries to TNWs, territorial seas, interstate waters, or impoundments	Branches of creeks, streams, rivers, lakes, ponds, ditches, and impoundments that ultimately flow into TNWs, the territorial seas, interstate waters, or impoundments of jurisdictional waters. Tributaries are jurisdictional if they meet the relatively permanent standard. ¹
Adjacent wetlands ²	Wetlands adjacent to TNWs, the territorial seas, or interstate waters. Wetlands with a continuous surface connection to relatively permanent impoundments or to jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard.
Other waters	Intrastate lakes and ponds that are not identified in the categories above but do meet the relatively permanent standard and have continuous surface water connections to the waters identified above.

¹ The relatively permanent standard identifies WOTUS as having relatively permanent, standing, or continuously flowing waters.

² A wetland is defined as adjacent when it has a continuous surface water connection to a WOTUS as defined above in its own right.

Table 2. Non-Jurisdictional Waters as Defined in the 2023 Rule, as Amended

Water Type	Regulatory Definition
Waste treatment systems	Includes lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).
Prior converted cropland	Any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. The USEPA and USACE recognize designations of prior converted cropland made by the Secretary of Agriculture. An area is no longer considered prior converted cropland for purposes of the CWA when the area is abandoned and has reverted to wetlands. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. For the purposes of the CWA, the USEPA has the final authority to determine whether prior converted cropland has been abandoned. Excavated wholly in, and draining only, dry land and that do not carry a
Ditches (including roadside ditches)	relatively permanent flow of water.
Artificially irrigated areas	Areas that would revert to dry land if the irrigation ceased.
Artificial lakes or ponds	Created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
Artificial reflecting or swimming pools or other small ornamental bodies of water	Created by excavating or diking dry land to retain water for primarily aesthetic reasons.
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 or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS.
Swales and erosional features	Gullies or small washes characterized by low volume, infrequent, or short duration flow.

A Section 404 permit from the USACE is required for activities that result in the placement of dredged or fill materials in WOTUS. In addition, Section 10 of the Rivers and Harbor Act requires a permit from the USACE to construct any structure in, under, or over any TNWs, as well as any proposed action that would alter or disturb these waters (such as excavation/dredging or deposition of materials).

2.2 NEW YORK STATE FRESHWATER WETLANDS AND PROTECTED STREAMS

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. The Freshwater Wetlands Act requires the NYSDEC to map all state-protected wetlands to allow landowners and other interested parties a means of determining where state-jurisdictional wetlands exist. To implement the policy established by this act, regulations were promulgated by the state under 6 New York Codes, Rules, and Regulations (NYCRR) Parts 663 and 664. Part 663 of the regulations implement the wetlands protection policy, define the procedural requirements to be followed for different activities in wetlands and adjacent areas, and establish standards for issuance of permits. Part 664 of the regulations designates wetlands into four class ratings, with Class I being the highest or best quality wetland, and Class IV being the lowest. In general, wetlands regulated by the state are those 12.4 acres in size or larger. Smaller wetlands can also be regulated if they are considered of unusual local importance. A 100-foot adjacent area around the delineated boundary of any state regulated wetland is also under NYSDEC jurisdiction. An Article 24 permit is required from the NYSDEC for any disturbance to a state-protected wetland or adjacent area.

Under Article 15 of the ECL (Protection of Waters), the NYSDEC has regulatory jurisdiction over any activity that disturbs the bed or banks of protected streams or other watercourse. In addition, small lakes and ponds with a surface area of 10 acres or less, located within the course of a stream, are considered to be part of a stream and are subject to regulation under the stream protection category of Article 15. According to 6 NYCRR Part 608.1(aa), protected streams include 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, or C(T) or C(TS). 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. An Article 15 permit is required from the NYSDEC for any disturbance to the bed and banks of protected streams, with special requirements applied to streams designated as supporting trout or trout spawning. Where banks are not clearly defined, the NYSDEC may extend permitting jurisdiction to 50 feet beyond the stream.

In addition to the protection of waters permit required to change, modify, or disturb protected streams, Article 15 also requires a permit from the NYSDEC to construct any structure in or above any navigable waters of the state, as well as any proposed action that would alter or disturb these waters (such as excavation/dredging or deposition of materials). The state defines navigable waters "lakes, rivers and other waterways and water bodies on which water vessels with a capacity of one or more persons are operated or can be operated notwithstanding interruptions to navigation by artificial structures, shallows, rapids or other obstructions, or by seasonal variations in capacity to support navigation."

Wetland and Stream Delineation Report – Revision 1 Hoffman Falls Wind Project

¹ On April 9, 2022, the 2022-2023 New York State Fiscal Year budget was approved and included amendments to the Freshwater Wetlands Act. Beginning in 2025, the state wetland maps will no longer be used to determine jurisdiction and will be for informational purposes only. Any wetland that is 12.4 acres or larger, or that possess unusual importance (as determined by the NYSDEC) will be subject to state jurisdiction. In 2028, the size threshold will be reduced to include any wetland that meets or exceeds 7.4 acres.

Since the proposed Project will be permitted under the Section 94-c process, permits under Article 15 or Article 24 of the ECL will not be required. The Section 94-c process supersedes these specific permitting requirements. However, it is anticipated that the Section 94-c certificate conditions may include state jurisdictional requirements equivalent or similar to those applicable under Article 15 and/or Article 24. The Project will comply with the wetland and stream requirements under the Section 94-c process (19 NYCRR §900-2.14 and 19 NYCRR §900 §2.15).

3.0 REVIEW OF BACKGROUND DATA AND MAPPING

In preparation for the field delineations, EDR reviewed publicly available data related to physiography, soils, hydrology, and vegetation in the Study Area. Mapping and data were obtained from various state and federal agencies, including but not limited to the following:

- U.S. Geological Survey (USGS) topographic mapping (Morrisville and Cazenovia 7.5-minute quadrangles)
- U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) mapping
- NYSDEC Freshwater Wetlands mapping
- The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (Soil Survey Staff, 2023)
- The NRCS List of Hydric Soils of the State of New York (NRCS, 2023)
- The National Land Cover Database (NLCD) land cover and vegetation classes (Dewitz, 2023)
- Recent aerial photography.

3.1 PHYSIOGRAPHY AND SOILS

The Study Area is located within the Allegheny Plateau physiographic province of New York State. The geography in this province consists of high rounded hills separated by narrow valleys, except for select locations in the Cazenovia Lake-Chittenango Creek/Canaseraga Creek and Oneida River Valleys (Bryce et al., 2010). Elevations within the Study Area range from approximately 1,280 to 1,860 feet above mean sea level (Figure 2).

The Web Soil Survey of Madison County (Soil Survey Staff, 2023) identifies 54 mapping units within the Study Area, including 51 soil series and two other mapping units of alluvial land, which consists of recent alluvium deposits on floodplains, and water (Figure 3). Lansing gravelly silt loam (LsC) is the most recurrent series occurring within the Study Area, with Mardin channery silt loam (MaC and MaB), Volusia channery silt loam (VoB), and Honeoye silt loam (HnB and HnC) also common. These soils range from very poorly drained to somewhat excessively drained, with soil textures consisting of silt loam, loam, and muck. Table 3 lists the soil mapping units identified within the Study Area and their slope, drainage class, hydric rating, and hydric classification. Hydric ratings and hydric soil classifications are based on information obtained from the NRCS Web Soil Survey (NRCS, 2023). Although soil series may have a hydric rating in the online databases indicating hydric or potentially hydric conditions, this is for general use and does not supersede specific conditions documented in the field.

Table 3. Study Area Soil Mapping Units

Mapping Unit Symbol	Mapping Unit	Percent of Study Area	Slope	Drainage ¹	Hydric Rating ²	Hydric Classification ³
LsC	Lansing gravelly silt loam	17.1%	8-15%	WD	0	Non-hydric
MaC	Mardin channery silt loam	11.1%	8-15%	MWD	0	Non-hydric
LsB	Lansing gravelly silt loam	10.0%	3-8%	WD	0	Non-hydric
MaB	Mardin channery silt loam	5.5%	3-8%	MWD	0	Non-hydric
HnB	Honeoye silt loam	4.6%	3-8%	WD	0	Predominantly Non-hydric
HnC	Honeoye silt loam	4.6%	8-15%	WD	0	Non-hydric
VoB	Volusia channery silt loam	4.5%	3-8%	SPD	5	Predominantly Non-hydric
LsD	Lansing gravelly silt loam	3.1%	15-25%	WD	0	Non-hydric
СоВ	Conesus silt loam	3.0%	3-8%	MWD	1	Predominantly Non-hydric
LtB	Lima silt loam	2.7%	3-8%	MWD	1	Predominantly Non-hydric
AuC	Aurora silt loam	2.6%	8-15%	MWD	0	Non-hydric
Wn	Wayland soils complex, frequently flooded	2.6%	0-3%	PD	90	Predominantly hydric
CfB	Cazenovia silt loam	2.2%	3-8%	WD	0	Non-hydric
VoC	Volusia channery silt loam	2.2%	8-15%	SPD	4	Predominantly Non-hydric
АоВ	Appleton loam	2.1%	3-8%	SPD	4	Predominantly Non-hydric
MaD	Mardin channery silt loam	2.1%	15-25%	MWD	0	Non-hydric
HnD	Honeoye silt loam	1.9%	15-25%	WD	0	Non-hydric
Ly	Lyons soils	1.7%	0-3%	PD	95	Predominantly hydric
PgB	Palmyra gravelly loam, undulating	1.5%	3-8%	WD	0	Non-hydric
Te	Teel silt loam	1.5%	0-3%	MWD	5	Predominantly Non-hydric
Ce	Carlisle muck	1.2%	0-1%	VPD	100	Hydric
HnE	Honeoye silt loam	1.2%	25-50%	WD	0	Non-hydric
LwD	Lordstown channery silt loam	1.2%	15-25%	WD	0	Non-hydric

Table 3. Study Area Soil Mapping Units

Mapping Unit Symbol	Mapping Unit	Percent of Study Area	Slope	Drainage ¹	Hydric Rating ²	Hydric Classification ³
Ch	Chippewa silt loam	1.0%	0-3%	PD	95	Predominantly hydric
AuB	Aurora silt loam	0.9%	3-8%	MWD	0	Non-hydric
LwC	Lordstown channery silt loam	0.9%	8-15%	WD	0	Non-hydric
Pb	Palms muck	0.9%	0-1%	VPD	100	Hydric
AuD	Aurora silt loam	0.7%	15-25%	MWD	0	Non-hydric
CoC	Conesus silt loam	0.6%	8-15%	MWD	0	Non-hydric
CfC	Cazenovia silt loam	0.5%	8-15%	WD	0	Non-hydric
AL	Alluvial land	0.4%	0-3%	PD	51	Partially hydric
An	Angola silt loam	0.4%	0-3%	SPD	5	Predominantly Non-hydric
Hb	Hamlin silt loam	0.4%	0-3%	WD	0	Non-hydric
LwB	Lordstown channery silt loam	0.4%	3-8%	WD	0	Non-hydric
LXE	Lordstown-Arnot complex, steep, rocky	0.4%	10-40%	WD	0	Non-hydric
VoA	Volusia channery silt loam	0.3%	0-3%	SPD	5	Predominantly Non-hydric
AoA	Appleton loam	0.2%	0-3%	SPD	4	Predominantly Non-hydric
Fo	Fonda mucky silt loam	0.2%	0-1%	VPD	95	Predominantly hydric
LtC	Lima silt loam	0.2%	8-15%	MWD	1	Predominantly Non-hydric
PgC	Palmyra gravelly loam, rolling	0.2%	8-15%	WD	0	Non-hydric
РрА	Phelps gravelly silt loam	0.2%	0-3%	MWD	0	Non-hydric
SgC	Stockbridge channery silt loam	0.2%	8-15%	WD	0	Non-hydric
CkA	Collamer silt loam	0.1%	0-3%	MWD	5	Predominantly Non-hydric
На	Halsey silt loam	0.1%	0-8%	VPD	90	Predominantly hydric

Table 3. Study Area Soil Mapping Units

Mapping Unit Symbol	Mapping Unit	Mapping Unit Percent of Study Slope Drainage ¹ Area		Hydric Rating ²	Hydric Classification ³	
OvB	Ovid silt loam	0.1%	3-8%	SPD	5	Predominantly Non-hydric
PgA	Palmyra gravelly loam	0.1%	0-3%	WD	0	Non-hydric
W	Water	0.1%				
Ad	Alden mucky silt loam	<0.1%	0-2%	VPD	100	Hydric
AsB	Arnot channery silt loam	<0.1%	3-8%	SED	0	Non-hydric
CgB	Chenango cannery silt Ioam	<0.1%	3-8%	WD	0	Non-hydric
Fr	Fredon silt loam	<0.1%	0-3%	SPD	40	Partially hydric
Od	Odessa silt loam	<0.1%	0-3%	SPD	5	Predominantly Non-hydric
SdC	Schoharie silty clay loam	<0.1%	8-15%	MWD	0	Non-hydric
SgD	Stockbridge channery silt loam	<0.1%	15-25%	WD	0	Non-hydric

¹ SED = somewhat excessively drained, WD = well drained, MWD = moderately well drained, SPD = somewhat poorly drained, PD = poorly drained, and VPD = very poorly drained.

3.2 HYDROLOGY

The Study Area is located within the Chenango and Oneida Hydrologic Units (02050102 and 04140202, respectively). Most of the surface water within the Study Area is generated by direct precipitation, run-off from adjacent land, and flow from several streams withing the Study Area. The average annual precipitation from 2003 to 2023 was 45.15 inches measured nearby at the Sherburne weather station in Chenango County, NY (NOAA, 2023).

The Study Area does not include any TNWs (USACE, 2012). The Chenango River is the closest TNW, located approximately 2 miles southeast of the Study Area and has a drainage area of approximately 1,610 square miles (USGS, 2023). It flows approximately 90 miles from the confluence of Eaton and Callahan Brooks in Madison County to the Susquehanna River in Binghamton, NY.

The Study Area contains one waterway, Callahan Brook, that could qualify as a state-navigable water. It has a drainage area of 12.5 square miles and flows approximately 8 miles through the Study Area and southeast to its confluence with Eaton Brook, where they form the Chenango River (USGS, 2023).

² Map units are composed of one or more component soil types, each of which is individually rated as hydric or not hydric. The hydric rating, as provided in the USDA Web Soil Survey, indicates the percentage of the map unit that meets hydric criteria.

³ Hydric classification categories are based on the total percentage of hydric soils in the map unit. as listed on the USDA Web Soil Survey. Hydric = 100% of map unit components rated as hydric. Predominantly hydric = 66%–99% of map unit components rated as hydric. Predominantly non-hydric = up to 33% of map unit components rated as hydric. Non-hydric = 0% of map unit components rated as hydric.

3.2.1 Federal and State Mapped Wetlands and Streams

Review of NWI mapping indicates a total of 75 federally mapped wetlands, ponds, and riverine habitats located within the Study Area (Figure 4). Freshwater forested/shrub wetland habitats are the most prevalent water resources within the Study Area (60.9 acres), while others include riverine habitats (6.0 acres), freshwater emergent wetlands (3.7 acres), and freshwater ponds (1.6 acres).

Review of NYS Freshwater Wetlands maps indicates that there are two wetlands intersecting the Study Area, MO-6 (Class 1) and CA-11 (Class 2), that are regulated under Article 24 of the ECL (Figure 4). Based on available NYSDEC stream classification mapping, the Study Area includes five Class C(t) and four Class C stream reaches (Figure 4). State-protected streams and tributaries within the Study Area include Chittenango Creek, Callahan Brook, and tributaries to Oneida Creek.

3.2.2 Mapped Floodplains

According to Federal Emergency Management Agency (FEMA) map services, there is one FEMA flood hazard zone mapped in the vicinity of the Study Area, along Callahan Brook and Morrisville Swamp (Figure 5). This area is designated as Zone A, which identifies the areas subject to inundation by the 1-percent-annual-chance flood (i.e., the 100-year floodplain) (FEMA, 2023).

3.3 MAPPED VEGETATION

Mapped land cover and vegetation occurring within the Study Area were evaluated using current National Land Cover Database mapping (Dewitz, 2023). The Study Area encompasses approximately 1,894.3 acres and primarily consists of deciduous forest, hay/pasture, and cultivated crops (Table 4 and Figure 6).

Table 4. Vegetation/Land Cover Within the Study Area

Land Cover Class	Acres	Percent of the Study Area
Deciduous Forest	616.7	32.5
Hay/Pasture	538.0	28.4
Cultivated Crops	432.0	22.8
Woody Wetlands	74.8	3.9
Evergreen Forest	70.2	3.7
Developed, Open Space	64.7	3.4
Mixed Forest	38.0	2.0
Shrub/Scrub	33.7	1.8
Herbaceous	11.6	0.6
Developed, Low Intensity	8.2	0.4
Developed, Medium Intensity	4.2	0.2
Emergent Herbaceous Wetlands	3.8	0.2
Open Water	1.1	0.1
Developed, High Intensity	0.2	<0.1

otal	1,897.2	100%
------	---------	------

Source: Dewitz, 2023.

4.0 ON-SITE WETLAND AND STREAM DELINEATION

EDR conducted most of the field delineations of wetlands and streams in the Study Area between May and November 2023. Precipitation for the months of May, June, July, September, October, and November in 2023 (2.82, 4.23, 4.74, 3.28, 3.73, 2.14 inches, respectively) was generally around or below the long-term average for those months 2003-2023 (3.61, 4.78, 4.97, 3.65, 4.87, and 3.13 inches, respectively). Precipitation for August 2023 (7.33 inches) was well above average compared to the long-term average for August 2003-2023 (4.57 inches) measured nearby in Sherburne, NY (NOAA, 2023).

4.1 METHODOLOGY

The identification of wetland boundaries was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987). Determination of wetland boundaries was also guided by the methodologies presented in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (USACE, 2012) and the *New York State Freshwater Wetland Delineation Manual* (NYSDEC, 1995). Attention was given to wetland size (including portions that extend outside the Study Area), evidence of disturbance, and the identification of potential hydrologic connections between wetlands, as these factors could influence jurisdictional status. Wetland boundaries were defined in the field with sequentially numbered pink surveyor's flagging and mapped using a GPS unit with reported sub-meter accuracy.

Delineated features were characterized according to the wetlands and deepwater habitats classification system used in NWI mapping (Cowardin et al., 1979). Data were collected from sample plots in representative wetland cover types and recorded on USACE Routine Wetland Determination forms (Appendix B). The data collected at each delineated wetland included dominant vegetation, hydrology indicators, and soil characteristics. Data to confirm upland areas was also collected and recorded on USACE Routine Wetland Determination forms (Appendix B).

Wetland hydrology was evaluated based on the presence of primary and secondary indicators. The Regional Supplement lists the following primary indicators of wetland hydrology: (A1) surface water, (A2) high water table, (A3) saturation, (B1) water marks, (B2) sediment deposits, (B3) drift deposits, (B4) algal mat or crust, (B5) iron deposits, (B7) inundation visible on aerial imagery, (B8) sparsely vegetated concave surface, (B9) water-stained leaves, (B13) aquatic fauna, (B15) marl deposits, (C1) hydrogen sulfide odor, (C3) oxidized rhizospheres on living roots, (C4) presence of reduced iron, (C6) recent iron reduction in tilled soils, and (C7) thick muck surface. Per the Regional Supplement, the presence of any one of these primary indicators is sufficient evidence that wetland hydrology is present. In addition, the Regional Supplement identifies the following secondary indicators, which were also used by EDR to determine wetland hydrology: (B6) surface soil cracks, (B10) drainage patterns, (B16) moss trim lines, (C2) dry-season water table, (C8) crayfish burrows, (C9) saturation visible on aerial imagery, (D1) stunted or stressed plants, (D2) geomorphic position, (D3) shallow aquitard, (D4) microtopographic relief, and (D5) results of the FAC-neutral test. In accordance with the Regional Supplement, in the absence of a primary indicator, the presence of any two secondary indicators is considered a suitable indication of wetland hydrology.

Wetland vegetation is indicated by a dominance of hydrophytic plant species, or species that have adapted to grow in areas of inundation and soil saturation. Assessment of vegetation focused on the identification of dominant plant species in four categories: trees (greater than 3 inches diameter at breast height), saplings/shrubs (less than 3 inches diameter at breast height and greater than 3.2 feet tall), herbs (all vegetation less than 3.2 feet tall), and woody vines. Dominance was determined by visually estimating those species having the greatest absolute percent cover within each stratum. Vascular plant nomenclature and wetland indicator status for dominant plant species were determined by the Wildnote field data collection application, which utilizes the USDA PLANTS Database (USDA NRCS, 2021) and the National Wetland Plant List, an interagency effort compiled by the USACE (2020). The indicator status represents a plant's likelihood of occurring in wetlands. The five indicator statuses and their probability of being observed in a wetland are as follows:

- Obligate (OBL) Plants almost always occur within wetlands (>99% of the time)
- Facultative Wetland (FACW) Plants usually occur within wetlands (67 to 99% of the time)
- Facultative (FAC) Plants occur equally in wetlands and uplands (in wetlands 33 to 67% of the time)
- Facultative Upland (FACU) Plants usually occur within uplands (in wetlands 1 to 33% of the time)
- Upland (UPL) Plants almost always occur within uplands (in wetlands <1% of the time).

Those plant species that are not assigned an indicator status in the National Wetland Plant List are assumed to always be found in uplands and assigned an indicator status of UPL. Wetlands are indicated by a dominance and/or prevalence of hydrophytic plant species (i.e., those assigned an indicator status of OBL, FACW, or FAC).

Hydric soils are those that are poorly drained and are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil layer. The presence of hydric soils is indicative of the possible presence of wetlands (Environmental Laboratory, 1987). Hydric soil conditions were determined in the field through observation of soils composition, color, and morphology. Soils data were collected by using a Dutch auger and tiling spade to examine the soil profile. Soil colors were determined using Munsell Soil Charts (Munsell Color, 2009). Information concerning soil series, color, texture, and matrix and concentration color was recorded for each delineated wetland and used to determine whether the soils displayed hydric characteristics.

Streams were identified according to the Cowardin et al. (1979) classification system, and stream boundaries were determined based on the presence of ordinary high water mark characteristics, including 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" (33 CFR 329.11). Stream boundaries were defined and mapped in the field using the same method as described above for wetlands. The OHWM was determined through evaluation of hydrologic, geomorphic, and biological characteristics in accordance with the USACE *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Interim Version* (David et al., 2022). Data regarding stream morphology, stream bank and channel width, water depth, stream bed substrate, in-stream cover, and biological indicators were collected and recorded on OHWM data forms (Appendix B).

Photographs were taken of each wetland and stream delineated within the Study Area. Representative photographs of each wetland and stream community delineated are included in Appendix C.

4.2 RESULTS

EDR identified and delineated 157 wetlands and 100 streams within the Study Area (Figure 7)². The data collected at each delineated wetland and stream are summarized in Table 5 and Table 6, respectively. In accordance with the Cowardin et al. (1979) classification system, the features delineated within the Study Area consist of the following community types: palustrine emergent wetland (PEM), palustrine scrub-shrub wetland (PSS), palustrine forested wetland (PFO), palustrine open water wetland (POW), perennial stream (R3), intermittent stream (R4), and ephemeral stream (R6).

One stream was identified within the Study Area that may qualify as a state-navigable water. Therefore, the requirements of §15-0505 of the ECL may apply to this stream within the proposed Facility.

Descriptions of the delineated wetlands within the Study Area are provided in Section 4.2.1, while Section 4.2.2 provides descriptions of the delineated streams within the Study Area, and Section 4.2.3 discusses upland verification points.

Wetland and Stream Delineation Report – Revision 1 Hoffman Falls Wind Project

² The April 12, 2024 Surface Waters Jurisdictional Determination Letter identified additional Surface Waters: ID 23-W001 & ID 66-ST002; however, these features are located outside the Wetland Study Area, and Facility Site, and are therefore not discussed in this Report.

Table 5. Delineated Wetlands

Wetland Delineation ID ¹			ge Within Type ²		area by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	Victiana							
01-W002			0.06		0.06	05- ST002A		42.92317	-75.65439	No	Adjacent wetland	No	86
01-W004	0.01				0.01			42.90794	-75.64829	No	Isolated	No	84
01-W005	0.5			0.16	0.66	33- ST006, 01- ST007, 26- ST001	Unmapped	42.91378441	- 75.64057449	Yes	Adjacent wetland	Yes	96
01-W006	0.26				0.26			42.92107	-75.63326	No	Isolated	No	93
01-W008	0.23				0.23	01- ST012		42.92577	-75.63468	Yes	Adjacent wetland	No	94
05-W001		1.93	0.47		2.4		CA-11 Class 2	42.9659	-75.7523	Yes	Adjacent wetland	Yes	20
05-W002	0.17				0.17			42.96409	-75.74665	Yes	Adjacent wetland	No	19
05-W003			0.15		0.15			42.91288	-75.68598	No	Isolated	No	68
05-W005		0.96	0.48		1.44			42.91055	-75.68692	Yes	Adjacent wetland	No	69
05-W006			0.02		0.02			42.91102	-75.68647	No	Isolated	No	69
10-W001	15.93		18.23		34.02	23- ST001, 23- ST002, 23- ST003,	MO-6 Class 1	42.91524	-75.65981	Yes	Adjacent wetland	Yes	74, 75, 76, 77, 78

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetla	nd Acrea	ge Withir Type ²	n Study A	Present Wetland ³ ID/CI		NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	rectand							
						23- ST004							
10-W002			0.6		0.6			42.95983	-75.74602	Yes	Adjacent wetland	No	18
10-W003	0.1				0.1			42.9631	-75.74767	No	Isolated	No	19
10-W004	1.9	0.34			2.25	10- ST002		42.91675	-75.66857	Yes	Adjacent wetland	No	72
10-W005	0.04				0.04			42.9162	-75.66923	No	Isolated	No	72
10-W006			0.05		0.05	10- ST003, 10- ST004, 10- ST005		42.92083	-75.67585	Yes	Adjacent wetland	No	64
10-W007	0.18				0.18	10- ST008, 10- ST006	Unmapped	42.91697	-75.68192	Yes	Adjacent wetland	Yes	65, 67
10-W008	0.93	4.28	0.33		5.53	05- ST001, 10- ST006, 10- ST007	Unmapped	42.91617	-75.67788	Yes	Adjacent wetland	Yes	65, 66, 67
10-W009	0.32	0.15			0.47	05- ST001	Unmapped	42.91764	-75.68047	Yes	Adjacent wetland	Yes	65

Table 5. Delineated Wetlands

Wetland Delineation ID ¹		nd Acrea	Type ²	_	-	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total								
10-W010			0.09		0.09			42.91597	-75.67825	No	Isolated	No	65, 66
10-W011	0.06				0.06	10- ST006	Unmapped	42.91656	-75.6812	Yes	Adjacent wetland	Yes	65, 67
10-W012			0.07		0.07	10- ST008	Unmapped	42.91634	-75.68176	Yes	Adjacent wetland	Yes	65, 67
10-W013	0.58		1.19		1.77			42.91328	-75.68437	Yes	Adjacent wetland	No	68
10-W014			0.09		0.09	12- ST004		42.90962	-75.68637	Yes	Adjacent wetland	No	69
10-W015	0.8	0.75	0.51	0.05	2.1	10- ST009, 12- ST004, 12- ST006, 12- ST007		42.90941	-75.68401	Yes	Adjacent wetland	No	69, 71
12-W001		0.7			0.7	12- ST023		42.94368	-75.76061	Yes	Adjacent wetland	Yes	11
12-W002	0.07		0.75		0.82	01- ST007	Unmapped	42.91685	-75.63926	Yes	Adjacent wetland	Yes	95
12-W003	0.36		0.73		1.09	10- ST005, 12- ST002, 12- ST003A,		42.91995	-75.67654	Yes	Adjacent wetland	No	64

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea	ge Withir Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	wettand							
						12- ST003							
12-W004			0.19		0.19	10- ST005		42.92037	-75.67597	Yes	Adjacent wetland	No	64
12-W005	0.34				0.34			42.90861	-75.68344	No	Isolated	No	71
12-W006	0.14		0.44		0.58			42.91344	-75.69858	Yes	Adjacent wetland	No	54, 55
12-W007		0.79			0.79			42.91444	-75.69885	No	Isolated	No	54
12-W008	0.6				0.6			42.91538	-75.69886	No	Isolated	No	54
12-W009			0.78		0.78			42.9171	-75.70002	No	Isolated	No	53
12-W011	1.64	0.24			1.88	12- ST008	Unmapped	42.90841	-75.66426	Yes	Adjacent wetland	Yes	79, 80
12-W012			0.18		0.18			42.95547	-75.73522	No	Isolated	No	23
12-W013	0.52		0.6		1.15	12- ST012	Unmapped	42.95499	-75.73702	Yes	Adjacent wetland	Yes	23
12-W014	0.07				0.07	12- ST014		42.93392	-75.72886	No	Isolated	No	35
12-W015	0.36				0.36			42.91425	-75.66608	Yes	Adjacent wetland	No	73
12-W016	0.43				0.43			42.91433	-75.66854	No	Isolated	No	73

Table 5. Delineated Wetlands

Wetland Delineation ID ¹			ge Withir Type ²			Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total								
12-W017	0.51	0.34			0.85			42.92075	-75.68365	Yes	Adjacent wetland	No	60
12-W018	0.3	0.62			0.92			42.92207	-75.68068	Yes	Adjacent wetland	No	59, 60
12-W019			0.01		0.01			42.92007	-75.6775	Yes	Adjacent wetland	No	64
12-W020	0.03				0.03			42.92045	-75.67759	No	Isolated	No	64
12-W021	0.26				0.26			42.92127	-75.68074	No	Isolated	No	60
12-W022				0.02	0.02			42.93372	-75.75754	No	Isolated	No	9
12-W023	0.19				0.19			42.93424	-75.75749	No	Isolated	No	9
12-W024				0.06	0.06			42.93468	-75.75799	No	Isolated	No	9
12-W025	0.02				0.02			42.93905	-75.69377	No	Isolated	No	43
12-W026	0.26			0.22	0.48	93- ST009		42.93884	-75.69463	No	Isolated	No	43
12-W027	1.72				1.72		Unmapped	42.94327	-75.76487	Yes	Adjacent wetland	Yes	5
12-W028			0.03		0.03			42.93468	-75.76438	No	Isolated	No	8
12-W029			0.16		0.16			42.9347	-75.76348	No	Isolated	No	8
12-W030	0.55				0.55	12- ST016A		42.93686	-75.76423	No	Isolated	No	7
12-W031	0.29				0.29			42.93508	-75.76316	No	Isolated	No	8
12-W031A	0.07				0.07	12- ST018		42.9364	-75.73162	Yes	Adjacent wetland	No	34, 35

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea	ge Within Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	Wettaria							
12-W032	0.03				0.03			42.94898	-75.77371	No	Isolated	No	1
12-W033		0.22			0.22			42.90914	-75.68656	Yes	Adjacent wetland	No	69, 70
12-W034	0.02				0.02			42.90872	-75.68689	Yes	Adjacent wetland	No	70
12-W035	0.2			0.06	0.26			42.90805	-75.68699	Yes	Adjacent wetland	No	70
12-W036	0.3				0.3			42.91448	-75.69926	Yes	Adjacent wetland	No	54
12-W037	0.09	0.22			0.31			42.91318	-75.69905	Yes	Adjacent wetland	No	54, 55
12-W038	0.25				0.25			42.92815	-75.7024	No	Isolated	No	49, 50
12-W039	0.13	0.7			0.83			42.92691	-75.70281	Yes	Adjacent wetland	No	50
12-W040	0.26	1.38	1.36		3	12- ST009, 12- ST011, 12- ST020	Unmapped	42.90367	-75.66313	Yes	Adjacent wetland	Yes	81, 82, 83
12-W041	0.03				0.03		-1	42.94314217	- 75.71231606	Yes	Adjacent wetland	No	98
12-W042			0.63		0.63			42.95708436	- 75.76603628	No	Isolated	No	97

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlan	nd Acreag	ge Withir Type ² PFO	Study A	Total	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	I LIVI	1 33	110	1000	Total								
12-W043		0.17			0.17			42.95807	-75.76696	Yes	Adjacent wetland	No	97
12-W045	0.09				0.09			42.91289	-75.66528	Yes	Adjacent wetland	No	73
18-W001	0.07				0.07			42.935424	-75.727798	No	Isolated	No ⁸	35
23-W002		0.53			0.53	93- ST001, 93- ST002	Unmapped	42.94519	-75.75432	Yes	Adjacent wetland	Yes	12
23-W003			0.03		0.03	05- ST002		42.93002	-75.70207	Yes	Adjacent wetland	No	49
23-W004			0.23		0.23	05- ST002		42.93079	-75.70225	Yes	Adjacent wetland	No	49
23-W005			0.27		0.27			42.93361	-75.70083	No	Isolated	No	46
23-W006			0.23		0.23			42.93345	-75.69987	No	Isolated	No	46
23-W007	0.38		1.22		1.6			42.93245	-75.70094	Yes	Adjacent wetland	No	47
23-W008			0.08		0.08			42.92944	-75.70133	No	Isolated	No	49
23-W009	0.23				0.23			42.93267	-75.69825	No	Isolated	No	47
23-W010		0.96			0.96			42.92886	-75.69503	Yes	Adjacent wetland	No	56
23-W011		1.11			1.11	23- ST001A		42.92579	-75.69271	Yes	Adjacent wetland	No	57

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea	ge Withir Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	vvetianu							
23-W012	0.18	1.03			1.21			42.92463	-75.69065	No	Isolated	No	57
23-W013			0.12		0.12			42.95535	-75.73419	No	Isolated	No	23
23-W016	0.01				0.01			42.95007	-75.74905	No	Isolated	No	25
26-W001		1.4			1.4			42.95551	-75.74608	No	Isolated	No	16
26-W002	0.05	1.4			1.45		Unmapped	42.94821	-75.75395	Yes	Adjacent wetland	Yes	13
26-W003				0.08	0.08			42.95281	-75.75154	No	Isolated	No	14
26-W004				0.79	0.79			42.95237	-75.74534	Yes	Adjacent wetland	No	15
26-W005		0.04			0.04			42.95213	-75.74584	Yes	Adjacent wetland	No	15
26-W006	0.19				0.19			42.95284	-75.74464	Yes	Adjacent wetland	No	15
26-W007			0.8		0.8	26- ST002		42.94904	-75.74619	Yes	Adjacent wetland	No	25, 27
26-W008	0.24				0.24			42.95887	-75.73207	No	Isolated	No	22
26-W010				0.11	0.11			42.93905	-75.69284	No	Isolated	No	43
26-W011				0.29	0.29			42.93933	-75.69291	Yes	Adjacent wetland	No	43
26-W012	0.57				0.57			42.94007	-75.69296	Yes	Adjacent wetland	No	43
26-W013	0.03				0.03			42.93836	-75.688	No	Isolated	No	44

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlan	nd Acreag	ge Withir Type ²	n Study A	area by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	vvetiand							
26-W014	0.06				0.06	26- ST005, 26- ST007		42.93846	-75.68368	Yes	Adjacent wetland	No	45
26-W015	0.06				0.06	26- ST006		42.93789	-75.68348	Yes	Adjacent wetland	No	45
26-W016			0.36		0.36			42.93718	-75.68444	Yes	Adjacent wetland	No	45
26-W017			1.42		1.42			42.93725	-75.68574	Yes	Adjacent wetland	No	44, 45
26-W018	0.03				0.03	26- ST009	Unmapped	42.94402	-75.73141	Yes	Adjacent wetland	Yes	31
26-W019	0.62		3.81		4.43	26- ST010, 26- ST011	Unmapped	42.95024	-75.73589	Yes	Adjacent wetland	Yes	28, 29
26-W020		1.03			1.03			42.94836	-75.72998	Yes	Adjacent wetland	No	30
26-W021	0.1				0.1			42.94893	-75.73617	No	Isolated	No	29
26-W026		4.33	1.41		5.74	26- ST003, 26- ST004	MO-5 Class 2	42.92411	-75.70124	Yes	Adjacent wetland	Yes	51, 52
33-W001	0.64		0.53	1.13	2.3	33- ST001		42.92305	-75.65081	Yes	Adjacent wetland	No	87

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea	ge Withir Type²	n Study A	area by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	Wettand							
33-W002	0.26	0.22			0.47			42.91755	-75.64523	Yes	Adjacent wetland	No	89
33-W003		0.13			0.13	33- ST002		42.94238	-75.75854	Yes	Adjacent wetland	Yes	11
33-W004			0.73		0.73	33- ST004, 33- ST005	Unmapped	42.91977	-75.63959	Yes	Adjacent wetland	Yes	91
33-W005	1.53	0.07			1.6	12- ST001, 33- ST002	Unmapped	42.94278	-75.76046	Yes	Adjacent wetland	Yes	11
33-W006		0.08			0.08	33- ST002	Unmapped	42.94249	-75.75982	Yes	Adjacent wetland	Yes	11
33-W007	0.02				0.02			42.92523	-75.67136	No	Isolated	No	63
33-W008	0.03				0.03			42.92503	-75.67216	No	Isolated	No	63
33-W009	0.03				0.03			42.92546	-75.67302	Yes	Adjacent wetland	No	62, 63
33-W010		2.87	6.67		9.54		Unmapped	42.92355	-75.67549	Yes	Adjacent wetland	Yes	61, 62
33-W011	0.2	1.43		0.1	1.73	33- ST007		42.92274	-75.68088	Yes	Adjacent wetland	No	59
33-W012	0.01				0.01			42.939	-75.71202	No	Isolated	No	41
33-W013		0			0	33- ST008		42.93872	-75.71105	Yes	Adjacent wetland	No	41

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea <u>c</u>	ge Withir Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	vvetianu							
33-W014	0.13				0.13			42.93886	-75.71058	No	Isolated	No	41
33-W015		0.55			0.55	33- ST011		42.93908	-75.70989	Yes	Adjacent wetland	No	41
33-W016	0.04				0.04			42.9406	-75.71478	No	Isolated	No	40
33-W017	0.48				0.48	33- ST015, 33- ST016		42.93955	-75.71546	Yes	Adjacent wetland	No	40
33-W018	0.05				0.05			42.93915	-75.71483	No	Isolated	No	40
33-W019	0.02				0.02			42.9389	-75.71439	No	Isolated	No	40, 41
33-W020	0.05				0.05			42.93899	-75.71604	No	Isolated	No	39, 40
33-W021	0.1				0.1	33- ST016		42.94036	-75.7174	Yes	Adjacent wetland	No	40
33-W022	0.06				0.06			42.93894	-75.71719	No	Isolated	No	39, 40
33-W023	0.28				0.28			42.93845	-75.7185	Yes	Adjacent wetland	No	39
33-W024			0		0			42.95075	-75.7712	Yes	Adjacent wetland	No	1
33-W025	0.05				0.05			42.94909	-75.76877	No	Isolated	No	2,3
33-W026			1.48		1.48			42.94878	-75.77021	Yes	Adjacent wetland	No	1, 2
33-W027	0.05				0.05			42.9626	-75.73452	No	Isolated	No	21

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlan	nd Acrea	ge Withir Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	wettand							
33-W028	0.04				0.04	33- ST017		42.94045	-75.7617	Yes	Adjacent wetland	Yes	10
33-W029	0.47		0.07		0.54	05- ST006		42.93959	-75.76089	No	Isolated	No	10
66-W001			0.54		0.57			42.95809	-75.74639	Yes	Adjacent wetland	No	17
66-W002		1.06			1.06			42.95558	-75.74505	Yes	Adjacent wetland	No	16, 17
66-W003		0.72			0.72		Unmapped	42.95432	-75.74095	Yes	Adjacent wetland	Yes	24
66-W004	0.16	1.3		0.37	1.83	26- ST002, 66- ST002, 66- ST003, 66- ST004	Unmapped	42.94981	-75.74303	Yes	Adjacent wetland	Yes	26, 27
66-W007		.08			0.08			42.95588	-75.74478	Yes	Adjacent wetland	No	25, 26
66-W008	0.16				0.16			42.95421	-75.74082	Yes	Adjacent wetland	No	46
66-W009		0.03			0.03			42.93928	-75.70722	No	Isolated	No	42
66-W010		0.03			0.03	66- ST005		42.94263	-75.73306	Yes	Adjacent wetland	No	32

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetla	nd Acreag	ge Withir Type ²	n Study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	vvetianu							
66-W011	5.42	18.51	0.01		23.94	66- ST006	Unmapped	42.93779	-75.72899	Yes	Adjacent wetland	Yes	32, 33, 34, 36, 37
66-W012	0.01				0.01	66- ST005		42.94279	-75.73268	Yes	Adjacent wetland	No	32
66-W013	0.9				0.9			42.94156	-75.73281	No	Isolated	No	32
66-W014		0.85			0.85	33- ST016		42.94046	-75.72327	Yes	Adjacent wetland	No	38
66-W015	0.02	0.21			0.22			42.94385	-75.77007	Yes	Adjacent wetland	No	4
66-W016	1.4			0.22	1.62	12- ST015	Unmapped	42.94005	-75.76555	Yes	Adjacent wetland	Yes	6
66-W017	0.17				0.17			42.94003	-75.76798	No	Isolated	No	6
66-W018	0.56				0.56	93- ST007		42.93296	-75.70284	Yes	Adjacent wetland	No	48
66-W019		0.01			0.01		CA-11 Class 2	42.9655	-75.75348	Yes	Adjacent wetland	Yes	20
66-W020		0.04			0.04		CA-11 Class 2	42.96501	- 75.75389081	Yes	Adjacent wetland	Yes	20
93-W001	0.83	3.59			4.42	93- ST001, 93- ST002	Unmapped	42.94645	-75.75329	Yes	Adjacent wetland	Yes	12, 13
93-W002			0.12		0.12			42.92059	-75.63747	Yes	Adjacent wetland	Yes	92

Table 5. Delineated Wetlands

Wetland Delineation ID ¹	Wetlar	nd Acrea	ge Withir Type ²	study A	rea by	Stream Present in Wetland ³	NYS Wetland ID/Class ⁴	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁵	Rationale for Federal Jurisdiction ⁶	State Jurisdiction ⁷	Figure 7 Sheet Number
	PEM	PSS	PFO	POW	Total	wetiana							
93-W003	0.41	0.28	0.01		0.7	93- ST005		42.92264	-75.6871	Yes	Adjacent wetland	No	58
93-W004	2.68			0.09	2.76	93- ST006, 93- ST008, 93- ST007		42.93346	-75.70468	Yes	Adjacent wetland	No	48
93-W005	0.03				0.03			42.9406	-75.73391	No	Isolated	No	33
93-W006	0.02				0.02			42.93943	-75.73176	No	Isolated	No	33

¹ Field ID assigned by EDR.

² Wetland community types are based upon the Cowardin et al. (1979) classification system: palustrine emergent wetland (PEM), palustrine forested wetland (PFO), palustrine scrubshrub wetland (PSS), palustrine open water wetland (POW).

³ Field ID for stream features assigned by EDR.

⁴ If applicable.

⁵ Based on visual observation of hydrologic connectivity in the field and review of available spatial data. Final jurisdictional determination to be made by the USACE.

⁶ Based on the September 8, 2023, Revised Definition of "Waters of the United States"; Conforming. See Table 1 and Table 2 for more additional information.

⁷ Based ORES's April 12, 2024 Wetland Jurisdictional Determination (JD).

⁸ Anticipated jurisdiction; this wetland was delineated after ORES's April 12, 2024 Jurisdictional Determination was issued.

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
01-ST003	171.30	R4				1	42.92066	-75.6542	Yes	Tributary to TNW	No	85
01-ST004	65.61	R6				1	42.92162	-75.6455	No	Does not meet relative permanence test	No	88
01-ST007	311.48	R4				1	42.91499	-75.6402	Yes	Tributary to TNW	No	96
01-ST009	481.51	R4		С		2	42.91863	-75.6347	Yes	Tributary to TNW	No	92
01-ST010	52.18	R4				1	42.91822	-75.635	Yes	Tributary to TNW	No	92
01-ST011	187.41	R6				1	42.91835	-75.6354	No	Does not meet relative permanence test	No	92
01-ST012	447.21	R3	UNT to Blue Creek	С	Ont. 66-11- P 26-25-6	2	42.92587	-75.6344	Yes	Tributary to TNW	No	94
05-D001	391.65	R6				1	42.96558	-75.7512	No	Does not meet relative permanence test	No	20
05-ST001	523.56	R4		C(T)		1	42.91762	-75.6805	Yes	Tributary to TNW	No	65, 67
05-ST002	498.68	R4				1	42.92982	-75.7022	Yes	Tributary to TNW	No	49
05-ST002A	165.60	R6				1	42.92315	-75.6547	No	Does not meet relative permanence test	No	86
05-ST006	220.16	R6				1	42.94011	-75.7607	No	Does not meet relative permanence test	No	10

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
10-ST001	251.77	R6				1	42.96312	-75.7461	No	Does not meet relative permanence test	No	19
10-ST002	165.39	R4				1	42.91687	-75.6695	Yes	Tributary to TNW	No	72
10-ST003	25.32	R4				1	42.9208	-75.6757	Yes	Tributary to TNW	No	64
10-ST004	50.51	R4				1	42.92086	-75.6758	Yes	Tributary to TNW	No	64
10-ST005	373.69	R4				2	42.92038	-75.6759	Yes	Tributary to TNW	No	64
10-ST006	2517.79	R3	Callahan Brook	C(T)	SR-44-87	3	42.91637	-75.6788	Yes	Tributary to TNW	Yes	65, 67, 66
10-ST007	206.40	R4				1	42.91665	-75.6765	Yes	Tributary to TNW	No	66
10-ST008	349.06	R4				1	42.91639	-75.6818	Yes	Tributary to TNW	No	65, 67
10-ST009	130.69	R4				1	42.90917	-75.6845	Yes	Tributary to TNW	No	69, 71, 70
12-ST001	145.33	R3	Chittena ngo Creek	C(T)	ONT-66- 11-P26-37	2	42.94317	-75.7607	Yes	Tributary to TNW	Yes	11
12-ST002	276.07	R4				2	42.91986	-75.6769	Yes	Tributary to TNW	No	64
12-ST003	281.27	R4				1	42.92059	-75.6767	Yes	Tributary to TNW	No	64
12-ST003A	36.84	R4				1	42.91995	-75.677	Yes	Tributary to TNW	No	64
12-ST004	779.9	R4				1	42.90955	-75.6855	Yes	Tributary to TNW	No	69, 71
12-ST005	72.26	R4		С		1	42.90953	-75.6839	Yes	Tributary to TNW	No	71
12-ST006	112.11	R4		С		1	42.90959	-75.6841	Yes	Tributary to TNW	No	69, 71

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
12-ST007	416.77	R3	UNT to Callahan Brook	С	SR-44-87A- 2a	2	42.90984	-75.6833	Yes	Tributary to TNW	No	71
12-ST008	445.2	R3	Callahan Brook	C(T)	SR-44-87	3	42.90911	-75.6648	Yes	Tributary to TNW	Yes	79
12-ST009	1199.09	R4	UNT to Callahan Brook	С	SR-44-86	2	42.90149	-75.6588	Yes	Tributary to TNW	No	83
12-ST010	46.40	R4		С		1	42.90158	-75.6609	Yes	Tributary to TNW	No	82, 83
12-ST011	486.2	R4	UNT to Callahan Brook	С	SR-44-86	2	42.90187	-75.6615	Yes	Tributary to TNW	No	82, 83
12-ST012	451.74	R4				1	42.95494	-75.737	Yes	Tributary to TNW	No	23
12-ST013A	32.43	R4		С		1	42.90201	-75.6623	Yes	Tributary to TNW	No	82
12-ST014	408.74	R6				1	42.93444	-75.7284	No	Does not meet relative permanence test	No	35
12-ST015	780.58	R3	Chittena ngo Creek	C(T)	ONT-66- 11-P26-37	3	42.93978	-75.7663	Yes	Tributary to TNW	Yes	6
12-ST015A	94	R4				1	42.92382	-75.681	Yes	Tributary to TNW	No	59
12-ST016	429.13	R4	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35-4	1	42.93697	-75.7317	Yes	Tributary to TNW	Yes	34

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
12-ST016A	368.49	R6				1	42.93788	-75.7651	No	Does not meet relative permanence test	No	7
12-ST018	568.75	R4				1	42.93649	-75.7316	Yes	Tributary to TNW	No	34, 35
12-ST020	80.23	R4		С		1	42.90209	-75.6624	Yes	Tributary to TNW	No	82
12-ST021	133.34	R6				1	42.92318	-75.682	No	Does not meet relative permanence test	No	59
12-ST022	269.85	R6				1	42.94379	-75.76075	No	Does not meet relative permanence test	No	11
12-ST023	69.8	R3		C(T)		1	42.94344	-75.76119	Yes	Tributary to TNW	Yes	11
12-ST024	39	R3		C(T)		2	42.94241	-75.71308	Yes	Tributary to TNW	Yes	98
23-ST001	1528.66	R3	Chenan go River	C(T)	SR-44	2	42.91463	-75.6576	Yes	Tributary to TNW	Yes	77, 76, 78
23-ST001A	449.06	R3	UNT to Callahan Brook	С	SR-44-87A- 3b	1	42.92584	-75.6927	Yes	Tributary to TNW	No	57
23-ST002	170.78	R3	UNT to Chenan go River	C(T)		1	42.91632	-75.6589	Yes	Tributary to TNW	Yes	76
23-ST002A	76.25	R4	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35	1	42.93921	-75.7267	Yes	Tributary to TNW	Yes	37

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
23-ST003	191.92	R4	UNT to Chenan go River	C(T)		1	42.9147	-75.6584	Yes	Tributary to TNW	Yes	77
23-ST003A	87.78	R3	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35	1	42.93929	-75.7266	Yes	Tributary to TNW	Yes	37
23-ST004	2942.63	R3	UNT to Chenan go River			1	42.91577	-75.6607	Yes	Tributary to TNW	Yes	75, 77, 76, 78
23-ST004A	606.77	R3	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35	3	42.93862	-75.7261	Yes	Tributary to TNW	Yes	36, 37
23-ST005	1374.08	R3	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35-4	2	42.93828	-75.7281	Yes	Tributary to TNW	Yes	34, 36
23-ST006	666.22	R3	UNT to Oneida Creek			1	42.93757	-75.7311	Yes	Tributary to TNW	Yes	34
23-ST007	197.99	R4	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35-4	3	42.93732	-75.7303	Yes	Tributary to TNW	Yes	34
26-ST001	252.29	R4				1	42.91348	-75.6414	Yes	Tributary to TNW	No	96
26-ST002	236.23	R4				1	42.9486	-75.7459	Yes	Tributary to TNW	No	27
26-ST003	598.26	R3	Callahan Brook	C(T)	SR-44-87	3	42.92554	-75.7021	Yes	Tributary to TNW	Yes	51

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
26-ST004	225.05	R4				1	42.92432	-75.7016	Yes	Tributary to TNW	No	51
26-ST005	134.65	R6				1	42.9385	-75.6839	No	Does not meet relative permanence test	No	45
26-ST006	403.58	R4				2	42.93814	-75.6834	Yes	Tributary to TNW	No	45
26-ST007	64.72	R4				1	42.9385	-75.6835	Yes	Tributary to TNW	No	45
26-ST008	102.43	R4				2	42.93862	-75.6833	Yes	Tributary to TNW	No	45
26-ST009	768.26	R4				1	42.94489	-75.7314	Yes	Tributary to TNW	No	31
26-ST010	877.63	R4				1	42.94879	-75.734	Yes	Tributary to TNW	No	29
26-ST011	405.35	R4				1	42.95081	-75.7386	Yes	Tributary to TNW	No	28
33-ST001	249.31	R4				1	42.92385	-75.6507	Yes	Tributary to TNW	No	87
33-ST002	945.09	R3	UNT to Chittena ngo Creek	С	Ont. 66-11- P26-37-56	2	42.94232	-75.759	Yes	Tributary to TNW	No	11
33-ST003	903.00	R6				1	42.91915	-75.6414	No	Does not meet relative permanence test	No	91, 90
33-ST004	59.87	R4				1	42.91934	-75.6396	Yes	Tributary to TNW	No	91, 90
33-ST005	139.53	R4				1	42.91966	-75.6397	Yes	Tributary to TNW	No	91
33-ST006	275.57	R4				1	42.91398	-75.6405	Yes	Tributary to TNW	No	96
33-ST007	190.68	R4				1	42.923	-75.679	Yes	Tributary to TNW	No	59
33-ST008	44.05	R4				1	42.93872	-75.7117	Yes	Tributary to TNW	No	41

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
33-ST010	716.36	R3	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35	3	42.93965	-75.7119	Yes	Tributary to TNW	Yes	41
33-ST011	553.9	R4	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35-2C	1	42.94005	-75.7102	Yes	Tributary to TNW	Yes	41
33-ST013	733.16	R4	UNT to Oneida Creek	C(T)	ONT-66- 11-P26-25- 35-2B	2	42.93968	-75.7135	Yes	Tributary to TNW	Yes ⁹	41
33-ST014	277.18	R4				1	42.93857	-75.7141	Yes	Tributary to TNW	No	41
33-ST015	499.18	R4				1	42.93957	-75.7146	Yes	Tributary to TNW	No	40, 41
33-ST016	1417.93	R4				1	42.94028	-75.7193	Yes	Tributary to TNW	No	38, 40
33-ST017	101.54	R4				1	42.94055	-75.7621	Yes	Tributary to TNW	No	10
66-ST004	1191.19	R4				2	42.95073	-75.7444	Yes	Tributary to TNW	No	15, 25, 26
66-ST005	153.99	R4				1	42.94281	-75.7327	Yes	Tributary to TNW	No	32
66-ST006	470.7	R3	Oneida Creek	C(T)	Ont. 66-11- P 26-25	2	42.94268	-75.7321	Yes	Tributary to TNW	Yes	32
66-ST007	62.84	R4				1	42.94407	-75.7702	Yes	Tributary to TNW	No	44
66-ST008	364.4	R4				1	42.96564	-75.75327	Yes	Tributary to TNW	No	20
93-ST001	590.00	R3	Chittena ngo Creek	C(T)	Ont. 66-11- P 26-37-55	0	42.94519	-75.7542	Yes	Tributary to TNW	Yes	12
93-ST002	343.29	R4				1	42.94552	-75.754	Yes	Tributary to TNW	No	12

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
93-ST002A	86.94	R4				1	42.93703	-75.7304	Yes	Tributary to TNW	No	34
93-ST003	94.27	R4				1	42.93704	-75.7305	Yes	Tributary to TNW	No	34
93-ST003A	792.31	R3	UNT to Chittena ngo Creek		1	1	42.944	-75.7544	Yes	Tributary to TNW	Yes	12
93-ST004	627.85	R4				1	42.91957	-75.6355	Yes	Tributary to TNW	No	92
93-ST004A	117.9	R4	UNT to Oneida Creek	C(T)		2	42.93714	-75.7307	Yes	Tributary to TNW	Yes	34
93-ST005	733.96	R3	UNT to Callahan Brook	С	SR-44-87A- 3b	2	42.92279	-75.6867	Yes	Tributary to TNW	No	58
93-ST006	62.92	R3	UNT to Callahan Brook	С	SR-44-87A- 4	1	42.93334	-75.7052	Yes	Tributary to TNW	No	48
93-ST007	122.89	R4				1	42.93338	-75.7033	Yes	Tributary to TNW	No	48
93-ST008	140.03	R4				1	42.93386	-75.7034	Yes	Tributary to TNW	No	48
93-ST009	93.22	R6				1	42.9391	-75.6941	No	Does not meet relative permanence test	No	43

Table 6. Delineated Streams

Stream Delineation ID ¹	Linear Feet of Stream Within Project Site	Stream Type ²	Stream Name ³	Stream Class ⁴	Waterbody ID Number (WIN) ⁵	Stream Order ⁶	Latitude of Centroid	Longitude of Centroid	Anticipated Federal Jurisdiction ⁷	Rationale for Federal Jurisdiction ⁸	State Jurisdiction ⁴	Figure 7 Sheet Number
--	--	-----------------------------	-----------------------------	------------------------------	--	------------------------------	----------------------------	-----------------------------	---	---	------------------------------------	-----------------------------

¹ Field ID assigned by EDR.

² Stream type is based upon the Cowardin et al. (1979) classification system: perennial stream (R3), intermittent stream (R4), and ephemeral stream (R6).

³ UNT = Unnamed Tributary.

⁴ Based ORES's April 12, 2024 Surface Waters Determination (JD).

⁵ See 6 NYCRR (Parts 800-941).

⁶ Using Strahler method in which stream order increases when streams of the same order confluence.

⁷ Based on EDR's field observations and desktop analysis. Final jurisdictional determination to be made by USACE.

⁸ Based on the September 8, 2023, Revised Definition of "Waters of the United States"; Conforming. See Table 1 and Table 2 for more information.

⁹ Jurisdiction of stream 33-ST013 ends south of approximately 42.94, -75.714, per the April 12, 2024 Surface Waters JD.

4.2.1 Wetlands

Within the Study Area, EDR identified 157 wetlands totaling 161.82 acres. Descriptions of each wetland community type are presented herein. Note that many wetlands identified contained more than one community type. For all delineated wetlands within the Study Area, Table 5 indicates the area occupied by each community type.

Emergent Wetlands (PEM) – (Photographs 1 through 4 in Appendix C)

A total of 95 wetlands identified within the Study Area contained persistent emergent vegetation. These wetlands were typically located in depressional areas within or adjacent to active agricultural fields, where sheet flow run-off from the open fields accumulates. Where not located within or adjacent to active agricultural fields, the emergent wetlands were often riverine wetlands following a break in topography along a valley-bottom, which receives shade from the surrounding upland tree species. The emergent wetlands were characterized by the dominance of erect rooted herbaceous wetland plants, including smooth goldenrod (Solidago gigantea), Indian hemp (Apocynum cannabinum), green bulrush (Scirpus atrovirens), soft rush (Juncus effusus), acrid buttercup (Ranuculus acris), and species of sedge (Carex spp.). The riverine emergent wetlands often also included species such as sensitive fern (Onoclea sensibilis), broadleaf cattail (Typha latifolia), yellow marsh marigold (Caltha palustris), creeping Jenny (Lysimachia nummularia), fringed sedge (Carex crinita), and water forget-me-not (Myosotis scorpioides), Indicators of wetland hydrology in the emergent wetlands included standing surface water (A1), a high water table (A2), saturation (A3), oxidized rhizospheres on living roots (C3), and/or results of the FAC-neutral test (D5). Soils sampled within the emergent wetlands satisfied the depleted matrix (F3), redox dark surface (F6), and/or histosol (A1) hydric soil indicators with low chroma matrix colors and high chroma redox concentrations. To a depth of up to 18 inches, the surface soil matrix colors ranged between black (10YR 2/1) and brown (7.5YR 4/2) with dark brown (5YR 3/3) to olive yellow (2.5Y 6/6) redoximorphic concentrations. In depths between 3 and 20 inches, underlying soil layers were black (7.5YR 2.5/1) to gray (10YR 6/1) with dark gray (7.5YR 4/1) to brownish yellow (10YR 6/8) redoximorphic features. The texture of soils in the emergent wetlands was generally characterized as clay loam. The wetland-upland transitions were mostly very abrupt, with the adjacent uplands consisting of actively cultivated agricultural fields planted with corn (Zea mays), alfalfa (Medicago sativa) or upland hay species. Species including common dandelion (Taraxacum officinale), Canada thistle (Cirsium arvense), and species of plantain (Plantago major, P. lanceolata), were often observed growing between planted row crops. The wetland-upland transition for the emergent wetlands not adjacent to active agricultural fields were also abrupt, with adjacent uplands consisting of deciduous trees including sugar maple (Acer saccharum), eastern hop-hornbeam (Ostrya virginiana), and black cherry (Prunus serotina).

Forested Wetland (PFO) – (Photographs 5 through 7 in Appendix C)

A total of 49 of the wetlands identified within the Study Area were characterized by broad-leaved deciduous forest vegetation, with a dominance of tree species greater than 20 feet tall. These wetlands were most often encountered adjacent to active agricultural fields, with their source of hydrology being water discharged from drainage tiling installed underneath the adjacent fields. Dominant overstory species included green ash (Fraxinus pennsylvanica) and red maple (Acer rubrum). Common shrub and sapling species in these wetlands included Morrow's honeysuckle (Lonicera morrowii), European buckthorn

(Rhamnus cathartica), and green ash. Herbaceous species in the forested wetlands included creeping Jenny, sensitive fern, water forget-me-not, acrid buttercup, smooth goldenrod, and spotted jewelweed (Impatiens capensis). Indicators of wetland hydrology included standing surface water (A1), a high water table (A2), soil saturation (A3), microtopographic relief (D4), results of the FAC-neutral test (D5), and oxidized rhizospheres on living roots (C3). The soils within these wetlands generally satisfied the depleted matrix (F3) and a redox dark surface (F6) hydric soil indicators with low chroma matrix colors and high chroma redox concentrations. To a depth of up to 18 inches, the surface soil matrix colors ranged between black (10YR 2/1) to dark grayish brown (10YR 4/2) with dark brown (7.5YR 3/4) to light olive brown (2.5Y 5/6) redoximorphic concentrations. In depths between 6 inches and 20 inches, underlying soil layers were dark reddish gray (5YR 4/2) to grayish brown (2.5Y 5/2) with gray (7.5YR 5/1) to brownish yellow (10YR 6/6) redoximorphic features. The texture of the forested wetland soils was generally characterized as clay or clay loam. The wetland-upland transition was relatively abrupt, and generally followed site topography. Adjacent uplands generally consisted of deciduous forests or agricultural fields planted with corn or hay. Adjacent upland deciduous forests typically had overstories dominated by sugar maple and Eastern hop-hornbeam; shrub layers dominated by multiflora rose (Rosa multiflora) and Morrow's honeysuckle; and ground layers dominated by sugar maple and green ash seedlings, multiflora rose. And Allegheny blackberry (Rubus allegheniensis). No indicators of hydric soil or wetland hydrology were observed in the adjacent uplands.

<u>Scrub-Shrub Wetlands (PSS)</u> – (Photographs 8 through 11 in Appendix C)

A total of 46 wetlands within the Study Area were dominated by broad-leaved deciduous scrub-shrub vegetation. Scrub-shrub wetlands are characterized by dense stands of shrub species less than 20 feet tall. These wetlands were most often encountered between or adjacent to active agricultural fields and some appeared to be portions of these fields that had been left fallow. Dominant shrub species included willows (Salix spp.), dogwoods (Cornus sericea, C. amomum), and nannyberry (Viburnum lentago). Common herbaceous species in scrub-shrub wetlands included species of sedge, smooth goldenrod, sensitive fern, green bulrush, soft rush, meadow-rue (*Thalictrum* sp.), and spotted trumpetweed (*Eutrochium maculatum*). Evidence of wetland hydrology included surface water (A1), a high water table (A2), soil saturation (A3), water-stained leaves (B9), oxidized rhizospheres on living roots (C3), and/or results of the FAC-neutral test (D5). The soils within these scrub-shrub wetlands satisfied the depleted matrix (F3) and redox dark surface (F6) hydric soil indicators with low chroma matrix colors and high chroma redox concentrations. To a depth of up to 18 inches, the surface soil matrix colors ranged between black (10YR 2/1) and dark grayish brown (2.5Y 4/2) with dark reddish brown (5YR 3/4) to yellowish brown (10YR 5/6) redoximorphic features. In depths between 4 inches and 25 inches, underlying soil layers were black (2.5Y 2.5/1) to grayish brown (10YR 5/2) with brown (7.5YR 4/3) to olive yellow (2.5Y 6/6) redoximorphic features. The texture of soils within the scrub-shrub wetlands was generally characterized as clay loam, silty clay, or silty clay loam. Where not adjacent to active agricultural fields, these wetlands often occurred in successional fields with a gradual wetland-upland transition to upland shrub species, or between emergent wetlands and the surrounding upland forest as part of a larger wetland complex with multiple cover types. The wetland-upland transition was often much more abrupt when the surrounding upland was forested. The adjacent uplands were often hay or cornfields, successional shrubland dominated by Morrow's honeysuckle, European buckthorn, gray dogwood (Cornus racemosa), quaking aspen (Populus tremuloides), multiflora rose (Rosa multiflora), and species of goldenrod (Solidago canadensis, S. rugosa); or upland forests dominated by sugar maple and

white ash (*Fraxinus americana*). No indicators of hydric soil or wetland hydrology were observed in the adjacent uplands.

Open Water (POW) – (Photographs 12 through 14 in Appendix C)

A total of 15 wetlands with the Study Area were man-made farm ponds or other open water wetlands characterized by sparsely vegetated surfaces with standing water. Dominant species along the edges of these open water areas included narrow leaf cattail (Typha angustifolia), rice cutgrass (Leersia oryzoides), nutgrass (Cyperus esculentus), and smooth goldenrod. Indicators of wetland hydrology in these wetlands included standing surface water (A1), a high water table (A2), soil saturation (A3), inundation visible on aerial imagery (B7), oxidized rhizospheres on living roots (C3), geomorphic position (D2), and/or results of the FAC-neutral test (D5). The soils within these open water wetlands satisfied the depleted matrix (F3) and redox dark surface (F6) hydric soil indicators with low chroma matrix colors and high chroma redox concentrations. Where soil samples were able to be collected, the soil matrix colors were dark gray (10YR 4/1) silty clay loam with light olive brown (2.5Y 5/4) and dark brown (10YR 3/3) redoximorphic concentrations to a depth of up to 18 inches. The wetland-upland transitions were typically abrupt, and generally followed site topography. Adjacent uplands generally consisted of pastureland, disturbed/developed land, and/or successional communities, with dominant plants including hawthorn (Crataegus sp.), viburnum (Viburnum sp.) common timothy (Phleum pratense), reed canary grass (Phalaris arundinacea), common milkweed (Asclepias syriaca), cleavers (Galium aparine), curly dock (Rumex crispus), and plantain species.

4.2.2 Streams

Within the Study Area, EDR identified 100 perennial, intermittent, and ephemeral streams totaling 41,131.02 linear feet. Many of the streams within the Study Area are adjacent to and/or within active agricultural fields. Others flow through forested areas and correspond to NYSDEC-mapped streams.

Intermittent Streams (R4) – (Photographs 15 and 16 in Appendix C)

The 63 intermittent streams delineated within the Study Area ranged between 1 foot and 12 feet in width and were up to 8 inches in depth. The stream gradients ranged from gentle to steep. Breaks in slope were typically pronounced and streambeds were commonly absent of vegetation, with adjacent vegetation including graminoids, forbs, woody shrubs, or deciduous trees. Streambed substrates consisted of bedrock, boulders, cobbles, gravel, and/or sand, which contrasted with the finer silt and clay soils adjacent to the stream above the OHWM. Additional indicators of OHWM commonly exhibited by intermittent streams include shelving, changes in character of soil, wracking, and disturbed leaf litter.

Perennial Streams (R3) – (Photographs 17 and 18 in Appendix C)

The 24 perennial streams delineated within the Study Area ranged between 4 and 35 feet in width with water depths exceeding 24 inches at times. The stream gradients were generally gentle. Breaks in slope were pronounced and streambeds were commonly absent of vegetation, with adjacent vegetation including graminoids or forbs. Streambed substrates consisted of cobbles and/or gravel, which contrasted with the finer silt and clay soils adjacent to the stream above the OHWM. Additional indicators of OHWM commonly

exhibited by perennial streams include undercut banks, shelving, changes in character of soil, exposed roots below intact soil layer, wracking, and disturbed leaf litter.

<u>Ephemeral Streams (R6) – (Photographs 19 and 20 in Appendix C)</u>

The 13 ephemeral streams delineated within the Study Area were typically associated with agricultural field drainage and ranged between 1 foot and 10 feet in width and were up to 1 inch in depth. The stream gradients were gentle to moderate. Breaks in slope were typically pronounced and streambeds were commonly absent of vegetation, with adjacent vegetation including graminoids or forbs. Streambed substrates consisted of cobbles and/or gravel, which contrasted with the finer silt and clay soils adjacent to the stream above the OHWM. Additional indicators of OHWM commonly exhibited by intermittent streams include changes in character of soil, wracking, and water staining. At the time of the delineation only one of the ephemeral streams displayed evidence of baseflow.

4.2.3 Uplands

Uplands within the Study Area consisted of actively cultivated agricultural fields planted with corn, soybean (Glycine max), or hay; successional fields; successional shrubland; deciduous forests, and coniferous forests. Successional fields were dominated by brownray knapweed (Centaurea jacea), orchardgrass (Dactylis qlomerata), quack grass (Elymus repens), common timothy, common plantain (Plantago major), Canada goldenrod (Solidago canadensis), and common dandelion. The successional shrublands were dominated by European buckthorn, Morrow's honeysuckle, green ash seedlings, and hawthorn. Upland deciduous forests were dominated by sugar maple, American beech (Fagus grandifolia), white ash, and black cherry in the canopy; sugar maple saplings, European buckthorn, Morrow's honeysuckle, and American beech saplings in the shrub layer; and green ash seedlings, woodfern (*Dryopteris* sp.), Allegheny blackberry, graceful sedge (Carex gracillima), white avens (Geum canadense), and American beech seedlings in the ground layer. Upland coniferous forests were dominated by eastern hemlock (Tsuga canadensis), eastern white pine (Pinus strobus), and Norway spruce (Picea abies) in the canopy; American beech saplings and Morrow's honeysuckle in the shrub layer; and green ash seedlings, New York fern (Parathelypteris noveboracensis), and European buckthorn seedlings in the ground layer. Indicators of hydric soil or wetland hydrology were rarely observed in these uplands. Photographs 21 and 22 in Appendix C illustrate characteristics of the upland areas.

5.0 CONCLUSIONS

Within the Study Area, EDR identified 157 wetlands totaling 161.82 acres, and 100 perennial, intermittent, and ephemeral streams totaling 41,131.02 linear feet.

The Study Area does not include any TNWs; therefore, Section 10 of the Rivers and Harbor Act is not applicable to the proposed Project. Additionally, the Study Area includes a potentially state-navigable water, Callahan Brook (10-ST006 and 12-ST008); therefore, Article 15 regulations related to navigable waters may apply to the proposed Project.

Ninety-eight delineated wetlands and 88 delineated streams are anticipated to be considered jurisdictional by the USACE under Section 404 of the CWA. The remaining 58 delineated wetlands and 13 delineated streams are anticipated to be non-jurisdictional because they are either isolated, ephemeral (i.e., temporary drainage features flowing only in direct response to precipitation events), or constructed features designed for the conveyance of stormwater runoff. Rationales for the anticipated federal jurisdictional status of each delineated wetland and stream are presented in Table 5 and Table 6, respectively.

It should be noted that EDR has made a presumption of CWA jurisdiction for delineated wetlands and streams based on the current understanding of the 2023 Rule, as amended. Final federal jurisdictional status of all waters delineated within the Study Area can only be established by the USACE.

Per the jurisdictional determination issued by ORES on April 12, 2024, 32 of the delineated wetlands and 24 of the delineated streams within the Study Area are state-regulated (01-W005, 05-W001, 10-W001, 10-W007, 10-W008, 10-W009, 10-W011, 10-W012, 12-W001, 12-W002, 12-W011, 12-W013, 12-W027, 12-W040, 23-W001, 23-W002, 26-W002, 26-W018, 26-W019, 26-W026, 33-W003, 33-W004, 33-W005, 33-W006, 33-W010, 33-W028, 66-W003, 66-W004, 66-W011, 66-W016, 93-W001, and 93-W002; and 10-ST006, 12-ST001, 12-ST008, 12-ST015, 12-ST016, 23-ST001, 23-ST002, 23-ST002A, 23-ST003A, 23-ST004A, 23-ST005, 23-ST006, 23-ST007, 26-ST003, 33-ST010, 33-ST011, 33-ST013, 66-ST002, 66-ST006, 93-ST001, 93-ST001A, and 93-ST004A).

REFERENCES

Bryce, S.A., G.E. Griffith, J.M. Omernik, G. Edinger, S. Indrick, O. Vargas, and D. Carlson. 2010. *Ecoregions of New York*. U.S. Geological Survey, Reston, Virginia.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31. U.S. Fish and Wildlife Service. Washington, D.C.

David, G.C.L., K.M. Fritz, T.-L. Nadeau, B.J. Topping, A.O. Allen, P.H. Trier, S.L. Kichefski, L.A. James, E. Wohl, and D. Hamill. 2022. *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Interim Version*. US Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. ERDC/CRREL TR-22-26.

Dewitz, J. 2023. *National Land Cover Database (NLCD) 2021 Products*. U.S. Geological Survey data release. Available at: https://doi.org/10.5066/P9JZ7AO3.

Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual*. Technical Report Y-87-1. U.S. Army Corps of Engineers: Waterways Experiment Station. Vicksburg, MS.

Federal Emergency Management Agency (FEMA). 2023. *FEMA Acronyms, Abbreviations and Terms: A Capability Assurance Job and Field* Aid. U.S. Department of Homeland Security. July 2023.

Munsell Color. 2009. Munsell Soil Color Book. X-Rite, Incorporated. Grand Rapids, MI.

National Oceanic and Atmospheric Administration (NOAA). 2023. Temperature and Precipitation Summary for Sherburne NY, NY, 2003-2023. NOAA Regional Climate Center. Available at: http://agacis.rcc-acis.org/(Accessed September 2023).

New York State Department of Environmental Conservation (NYSDEC). 1995. *New York State Freshwater Wetland Delineation Manual*. July 1995.

Soil Survey Staff. 2023. *Web Soil Survey*. Natural Resources Conservation Service, United States Department of Agriculture Available at: http://websoilsurvey.nrcs.usda.gov/ (Accessed July 2023).

United States Army Corps of Engineers (USACE). 2012. *Traditionally Navigable Waterways (TNWs) in the Buffalo District, State of New York*. Available at:

https://www.lrb.usace.army.mil/Portals/45/docs/regulatory/DistrictInfo/TNWListNYFinal.pdf. (Accessed September 2023).

USACE. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. Version 2.0. ERDC/EL TR-12-1. Vicksburg, MS.

USACE. 2020. *National Wetland Plant List*. Version 3.5. Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH. Available at: http://wetland-plants.usace.army.mil (Downloaded February 2022).

USACE and United States Environmental Protection Agency (USEPA). 2023a. *Revising the Definition of "Waters of the United States."* Federal Register, Volume 88, Number 11 (January 18, 2023). Available at:

https://www.federalregister.gov/documents/2023/01/18/2022-28595/revised-definition-of-waters-of-the-united-states (Accessed September 2023).

USACE and USEPA. 2023b. *Revising the Definition of "Waters of the United States"; Conforming.* Federal Register, Volume 88, Number 173 (September 8, 2023). Available at: https://www.federalregister.gov/documents/2023/09/08/2023-18929/revised-definition-of-waters-of-the-united-states-conforming">https://www.federalregister.gov/documents/2023/09/08/2023-18929/revised-definition-of-waters-of-the-united-states-conforming (Accessed September 2023).

USEPA. 2023. *Definition of "Waters of the United States": Rule Status and Litigation Update*. Available at: https://www.epa.gov/wotus/definition-waters-united-states-rule-status-and-litigation-update (Last updated September 8, 2023; Accessed September 2023).

USDA Natural Resources Conservation Service (NRCS). 2023. *New York Portion of the National Hydric Soil List*. Available at: https://efotg.sc.egov.usda.gov/references/Public/IL/State List NRCS Hydric Soils Report Dynamic Data.html (Accessed September 2023).

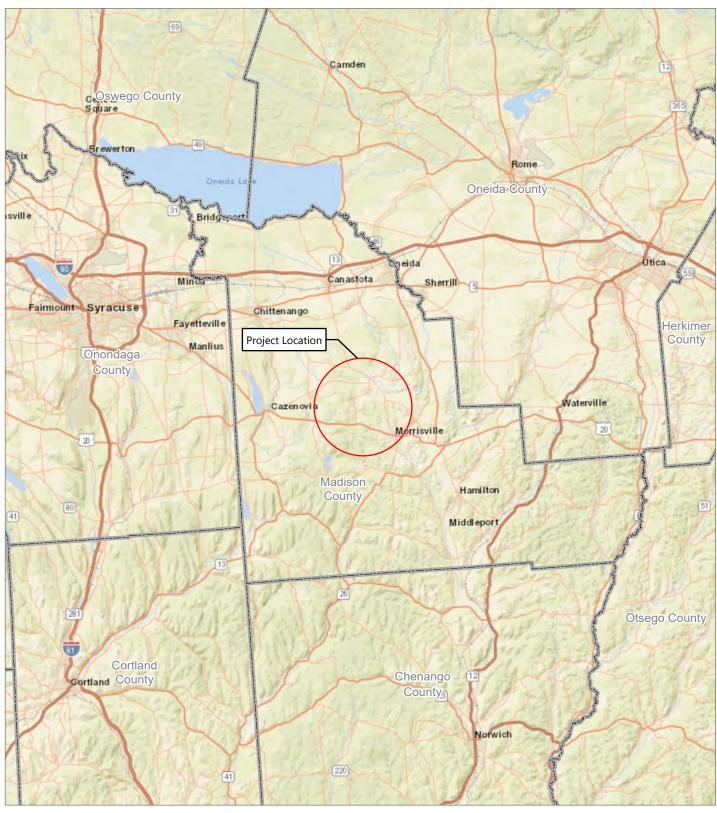
USDA NRCS. 2021. The PLANTS Database. Available at: http://plants.usda.gov. National Plant Data Team. Greensboro, North Carolina.

United States Geological Survey (USGS). 2023. StreamStats: Streamflow Statistics and Spatial Analysis Tools for Water-Resource Applications. United States Department of the Interior. Washington, D.C. Available at: https://streamstats.usgs.gov/ss/ (Accessed July 2023).

Appendix A

Figures

Figure 1. Regional Project Location



Hoffman Falls Wind Project

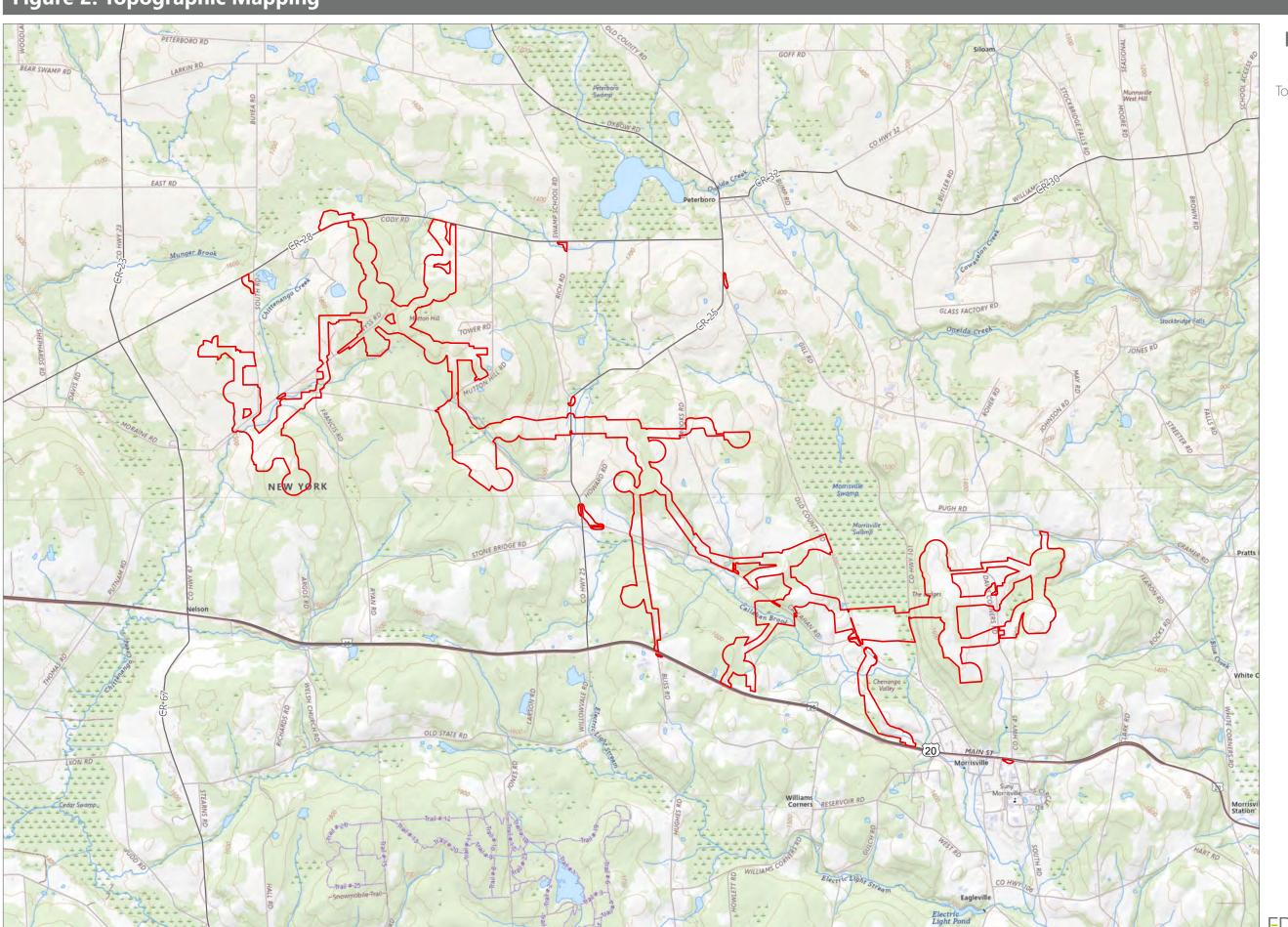
Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report





Figure 2. Topographic Mapping



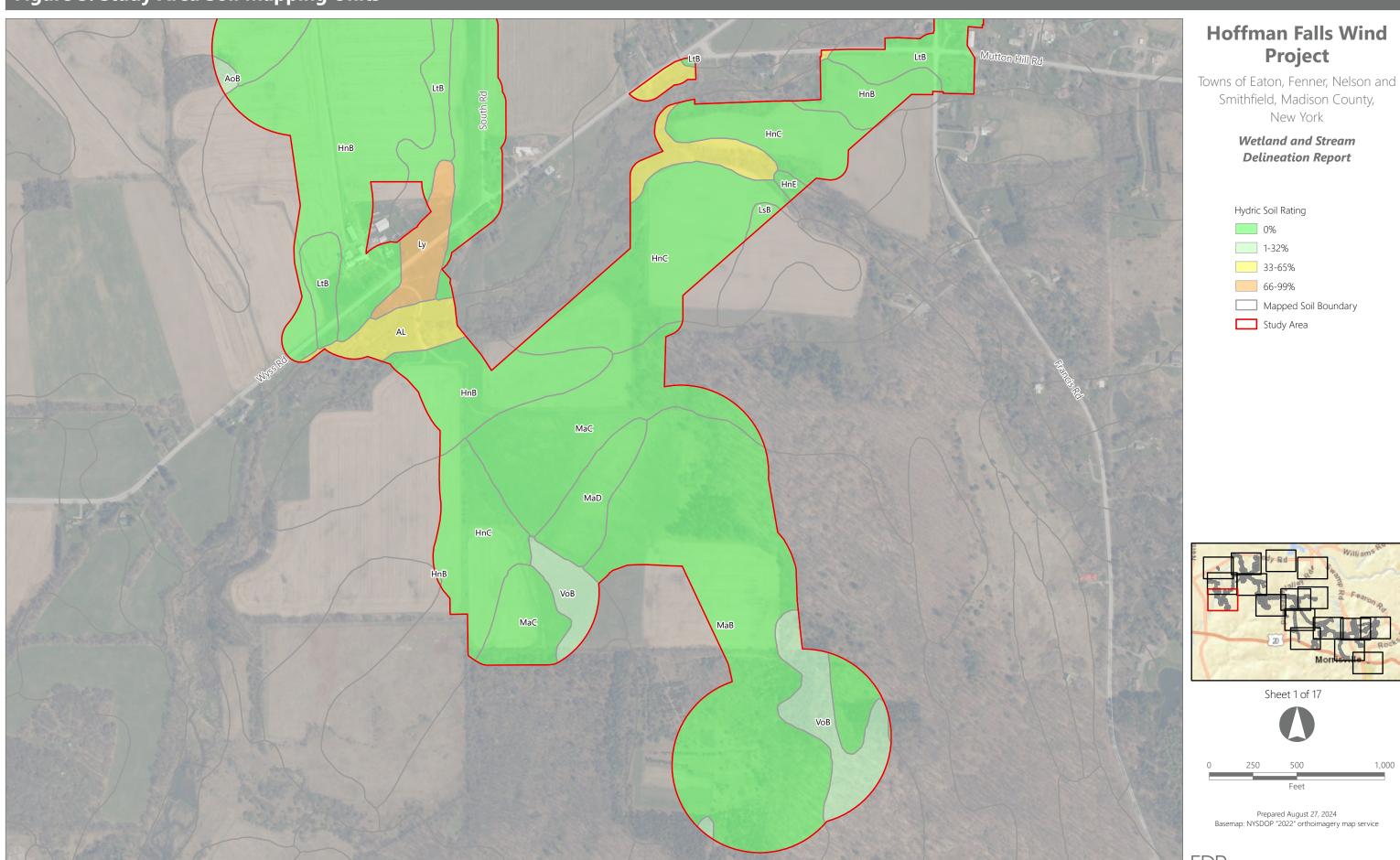
Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

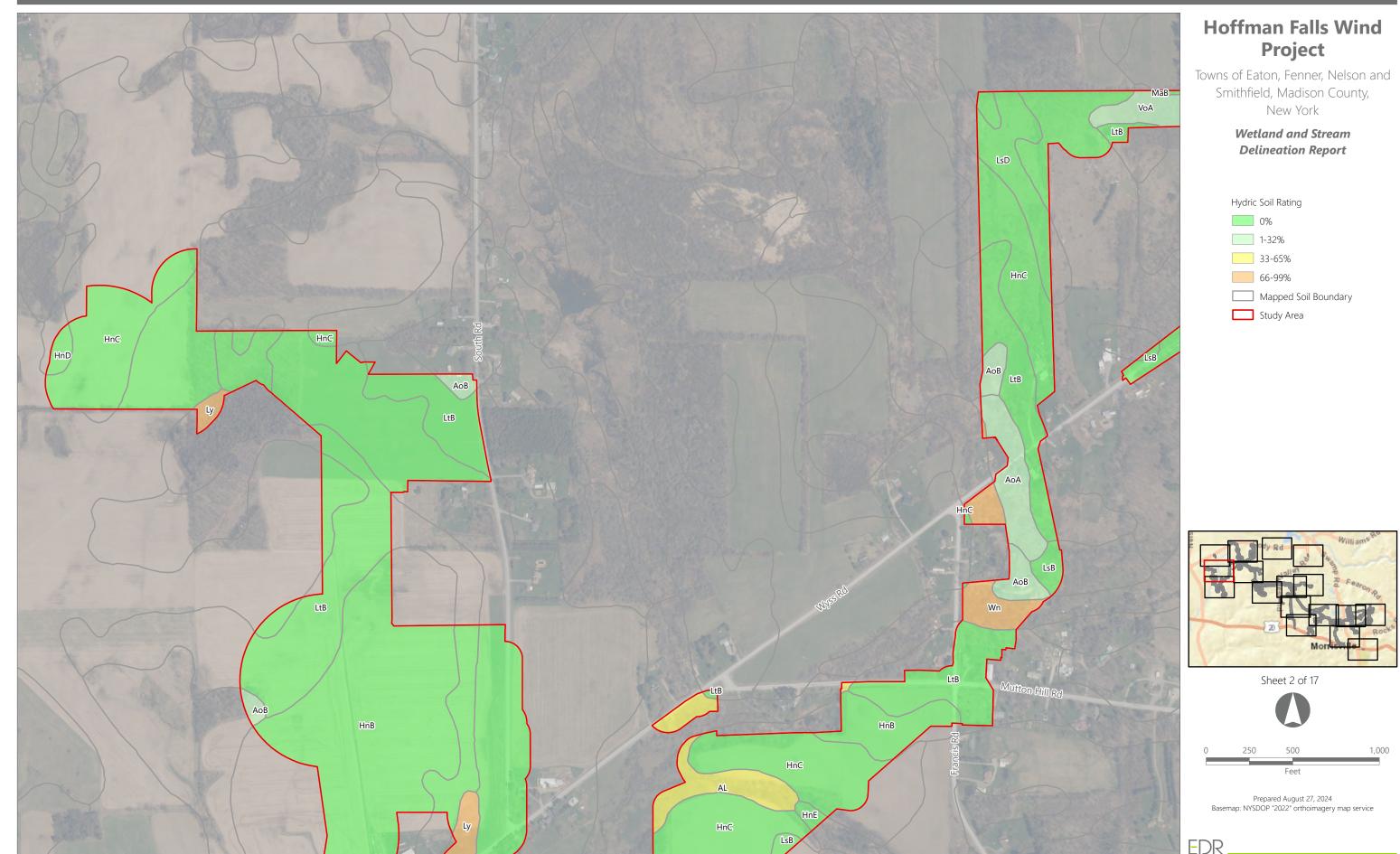
Wetland and Stream
Delineation Report

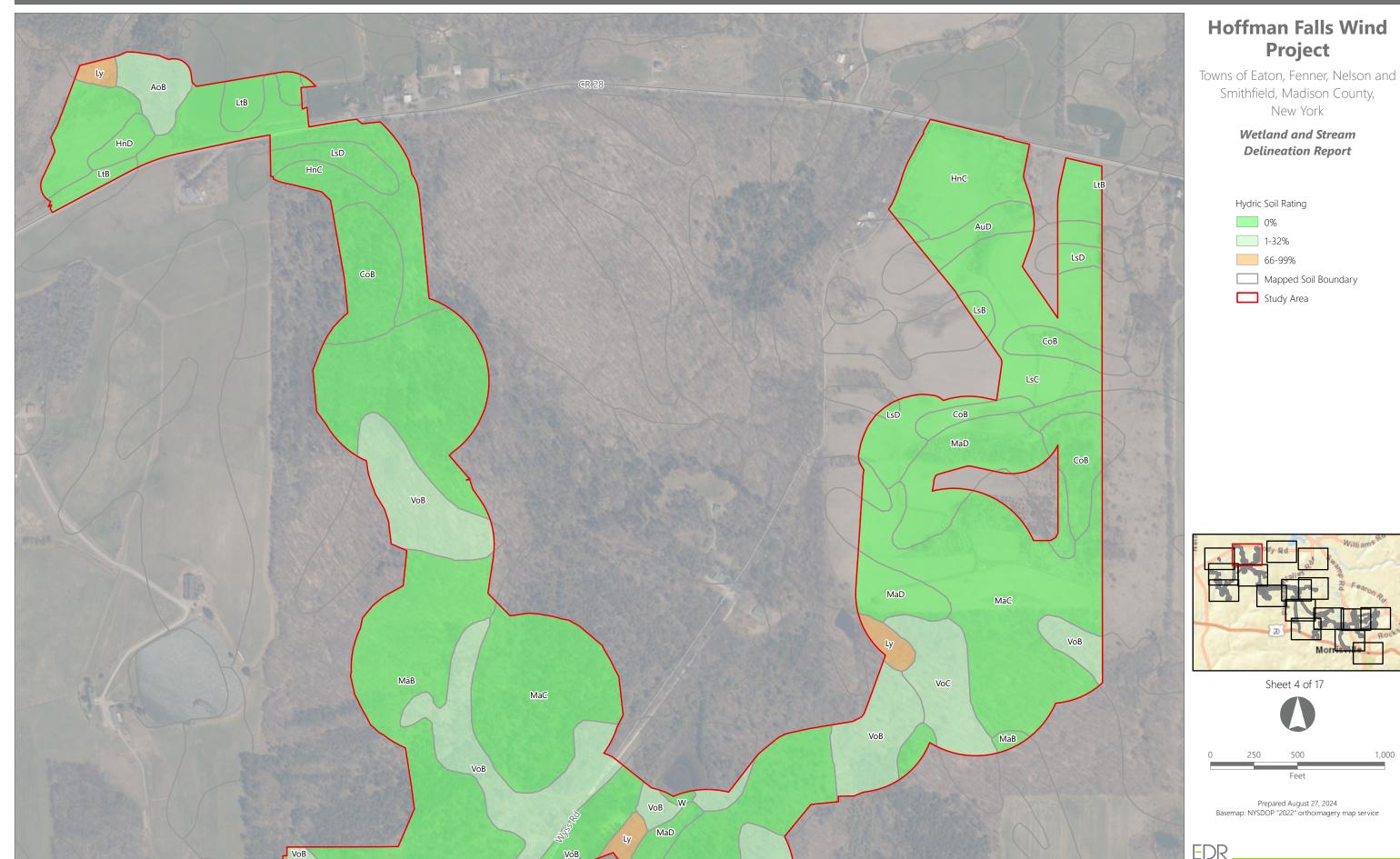
Study Area

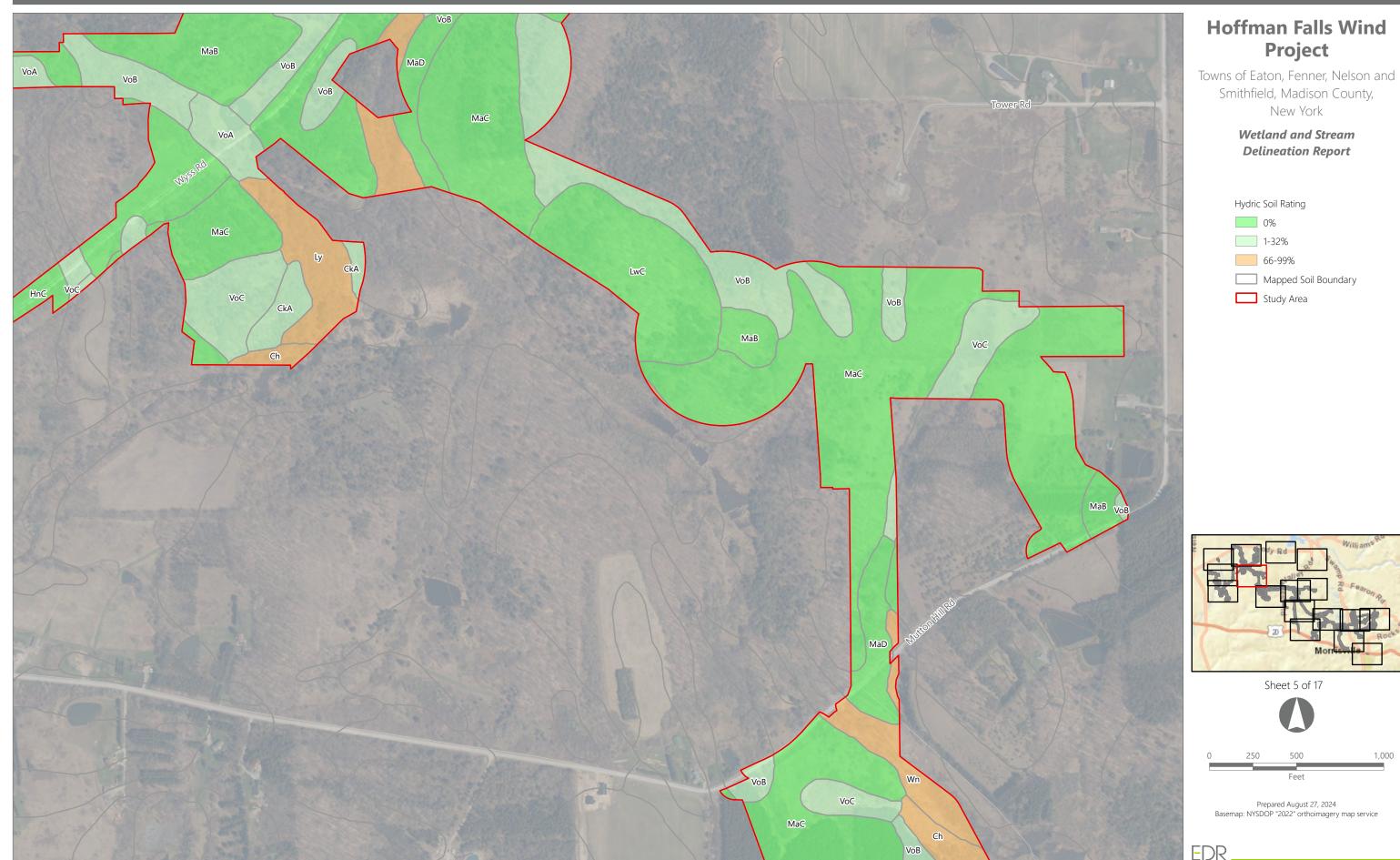


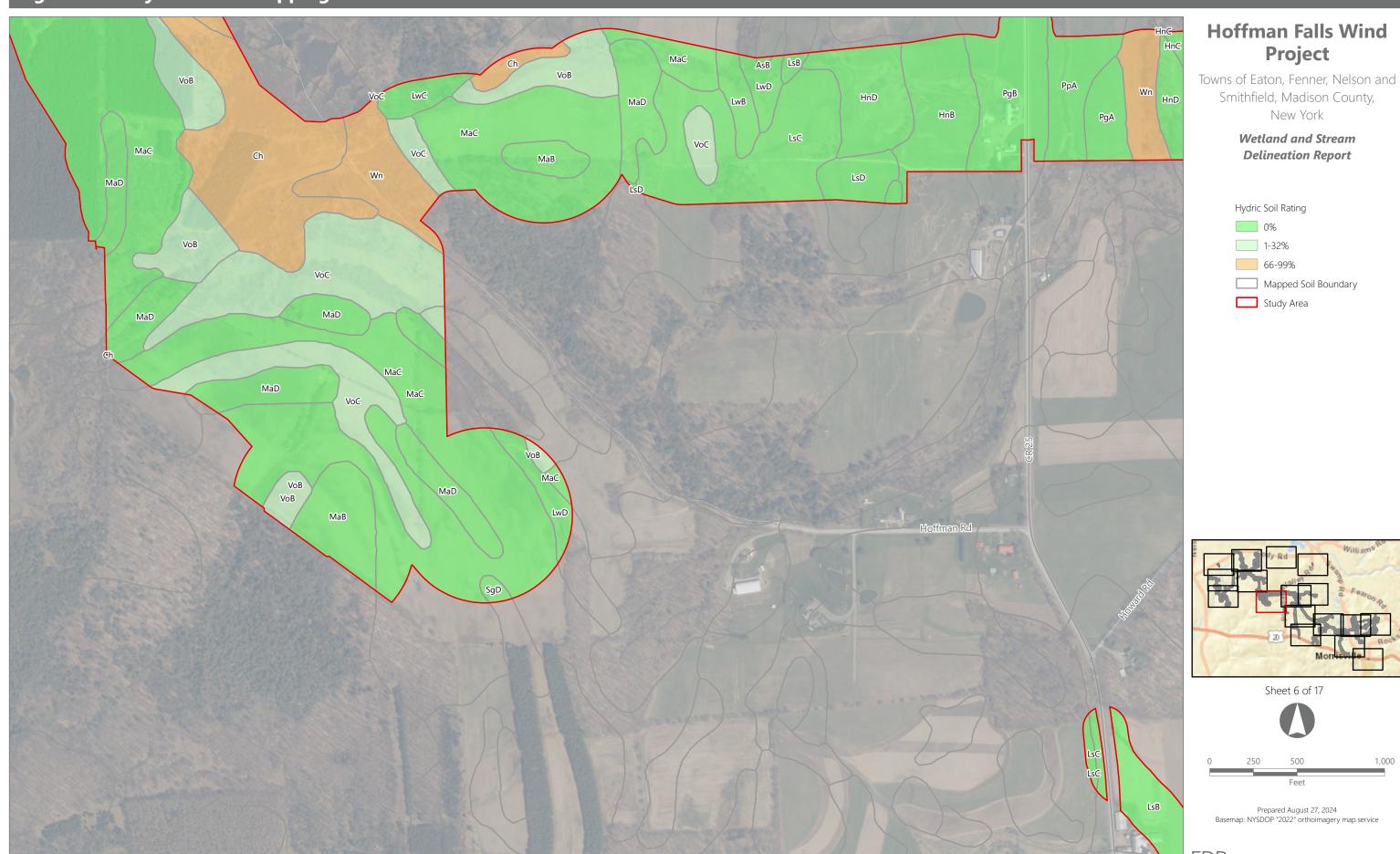
Prepared August 27, 2024 Basemap: Esri "USGS Topo" map service

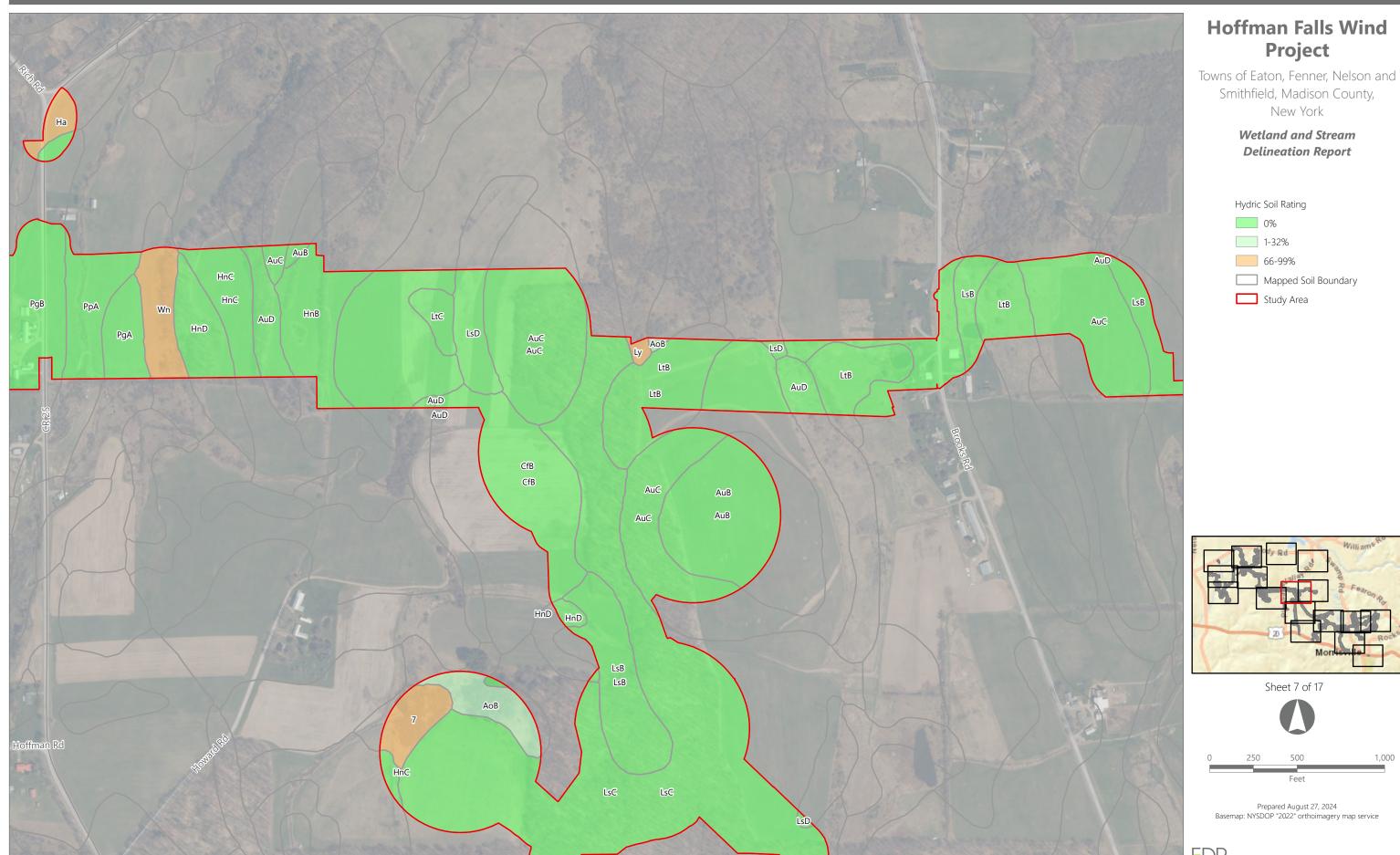


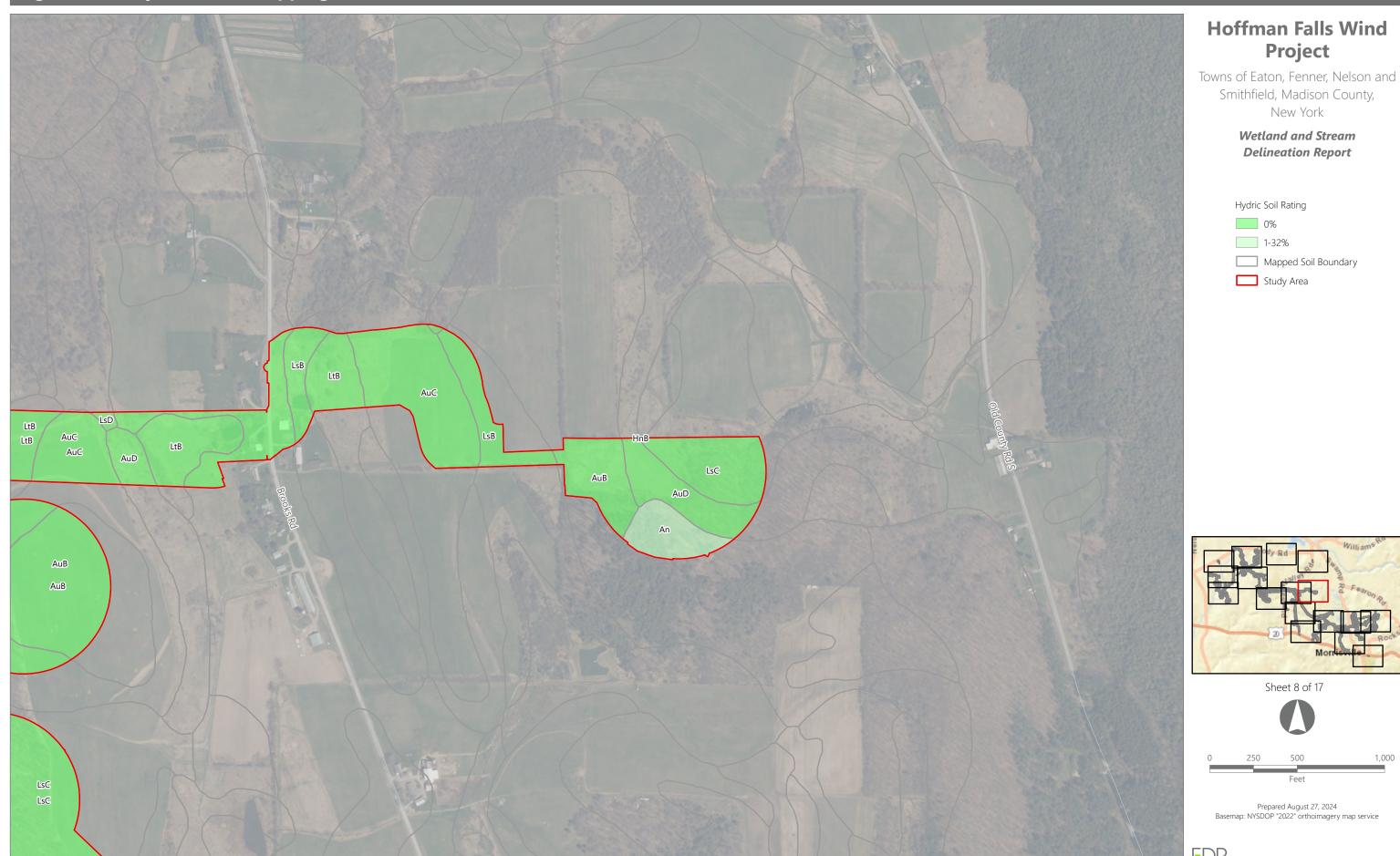


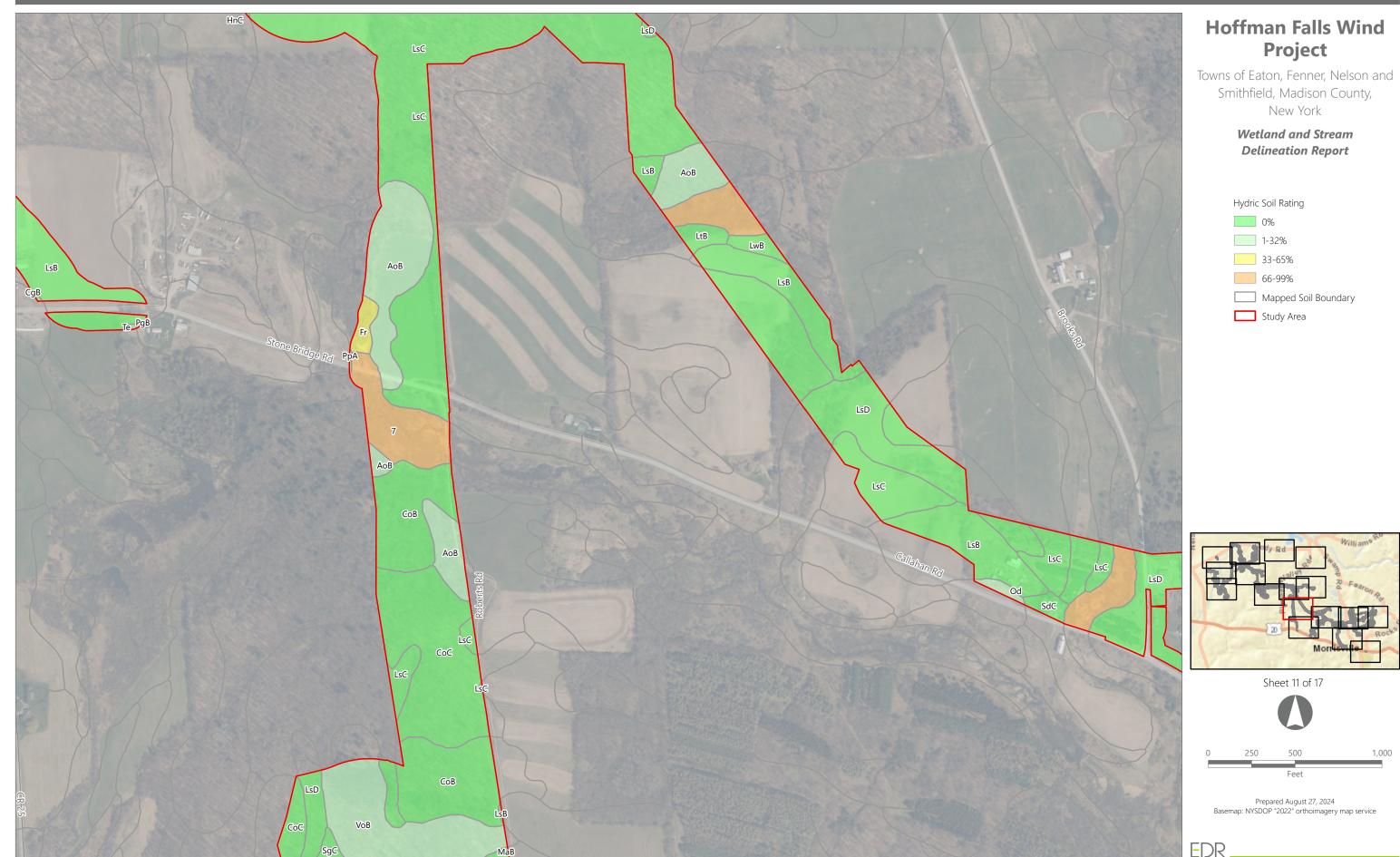


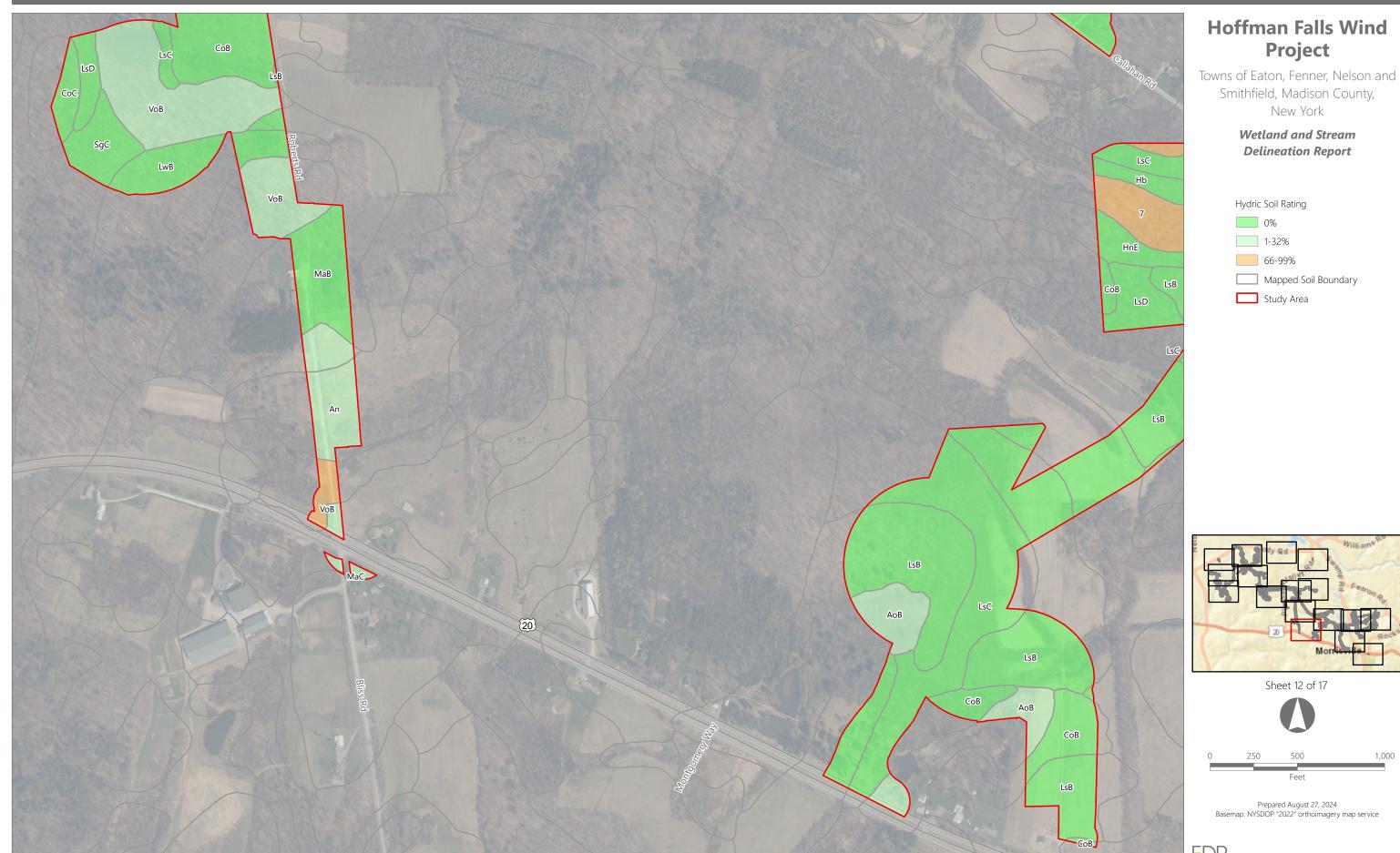


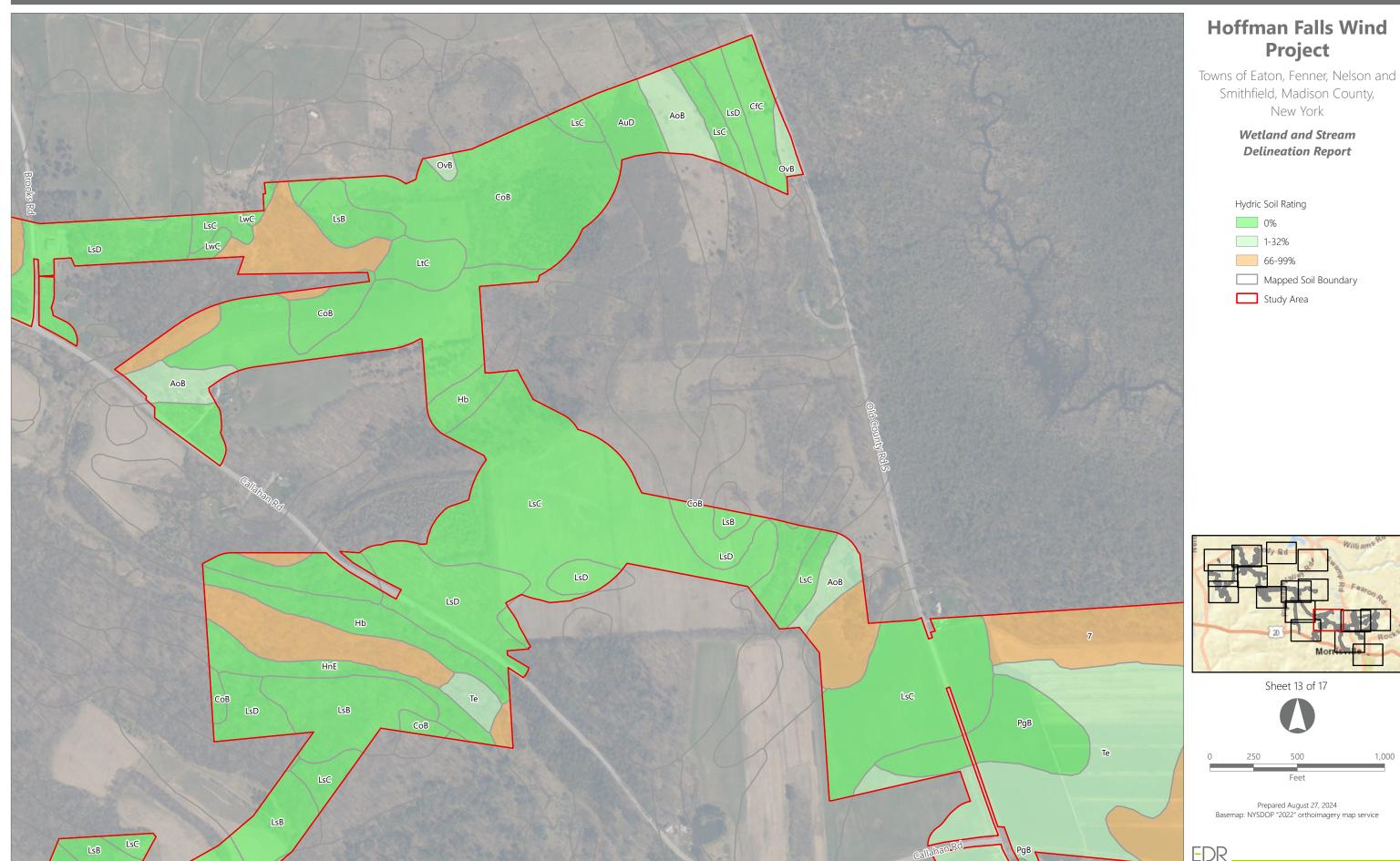


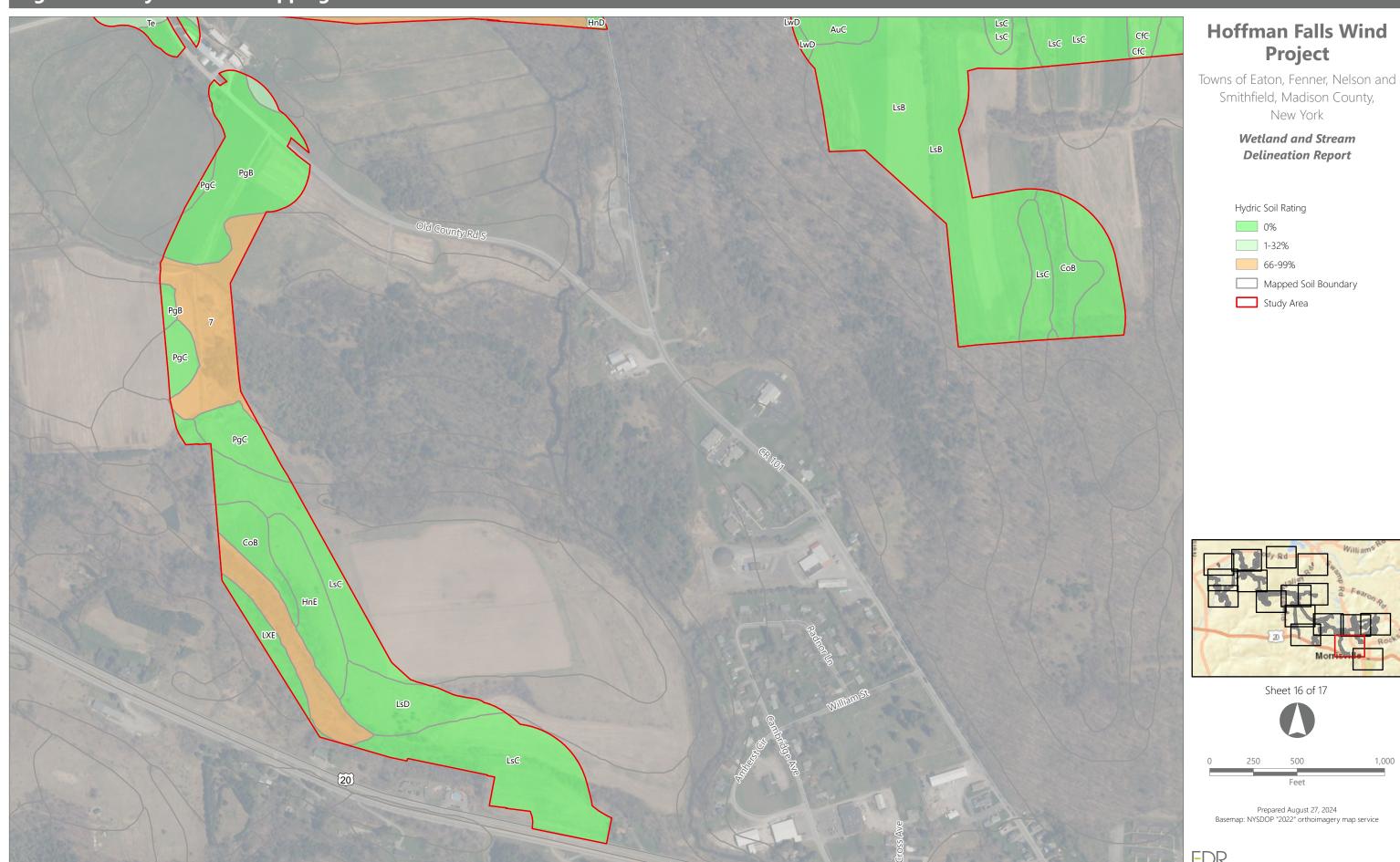


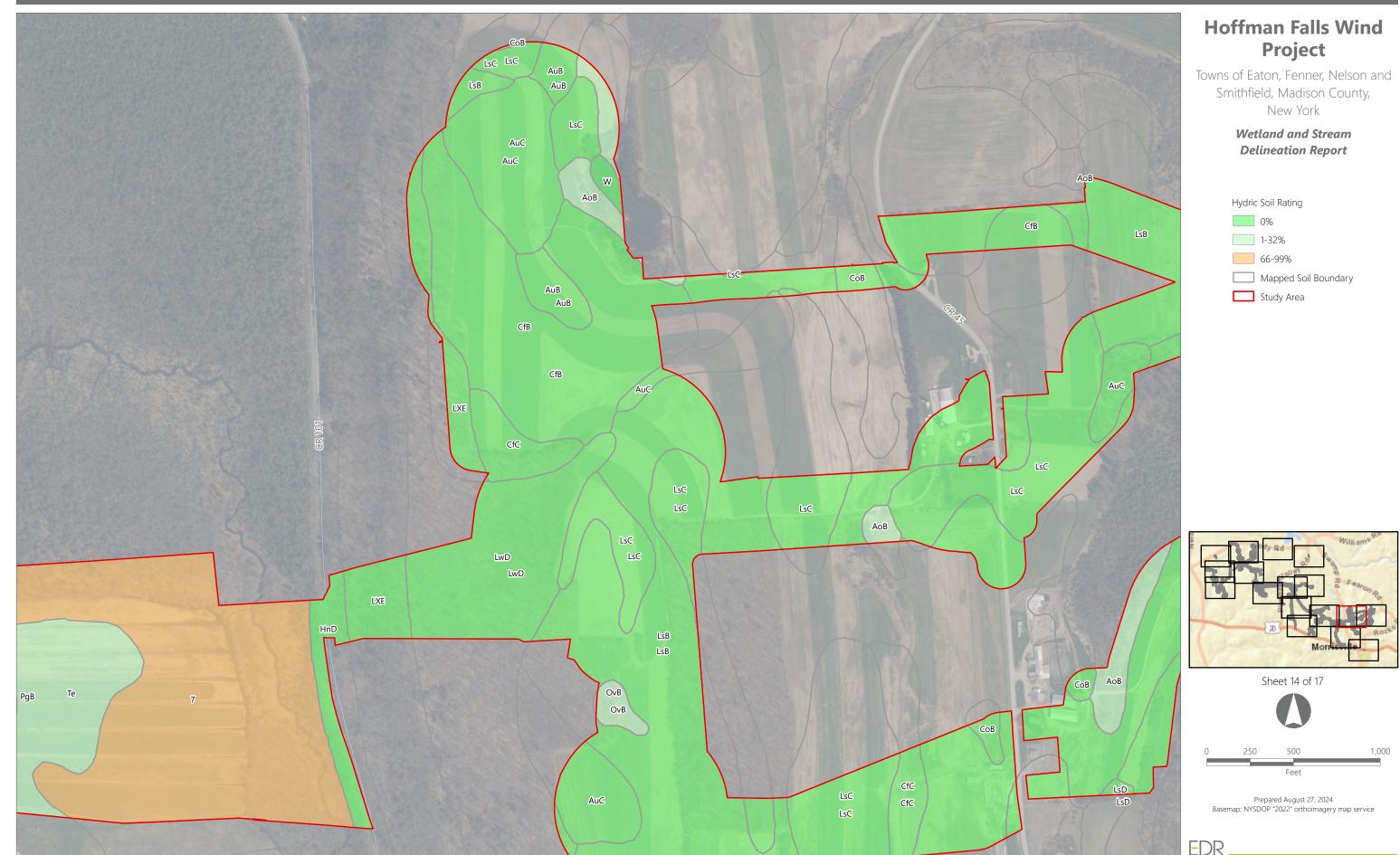












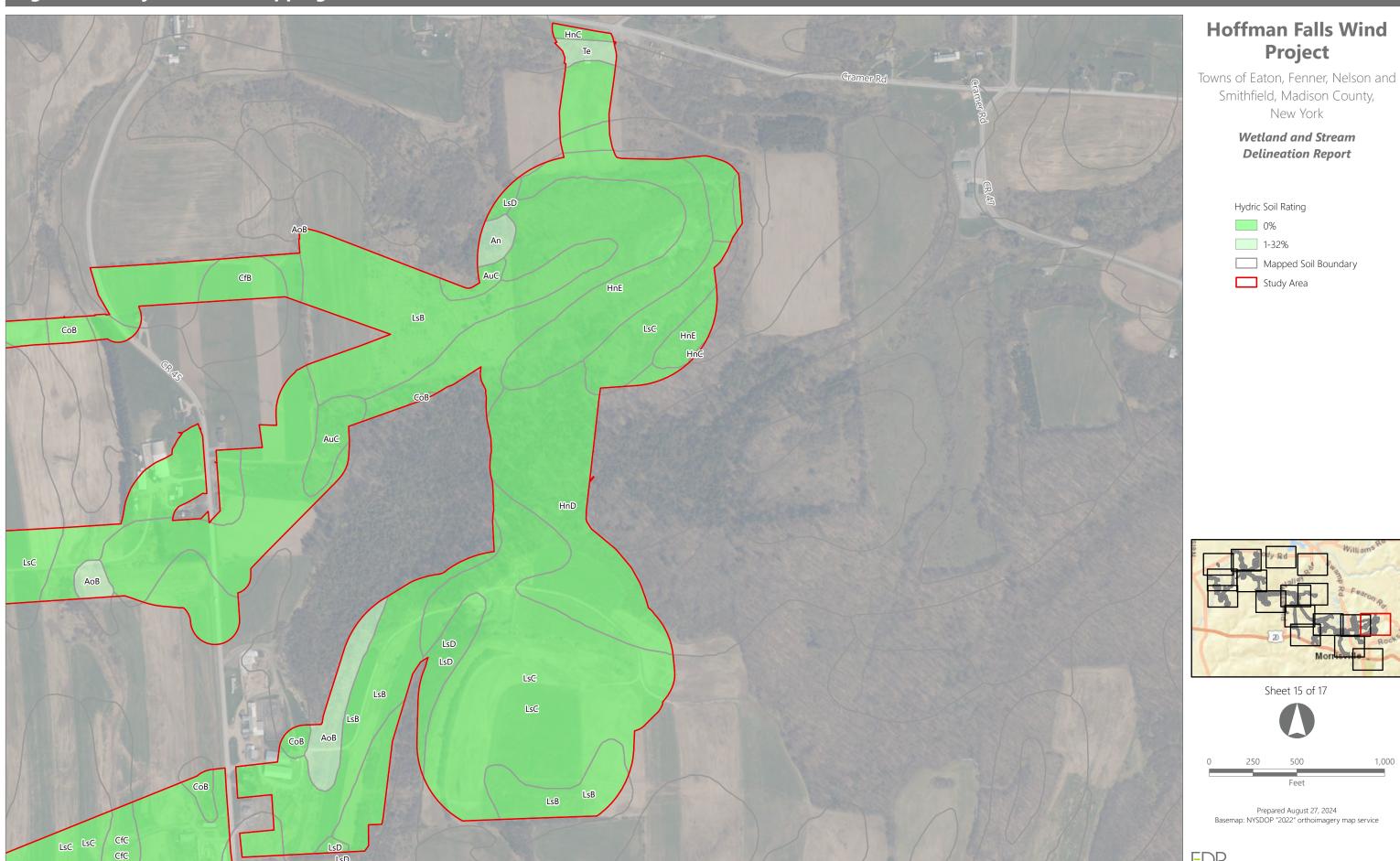
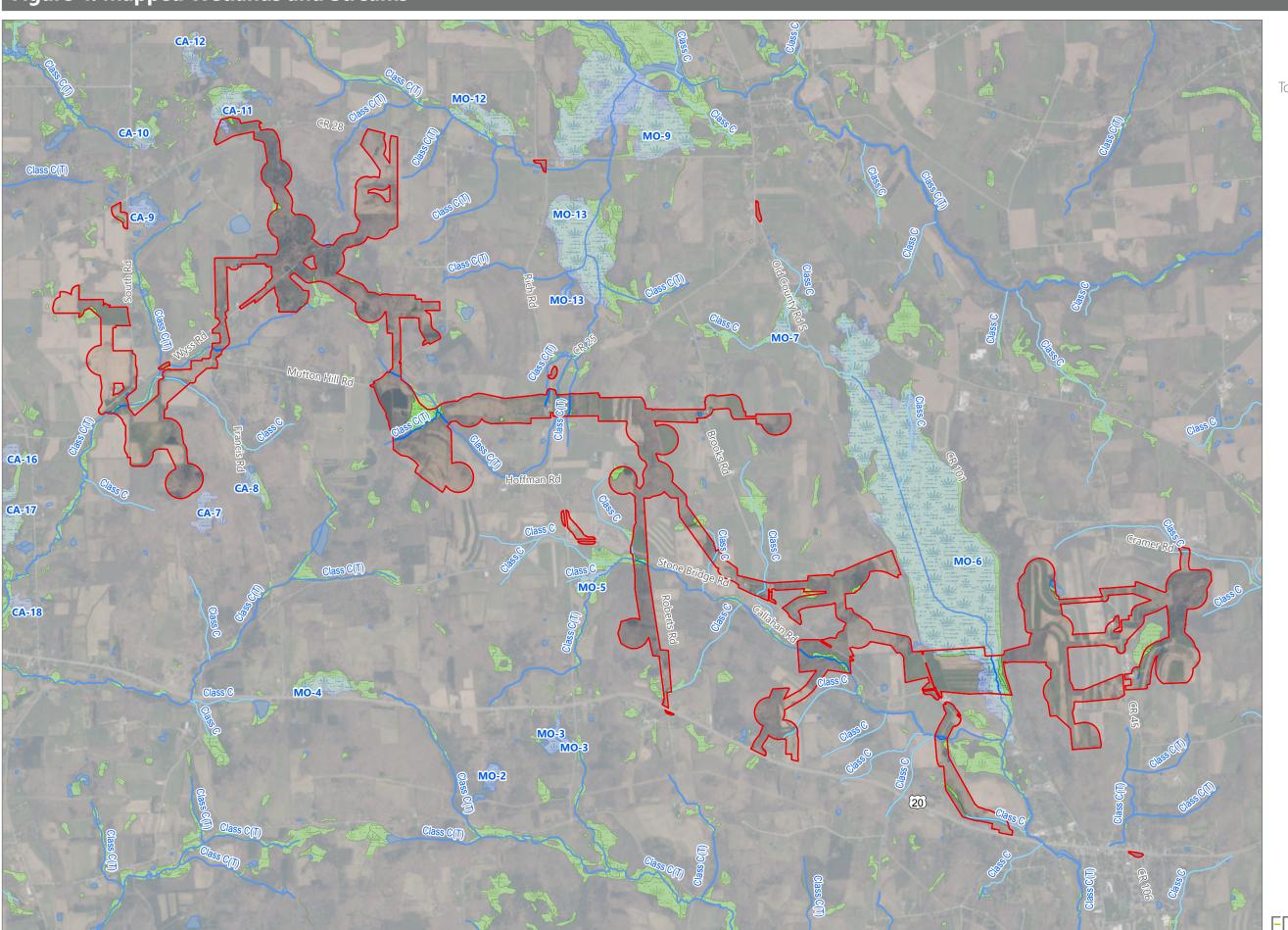


Figure 4. Mapped Wetlands and Streams



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

NYSDEC Stream Classification

Class A, B, C(TS), or C(T) Stream

— Class C or D Stream

NYSDEC Mapped Wetland

NWI Mapped Wetland

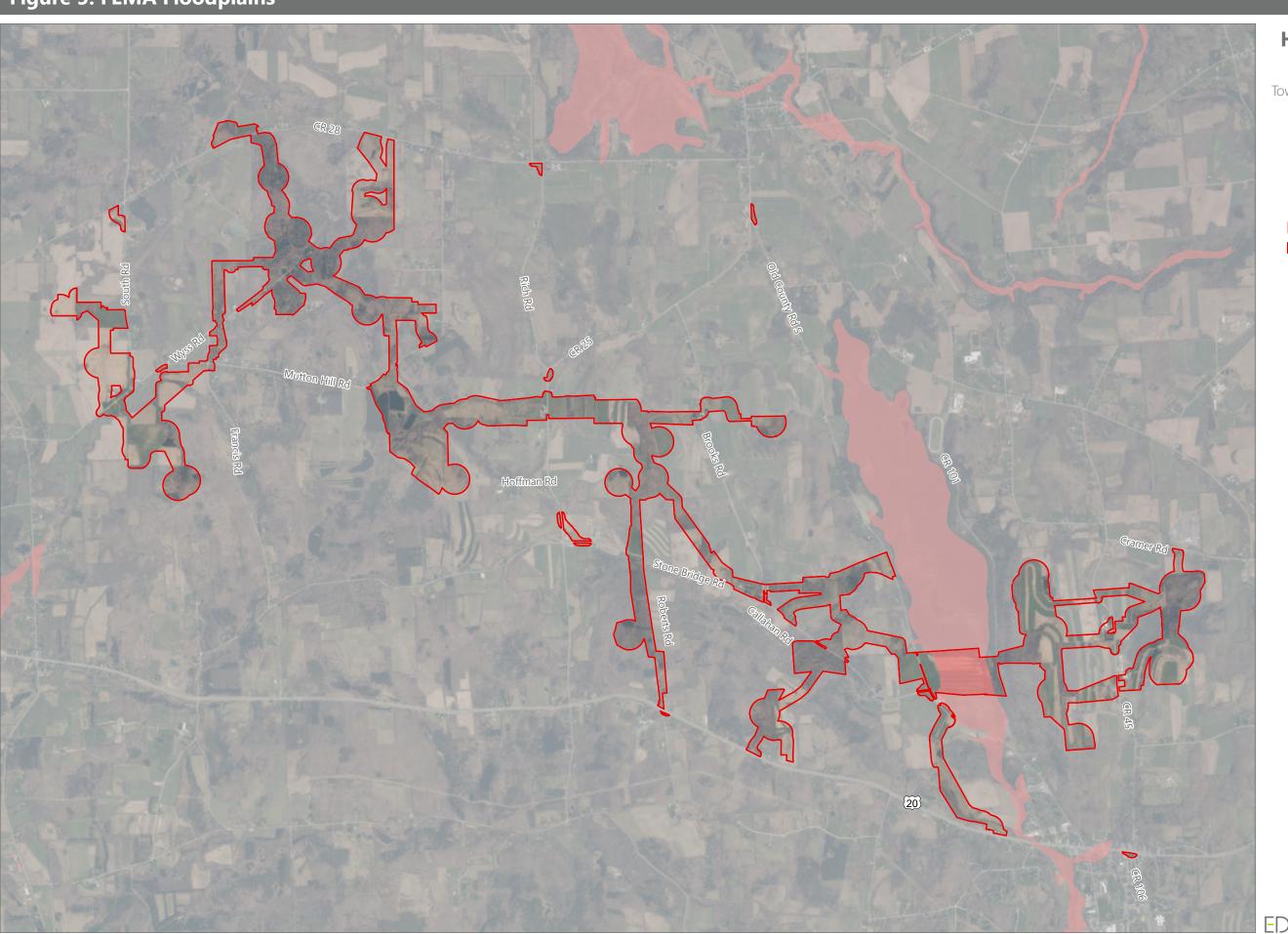
NWI Mapped Freshwater Pond/Lake/Riverine

Study Area



Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

Figure 5. FEMA Floodplains



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

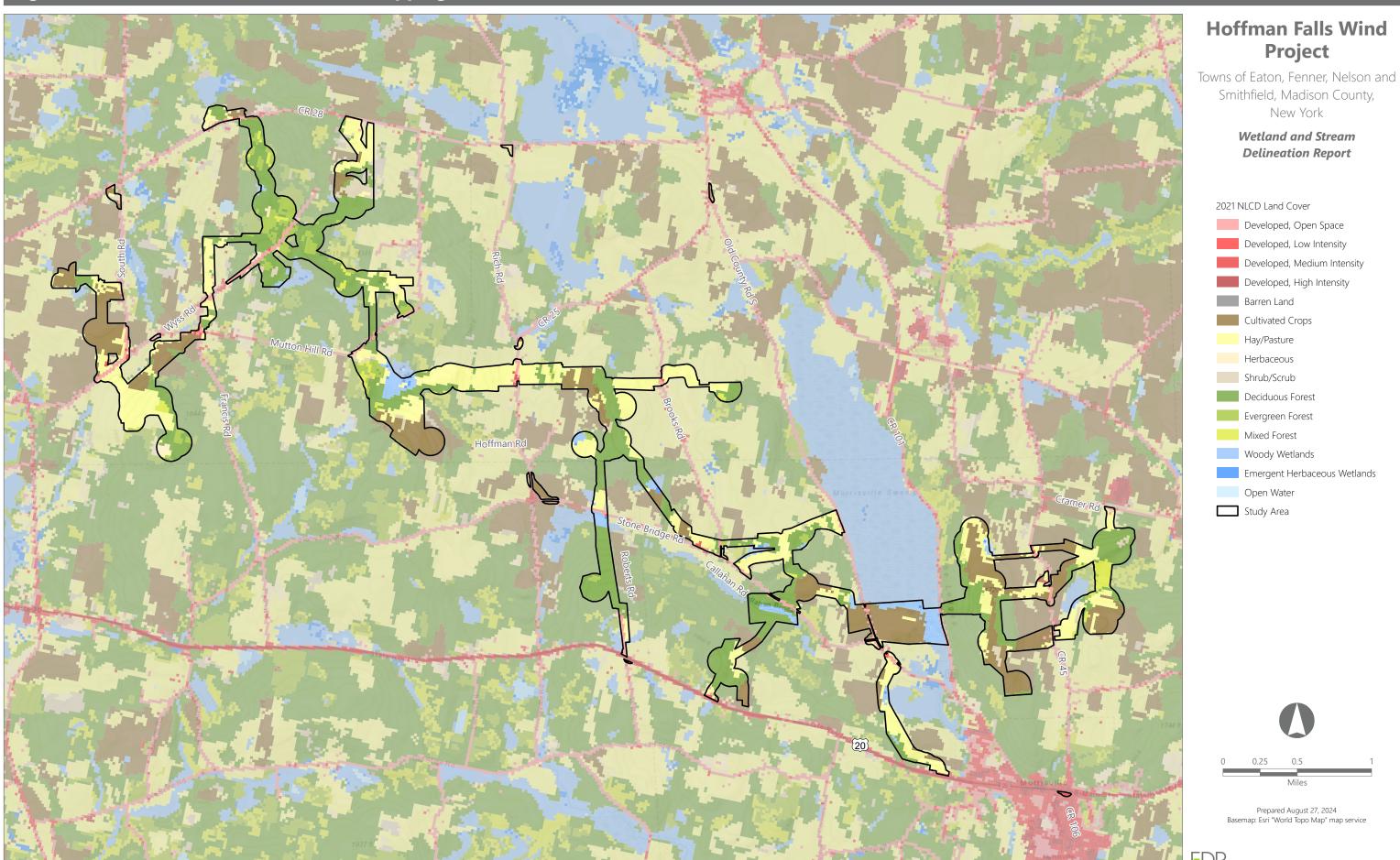
FEMA 100-Year Flood Hazard Area

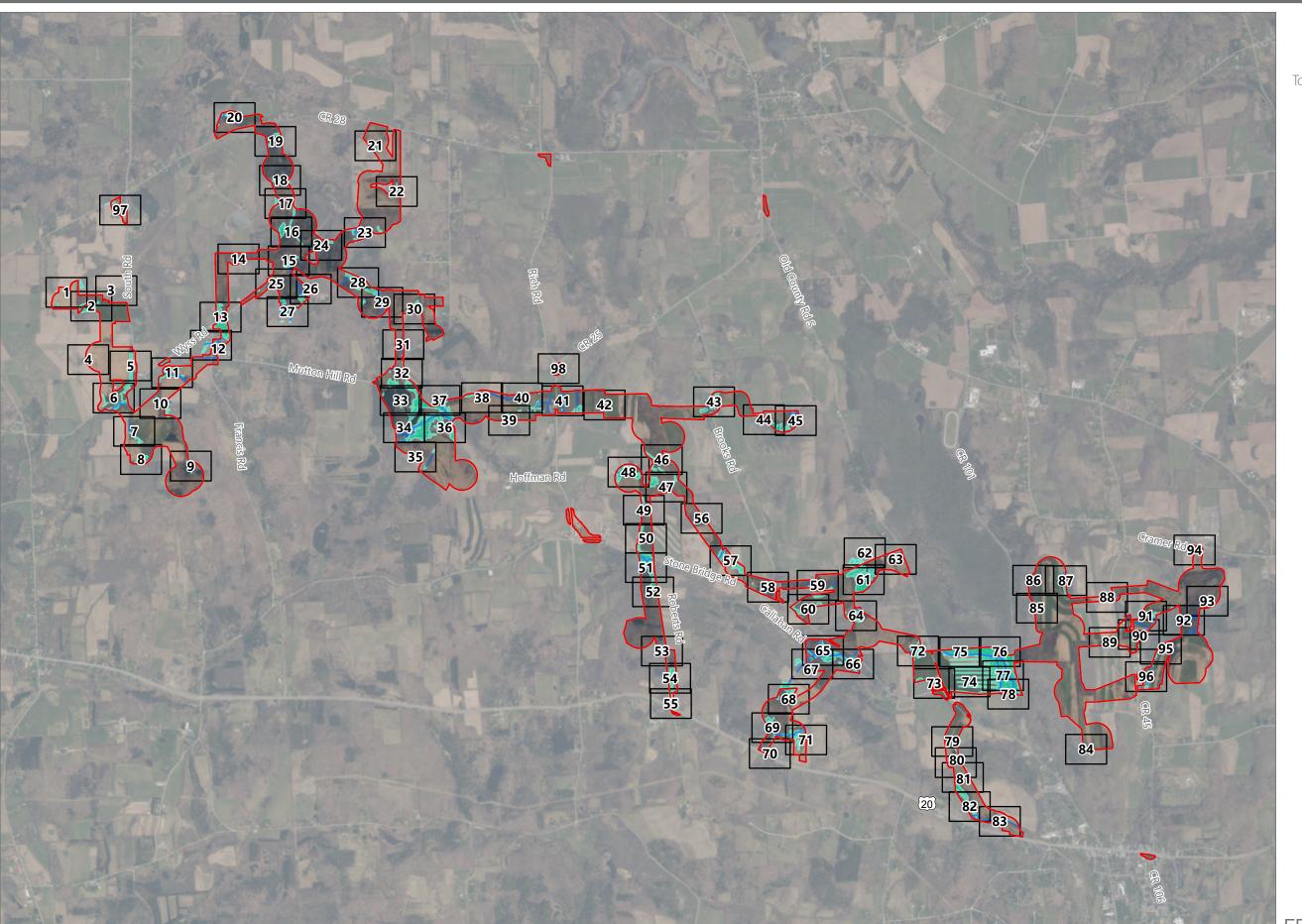
Study Area



Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

Figure 6. National Land Cover Dataset Mapping





Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

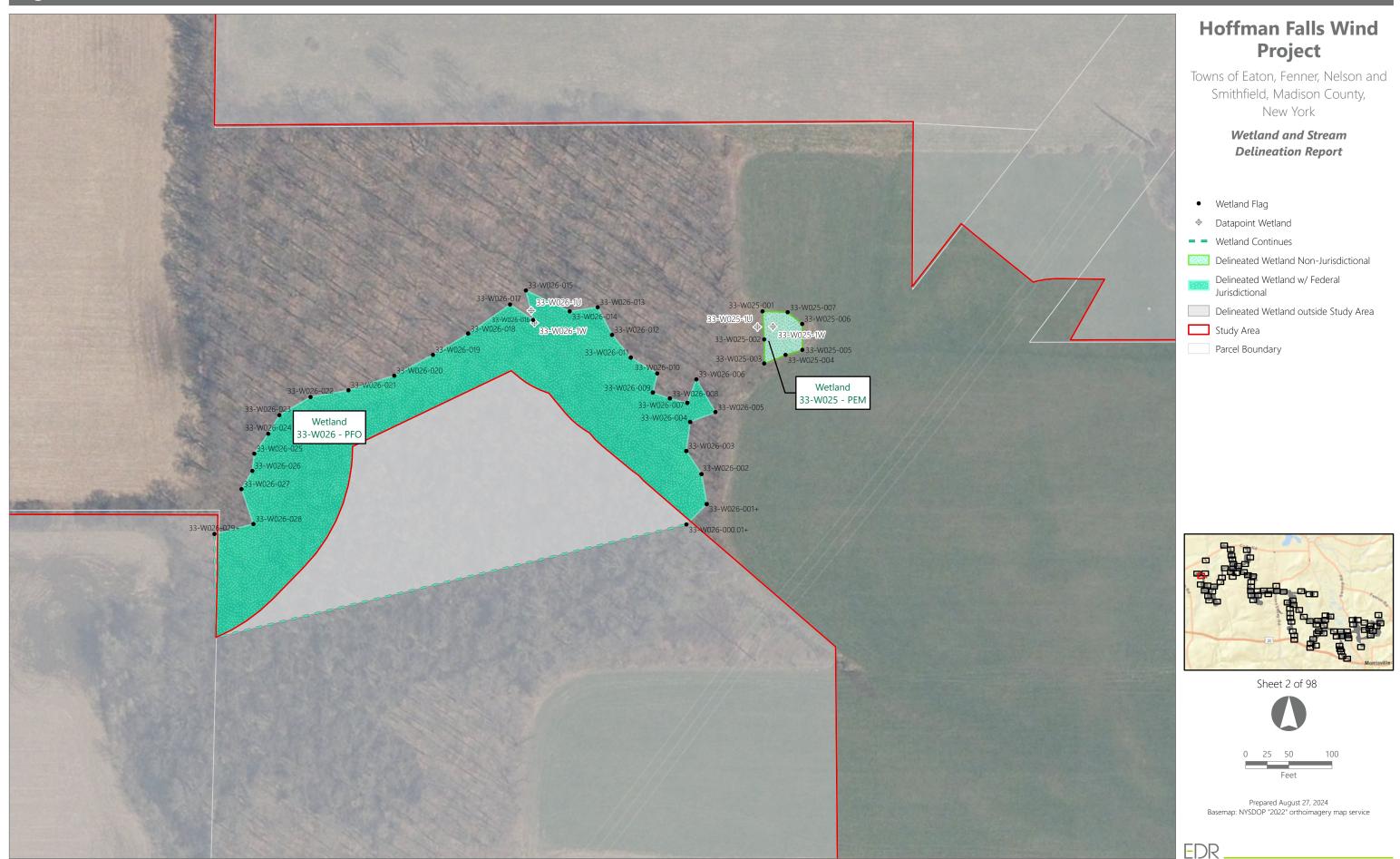




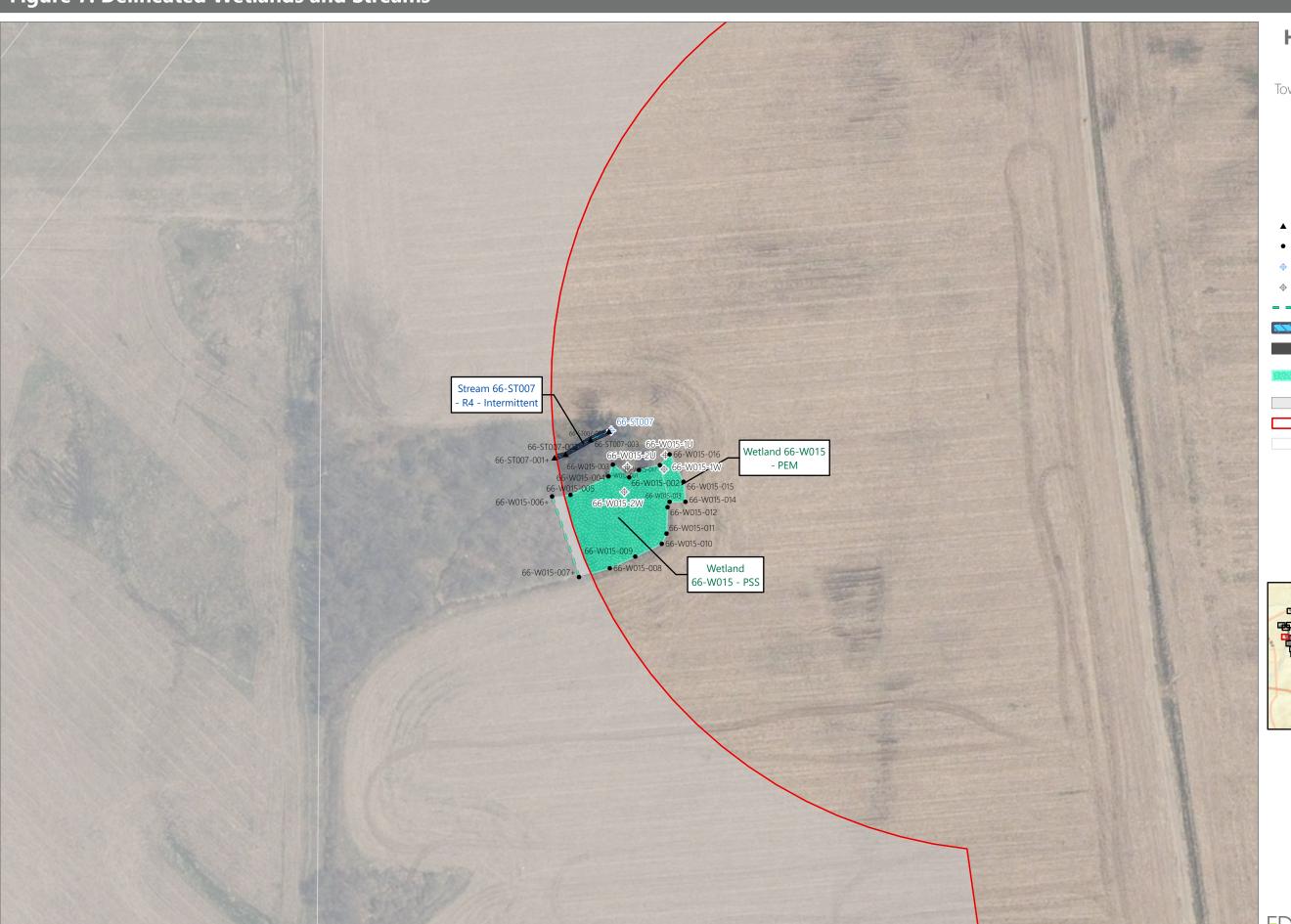


Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service









Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Wetland Continues
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

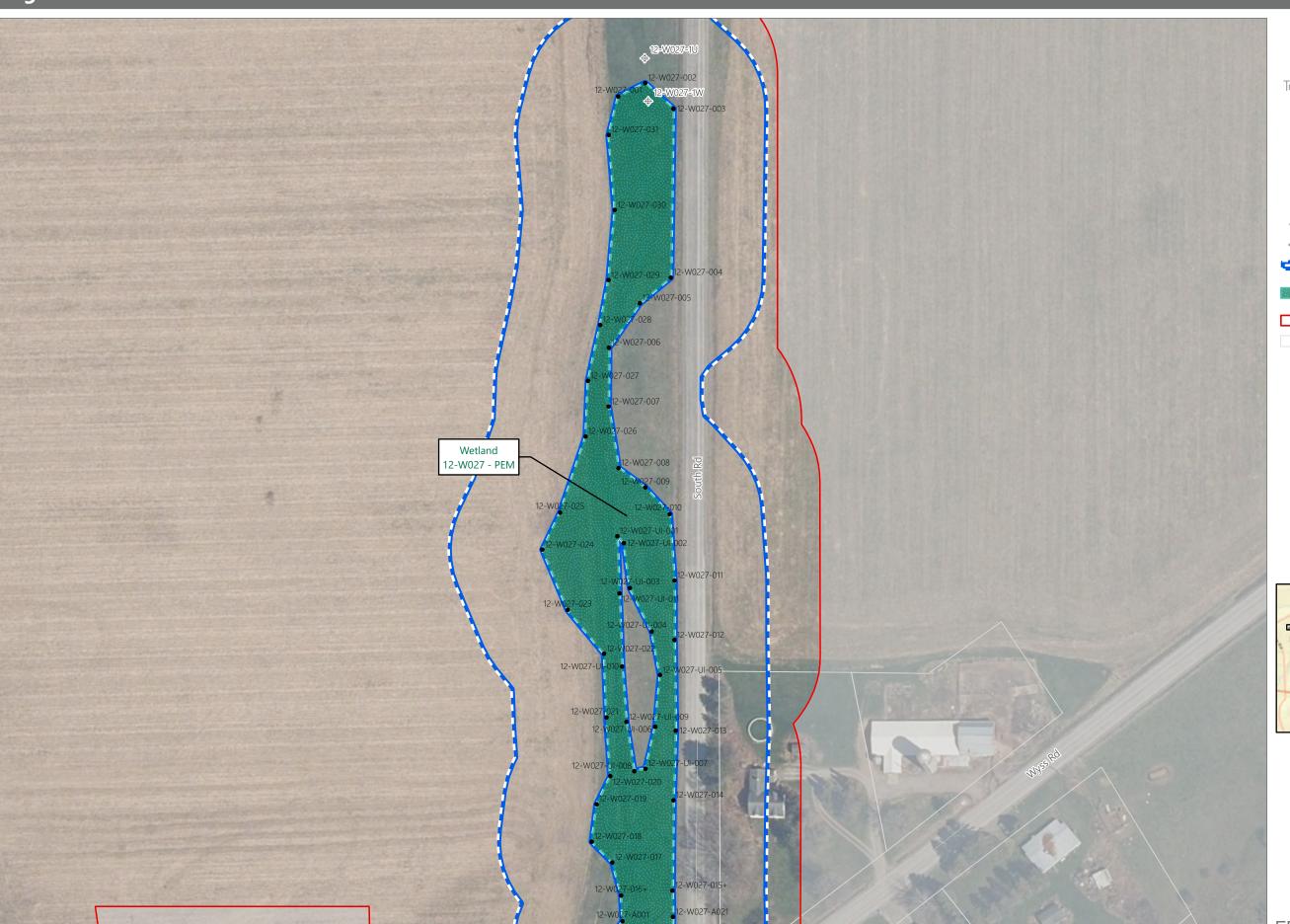


Sheet 4 of 98



0 25 50 10 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- ◆ Datapoint Wetland

NYSDEC-Regulated Adjacent Area

Delineated Wetland w/ State & Federal Jurisdictional

Study Area

Parcel Boundary

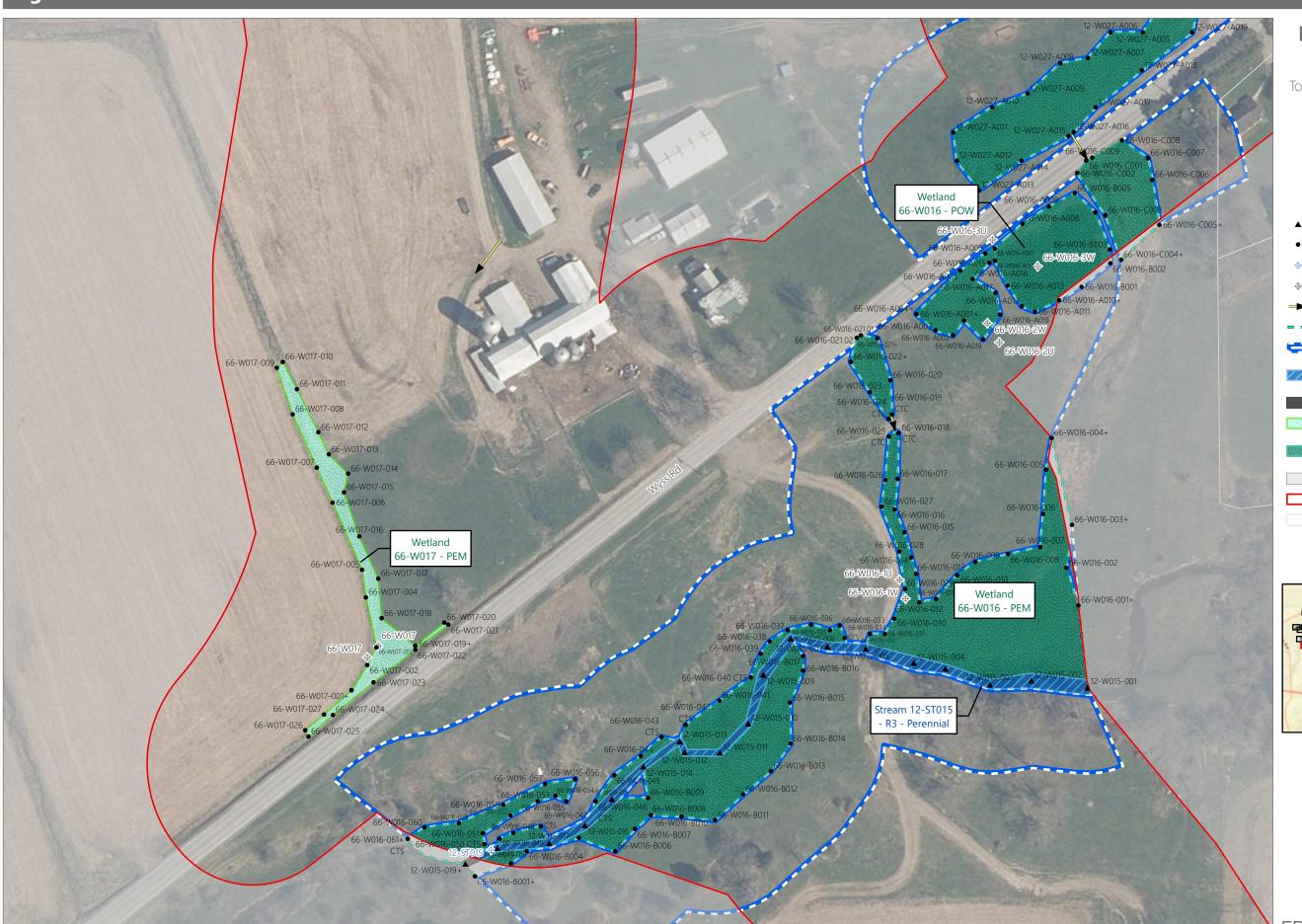


Sheet 5 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ State & Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional
 - Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

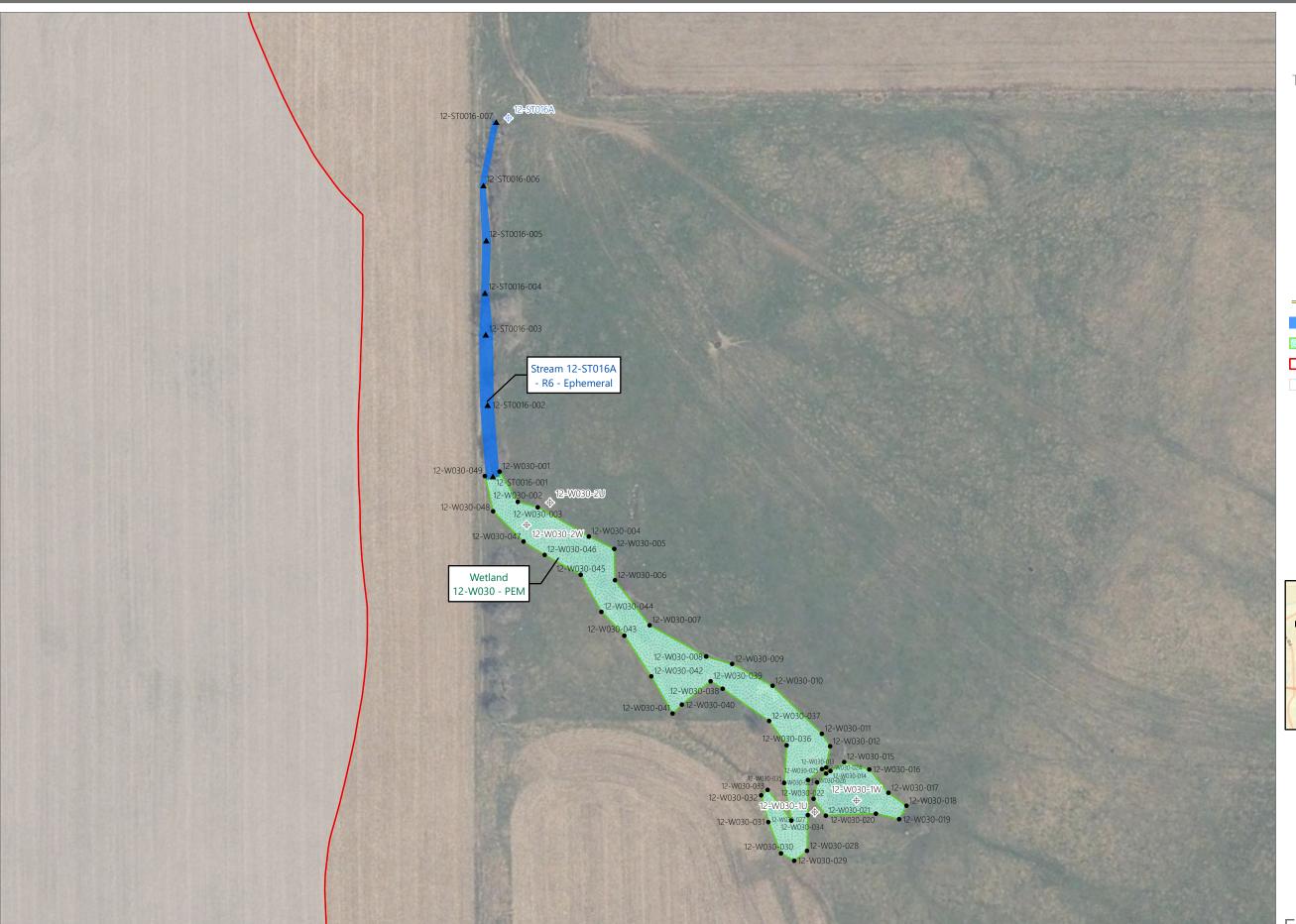


Sheet 6 of 98



0 25 50 10 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Delineated Stream Non-Jurisdictional
- Delineated Wetland Non-Jurisdictional
- Study Area
- Parcel Boundary



Sheet 7 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- Datapoint Wetland
- **–** Wetland Continues
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 8 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- ◆ Datapoint Wetland
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 9 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

Project

Smithfield, Madison County, New York **Wetland and Stream Delineation Report**

Datapoint Stream

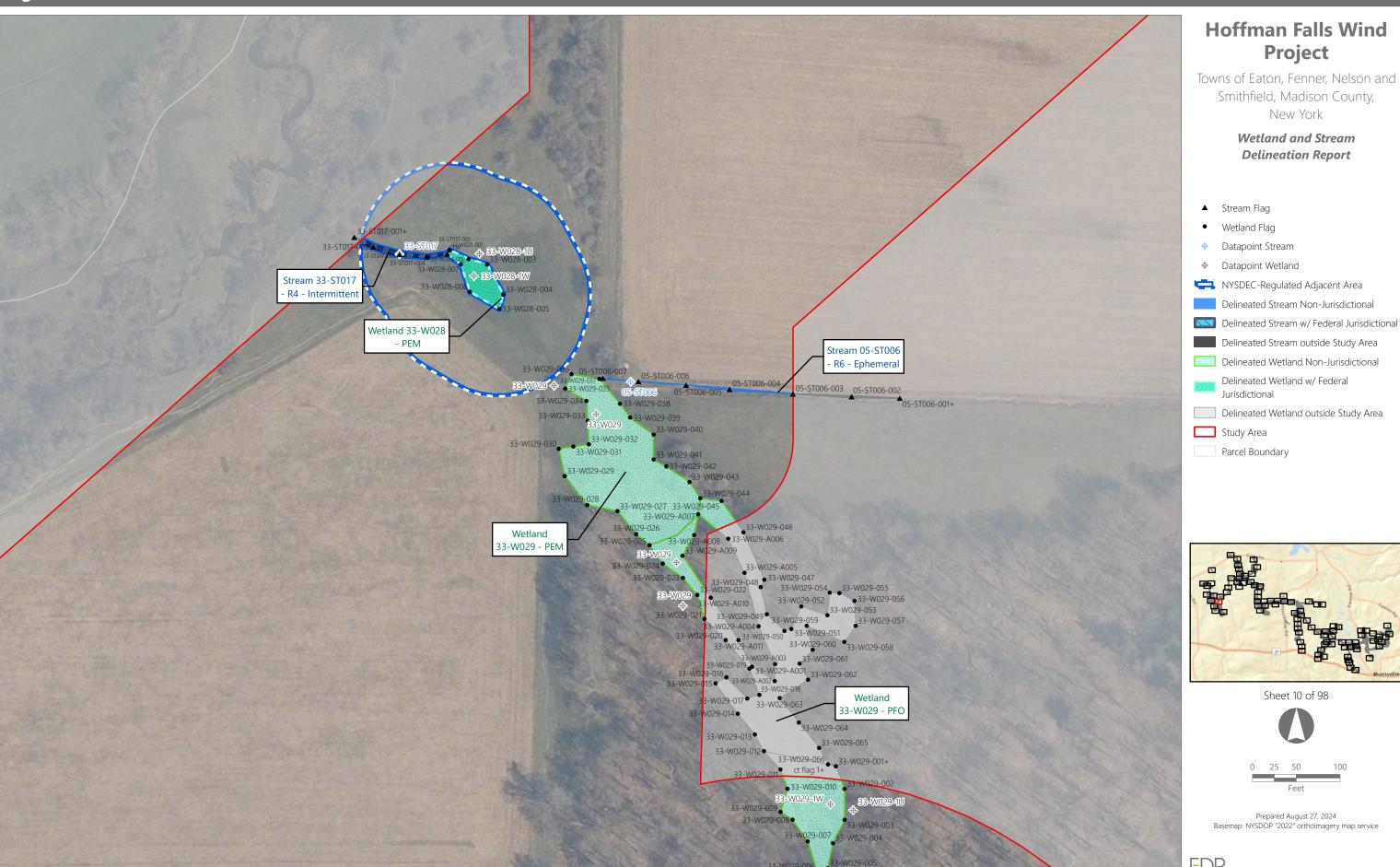
Jurisdictional

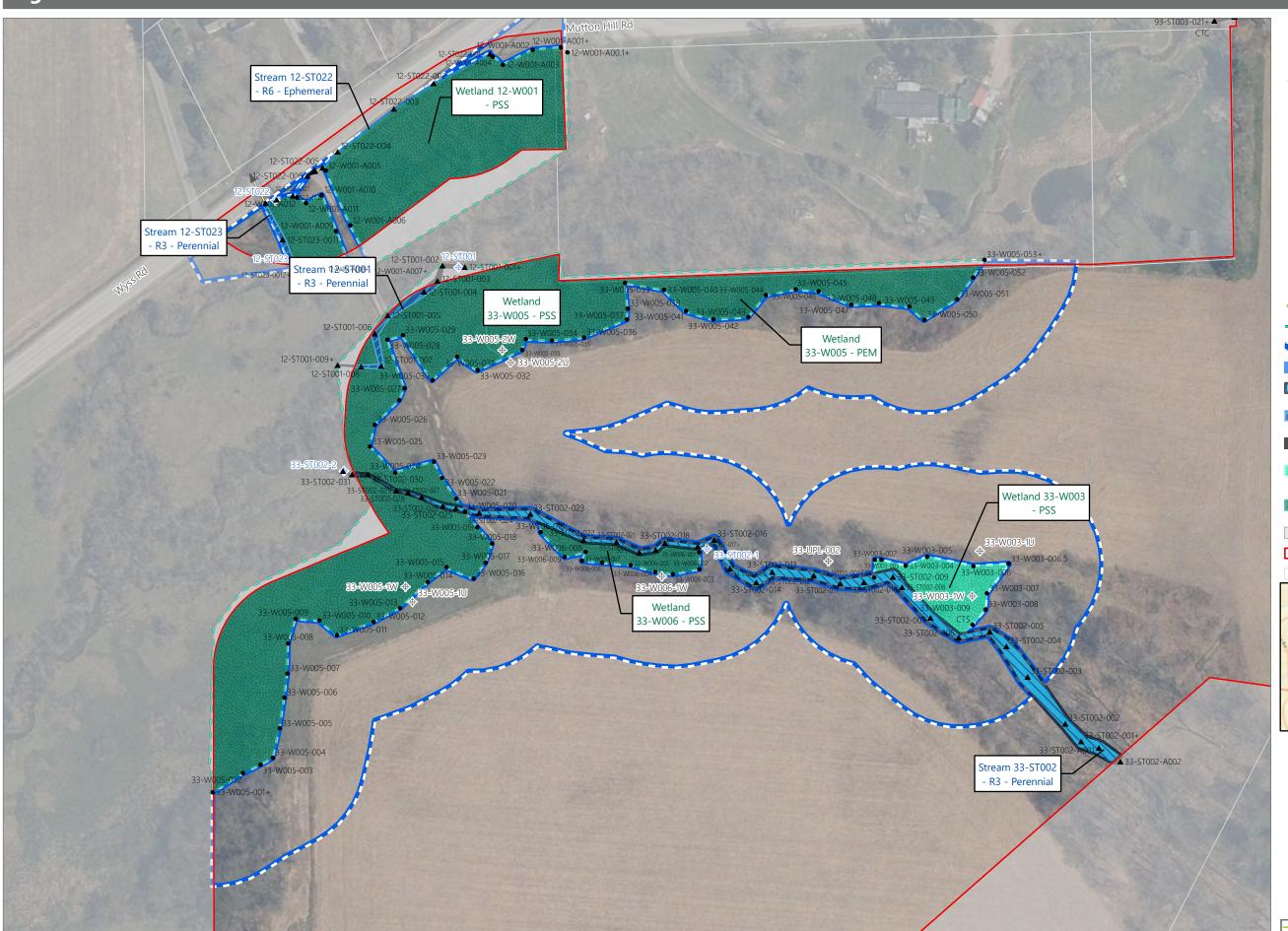
Delineated Wetland w/ Federal

Sheet 10 of 98

Prepared August 27, 2024

Basemap: NYSDOP "2022" orthoimagery map service





Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream Non-Jurisdictional
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream w/ State & Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ Federal Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
 - Parcel Boundary



Sheet 11 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
 - Delineated Stream w/ State & Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

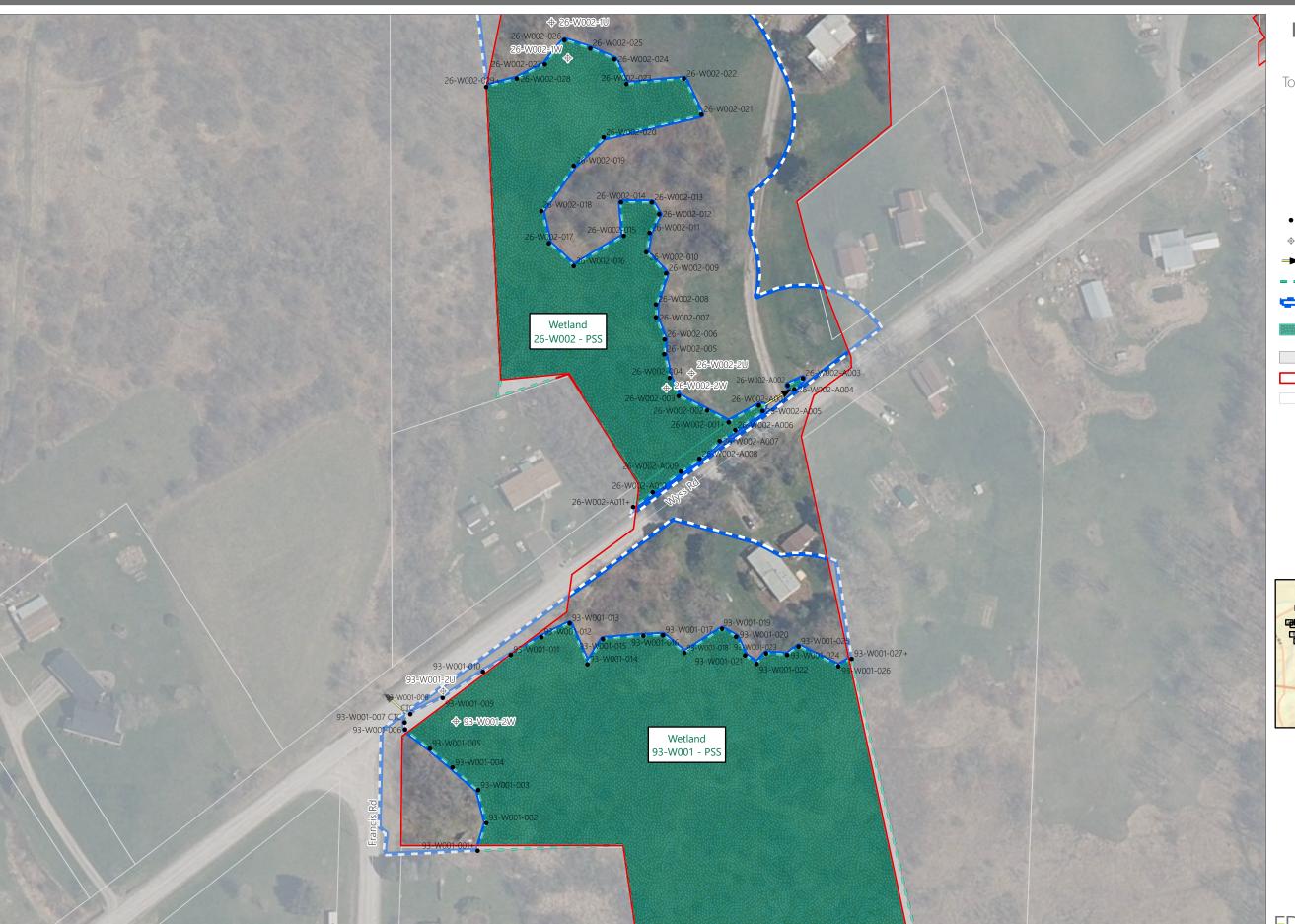


Sheet 12 of 98



0 25 50 100 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

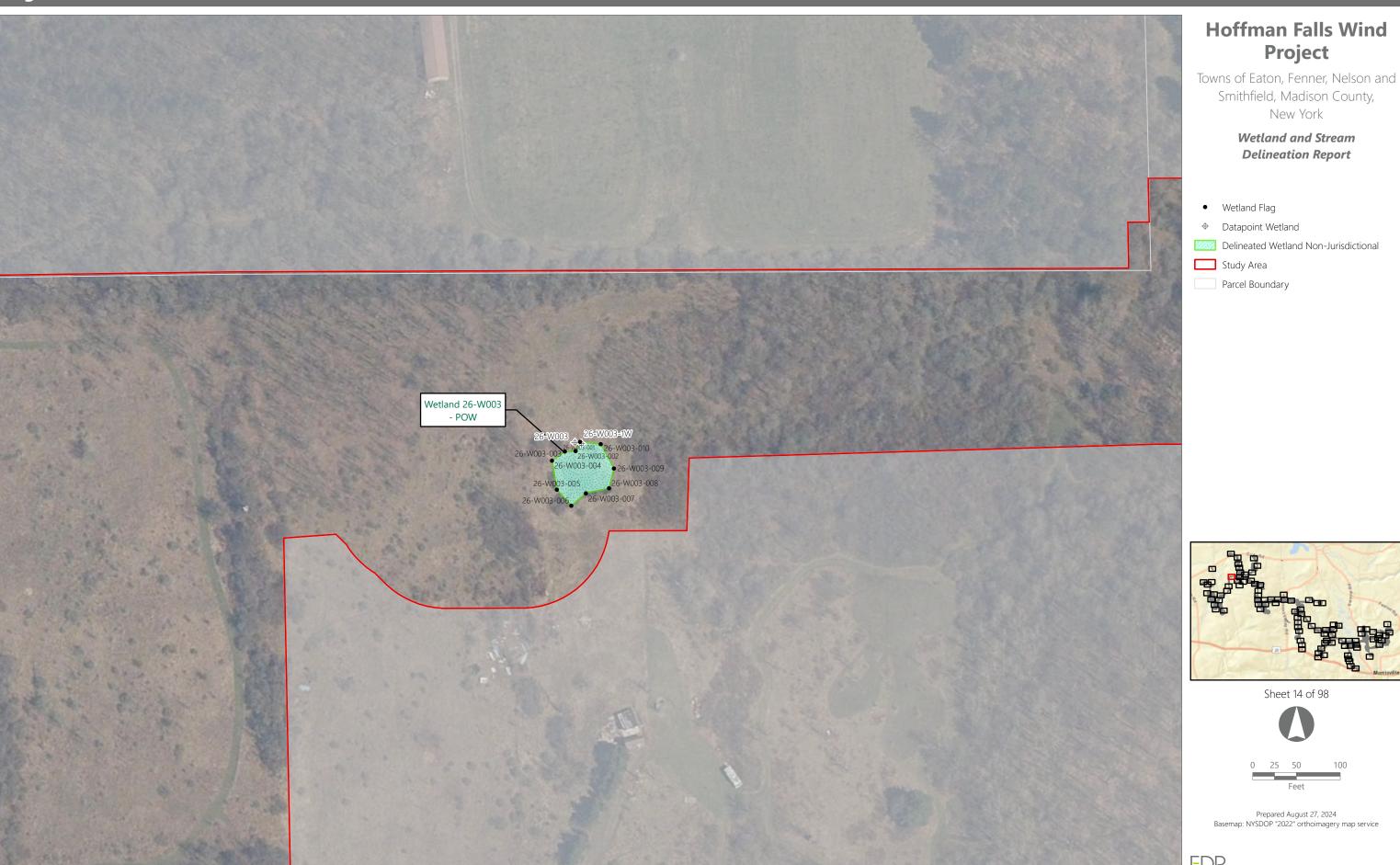


Sheet 13 of 98





Prepared August 27, 2024
Basemap: NYSDOP "2022" orthoimagery map service







Project

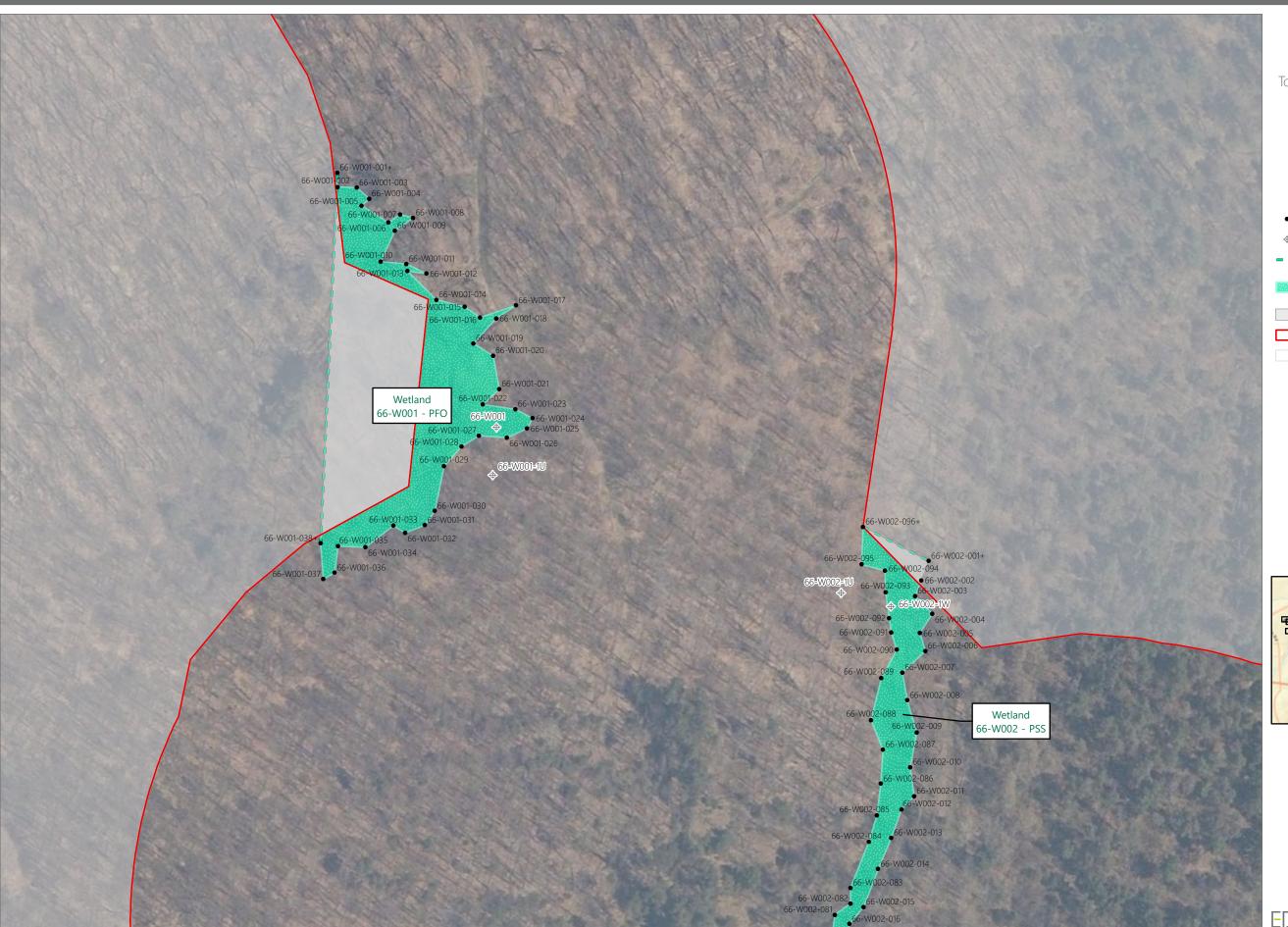
Smithfield, Madison County,

Wetland and Stream Delineation Report

- Delineated Wetland Non-Jurisdictional
 - Delineated Wetland w/ Federal
- Delineated Wetland outside Study Area



Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- Datapoint Wetland
- **–** Wetland Continues
- Delineated Wetland w/ Federal
 Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 17 of 98

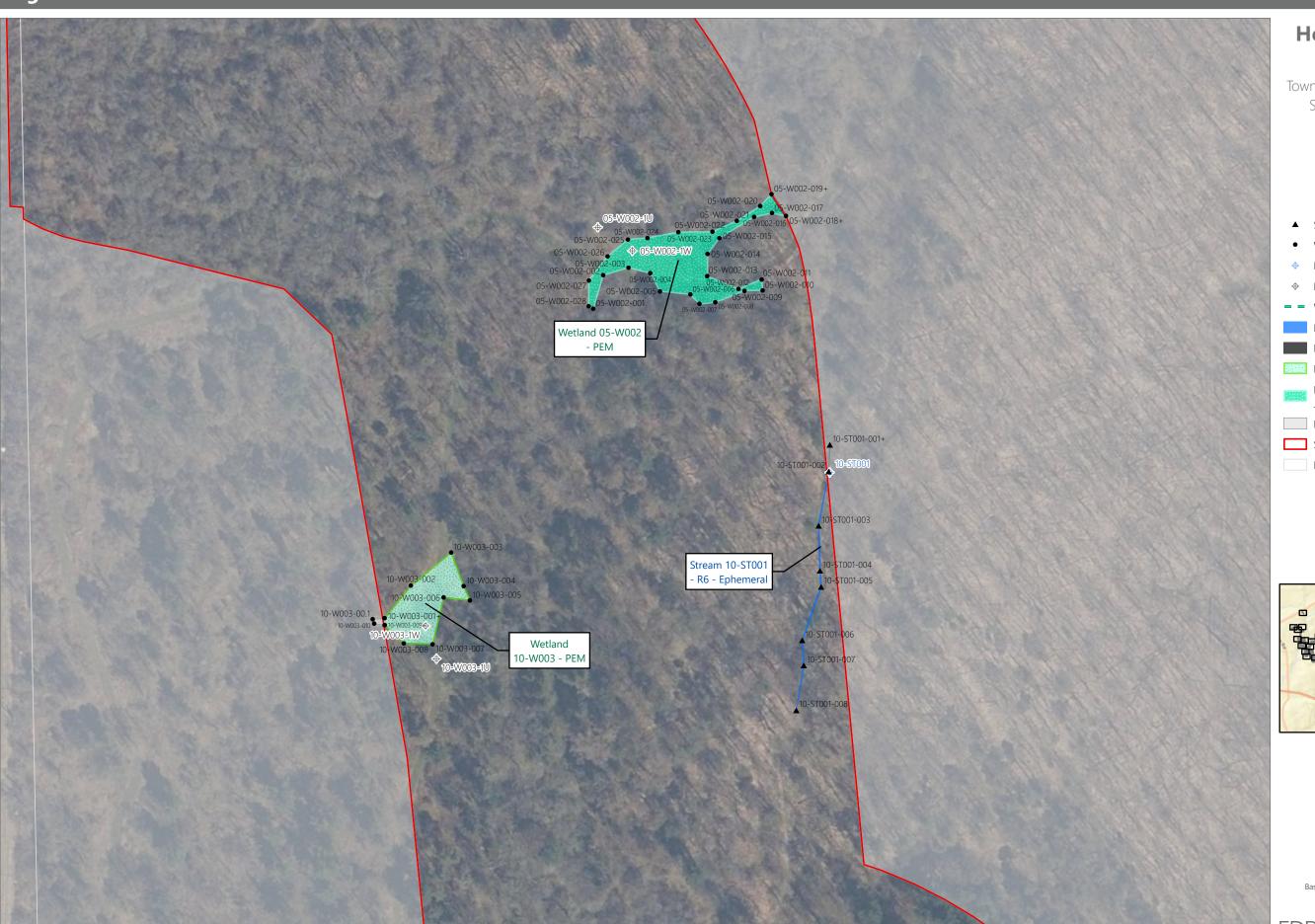


0 25 50 100 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

EDR .





Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Wetland Continues
- Delineated Stream Non-Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland w/ Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

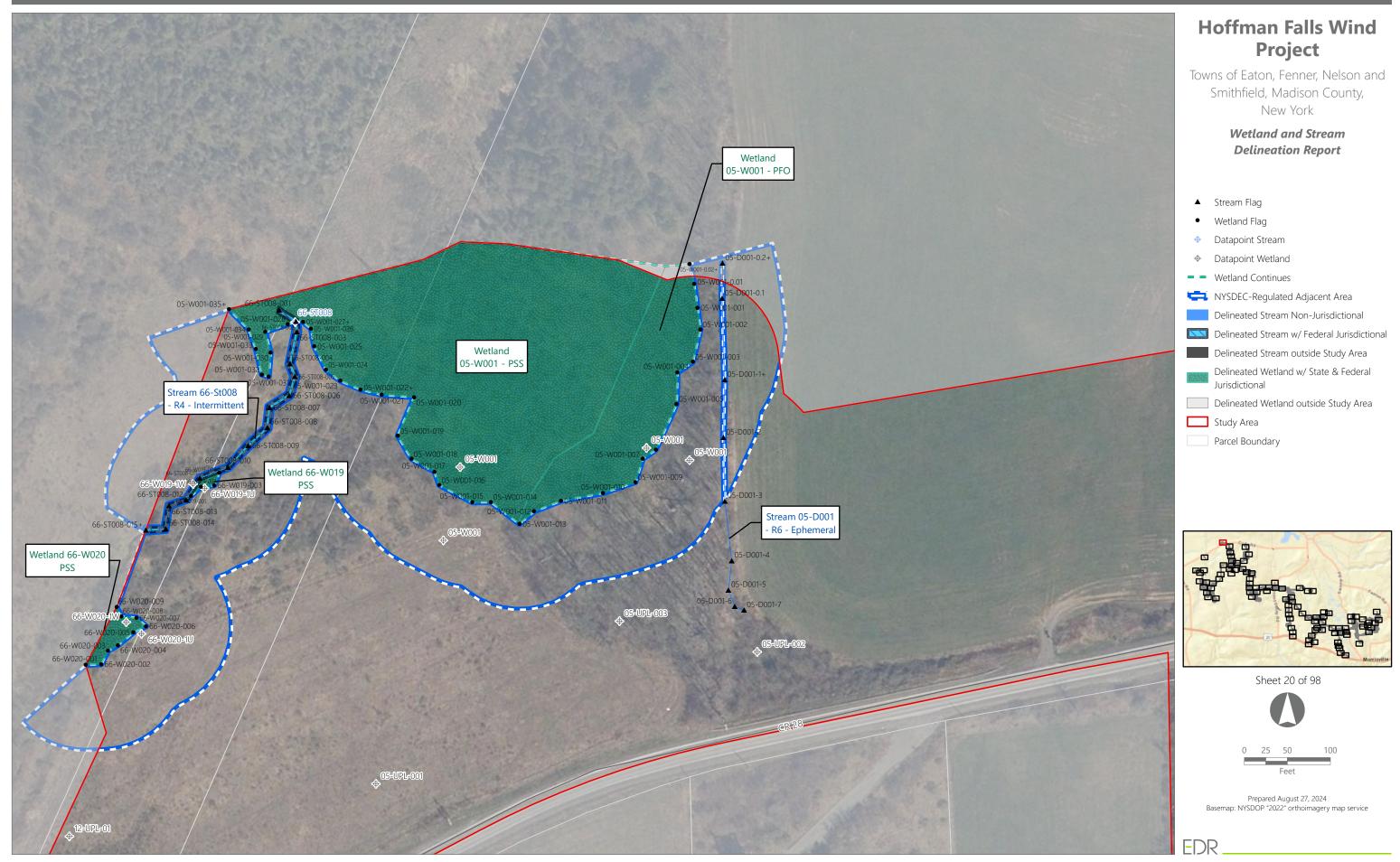


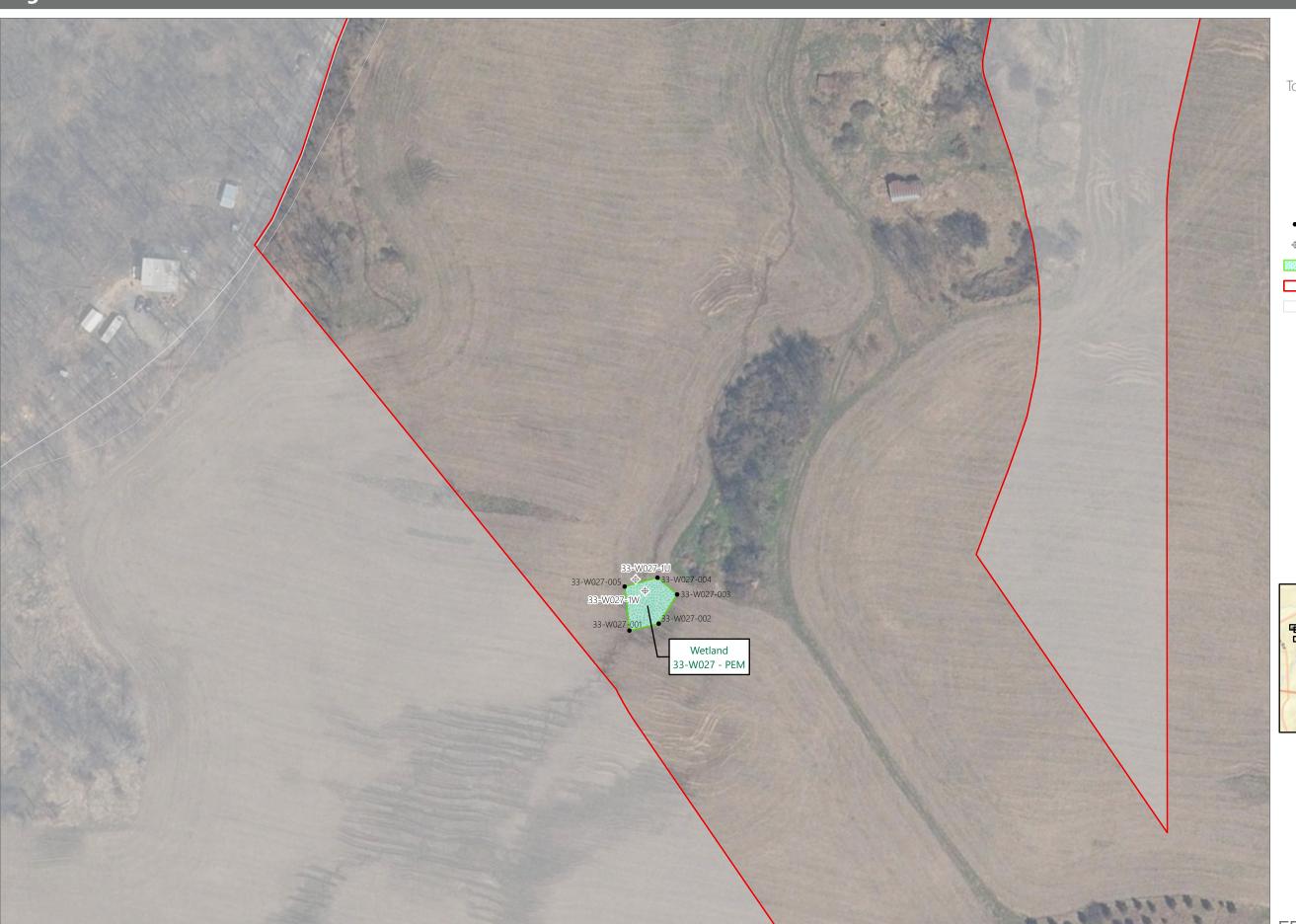
Sheet 19 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service





Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- ◆ Datapoint Wetland
- Delineated Wetland Non-Jurisdictional
- Study Area
- Parcel Boundary

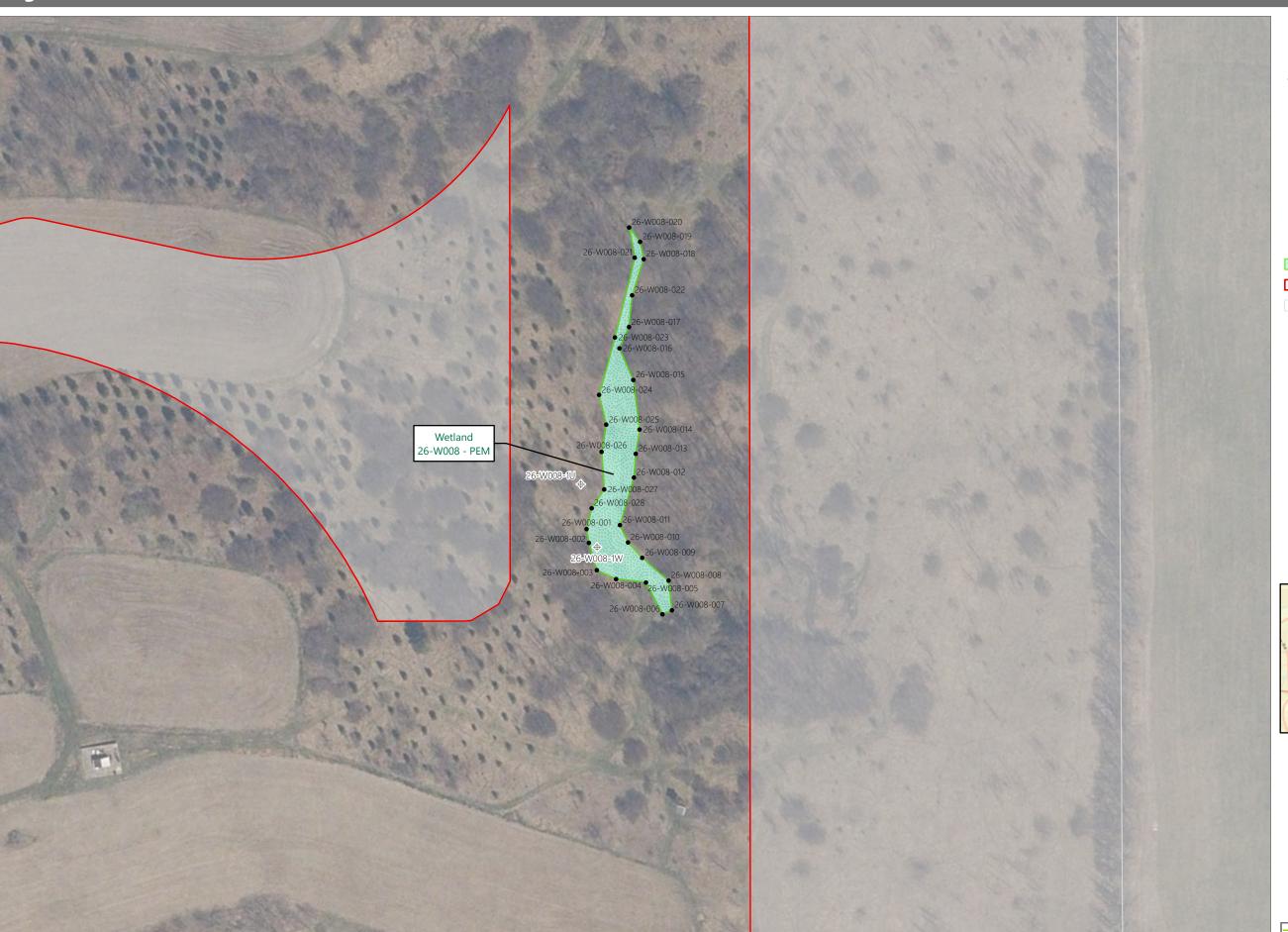


Sheet 21 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- ◆ Datapoint Wetland
- Delineated Wetland Non-Jurisdictional
- Study Area
- Parcel Boundary

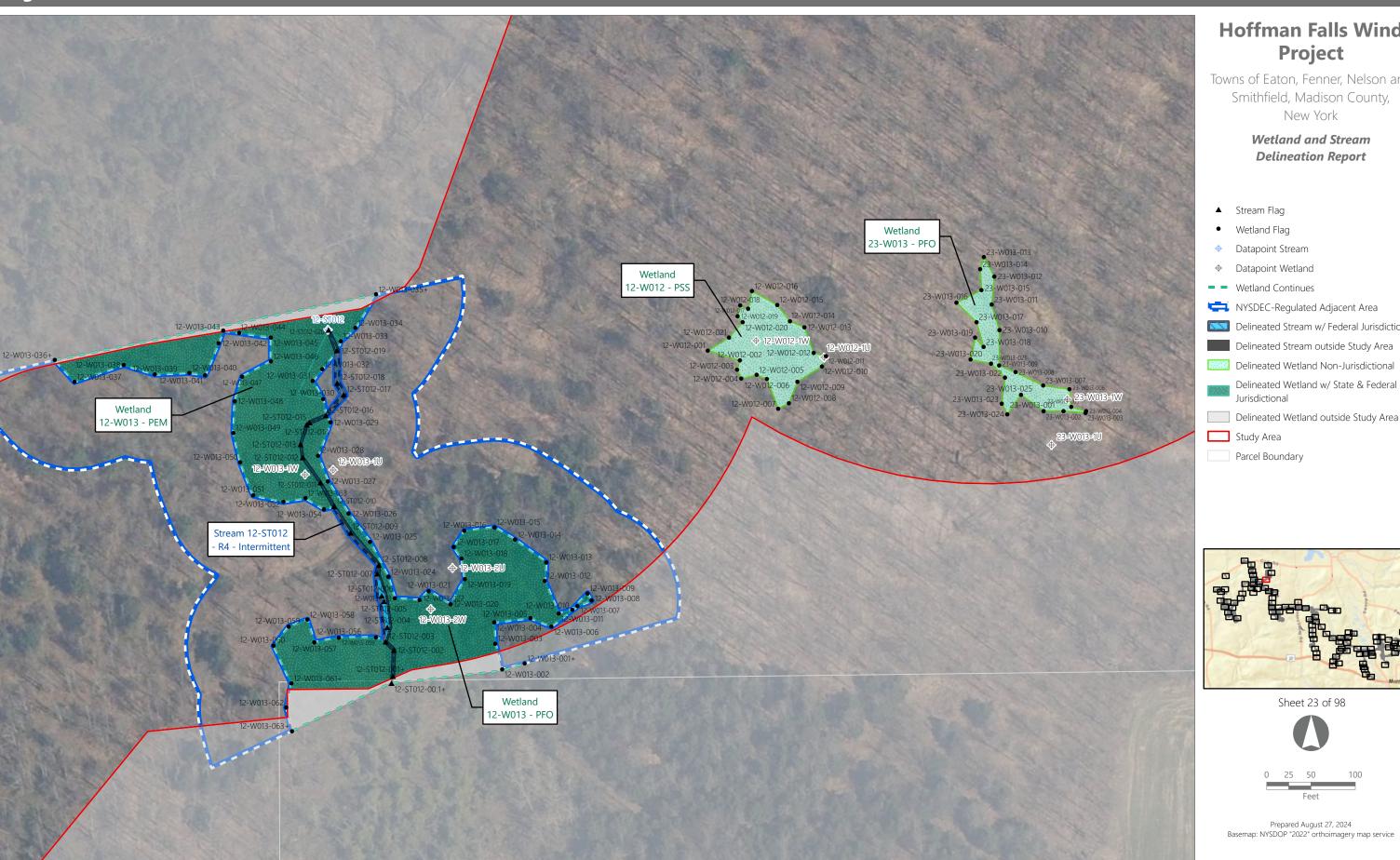


Sheet 22 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

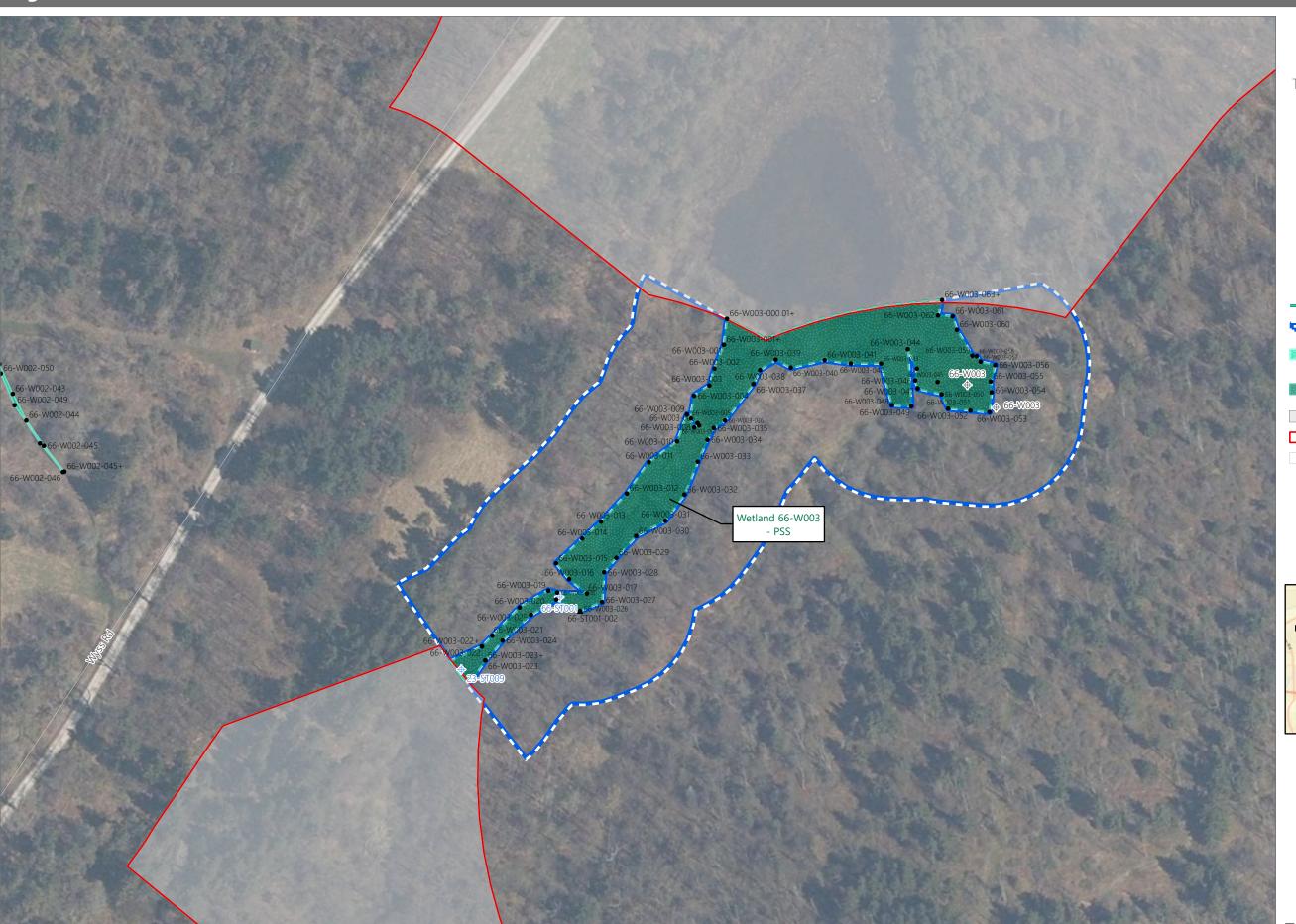
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional



Sheet 23 of 98



Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
 - Delineated Wetland w/ Federal
 Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 24 of 98



0 25 50 10 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

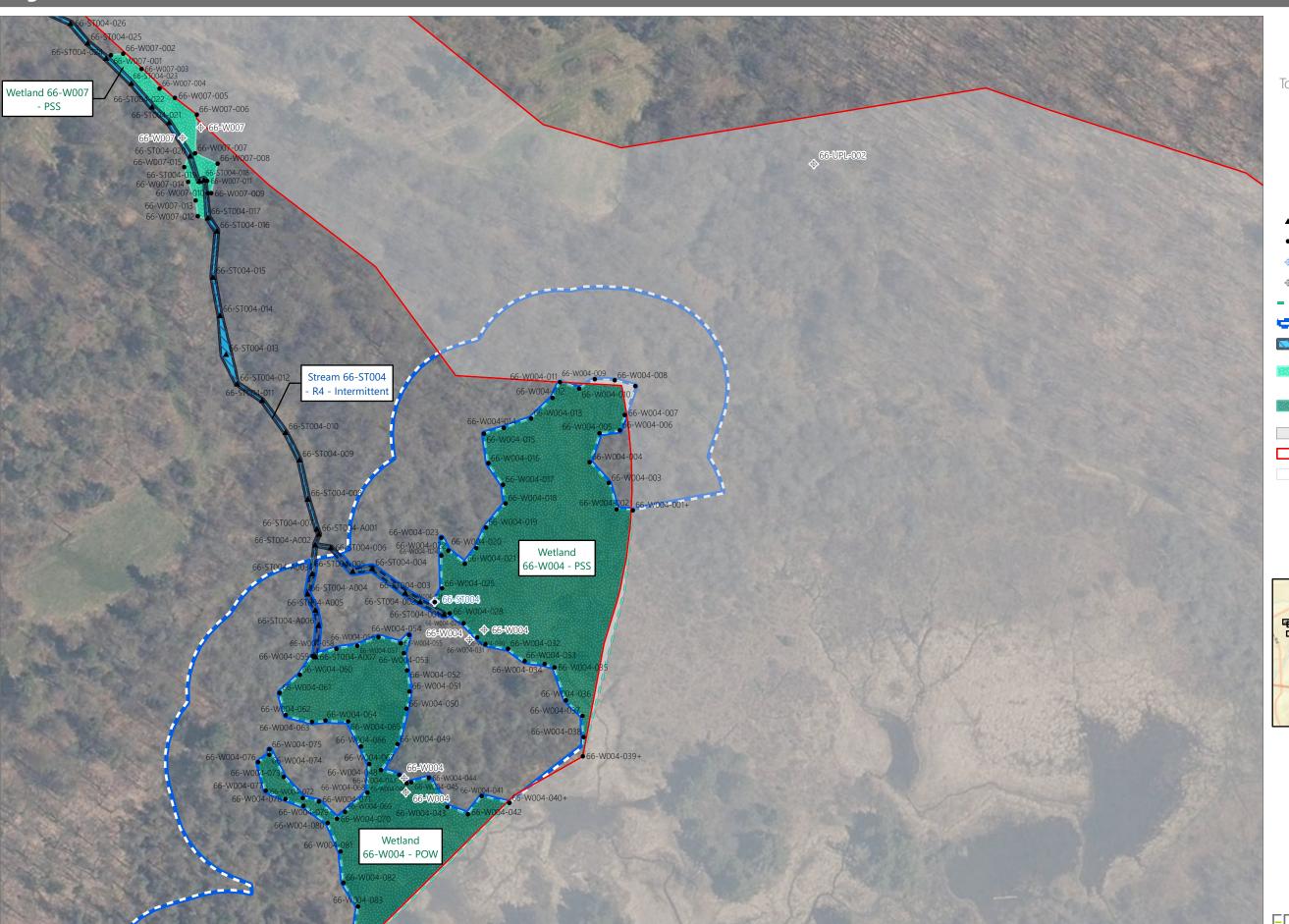
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Wetland Non-Jurisdictional
 - Delineated Wetland w/ Federal
- Delineated Wetland outside Study Area



Sheet 25 of 98



Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- Datapoint Wetland
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Wetland w/ Federal Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



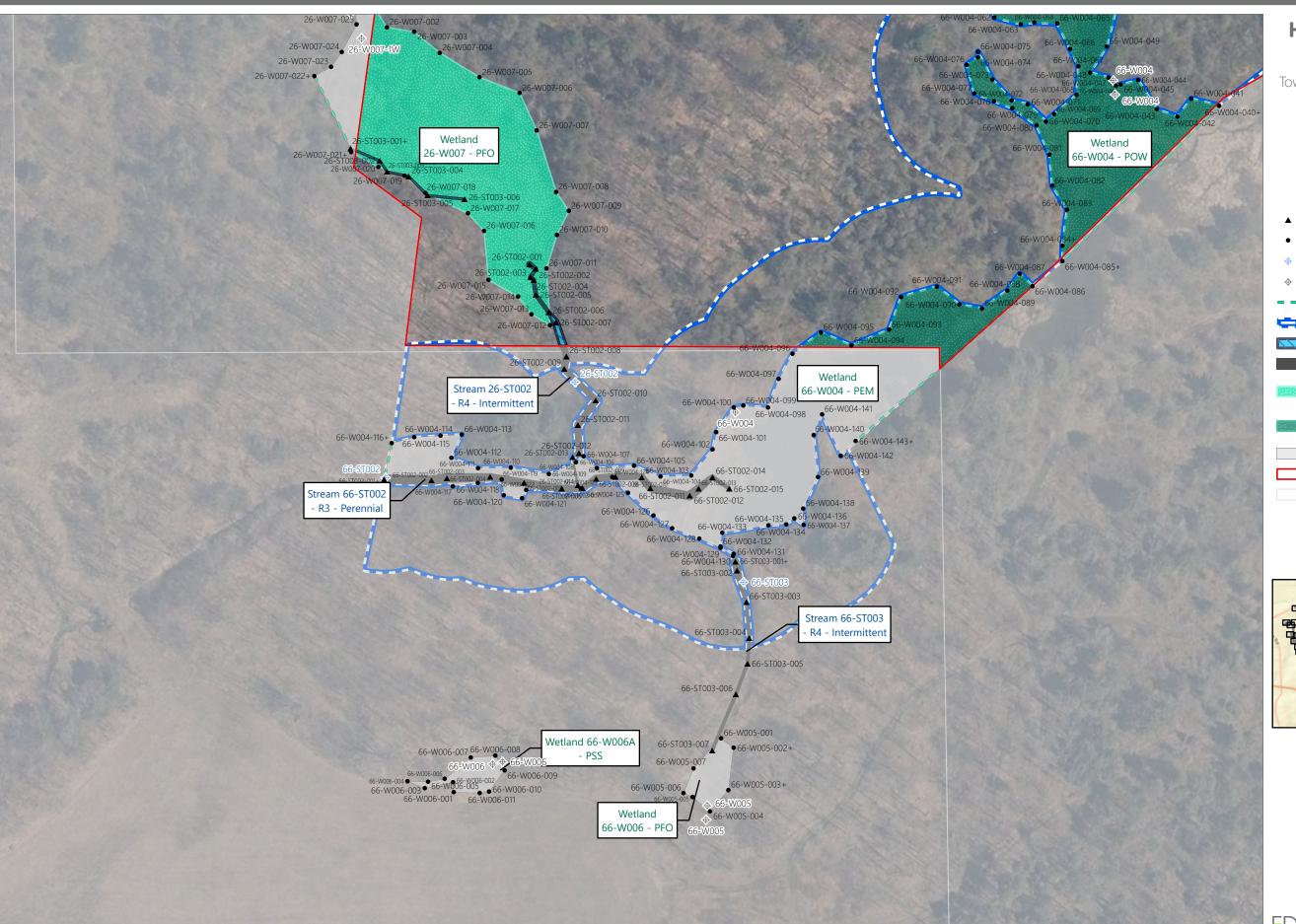
Sheet 26 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

Figure 7. Delineated Wetlands and Streams



Hoffman Falls Wind Project

Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- Datapoint Wetland
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ Federal
 Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

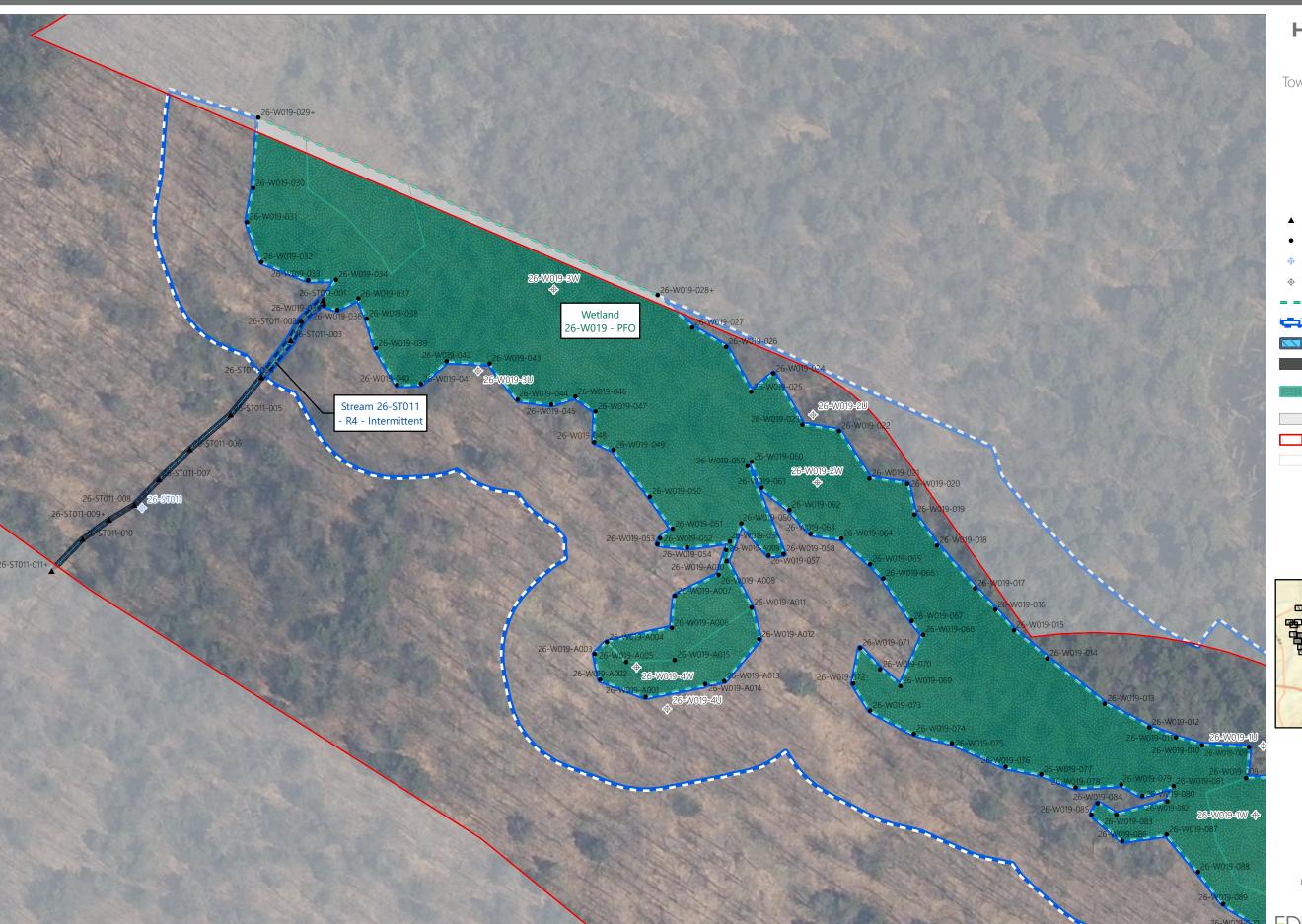


Sheet 27 of 98





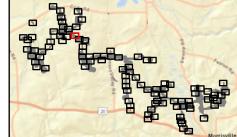
Prepared August 27, 2024
Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

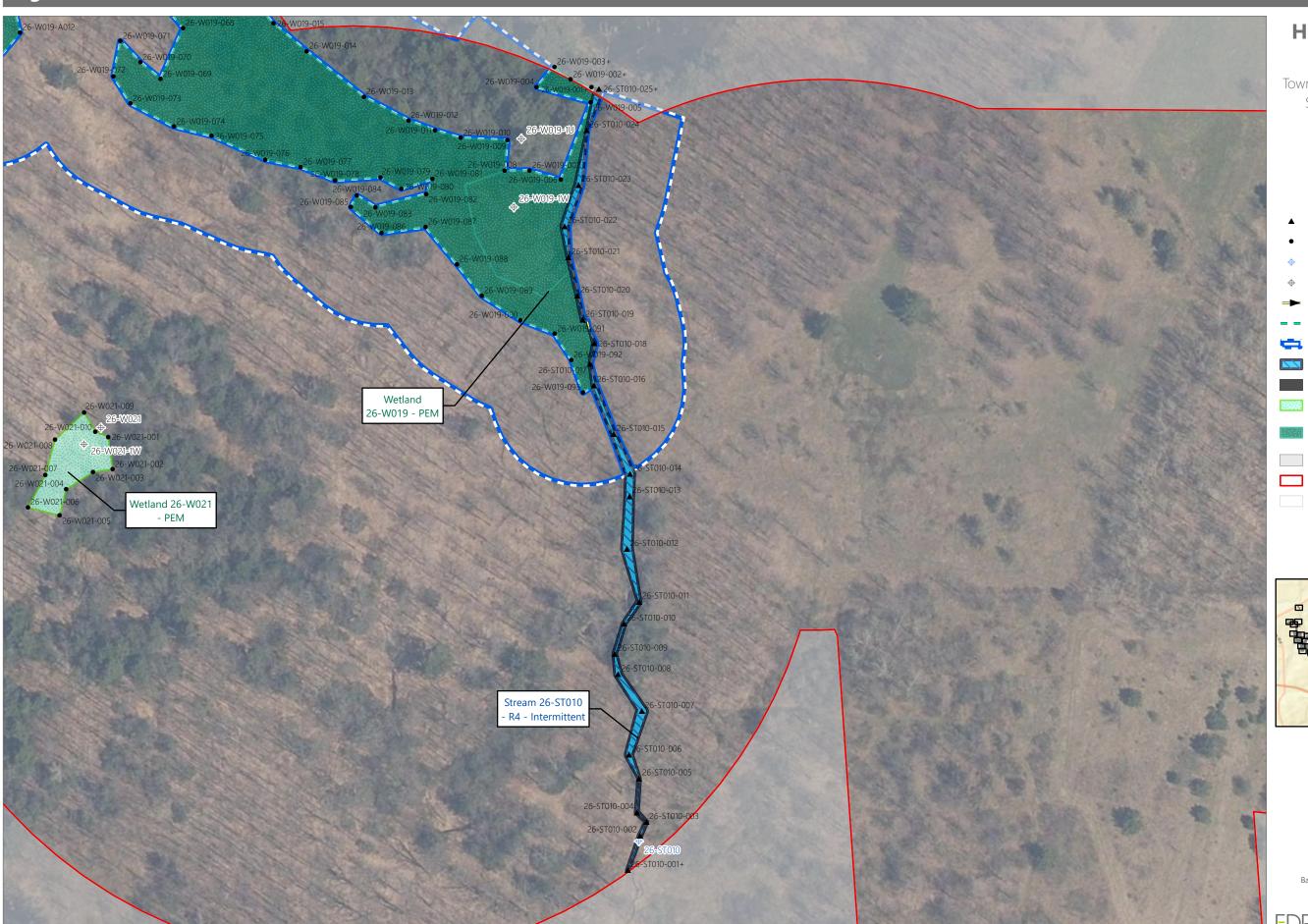


Sheet 28 of 98



0 25 50 10

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

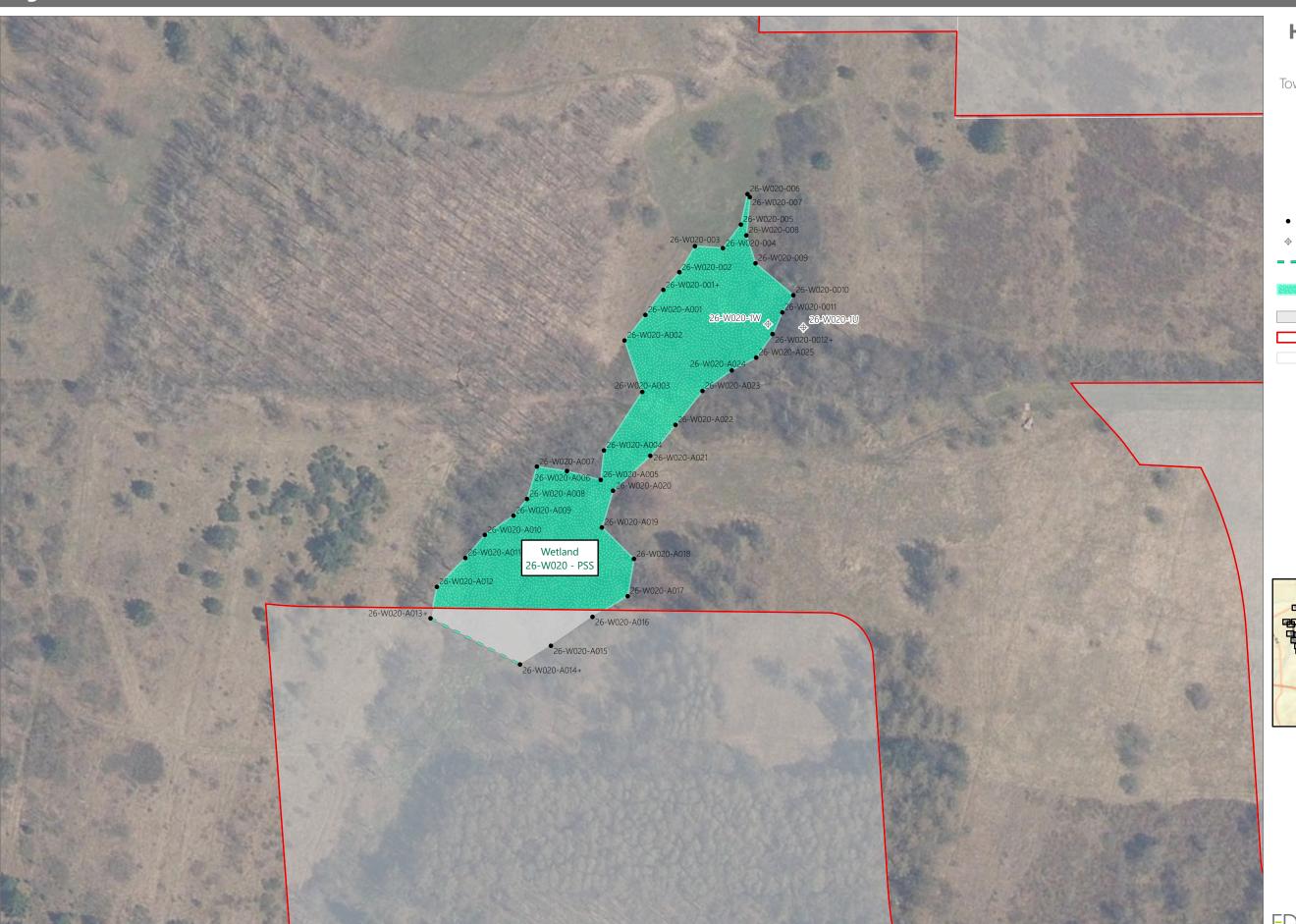


Sheet 29 of 98



0 25 50 10

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Wetland Flag
- Datapoint Wetland
- Wetland Continues
- Delineated Wetland w/ Federal
 Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary

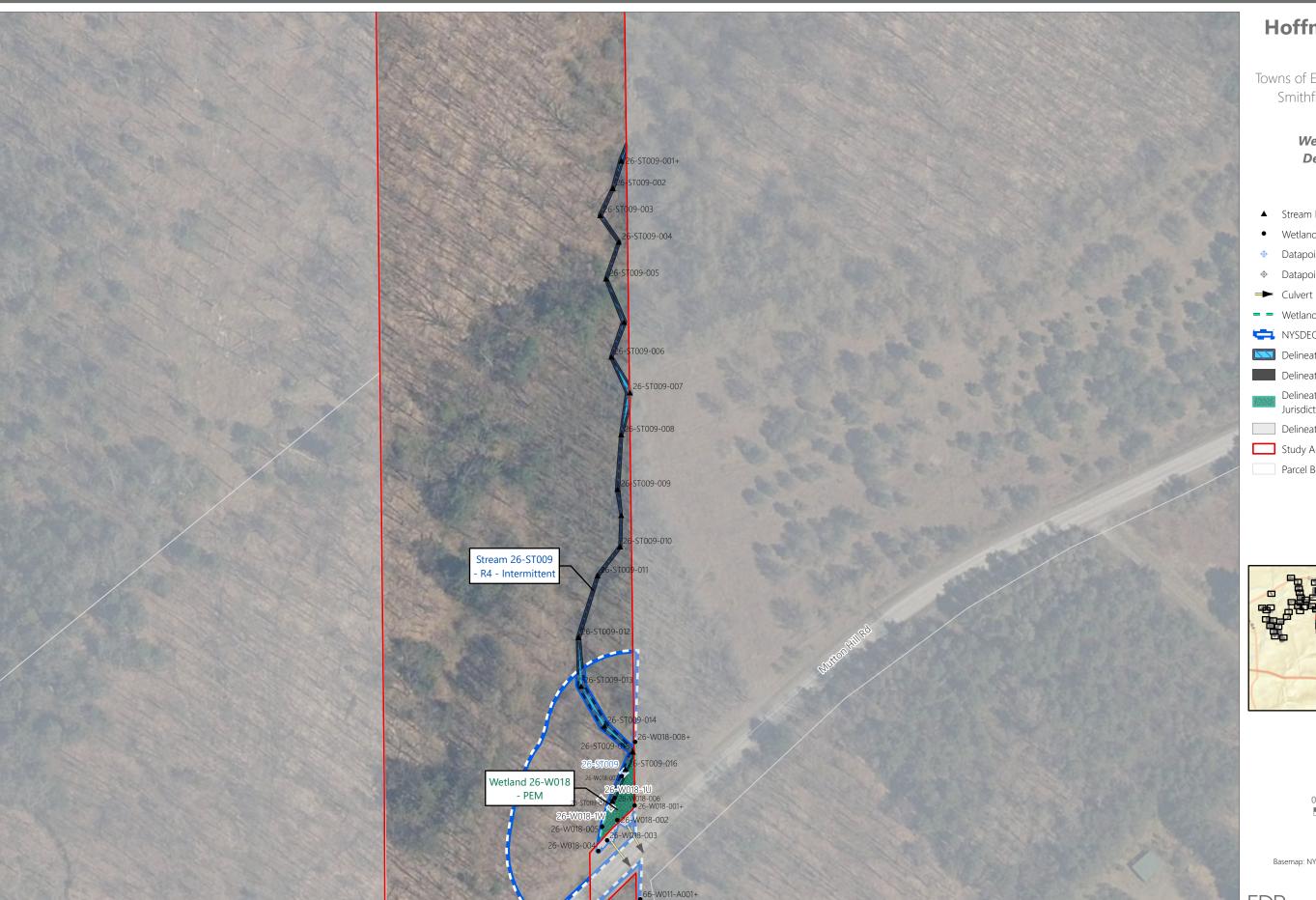


Sheet 30 of 98



0 25 50 100 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

> **Wetland and Stream Delineation Report**

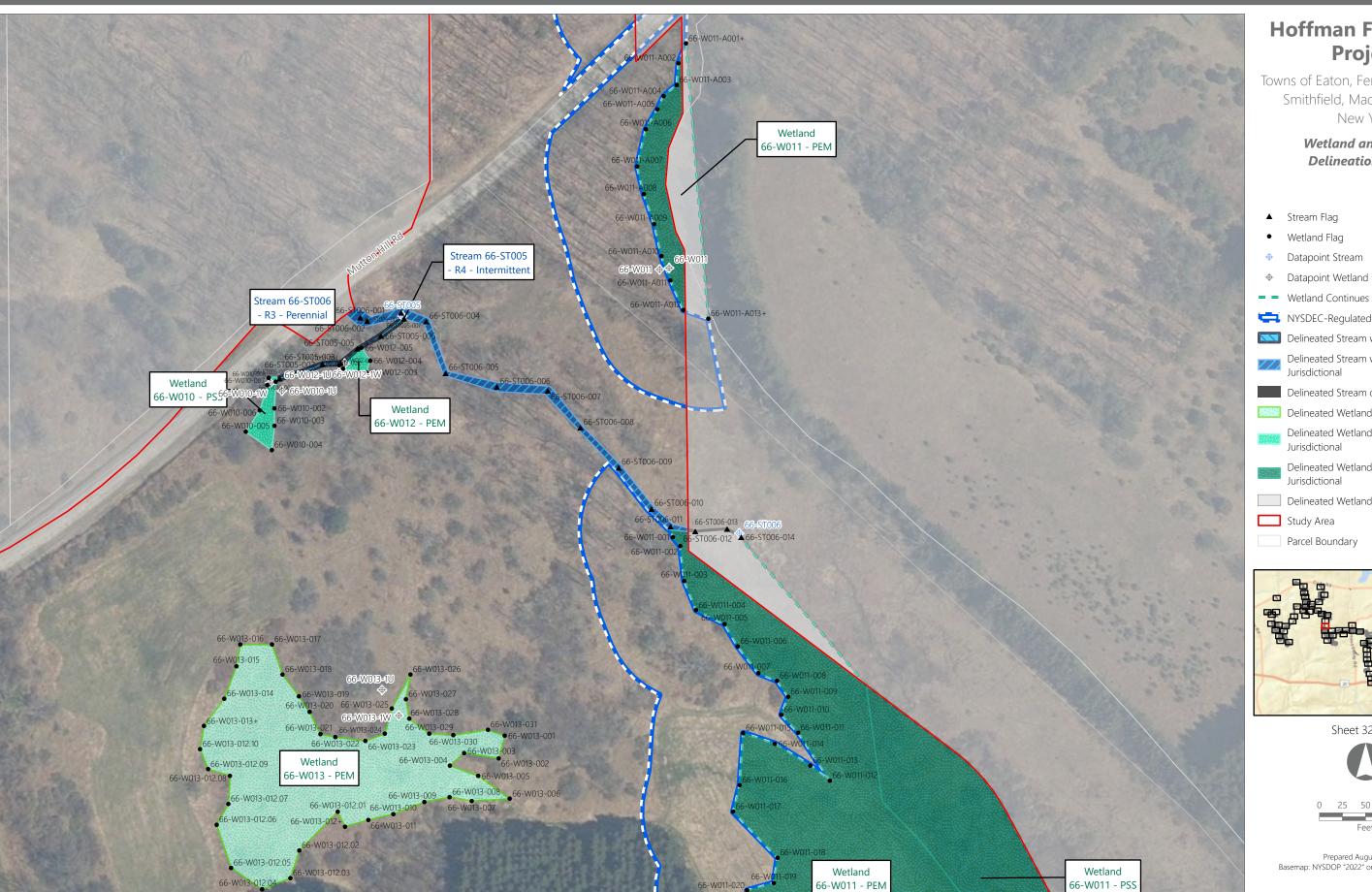
- ▲ Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- **-** Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 31 of 98



Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream **Delineation Report**

- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream w/ State & Federal
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland w/ Federal
- Delineated Wetland w/ State & Federal
- Delineated Wetland outside Study Area

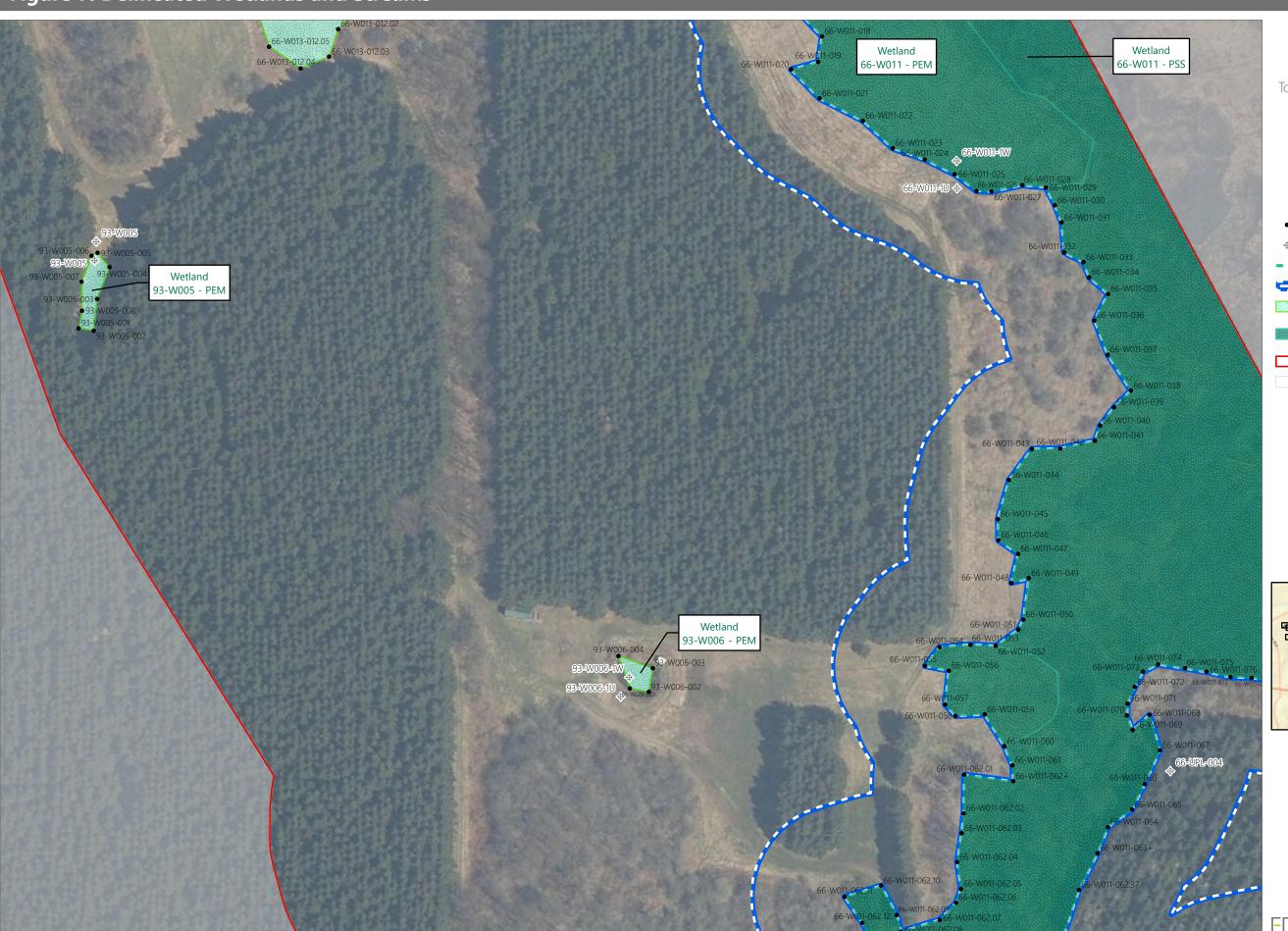


Sheet 32 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- Wetland Flag
- ◆ Datapoint Wetland
- **–** Wetland Continues
- NYSDEC-Regulated Adjacent Area
- Delineated Wetland Non-Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Study Area
- Parcel Boundary



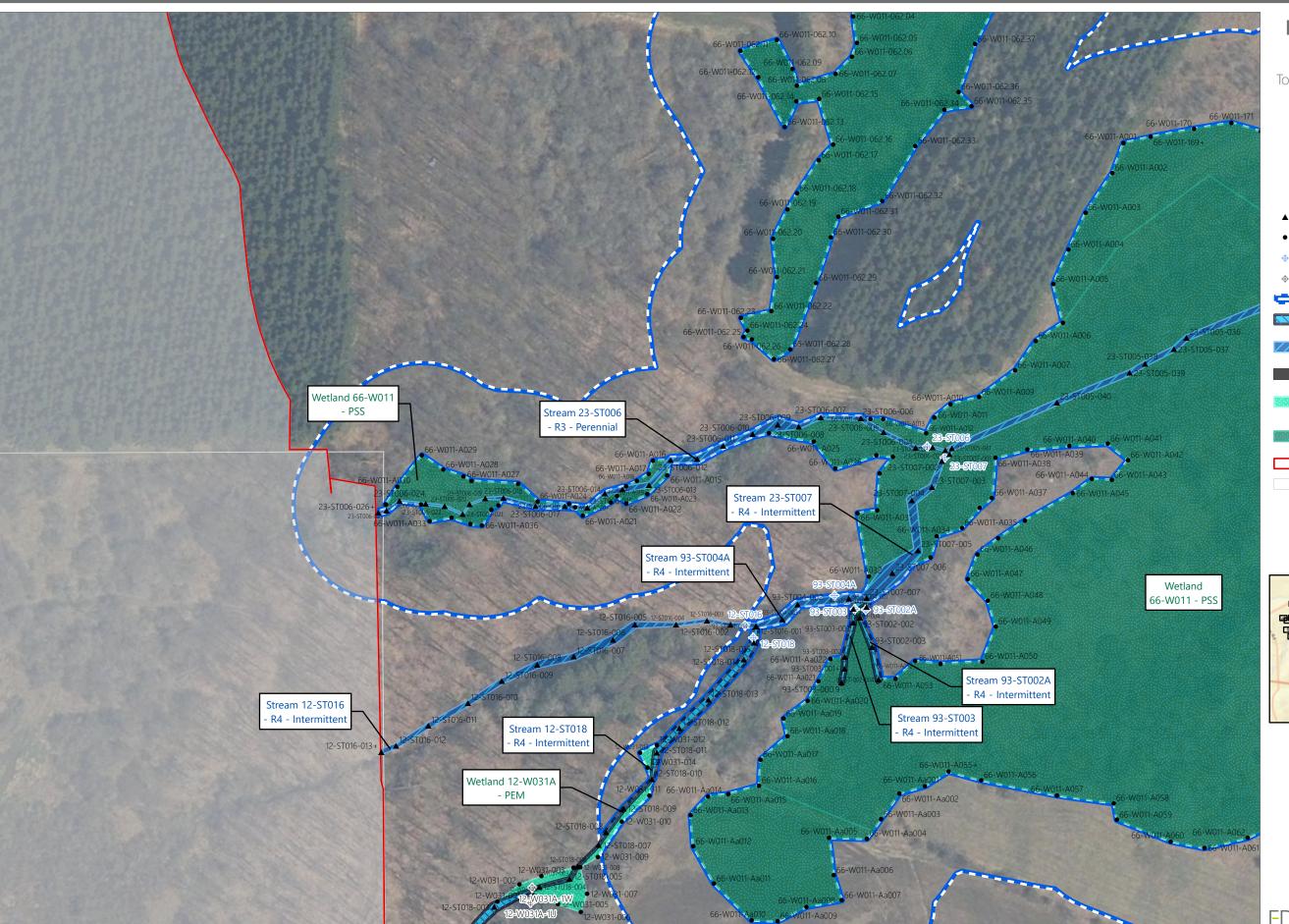
Sheet 33 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

EDR .



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- NYSDEC-Regulated Adjacent Area
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream w/ State & Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ Federal
 Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Study Area
- Parcel Boundary

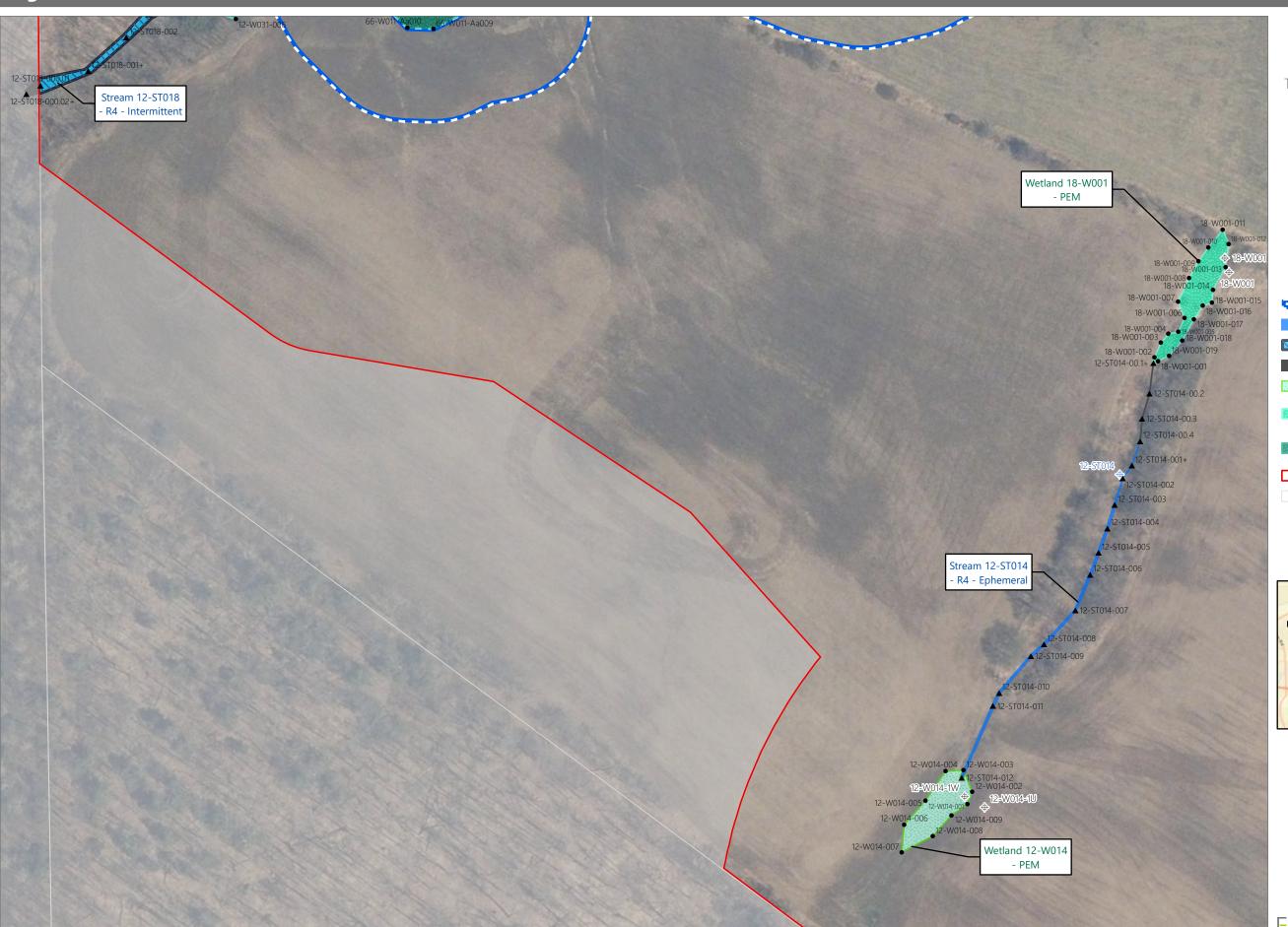


Sheet 34 of 98



0 25 50 10 Feet

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service



Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream Delineation Report

- Stream Flag
- Wetland Flag
- Datapoint Stream
- Datapoint Wetland
- NYSDEC-Regulated Adjacent Area
- Delineated Stream Non-Jurisdictional
- Delineated Stream w/ Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland Non-Jurisdictional
 Delineated Wetland w/ Federal
- Jurisdictional
- Delineated Wetland w/ State & Federal Jurisdictional
- Study Area
- Parcel Boundary



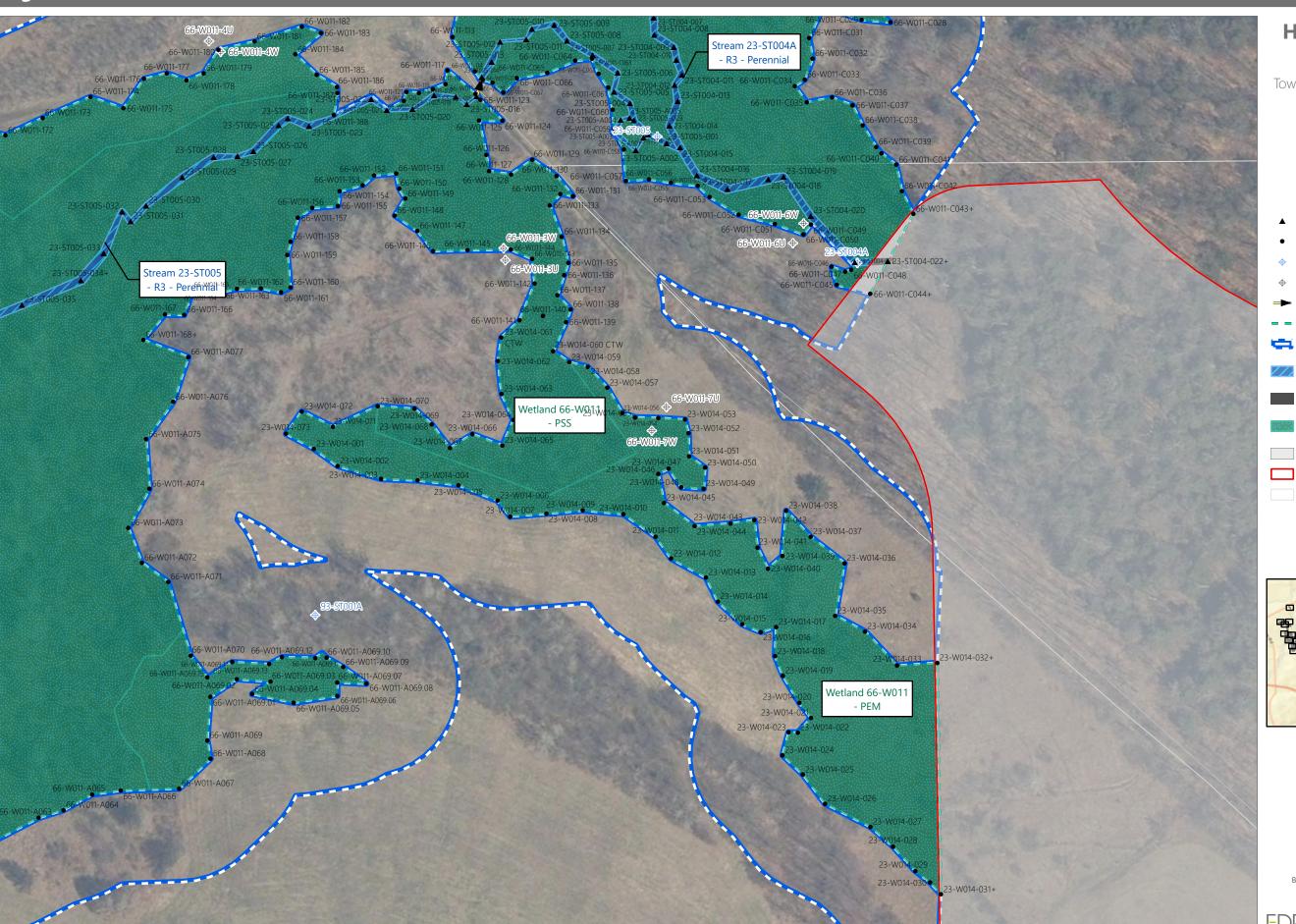
Sheet 35 of 98





Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service

Figure 7. Delineated Wetlands and Streams



Hoffman Falls Wind Project

Towns of Eaton, Fenner, Nelson and Smithfield, Madison County, New York

Wetland and Stream
Delineation Report

- Stream Flag
- Wetland Flag
- Datapoint Stream
- ◆ Datapoint Wetland
- Culvert
- Wetland Continues
- NYSDEC-Regulated Adjacent Area
 - Delineated Stream w/ State & Federal Jurisdictional
- Delineated Stream outside Study Area
- Delineated Wetland w/ State & Federal Jurisdictional
- Delineated Wetland outside Study Area
- Study Area
- Parcel Boundary



Sheet 36 of 98



0 25 50 10

Prepared August 27, 2024 Basemap: NYSDOP "2022" orthoimagery map service