Appendix 14-2

Wetland Functions and Values Assessment



Highest standards





BROOKSIDE SOLAR, LLC

Matter No. 21-00917

Towns of Burke and Chateaugay Franklin County, NY

Appendix 14-2

Wetland Functions and Values

Assessment

February 2022

TABLE OF CONTENTS

1.0	INTR	ODUCTION AND PURPOSE	1
2.0	ASSI	ESSMENT METHODOLOGY	2
3.0	WET	LAND FUNCTIONS	4
4.0	WET	LAND VALUES	6
5.0	RES	ULTS	7
	5.1	Groundwater Recharge/Discharge	
	5.2	Flood-flow Alteration	
	5.3	Fish and Shellfish Habitat	7
	5.4	Sediment/Toxicant/Pathogen Retention	8
	5.5	Nutrient Removal/Retention/Transformation	
	5.6	Production Export	9
	5.7	Sediment/Shoreline Stabilization	9
	5.8	Wildlife Habitat	9
	5.9	Recreation	
	5.10	Educational/Scientific Value	10
	5.11	Uniqueness/Heritage	10
	5.12	Visual Quality/Aesthetics	
	5.13	Threatened or Endangered Species Habitat	10
6.0	CON	CLUSIONS	21
7.0	REF	ERENCES	22
Table	es		
		lifier Assignment Table	
Table	2. Fun	ctions and Values of Delineated Wetlands	12

Attachments

Attachment A. Wetland Functions and Values Forms



1.0 Introduction and Purpose

TRC has prepared this assessment report on behalf of Brookside Solar, LLC, a wholly owned, indirect subsidiary of The AES Corporation, Inc. (AES). The report provides a functions and values assessment of the freshwater wetland resources currently present on the 1,280-acre Wetland Survey Area within the Towns of Chateaugay and Burke, Franklin County, New York. This assessment provides a pre-construction baseline for wetlands onsite that may or may not be impacted by construction and/or operation of a proposed 100-megawatt (MW) solar-powered wholesale energy-generating facility with associated infrastructure (the Facility).

Wetlands that are deemed Waters of the United States (WOTUS) are regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act of 1972 (CWA). Originating in 1987, *The Highway Methodology Workbook* (the Workbook), was created by the USACE New England District to integrate highway planning, design, and development with the requirements of USACE permit regulations, the National Environmental Policy Act (NEPA), and the Federal Highway Administration (FHWA) funding approvals (USACE, 1993). A memorandum of agreement between the Environmental Protection Agency (EPA) and USACE, dated February 7, 1990, was appended to the Workbook, recognizing a stepwise process of avoidance, minimization, and compensation of adverse impacts to an established set of wetland functions and values. Subsequently, *Wetlands Functions and Values: A Descriptive Approach* was created by the USACE New England District as a supplement to the Workbook (the Supplement). Within the Supplement, a "Descriptive Approach" is presented as a method that any project, outside the scope of highway development, could adopt to characterize wetland resources necessary for Section 404 permit requirements.

Efforts to use best professional judgment to interpret functions and values are often unorganized, unpredictable, and legally difficult to defend and document (USACE, 1999). In response, the USACE developed a format in the Supplement to collect and display this information, and to describe the functions and values assessment of wetlands in a measurable and un-biased perspective.

In contrast, New York State does not yet have its own wetland functional assessment methodology intended to aid in a regulatory review of Facility impacts. Nor does New York State endorse any specific methodology. However, a survey of New York State Department of Environmental Conservation (NYSDEC) wetland biologists revealed the USACE Highway Methodology to be the most commonly used wetland functional assessment technique for

projects requiring NYSDEC permits (Bliss, 2016). Importantly, the functions and values reviewed by the Supplement are compatible with the wetland benefits outlined in the Environmental Conservation Law at Article 24, the Freshwater Wetlands Act. For these reasons, TRC elects to rely heavily upon the USACE Highway Methodology outlined in the Supplement as a means of providing a wetlands functions and values assessment.

Brookside Solar, LLC contracted TRC to survey, identify, and document all wetlands within the Wetland Survey Area. Within the 1,280-acre Wetland Survey Area, TRC delineated 38 freshwater wetlands, totaling approximately 72 acres. This Assessment is intended to aid in determining the wetland functions and values that may be impacted and/or altered due to the Facility's construction and operation.

The functions and values of wetlands are the roles that a wetland provides to its surrounding environment, often to the benefit of human society. Functions and values are a result of specific biological, chemical, and physical characteristics within the wetland, and many complex relationships between the wetland and its watershed, local environment, and inhabitants and dependents, including the public. This wetland functions and values assessment is used to document wetland features based on their presence and level of significance relative to providing these many roles. Further review of the functions and values attributed to each wetland allows for an assessment of which ones may be regarded as principal, or more relevant, to a given wetland. Doing so helps to ensure that wetlands receive proper protection through well-planned wetland impact avoidance, minimization, and mitigation.

The 13 functions and values that are considered by the USACE Supplement are described below in Sections 3.0 and 4.0. The list includes eight functions and five values.

As noted above, these functions and values equate well to the benefits of concern within the applicable New York State Environmental Conservation Law. These functions and values, together with the working suite of USACE Supplement descriptors, have been used to provide an objective representation of the wetland resources associated with the Facility.

2.0 Assessment Methodology

This wetland functions and values assessment was developed based on the *Wetlands*Functions and Values: A Descriptive Approach, described in the supplement to The Highway

Methodology Workbook by the New England Division of the USACE (1999). This method



incorporates wetland science and best professional judgement in data collection toward a qualitative description of the physical and biological characteristics of the wetlands. In so doing, it identifies the functions and values exhibited and, very importantly, the bases for associated conclusions. The approach addresses the limitations of wetland assessments based on numerical weightings, rankings, and/or averaging of dissimilar wetland functions (USACE, 1999). As part of this method, the evaluator accounted for many predetermined "Qualifiers" that are used as indicators or descriptors of functions and values. Based on the descriptions of qualifiers outlined in the Supplement, TRC developed a spreadsheet (Table 1 below) that displays these qualifiers. When attributed to a wetland, these qualifiers help to identify the functions and values thought to be provided by the wetland. Considerations included observed vegetation conditions, hydrologic conditions, size, adjacent area conditions, and the availability of public access, among several other documented characteristics documented either in the field or remotely, which are strategically defined to allow each wetland's functions and values to be evaluated.

Functions and values were evaluated for all wetlands onsite during the 2020 and 2021 growing season. Data on qualifiers of functions and values were documented at each wetland where vegetation, soils, hydrological data, location, and geographic nature were also collected as part of a formal delineation. The 38 wetlands delineated within the Wetland Survey Area were entered into Table 2 below, along with the various wetland qualifiers identified if and as applicable to each wetland. This accounting of observed qualifiers was cross-referenced to the predetermined Qualifier Assignment Table (Table 1). The functions and values provided by each wetland were thus determined based on the predetermined qualifiers observed in the field or ascertained remotely. From these, Principal Functions and Values were selected and recorded as evidenced by volume, perceived strength, and significance of associated qualifiers.

Wetlands functions and values recognized under Article 24 of the Environmental Conservation Law and Regulations are similar to those described by the Supplement. The functions and values as outlined in the Freshwater Wetlands Act are as follows:

- Flood and storm control by the hydrologic absorption and storage capacity of freshwater wetlands;
- 2. Wildlife habitat by providing breeding, nesting, and feeding grounds and cover for many forms of wildlife, wildfowl, and shorebirds, including migratory wildfowl and species such as the bald eagle and osprey;



- 3. Protection of subsurface water resources and provision for valuable watersheds and recharging groundwater supplies;
- 4. Recreation by providing areas for hunting, fishing, boating, hiking, bird watching, photography, camping, and other uses;
- 5. Pollution treatment by serving as biological and chemical oxidation basins;
- 6. Erosion control by serving as sedimentation areas and filtering basins, absorbing silt and organic matter, and protecting channels and harbors;
- 7. Education and scientific research by providing readily accessible outdoor bio-physical laboratories, living classrooms, and vast training and education resources;
- 8. Open space and aesthetic appreciation by often providing the only remaining open areas along crowded river fronts and coastal Great Lakes regions; and
- 9. Sources of nutrients in freshwater food cycles, nursery grounds, and sanctuaries for freshwater fish.

3.0 Wetland Functions

Wetland functions are the properties or processes of a wetland ecosystem that aid in promoting an equilibrium in the wetland and surrounding environment. Wetland functions relate to the ecological significance of wetland properties without regard to subjective human values. The eight functions attributed to wetlands by the Supplement are defined as follows:

- 1. Flood-flow Alteration The effectiveness of the wetland to reduce flood damage by containing and desynchronizing floodwaters for an extended period following heavy precipitation and runoff events. Wetlands that occur higher in a watershed reduce flooding of downstream waterbodies through ponding water and diffusing or diverting flow velocities. Wetlands that occur lower in the watershed may contain the ability to store high volumes of water through direct interactions with the local floodplain or contain large areas of porous surface soils with the ability to become heavily saturated and still maintain integrity during flood-flow events. If a wetland is situated in the riparian zone along a waterbody and contains dense vegetation, it can attenuate the severity of increased flow regimes by dissipating flow velocity during flooding events.
- 2. Groundwater Recharge/Discharge The potential for a wetland to act as a source of groundwater recharge and/or discharge. Recharge describes the potential for the wetland to contribute water to an underlying aquifer. Discharge relates to the potential



- for the wetland to act as a source of groundwater transfer to the surface (i.e., springs and hillside seeps).
- 3. Sediment/Pollutant Retention The ability to reduce or prevent the degradation of water quality. This function relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens based on its geomorphic position, connectivity, soil thickness, and other physical characteristics. The retention of sediments, toxicants, or pathogens that may be carried by surface water runoff within the watershed reduces or prevents the degradation of water quality and is a function shared by many wetland features.
- 4. Fish and Shellfish Habitat The ability to contain or influence suitable habitats for fish and shellfish. For a wetland to contain fish and/or shellfish habitat, the wetland must be associated with a fish/shellfish-bearing water. Wetlands providing the fish and shellfish habitat are typically associated with perennial streams or large bodies of standing water. These waterbodies must contain appropriate levels of nutrient production, habitat complexity, and flow regimes to support the lifecycles of various fish and/or shellfish species.
- **5. Sediment/Shoreline Stabilization** The ability to effectively stabilize streambanks and shorelines against erosion.
- 6. Production (Nutrient) Export The ability to produce food or usable products for all organisms, including humans. To perform this function, a wetland must contain a level of high productivity. Wetlands that exhibit this function have an abundance of wildlife habitat and are ecologically rich. Many trophic levels support a higher level of production within the system and, therefore, an increased level of production export.
- 7. Nutrient Removal/Retention/Transformation The ability to prevent excess nutrients from entering aquifers or surface waters by trapping nutrients in runoff water from surrounding uplands or contiguous wetlands, and by processing these nutrients into other forms or trophic levels. Wetlands remove excess nutrients carried by sediments through absorbing them into soils with high organic matter or transforming these nutrients through nitrification and denitrification as a result of the alternating toxic and anoxic water conditions caused by wetland hydrology.
- 8. Wildlife Habitat The effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and their periphery. Resident and migrating species are considered along with the potential for any state or federally listed species occurring within the target wetland. The presence of wildlife



habitat can be inferred by looking at the characteristics of a wetland including the ecological community present, dominant vegetation, and surrounding habitat availability. Wetlands often support large invertebrate populations which provide a food source for birds, bats, and other wildlife. Inundation and open water found in some wetlands can provide aquatic breeding habitat for amphibians as well. Many plant species commonly found in wetlands may be used by birds and mammals as a food source.

4.0 Wetland Values

Values are the societal benefits resulting from one or more of the functions and the physical characteristics associated with a wetland. The five values defined by the Supplement and adopted for use in this assessment, including short descriptions of each value, are documented below.

- 1. **Recreation –** The effectiveness of the wetland to provide, or assist in the establishment of, recreational opportunities such as boating, fishing, hunting, and other leisurely pursuits.
- 2. Education/Scientific Value The effectiveness of the wetland as a site for public education or as a location for scientific research.
- 3. Uniqueness/Heritage The ability to contain or demonstrate a singular or rare quality. Such qualities may include the presence of archaeological sites; an unusual aesthetic quality; historical events that took place at the wetland; or unique plants, animals, or geologic features located within, or supported by, the wetland.
- Visual Quality/Aesthetics The ability to provide pleasing or unique visual and aesthetic qualities.
- **5.** Threatened or Endangered Species Habitat The effectiveness of the wetland to specifically support threatened or endangered species.



5.0 Results

Qualifiers attributed to a given wetland identified the functions and values thought to be provided by the wetlands delineated within the Wetland Survey Area (Table 1). The principal functions and values of each delineated wetland are based on those which stand out as having the most qualifiers and most substantive qualifiers deemed applicable (Table 2). The USACE identifies principal functions and values as those that are most important to the wetland and the community as a whole.

5.1 Groundwater Recharge/Discharge

Wetlands observed within the Wetland Survey Area were found to exhibit groundwater recharge/discharge. This conclusion is due in part by the relative fluidity and connectivity of wetlands and waterbodies through surface or groundwater flows and the fundamental interactions that occur between wetlands and aquifers. The wetlands were observed to have characteristics such as being associated with a watercourse, ponded water, signs of springs or seeps, sandy or organic soils, located in a concave depression or contain a gradual gradient, water marks, and deep surface soil layers. These characteristics indicate that the water level changes periodically or seasonally within the wetland due to potential discharge/recharge events, which the wetland assists in the continuance of surface water flows for groundwater recharge, or that physical attributes in the wetland allows for groundwater recharge/discharge to occur onsite at variable rates.

5.2 Flood-flow Alteration

Wetlands observed within the Wetland Survey Area were found to promote flood-flow alteration or attenuation. The delineated wetlands were noted to have a combination of features including ponded water, water marks, dense vegetative cover, association with a waterbody, deep surface soil layers, fine-grained or organic soils, large areas relative to other wetlands in the local watershed and occurring in a concave landform or on a gentle gradient. These characteristics contribute to the ability of a wetland to reduce stormwater flow velocities, divert and diffuse stormwater flows, and store excess water.

5.3 Fish and Shellfish Habitat

Within the Wetland Survey Area, four wetlands were designated as having the function of supporting fish/shellfish habitat. These wetlands were associated with perennial streams or

large open waterbodies that were determined to function as fish/shellfish habitat. Delineated wetlands were also included as contributing to potential fish/shellfish habitat if they contained intermittent tributaries and/or ponded wetland sites that were close to a perennial waterbody as to provide seasonal fish habitat or potential refugia within confluence sites. Wetlands directly connected and adjacent to predetermined high quality streams or designated trout streams by the NYSDEC were also characterized as containing the function of providing fish/shellfish habitat.

5.4 Sediment/Toxicant/Pathogen Retention

Wetlands observed in the Wetland Survey Area were noted to contain sediment/toxicant/pathogen retention abilities. These wetlands were determined to have some combination of thick layers of organic soils, dense vegetation, a landscape position on concave landforms or on gentle gradients, and/ or sites of deep open water capable of trapping sediment/toxicant/pathogens and allowing them to settle out of the water column. Wetlands that provide flood-flow alteration were also considered to exhibit the function of sediment/toxicant/pathogen retention. Increased flow regimes caused by flooding events carry increased sediment loads. These increased sediment loads are, in turn, deposited into wetlands that provide the function of flood flow attenuation by disrupting increased flow regimes.

5.5 Nutrient Removal/Retention/Transformation

Wetlands observed within the Wetland Survey Area perform a nutrient removal/retention/transformation function. Wetlands within the Wetland Survey Area that support nutrient removal/retention/transformation contain characteristics such as inundation or deep-water habitats, association with a watercourse, concave topography or gentle gradients, large size compared to other wetlands in the Site, thick layers of fine-grained or organic soils, and dense vegetative cover. Large portions of the Wetland Survey Area are active agricultural land. Wetlands that exhibit the nutrient removal, retention, and transformation function are important in helping reduce the input of excess nutrients generated by this agriculture to downstream watercourses. Excess nutrients in a watershed are associated with increased productivity levels of aquatic plant life, eutrophication events, and lowered dissolved oxygen levels throughout the water column. Such instances may lower water quality, alter aquatic habitat, and adversely impact fish and other aquatic species.



5.6 Production Export

Within the Wetland Survey Area, 29 wetlands exhibit the function of production export. Wetlands in the Wetland Survey Area with this function contain relatively high ecological richness and a high structural diversity through the presence of multiple vegetative cover types. Wetlands that are seasonally or perpetually inundated serve as habitats for amphibians, reptiles, freshwater fish, aquatic invertebrates, and as breeding areas for insects. These species are consumed by higher trophic levels like birds, fish, bats, and various mammals.

5.7 Sediment/Shoreline Stabilization

Within the Wetland Survey Area, 11 wetlands exhibit the function of sediment/shoreline stabilization. Wetlands in the Wetland Survey Area were considered to function in stabilizing the sediment and banks of a waterbody if they created a buffer zone adjacent to a waterbody that acts to absorb and/or diffuse high flow velocities during flood events preventing the erosion of shoreline or transport of excess sediment.

5.8 Wildlife Habitat

Within the Wetland Survey Area, the identified wetlands exhibited sufficient qualifier to the support the function as wildlife habitat. Wildlife or evidence of wildlife was observed during field surveys in many of the wetlands. White-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*), various birds, green frogs (*Lithobates clamitans*), salamanders, and several other species of mammals, reptiles, amphibians, and various invertebrates were seen within wetlands located throughout the Wetland Survey Area during field surveys. Evidence of wildlife observed in wetlands includes tracks, scat, burrows, scrapes, and chews. Wetlands in the Wetland Survey Area that support wildlife habitat have some combination of characteristics including association with a watercourse, dense vegetative coverage, multiple cover types, limited wetland fragmentation, deep open water sites, and ecological richness.

5.9 Recreation

A total of 25 wetlands in the Wetland Survey Area are considered suitable for recreation. Although they are located on private land without available public access, hunting on private lands is very prevalent within the Wetland Survey Area as evidenced by deer stands and duck blinds located in wetlands and the surrounding area throughout the Wetland Survey Area.



Additionally, there are several streams and deep open water areas within wetlands in the Wetland Survey Area that support fishing, another popular recreational activity on private land.

5.10 Educational/Scientific Value

The wetlands in the Wetland Survey Area do not provide direct educational value, as they are located on private land without available or safe public access, parking, or facilities. However, seven were determined to have significant scientific value as there are attributed relevant qualifiers, such as rare or significant wetland community types within the Wetland Survey Area.

5.11 Uniqueness/Heritage

Within the Wetland Survey Area, seven wetlands have been determined to contain a uniqueness/heritage value.

5.12 Visual Quality/Aesthetics

A total of 25 wetlands in the Wetland Survey Area were found to exhibit visual quality/aesthetic values. Although they lack a primary publicly accessible viewing location, they are visible to local landowners. Qualifiers within a wetland that support a value of visual quality/aesthetics include an associated watercourse and a sizeable wetland complex.

5.13 Threatened or Endangered Species Habitat

None of the wetlands were determined to have significant threatened or endangered species habitat as there are attributed relevant qualifiers within the Wetland Survey Area. Correspondence with the New York Natural Heritage Program (NYNHP) indicated there was no record of rare or state-listed animals or plants, or significant natural communities at the Wetland Survey Area or in its immediate vicinity. Also, review of the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system indicated there was potential for the presence of the Federally and State-listed threatened northern long-eared bat (*Myotis septentrionalis*) in the Facility vicinity.



Table 1. Qualifier Assignment Table

				Wetlan	d Functions					W	etland Values	;	
Qualifiers	Groundwater Recharge or Discharge	Flood- Flow Alteration	Fish or Shellfish Habitat	Sediment/ Toxicant/ Pathogen Retention	Nutrient Removal/ Retention/ Transformation	Production Export	Sediment/ Shoreline Stabilization	Wildlife Habitat	Recreation	Educational or Scientific	Uniqueness/ Heritage	Visual Quality/ Aesthetics	Threatened or Endangered Species Habitat
Associated with Watercourse	Х	Х		Х	Х	Х	Х	Х	Х			Х	
Signs of Springs/Seeps	Х												
Concave Landform or Gentle Gradient		Х		Х	X								
Deep Surface Soil Layer (16"+)		Х		X	Х								
Dense Vegetative Coverage		Х		Х	Х	Х		Х					
Sizeable Wetland		Х			X				Х			Х	
Deep Open Water Area	Х	Х	Х	Х	Х	Х		X	Х				
Fish/Shellfish Present			Х			Х		X	Х				
Ecologically Rich					X	Х		Х					
Fine-grained or Organic Soils Present	Х	X		Х	X								
No to Low Wetland Fragmentation								Х					
Threatened/Endangered Present or Habitat Present								Х		Х	X		Х
Multiple Cover Types					X	X		Х					



 Table 2. Functions and Values of Delineated Wetlands

Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
W-JJB-1	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Pathogen Retention	None
W-JJB-2	Yes	Yes	Yes	Yes	Low	Medium	No	Yes	Yes	Yes	Medium	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Pathogen Retention; Sediment, Shoreline Stabilization; Fish Habitat; Production Export	Recreation; Visual Quality and Aesthetics; Educational or Scientific Value; Uniqueness and Heritage
W-JJB-3	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Pathogen Retention	None
W-JJB-4	No	Yes	Yes	Yes	High	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Pathogen Retention	Recreation; Visual Quality and Aesthetics
W-JJB-5	No	Yes	Yes	Yes	Low	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment; Production Export; Sediment, Pathogen Retention	Recreation; Visual Quality and Aesthetics Educational or Scientific Value; Uniqueness and Heritage

¹ Functions and values in bold represent the principal functions and values of each wetland.

BROOKSIDE SOLAR, LLC 12



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
W-JJB-6	Yes	Yes	Yes	Yes	Low	Small	Yes	Yes	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Sediment, Shoreline Stabilization; Production Export; Fish or Shellfish Habitat	Recreation; Visual Quality and Aesthetics Educational or Scientific Value; Uniqueness and Heritage
W-JJB-7	No	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Sediment, Toxicant, Pathogen Retention; Nutrient Removal/Retention/ Transformation; Production Export; Wildlife Habitat	None
W-JJB-8	No	Yes	Yes	Yes	High	Medium	No	No	Yes	Yes	Low	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Sediment, Shoreline Stabilization; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-9	No	Yes	Yes	Yes	High	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Shoreline Stabilization; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-10	No	Yes	Yes	Yes	High	Large	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/	Recreation; Visual Quality and Aesthetics



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
															Transformation; Wildlife Habitat; Sediment, Shoreline Stabilization; Sediment, Toxicant, Pathogen Retention; Production Export	
W-JJB-11	Yes	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export; Sediment, Shoreline Stabilization	Recreation; Visual Quality and Aesthetics
W-JJB-12	Yes	Yes	Yes	Yes	Medium	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Alteration; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-13	Yes	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export; Sediment, Shoreline Stabilization	Recreation; Visual Quality and Aesthetics
W-JJB-14	Yes	Yes	Yes	Yes	High	Large	No	No	Yes	Yes	Medium	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment,	Recreation; Visual Quality and Aesthetics Educational or Scientific Value; Uniqueness and Heritage



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
															Toxicant, Pathogen Retention; Production Export; Sediment, Shoreline Stabilization	
W-JJB-15	Yes	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export; Sediment, Shoreline Stabilization	Recreation; Visual Quality and Aesthetics
W-JJB-16	No	Yes	Yes	No	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	None
W-JJB-17	No	Yes	Yes	Yes	High	Large	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-18	No	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-19	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood	None



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
															Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention ; Production Export	
W-JJB-20	Yes	Yes	Yes	Yes	High	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-JJB-21	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	None
W-JJB-22	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Educational or Scientific Value; Uniqueness and Heritage
W-JJB-23	Yes	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Medium	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics Educational or Scientific Value; Uniqueness and Heritage



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
W-NSD-1	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	High	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	None
W-NSD-2	No	Yes	Yes	Yes	High	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	None
W-NSD-3	No	Yes	Yes	Yes	Low	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-NSD-4	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Educational or Scientific Value; Uniqueness and Heritage
W-NSD-5	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	None



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
W-NSD-6	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention	None
W-WCR-1	Yes	Yes	Yes	Yes	High	Medium	No	Yes	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Shoreline Stabilization; Sediment, Toxicant, Pathogen Retention, Fish and Shellfish Habitat.	Recreation; Visual Quality and Aesthetics
W-WCR-2	No	Yes	Yes	Yes	High	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Shoreline Stabilization; Sediment, Toxicant, Pathogen Retention	Recreation; Visual Quality and Aesthetics
W-WCR-3	Yes	Yes	Yes	Yes	High	Small	No	Yes	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export. Fish Habitat	Recreation; Visual Quality and Aesthetics
W-WCR-4	Yes	Yes	Yes	Yes	High	Large	No	No	Yes	Yes	Medium	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment,	Recreation; Visual Quality and Aesthetics



Wetland Name	Associated with Watercourse	Signs of Springs /Seeps	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Deep Open Water Area (3'+)	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Fine- grained or Organic Soils Present	Wetland Fragmentation (High, Medium, Low)	Publicly Accessible	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
															Toxicant, Pathogen Retention; Production Export	
W-WCR-5	No	Yes	Yes	Yes	Medium	Medium	No	No	Yes	Yes	Low	No	No	Yes	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-WCR-6	No	Yes	Yes	Yes	Low	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention	None
W-WCR-7	Yes	Yes	Yes	Yes	High	Medium	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention; Production Export	Recreation; Visual Quality and Aesthetics
W-RDS-2	Yes	Yes	Yes	Yes	High	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/ Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention	Recreation; Visual Quality and Aesthetics
W-RDS-3	Yes	Yes	Yes	Yes	Medium	Small	No	No	Yes	Yes	Low	No	No	No	Groundwater Recharge/Discharge; Flood Flow Alteration; Nutrient Removal/Retention/	Recreation; Visual Quality and Aesthetics



Wetland Name	Associated with Watercourse	Springs	Concave Landform or Gentle Gradient	Deep Surface Soil Layer (16"+)	Vegetative Cover Density (High, Medium, Low)	Wetland Size (Small, Medium, Large)	Open Water	Fish or Shellfish Present in Associated Stream	Ecologically Rich	Wetland Fragmentation (High, Medium, Low)	Publicly	Threatened or Endangered Species Present or Habitat Present	Multiple Cover Types	Attributed Functions ¹	Attributed Values ¹
														Transformation; Wildlife Habitat; Sediment, Toxicant, Pathogen Retention ;	

¹Functions and values in bold represent principal functions and values of each wetland.



6.0 Conclusions

Wetlands delineated within the Wetland Survey Area displayed multiple functions based on their specific characteristics. Each of the wetlands identified within the Wetland Survey Area were determined to have the ability to provide the functions of groundwater recharge/discharge, flood-flow alteration, sediment/toxicant/pathogen retention, nutrient removal/retention/transformation, and wildlife habitat. Other functions displayed within wetlands delineated within the Wetland Survey Area include:

- Fish and Shellfish Habitat (4 wetlands),
- Sediment/Shoreline Stabilization (11 wetlands), and
- Production Export (29 wetlands).

Values were found to occur in most, but not all wetlands within the Wetland Survey Area, based on this assessment. None of the values assessed were found to occur within all wetlands in the Wetland Survey Area. The values that were found to occur include:

- Visual Quality and Aesthetics (25 wetlands),
- Recreation (25 wetlands),
- Educational or Scientific Value (7 wetlands), and
- Uniqueness and Heritage (7 wetlands).

Assessing a specific wetland's functions and values is needed to determine the overall effects an impact or alteration may have on a wetland feature. Those functions and values deemed to be principal provide the greatest insight to that effort. Ultimately, such a measurement aids in establishing the appropriate level of mitigation after impacts to a wetland occur. As such, this functions and values assessment will be used during the impact analysis and mitigation planning efforts for the Facility, wherein functions and values identified as principal shall receive greater focus.



7.0 References

- Bliss, Kevin. 2016. NYS Wetlands Forum Wetland Functional Assessment Workshop
 [PowerPoint Slides]. Retrieved from
 http://www.wetlandsforum.org/NYSWFWetlandAssessmentOctober13WorkshopIntro.pdf
 Accessed November 2021.
- U.S. Army Corps of Engineers (USACE). 1993. *The Highway Methodology Workbook*. U.S. Army Corps of Engineers, New England Division. NEDEP-360-1-30. 30 pp.
- USACE. 1999. *The Highway Methodology Workbook Supplement. Wetland Functions and Values: A Descriptive Approach*. U.S. Army Corps of Engineers, New England Division. NAEEP-360-1-30a. 32 pp.



ATTACHMENT A

Wetland Functions and Values Forms

Total area of wetland 0.05 ac Human made? No	Is wetla	and part of a wildlife corridor?	0	or a "habitat island"? No	Wetland I.D. W-JJB-1 Latitude 44.929 Longitude -74.134
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 50'	Prepared by: ND Date 11/4/2021
Dominant wetland systems present_PEM		Contiguous undevelope	ed buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		_Wildlife & vegetation diversity/s	abunda	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N Omments
✓ Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18			for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20			
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 9.64 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM, PSS Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 2	If n	Distance to nearest road Contiguous undevelope	way or ed buff the dr	r other development 50' Fer zone present No ainage basin? Mid	Wetland I.D. W-JJB-2 Latitude 44.923 Longitude -74.138 Prepared by: ND Date 11/4/2021 Wetland Impact: TypeArea Evaluation based on: Office X Field X Corps manual wetland delineation
Function/Value	Suitabilit Y/N		rinci Juncti		completed? Y <u>×</u> N
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream ab	le to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving strear
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11	1	Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity i	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N			No opportunity but	it has the value
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	Close proximity to	a road
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.33 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM		and part of a wildlife corridor? N Distance to nearest road Contiguous undevelope	way o	r other development 50'	Wetland I.D. W-JJB-3 Latitude 44.927 Longitude -74.138 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n	ot, where does the wetland lie in Wildlife & vegetation diversity/s	the drabunda	ainage basin? Mid ance (see attached list) pal	Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20			
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 3.02 ac Human made? No Adjacent land use Agriculture		and part of a wildlife corridor? N			Wetland I.D. W-JJB-4 Latitude 44.930 Longitude -74.130 Prepared by: ND Date 11/4/2021
	Distance to nearest roadway or other development 50' Contiguous undeveloped buffer zone present No				Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		Wildlife & vegetation diversity/s	abunda	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
▼ Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	Χ	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20			
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 2.66 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PSS		and part of a wildlife corridor? Note to nearest road Contiguous undevelope	way o	r other development 50'	Wetland I.D. W-JJB-5 Latitude 44.927
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		_Wildlife & vegetation diversity/s	abunda	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N Omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	Χ	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20			
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.15 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PUB Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n		way o	r other development 50' Ter zone present No ainage basin? Mid	Wetland I.D. W-JJB-6 Latitude 44.924 Longitude -74.125 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation
Function/Value	Suitabilit Y/N	y Rationale P (Reference #)* F	rinci uncti		completed? Y_X N omments
▼ Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.24 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PSS Is the wetland a separate hydraulic system? No		and part of a wildlife corridor? N Distance to nearest road Contiguous undevelope ot, where does the wetland lie in	way o	r other development 500' Ter zone present No	Wetland I.D. W-JJB-7 Latitude 44.928 Longitude -74.125 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on:		
How many tributaries contribute to the wetland? $\underline{0}$	Suitabilit Y / N	Wildlife & vegetation diversity/a y Rationale P (Reference #)*	rinci	pal	Office X Field X Corps manual wetland delineation completed? Y X N Omments		
	Y	5		Porous soils allow	for recharge		
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage		
Fish and Shellfish Habitat	N						
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland		
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland		
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field		
Sediment/Shoreline Stabilization	N						
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat		
Recreation	N						
Educational/Scientific Value	N						
★ Uniqueness/Heritage	N						
Visual Quality/Aesthetics	N						
ES Endangered Species Habitat	N						
Other							

Total area of wetland 1.45 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PSS, PFO Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n	Wildlife & vegetation diversity/s	way or	r other development 500' Fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-8 Latitude 44.927 Longitude -74.124 Prepared by: ND Date 11/4/2021 Wetland Impact: TypeArea_ Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N
Function/Value	Y/N	(Reference #)* F	uncti		omments
	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland .04 ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? No	Wetland I.D. W-JJB-9 Latitude 44.936 Longitude -74.128
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 500'	Prepared by: ND Date
Dominant wetland systems present_PEM	Contiguous undeveloped buffer zone present No				Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		Wildlife & vegetation diversity/s	abund	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N O O O O O O O O O O O O O O O O O O
Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18			for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 4.98 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 2	If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in _Wildlife & vegetation diversity/s	way on the draw abunda	r other development 500' Fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-10 Latitude 44.933 Longitude -74.125 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N_
Function/Value	Suitabilit Y/N		Princi Tuncti		Comments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream ab	le to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving strear
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11	1	Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity i	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N			No opportunity but	it has the value
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.17 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PSS Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1	If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in Wildlife & vegetation diversity/a	way or	er other development 500' er zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-11 Latitude 44.918 Longitude -74.131 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y / N	(Reference #)* F	uncti	T , , , , , ,	omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream ab	le to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving strean
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
❤ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 1.01 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1	If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in Wildlife & vegetation diversity/a	way or d buff the dra abunda	r other development 500' fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-12 Latitude 44.915 Longitude -74.135 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N
Function/Value	Suitability Y/N		rincij uncti		omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.25 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1	If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in _Wildlife & vegetation diversity/a	way on d buff the dra abunda	r other development 500' Fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-13 Latitude 44.917 Longitude -74.135 Prepared by: ND Date 11/4/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N
Function/Value	Suitabilit Y/N		rinci uncti		Comments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream ab	le to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving strear
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity i	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	Χ	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	Χ	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 12.61 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM, PSS Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 3	If n	Wildlife & vegetation diversity/a	way or deal of the drabundar	r other development 300' Fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-14 Latitude 44.919 Longitude -74.135 Prepared by: ND Date 11/4/2021 Wetland Impact: TypeArea Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y/N	(Reference #)* F	uncti		omments
✓ Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 7, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving strean
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15)	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.26 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1	If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in Wildlife & vegetation diversity/a	way or	r other development 300' Fer zone present No ainage basin? Mid ance (see attached list)	Wetland I.D. W-JJB-15 Latitude 44.917 Longitude -74.133 Prepared by: ND Date 11/8/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N
Function/Value	Y/N				omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream ab	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
❤ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.26 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n		way o	r other development 300' Fer zone present No ainage basin? Mid	Wetland I.D. W-JJB-16 Latitude 44.916 Longitude -74.121 Prepared by: ND Date 11/8/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation completed? YX N_
Function/Value	Suitabilit Y/N	y Rationale P (Reference #)* F	rinci uncti		omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20			
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 5.96 ac Human made? No Adjacent land use Agriculture		and part of a wildlife corridor? N			Wetland I.D. W-JJB-17 Latitude 44.917 Longitude -74.116 Prepared by: ND Date 11/8/2021
		Contiguous undevelope	Wetland Impact: TypeArea		
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		Wildlife & vegetation diversity/s	abund	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N Omments
	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	Χ	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.06 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n		way o	r other development 300' Fer zone present No ainage basin? Mid	Wetland I.D. W-JJB-18 Latitude 44.920 Longitude -74.115 Prepared by: ND Date 11/8/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation
Function/Value	Suitabilit Y/N	y Rationale P (Reference #)* F	rinci uncti	ion(s)/Value(s) C	completed? YX N omments
▼ Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.28 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n		way o	r other development_200' Ter zone present_No ainage basin? Mid	Wetland I.D. W-JJB-19 Latitude 44.922 Longitude -74.113 Prepared by: ND Date 11/8/2021 Wetland Impact: Type Area Evaluation based on: Office X Field X Corps manual wetland delineation
Function/Value	Suitabilit Y/N	y Rationale P (Reference #)* F	rinci		completed? Y ^x N omments
	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.19ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? No	Wetland I.D. W-JJB-20 Latitude 44.920 Longitude -74.105
Adjacent land use Agriculture				r other development 100'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PEM		Contiguous undevelope			Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1 Function/Value		_Wildlife & vegetation diversity/s	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N N N N N N N N N N N N N N N N N N
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	ЗX	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream ab	le to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11	1	Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N			_	
Other					

0.04					Wetland I.D. WV-JJD-21
Total area of wetland 0.61 ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? No	Latitude 44.919 Longitude -74.105
Adjacent land use Agriculture		Distance to nearest road	way oi	r other development 200'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present PEM		Contiguous undevelope	d buff	er zone present No	Wetland Impact: TypeArea
How many tributaries contribute to the wetland? 0		ot, where does the wetland lie in Wildlife & vegetation diversity/a y Rationale P (Reference #)*	abunda	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18			for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.56 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No		Contiguous undevelope	way o	r other development 200' Fer zone present No	Wetland I.D. W-JJB-22 Latitude 44.921 Longitude -74.13 Prepared by: ND Date 11/8/202 Wetland Impact: Type Area Evaluation based on:			
How many tributaries contribute to the wetland? $\underline{0}$ Function/Value	Suitabilit Y / N	Wildlife & vegetation diversity/s y Rationale P (Reference #)* F	rinci	pal	Office X Field X Corps manual wetland delineation completed? Y X N Omments			
	Y	5		Porous soils allow	for recharge			
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage			
Fish and Shellfish Habitat	N							
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland			
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland			
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field			
Sediment/Shoreline Stabilization	N							
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat			
Recreation	N							
Educational/Scientific Value	N							
★ Uniqueness/Heritage	N							
Visual Quality/Aesthetics	N							
ES Endangered Species Habitat	N							
Other								

			0	No	Wetland I.D. W-JJB-23
Total area of wetland 1.71 ac Human made? No	Is wetla	and part of a wildlife corridor? N		or a "habitat island"?	Latitude 44.922 Longitude -74.124
Adjacent land use Agriculture	 	Distance to nearest road	way o	r other development 100'	Prepared by: ND Date
Dominant wetland systems present_PSS		Contiguous undevelope	ed buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1		Wildlife & vegetation diversity/	abunda	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Suitabilit Y / N	y Rationale P (Reference #)* F	rinci uncti		omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11	1	Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	Close proximity to	a road
ES Endangered Species Habitat	N				
Other					

Total area of wetland 1.55 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n	Contiguous undevelope	way or	r other development 200' Ter zone present No ainage basin? Mid	Wetland I.D. W-NSD-1 Latitude 44.920 Longitude -74.101 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea_ Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Suitabilit Y / N	y Rationale P (Reference #)* F	rinci uncti		omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.36 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM, PFO Is the wetland a separate hydraulic system? No		nd part of a wildlife corridor? No. 2015. Distance to nearest road Contiguous undeveloped of, where does the wetland lie in	way or		Wetland I.D. W-NSD-2 Latitude 44.920 Longitude -74.104 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea
How many tributaries contribute to the wetland? $\underline{0}$ Function/Value	Suitability Y / N		rinci	pal	Office X Field X Corps manual wetland delineation completed? Y X N N O N O N O N O N O N O N O N O N O
✓ Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18			for storm water storage
Fish and Shellfish Habitat	N			-	
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 4.23 ac Human made? No	Is wetla	and part of a wildlife corridor?	0	or a "habitat island"? No	Wetland I.D. W-NSD-3 Latitude 44.923 Longitude -74.128
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 200'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present PEM		Contiguous undevelope	Wetland Impact: TypeArea		
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		Wildlife & vegetation diversity/ Rationale F	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N N N N N N N N N N N N N N N N N N
Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18			for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11	1	Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
W ildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

0.13.20 No.		N	_	No	Wetland I.D. W-NSD-4
Total area of wetland 0.13 ac Human made? No	Is wetla	and part of a wildlife corridor? N		or a "habitat island"?	Latitude 44.925 Longitude -74.129
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 300'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PEM		Contiguous undevelope	ed buff	fer zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	Suitabilit	Wildlife & vegetation diversity/s	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y/N		unct	T (forments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

0.01 aa Na		NI	_	No	Wetland I.D. W-NSD-5
Total area of wetland 0.91 ac Human made? No	Is wetla	and part of a wildlife corridor? N	<u> </u>	or a "habitat island"? NO	Latitude 44.935 Longitude -74.131
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 300'	Prepared by: ND Date
Dominant wetland systems present_PEM		Contiguous undevelope	ed buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	Suitabilit	_Wildlife & vegetation diversity/a	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y/N		uncu	T (omments • • • • • • • • • • • • • • • • • • •
Groundwater Recharge/Discharge	Y	5		Porous soils allow	
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

			^	No	Wetland I.D. W-NSD-6
Total area of wetland 0.12 ac Human made? No	Is wetla	and part of a wildlife corridor? N		or a "habitat island"? NO	Latitude 44.915 Longitude -74.134
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 300'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PSS		Contiguous undevelope	d buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? O Function/Value		_Wildlife & vegetation diversity/s	abunda rinci	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Groundwater Recharge/Discharge	Y	5	unct	Porous soils allow	
	_				
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.11 ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? No	Wetland I.D. W-RDS-2 Latitude 44.927 Longitude -74.108
Adjacent land use Agriculture				r other development 200'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PFO		Contiguous undevelope			Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1 Function/Value		Wildlife & vegetation diversity/	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N Omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	ЗХ	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11	1	Potential exists due	to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	Χ	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.70 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PSS Is the wetland a separate hydraulic system? No		Distance to nearest road Contiguous undevelope ot, where does the wetland lie in	way o	r other development 200' Fer zone present No	Wetland I.D. W-RDS-3 Latitude 44.928 Longitude -74.109 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea_ Evaluation based on:
How many tributaries contribute to the wetland? 1	Suitabilit	Wildlife & vegetation diversity/a	rinci	pal	Corps manual wetland delineation completed? Y X N
Function/Value	Y / N	(Reference #)* F	uncti		omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 2.60 ac Human made? No	Is wetla	and part of a wildlife corridor?	0	or a "habitat island"? No	Wetland I.D. W-WCR-1 Latitude 44.937 Longitude -74.132
Adjacent land use Agriculture		Distance to nearest road	way o	r other development_500'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PFO		Contiguous undevelope			Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1 Function/Value		_Wildlife & vegetation diversity/	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N Omments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	ЗХ		for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 1	1	Potential exists due	to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
**Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 1.67 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PFO Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	If n	Contiguous undevelope	way or	r other development 500' Fer zone present No ainage basin? Mid	Wetland I.D. W-WCR-2 Latitude 44.924 Longitude -74.137 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea_ Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Suitabilit Y/N	y Rationale P (Reference #)* F	rinci		omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain toxi	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	sent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.63 ac Human made? No	I41	and part of a wildlife corridor? N	0		Wetland I.D. VV-VVCR-3
	is weth				Latitude 44.935 Longitude -74.138
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 500'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PFO		Contiguous undevelope	d buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No					Evaluation based on: Office X Field X
How many tributaries contribute to the wetland? $\frac{1}{2}$		Wildlife & vegetation diversity/a	abunda	ance (see attached list)	Corps manual wetland delineation
Function/Value	Suitabilit Y / N	y Rationale P (Reference #)* F	rinci uncti		completed? Y ^x Nomments
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	X	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 8.66 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PEM, PSS, F Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1	PFO If n	Distance to nearest road Contiguous undevelope ot, where does the wetland lie in Wildlife & vegetation diversity/a	way or	r other development 500' Fer zone present No ainage basin? Mid	Wetland I.D. W-WCR-4 Latitude 44.935 Longitude -74.110 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea_ Evaluation based on: Office X Field X
Function/Value	Suitabilit Y/N		rinci		Corps manual wetland delineation completed? YX N N
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat
Recreation	Y	6, 12	Χ	No opportunity but	it has the value
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value
ES Endangered Species Habitat	N				
Other					

Total area of wetland 4.23 ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? No	Wetland I.D. W-WCR-5 Latitude 44.924 Longitude -74.116
Adjacent land use Agriculture		Distance to nearest road	way oi	r other development 100'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present PEM, PFO	Contiguous undeveloped buffer zone present No			Wetland Impact: TypeArea	
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	Suitabilit	Wildlife & vegetation diversity/	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y / N		uncti		omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	for recharge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	icants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

0.21 as No.		NI	_	No	Wetland I.D. WV-VVCR-0
Total area of wetland 0.21 ac Human made? No	Is wetla	and part of a wildlife corridor? N	0	or a "habitat island"? NO	Latitude 44.927 Longitude -74.117
Adjacent land use Agriculture		Distance to nearest road	way o	r other development 100'	Prepared by: ND Date 11/8/2021
Dominant wetland systems present_PEM		Contiguous undevelope	ed buff	er zone present No	Wetland Impact: TypeArea
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 0	Suitabilit	_Wildlife & vegetation diversity/a	abunda Princi	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N
Function/Value	Y / N		uncti		omments
Groundwater Recharge/Discharge	Y	5		Porous soils allow	tor recnarge
Floodflow Alteration	Y	3, 5, 6, 9, 10, 18		Depressions allow	for storm water storage
Fish and Shellfish Habitat	N				
Sediment/Toxicant Retention	Y	1, 2, 4, 6	X	Potential to retain tox	cants from nearby farmland
Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11		Potential exists due	e to proximity to farmland
→ Production Export	Y	7, 14		Opportunity assumed to be pre	esent, wetland within an agricultural field
Sediment/Shoreline Stabilization	N				
₩ Wildlife Habitat	Y	1, 3, 4, 5, 11, 13, 19, 20		Good amphibian h	abitat
Recreation	N				
Educational/Scientific Value	N				
★ Uniqueness/Heritage	N				
Visual Quality/Aesthetics	N				
ES Endangered Species Habitat	N				
Other					

Total area of wetland 0.47 ac Human made? No Adjacent land use Agriculture Dominant wetland systems present PFO		Contiguous undevelope	way o	r other development 200' Fer zone present No	Wetland I.D. W-WCR-7 Latitude 44.912 Longitude -74.138 Prepared by: ND Date 11/8/2021 Wetland Impact: TypeArea		
Is the wetland a separate hydraulic system? No How many tributaries contribute to the wetland? 1 Function/Value			abunda Trinci	ance (see attached list)	Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y X N Omments		
Groundwater Recharge/Discharge	Y	5, 7, 10, 12		Porous soils allow	for recharge		
Floodflow Alteration	Y	1,3, 5, 6, 9, 10, 13, 14, 18	X	Depressions allow	for storm water storage		
Fish and Shellfish Habitat	Y	4, 14, 16, 17		Associated stream abl	e to support fish populations		
Sediment/Toxicant Retention	Y	1, 2, 4, 6, 10, 16	X	Potential to retain toxicants from near	by farmland, connected to a slow moving stream		
Nutrient Removal	Y	1, 3, 4, 7, 8, 9, 10, 11		Potential exists due	to proximity to farmland		
→ Production Export	Y	4, 7, 12, 14		Connected to a str	eam with nutrients		
Sediment/Shoreline Stabilization	Y	3, 4, 6, 7, 12, 13, 15	5	Low flow velocity in	n the stream		
₩ Wildlife Habitat	Y	1, 3, 4, 5, 8, 11, 13, 19, 20, 21		Good amphibian h	abitat		
Recreation	Y	6, 12	X	No opportunity but	it has the value		
Educational/Scientific Value	N						
★ Uniqueness/Heritage	N						
Visual Quality/Aesthetics	Y	2, 5, 8,12	X	No opportunity but	has the value		
ES Endangered Species Habitat	N						
Other							