




ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

April 4, 2023

To: Terrence D. McCracken, Secretary to the Authority

From: Michael J. Quinn, Senior Distribution Engineer 

Subject: Contract MP-088, Sturgeon Point WTP Washwater Tank Replacement
Contract MP-090, Sturgeon Point WTP Filtration Piping, Valve, and Underdrain
System Improvements
SEQRA Negative Declaration
ECWA Project No. 202100111 and 202200014

On May 13, 2021, the Erie County Water Authority (the Authority) executed an agreement with Arcadis for Contract MP-088, Sturgeon Point WTP Washwater Tank Replacement and on December 22, 2021, the Authority executed an agreement with Arcadis for Contract MP-090, Sturgeon Point TWP Filtration Piping, Valve, and Underdrain System Improvements (the Project).

Due to the interrelationships and scopes of the individual projects, the Authority's Engineering and Legal Departments believe that for the purposes of environmental review, both projects should be combined and that the combined projects should be handled as a single action which is subject to review under the New York State Environmental Quality Review Act (SEQRA). Recognizing the need for certain expertise in the area of the SEQRA regulations, the Authority requested input on the SEQRA process from Harris Beach. The Authority Engineering Staff, Harris Beach and Arcadis thoroughly reviewed the Project specifics, prepared the Full Environmental Assessment Form (FEAF), and determined that the Project should be appropriately designated as an Unlisted Action, as defined under SEQRA. As an Unlisted Action, the Project is subject to further review under SEQRA.

Given the fact that the Project has been identified as an Unlisted Action under SEQRA, the Engineering and legal Departments recommended that the Authority declare itself Lead Agency, as defined under SEQRA, and conduct a coordinated review of the Project thereby seeking input from various other Involved and Interested Agencies. On December 15, 2022, the ECWA Board declared itself Lead Agent and authorized the commencement of the coordinated review. .

During the coordinated review process, The United States Army Corps of Engineers (USACE), The New York State Department of Environmental Conservation (NYS DEC), The New York State Department of State, the New York State Department of Health, and The Town of Evans. were included as Involved Agencies, as defined under SEQRA. These agencies have been so designated because they need to take discretionary actions and issue approvals as so related to the Project. The FEAF was sent to each party to solicit input on the Authority's Lead Agency Status as well as comments on the environmental impact of the project. Following the close of the 30-day

review and response period, responses and/or comments were received from the following Involved Agencies:

- Erie County Department of Health (no objection to ECWA assuming Lead Agency for SEQR review and advising NYSDOH will perform review/approval of project)
- NYSDOH (no objection to ECWA assuming Lead Agency for SEQR review)
- NYSDEC Division of Environmental Permits (permitting and design, and concurrence with Lead Agency Declaration)

No objection to ECWA as Lead Agency was received. Also, during the coordinated review, the Authority received no technical comments from the Involved Agencies or from the general public and as a result, the Authority has been installed as lead agency.

Following completion of the coordinated review process, the Authority has thoroughly considered the Project and has reviewed Part 1 of the EAF; completed Parts 2 and 3 of the Full EAF and considered the other documents and information in connection with the Project. Included as Attachment 1 find a copy if the complete FEAF (Parts 1, 2 and 3) which fully outline and document the findings. The Engineering Department and Harris Beach have thoroughly reviewed all project SEQR related documents and agree with the findings outlined in the FEAF. It is the Engineering Department's recommendation that the SEQR process was thorough, and the assessment has not identified any significant adverse environmental impacts associated with the Project and that the Project will result in no significant adverse impacts on the environment and, therefore, an environmental impact statement need not be prepared.

Based on the above, it is recommended that the Authority issue a Negative Declaration for the Project and that Leonard F. Kowalski, Executive Engineer of the Authority, be authorized to execute Part 3 of the EAF setting forth the Negative Declaration.

MJQ:jmf

Attachments

cc: R.Stoll

L.Kowalski

M.Wymer

CONT-MP-088-2101-X-30

CONT-MP-090-2201-X-30

ERIE COUNTY WATER AUTHORITY
AUTHORIZATION FORM
For Approval/Execution of Documents
(check which apply)

Contract: MP-088 & MP-090 **Project No.:** 202100111 & 202200014
Project Description: Sturgeon Point WTP Washwater Tank Replacement.
Sturgeon Point WTP Filtration Piping, Valve, and Underdrain System Improvements.

Item Description:



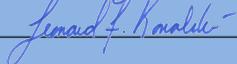

<input type="checkbox"/> Agreement	<input type="checkbox"/> Professional Service Contract	<input type="checkbox"/> Amendment	<input type="checkbox"/> Change Order
<input type="checkbox"/> BCD	<input type="checkbox"/> NYSDOT Agreement	<input type="checkbox"/> Contract Documents	<input type="checkbox"/> Addendum
<input type="checkbox"/> Recommendation for Award of Contract	<input type="checkbox"/> Recommendation to Reject Bids		
<input type="checkbox"/> Request for Proposals			
<input checked="" type="checkbox"/> Other <u>SEQRA Negative Declaration</u>			

Action Requested:


<input type="checkbox"/> Board Authorization to Execute	<input type="checkbox"/> Legal Approval
<input type="checkbox"/> Board Authorization to Award	<input type="checkbox"/> Execution by the Chairman
<input type="checkbox"/> Board Authorization to Advertise for Bids	<input type="checkbox"/> Execution by the Secretary to the Authority
<input type="checkbox"/> Board Authorization to Solicit Request for Proposals	
<input checked="" type="checkbox"/> Other <u>Resolution for Adopting a SEQRA Negative Declaration</u>	

Approvals Needed:

APPROVED AS TO CONTENT:

<input checked="" type="checkbox"/> Sr. Distribution Engineer	<u></u>	Date: <u>4/10/23</u>
<input checked="" type="checkbox"/> Chief Operating Officer	<u></u>	Date: <u>4/10/23</u>
<input checked="" type="checkbox"/> Executive Engineer	<u></u>	Date: <u>4/10/23</u>
<input type="checkbox"/> Director of Administration	_____	Date: _____
<input type="checkbox"/> Risk Manager	_____	Date: _____
<input type="checkbox"/> Chief Financial Officer	_____	Date: _____
<input checked="" type="checkbox"/> Legal	<u></u>	Date: <u>4/10/23</u>

APPROVED FOR BOARD RESOLUTION:

<input checked="" type="checkbox"/> Secretary to the Authority	<u></u>	Date: <u>4/13/23</u>
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Remarks: _____

Resolution Date: _____ **Item No:** _____

Mr. Leonard Kowalski, P.E.
Executive Engineer
Erie County Water Authority
3030 Union Road
Cheektowaga, NY 14227

Arcadis of New York, Inc.
50 Fountain Plaza
Suite 600
Buffalo
New York 14202
Tel 716 667 0900
Fax 716 842 2612
www.arcadis.com

WATER BUSINESS LINE

Subject:

MP-88/MP-90: Sturgeon Point Water Treatment Plant Washwater Tank Replacement and Filtration Piping, Valve, and Underdrain System Improvements
State Environmental Quality Review Act Determination Recommendation

Date:
March 1, 2023

Contact:
Dan Seider, PE

Mr. Kowalski:

Phone:
716-667-6670

Email:
Daniel.Seider@arcadis.com

Our ref:
30130805

Arcadis of New York, Inc. (Arcadis) recommends that the Erie County Water Authority (ECWA) prepare a Negative Declaration for both the MP-88: Washwater Tank Replacement and MP-90: Filtration Piping, Valve, and Underdrain System Improvements at Sturgeon Point Water Treatment Plant to complete the requirements of the State Environmental Quality Review (SEQR) process. Please find enclosed the Full Environmental Assessment Form (FEAF) Parts 1, 2, and 3 as prepared for this project. Through our review, it has been determined that any indicated potential "Moderate to Large" impacts that may occur as a result of the proposed project implementation would be reduced, minimized, avoided, and/or mitigated as a result of established Best Management Practices (BMPs) and issued permits and their associated requirements. In accordance with SEQR guidance, "the lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact." Based on the explanations provided in the prepared Part 3 for this project, it is the opinion of Arcadis that no significant impacts would result from the proposed project.

A Lead Agency Declaration letter and Part 1 (with attachments) of the FEAF were distributed via email to the following involved agencies for their coordinated review on December 19, 2022, which started a 30-day review and response period:

- New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Permits
- New York State Department of State (NYSDOS)
- New York State Department of Health (NYSDOH)
- Erie County Health Department

MP-88/MP-90: Sturgeon Point Water Treatment Plant Washwater Tank
Replacement and Filtration Piping, Valve, and Underdrain System
Improvements
State Environmental Quality Review Determination Recommendation

- Town of Evans, New York

Following the close of the 30-day review and response period, responses and/or comments were received from the following Involved Agencies:

- Erie County Department of Health (no objection to ECWA assuming Lead Agency for SEQR review and advising NYSDOH will perform review/approval of project)
- NYSDOH (no objection to ECWA assuming Lead Agency for SEQR review)
- NYSDEC Division of Environmental Permits (permitting and design, and concurrence with Lead Agency Declaration)

No objection to ECWA as Lead Agency was received.

Because of the known presence of both USACE and NYSDEC jurisdictional wetlands and waterbodies located within, or in near proximity to, our proposed project activities, and the location of our proposed project activities within the established boundary of the New York State Coastal Zone, a joint USACE/NYSDEC/NYSDOS permit application for USACE Nationwide Permit No. 7 – Stream and Freshwater Wetland, NYSDEC Protection of Waters Permit, and NYSDOS Federal Consistency Determination is being prepared. Relevant project activities will not be conducted prior to issuance of these required permits and approvals and will be performed in accordance with all permit and approval requirements. In addition, since project activities will involve land disturbance of one acre or more, a SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001), including the associated Stormwater Pollution Prevention Plan (SWPPP) is required, and is being prepared.

Based on the expectation that any perceived potential moderate to large impacts associated with construction and/or operation of the proposed project would be reduced, minimized, avoided, or mitigated through the use of BMPs and issued permits and their associated requirements, and the lack of comment from Involved Agencies related to the potential for impacts, we recommend that ECWA prepare and adopt a Negative Declaration for both projects.

Sincerely,



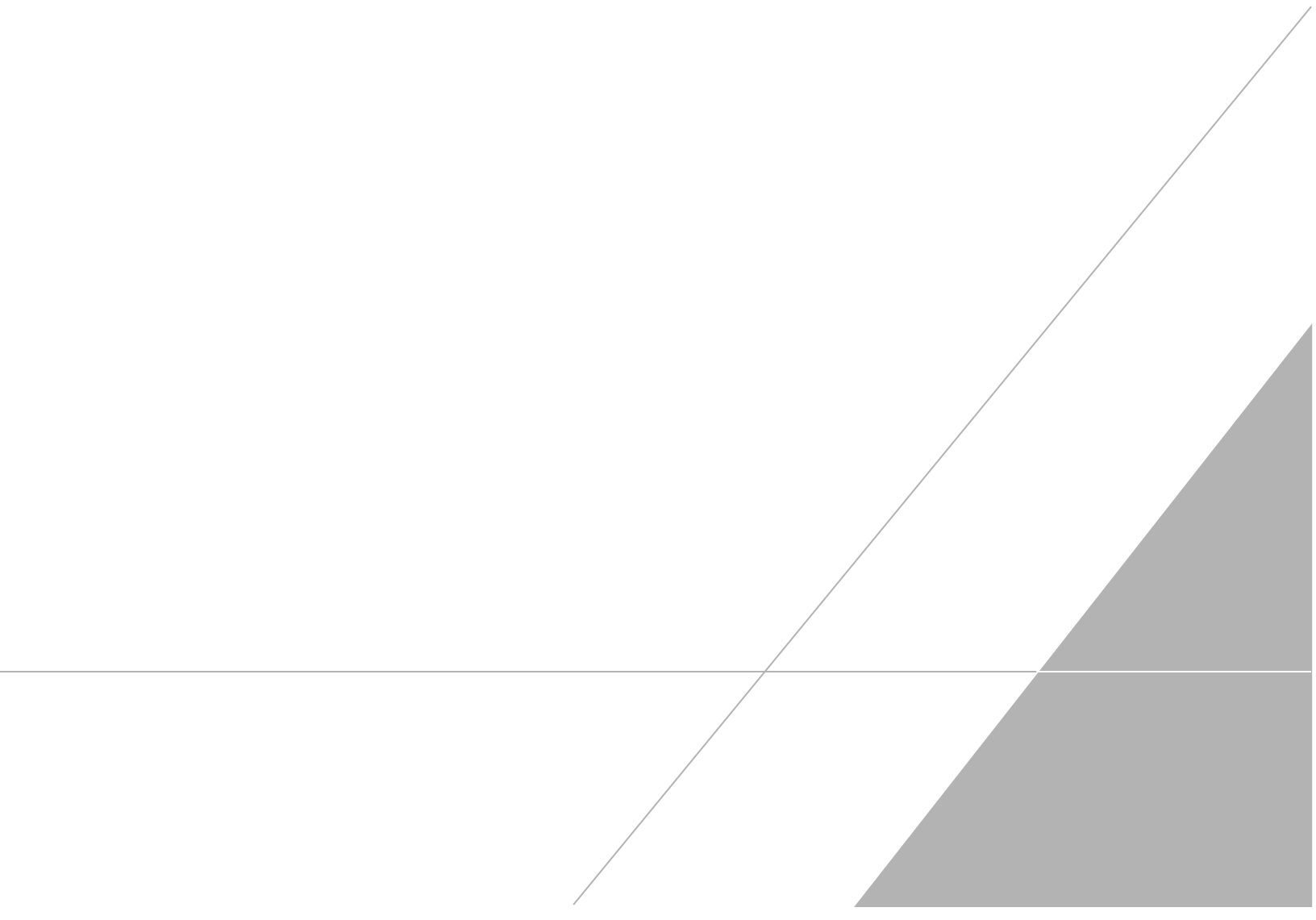
Dan Seider, PE
Project Manager

Enclosures:

1 SEQR Draft FEAF Parts 1, 2 and 3

ENCLOSURE 1:

SEQR Draft EAF Parts 1, 2, and 3



Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: MP-88/MP-90: Sturgeon Point Water Treatment Plant Washwater Tank Replacement and Filtration Piping, Valve, and Underdrain System Improvements		
Project Location (describe, and attach a general location map): 722 Sturgeon Point Rd, Derby, NY 14047		
Brief Description of Proposed Action (include purpose or need): The Erie County Water Authority (ECWA) Sturgeon Point Water Treatment Plant (STP WTP) located at 722 Sturgeon Point Rd, Derby, NY 14047 is pursuing the design and construction of several on-site improvements and/or upgrades to the STP WTP to ensure the continued reliability of the safe treatment and distribution of clean water. This project is confined within the 113-acre ECWA property boundary and the limits of disturbance will be approx 6 acres. The project generally includes the construction of a replacement/redundant washwater tank to facilitate rehabilitation of the existing elevated backwash water tank, and to provide a redundant backwash system, filter underdrain replacement, backwash system improvements, including the addition of air scour, to improve backwash efficacy and system reliability and resiliency, replacement of filter valves to provide improved reliability, Filter-to-Waste (FTW) system improvements to provide an air gap for the system and greater FTW capacity, Sodium Bisulfate Feed Improvements, installation of new dehumidification equipment and improvements to the HVAC system, installation of new electrical equipment and improvement to the existing system to provide enhanced power resiliency for the Main Control Building.		
Name of Applicant/Sponsor: Erie County Water Authority - Leonard Kowalski, PE	Telephone: 716-685-8220	E-Mail: lkowalski@ecwa.org
Address: 3030 Union Road		
City/PO: Cheektowaga	State: New York	Zip Code: 14227
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Town of Evans - Local Waterfront Revitalization Program	April 2023 (projected)
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Erie County Health Department- NYS DOH form 348 approval	April 2023 (projected)
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYS DEC- SWPPP eNOI & NOT approvals, SPDES	April 2023 (projected)
h. Federal agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	USACE, NYSDEC, and NYSDOS Joint Application	April 2023 (projected)
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s): NYS Heritage Areas:West Erie Canal Corridor	

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?

Public facility _____

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No

If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Lakeshore Central School District

b. What police or other public protection forces serve the project site?
Town of Evans Police Department

c. Which fire protection and emergency medical services serve the project site?
Highland Hose Volunteer Fire Company

d. What parks serve the project site?
No parks are on the project site. However, the Sturgeon Point Nature Trail and Sturgeon Point Marina are located ~250-1000 ft from the western boundary of the project site. The project site is fenced and is not accessible by the public/recreational users.

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Industrial/ public utility

b. a. Total acreage of the site of the proposed action? 5.7 acres
b. Total acreage to be physically disturbed? approx. 3.2 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? approx. 113.5 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 0.264% Units: square feet

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? Yes No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated 2
- Anticipated commencement date of phase 1 (including demolition) April month 2023 year
- Anticipated completion date of final phase May month 2027 year

• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

Phase 1 and 2 will progress concurrently during 2023. The work associated with Phase 1 (MP-88) will be completed by August, 2024. Phase 2 (MP-90) will continue until anticipated completion in approximately May, 2027.

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will a line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or _____ acres (impervious surface)
 _____ Square feet or _____ acres (parcel size)
 ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

 • If to surface waters, identify receiving water bodies or wetlands: _____

 • Will stormwater runoff flow to adjacent properties? Yes No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? Yes No

l. Hours of operation. Answer all items which apply. Construction an operation may be required outside of the listed hours due to critical interconnections/ti-ins, or emergency work.

i. During Construction:

<ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
---	---

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: _____ tons per _____ (unit of time)
 • Operation : _____ tons per _____ (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: _____

 • Operation: _____

 iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: _____

 • Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____

 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): _____
 ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site: _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ % of site
 10-15%: _____ % of site
 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____ _____ _____	
n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Describe the habitat/community (composition, function, and basis for designation): _____ _____ <i>ii.</i> Source(s) of description or evaluation: _____ <i>iii.</i> Extent of community/habitat: <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing (endangered or threatened): _____ _____ _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____ _____	
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> CEA name: _____ <i>ii.</i> Basis for designation: _____ <i>iii.</i> Designating agency and date: _____	

<p>e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District</p> <p style="margin-left: 20px;">ii. Name: _____</p> <p style="margin-left: 20px;">iii. Brief description of attributes on which listing is based: _____</p>
<p>f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>g. Have additional archaeological or historic site(s) or resources been identified on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe possible resource(s): _____</p> <p style="margin-left: 20px;">ii. Basis for identification: _____</p>
<p>h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify resource: _____</p> <p style="margin-left: 20px;">ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____</p> <p style="margin-left: 20px;">iii. Distance between project and resource: _____ miles.</p>
<p>i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify the name of the river and its designation: _____</p> <p style="margin-left: 20px;">ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____ Date _____

Signature *Lemaud F. Kovalik* Title _____

E.2.h.v [Impaired Water Bodies]	Yes
E.2.h.v [Impaired Water Bodies - Name and Basis for Listing]	Name - Pollutants - Uses:Lake Erie (Main Lake, North) – Pathogens;Priority Organics – Recreation;Fish Consumption;Public Bathing
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

MP-88/MP-90: Sturgeon Point Water Treatment Plant Washwater Tank Replacement and Filtration Piping, Valve, and Underdrain System Improvements

Full Environmental Assessment Form Part 1, Section F

FEAF Section	Additional Information/Explanation
<p>C.2.b Adopted Land Use Plans</p>	<p>The project site has been identified as being located in the New York State Heritage Area called the West Erie Canal Corridor, which spans approximately 524 miles, in 23 counties across upstate New York. All work associated with this project scope will be confined within the property boundaries owned by ECWA and will not impact the Heritage Area within which the property is located.</p>
<p>D.1.c Is the proposed action an expansion of an existing project or use?</p>	<p>The proposed action is an expansion of the existing facility located on the project site and is not an expansion of the property itself. All work will be conducted within the existing ECWA property boundaries and will not encroach on adjacent or neighboring properties. No change in property use will result from the project scope.</p>
<p>D.2.b Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach, or adjacent area?</p>	<p>Aquatic resource delineations were completed at the STP WTP on December 30, 2021, and February 28, 2022, which identified two stream features (S1 and S2) and an associated wetland complex. Stream S1 corresponds with a mapped New York State Department of Environmental Conservation (NYSDEC) Class B stream that connects to Lake Erie and Stream S2 is an unmapped stream that flows into Stream S1 from the south. Both of these streams and the associated wetland complex are assumed to be under NYSDEC and the U.S. Army Corps of Engineers (USACE) jurisdiction. Most of the proposed work would avoid these streams and wetland complex; however, a storm sewer pipe is proposed to connect the Blower Building roof drains to Stream 1, and a washwater tank overflow channel will also drain to Stream 1. The STP WTP is located within the New York State coastal zone and is subject to New York State Department of State (NYS DOS) jurisdiction as well.</p>

FEAF Section	Additional Information/Explanation
	<p>It is anticipated that the project will require permits and approvals from the USACE, the NYSDEC, and the NYSDOS, due to the potential impact to Federal and State regulated aquatic resources. Consultations regarding required permitting are underway with NYSDEC, USACE, and NYSDOS. All work will be performed in accordance with permit conditions.</p> <p>In addition, the proposed riprap outlet will cause minimal disturbance to the wetlands and is expected to be covered under a USACE Nationwide Permit. However, all work associated with disturbance to wetlands and/or waterbodies will be conducted in accordance with obtained permits and approvals from USACE, NYSDEC, and NYSDOS, including mitigation measures, if required.</p>
<p>D.2.g</p> <p>Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?</p>	<p>It is anticipated that any new stationary emissions sources associated with operations would be registered, as required, and the existing facility permit would be modified to include any new stationary sources, as needed. No new registrations or air permits are expected to be associated with the project scope.</p>
<p>D.2.m</p> <p>Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?</p>	<p>The Town of Evans Noise Ordinance (Chapter 137) ^[1] was reviewed and contains restrictions specific to construction activities between the hours of 10:00pm and 7:00am, except in the case of an emergency or in the interest of public safety, with the permit of the Building Inspector. Construction will occur Monday-Friday from 7:00am-4:00pm only, with no construction activities occurring in the evenings, on weekends, or on holidays.</p> <p>The Erie County Water Authority (ECWA) standards for noise reduction state that contractor's vehicles and equipment shall be such as to minimize noise to the greatest degree practicable. In addition, noise levels shall conform to the latest OSHA standards and in no case will noise levels be permitted which interfere with the work of others. The implementation of any mitigation measures possible to reduce the amount of noise in the area will be considered during the design and construction phases.</p>
<p>D.2.p</p> <p>Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical</p>	<p>An above ground chemical storage building with a containment area below is proposed. Space is provided for three 275-gallon totes. All three totes will be used for chemical storage. Tote deliveries will be scheduled so that two empty totes will be removed and replaced while the third tote is in-service.</p>

FEAF Section	Additional Information/Explanation
<p>products 185 gallons in above ground storage or any amount in underground storage?</p>	
<p>D.2.r</p> <p>Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?</p>	<p>It is expected that there would be residual solid waste resulting from construction activities in the form of normal construction debris, which would be collected, hauled/transported offsite, and disposed of by the contractor in accordance with all applicable laws and regulations. No solid wastes are anticipated to be generated or disposed of as a result of operations.</p>
<p>E.1.b</p> <p>Land Uses and Land Cover Types</p>	<p>Land uses and land cover types were considered within the LOD for this project. This FEAF was created using the New York State Department of Environmental Conservation (NYSDEC) EAF Mapper program. The EAF Mapper program places an automatic 500' buffer around regulated wetlands and waterbodies [4], to ensure that these are considered during project assessment. During construction, stormwater Best Management Practices (BMPs) will serve to protect these surface water features from impacts associated with runoff from project activities.</p>
<p>E.2.h</p> <p>Surface Water Features</p>	<p>As stated previously, aquatic resource delineations were completed at the STP WTP on December 30, 2021, and February 28, 2022, which identified two stream features (S1 and S2) and an associated wetland complex. Stream S1 corresponds with a mapped New York State Department of Environmental Conservation (NYSDEC) Class B stream that connects to Lake Erie and Stream S2 is an unmapped stream that flows into Stream S1 from the south. Both of these streams and the associated wetland complex are assumed to be under NYSDEC and the U.S. Army Corps of Engineers (USACE) jurisdiction. Most of the proposed work would avoid these streams and wetland complex; however, a storm sewer pipe is proposed to connect the Blower Building roof drains to Stream 1 and a washwater tank overflow channel will also drain to Stream 1. The STP WTP is located within the New York State coastal zone and is subject to NYSDOS jurisdiction.</p> <p>It is anticipated that the project will require permits and approvals from the USACE, the NYSDEC, and the NYSDOS, due to the potential impact to Federal and State regulated aquatic resources. Consultations regarding required permitting are underway with NYSDEC, USACE, and NYSDOS. All work will be performed in accordance with permit conditions.</p> <p>In addition, the proposed riprap outlet will cause minimal disturbance to the wetlands and is expected to be covered under a USACE Nationwide</p>

FEAF Section	Additional Information/Explanation
	Permit. However, all work associated with disturbance to wetlands and/or waterbodies will be conducted in accordance with obtained permits and approvals from USACE, NYSDEC, and NYSDOS, including mitigation measures, if required.

[1] <https://ecode360.com/7074175>

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Project :

Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency’s reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land			
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)		<input type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

2. Impact on Geological Features The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - c. If "No", move on to Section 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - l. If "No", move on to Section 4.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
----------------------------------	--	--------------------------	--------------------------

4. Impact on groundwater
 The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. NO YES
 (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If “Yes”, answer questions a - h. If “No”, move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding
 The proposed action may result in development on lands subject to flooding. NO YES
 (See Part 1. E.2)
If “Yes”, answer questions a - g. If “No”, move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)		<input type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>				<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>		
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>		
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>		

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>				<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>		

d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property’s setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

11. Impact on Open Space and Recreation			
The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas			
The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation The proposed action may result in a change to existing transportation systems. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.j) <i>If "Yes", answer questions a - f. If "No", go to Section 14.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy The proposed action may cause an increase in the use of any form of energy. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.k) <i>If "Yes", answer questions a - e. If "No", go to Section 15.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light The proposed action may result in an increase in noise, odors, or outdoor lighting. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.m., n., and o.) <i>If "Yes", answer questions a - f. If "No", go to Section 16.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health			
The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) <i>If "Yes", answer questions a - m. If "No", go to Section 17.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

17. Consistency with Community Plans			
The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) <i>If “Yes”, answer questions a - h. If “No”, go to Section 18.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character			
The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) <i>If “Yes”, answer questions a - g. If “No”, proceed to Part 3.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the _____ as lead agency that:

A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:

Name of Lead Agency:

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer:

Signature of Responsible Officer in Lead Agency:

Date:

Signature of Preparer (if different from Responsible Officer)

Date:

For Further Information:

Contact Person:

Address:

Telephone Number:

E-mail:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

MP-88/MP-90: Sturgeon Point Water Treatment Plant Washwater Tank Replacement and Filtration Piping, Valve, and Underdrain System Improvements

Full Environmental Assessment Form Part 3

FEAF Part 2 Section	FEAF Part 3 Additional Information/Explanation
<p>1.a</p> <p>Impact on Land –</p> <p>The proposed action may involve construction on land where depth to water table is less than 3 feet.</p>	<p>The average depth to the water table at the project site is approximately 1.8 feet. Excavation is proposed for foundations associated with the new tank, blower building, and filter building extension, and for project activities associated with demolition of various existing components located on the site and excavation and grading is proposed for installation of new piping associated with proposed new on-site structures. It is anticipated that groundwater will be encountered during site preparation activities, however, adherence to the Erosion and Sediment Control Plan (ESCP), Stormwater Pollution Prevention Plan (SWPPP), permitting requirements associated with the State Pollutant Discharge Elimination System (SPDES) General Permit (GP) for Construction, and various other best management practices (BMPs) will ensure protection of groundwater and surface water throughout project activities. Therefore, no moderate to significant impacts to groundwater are expected to result from proposed project activities.</p>
<p>1.e</p> <p>Impact on Land –</p> <p>The proposed action may involve construction that continues for more than one year or in multiple phases.</p>	<p>The proposed project will be constructed in two phases over a three-year period. Phases one and two will begin concurrently, with Phase one completing by approximately August 2024 and Phase 2 extending until approximately May 2027. The project will not impede the function of the water treatment plant, as it is extending its current functions and duplicating systems. All project activities will be located within the interior of the ECWA property. Therefore, no impacts to facility functionality or areas outside of the ECWA facility property boundaries are anticipated to result from the phased construction or length of construction timeframe.</p>
<p>3.d</p> <p>Impacts on Surface Water –</p> <p>The proposed action may involve construction within or adjoining a freshwater or</p>	<p>Land uses and land cover types were considered within the LOD for this project. The New York State Department of Environmental Conservation (NYSDEC) EAF Mapper program places an automatic 500' buffer around regulated wetlands and waterbodies, to ensure that these are considered during project assessment. According to a review of the United States Army Corps of Engineers (USACE) National Wetland Inventory (NWI), seven mapped freshwater wetlands were identified within the ECWA property boundary (Figure 1 - Project Overview).</p>

FEAF Part 2 Section**tidal wetland, or in the bed or banks of any other water body.****FEAF Part 3 Additional Information/Explanation**

Aquatic resource surveys were completed on July 28, 2021, and December 30, 2021 to identify and delineate the boundaries of wetlands, streams, and other features that may be considered waters of the United States under the jurisdiction of the USACE, or waters of the state under the jurisdiction of the NYSDEC.

Two (2) perennial streams, three (3) palustrine emergent (PEM) wetlands, and one (1) palustrine forested wetland (PFO) were delineated within the environmental survey area (ESA) (Figure 1 – Project Overview). Stream 1 (S1) was identified as a mapped stream that flows southeast to northwest adjacent to the project site and connects to Lake Erie. Stream 2 (S2) is an unmapped stream that flows into S1 from the north. Approximately 638 feet of stream was delineated. One PEM wetland totalling 0.39 acres was delineated within the proposed project area. No other resources were identified within the ESA.

Wetland D and Stream S1 are located directly within the defined limits of disturbance within the project area. Wetland D is located in the northwest ESA surveyed on December 30, 2021 (Figure 1 – Project Overview). Wetland D is a PEM wetland. The landform is a wetland depression and drainage swale that accepts runoff from the surrounding roadway and landscape. Hydrology in this wetland is also influenced by Streams S1 and S2, the former of which flows through this wetland. The total area of the wetland delineated in the ESA is 0.39 acre. Indicators of wetland hydrology include saturation and high-water table. Dominant vegetation included common reed, red osier dogwood (*Cornus sericea*), and Torrey's rush. Soils are a clay loam with 15% redox features and a matrix color of 2.5 YR 3/2 at 4"-20". The hydric soil indicator is a redox dark surface (F6). Stream S1 is a perennial stream that originates from a culvert in the southeast corner of the northwest ESA, which was surveyed on December 30, 2021. The length of the stream delineated in the ESA is 638.12 feet. Stream S1 flows northwest before flowing off-site. Stream S1 has an Ordinary High-Water Mark (OHWM) width of approximately 4 feet and a bank-to-bank width of approximately 8 feet. Approximate average stream depth at the time of the survey was 6 inches. The bed of this stream consisted of cobble and gravel. Stream S1 was recorded at the top-of-bank before it entered Wetland D. Stream S1 corresponds with a mapped NYSDEC Class B stream.

Most of the proposed work would avoid the aquatic resources identified nearby; however, water is anticipated to drain into a stream from the site. Potential impacts to Stream S1 from the proposed water treatment facility repairs consist of project activities associated with the washwater tank installation and the storm sewer pipe coming from the Blower Building roof. Both the storm sewer pipe and the washwater tank overflow channel

FEAF Part 2 Section	FEAF Part 3 Additional Information/Explanation
	<p>will drain into Stream S1. It is expected that fill will occur within the Wetland D to accommodate the storm sewer pipe and the outlet will be protected using a rock riprap outlet protection.</p> <p>Approximately 24 trees that are located within the NYSDEC-established 100-foot wetland buffer are planned to be removed. Discussions regarding tree removal took place with NYSDEC in January, 2023, and since there are no known occurrences of NLEB near the site, NYSDEC indicated they would not make it mandatory to clear trees before April 1. A joint USACE and NYSDEC permit application is being prepared and tree clearing within the 100-foot wetland buffer would not occur prior to permit issuance and would be conducted in accordance with all permit requirements.</p> <p>Adherence to the ESCP, SWPPP, permitting requirements associated with the SPDES GP for Construction, and various other BMPs, including installation of silt fencing and the turbidity curtain, will ensure protection of water resources throughout project activities and will minimize impacts to water quality.</p>
<p>3.g</p> <p>Impacts on Surface Water –</p> <p>The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).</p>	<p>Potential impacts to Stream S1 from the proposed water treatment facility repairs consist of project activities associated with the washwater tank installation and the storm sewer pipe coming from the Blower Building roof. Both the storm sewer pipe and the washwater tank overflow channel will drain into Stream S1. Water from the washwater tank overflow would constitute clean drinking water from the tank. Backwash water from the filters would not be discharged. The use of BMPs, including installation of silt fencing and the turbidity curtain, will minimize impacts to water quality during the project.</p>
<p>7.d</p> <p>Impact on Plants and Animals –</p> <p>The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.</p>	<p>The Northern Long Eared Bat (NLEB) currently holds “Threatened” status federally, according to USFWS. The proposed action will involve tree clearing in an area. The project area is not considered critical habitat for NLEB, and no known sightings of the NLEB have occurred at the project location, according to the NYS DEC. Additionally, the NLEB federal status is expected to officially change on March 31, 2023, and after that date, is expected to hold “Endangered” federal status. Project planning, permitting, and construction activities are expected to continue past March 31, 2023, and therefore, all requirements associated with the change in federal status of the NLEB will be incorporated into the project permitting process and accounted for in project implementation in accordance with issued guidance and permits. Therefore, no reduction or degradation of any habitat used by any species of concern and conservation is expected to result from project activities and implementation and no impacts to listed species are anticipated.</p>

FEAF Part 2 Section	FEAF Part 3 Additional Information/Explanation
<p>14.a</p> <p>Impact on Energy –</p> <p>The proposed action will require a new, or an upgrade to an existing, substation.</p>	<p>A new Blower Building is proposed to house the air scour blowers. The proposed Blower Building includes an electrical room with proposed unit substations. The unit substations will include a 5kV fused load break switch, 1000kVA dry-type transformer, and 480V power distribution switchgear, and would provide a dedicated power feed for the Main Control Building, resulting in increased reliability and resiliency of the plant’s electrical system. However, the current loads required for existing uses at the facility would remain and would continue to rely on their current power sources. Therefore, no overall increase in energy use or capacity would be required to be sourced from the local area power grid, and the only required increase in energy use would be sourced by the proposed onsite, dedicated power, unit substations.</p>
<p>14.b</p> <p>Impact on Energy –</p> <p>The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.</p>	<p>The proposed action will require the creation of an energy supply system to serve this project's industrial use. Sturgeon Point WTP receives power from National Grid at 34.5kV. Due to the proposed improvements an additional 730kVA of capacity is required which is not currently available at the Main Control Building but is available at ECWA's existing main substation. This will be remedied by constructing a dedicated 480V substation for the Main Control Building. Therefore, no overall increase in energy use or capacity would be required to be sourced from the local area power grid, and the only required increase in energy use would be sourced by the proposed onsite, dedicated power, unit substations.</p>
<p>15.a</p> <p>Impact on Noise, Odor, and Light –</p> <p>The proposed action may produce sound above noise levels established by local regulation.</p>	<p>The proposed action may produce temporary sound above noise levels established by local regulation during construction activities. However, after completion of the project construction, noise levels are expected return to levels consistent with that of pre-construction conditions in the area. It is expected that because the majority of project construction activities will take place interior to the ECWA facility property, noise levels at the property perimeter boundaries are not anticipated to be intrusive. The closest sensitive receptor to the ECWA property boundary is located approximately 60 feet to the west of the ECWA fenceline near the facility entrance. No proposed construction activities are planned to take place near the facility entrance, and instead, all construction activities are planned in the vicinity of the existing facility structures, located interior to the facility site. Therefore, it is anticipated that with the exception of passing construction and personnel vehicles, no major construction related noise sources will be located in close proximity to this receptor. The next closest sensitive receptor is a residence that is located approximately 900 feet to the northwest of the ECWA fenceline. Although it is expected that construction noise may be perceptible at this receptor, the distance and between the two properties, which are separated by a large, forested parcel is expected to result in diminished noise levels.</p>

FEAF Part 2 Section	FEAF Part 3 Additional Information/Explanation
	<p>Therefore, noise impacts associated with the temporary nature of the construction activities are anticipated to be minor to moderate, and intermittent. Various BMPs and noise mitigation measures can be employed by the contractor, as needed, to reduce noise levels at receptor locations.</p>

16.c

Impact on Human Health

There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.

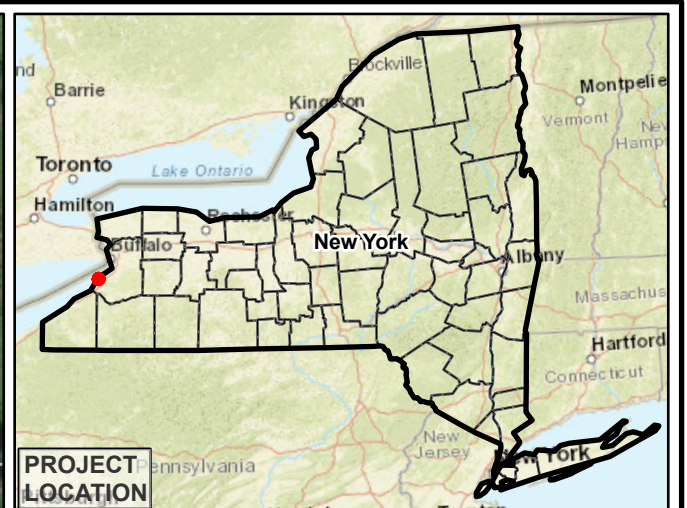
According to the NYSDEC Spills Incidents Database, a reported spill occurred at a property adjacent, to the east, of the ECWA property, located at 654 Sturgeon Point Road. The reported spill consisted of one pound of mineral oil affecting the soil and was the result of equipment failure involving a transformer on Pole 68 (Spill Number 2003685). The case was closed on August 6, 2020. Therefore, it is not anticipated that the proposed project activities would impact this spill case.

ATTACHMENT A:

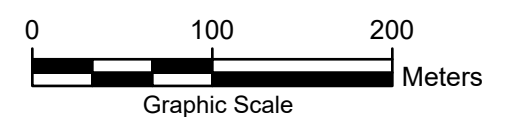
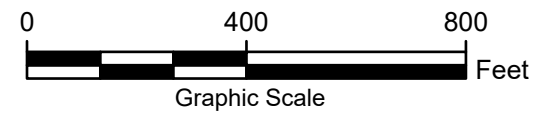
Project Site Overview – Figure 1



Last Saved By: RDby
TV_EPPICWA\MP88_MP90_SEOR_FEA\FIXD_Proj\ECWA_MP-88 and MP-90 SEOR_FEA\aprx - Project_Overview 11/10/2022



- LEGEND:**
- Anticipated Project Activities
 - Delineated Wetland**
 - Palustrine Emergent (PEM)
 - Palustrine Forested (PFO)
 - Delineated Stream
 - Freshwater Emergent Wetland (NWI)
 - Freshwater Forested/Shrub Wetland (NWI)
 - Freshwater Pond (NWI)
 - Lake (NWI)
 - Parcel Boundary



NOTE:

1. AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE (2021).
2. NATIONAL WETLANDS INVENTORY (NWI) DATA OBTAINED FROM THE US FISH AND WILDLIFE SERVICE AT: WWW.FWS.GOV.

ERIE COUNTY WATER AUTHORITY
MP-88/MP-90 PROJECT
ERIE COUNTY, NEW YORK

PROJECT OVERVIEW



FIGURE
1

ATTACHMENT B:

Site Photograph Log



Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 001

Date:
07/28/2021

Description:
WA-1W facing east

Location:
Erie County Water Authority



Photo: 002

Date:
07/28/2021

Description:
WA-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 003

Date:
07/28/2021

Description:
WB-1W facing west

Location:
Erie County Water Authority



Photo: 004

Date:
07/28/2021

Description:
WB-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 005

Date:
07/28/2021

Description:
WC-1W facing west

Location:
Erie County Water Authority



Photo: 006

Date:
07/28/2021

Description:
WC-1UP facing east

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 007

Date:
07/28/2021

Description:
WC-1W facing west

Location:
Erie County Water Authority



Photo: 008

Date:
12/30/2021

Description:
Wetland WD facing west

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 009

Date:
12/30/2021

Description:
Stream S1 inside wetland WD,
facing northwest

Location:
Erie County Water Authority



Photo: 010

Date:
12/30/2021

Description:
Confluence of stream S1
(center) and S2 (right), facing
east

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 011

Date:
12/30/2021

Description:
Stream S2 across, facing west

Location:
Erie County Water Authority



Photo: 012

Date:
12/30/2021

Description:
Upland overview, wetland
WD in the far left, facing
northwest

Location:
Erie County Water Authority

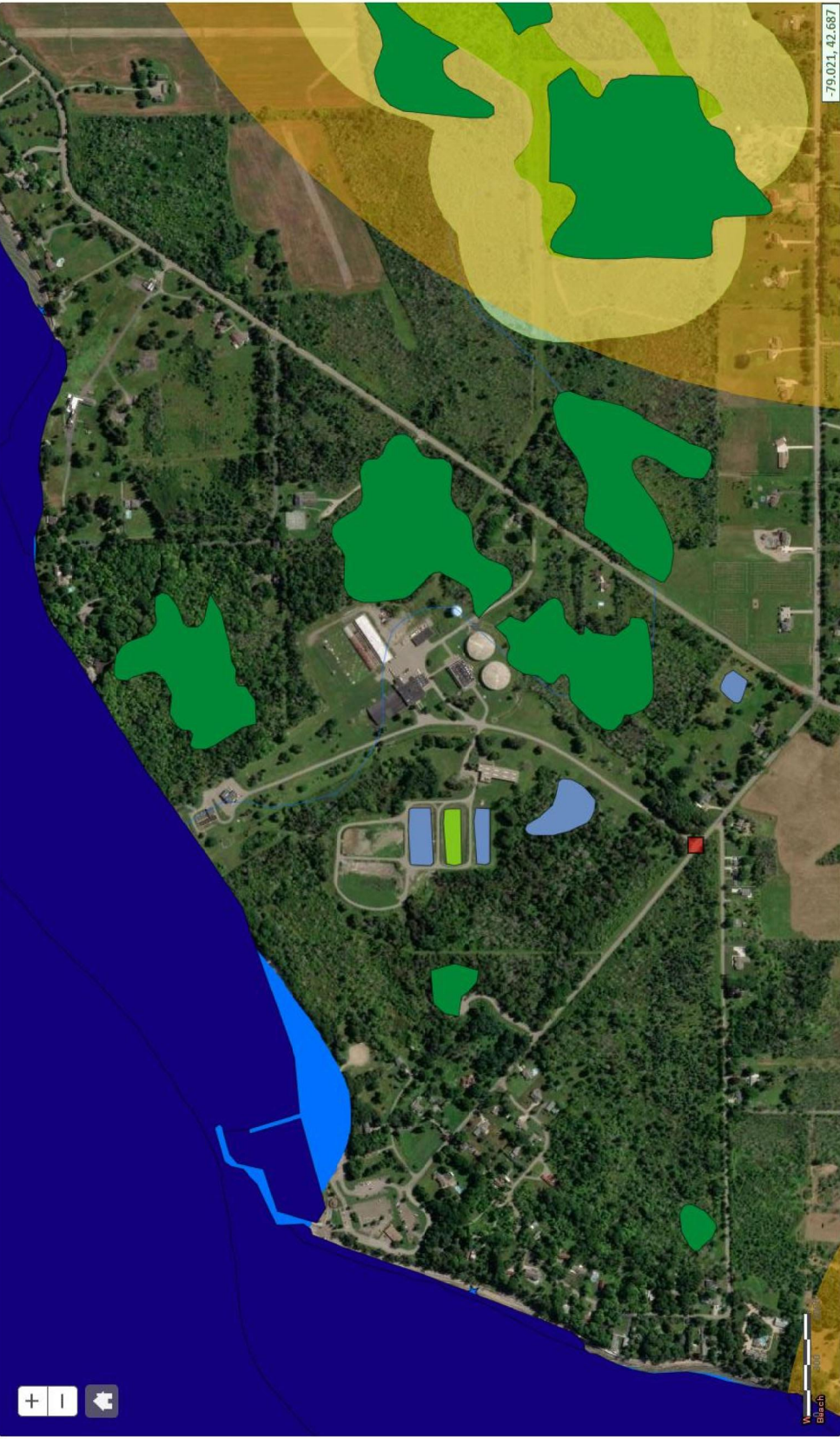
ATTACHMENT C:

Agency Correspondence



Environmental Resource Mapper

Base Map: Satellite with Labels Using this map



Search

Tools

Layers and Legend

All Layers

Unique Geological Features

Waterbody Classifications for Rivers/Streams

Waterbody Classifications for Lakes

State Regulated Freshwater Wetlands (Outside of the Adirondack Park)

State Regulated Wetland Checkzone

Impaired Mussels

Mussel Screening Ponded Waters

Mussel Screening Streams

Significant Natural Communities

Natural Communities Near This Location

Rare Plants or Animals

Base Flood Elevation Plus 72/75 Inches Sea-level Rise

Limit to Moderate Wave Action

Other Wetland Layers

Reference Layers

Tell Me More...

Need A Permit?

Contacts

-79,021, 42,687



Request Natural Heritage Information

New York Natural Heritage makes its data available to inform biodiversity conservation, natural resource management, land protection, land use decisions, environmental assessment, and project review.

Note that information regarding the locations of rare species is considered sensitive. The distribution of information which identifies the locations of rare species or their habitats may lead to the collection or disturbance of the animals and plants at those locations. NYSDEC has the legal authority, under New York State Environmental Conservation Law, to restrict access to such information, and has adopted a policy regarding the release of information compiled by the New York Natural Heritage Program. Under this policy, the level of detail provided about the locations and identities of rare species may be limited in order to protect the sensitive resources.

- **Part I of an Environmental Assessment Form (EAF).** If you are completing Part 1 of either the Short Form EAF or Long Form EAF as part of the SEQR process, please see [Completing Part 1 of an Environmental Assessment Form](#) below.
- **Project Screening.** If you need information on the presence of rare or listed plants and animals or of significant natural communities that may be impacted by a proposed development, project, or activity, see [How to Obtain Information for a Project Site](#) below.
- **Other Uses.** If you would like to apply Natural Heritage information in any of the following activities, please contact NY Natural Heritage at NaturalHeritage@dec.ny.gov or (518) 402-8935 (and leave message).
 - municipal or regional planning
 - natural resource inventory or management
 - open space inventory or protection
 - environmental or biodiversity conservation
 - scientific research

Completing Part 1 of an Environmental Assessment Form

If you are completing Part 1 of either the Short or Long Environmental Assessment Form (EAF), use the [EAF Mapper](#); see also [Using the EAF Mapper](#). This online tool will provide the answers to several of the questions in Part 1 of the EAF, including the questions about listed plants and animals and about significant natural communities. The answers provided by the EAF Mapper are sufficient to complete those questions in the EAF, and a request for information from the New York Natural Heritage Program is not required. If, however, you would like more information on the species and communities reported by the EAF Mapper:

- If the EAF Mapper reports any animals in the vicinity of your project site, contact the Permits staff at the appropriate NYSDEC Regional office for information about any permit considerations for the project or about potential impacts of the project on these species. (Contacting NY Natural Heritage is not necessary.)
- If the EAF Mapper reports any plants or natural communities, and if you would like more information, submit a request to NY Natural Heritage for a project screening (see [next section](#)).

How to Obtain Information for a Project Site

The New York Natural Heritage Program will screen locations of proposed projects, activities, and SEQR-subject actions for any records in our database of rare plants and animals (both listed and unlisted) and of significant natural communities which are in the vicinity of the project or action and which may be impacted.

Before requesting a Natural Heritage project screening

We recommend that you review your project site with the [Environmental Resource Mapper](#) (ERM), an online tool on the NYSDEC website.

- If your project site does not fall within an area displayed in the Rare Plants and Rare Animals layer or in the Significant Natural Communities layer, then New York Natural Heritage has no records to report in the vicinity of your project site. **Submitting a project screening request to NY Natural Heritage is not necessary.**
- If your project site falls within an area identified for a state-listed animal, and if you would like information about the specific species, about any permit considerations for the project, or about potential impacts of the project on listed species, contact the Permits staff at the NYSDEC Regional office for the Region where the project is located. (You can also use the [EAF Mapper](#) (see [section above](#)) to identify the particular species in the vicinity of the site.)
- If your project falls within an area identified for a plant, an unlisted animal, or a natural community, and if you would like more information than the ERM provides, submit a request to NY Natural Heritage for a project screening via our online Request Form or our dedicated e-mailbox. See [Instructions](#) below.

For a record of your results from the ERM, use the Identify Tool to click on your project location. Print or save the Identify Results window that opens.

Instructions for requesting a project screening from NY Natural Heritage

To request a screening of a specific project site, please use our online [Project Screening Request Form](#) (link leaves DEC's website). This allows online submission of information requests. Instructions are at the top of the form.

Alternatively, you may submit your requests by email to our dedicated e-mailbox, NaturalHeritage@dec.ny.gov.

Include "info request" and the name of the project in the subject line. Attach a map and include the following information in an attachment or in the body of the email:

- Why you need the information (e.g., SEQR review, environmental assessment for permit, planning board approval, management plan). If the proposed action is undergoing SEQR review, also include the name of the lead agency.
- Brief description of the proposed project or activity (e.g., residential development, bridge repair, cellular communications tower, landfill siting).
- Brief description of the current land use and habitats at the project site (e.g., wooded, agricultural, developed commercial).
- Name of counties and towns where the proposed project is located; also very helpful are the project site's street address and/or geographic coordinates (e.g., latitude and longitude) and/or tax parcel numbers.
- Map that includes labeled roads and other features, with the boundary of the proposed project clearly labeled, marked or highlighted. **Please do not send architectural or engineering drawings or photographs.**

We strongly encourage you to submit your request via our online form or by email as described above; however, if you are not able to use either of these two methods, we can accept requests mailed to the address below.

We strongly encourage you to submit your request during the early stages of a project.

Response time is 3-4 weeks from the date your request is received in our office. Projects extending over large areas or requiring more information may take longer. Requests are processed in the order in which they are received.

We provide a response by email to all information requests. Therefore, if you have not yet received a response, do not assume we have no data to report.

NY Natural Heritage Program - Information Services

NYS DEC

625 Broadway, 5th Floor

Albany, NY 12233-4757

Phone: (518) 402-8935 and leave message

Fax: (518) 402-8925



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2023-0015363
Project Name: Sturgeon Point Water Treatment Plant

November 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

Project Summary

Project Code: 2023-0015363
Project Name: Sturgeon Point Water Treatment Plant
Project Type: Water Supply Facility - Maintenance / Modification
Project Description: The Erie County Water Authority Sturgeon Point Water Treatment Plant located at 722 Sturgeon Point Rd, Derby, NY 14047 is planning to improve and renovate the current facility. This project generally includes excavation and construction for a new washwater tank, Blower Building, Filter-to-Waste (FTW) system building expansion, storm sewer pipe, and overflow channel. The site's limits of disturbance is 5.7 acres with a 200 ft buffer. The attached shapefile indicates the LOD with the 200 ft buffer.

The project will construct a new concrete washwater tank near the existing washwater tank and a new Blower Building. Also, a new storm sewer pipe will connect the Blower Building roof drains to Stream 1 and the washwater tank overflow channel will drain to Stream 1. Other improvements also will be made to the plant such as: underdrain media replacement, backwash system improvements, Filter-to-Waste (FTW) system building expansion, a new sodium bisulfite chemical injection manhole and mixing chamber prior to the outfall discharge, new dehumidification equipment and improvements to the HVAC system, and new electrical equipment.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.68927505,-79.03534711084964,14z>



Counties: Erie County, New York

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: County of Erie
Name: Hannah Saxena
Address: 100 Chestnut St
Address Line 2: Suite 1020
City: Rochester
State: NY
Zip: 14604
Email: hannah.saxena@arcadis.com
Phone: 5854207689



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project code: 2023-0015363
Project Name: Sturgeon Point Water Treatment Plant

November 14, 2022

Subject: Verification letter for the 'Sturgeon Point Water Treatment Plant' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Hannah Saxena:

The U.S. Fish and Wildlife Service (Service) received on November 14, 2022 your effects determination for the 'Sturgeon Point Water Treatment Plant' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Sturgeon Point Water Treatment Plant

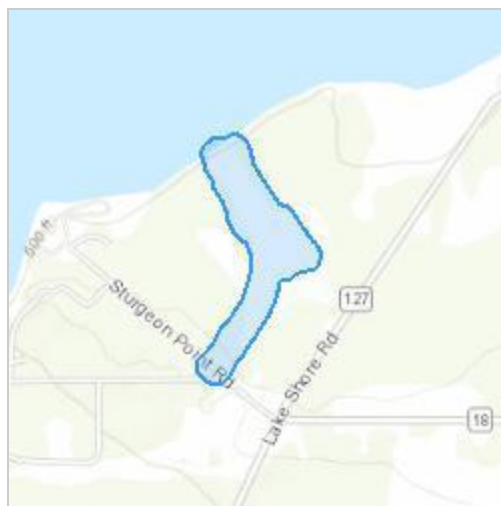
2. Description

The following description was provided for the project 'Sturgeon Point Water Treatment Plant':

The Erie County Water Authority Sturgeon Point Water Treatment Plant located at 722 Sturgeon Point Rd, Derby, NY 14047 is planning to improve and renovate the current facility. This project generally includes excavation and construction for a new washwater tank, Blower Building, Filter-to-Waste (FTW) system building expansion, storm sewer pipe, and overflow channel. The site's limits of disturbance is 5.7 acres with a 200 ft buffer. The attached shapefile indicates the LOD with the 200 ft buffer.

The project will construct a new concrete washwater tank near the existing washwater tank and a new Blower Building. Also, a new storm sewer pipe will connect the Blower Building roof drains to Stream 1 and the washwater tank overflow channel will drain to Stream 1. Other improvements also will be made to the plant such as: underdrain media replacement, backwash system improvements, Filter-to-Waste (FTW) system building expansion, a new sodium bisulfite chemical injection manhole and mixing chamber prior to the outfall discharge, new dehumidification equipment and improvements to the HVAC system, and new electrical equipment.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.68927505,-79.03534711084964,14z>



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

No

3. Will your activity purposefully **Take** northern long-eared bats?

No

4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/media/nleb-roost-tree-and-hibernacula-state-specific-data-links-0.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

7. Will the action involve Tree Removal?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

Agency: County of Erie
Name: Hannah Saxena
Address: 100 Chestnut St
Address Line 2: Suite 1020
City: Rochester
State: NY
Zip: 14604
Email: hannah.saxena@arcadis.com
Phone: 5854207689



**New York State
Parks, Recreation and
Historic Preservation**

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

February 03, 2023

Hannah Saxena
Arcadis U.S., Inc
100 Chestnut St
Rochester, NY 14514

Re: USACE
MP-90: Sturgeon Point Water Treatment Plant Improvements Project
722 Sturgeon Point Rd, Derby, NY 14047
22PR08194

Dear Hannah Saxena:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

rev: A. Farry

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7165 | F: (716) 851-7168
www.dec.ny.gov

SENT VIA EMAIL

January 19, 2023

Dan Seider
Arcadis of New York, Inc.
50 Fountain Plaza, Suite 600
Buffalo, New York 14202

Dear Dan Seider:

SEQR Lead Agency Coordination
Sturgeon Point Water Treatment Plant
Washwater Tank Bypass and Filtration Piping,
Valve, and Underdrain System Improvements
Town of Evans, Erie County

This is to acknowledge receipt of your letter, dated November 29, 2022 and received on December 19, 2022, which requested State Environmental Quality Review Act (SEQR) Lead Agency status for the above-noted project. The New York State Department of Environmental Conservation (NYSDEC) concurs that the Erie County Water Authority (ECWA) should act as SEQR Lead Agency. However please be aware of the following:

1. The project site includes New York State regulated wetlands; specifically, NYS Freshwater Wetland AN-6 and AN-7 and their regulated 100-foot-wide adjacent areas. ECWA should submit a delineation request to the NYSDEC for a wetland boundary verification, along with the delineation report and shapefiles, in order to determine NYS Freshwater Wetland jurisdiction over the project. A Freshwater Wetlands Permit pursuant to Article 24 of the New York State Environmental Conservation Law (ECL) will likely be required for any regulated activities proposed within these areas.
2. Please note that the on-site tributary of Lake Erie has a water classification and standard of B, pursuant to 6 NYCRR Part 838, Item 4. Therefore, any physical alteration (i.e., land clearing, filling, drainage pipe/ditch installation, etc.) to the bed or banks (within 50 feet of the stream) will require a Protection of Waters Permit pursuant to Article 15 of the New York State ECL.

3. Based on information enclosed with your notice, federally regulated wetlands are located on the project site. The ECWA should continue to consult with the United States Army Corps of Engineers (USACE) concerning USACE regulatory jurisdiction to determine if the project will impact federally regulated wetlands or require any other approval from that agency. If federal wetlands are involved, USACE may require the ECWA to obtain a Water Quality Certification (WQC) from NYSDEC. Please note that, effective September 11, 2020, a request for a WQC is subject to a United States Environmental Protection Agency rule which requires that a pre-filing meeting request be filed 30 days prior to applying for a WQC. More information related to this requirement and a pre-filing meeting request form can be found on NYSDEC's website at <https://www.dec.ny.gov/permits/6546.html>.
4. The western portion of the project site along Lake Erie includes the designated Coastal Erosion Hazard Area (CEHA), which NYSDEC regulates pursuant to Article 34 of the New York State ECL and 6 NYCRR Part 505 (Coastal Erosion Management Regulations). Based on previous discussions, the regulated area will not be impacted by the proposed project. However, if any project changes result in potentially regulated activities within the CEHA, an Article 34 Coastal Erosion Management Permit may be required.
5. Chemical Bulk Storage registrations will be required for the Sodium Bisulfite storage tanks proposed for the facility. The Erie County Water Authority should contact the Division of Environmental Remediation at 716/851-7220 for more information on this requirement.
6. Since project activities will involve land disturbance of 1 acre or more, the project sponsor, owner or operator is required to obtain a SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). This General Permit requires the project sponsor, owner or operator to control stormwater runoff according to a Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared prior to filing a Notice of Intent (NOI) and prior to commencement of the project. More information on General Permit GP-0-20-001, as well as the NOI form, is available on the NYSDEC's website at <https://www.dec.ny.gov/chemical/43133.html>. Information on permitting requirements and preparation of a SWPPP is available on the NYSDEC's website at <https://www.dec.ny.gov/chemical/8468.html>.

The Town of Evans is designated as an MS4 community. The project sponsor, owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 shall have their SWPPP reviewed and accepted by the MS4 community. The "MS4 SWPPP Acceptance" form must be signed by the principal executive officer or ranking elected official from the MS4 community, or by a duly authorized representative of that person, and

submitted along with the NOI, to the NYSDEC at NOTICE OF INTENT, NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505, telephone: 518/402-8111 to receive NYSDEC approval before construction commences.

7. There appears to be a gas well located within the project site. It will be necessary to determine whether this well is functional or has been appropriately plugged for public safety purposes. Please contact our Regional Mineral Resources Unit (Allegany Sub office, telephone: 716/372-5636) if you believe that this well may be affected by the project.
8. It was noted on the Federal Emergency Management Agency's (FEMA) FIRM Map No. 36029C0433J that the site is located within the designated 100-year floodplain. The proposed project should be designed in accordance with all applicable local municipal laws for flood damage reduction.
9. The project location is within a designated Coastal Management Area. It is strongly recommended that you obtain guidance from the Town of Evans concerning possible Local Waterfront Revitalization Plan requirements.

If you have any questions regarding this letter, please feel free to contact Michelle Woznick of my staff at 716/851-7165 or Michelle.Woznick@dec.ny.gov.

Sincerely,

David S. Denk

David S. Denk
Regional Permit Administrator

MRW

ecc: Angela Driscoll, NYSDEC Division of Fish & Wildlife
Molly Bebak, NYSDEC Division of Water
Sevon Thompson, NYSDEC Division of Water
Leonard Kowalski, Erie County Water Authority



COUNTY OF ERIE

MARK C. POLONCARZ

COUNTY EXECUTIVE

GALE R. BURSTEIN, MD, MPH
COMMISSIONER OF HEALTH

December 19, 2022

Daniel Seider, PE
Arcadis of New York
50 Fountain Plaza; Suite 600
Buffalo, NY 14202

RE: SEQR for ECWA Sturgeon Point Water Treatment Plant MP-88/MP-90 Project

Dear Mr. Seider:

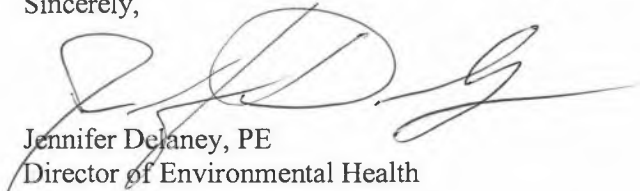
Regarding your letter report dated November 29, 2022 for the above project, ECDOH has no objection to the Erie County Water Authority assuming Lead Agency for SEQR review.

Please be advised that because the project includes upgrades to a water treatment plant, New York State Department of Health (NYSDOH) will be performing the review and approval of the project. We will forward your letter report to NYSDOH. Future project correspondence may be sent to NYSDOH and copied to me. The address for NYSDOH reviewing section is:

David Phillips
Design Section, NYSDOH Bureau of Water Supply Protection
Erastus Corning Tower, Room 1135
Albany, NY 12237

If there are any questions, please contact me at 716-961-6800.

Sincerely,



Jennifer DeJaney, PE
Director of Environmental Health
Erie County Department of Health

Novak, Tiffany

From: Silkworth, Wade (HEALTH) <Wade.Silkworth@health.ny.gov>
Sent: Tuesday, December 27, 2022 9:54 AM
To: Novak, Tiffany
Cc: mquinn@ecwa.org; Leonard F. Kowalski; Mike W. Wymer; Seider, Dan; Saxena, Hannah
Subject: RE: Erie County Water Authority Sturgeon Point Water Treatment Plant MP-88/MP-90 Project

Hi Tiffany,

No objection to lead agency proposal for SEQR.

Thanks,
Wade

Wade Silkworth, PE

Professional Engineer I, Field Coordinator
NYSDOH, Western Region Water Supply
335 East Main St, Rochester, NY 14604
585-423-7516 | wade.silkworth@health.ny.gov

From: Novak, Tiffany <Tiffany.Novak@arcadis.com>
Sent: Monday, December 19, 2022 1:31 PM
To: Silkworth, Wade (HEALTH) <Wade.Silkworth@health.ny.gov>
Cc: mquinn@ecwa.org; Leonard F. Kowalski <lkowalski@ecwa.org>; Mike W. Wymer <mwymmer@ecwa.org>; Seider, Dan <Daniel.Seider@arcadis.com>; Saxena, Hannah <Hannah.Saxena@arcadis.com>
Subject: Erie County Water Authority Sturgeon Point Water Treatment Plant MP-88/MP-90 Project

You don't often get email from tiffany.novak@arcadis.com. [Learn why this is important](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Mr. Silkworth:

On behalf of the Erie County Water Authority (ECWA), I am transmitting to you the Sturgeon Point Water Treatment Plant Project Part I of the SEQR Full Environmental Assessment Form (FEAF) and Lead Agency letter for your agency's review and feedback.

Please feel free to contact me with any questions or needs for clarification.

Thank you.

Best,

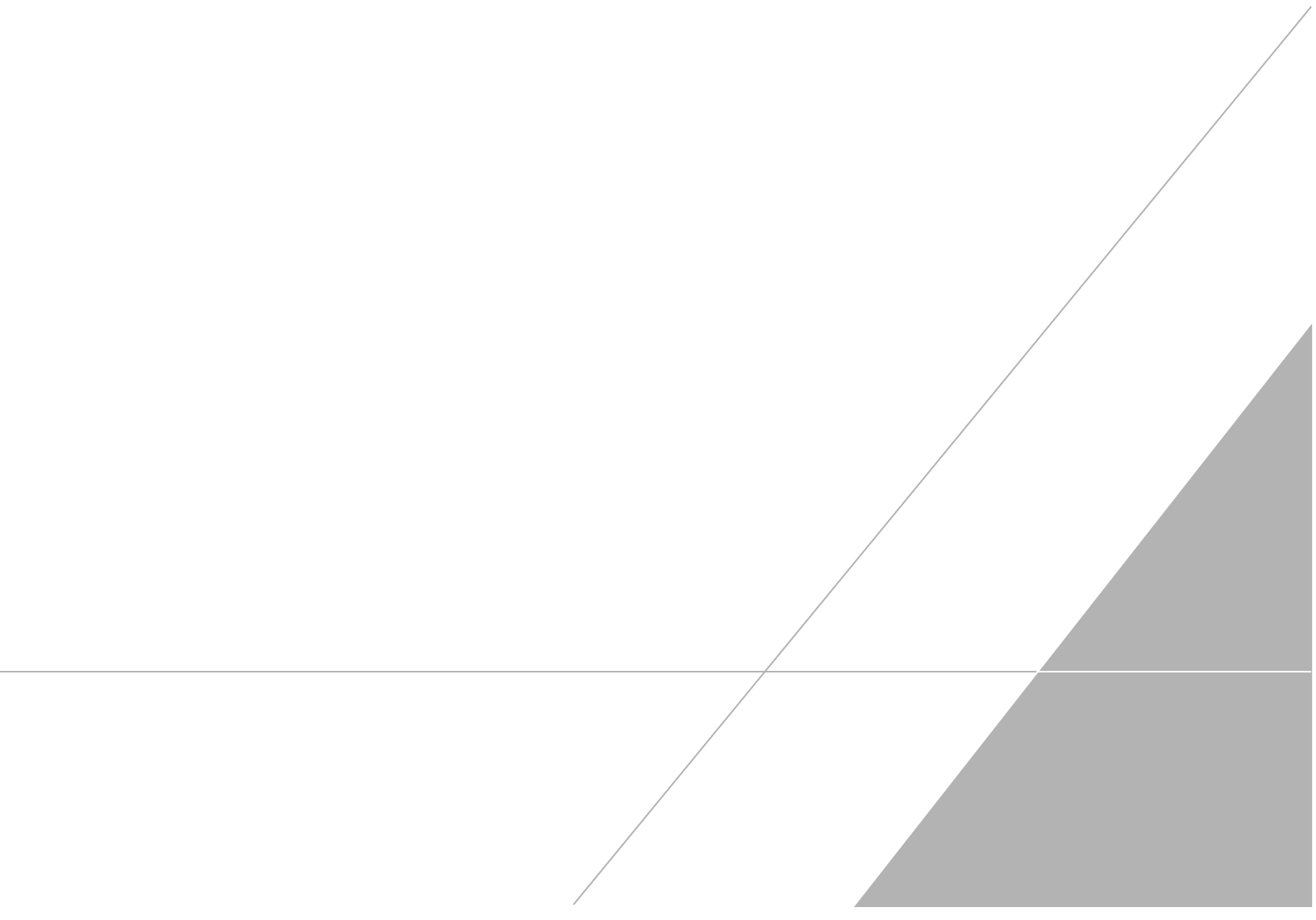
Tiffany

Tiffany M. Novak, ENV SP | Senior Environmental Scientist; Line Manager | tiffany.novak@arcadis.com
Arcadis | Arcadis U.S., Inc.

4301 North Fairfax Drive, Suite 530, Arlington, VA | 22203 | USA

ATTACHMENT D:

Wetland Delineation Report Technical Memos



SUBJECT

Sturgeon Point Water Treatment Plant Washwater Tank Replacement Wetland Delineation Update

TO

Mike Quinn, PE – ECWA

DATE

February 28, 2022

PROJECT NUMBER

30099812

COPIES TO

Mike Wymer, PE – ECWA
Dave Patton, PE – ECWA
File/Projects/30076280

NAME

Rachel Smith – Arcadis
716 667 6662
Rachel.Smith@arcadis.com

Introduction

This technical memorandum summarizes the findings of the aquatic resources survey completed in support of Erie County Water Authority's Sturgeon Point Water Treatment Plant Washwater Tank Replacement project in Erie County, New York. The original survey was completed on July 28, 2021, and an additional survey was completed on December 30, 2021, these surveys covered the areas outlined in Attachment 1 – Figure 1 of this technical memorandum. The scope of the field work included a delineation of aquatic resources (i.e., wetlands and streams) (Attachment 1 – Figure 4), a photo log of relevant areas and resources (Attachment 2), and notes of the current site conditions.

The aquatic resource survey was completed in accordance with methodologies established the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual, and Northeast and Northcentral Regional Supplement. From this regulatory definition, a three-parameter approach to identify and delineate wetlands was utilized. First, the National Wetlands Plant List was reviewed to determine the presence or absence of vegetative communities indicative of wetlands. Second, the upper horizons of soil profiles were analyzed for indicators of hydric soils, using Munsell® Soil Color Charts to assign standard notations to the samples. Finally, the presence, potential presence, or absence of wetland hydrology was determined for final definition of the upland and wetland boundaries.

Streams were located at their ordinary high-water mark (OHWM) levels as defined by the USACE as “the line on the shore in non-tidal areas established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.” All boundaries were located using a Trimble sub-meter GPS unit (Trimble).

Site Conditions and Aquatic Resource Survey

Wetlands

Wetland WA – This wetland is located in the southeast environmental survey area (ESA). Wetland WA is a palustrine forested wetland (PFO). The total area of wetland WA delineated within the ESA is 1.23 acres. Wetland WA extends out of the ESA to the southeast. The landform is a wetland depression that accepts runoff from the surrounding landscape and potential off-site hydrological connections. Indicators of wetland hydrology include saturation, hydrogen sulfide odor, drainage pattern, geomorphic position, and stunted or stressed plants. Dominant vegetation includes green ash (*Fraxinus pennsylvanica*) green bulrush (*Scirpus atrovirens*) and

sensitive fern (*Onoclea sensibilis*). There is also a presence of fox sedge (*Carex vulpinoidea*) and silky dogwood (*Cornus amomum*). Soils are a mucky loam/clay with 40% redox features. Hydric soil indicators include hydrogen sulfide odor (A4) and redox dark surface (F6).

Wetland WB – This wetland is located in the southeast ESA, northwest of wetland WA. Wetland WB is a palustrine emergent (PEM) wetland. The landform is a wetland depression that accepts runoff from the surrounding landscape. The total area of the wetland is 0.25 acre. Indicators of wetland hydrology include drainage patterns, geomorphic position, and FAC-neutral test. Dominant vegetation includes green bulrush at 45% absolute cover and narrowleaf cattail at 25% absolute cover. There was also a presence of Torrey's rush (*Juncus torreyi*). Soils are a loamy clay with 25% mottles beneath 4 inches. Hydric soil indicators include a redox dark surface (A11) and sandy redox (S5).

Wetland WC – This wetland is located in the northeastern ESA. Wetland WC is a PEM wetland. The landform is a wetland depression and drainage swale that accepts runoff from the surrounding roadway and landscape. The total area of the wetland is 0.12 acre. Indicators of wetland hydrology include drainage patterns, saturation visible on aerial imagery, and geomorphic position. Dominant vegetation includes common reed (*Phragmites australis*) at 90% absolute cover. Other vegetation observed at the time of survey included fox sedge and bulrush. Soils are a clay loam with 10% redox features and a matrix color of 10 YR 4/1 at 0"-16". Hydric soil indicators include a depleted matrix (F3).

Wetland WD – This wetland is located in the northwest ESA surveyed on December 30, 2021. Wetland WD is a PEM wetland. The landform is a wetland depression and drainage swale that accepts runoff from the surrounding roadway and landscape. Hydrology in this wetland is also influenced by streams S1 and S2, the former of which flows through this wetland. The total area of the wetland delineated in the ESA is 0.39 acre. Indicators of wetland hydrology include saturation and high water table. Dominant vegetation included common reed, red osier dogwood (*Cornus sericea*), and Torrey's rush. Soils are a clay loam with 15% redox features and a matrix color of 2.5 YR 3/2 at 4"-20". The hydric soil indicator is a redox dark surface (F6).

Streams

Stream S1 – This feature is a perennial stream that originates from a culvert in the southeast corner of the northwest ESA, surveyed on December 30, 2021. The length of the stream delineated in the ESA is 638.12 feet. S1 flows northwest before flowing off-site. Stream S1 has an OHWM width of approximately 4 feet and a bank-to-bank width of approximately 8 feet. Approximate average stream depth at the time of the survey was 6 inches. The bed of this stream consisted of cobble and gravel. Stream S1 was recorded at the top-of-bank before it entered wetland WD. Stream S1 corresponds with a mapped New York State Department of Conservation (NYSDEC) Class B stream.

Stream S2 – This feature is a perennial stream that originates from a drainage swale in the south of the northwestern ESA and flows north into stream S1. Approximately 52.85 feet of this stream is mapped with in the ESA. Stream S2 has an OHWM width of approximately 3 feet and a bank-to-bank width of approximately 8 feet. Approximate average stream depth at the time of the survey was 6 inches. The bed of this stream consisted of cobble and gravel. Stream S2 was recorded at its top-of-bank width. This unmapped stream flows into a mapped NYSDEC Class B stream (S2).

Mike Quinn, PE
Erie County Water Authority
February 2022

NYSDEC Resources

None of the wetlands on-site were considered potentially jurisdiction under NYSDEC. The nearest NYSDEC mapped wetland is approximately 0.32 mile away to the southeast. A Class B NYSDEC mapped stream does flow through the ESA. It corresponds with stream S1. Perennial unmapped stream S2 flows into S1; both streams are likely under NYSDEC jurisdiction. The NYSDEC regulated bank areas for these streams are contained in their mapping, as both streams were recorded at their top-of-bank widths. No areas outside of the mapped stream boundaries and wetland complex for S1 would likely fall under NYSDEC jurisdiction.

Enclosures

Attachment 1: Mapping

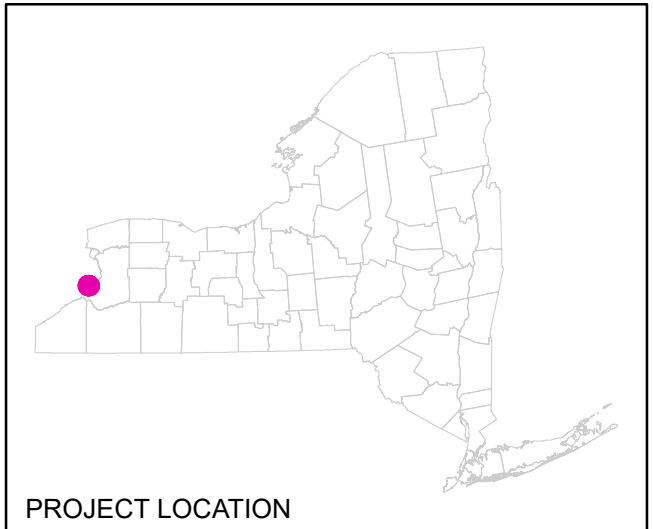
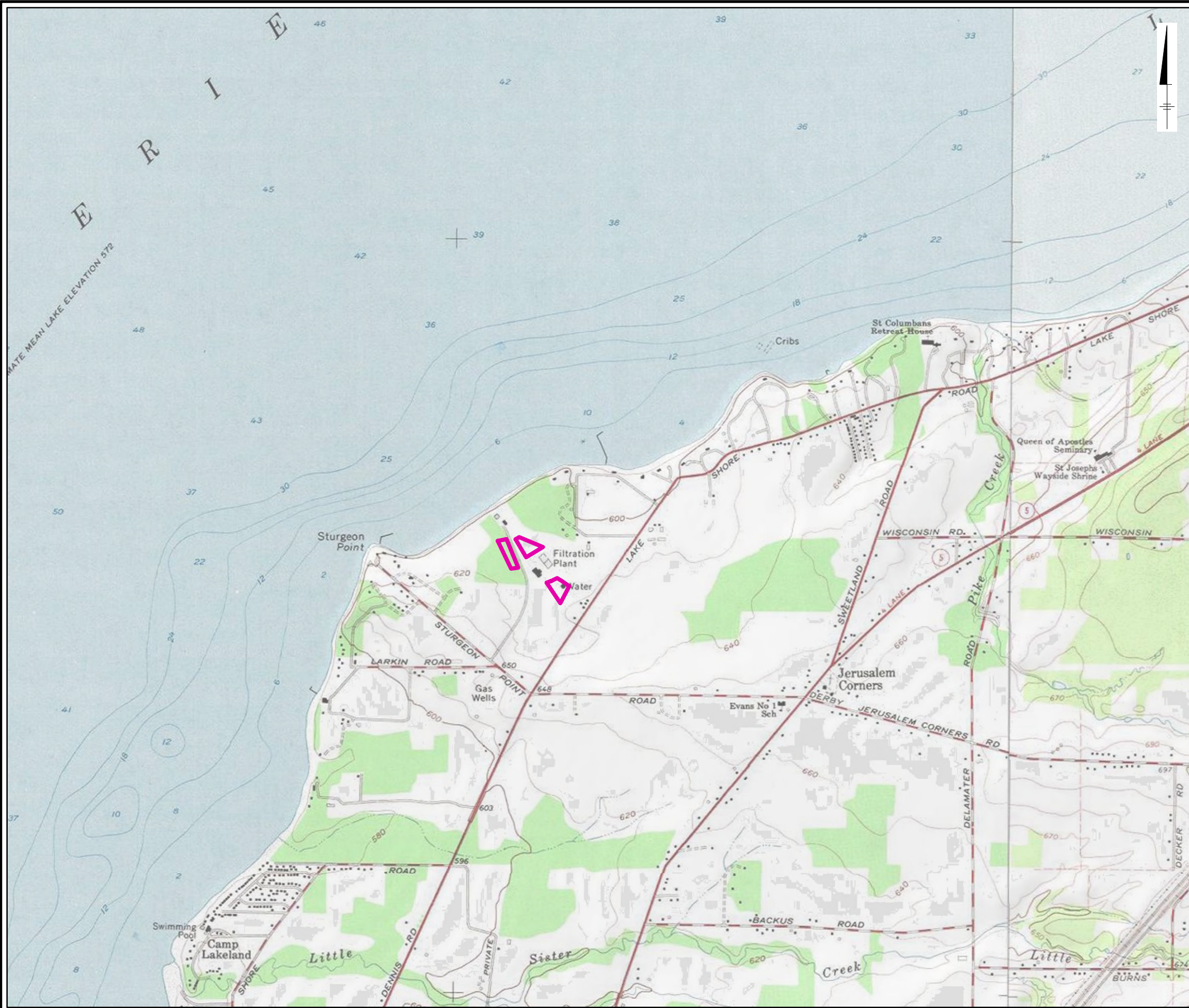
Attachment 2: Photo Log


Attachment 3: Wetland Determination Data Forms

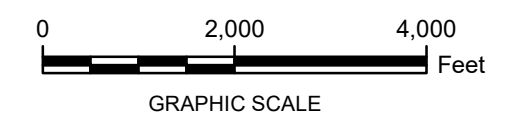
ATTACHMENT 1

Mapping

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Project (Project #138, 1.6)
T:\ErieCountyWater\Authority\AGCO_SetUp\WDR\Topo_SiteMap.mxd 1/13/2022 10:37:24 AM



LEGEND:
 STUDY AREA

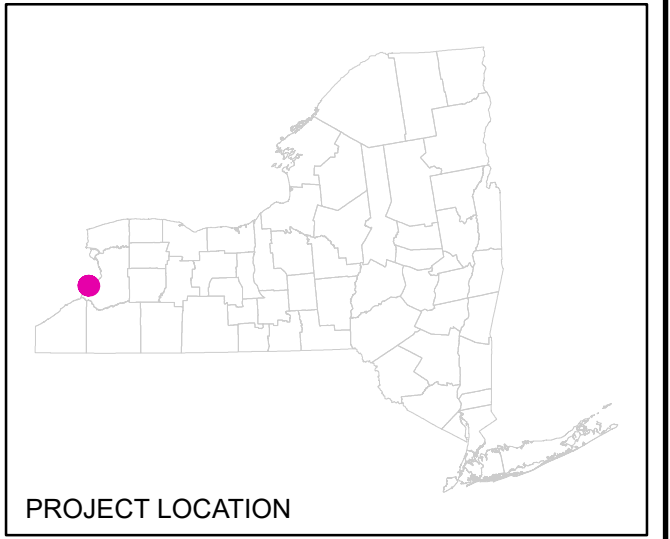


NOTE:
1. TOPOGRAPHIC QUADRANGLE FOR ANGOLA, NEW YORK WAS OBTAINED FROM ESRI IMAGE SERVICE.

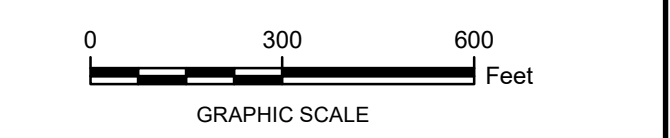
ERIE COUNTY WATER AUTHORITY
ERIE COUNTY, NEW YORK

SITE LOCATION MAP

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Project (Project #138, 1.6)
T:\ErieCountyWater\Authority\AGO_SetUp\WDR\NWI_FEMA_NHD_Map.mxd 1/9/2022 10:08:17 PM



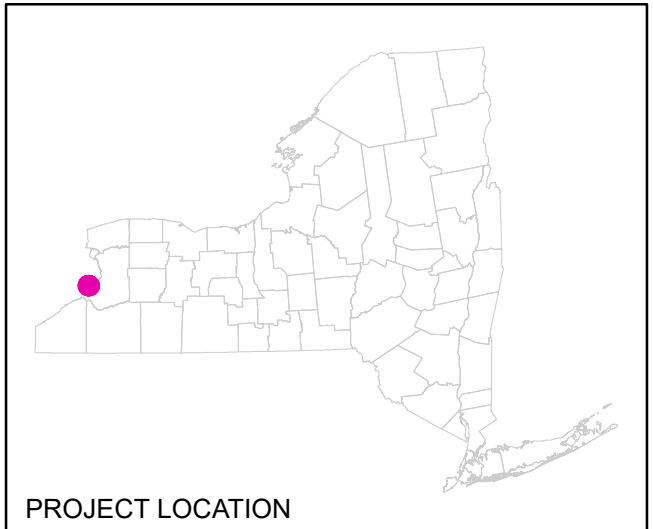
- LEGEND:
- NHD RIVER/STREAM
 - STUDY AREA
 - FEMA FLOOD ZONE TYPE:
 - AE
 - NWI WETLAND TYPE:
 - FRESHWATER EMERGENT WETLAND
 - FRESHWATER FORESTED/SHRUB WETLAND
 - FRESHWATER POND; LAKE





- NOTES:
1. IMAGERY OBTAINED FROM ESRI IMAGE SERVICES.
 2. 2019 NATIONAL WETLANDS INVENTORY (NWI) WETLAND DATA OBTAINED FROM THE US FISH & WILDLIFE SERVICE AT: WWW.FWS.GOV.
 3. 2012 NATIONAL HYDROGRAPHY DATASET (NHD) OBTAINED FROM THE US GEOLOGICAL SURVEY AT: [HTTPS://NHD.USGS.GOV](https://NHD.USGS.GOV)
 4. 2016 FEMA FLOODPLAIN DATA OBTAINED FROM FEMA AT: [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

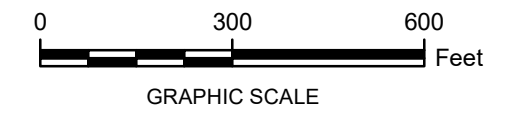
ERIE COUNTY WATER AUTHORITY
ERIE COUNTY, NEW YORK

NHD/NWI/FEMA MAP



LEGEND:
 STUDY AREA
 SOIL CLASS BOUNDARY

SOIL ID	SOIL DESCRIPTION
BIC	Blasdell channery silt loam, 8 to 15 percent slopes
Ch	Cheektowaga fine sandy loam
FbB	Farnham channery silt loam, 3 to 8 percent slopes
Ha	Halsey silt loam
MaB	Manlius channery silt loam, 3 to 8 percent slopes
OrA	Orpark silt loam, 0 to 3 percent slopes
OrB	Orpark silt loam, 3 to 8 percent slopes
PhA	Phelps gravelly loam, 0 to 3 percent slopes
PhB	Phelps gravelly loam, 3 to 8 percent slopes
Re	Red Hook silt loam
RmA	Rhinebeck silty clay loam, stratified substratum, 0 to 3 percent slopes
Ro	Rock outcrop
Uc	Udorthents, smoothed
W	Water

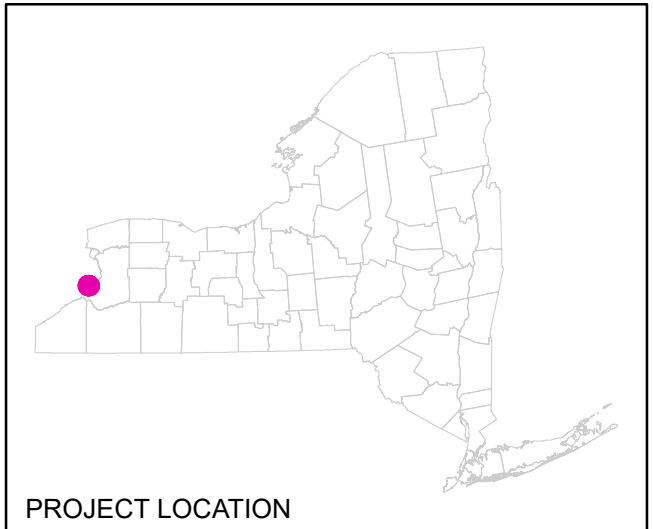
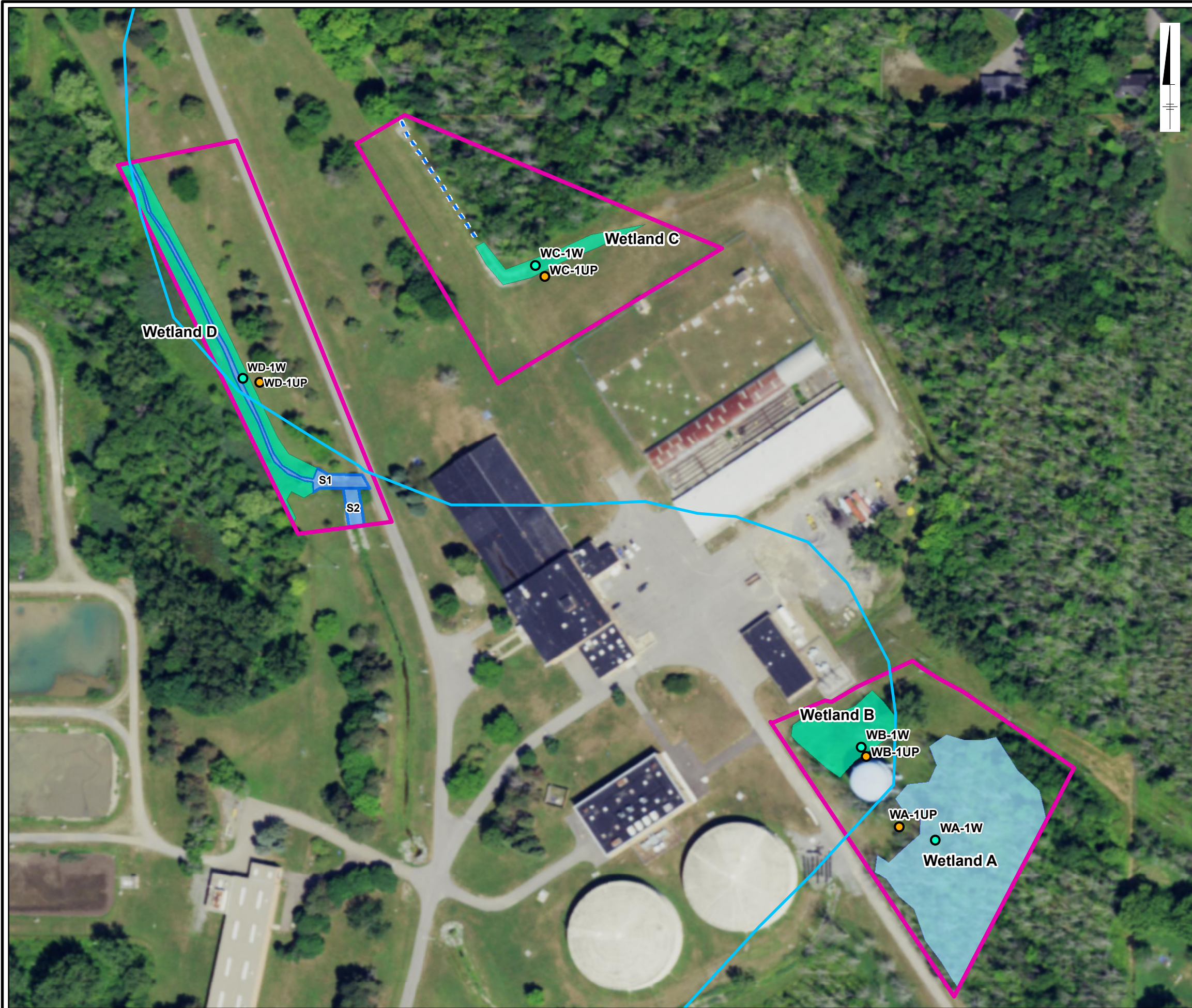


NOTES:
 1. IMAGERY OBTAIN ED FR OM ESRI IMAGE SERVICES.
 2. 2014 NATURAL RESOURCES CONSERVATION SERVICE (NRCS)
 SOIL DATA OBTAINED FROM: <https://websoilsurvey.nrcs.usda.gov>

ERIE COUNTY WATER AUTHORITY
 ERIE COUNTY, NEW YORK

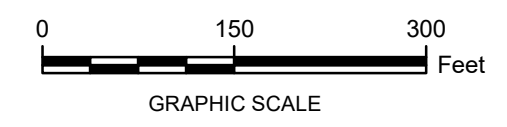
NRCS SOIL MAP

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Project (Project #138, 1.6)
T:\ErieCountyWater\Authority\AGCO_SetUp\WDR\DelinedatedFeaturesMap.mxd 2/17/2022 8:52:32 AM



LEGEND:

- UPLAND DATA POINT
- WETLAND DATA POINT
- NYSDEC CLASS B STREAM
- - - DRAINAGE DITCH
- ▭ STUDY AREA
- ▭ DELINEATED STREAM
- ▭ PALUSTRINE EMERGENT (PEM)
- ▭ PALUSTRINE FORESTED (PFO)



NOTE:
1. IMAGERY OBTAINED FROM ESRI IMAGE SERVICES.

ERIE COUNTY WATER AUTHORITY
ERIE COUNTY, NEW YORK

DELINEATED RESOURCES MAP

ATTACHMENT 2

Photo Log

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 001

Date:
07/28/2021

Description:
WA-1W facing east

Location:
Erie County Water Authority



Photo: 002

Date:
07/28/2021

Description:
WA-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 003

Date:
07/28/2021

Description:
WB-1W facing west

Location:
Erie County Water Authority



Photo: 004

Date:
07/28/2021

Description:
WB-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 005

Date:
07/28/2021

Description:
WC-1W facing west

Location:
Erie County Water Authority



Photo: 006

Date:
07/28/2021

Description:
WC-1UP facing east

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 007

Date:
07/28/2021

Description:
WC-1W facing west

Location:
Erie County Water Authority



Photo: 008

Date:
12/30/2021

Description:
Wetland WD facing west

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 009

Date:
12/30/2021

Description:
Stream S1 inside wetland WD,
facing northwest

Location:
Erie County Water Authority



Photo: 010

Date:
12/30/2021

Description:
Confluence of stream S1
(center) and S2 (right), facing
east

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 011

Date:
12/30/2021

Description:
Stream S2 across, facing west

Location:
Erie County Water Authority



Photo: 012

Date:
12/30/2021

Description:
Upland overview, wetland
WD in the far left, facing
northwest

Location:
Erie County Water Authority

ATTACHMENT 3

Wetland Determination Data Forms

VEGETATION – Use scientific names of plants.

Sampling Point: WA-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>0</u></td><td>x 2 = <u>0</u></td></tr> <tr><td>FAC species <u>3</u></td><td>x 3 = <u>9</u></td></tr> <tr><td>FACU species <u>75</u></td><td>x 4 = <u>300</u></td></tr> <tr><td>UPL species <u>0</u></td><td>x 5 = <u>0</u></td></tr> <tr><td>Column Totals: <u>78</u></td><td>(A) <u>309</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.96</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>3</u>	x 3 = <u>9</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>78</u>	(A) <u>309</u> (B)	Prevalence Index = B/A = <u>3.96</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>3</u>	x 3 = <u>9</u>																			
FACU species <u>75</u>	x 4 = <u>300</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>78</u>	(A) <u>309</u> (B)																			
Prevalence Index = B/A = <u>3.96</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Herb Stratum</u> (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1. <u>Trifolium repens</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Plantago lanceolata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Centaureum pulchellum</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>78</u> =Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WA-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): toeslope Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.688890 Long: -79.033563 Datum: NAD83
 Soil Map Unit Name: OrA - Orpark silt loam, 0 to 3 percent slopes. NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland A</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) <u>X</u> Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) <u>X</u> Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) <u>X</u> Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
--	--

Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>6</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WA-1W

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>20</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>86</u></td> <td>x 2 = <u>172</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>112</u> (A)</td> <td><u>200</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.79</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>86</u>	x 2 = <u>172</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>112</u> (A)	<u>200</u> (B)	Prevalence Index = B/A = <u>1.79</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>86</u>	x 2 = <u>172</u>																			
FAC species <u>1</u>	x 3 = <u>3</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>112</u> (A)	<u>200</u> (B)																			
Prevalence Index = B/A = <u>1.79</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>20</u> =Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>10</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>10</u> =Total Cover																			
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Onoclea sensibilis</u>	<u>40</u>	Yes	FACW	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Carex vulpinoidea</u>	<u>10</u>	No	OBL																	
3. <u>Fraxinus pennsylvanica</u>	<u>5</u>	No	FACW																	
4. <u>Scirpus atrovirens</u>	<u>15</u>	Yes	OBL																	
5. <u>Carex cristatella</u>	<u>6</u>	No	FACW																	
6. <u>Geum aleppicum</u>	<u>1</u>	No	FAC																	
7. <u>Cornus amomum</u>	<u>5</u>	No	FACW																	
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>82</u> =Total Cover																			
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
	_____ =Total Cover																			

Remarks: (Include photo numbers here or on a separate sheet.)

VEGETATION – Use scientific names of plants.

Sampling Point: WB-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>1</u> x 3 = <u>3</u> FACU species <u>100</u> x 4 = <u>400</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>101</u> (A) <u>403</u> (B) Prevalence Index = B/A = <u>3.99</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5</u>)				
1. <u>Trifolium repens</u>	15	No	FACU	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Taraxacum officinale</u>	3	No	FACU	
3. <u>Poa pratensis</u>	80	Yes	FACU	
4. <u>Plantago major</u>	2	No	FACU	
5. <u>Prunella vulgaris</u>	1	No	FAC	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
_____ =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ =Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WB-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): toeslope Local relief (concave, convex, none): concave Slope %: 2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.691269 Long: -79.035832 Datum: NAD83
 Soil Map Unit Name: Uc - Udorthents, smoothed. NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland B</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WB-1W

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>72</u></td><td>x 1 = <u>72</u></td></tr> <tr><td>FACW species <u>15</u></td><td>x 2 = <u>30</u></td></tr> <tr><td>FAC species <u>5</u></td><td>x 3 = <u>15</u></td></tr> <tr><td>FACU species <u>0</u></td><td>x 4 = <u>0</u></td></tr> <tr><td>UPL species <u>1</u></td><td>x 5 = <u>5</u></td></tr> <tr><td>Column Totals: <u>93</u></td><td>(A) <u>122</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.31</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>72</u>	x 1 = <u>72</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>93</u>	(A) <u>122</u> (B)	Prevalence Index = B/A = <u>1.31</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>72</u>	x 1 = <u>72</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>1</u>	x 5 = <u>5</u>																			
Column Totals: <u>93</u>	(A) <u>122</u> (B)																			
Prevalence Index = B/A = <u>1.31</u>																				
_____ =Total Cover																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Herb Stratum</u> (Plot size: <u>5</u>)																				
1. <u>Typha angustifolia</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Scirpus atrovirens</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Agrostis gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Sisyrinchium angustifolium</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Hypericum perforatum</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Juncus torreyi</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Scirpus cyperinus</u>	<u>2</u>	<u>No</u>	<u>OBL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WB-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Loamy/Clayey	
4-10	5Y 5/1	75	2.5YR 4/6	25	C	M	Sandy	Prominent redox concentrations
10-20	2.5Y 3/1	85	5YR 4/6	15	C	M	Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	
<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Marl (F10) (LRR K, L)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WC-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ =Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ =Total Cover
<u>Herb Stratum</u> (Plot size: <u>5</u>)				
1. <u>Lotus corniculatus</u>	3	No	FACU	
2. <u>Prunella vulgaris</u>	1	No	FAC	
3. <u>Poa pratensis</u>	90	Yes	FACU	
4. <u>Trifolium repens</u>	6	No	FACU	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
				_____ =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				_____ =Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>99</u>	x 4 = <u>396</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>399</u> (B)
Prevalence Index = B/A = <u>3.99</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WC-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope %: 0
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.691257 Long: -79.035824 Datum: NAD83
 Soil Map Unit Name: PhA - Phelps gravelly loam, 0 to 3 percent slopes. NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland C</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WC-1W

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>9</u></td><td>x 1 = <u>9</u></td></tr> <tr><td>FACW species <u>91</u></td><td>x 2 = <u>182</u></td></tr> <tr><td>FAC species <u>0</u></td><td>x 3 = <u>0</u></td></tr> <tr><td>FACU species <u>0</u></td><td>x 4 = <u>0</u></td></tr> <tr><td>UPL species <u>0</u></td><td>x 5 = <u>0</u></td></tr> <tr><td>Column Totals: <u>100</u></td><td>(A) <u>191</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.91</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>9</u>	x 1 = <u>9</u>	FACW species <u>91</u>	x 2 = <u>182</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u>	(A) <u>191</u> (B)	Prevalence Index = B/A = <u>1.91</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>9</u>	x 1 = <u>9</u>																			
FACW species <u>91</u>	x 2 = <u>182</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u>	(A) <u>191</u> (B)																			
Prevalence Index = B/A = <u>1.91</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
_____ =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
<u>Herb Stratum</u> (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Phragmites australis</u>	<u>90</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Carex vulpinoidea</u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Juncus effusus</u>	<u>1</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Scirpus atrovirens</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Carex cristatella</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 12-30-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WD-1UP
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): convex Slope %: 2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.690697 Long: -79.037435 Datum: NAD83
 Soil Map Unit Name: Ha - Halsey silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: 	

VEGETATION – Use scientific names of plants.

Sampling Point: WD-1UP

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Herb Stratum (Plot size: <u>5</u>)				
1.	<u>Poa pratensis</u>	60	Yes	FACU
2.	<u>Plantago major</u>	15	No	FACU
3.	<u>Trifolium repens</u>	5	No	FACU
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
8.	_____	_____	_____	
9.	_____	_____	_____	
10.	_____	_____	_____	
11.	_____	_____	_____	
12.	_____	_____	_____	
	80 =Total Cover			
Woody Vine Stratum (Plot size: <u>30</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
	=Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>80</u>	x 4 =	<u>320</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column Totals:	<u>80</u> (A)		<u>320</u> (B)
Prevalence Index = B/A =			<u>4.00</u>

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 12-30-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WD-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): swale Local relief (concave, convex, none): concave Slope %: 0
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.690697 Long: -79.037435 Datum: NAD83
 Soil Map Unit Name: Ha - Halsey silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland D</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>6</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

Sampling Point: WD-1W

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Herb Stratum (Plot size: <u>5</u>)				
1.	<u><i>Phragmites australis</i></u>	60	Yes	FACW
2.	<u><i>Juncus torreyi</i></u>	15	No	FACW
3.	<u><i>Cornus alba</i></u>	10	No	FACW
4.	<u><i>Solidago gigantea</i></u>	10	No	FACW
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
12.	_____	_____	_____	_____
	95 =Total Cover			
Woody Vine Stratum (Plot size: <u>30</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
	=Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>95</u>	x 2 = <u>190</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>95</u> (A)	<u>190</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)

Technical Memorandum

**SUBJECT**

Sturgeon Point Water Treatment Plant Washwater Tank Replacement Wetland Delineation

TO

Mike Quinn, PE – ECWA

DATE

August 23, 2021

PROJECT NUMBER

30099812

COPIES TO

Mike Wymer, PE – ECWA
Dave Patton, PE – ECWA
File/Projects/30076280

NAME

Rachel Smith – Arcadis
716 667 6662
Rachel.Smith@arcadis.com

Introduction

This technical memorandum summarizes the findings of the aquatic resources survey completed in support of Erie County Water Authority's Sturgeon Point Water Treatment Plant Washwater Tank Replacement project in Erie County, New York. The survey was completed on July 28, 2021 and covered the areas outlined in Attachment 1 – Figure 1 of this technical memorandum. The scope of the field work included a delineation of aquatic resources (i.e., wetlands and streams) (Attachment 1 – Figure 4), a photo log of relevant areas and resources (Attachment 2), and notes of the current site conditions.

The aquatic resource survey was completed in accordance with methodologies established the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual, and Northeast and Northcentral Regional Supplement. From this regulatory definition, a three-parameter approach to identify and delineate wetlands was utilized. First, the National Wetlands Plant List was reviewed to determine the presence or absence of vegetative communities indicative of wetlands. Second, the upper horizons of soil profiles were analyzed for indicators of hydric soils, using Munsell® Soil Color Charts to assign standard notations to the samples. Finally, the presence, potential presence, or absence of wetland hydrology was determined for final definition of the upland and wetland boundaries.

Streams were located at their ordinary high-water mark levels as defined by the USACE as “the line on the shore in non-tidal areas established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.” All boundaries were located using a Trimble sub-meter GPS unit (Trimble).

Site Conditions and Aquatic Resource Survey

Wetlands

Wetland WA – This wetland is located in the southeast environmental survey area (ESA). Wetland WA is a palustrine forested wetland (PFO). The total area of wetland WA delineated within the ESA is 1.23 acres. Wetland WA extends out of the ESA to the southeast. The landform is a wetland depression that accepts runoff from the surrounding landscape and potential off-site hydrological connections. Indicators of wetland hydrology include saturation, hydrogen sulfide odor, drainage pattern, geomorphic position, and stunted or stressed plants. Dominant vegetation includes green ash (*Fraxinus pennsylvanica*) green bulrush (*Scirpus atrovirens*) and sensitive fern (*Onoclea sensibilis*). There is also a presence of fox sedge (*Carex vulpinoidea*) and silky dogwood

Mike Quinn, PE
Erie County Water Authority
August 23, 2021

(*Cornus amomum*). Soils are a mucky loam/clay with 40% redox features. Hydric soil indicators include hydrogen sulfide odor (A4) and redox dark surface (F6).

Wetland WB – This wetland is located in the southeast ESA, northwest of wetland WA. The landform is a wetland depression that accepts runoff from the surrounding landscape. The total area of the wetland is 0.25 acre. Indicators of wetland hydrology include drainage patterns, geomorphic position, and FAC-neutral test. Dominant vegetation includes green bulrush at 45% absolute cover and narrowleaf cattail at 25% absolute cover. There was also a presence of Torrey's rush (*Juncus torreyi*). Soils are a loamy clay with 25% mottles beneath 4 inches. Hydric soil indicators include a redox dark surface (A11) and sandy redox (S5).

Wetland WC – This wetland is located in the northwest ESA. The landform is a wetland depression and drainage swale that accepts runoff from the surrounding roadway and landscape. The total area of the wetland is 0.12 acre. Indicators of wetland hydrology include drainage patterns, saturation visible on aerial imagery, and geomorphic position. Dominant vegetation includes common reed (*Phragmites australis*) at 90% absolute cover. Other vegetation observed at the time of survey included fox sedge and bulrush. Soils are a clay loam with 10% redox features with a matrix color of 10 YR 4/1 at 0"-16". Hydric soil indicators include a depleted matrix (F3).

Enclosures

Attachment 1: Mapping

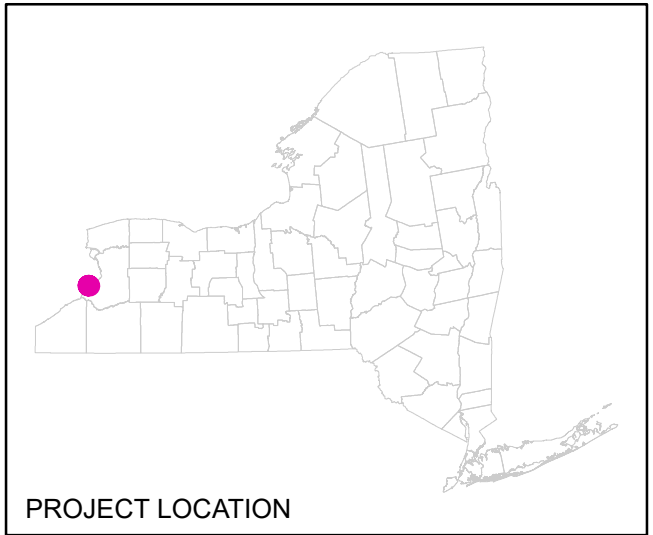
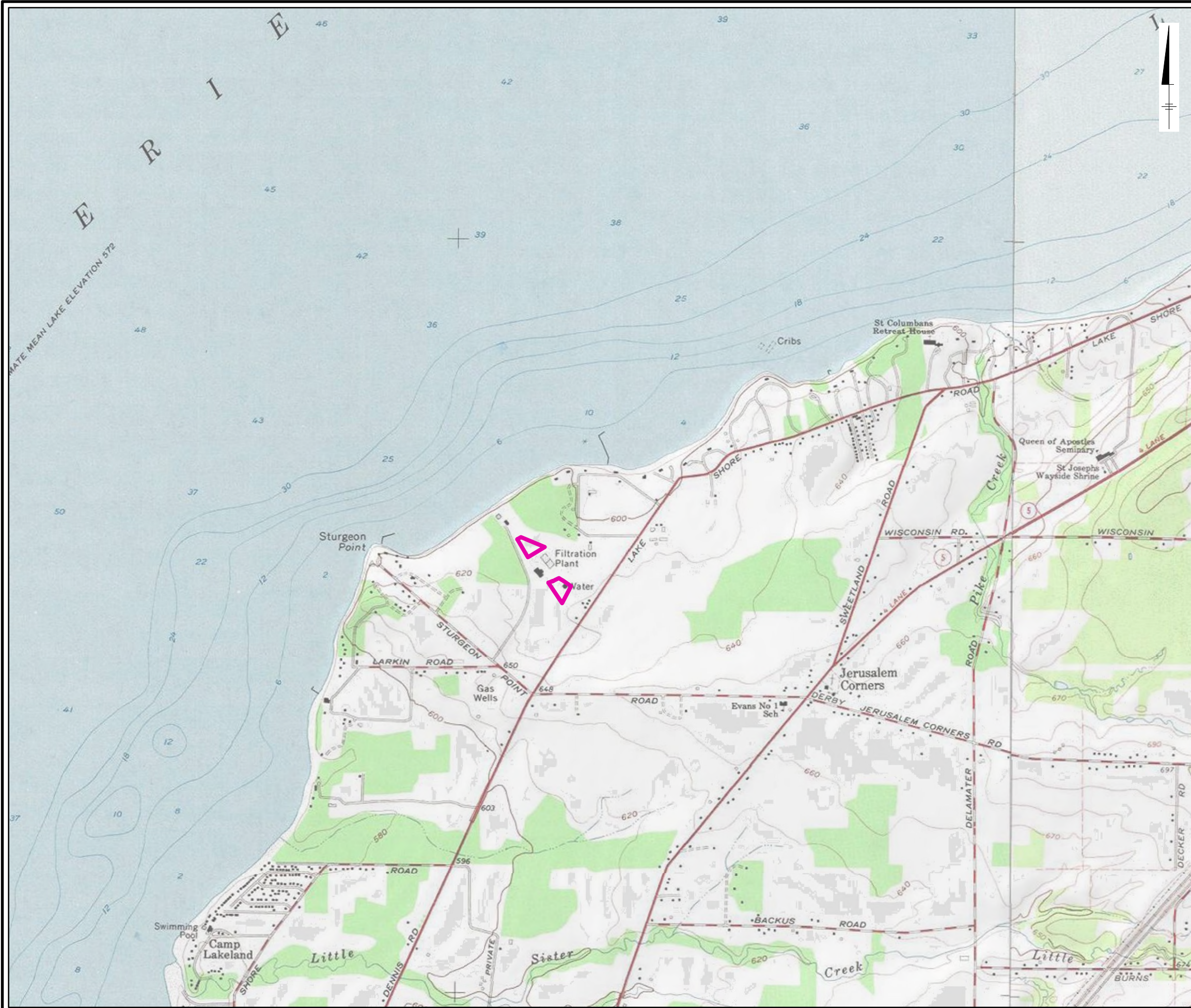
Attachment 2: Photo Log


Attachment 3: Wetland Determination Data Forms

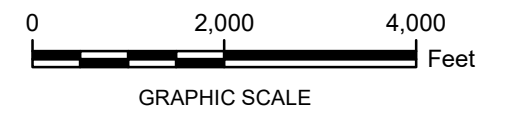
ATTACHMENT 1

Mapping

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
 Project (Project #138, 1.6)
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LEGEND:
 STUDY AREA

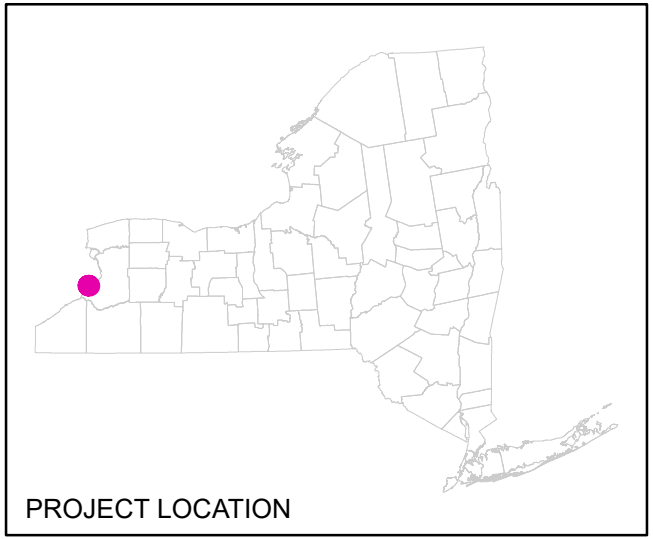


NOTE:
 1. TOPOGRAPHIC QUADRANGLE FOR ANGOLA, NEW YORK WAS OBTAINED FROM ESRI IMAGE SERVICE.

ERIE COUNTY WATER AUTHORITY
 ERIE COUNTY, NEW YORK







SITE LOCATION MAP

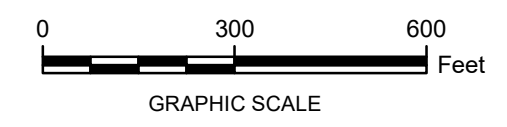
City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
Project (Project #138, 1.6)
T:\ErieCountyWater\Authority\AGO_SetUp\WDR\NWI_FEMA_NHD_Map.mxd 8/19/2021 2:13:25 PM



PROJECT LOCATION

LEGEND:

-  NHD RIVER/STREAM
-  STUDY AREA
- FEMA FLOOD ZONE TYPE:
 -  AE
- NWI WETLAND TYPE:
 -  FRESHWATER EMERGENT WETLAND
 -  FRESHWATER FORESTED/SHRUB WETLAND
 -  FRESHWATER POND; LAKE

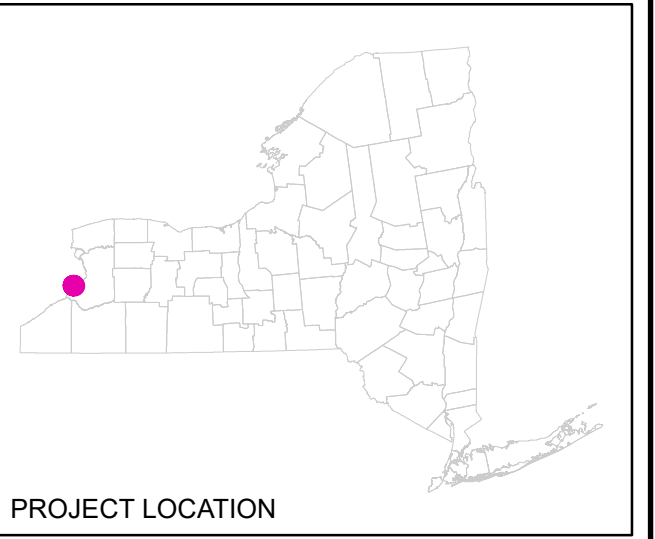


- NOTES:
1. IMAGERY OBTAINED FROM ESRI IMAGE SERVICES.
 2. 2019 NATIONAL WETLANDS INVENTORY (NWI) WETLAND DATA OBTAINED FROM THE US FISH & WILDLIFE SERVICE AT: WWW.FWS.GOV.
 3. 2012 NATIONAL HYDROGRAPHY DATASET (NHD) OBTAINED FROM THE US GEOLOGICAL SURVEY AT: [HTTPS://NHD.USGS.GOV](https://NHD.USGS.GOV)
 4. 2016 FEMA FLOODPLAIN DATA OBTAINED FROM FEMA AT: [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

ERIE COUNTY WATER AUTHORITY
ERIE COUNTY, NEW YORK

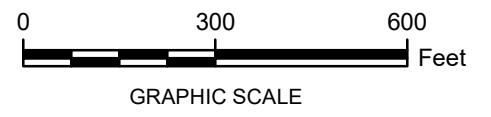
NHD/NWI/FEMA MAP

City: SYR Div/Group: IM/DV Created By: J.RAPP Last Saved By: jrapp
 Project (Project #138, 1.6)
 T:\ErieCountyWater\Authority\AGCO_SetUp\WDR\Soil_Map.mxd 8/19/2021 4:17:41 PM



LEGEND:
 [Pink outline] STUDY AREA
 [Yellow outline] SOIL CLASS BOUNDARY

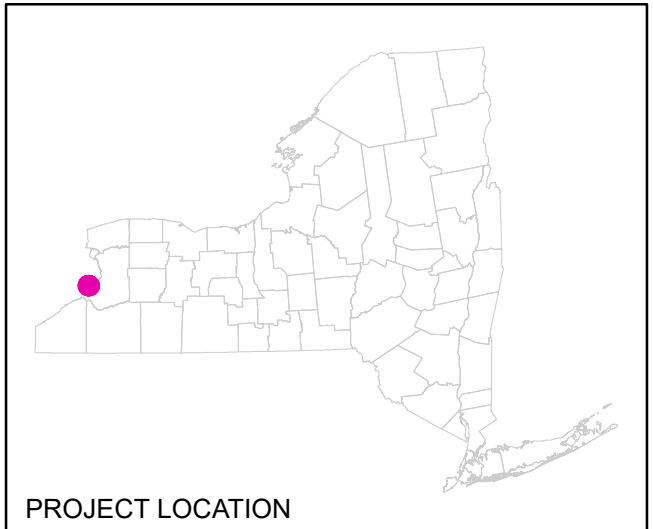
SOIL ID	SOIL DESCRIPTION
BIC	Blasdell channery silt loam, 8 to 15 percent slopes
Ch	Cheektowaga fine sandy loam
FbB	Farnham channery silt loam, 3 to 8 percent slopes
Ha	Halsey silt loam
MaB	Manlius channery silt loam, 3 to 8 percent slopes
OrA	Orpark silt loam, 0 to 3 percent slopes
OrB	Orpark silt loam, 3 to 8 percent slopes
PhA	Phelps gravelly loam, 0 to 3 percent slopes
PhB	Phelps gravelly loam, 3 to 8 percent slopes
Re	Red Hook silt loam
RmA	Rhinebeck silty clay loam, stratified substratum, 0 to 3 percent slopes
Ro	Rock outcrop
Uc	Udorthents, smoothed
W	Water









NOTES:
 1. IMAGERY OBTAINED FROM ESRI IMAGE SERVICES.
 2. 2014 NATURAL RESOURCES CONSERVATION SERVICE (NRCS) SOIL DATA OBTAINED FROM: <https://websoilsurvey.nrcs.usda.gov/>

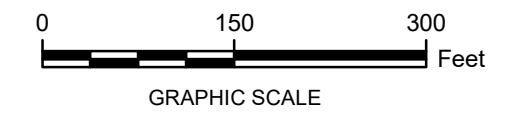
ERIE COUNTY WATER AUTHORITY
 ERIE COUNTY, NEW YORK

NRCS SOIL MAP



LEGEND:

-  UPLAND DATA POINT
-  WETLAND DATA POINT
-  DRAINAGE DITCH
-  STUDY AREA
-  PALUSTRINE EMERGENT (PEM)
-  PALUSTRINE FORESTED (PFO)



NOTE:

1. IMAGERY OBTAINED FROM ESRI IMAGE SERVICES.

ERIE COUNTY WATER AUTHORITY
ERIE COUNTY, NEW YORK

DELINEATED RESOURCES MAP

ATTACHMENT 2

Photo Log

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 001

Date:
07/28/2021

Description:
WA-1W facing east

Location:
Erie County Water Authority



Photo: 002

Date:
07/28/2021

Description:
WA-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 003

Date:
07/28/2021

Description:
WB-1W facing west

Location:
Erie County Water Authority



Photo: 004

Date:
07/28/2021

Description:
WB-1UP facing south

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 005

Date:
07/28/2021

Description:
WC-1W facing west

Location:
Erie County Water Authority



Photo: 006

Date:
07/28/2021

Description:
WC-1UP facing east

Location:
Erie County Water Authority

Project Photographs

Sturgeon Point WTP Washwater Tank
Erie County Water Authority



Photo: 007

Date:
07/28/2021

Description:
Drainage ditch facing west

Location:
Erie County Water Authority

ATTACHMENT 3

Wetland Determination Data Forms

VEGETATION – Use scientific names of plants.

Sampling Point: WA-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
_____ =Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>3</u> x 3 = <u>9</u> FACU species <u>75</u> x 4 = <u>300</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>78</u> (A) <u>309</u> (B) Prevalence Index = B/A = <u>3.96</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
_____ =Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<u>Herb Stratum</u> (Plot size: <u>5</u>)					
1. <u>Trifolium repens</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Plantago lanceolata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
4. <u>Centaureum pulchellum</u>	<u>3</u>	<u>No</u>	<u>FAC</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
_____ =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____ =Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>	

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WA-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): toeslope Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.688890 Long: -79.033563 Datum: NAD83
 Soil Map Unit Name: OrA - Orpark silt loam, 0 to 3 percent slopes. NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland A</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) <u>X</u> Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) <u>X</u> Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) <u>X</u> Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>6</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WA-1W

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>20</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>86</u></td> <td>x 2 = <u>172</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>112</u> (A)</td> <td><u>200</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.79</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>86</u>	x 2 = <u>172</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>112</u> (A)	<u>200</u> (B)	Prevalence Index = B/A = <u>1.79</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>86</u>	x 2 = <u>172</u>																			
FAC species <u>1</u>	x 3 = <u>3</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>112</u> (A)	<u>200</u> (B)																			
Prevalence Index = B/A = <u>1.79</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>20</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>10</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>10</u> =Total Cover																				
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Onoclea sensibilis</u>	<u>40</u>	Yes	FACW	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Carex vulpinoidea</u>	<u>10</u>	No	OBL																	
3. <u>Fraxinus pennsylvanica</u>	<u>5</u>	No	FACW																	
4. <u>Scirpus atrovirens</u>	<u>15</u>	Yes	OBL																	
5. <u>Carex cristatella</u>	<u>6</u>	No	FACW																	
6. <u>Geum aleppicum</u>	<u>1</u>	No	FAC																	
7. <u>Cornus amomum</u>	<u>5</u>	No	FACW																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>82</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____	_____ =Total Cover																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	

Remarks: (Include photo numbers here or on a separate sheet.)

VEGETATION – Use scientific names of plants.

Sampling Point: WB-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>0</u></td><td>x 2 = <u>0</u></td></tr> <tr><td>FAC species <u>1</u></td><td>x 3 = <u>3</u></td></tr> <tr><td>FACU species <u>100</u></td><td>x 4 = <u>400</u></td></tr> <tr><td>UPL species <u>0</u></td><td>x 5 = <u>0</u></td></tr> <tr><td>Column Totals: <u>101</u></td><td>(A) <u>403</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.99</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>101</u>	(A) <u>403</u> (B)	Prevalence Index = B/A = <u>3.99</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>1</u>	x 3 = <u>3</u>																			
FACU species <u>100</u>	x 4 = <u>400</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>101</u>	(A) <u>403</u> (B)																			
Prevalence Index = B/A = <u>3.99</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
_____ =Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<u>Herb Stratum</u> (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.															
1. <u>Trifolium repens</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
2. <u>Taraxacum officinale</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Poa pratensis</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Plantago major</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Prunella vulgaris</u>	<u>1</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WB-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): toeslope Local relief (concave, convex, none): concave Slope %: 2
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.691269 Long: -79.035832 Datum: NAD83
 Soil Map Unit Name: Uc - Udorthents, smoothed. NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland B</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WB-1W

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>72</u></td><td>x 1 = <u>72</u></td></tr> <tr><td>FACW species <u>15</u></td><td>x 2 = <u>30</u></td></tr> <tr><td>FAC species <u>5</u></td><td>x 3 = <u>15</u></td></tr> <tr><td>FACU species <u>0</u></td><td>x 4 = <u>0</u></td></tr> <tr><td>UPL species <u>1</u></td><td>x 5 = <u>5</u></td></tr> <tr><td>Column Totals: <u>93</u></td><td>(A) <u>122</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.31</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>72</u>	x 1 = <u>72</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>93</u>	(A) <u>122</u> (B)	Prevalence Index = B/A = <u>1.31</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>72</u>	x 1 = <u>72</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>1</u>	x 5 = <u>5</u>																			
Column Totals: <u>93</u>	(A) <u>122</u> (B)																			
Prevalence Index = B/A = <u>1.31</u>																				
_____ =Total Cover																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Herb Stratum</u> (Plot size: <u>5</u>)																				
1. <u>Typha angustifolia</u>	25	Yes	OBL																	
2. <u>Scirpus atrovirens</u>	45	Yes	OBL																	
3. <u>Agrostis gigantea</u>	5	No	FACW																	
4. <u>Sisyrinchium angustifolium</u>	5	No	FAC																	
5. <u>Hypericum perforatum</u>	1	No	UPL																	
6. <u>Juncus torreyi</u>	10	No	FACW																	
7. <u>Scirpus cyperinus</u>	2	No	OBL																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (Include photo numbers here or on a separate sheet.)

VEGETATION – Use scientific names of plants.

Sampling Point: WC-1UP

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ =Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ =Total Cover
<u>Herb Stratum</u> (Plot size: <u>5</u>)				
1. <u>Lotus corniculatus</u>	3	No	FACU	
2. <u>Prunella vulgaris</u>	1	No	FAC	
3. <u>Poa pratensis</u>	90	Yes	FACU	
4. <u>Trifolium repens</u>	6	No	FACU	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
				_____ =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				_____ =Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>99</u>	x 4 = <u>396</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>399</u> (B)
Prevalence Index = B/A = <u>3.99</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ECWA STP WTP City/County: Evans/Erie Sampling Date: 7-28-2021
 Applicant/Owner: ECWA State: NY Sampling Point: WC-1W
 Investigator(s): J. Brillo & A. Goodell Section, Township, Range: Evans
 Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope %: 0
 Subregion (LRR or MLRA): LRR L, MLRA 101 Lat: 42.691257 Long: -79.035824 Datum: NAD83
 Soil Map Unit Name: PhA - Phelps gravelly loam, 0 to 3 percent slopes. NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland C</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <u>X</u> Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WC-1W

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				=Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				=Total Cover
<u>Herb Stratum</u> (Plot size: <u>5</u>)				
1. <u>Phragmites australis</u>	90	Yes	FACW	
2. <u>Carex vulpinoidea</u>	3	No	OBL	
3. <u>Juncus effusus</u>	1	No	OBL	
4. <u>Scirpus atrovirens</u>	5	No	OBL	
5. <u>Carex cristatella</u>	1	No	FACW	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
				100 =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				=Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>9</u>	x 1 = <u>9</u>
FACW species <u>91</u>	x 2 = <u>182</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>191</u> (B)
Prevalence Index = B/A = <u>1.91</u>	

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 Problematic Hydrophytic Vegetation¹ (Explain)

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)

