WETLAND MITIGATION PLAN

PREPARED FOR:

Delaware River Solar 140 East 45th Street (Suite 32B-1) New York, New York 10017

PREPARED BY:



P.W. Grosser Consulting, Inc. 630 Johnson Avenue, Suite 7 Bohemia, New York, 11716 Phone: 631-589-6353 Fax: 631-589-8705

Michael Gaul, Senior Project Manager Issac White, Project Scientist

PWGC Project Number: DRS2404

mgaul@pwgrosser.com iwhite@pwgrosser.com

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WETLAND MITIGATION PLAN NORTH TRIPHAMMER ROAD, LANSING, NEW YORK 14850

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1.0 INTRODUCTION

Delaware River Solar (Client) retained P.W. Grosser Consulting, Inc. (PWGC) to prepare a Wetland Mitigation Plan (WMP) for the two proposed solar project areas (hereafter referred to as the "Site") located on North Triphammer Road, Lansing, New York, identified as the tax parcels 44.-1-3.3 and 44.-1-1.2 on the Tompkins County Tax Map. The two proposed solar project areas are 14.02 acres and 19.55 acres, respectively.

In March 2024, the Client retained PWGC to complete a Wetland Assessment at the Site and to prepare a Wetland Assessment Letter Report. The assessment concluded that multiple potential wetlands and / or waterbodies were identified, and that a portion of the identified potential wetlands appeared to be contiguous with a large offsite wetland complex identified in the National Wetland Inventory (NWI). There were no identified mapped New York State Department of Environmental Conservation (NYSDEC) Article 24 Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site. There were also no identified NYSDEC Article 15 Protected Waters on the Site.

A Wetland Delineation was performed on the Site on June 12, 13, and 14, 2024. Wetlands were identified within each of the two proposed solar project areas. Waterbodies were also identified in the form of drainageways within the two hedgerows that separated the three onsite fields, with each of these waterbodies bounded by wetlands. These wetland and water bodies were deemed to potentially be jurisdictional Waters of the United States (WOTUS) wetlands and / or water bodies. Potentially jurisdictional WOTUS consisted of the two sets of drainageways (streams) located within the hedgerows which bisect the center of the site from north to south including the adjacent freshwater wetlands, and one additional larger area of freshwater wetland in the southeast.

On October 23, 2024, PWGC met with a United States Army Corps of Engineers (USACE) Buffalo New York District Engineer at the Site to perform an investigation pursuant to obtaining a jurisdictional determination (JD) for the wetlands delineated by PWGC in June 2024. The USACE was in general agreement with delineated boundaries of wetlands on the Site. Preliminary results of the JD investigation suggested that the Site likely contains WOTUS regulated by the USACE. Following the Site inspection, JD Field Inspection Notes were drafted jointly by PWGC and the USACE District Engineer to determine next steps pursuant to obtaining a determination. The USACE District Engineer suggested that the most efficient path would be to assume that all the wetlands delineated on the Site were WOTUS and to seek a permit verification that the permanent discharge resulting from the proposed project would fall under Nationwide Permit 14 for Linear Transportation Projects.

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2.0 PURPOSE

The purpose of this WMP is to develop a mitigation plan for the unavoidable loss of WOTUS to be submitted to the (USACE) Buffalo District Engineer. This WMP will be submitted as part of the pre-construction notification (PCN) pursuant to determining if the Nationwide Permit 14 for Linear Transportation Projects is suitable for the portion of the proposed work at the site covered under Section 404 of the Clean Water Act. If Nationwide Permit 14 is deemed practicable by the District Engineer, the applicant will seek mitigation bank or in-lieu fee program credits as the proposed option for compensatory mitigation.



3.0 SUMMARY OF IMPACTS

The proposed project, consisting of two proposed arrays, will permanently impact 0.27 acres and temporarily impact 8.05 acres of WOTUS on the Site. There are no identified proposed impacts to mapped, currently regulated NYSDEC freshwater wetlands. Proposed site layout plans are included as **Figure 1 and Figure 2 (MRS Layout Technical Review Plans)**.

PWGC completed a functional assessment of the delineated wetlands to identify key wetland functions and values that are important to mitigate against loss from the proposed project. Identified functions and values provided by wetlands to potentially be impacted include groundwater recharge/discharge, sediment/toxicant/pathogen retention, sediment stabilization, and wildlife habitat.

The proposed solar project will result in permanent loss to some WOTUS, temporary impacts to additional WOTUS, and permanent forest conversion. PWGC will consult with the USACE Buffalo District Engineer to determine the appropriate mitigation ratios for the anticipated impacts to WOTUS.

3.1 PERMANENT IMPACTS

Unavoidable discharges for the installation of the proposed gravel access roads for the two proposed solar project array areas will permanently impact 0.27 acres of WOTUS. Proposed gravel roadways for array #1 will permanently impact 0.01 acres of WOTUS and proposed gravel roadways for array #2 will permanently impact 0.26 acres of WOTUS. Permanent impacts are all anticipated within shrub/forest wetland habitat.

3.2 PERMANENT FOREST CONVERSION

Vegetative cutting within the two proposed solar projects' limit of disturbance (LOD) will permanently convert forest/shrub wetland habitat. Forested wetland vegetation will be cut to install and safely operate the proposed solar arrays and aboveground utility lines. These forested wetlands will become dominated by herbaceous and shrub/sapling cover types. The cutting of trees in forested areas within the two proposed solar array project areas may affect wildlife species composition by favoring species that prefer shrub/sapling, emergent, and/or open habitats as opposed to those that inhabit forested communities. Total tree cutting will result in the conversion of 8.32 acres of forested USACE jurisdictional wetlands.

3.3 TEMPORARY IMPACTS

Temporary impacts include the placement of timber matting where necessary for the construction of access roads and the installation of solar arrays, aboveground utility lines, and fences. Temporary impacts on freshwater wetlands are anticipated to occur during construction activities and will be restored upon completion of construction utilizing best management practices BMPs as directed by the USACE. Temporary impacts to freshwater wetland habitats are anticipated to affect shrub / forested habitat.

3.4 IMPACTS TO NYSDEC FRESHWATER WETLANDS

There are no currently mapped Article 24 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site.

3.5 IMPACTS TO FEDERAL FRESHWATER WETLANDS AND WATERBODIES

The proposed project, consisting of two proposed arrays, will permanently impact 0.27 acres and temporarily impact 8.05 acres of WOTUS on the Site. The full 8.32 acres of WOTUS covered by the



permanent and temporary impacts will also undergo forest conversion. The following table includes anticipated impacts to freshwater wetlands.

Impact Type	USACE Wetlands	Mapped NYSDEC Wetlands
	(acres)	(acres)
Permanent Impacts to WOTUS	0.27	0
(fill / excavation for roadways)		
Temporary Impacts to WOTUS	8.05	0
(timber matting, vegetation		
cutting, fence and solar array		
installation)		
Permanent forest conversion	8.32 (includes the sum of the other	0
	two rows)	7

Table 1. Anticipated Impacts to USACE Freshwater Wetlands and NYSDEC Wetlands.



4.0 MITIGATION REQUIREMENT

As discussed above, the Project's mitigation requirement will be established through consultation with the USACE Buffalo District Engineer. As permanent filling and/or excavation in USACE jurisdictional wetlands are greater than 0.10 acres, mitigation is expected to be required for these permanent impacts. The compensatory mitigation requirement for the two proposed solar project arrays is expected to address the anticipated permanent impacts to USACE wetlands (0.27 acres). PWGC will verify with the district engineer if any compensatory mitigation is required for the USACE wetlands.

4.1 NYSDEC MITIGATION REQUIREMENT

There are no currently mapped Article 24 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site. At the time of this report, there are no anticipated compensatory mitigation requirements on the state level for the anticipated permanent and temporary impacts to wetlands affiliated with the proposed installation of the two solar arrays.

5.0 PROPOSED MITIGATION PLAN

PWGC proposes purchasing credits from an in-lieu fee wetland mitigation program. The amount of credits to be purchased will be determined after consultation with the USACE Buffalo District Engineer. PWGC will propose the anticipated permanent impact acreage for the two proposed solar arrays (0.27 acres) as a compensatory mitigation requirement. However, mitigation ratios for wetland impacts will be agreed upon between PWGC and USACE. Once the amount of credits required has been agreed upon, an in-lieu fee wetland mitigation program will be identified that has enough credits available. If there are no credits available from an in-lieu fee wetland mitigation program, then PWGC will work with the USACE to identify an alternative method of mitigation.

In addition to this proposed mitigation plan, PWGC will also take the additional steps noted on the Proposed Wetland Disturbance Plans (**Figures 1 and 2**) to avoid unnecessary impacts on wetlands. These steps are as follows:

1. Efforts shall be made to minimize disturbance to any state or federally regulated wetlands. No unlawful filling, discharges, or material alteration to the functions or values of freshwater wetlands will be performed during construction. Unnecessary removal of vegetation or unnecessary alterations along stream banks or stream bottoms are prohibited. Where necessary, removal/cutting of vegetation in freshwater wetland areas will be done in accordance with guidance from the USFWS / USACOE. Woodchippers will not be used during construction. Side casting will not be performed during construction.

2. Where required, temporary access to freshwater wetlands will be performed without the use of permanent roads. When necessary, crossing of ephemeral, relatively non-permanent waterways in wetland areas will be made using temporary timber mats to minimize disturbance or access will be made during a period of deep freeze conditions to minimize disturbance to underlying wetland soils. If necessary, crossing of perennially flowing, relatively permanent waterways in wetland areas will be made using a properly engineered equilibrium culvert meeting or exceeding 1.25 times the stream width in pipe diameter.

3. Staging of any construction materials or equipment is prohibited in wetland areas.





4. Any wetland disturbance excluding the proposed permanent disturbance for the roadway is to be restored with an appropriate wetland seed mix. The seed mix specified in NYSDOT item 203.01920007 is the preferred mix for this activity. The seed mix may be substituted with the engineer's approval.

5. All land clearing shall occur without the use of heavy machinery on metal tracks.

- 6. The racking system will be installed using a small solar farm pile driver machine.
- 7. No grading is proposed for this site plan.



FIGURES

DRS2404 – WETLAND MITIGATION PLAN P.W. GROSSER CONSULTING, INC · P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC 631.589.6353 · <u>WWW.PWGROSSER.COM</u> · PWGC.INFO@PWGROSSER.COM BOHEMIA · MANHATTAN · SARATOGA SPRINGS · MONTICELLO · SYRACUSE · SHELTON, CT



04/04/24

DRS2404





630 Johnson Avenue. • Suite 7 Bohemia • NY • 11716-2618 Phone: (631) 589-6353 • Fax: (631) 589-8705 E-mail: INFO@PWGROSSER.COM

CONSULTANTS SYSTEM SUMMA

/ODULE:

MANUFACTURER: MODEL:

MODULE OUTPUT POWER: 585 WP STRING SIZE: NUMBER OF STRINGS: 252 MODULE QUANTITY: 6,048 PV SYSTEM OUTPUT:

COMBINER BOX:

CB QTY/INPUTS (QTY/INP): 11 CBs (6 INPUTS) 12 CBs (5 INPUTS)

HANWHA

BFG

24

INVERTER:

MANUFACTURER: MODEL: QUANTITY/RATING: PV SYSTEM OUTPUT:

DC SYSTEM VOLTAGE: MV INTERCONNECTION:

FRANSFORMER QTY/RATING: INTERCON. VOLTAGE:

RACKING:

MANUFACTURER: CONFIGURATION: TILT: AZIMUTH:

3,538.08 KWP DC

Q.PEAK DUO XL-G11.3 /

SUNGROW SG3150 UD-MV 1 / 3,000 KW (LIMITED) 3,000 KW AC 1,500 V

2 / 3,425 KW 34.5 KV

TBD SAT - 1 MODULE POTRAIT ±55° 177°

7		
6	WETLANDS UPDATE	11/11/2024
5	ACCESS ROAD UPDATE	11/01/2024
4	ACCESS ROAD UPDATE	08/12/2024
3	CLIENT REVIEW	07/29/2024
2	WETLANDS UDPATE	07/24/2024
1	CLIENT REVIEW	04/05/2024
Number	Revision Description	Revision Date

03/28/24 1" = 150'

NY LANSING II, LLC P.O. BOX 384 CALLICOON, NY 12783

RPV/THS

MTS

NORTH TRIPHAMMER ROAD SOLAR FARM CONCEPTUAL

SITE PLAN

NORTH TRIPHAMMER ROAD TOWN OF LANSING TOMPKINS COUNTY, NEW YORK unty Tax Map Number: 44-1-1.2 & 44-1-3.3

Unauthorized alteration or addition to this drawing and related documents is a violation of Section 7209 of the New York State Education Law

PROPOSED WETLANDS DISTURBANCE PLAN Drawing Number:

C-502 12 9 PWGC Project Number: DRS2404