# APPENDIX J

## Wetland Delineation Report

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# TECHNICAL MEMORANDUM

**To:** Katie Treadway, SVP Head of Regulatory Affairs
One Energy Solutions, LLC
12385 Township Road 215
Findlay, Ohio 45840

**From:** Griffin Bachhuber, Project Manager/Ecologist

**Date:** September 1, 2021

**Re:** **Dickinson Renewable Diesel Facility Wind Turbine Project, Stark County, North Dakota / SWCA Project No. 67406**

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One Energy Solutions, LLC (One Energy), contracted SWCA Environmental Consultants (SWCA) to conduct an on-site pedestrian wetland delineation for the Dickinson Renewable Diesel Facility Wind Turbine Project (Project) located in Stark County, North Dakota. Two surveys were conducted: one on June 11, 2021, and one on August 23, 2021. The June survey consisted of a 400 × 400-foot area surrounding each of the five proposed wind turbine locations, 100-foot-wide corridors centered on the proposed access road alignments, and 50-foot-wide corridors centered on the proposed collection lines, as well as laydown areas and temporary workspaces. After the June survey was conducted, SWCA received updated locations for two turbines; therefore, the August survey consisted of surveying a 400 × 400-foot area surrounding the two turbines that had shifted, minus the portions of those areas that had been previously surveyed. The total survey area, including the area surrounding the two turbine shifts, was 45.07 acres (survey area). SWCA surveyed all land within the survey area, with one exception that is depicted on Figure 1, which was inaccessible due to security fencing associated with the adjacent Marathon Dickinson Refinery. The purpose of the wetland delineation was to determine if any aquatic resources (wetlands or waterbodies with ordinary high-water marks [OHWMs]) that could qualify as waters of the U.S. (WUS) and be subject to permitting by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA) occur within the survey area.

## REGULATORY BACKGROUND

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredge and/or fill material into WUS. Section 404 requires that any entity proposing an activity that would discharge such materials into a WUS must obtain a permit from the USACE. Designation as a WUS applies to the jurisdictional limits of USACE authority under the CWA. The USACE has final and legal authority in determining the presence of jurisdictional WUS and the extent of their boundaries.

WUS typically include traditional navigable waters, interstate waters, and wetlands adjacent to streams; impoundments, tributaries, and wetlands adjacent to those waters; and territorial seas. Most rivers, creeks, streams, arroyos, lakes, special aquatic sites, and their tributaries are typically designated as WUS. Wetlands are the most common special aquatic site and are defined as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil

conditions" (USACE 1987). To be classified as a wetland under the federal definition, an area must meet the following three criteria under normal circumstances: 1) have a predominance of hydrophytic vegetation, 2) contain soils that are characteristic of frequent saturation (i.e., hydric soils), and 3) have the presence of hydrology showing regular inundation or saturation (USACE 1987). The ordinary high-water mark is a defining element for identifying the lateral limits of waterbodies lacking adjacent wetlands and typically represents the outer limits of potential USACE jurisdiction.

## METHODS

Prior to conducting field surveys, SWCA completed a desktop review of the survey area. The desktop review included examining existing data from U.S. Geological Survey (USGS) topographic quadrangle maps, the National Wetlands Inventory (NWI) database, the National Hydrography Dataset (NHD), the Natural Resources Conservation Service (NRCS) Web Soil Survey, and historic and current aerial real color and infrared photographs of the survey area. The NWI is a U.S. Fish and Wildlife Service (USFWS) database that identifies and categorizes wetland areas based primarily on aerial imagery interpretation (USFWS 2021). Maintained by the USGS, the NHD identifies surface water systems in the United States, including lakes, streams, rivers, and canals (USGS 2021). SWCA used NRCS soil survey data (NRCS 2021) to review area soils. This desktop review identified locations of potential aquatic resources for investigation during the field surveys.

An SWCA wetland biologist experienced with wetland attributes in this part of North Dakota conducted a pedestrian wetland delineation for aquatic resources within the survey area on June 11 and August 23, 2021. The wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Great Plains Region* (Version 2.0) (USACE 2010). The biologist used *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (Lichvar and McColley 2008) as a reference for delineating aquatic resources with OHWMs. Wetland boundaries and OHWMs were recorded using a submeter-accurate global positioning system (GPS) unit. The wetland delineation was conducted to verify the results of the desktop review and to determine if potentially regulated wetlands or waterbodies are present within the survey area; to establish and map boundaries and locations of features; and to determine whether wetland or waterbody features meet criteria that would require the Project to submit a pre-construction notification to the USACE.

## RESULTS

The SWCA wetland biologist identified no wetlands within the survey area. Three bends of the Heart River waterbody were delineated within the survey area. One Energy has indicated that no impacts to these areas will occur during development of the Project. An additional section of the Heart River was located (but not delineated) within an area of the Project in which a collection line is proposed to be installed. This section of the Heart River was not delineated because of access constraints due to security fencing associated with the adjacent Marathon Dickinson Refinery (refer to the areas excluded from survey in Figure 1). Horizonal directional drilling will allow the collection line to be installed under the Heart River, thus avoiding impacts to the waterbody.

Since no impacts will occur to wetlands or waterbodies through development of the Project, the Project will not be required to operate under a USACE Nationwide Permit or submit a pre-construction notification to the USACE. The survey area and results are illustrated in Figure 1.


**Figure 1. Wetland and waterbody delineation map for Dickinson Renewable Diesel Facility Wind Turbine Project.**

## LITERATURE CITED

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