Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy

Spring 2018 Target Extraction Summary Report









Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy

Spring 2018 Target Extraction Summary Report

Prepared for

New York State Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399



Prepared by

Normandeau Associates, Inc. 4581 NW 6th Street, Suite A Gainesville, FL 32609 352-372-4747 www.normandeau.com

with

APEM, Inc. 747 Southwest 2nd Avenue, Suite 226 Gainesville, FL 32601





October 2018



Introduction

Target extraction for the Spring 2018 survey for the NYSERDA Offshore Planning Area (OPA) was started in July 2018. All target extraction and quality control of target extraction was completed by October 2018.

Overview

The vast majority of the images collected contained no evidence of living organisms. More than 96% of the images from the OPA were blank. Of the 318,455 images analyzed, 308,772 were blank. Of the 30,912 (10.01%) blank images that were re-examined, 75 were determined to contain targets (living organisms) that had been missed in the initial target extraction. The overall quality rate of the initial extraction was 99.76%, well within the quality control criteria established for the project. Only endangered species found during target extraction QC were incorporated into the dataset and sent to taxonomists for identification.

Extracted targets found to contain organisms, boats, and buoys were transmitted to taxonomists for identification. All images containing targets were uploaded to ReMOTe.

Blank Images Detected

| | | Blank Images | | | |
|------|--------------------------|--------------------|-----------------------|---------------------|------------------------|
| Area | Total Images Analyzed | Number Detected | Number Sent for QA | Total Percent QA | Total Percent Blank |
| OPA | 318,455 | 308,772 | 30,912 | 10.01 | 96.96 |

Total Images and Area Surveyed

| | Total Number of Images | km² of Analyzed Images within the | Percent | |
|------|---------------------------|--------------------------------------|----------|-------------------|
| Area | Collected | Survey Area | Coverage | Survey Area (km²) |
| OPA | 318,455 | 3,126.71 | 7.15 | 43,745.20 |

Targets Detected

| Group | OPA | |
|------------------|--------|--|
| Avian | 21,489 | |
| Marine Mammals | 844 | |
| Turtles | 1 | |
| Sharks | 22,790 | |
| Large Bony Fish | 793 | |
| Vessels | 5 | |
| Fixed Structures | 3 | |
| Total | 45,925 | |

Quality Control Results

| Number of Images for QC | Number of Images | Number of Images | % Agreement |
|-------------------------|------------------|------------------|-------------|
| | QCd as Blank | QCd Not Blank | Reached |
| 30,912 | 30,837 | 75 | 99.76 |

Animal order found during Blank Image QC

| Animal Order Found in Image | Number of QCd Images Containing Species Group |
|-----------------------------|--|
| Avian | 52 |
| Marine Mammals | 3 |
| Sharks | 5 |
| Rays | 4 |
| Large Bony Fish | 7 |
| Total | 75 |