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

Winter 2017-2018 Target Extraction





NYSERDA





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

Winter 2017–2018 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







Introduction

Target extraction for the Winter 2017-2018 survey for the NYSERDA Offshore Planning Area (OPA) was started in April 2018. All target extraction and quality control of target extraction was completed in June 2018

Overview

The vast majority of the images collected contained no evidence of living organisms. More than 98% of the images from the OPA were blank. Of the 320,107 images analyzed, 315,434 were blank. Of the 31,604 (10.02%) blank images that were re-examined, 31 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 99.9%, well within the quality control criteria established for the project. Images found to contain organisms were transmitted to taxonomists for identification. Only endangered species found during target extraction QC were incorporated into the dataset and sent to taxonomists for identification. Within the Winter 2017 data, one Fin Whale was found during target extraction QC.

Total Images and Area Surveyed

Area	Total Number of Images Collected	km² of Analyzed Images within the Survey Area	Percent Coverage	Survey Area (km²)
OPA	320,107	3,147.14	7.19	43,745.20

Blank Images Detected

		Blank Images			
Area	Total Images Analyzed	Number Detected	Number Sent for QA	Total Percent QA	Total Percent Blank
OPA	320,107	315,434	31,604	10.02	98.54

Target Extraction Quality Control Results

Number of Images for QC	Number of Images	Number of Images	% Agreement
	QCd as Blank	QCd Not Blank	Reached
31,604	31,573	31	99.90

Animal Order Found in Image during Extraction QC	Number of Images
Birds	24
Marine Mammals	4
Sharks	1
Large Bony Fish	2
TOTAL	31

Targets Detected and Sent for Identification

Group	# Individuals
Avian	11,218
Marine Mammals	1,082
Sharks	11
Large Bony Fish	9
Vessels	6
Fixed Structures	3
Total	12,329