

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

Fall 2018 Target Extraction Summary Report



NYSERDA



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Prepared for

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Introduction

Target extraction for the Fall 2018 survey for the NYSERDA Offshore Planning Area (OPA) was started in March 2019. All target extraction and quality control of target extraction was completed in July 2019.

Overview

A total of 323,702 images were collected over the OPA providing an analyzed survey area of 3,192.36 km² (Table 1). The vast majority of the images collected contained no evidence of living organisms, with more than 97% of the images from the OPA being blank (Table 2). There were 31,502 (10%) of the blank images sent for QC, and 91 were determined to contain targets (living organisms) that had been missed in the initial target extraction. The overall quality rate of the extraction was 99.71%, well within the quality control criteria established for the project (Table 3). Only endangered species found during target extraction QC are incorporated into the dataset and sent to taxonomists for identification. Within the Fall 2018 data no endangered species were found during target extraction QC (Table 4).

Extracted targets found to contain organisms, boats, and buoys were uploaded to ReMOTe for taxonomists to access for identification.

A total of 25,935 targets were sent to taxonomists for identification (Table 5). Fish shoals were loaded to ReMOTe for measurement.

Table 1. Total Images and Area Surveyed

Area	Total Number of Images Collected	km ² of Analyzed Images within the Survey Area	Percent Coverage	Survey Area (km ²)
OPA	323,702	3,192.36	7.30	43,745.20

Table 2. Blank Images Detected

Area	Total Images Analyzed	Blank Images			
		Number Detected	Total Percent Blank	Number Sent for QA	Total Percent QA
OPA	323,702	314,907	97.28	31,502	10.00

Table 3. Target Extraction Quality Control Results

Number of Images for QC	Number of Images QCd as Blank	Number of Images QCd Not Blank	% Agreement Reached
31,502	31,412	90	99.71

Quality Control Results

Table 4. Number of images containing each represented taxonomic group

Group Found in Image during Extraction QC	Number of Images*
Avian	81
Marine Mammals	1
Rays	1
Large Bony Fish	6
Fixed Structures	1
Total	90

*Some images contained multiple taxonomic groups, and some contained multiple individuals of the taxonomic group

Table 5. Targets Detected and Sent for Identification

Group	# Individuals
Avian	24,688
Marine Mammals	1,121
Sharks	2
Rays	2
Large Bony Fish	47
Vessels	72
Fixed Structures	3
Total	25,935