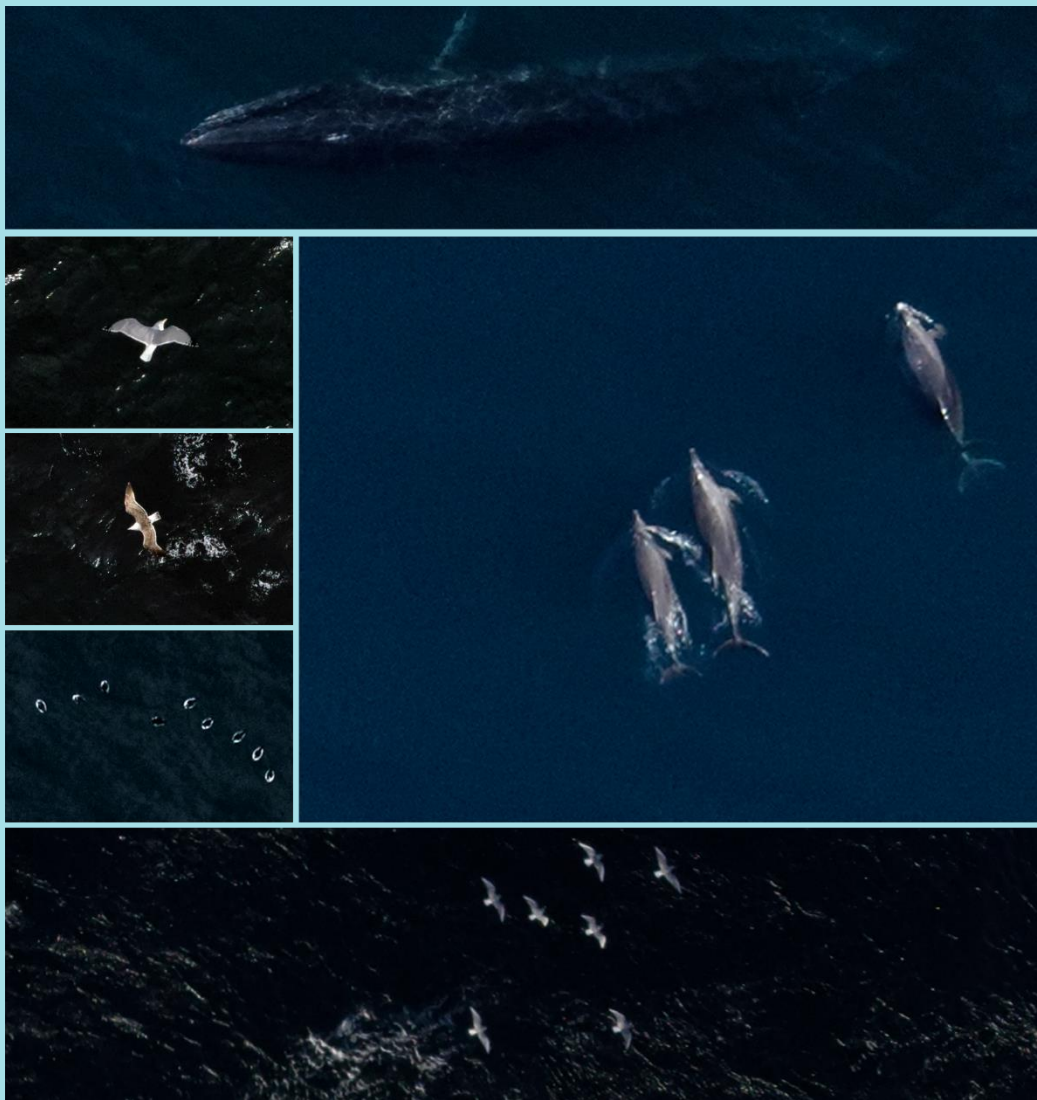


# Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy

Winter 2017 Target Extraction Summary Report



**NYSERDA**



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## Winter 2017 Target Extraction Summary Report

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## Introduction

Target extraction for the Winter 2017 survey for the NYSERDA Offshore Planning Area (OPA) and Wind Energy Area (WEA) was started on March 6, 2017. All target extraction and quality control of target extraction was completed by April 3, 2017.

## Overview

Data were collected for the OPA including a 300-m buffer and the WEA including a 4-km buffer. For the OPA, this buffer ensures complete coverage to the boundary of the OPA. Because of the relatively small size of the WEA, the 4-km buffer ensures that biota that may pass through the WEA are more likely to be captured and also provides a smaller scale perspective on distribution than comparing to the OPA as a whole. The vast majority of the images collected contained no evidence of living organisms. Of the 414,494 images analyzed, 403,032 were blank. Of the 40,430 (10.03%) blank images that were re-examined, 45 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 99.89%, well within the quality control criteria established for the project. Images found to contain organisms were transmitted to taxonomists for identification.

## Total Images and Area Surveyed

Area	Total Area (km <sup>2</sup> )	Survey Area		
		Area (km <sup>2</sup> )	Percent Coverage <sup>b</sup>	Number of Images
WEA <sup>a</sup>	850.92	112.74	13.25%	13,837
OPA	43,745.20	3,952.89	9.04%	400,657
<b>Total</b>	<b>44,596.12</b>	<b>4,065.63</b>	<b>9.12%</b>	<b>414,494</b>

<sup>a</sup> This table only represents the imagery that was processed and analysed per the scope of work. An additional 10% coverage was collected for the WEA but is being stored if needed for future processing and analysis.

<sup>b</sup> Percent coverage of the entire OPA including the WEA imagery.

## Blank Images Detected

Area	Number of Images in Survey Area	Blank Images			
		Number	Percent	Number QC'd	Percent QC'd
WEA	13,837	13,779	99.58	1,378	10.00
OPA	400,657	389,253	97.15	39,052	10.03
<b>TOTAL</b>	<b>414,494</b>	<b>403,032</b>	<b>97.23</b>	<b>40,430</b>	<b>10.03</b>

## Targets Detected\*

Taxonomic Group	Total (OPA and WEA)	OPA	WEA
Avian	20,958	20,919	39
Large Bony Fish	21	20	1
Fixed Structures	3	3	0
Marine Mammals	1,609	1,609	0
Rays	0	0	0
Sharks	26	26	0
Turtles	1	1	0
Vessels	5	5	0
Unknown/Other	98	98	0
<b>TOTAL</b>	<b>22,721</b>	<b>22,681</b>	<b>40</b>

\*final counts by taxonomic group determined during identification process

## Quality Control Results

Number of Images for QC	Number of Images QC'd as Blank	Number of Images QC'd Not Blank	% Agreement Reached
40,430	40,385	45	99.89

Order Found in Image	Number of Individuals	Number of QC'd Images Containing Species Group
Birds	33	33
Fish	7	7
Marine Mammals	5	5
<b>TOTAL</b>	<b>45</b>	<b>45</b>