

WHALESNORTH Northeast Mandatory Ship Reporting System
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Prepared for:
Northeast Ocean Data
www.northeastoceandata.org

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1. INTRODUCTION

The Code of Federal Regulations designates a mandatory ship reporting system in the northeastern U.S. named WHALESNORTH to protect North Atlantic Right Whales. The mandatory ship reporting system includes the waters of Cape Cod Bay, Massachusetts Bay, and the Great South Channel east and southeast of Massachusetts. The following restrictions apply:

Each self-propelled ship of 300 gross tons or greater must participate in the reporting system, except government ships exempted from reporting by regulation V/8-1© of SOLAS. However exempt ships are encouraged to participate in the reporting system. The mandatory ship reporting system operates year-round.

2. PURPOSE

This dataset is intended to support region-scale ocean planning activities.

3. SOURCES AND AUTHORITIES

- National Oceanic and Atmospheric Administration, U.S. Department of Commerce, National Ocean Service
- U.S. Coast Pilot 1, 42nd Edition (2012) – Atlantic Coast: Eastport to Cape Cod
- U.S. Coast Pilot 2, 42nd Edition (2013) – Atlantic Coast: Cape Cod, MA to Sandy Hook, NJ
- Electronic Code of Federal Regulations – Title 33: Navigation and Navigable Waters, Part 169

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=931b5e2ca823dc68445ddf490a6e1731&rgn=div5&view=text&node=33:2.0.1.6.38&idno=33>

- 33 U.S.C. 1230(d), 1231; 46 U.S.C. 70115, Department of Homeland Security Delegation No. 0170.1.
- USCG-1999-5525, 64 FR 29234, June 1, 1999, as amended by 66 FR 58070, Nov. 20, 2001

4. DATABASE DESIGN AND CONTENT

Native storage format: ArcGIS File Geodatabase – simple feature class

Feature Types:

Line

Data Dictionary:

Line	Name	Definition	Type	Size
1	OBJECTID	Uniquely identifies a feature	OBJECTID	*
2	Shape	Geometric representation of the feature	Polygon	*
3	name	Name of area	Text	50
4	season	Season mandatory ship reporting system is in effect	Text	20
5	description	Description of area	Text	80
6	CFRSection	Source in Code of Federal Regulations	Text	20

Feature Class Name: MandatoryShipReportingSystem

Total Number of Unique Features: 1

Dataset Status: Complete

5. SPATIAL REPRESENTATION

Geometry Type: vector line

Reference System: GCS North American 1983

Horizontal Datum: North American Datum 1983

Ellipsoid: Geodetic Reference System 1980

XY Resolution: 0.000000000899322 degrees

Tolerance: 0.000000008983153 degrees

Geographic extent: -70.62, 41, -68.52, 42.75

ISO 19115 Topic Category: transportation, environment, oceans

Place Names:

Cape Cod Bay, Massachusetts Bay

Recommended Cartographic Properties:

(Using ArcGIS ArcMap nomenclature)

Simple Line Symbol: color: 0-0-0, width: 2, color model: HSV

Scale range for optimal visualization: 500,000 to 5,000,000

6. DATA PROCESSING

Processing environment: ArcGIS 10.1 SP1, Windows 7 Professional, Intel Core i5 CPU

	Process Steps Description
1	Examine Coast Pilot 1 and 2 and extract out relevant information for the northeast mandatory ship reporting system. Cross reference information with Code of Federal Regulations.
2	Convert all coordinate pairs to decimal degrees
3	Create point dataset based on geographic coordinates
4	Digitize line features using the point data for the reporting system boundary in coordinates for North American Datum 1983 UTM Zone 19 N
5	Project line dataset into GCS NAD 1983

7. QUALITY PROCESS

Attribute Accuracy: The Coast Pilot and Code of Federal Regulations were reviewed for applicable information. Attribute information is based upon source material and is accurate as such.

Logical Consistency: All source data consisted of geographic coordinate pairs. Line data is topologically consistent.

Completeness: This dataset represents the Mandatory Ship Reporting System in the northeastern U.S. The Code of Federal Regulations was used to confirm Coast Pilot information.

Positional Accuracy: The coordinates used to derive the nodes that designate the boundary of the reporting system were converted to decimal degrees and are accurate based on source material.

Timeliness: Data are current based on Coast Pilot editions for 2012 and 2013, and the Electronic Code of Federal Regulations as March 6th, 2013.

Use restrictions: NOT FOR NAVIGATION

Distribution Liability: Data are provided as is. Northeast Ocean Data and RPS Applied Science Associates are not liable for any interpretations, assumptions, or conclusions based on these data.