# WhaleALERT











































- North Atlantic right whales are highly endangered (pop. ~ 400 - 500);
- Ship strikes are a leading cause of right whale mortality;
- Numerous management measures apply to mariners;
  - Compliance is best if information is streamlined;
    - Mariners have been fined up to \$92K for non-compliance





















# What Ships Need to Know

Rules & Regulations

Right Whale Seasonal Management Areas (SMA)
Right Whale Mandatory Ship Reporting (MSR)

**Voluntary Measures** 

Right Whale Dynamic Management Areas (DMA)

Right Whale Real-Time Acoustic Buoys

Right Whale Areas to be Avoided (ATBA)

Right Whale Recommended Routes





















# **How They Get All That Information**

#### Seasonal Management Areas (SMA)

- Notice to Mariners Electronic Charts ECDIS
  - Website

- NOAA Placard

#### Mandatory Ship Reporting (MSR)

- Website

- NOAA Placard
- MSR Telex/Phone/Email reporting required

#### Dynamic Management Areas (DMA)

- Notice to Mariners Website
  - MSR Telex/Phone/Email response from reporting



















# **How They Get All That Information**

#### Real-Time Acoustic Buoys

- Website

- Cornell phone Calls to LNG

#### Areas to be Avoided (ATBA)

- Website

- Notice to Mariners

- MSR Telex/Phone/Email reporting required

#### Recommended Routes

- Website

- Electronic Charts ECDIS

Requires visiting multiple websites & sources, often confusing and unsure if it is most up to date information











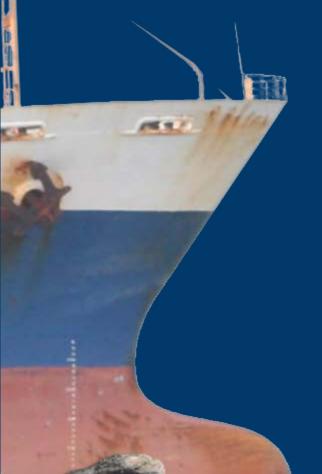












# Whale ALERT Provides

 Easy and Efficient Access to All of the most Up-to-Date Rules, Regulations & Voluntary Information

 Centralized location for all Right Whale Information displayed over **Raster Nautical Charts** 























# WhaleALERT

v1.0 Free App for



iPad or



**iPhone** 



















# Whale ALERT Provides

- Current Ships Location (built in GPS)
- Most up to date Raster Nautical Charts
- Real-Time Acoustic Detection Buoys
- Real-Time Seasonal Management Areas
- Real-Time Dynamic Management Areas
  - Real-Time Areas to be Avoided
    - Mandatory Ship Reporting Areas
      - Right Whale Sightings\*









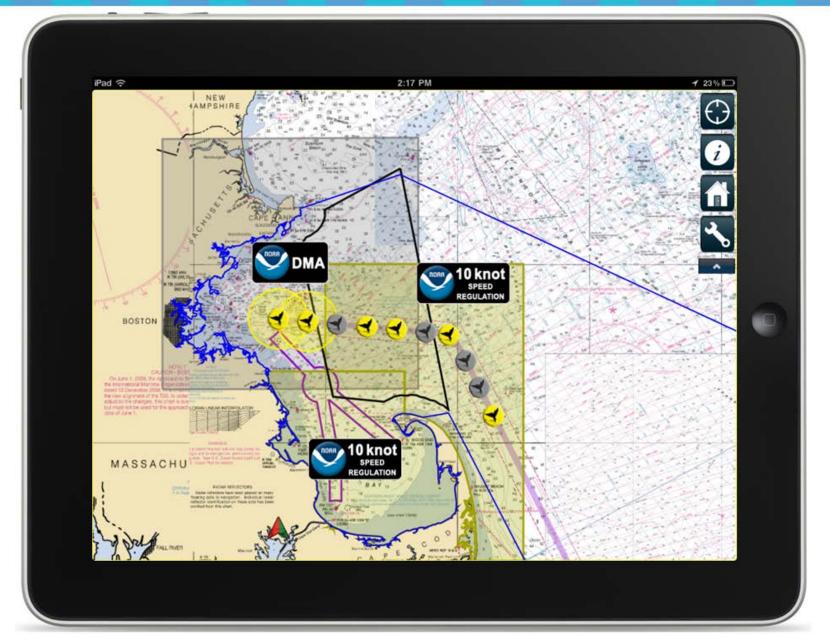








































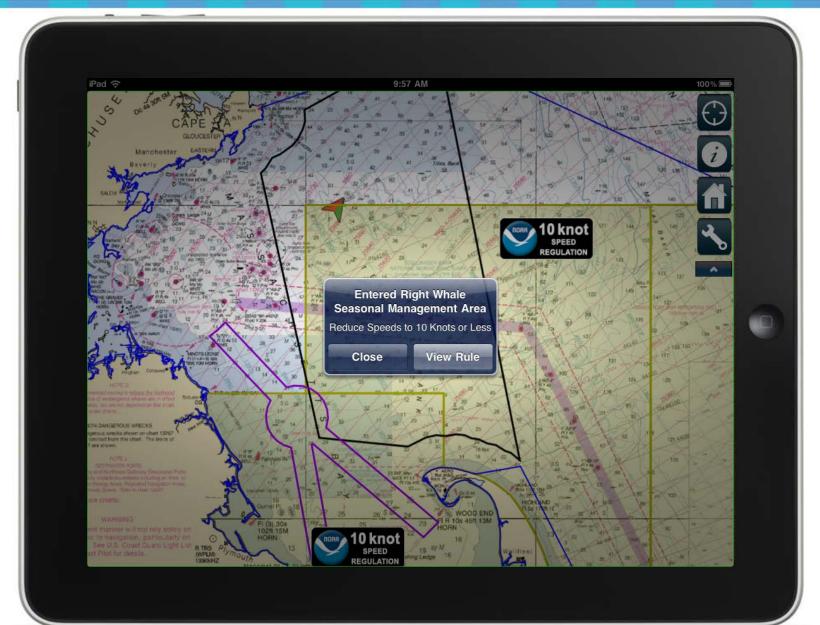


































































































#### Right Collision Warning System











#### Right Whale Seasonal Management Areas













#### Right Whale Mandatory Ship Reporting











Area To Be Avoided

















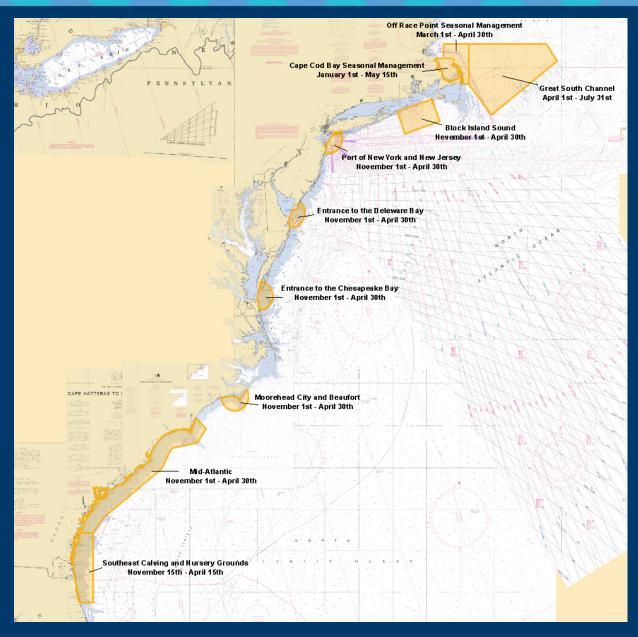












# **SMAs** along Eastern Seaboard





















# Download it Now at The App Store

FREE



**iPad** 



**iPhone** 





















http://stellwagen.noaa.gov/protect/whalealert.html























# Easy to Read/Print User Manual http://stellwagen.noaa.gov/protect/whalealert.html

#### **Quick Start Manual**



#### Detailed Setup & FAQ

























#### Videos

http://stellwagen.noaa.gov/protect/whalealert.html

#### **Tutorial Video**



#### At Sea Demo Video























#### Typical AIS Carrying Vessel Installation

Pilot Port

WiFi Pilot Plug

**iPad** 



























# Features Not Available without Internet or WiFi Pilot Plug

- Real-Time Auto-Detection Buoys
- Real-Time Dynamic Management Areas
  - \* WiFi AIS requires vessel to be within range of transmitter (~50-100nm from Provincetown, MA)
  - \* Internet will display these data using regular data rates



















# WhaleALERT Collaborating Partners

- **National Oceanic and Atmosphere Administration**
- **Stellwagen Bank National Marine Sanctuary**
- **Northeast Fisheries Science Center**
- International Fund for Animal Welfare
- **EarthNC**
- Bioacoustic Research Program at the Cornell Lab of Ornithology
- Center for Coastal and Oceanic Mapping / University of New Hampshire
- Gaia GPS
- **Massachusetts Port Authority**
- **NYK Lines North America**
- Woods Hole Oceanographic Institution
- **Excelerate Energy**
- **EOM Offshore**























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http://stellwagen.noaa.gov/protect/whalealert.html