

VESSEL TRAFFIC MANAGEMENT MEASURES FOR THE PROTECTION OF NORTHERN RIGHT WHALES OFF THE US EAST COAST



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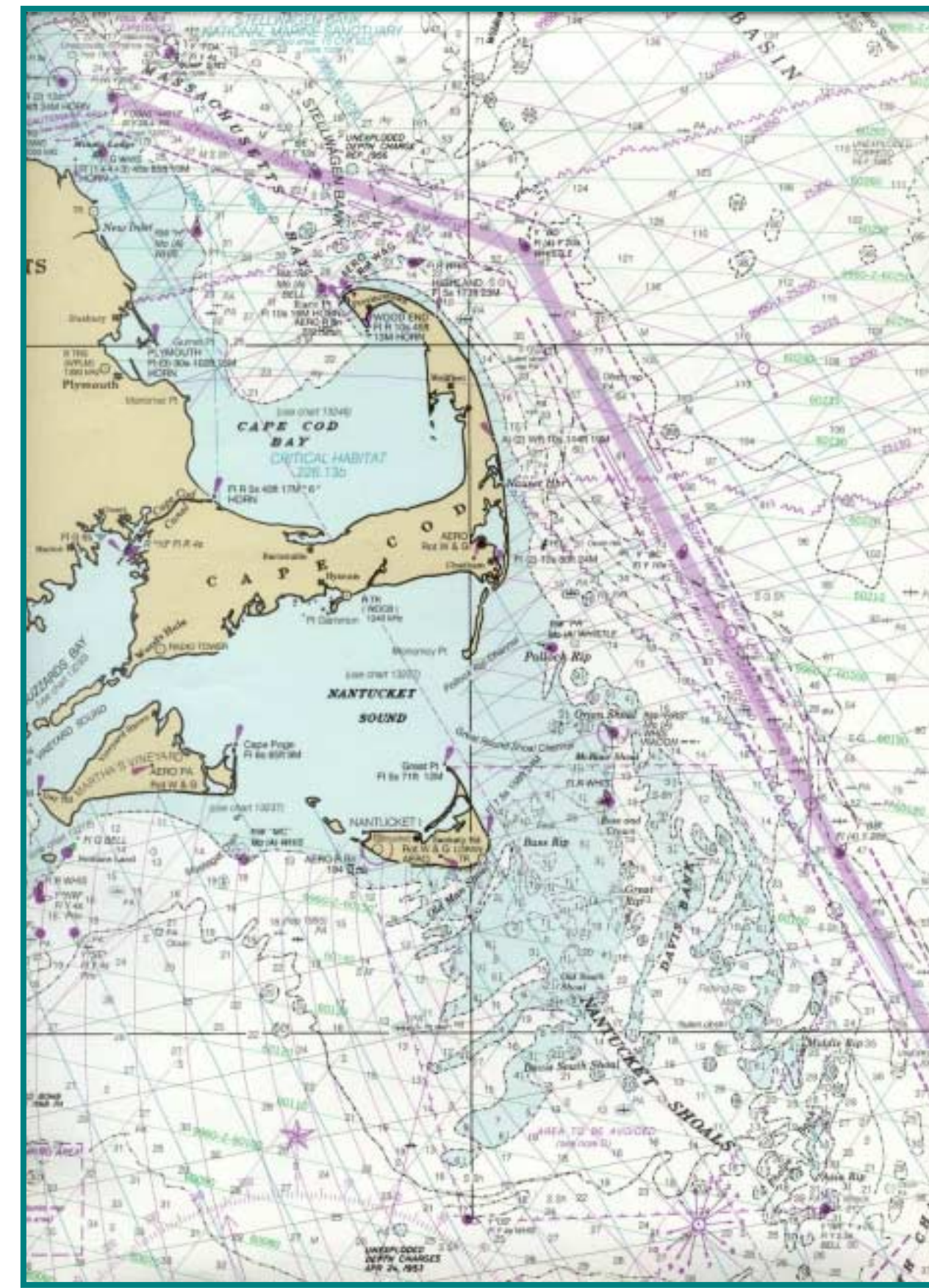
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Mother and calf right whale pair sighted in the Gulf of Maine in 2001. Mother had been struck by twin screw vessel. Note propeller marks on back. NMFS SAS photo

Abstract

The northern right whale, *Eubalaena glacialis*, the most endangered large whale in the Atlantic, if not the world, remains vulnerable to human caused mortality from collisions with ships (ship strikes) and entanglement in fixed fishing gear. While known, verified ship strike mortality numbers are low, ship strikes are the primary cause of death for right whales and the most difficult source of mortality to eliminate. Education of the maritime industry along the US east coast about right whales and ship strikes has increased dramatically over the last several years. This education and outreach remain ongoing and include reaching out to the broad range of shipping companies that trade at US east coast ports. The Ship Strike Committee of the Northeast and Southeast Implementation Teams for the Recovery of Right Whales has developed a suite of management options to reduce right whale mortality from ship collisions. These management measures were developed through a deliberative process that involved the engagement and participation of the shipping industry, conservation groups, researchers, and state and federal agencies. Proposed management measures will regulate shipping from Port Canaveral, Florida to the U.S - Canadian border. These proposed measures are region specific and include permanent, seasonal and dynamic vessel operating restrictions. Measures include diversion, or routing around known whale locations, dynamic management, mandatory /designated routes to port approaches, and speed restrictions. There is interest in this work as it may apply to ship strike problems for other large whale species throughout the world. This poster details the measures being considered and the multiple steps necessary for implementation of the regulations under consideration.



Existing traffic lanes through the Great South Channel, which are recommended for a mandatory designation.

RECOMMENDED TRAFFIC MANAGEMENT MEASURES

NORTHEAST REGION - US/CANADA border to Cape Cod

- Mandatory traffic lanes east of Cape Cod through Great South Channel
- Areas To Be Avoided (ATBA) - Cape Cod Bay (CCB) & Great South Channel (GSC) (east of traffic lanes)
- Seasonal Management Area - area off Provincetown (coincident to whales departing CCB) vessels either re-route around area or transit ≤ 10 knots

MID - ATLANTIC REGION - Rhode Island to Savannah, GA during northern & southern right whale migrations

- Seasonal Management Areas - during migration, approach/departure from ports from ~ 20 n. m. offshore to harbor entrance at ≤ 10 knots

SOUTHEAST REGION - Georgia to Port Canaveral, Florida (right whale calving area seasonally occupied from \sim late November - March)

- Mandatory traffic lanes for the ports of Brunswick, GA, and Jacksonville & Fernandina Beach, FL (north-south traffic to stay east of the critical habitat & re-route around right whale occupied areas)
- 10 knot (upper limit) speed restriction in the vicinity of the ports of Brunswick, GA, and Jacksonville & Fernandina Beach, FL

ALL REGIONS

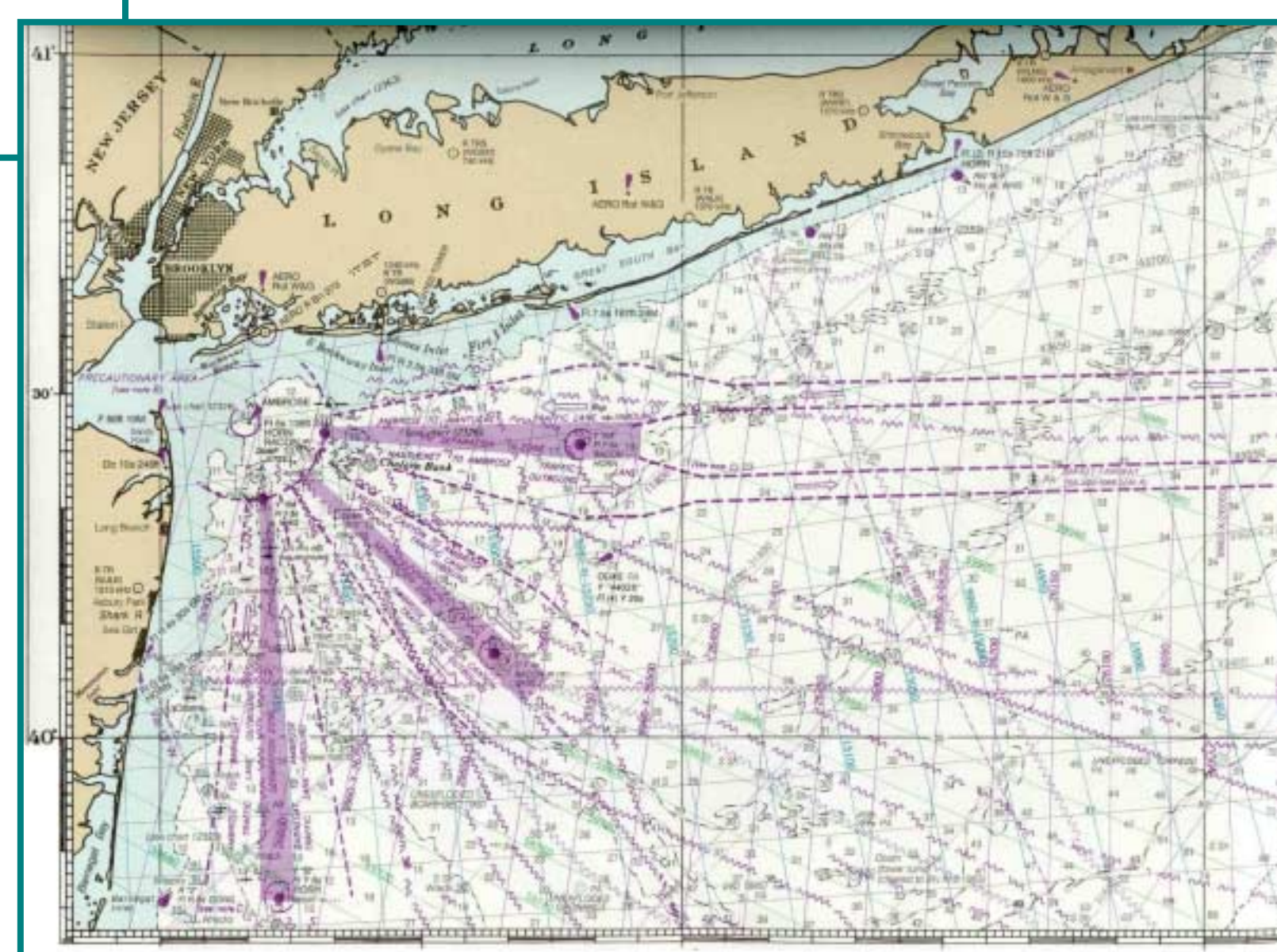
- Condition of port entry - prior to port entry in high risk areas:
 - check steering, ensure engines ready for maneuvering & post trained lookouts
- Dynamic Management Areas - (from surveys or acoustic detection showing right whales have reached a pre-determined density or trigger):
 - geographically targeted re-routing of vessels around right whale areas or speed restrictions (< 10 knots) in right whale areas

Collaborative Process with Shipping Industry, Other Agencies and Environmental Groups. Meetings & Briefings May 1999 - August 2001

- Northeast & Southeast Right Whale Implementation Teams
- Boston Port Operators Group
- ME/NH Harbor Safety Group
- Providence Harbor Safety Group
- NY/NJ Harbor Safety Committee
- Maritime Transportation System Advisory Council
- North Atlantic Port Authorities, Inc.
- Bath Iron Works
- Brunswick Naval Air Station
- Northeast, mid-Atlantic & southeast shipping industry
- Georgia Ports Authority
- American Association of Port Authorities
- NY/NJ Port Authority
- Marine Mammal Commission
- Right Whale Consortium
- Hampton Roads Maritime Ass'n.
- National Ass'n. of Maritime Organizations
- Thames Maritime Coalition (CT)
- Chamber of Shipping of America
- International Council of Cruise Lines
- Jacksonville Harbor Safety Comm. (FL)
- Delaware River Port Authority
- South Carolina Port Authority
- International Fund for Animal Welfare
- National Marine Fisheries Service
- U.S. Coast Guard
- NOAA Stellwagen Bank Nat'l Marine Sanctuary



Female right whale, *Staccato*, ship struck in vicinity of Cape Cod Bay, April 1999. NMFS SAS photo

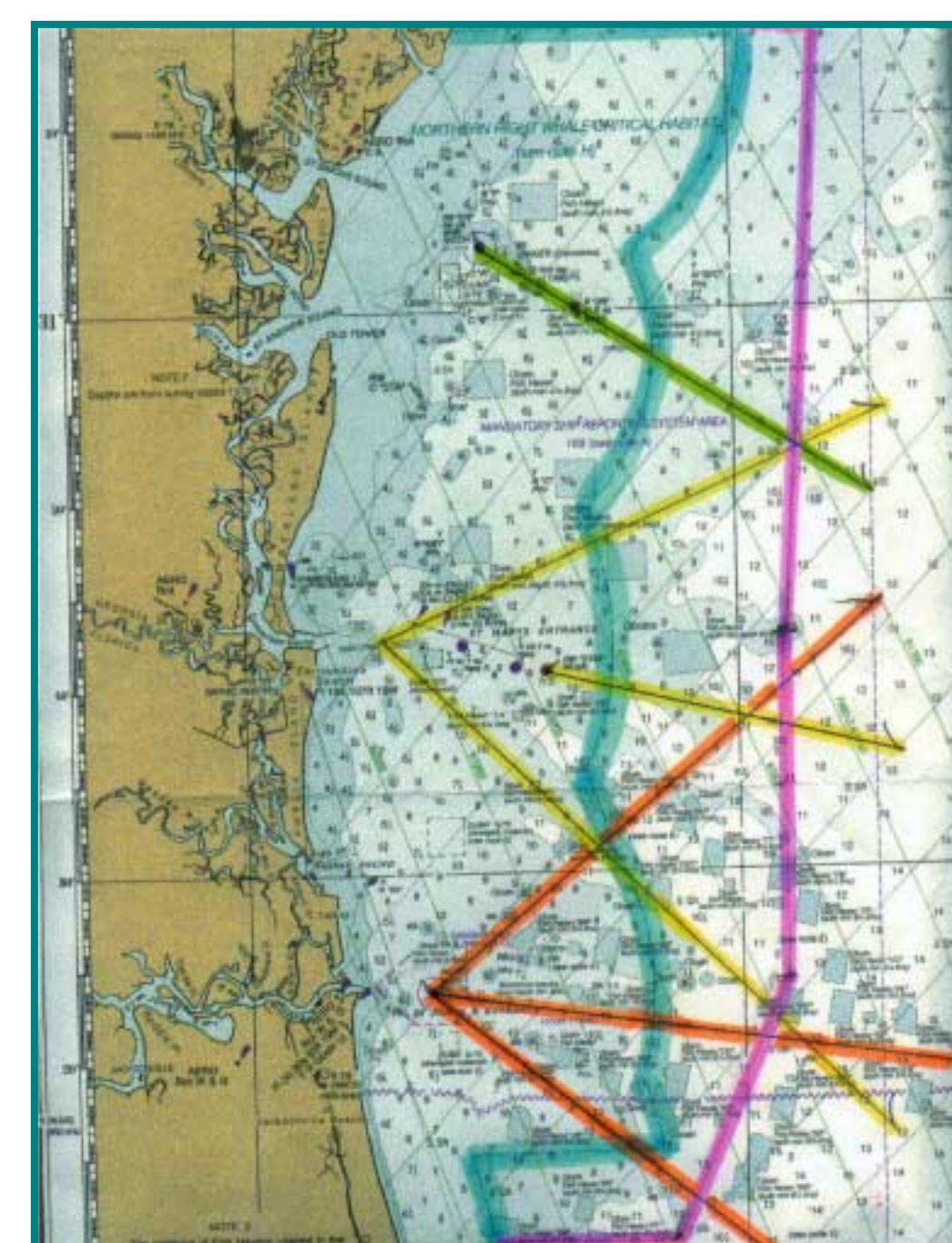


Existing NY/NJ traffic lanes; recommended action would establish seasonal management areas during right whale migration periods.

Applicability of Recommended Measures:

all vessels engaged in commerce $\geq 65'$ (20 m.), all commercial tugs & tows regardless of length, & all recreational vessels $\geq 65'$ (20 m.).

Exceptions in ATBAs: may include tug & tows and commercial fishing vessels. These vessels might be subject to operating restrictions such as daytime transit, posting of lookouts, or speed restrictions.



Possible locations for mandatory traffic lanes off the southeast US; no traffic lanes currently exist south of Delaware Bay.

Research, Studies & Projects for Recommended Measures

- Risk assessments by region - underway
- Economic Impact Analyses - underway for the area from the US/Canada border to Port Canaveral, FL
- Assess mid-Atlantic migratory corridor temporally & spatially - analyze existing survey & tag data; enhance aerial surveys &/or opportunistic sighting network
- Merchant mariner education - develop a training program; continue outreach efforts to mariners; incorporate protected species requirements in qualifications, licensing & voyage and shipboard safety planning
- Continue right whale detection research - real time passive acoustics & determine if active sonar detection is feasible
- Continue tagging research - address information gaps

References

Russell, B.A. *et al.* 2001. Recommended Measures to Reduce Ship Strikes of North Atlantic Right Whales. Contract report to NMFS. 37pp. (download full report at <http://www.nero.nmfs.gov/whaletrp/finalreport.pdf>).



NMFS SAS aerial photo