

Update on the United States' Actions to Reduce the Threat of Ship Collisions with Large Whales

Prepared for the International Whaling Commission's
Working Group on Ship Strikes and the International Whaling Commission's Conservation Committee,
Madeira, Portugal, June 16, 2009
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The United States continues to take steps to reduce ship strikes, including operational measures for vessels, education and outreach programs, technological research, and research and monitoring activities. For background information on previous and ongoing activities, please refer to the [June 2008 update](#) submitted to the IWC Conservation Committee.

Ship Speed Regulations: In October, 2008, NOAA Fisheries issued new regulations, becoming effective December 2008, to reduce the likelihood of ship collisions with right whales (73 FR 60173). The regulations implement speed restrictions of 10 knots or less for certain vessels (65 ft or greater) in certain times and areas (e.g., key port entrances) along the U.S. Atlantic seaboard that correspond to right whale occurrence. Exempted from the rule are U.S. government vessels that will be expected to adhere to guidance provided under Endangered Species Act Section 7 consultations and State law enforcement vessels engaged in search and rescue or law enforcement activities. The rule also contains a provision exempting vessels from speed restrictions in poor sea and weather conditions, thereby ensuring safe vessel maneuverability under those special conditions.

The rule provides for establishment of temporary, voluntary "dynamic management areas" (DMAs) in times and/or areas where the seasonal management measures are not in effect, and where whales occur. In these locations, mariners have the option to cross through the DMA at a speed no greater than 10 knots or route around the area.

The regulations will be in effect for five years after implementation. During this time, NOAA will be conducting additional research on whale distribution and the effectiveness of the rule. Additional information on the regulation can be found at: <http://www.nmfs.noaa.gov/pr/shipstrike/>.

Vessel Routing Activities: In 2008, the United States submitted two vessel routing proposals to the International Maritime Organization (IMO) to reduce the risk of ship strikes to North Atlantic right whales. The proposals were endorsed by the IMO and became effective June 1, 2009.

One measure is the establishment of a recommended, seasonal area to be avoided (ATBA) in the Great South Channel off Massachusetts (see Figure 1). The ATBA affects ships of 300 gross tons and above and is in effect each year from April 1 to July 31, a time and location of significant right whale aggregation. Information on these actions can be found at: <http://www.nmfs.noaa.gov/pr/shipstrike/>.

The other measure is a modification of the north-south leg of the IMO-adopted traffic separation scheme (TSS) "In the approach to Boston, Massachusetts" by narrowing the width of each of the lanes from two miles to a mile and a half, leaving the western boundary of the TSS and the width of the mile separation zone unchanged. This amendment will move ships away from the greatest density of right whales and minimize the overlap between whales and ships, while making the width of the north-south lanes of the Boston TSS consistent with the width as the east-west lanes.

¹ We acknowledge contributions by: David Matilla, Hawaiian Islands Humpback Whale National Marine Sanctuary, NOAA National Ocean Service; Sofie M. Van Parijs, Northeast Fisheries Science Center, NOAA Fisheries; Sarah Wilkin, Southwest Regional Office, NOAA Fisheries; and Michelle Yuen, Pacific Islands Regional Office, NOAA Fisheries.

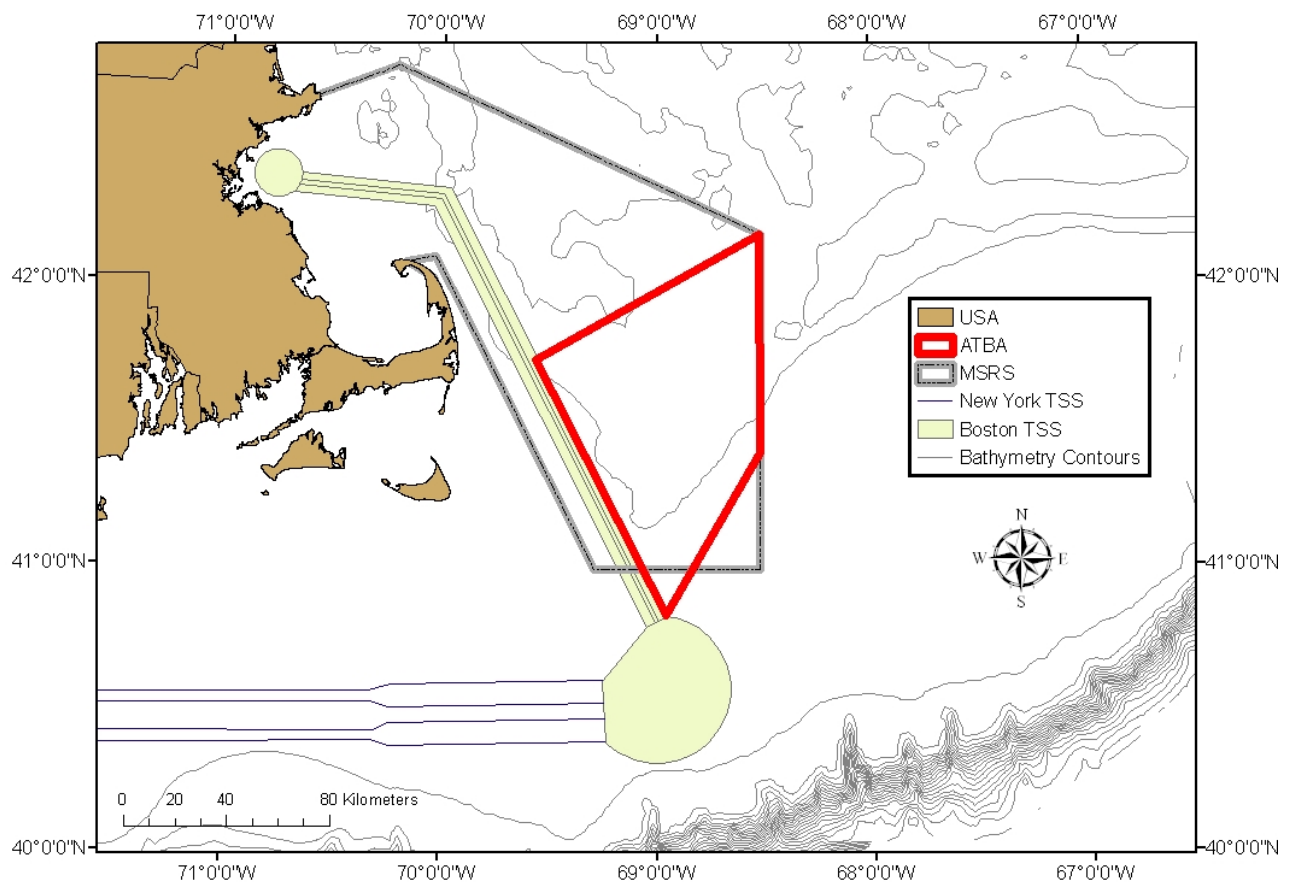


Figure 1. Chartlet of Great South Channel Area to be Avoided.

Ship Strike Reduction Technology Workshop: In July 2008, NOAA Fisheries convened a “Workshop to Identify and Assess Technologies to Reduce Ship Strikes of Large Whales”. The goals of the workshop were to: (a) identify existing or emerging technologies that might be useful in reducing ship strikes, (b) assess the feasibility of each in reducing ship strikes, and (c) identify research and development timelines needed to make a given technology useful in reducing the threat. Participants discussed and, in directed small groups, assessed a number of remote sensing technologies, including visual surveys; tagging and telemetry; passive acoustics; active acoustics; thermal imaging; radar; and predictive modeling. The final report is posted at: <http://www.nmfs.noaa.gov/pr/shipstrike/>.

International Conference on Marine Mammal Protected Areas: In spring 2009, the Hawaiian Islands Humpback Whale National Marine Sanctuary hosted an international conference on marine mammal protected areas (MMPA). The overall conference theme of “networks: making connections” was explored in three conference threads focusing on (1) design, (2) management, and (3) networking for the future of MMPAs and MMPA networks. Ship strike issues were addressed during a panel called “How can MPAs and networks of MPAs ensure threat mitigation to cetaceans?”

Blue Whales in Waters off California: In September and November, 2007, five or six blue whale carcasses (one possibly being a re-sight) were reported in California’s Channel Island area extending from Santa Cruz Island to immediately north of San Diego. Three carcasses were examined and exhibited blunt force trauma or other wounds consistent with injuries sustained in a collision with a large vessel. A fourth was a calf that likely died as a consequence of its mother being struck and killed.

Following the blue whale Unusual Mortality Event in 2007 and several subsequent fin whale ship strike mortalities in southern California, NOAA’s National Marine Fisheries Service (NMFS) partnered with several groups to attempt to understand, mitigate, and potentially reduce large whale ship strikes in coastal waters.

NMFS worked closely with NOAA's Channel Islands National Marine Sanctuary and Sanctuary Advisory Council to draft a response plan for large whale ship strikes in the Santa Barbara Channel. The plan outlines several stages of response, including language for two notices to mariners issued by the US Coast Guard. The first is issued when large whales have been consistently sighted in the greater Channel, and serves as a "heads-up" to mariners to be aware of the presence of whales. The second notice is issued when aggregations of 5 or more animals have been persistently observed in the shipping lanes or within 1 mile of the shipping lanes. This notice includes a recommendation of a speed reduction to 10 knots. The plan also includes general provisions for emergency response, such as when a dead whale is discovered in the Channel.

The California Marine Mammal Stranding Network, administered by NMFS, has been working to improve readiness for large whale stranding events and necropsies. Through partnerships with researchers, NMFS is endeavoring to better understand the ecology of large whales in the waters off California, particularly in and around shipping lanes.

Hawaii Superferry: "Superferry", a fast ferry capable of carrying up to 866 passengers, 282 cars or 28 forty-foot trucks with 65 cars, and traveling at approximately 35 knots, began operation in Hawaii in 2007. The initial route traveled between Oahu and Maui, through the Hawaiian Islands Humpback Whale National Marine Sanctuary. Superferry was granted an exemption from Hawaii Environmental Impact Statement laws by the State Department of Transportation. The State of Hawaii was sued by environmental organizations and community groups to enjoin Superferry operation. The concerns raised by these groups included the potential for the vessel to strike whales and the risk posed by transfer of invasive species between islands.

This case eventually was heard by the Hawaii Supreme Court, which published its [opinion](#) on March 16, 2009. The State Supreme Court unanimously ruled that a Hawaii State law that was drafted to save the ferry project was unconstitutional and improper. The court determined that the law was conceived, drafted and enacted to allow Superferry alone to operate without satisfying the State's rigorous environmental review law. On April 6, 2009, the Hawaii Superferry released a statement that they will cease operations in the main Hawaiian Islands.

Ongoing Activities

Aircraft Surveys and Right Whale Alerts: NOAA and other Federal and state agencies support or conduct extensive aircraft surveys for right whales. NOAA Fisheries Service continues to assemble reports, and "alerts" are disseminated to mariners via e-mail, web pages, U.S. Coast Guard Broadcast Notices to Mariners, NOAA Weather Radio, NAVTEX, NOAA Weather Buoys, shipping agents, pilots and port authorities.

Mariner and boater education and outreach programs:

- Distribution of compliance guides for the right whale ship strike reduction rule (available at http://www.nmfs.noaa.gov/pr/pdfs/shipstrike/compliance_guide.pdf).
- Continued distribution of placards, brochures, and videos to mariners on ways to reduce ship strikes.
- NOAA maintains two websites specifically devoted to right whale ship strike reduction.
- NOAA navigational charts are routinely updated as they are reprinted to include right whale advisories.
- Current information on right whales is provided throughout the U.S. eastern seaboard *Coast Pilot* guides, National Geospatial Intelligence Agency's *Notice to Mariners* and *Sailing Directions*, and to the United Kingdom's *Admiralty Publications*.
- NOAA has developed, in collaboration with a number of partners, a multi-media CD entitled "The Prudent Mariner's Guide to Right Whale Protection". The CD was updated in 2009 with current information. This CD is intended for professional mariners operating along the U.S. East Coast, and is available at: <http://www.nero.noaa.gov/shipstrike/doc/mtr.html>.

Auto-Detection Buoys in the Boston Traffic Separation Scheme: In spring 2007, a program was implemented to reduce the threat of ship strikes to endangered large whales that could result from transport of Liquefied Natural Gas (LNG) in waters off New England. The program calls for establishing three passive acoustic arrays for detecting calling whales. Two of the arrays include real-time auto detection buoys, first at the site of port and pipeline construction, and later within the Boston shipping lanes. The buoys automatically detect northern right whale contact calls and transmit alerts in real-time via Iridium satellite data. Detections are confirmed in real time by trained acousticians at Cornell University's Bioacoustics Research Program before triggering management decisions (see www.listenforwhales.org). Confirmed detections communicated to LNG vessels via phone trigger 24 hour time periods in which transiting LNG vessels are mandated to slow their speeds to 10 knots or less anywhere within 5 nautical miles of the detecting AB and heighten their visual awareness. The use of the arrays is mandated for the life of both ports (each estimated to be 25-40 years).

Although only vessels calling on the new LNG ports are mandated to slow their speeds in response to real-time whale detection information, NOAA's Northeast Fisheries Science Center began including acoustic detections in the Boston TSS in their Sighting Advisory System (SAS) in February 2008. The SAS provides information to mariners entering the area regarding the locations of right whales that have been seen, and, now, heard, in Northeast waters and provides guidance for avoiding collisions.