APPENDIX A

Sovereign Vessels



SOVEREIGN VESSELS

Sovereign vessels, which are owned and operated by the US Federal government, include, but are not limited to, Navy, United States Coast Guard (USCG), and United States Army Corps of Engineers (USACE) vessels. These vessels would be exempt from speed restrictions due to operational necessity and the respective agencies' ongoing efforts to reduce ship strikes. Any Federal agency or service that operates vessels 65 feet (ft) (19.8 m) and greater within right whale habitat (and is exempt from the rule) would be expected to consult under Section 7 of the Endangered Species Act. As Section 7 consultations are not considered an operational measure, they are not included in the main text of the final environmental impact statement (FEIS). However, this appendix gives a brief summary of current mitigation measures and previous Section 7 consultations for the exempted entities. This appendix does not go into detail on the current and future impacts of sovereign vessels on right whales, nor any current or future Section 7 consultation details as this measure is not an operational measure within of the scope of the FEIS.

U.S. Navy Mitigation Measures

The Navy completed Section 7 consultations with the National Marine Fisheries Service (NMFS) in 1997 for vessel operations in the southeastern US. NMFS issued a biological opinion (BO) following this consultation and the Navy has since implemented recommended measures from this BO along the entire US East Coast. These measures include the following:

- Annual message prior to calving season (December 1–March 30).
- Limit east-west transiting through right whale critical habitat and areas of concern where practical.
- Vessel speed limitations within critical habitat and areas of concern. (Captains are advised to "use extreme caution and use slow safe speed," that is the slowest speed consistent with essential mission, training, and operations.
- Operations in critical habitat and areas of concern are limited to daylight and periods of good visibility, to the extent practicable and consistent with mission, training, and operation.
- Posting two lookouts (one trained in marine mammal identification) while operating in critical habitat and other areas of concern.

In addition to the mitigation measures from the Section 7 consultations, the Navy implemented the following regional protective measures:

Northeast (Fleet message in June 2002)

• Ships transiting Great South Channel and Cape Cod Bay critical habitats check into the mandatory ship reporting system (MSRS) for latest sighting data.

- Ships approaching these areas of high concentration "shall use extreme caution and operate at a safe speed."
- Additional speed restrictions are required when a whale is sighted within 5 nm of a reported location, if the sighting is less than one week old.
- The same lookout requirements as the Southeast.

Mid-Atlantic (Fleet message in December 2004)

- Utilizes the mid-Atlantic ports and dates proposed by the National Oceanic and Atmospheric Administration (NOAA) as seasonal management areas (SMAs).
 - South and east of Block Island (Sept–Oct/Mar–Apr)
 - New York/New Jersey (Sept–Oct/Feb–Apr)
 - Delaware Bay (Oct–Dec/Feb–Mar)
 - Chesapeake Bay [Hampton Roads] (Nov–Dec/Feb–Apr)
 - North Carolina (Dec–Apr)
 - South Carolina (Oct–Apr)
- Ships operating within 20 nautical miles (nm) arcs of these ports "shall use extreme caution and operate at a slow safe speed that is consistent with mission and safety."
- Increased vigilance with regard to avoiding vessel/whale interactions along mid-Atlantic coast including ports not specified.
- The same lookout requirements as the Southeast.

The Navy is also involved with the Early Warning System (EWS) and contributes funding to the EWS survey flights. The Navy's communication and reporting network is coordinated through the Fleet Area Control and Surveillance Facility (FACSFAC). They distribute right whale sighting information to the Department of Defense (DoD) and the civilian shipping industry.

Naval Vessels

The major Navy homeports on the US East Coast include, but are not limited to, a submarine base in Groton, Connecticut, homeport to 15 vessels; Little Creek amphibious base in Virginia, with 13 vessels; Norfolk, Virginia, with 64 vessels; Kings Bay, Georgia, with 6 vessels; and Mayport, Florida, with 18 vessels.¹

Navy Vessel Traffic

Navy vessels account for about 3.0 percent of vessel traffic out to 200 nm (Filadelfo, 2001). A study was conducted from February 2000 to January 2001 comparing levels of Navy and commercial ship traffic. Commercial shipping data was obtained from the Historical Temporal Shipping (HITS) Database and Navy ship traffic on the East Coast was obtained from the CINCLANTFLT operations center through reviewing daily

¹ 'List of Homeports' (As of August 19,2005) http://www.chinfo.navy.mil/navpalib/ships/lists/homeport.html

snapshots of the locations of all LANTFLEET ships. Both fleets were sampled every five days. Commercial traffic density along the East Coast averaged about 202 ships within 50 nm of the coast, and the average steadily increased to 266 within 100 nm, and 358 within 200 nm. The total number of Navy ships on the east coast within 200 nm was 12 at any given time (Filadelfo, 2001).

In terms of spatial distribution, commercial ship traffic is relatively uniform along the coast, with certain concentrations around major port areas. Navy ships however have very non-uniform distribution, depending on exercises (Filadelfo, 2001).

Noise

Quieter Navy warships radiate significantly less noise than fishing vessels (~160 dB), and the loudest Navy ships are close to the range for supertankers (~173 dB) (Filadelfo, 2001).² Using the results from the Navy traffic density analysis, the 12 ships present on average from Maine to Florida out to 200 nm, would radiate approximately 1–2 watts of acoustic power to the ocean.³ In contrast, the estimated 358 commercial ships present in the same area would, on average, radiate about 40 times that of the Navy ships. Therefore, the Navy contributes a small percentage of noise to the ocean at around 2.5 percent. While large concentrations of Navy ships may occasionally increase traffic density and radiate higher levels of acoustic energy during large-scale fleet exercises, in general, the Navy is not a major contributor to traffic or noise (Filadelfo, 2001).

U.S. Coast Guard Mitigation Measures

These mitigation measures are contained in the BOs from the Section 7 consultation process with NMFS (see Section 1.8.3 for an overview of the three BOs). Mitigation measures contained in the 1995 BO include the following:

- Establishing a marine mammal and endangered species program in the First District (Maine to Tom's River, New Jersey), Fifth District (Tom's River through North Carolina), and Seventh District (South Carolina through Florida).
- Developing a Memorandum of Agreement and Memorandum of Understanding with NMFS.
- Developing and providing protected species training for USCG personnel.
- Continuing notices/broadcasts to mariners in right whale critical habitat areas.
- Supporting NMFS emergency efforts in responding to strandings.
- Implementing the protocol/guidelines recommended by the Right Whale Recovery Plan Implementation Teams.
- Participating in the Right Whale EWS; current guidelines in the protocol for the EWS are as follows:

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² These noise estimates exclude submarines and any noise from sonar.

³ These comparisons refer only to broadband noise in the 500 Hz center frequency.

- 1. In Florida and Georgia, a designated lookout must be posted on USCG vessels at all time between December 1 and March 31 when these vessels are operating in the vicinity of channels, near shore areas where humpback and right whales occur, and in other areas of the southeastern US that have been designated as critical habitat for right whales. USCG vessel operators must take the following precautions to avoid whales: All USCG vessels within a 15 nm or greater radius of a right whale sighting must operate at the slowest safe speed possible (except when the nature of the mission, such as emergency response, precludes slow speeds), exercise caution, and keep watch for right and humpback whales. During evening/nighttime hours or when there is limited visibility due to fog or sea states of greater than Beaufort 3, vessels must operate at the slowest safe speed possible (except as previously noted) when transiting between areas that whales have been spotted within 15 nm within the previous 24 hours.
- 2. Between March 1 and May 30, when right whales are concentrated in the vicinity of right whale critical habitat in the Great South Channel and Cape Cod Bay, a dedicated lookout must be posted on USCG vessels to watch for whales during all vessel operations. This includes reducing the speed of all vessels transiting these areas during this period in response to all non-emergency operations.

Additional conservation recommendations requested by NMFS are included in this BO. These recommendations and the USCG's implementation status are detailed in the following section.

USCG implementation of Conservation Recommendations identified in the 1996 BO includes the following:

- 1. Between January 1 and March 31, all USCG vessels operating in waters between Cape Henry and Cape Hatteras (Fifth District) have lookouts posted that are tasked with watching for whales at all times and use notice to mariners, broadcasts, and NAVTEX as appropriate. This tasking is specified in the Marine Mammal and Endangered Species Program which was provided in the original BO and is implemented in the Fifth District.
- 2. In addition to posting dedicated observers on vessels in the southeastern critical habitat area over the calving season, NMFS recommended that dedicated observers also be posted on all USCG vessels operating in the general area between Savannah, Georgia, and Palm Beach, Florida, to watch for whales during critical months. This recommendation was fully implemented by the Seventh District.
- 3. The terms "maximum safe speed" for emergency operations and "proportional to the mission" for standard operations currently convey that the mission goals supersede the safety of protected species. NMFS recommended that the USCG's standard operating procedures should be revised to incorporate protection for endangered and threatened species where they occur in conjunction with USCG operations. The current guidance contained in the standard operating procedures

for all three Districts did provide specific information regarding speed in critical habitat areas. The guidance document in the First District was revised in April 1996 and will be followed by the Fifth and Seventh Districts. The USCG standard operating procedures now implement the measures in Conservation Recommendation three by placing the safety of protected species on par with mission requirements during emergency operations and make the safety of protected species a primary factor during non-emergency operations.

- 4. NMFS recommended that the USCG should ensure that its lookouts are trained in techniques required to spot marine mammals and sea turtles. The First District has formally developed a course curriculum on marine mammal protection that is used at the Northeast Regional Fisheries Training Center. The Fifth district units invited NMFS personnel and local stranding network organizations to participate in local training sessions.
- 5. NMFS recommended that the USCG transmit broadcasts reporting right whale sightings by the EWS as quickly as possible over NAVTEX or other means in Georgia and Florida from mid-December through March. The message should advise mariners within 15 nm of the sighting to operate at the slowest safe speed, exercise caution, and keep watch for right whales. In response, the Fifth District began aerial surveys over critical habitats in Cape Cod Bay and the Great South Channel in 1996 and includes a notification to mariners. The Seventh District conducted surveys and broadcasts during the calving season in the Southeast during 1996.
- 6. NMFS recommended that the USCG should develop training for personnel that emphasizes not only stranding and enforcement issues, but information on the distribution and behavior of these species that will help the USCG to anticipate where and when conflicts may occur. This recommendation was incorporated into the implementation of Conservation Recommendation four.
- 7. NMFS recommended that when and where possible, routine transits should avoid those high-use and high-density whale habitat areas during the seasons when whales are concentrated in those areas. All USCG units are instructed to avoid high-use and high-density areas "whenever practical."
- 8. Per NMFS recommendation, the First and Seventh District are fully participating in the Recovery Plan Implementation Teams. However, the teams are not currently involved in issues directed at the mid-Atlantic area, and the Fifth District has not participated in the other implementation team activities.
- 9. NMFS recommended the USCG continue fulfilling its mission, with modifications as previously discussed, which fully support recovery efforts of protected species. The USCG addressed this recommendation under the specific numbers previously listed and will continue to support recovery through additional means.
- 10. NMFS recommended that during standard operations, and following a whale sighting, USCG vessels should maintain a minimum distance from the whale

(minimum of 100 yards). This recommendation was implemented through the updated guidance document in all three districts and specifies "100 yards if practical."

The remaining conservation measures, 11 through 14 had not been fully implemented at the time of the BO as they addressed activities that affected endangered species and areas other than the right whale and its habitat, which was a priority.

The Reasonable and Prudent Alternatives issued in this BO expand on current Conservation Recommendations and add several new measures. A summary of the alternatives includes:

- 1. Implement all conservation measures that concern endangered whales from the September 1995 BO.
- 2. Post dedicated lookouts during all transits within 20 nm of shore that are in areas with high whale concentrations.
- 3. All dedicated lookouts must successfully complete a marine mammal lookout training program.
- 4. All three of the East Coast Districts must continue current activities in conjunction with the respective Recovery Plan Implementation Teams to provide support for aerial surveys.
- 5. Issue speed guidance for vessels to clearly require use of the "slow safe speed" standard.
- 6. Participate in investigating, testing, and implementing technological solutions to prevent ship strikes.
- 7. Adopt a vessel approach guideline of 500 yards for right whales and 100 yards for all other whales.
- 8. Provide information on whales to commercial and recreational vessel operators that is geared towards avoiding collisions with endangered whales.
- 9. Provide timely information on current whale locations to commercial vessels coming into major ports within the critical habitat in the Northeast and Southeast US.
- 10. Complete Section 7 consultation on USCG permitting before the final rule is issued.
- 11. Coordinate with NMFS and other agencies on a proposal to the International Maritime Organization (IMO) that requests two MSR systems along the East Coast of the US.

The 1998 BO includes the following conservation recommendations:

1. Initiate Gulf of Mexico and marine event consultations within six months of receiving this BO.

- 2. USCG will assist in identification of floating whale carcasses and assistance in both marking and retrieving of that carcass if it is a right whale.
- 3. USCG should periodically review compliance with the speed guidance it has issued.
- 4. A "Job Aid" has been prepared to provide USCG stations with information that will assist personnel in getting the best information for efforts required under the Law Enforcement Guidance that implement the Atlantic Protected Living Marine Resources Initiative.
- 5. Evaluate USCG authorities to identify more aggressive opportunities to reduce the threat of ship strikes of endangered large whales, both by USCG and commercial ship traffic.
- 6. If approved by the IMO, USCG would support the implementation of the MSR systems.
- 7. USCG should work with NMFS and other agencies to develop information on critical habitat, marine sanctuaries, and endangered species migration routes, feeding and breeding areas for use by mariners and boaters.
- 8. USCG should assess mission requirement like full power trials so they can be scheduled during times of year and in areas where and when they present the least hazard to endangered and threatened species.
- 9. USCG First District should continue to support the EWS and other sighting programs.
- 10. USCG should continually update and revise its training courses for USCG lookouts.

USCG Vessels

The USCG Atlantic fleet patrols waters along the East Coast in response to marine pollution events, port safety and security issues, law enforcement efforts, search and rescue missions, vessel traffic control, and maintenance of aids to navigation. Most of these operations occur in waters less than 20 miles from the shore.

U.S. Army Corps of Engineers–Mitigation Measures

Biological Opinions

The USACE has engaged in a number of ESA Section 7 consultations on local actions involving harbor dredging and related activities in the Southeast US. The consultations did not find that these actions are likely to adversely affect right whales, although mitigation measures were included in the BOs to lessen the likelihood of an interaction between right whales and vessels. The USACE began consulting with NMFS on the effects of hopper dredging in the Canaveral Ship Channel in Florida in 1978.

Consultations for dredging in the southeastern US were reinitiated in 1980, 1986, 1991, 1995, and most recently in 1997. While these BOs focus on threatened and endangered sea turtles, they also address potential impacts on whales; and right whale mitigation measures were developed from the reasonable and prudent measures listed in these BOs.

The 1991 BO was the first cumulative area consultation between NMFS and the USACE regarding hopper dredging in channels along the southeastern Atlantic seaboard from North Carolina through Canaveral, Florida. These activities have the potential to result in interactions between hopper dredges and right whales; therefore, several reasonable and prudent measures were developed in this BO to reduce the impacts on whales:

- 1. Endangered species observers (with at sea large whale identification experience) are required on dredges from December 1 to March 31st in Georgia and northern Florida to maintain surveys for the occurrence of right whales during transit between channels and disposal areas. Whale sightings must be documented in an annual report to NMFS.
- 2. Aerial surveys that initiated in Kings Bay, Georgia, are required to continue in accordance with the Right Whale EWS surveys, which are funded in part by the USACE. Dredging within right whale critical habitat from December to March must follow the protocol established within the EWS.
- 3. Whales that are observed by aerial and shipboard surveys are individually identified and counted, along with cow/calf pairs, and the movements and distribution of the whales is noted.
- 4. During evening hours or when there is limited visibility due to fog or sea states of greater than Beaufort 3, the dredge must slow down to 5 knots or less when transiting between areas if whales have been spotted within 15 nm of the vessel's path within the previous 24 hours. During daylight hours, the dredge operator must take necessary precautions to avoid whales.

USACE operators and contractors operating in the area from North Carolina to Pawleys Island, South Carolina; Pawleys Island to Tybee Island, Georgia; and Tybee Island to Titusville, Florida, are required to adhere to these measures. There are additional measures for reducing sea turtle takes, although these are outside the scope of the EIS.

There have also been several Section 7 consultations with the USACE in the Northeast. In 2000, NMFS consulted with USACE Baltimore office on the Assateague State Park Nourishment Project. NMFS completed a BO in 2002 on dredging in the Thimble Shoal Federal Navigation Channel and Atlantic Ocean Channel for the USACE Norfolk office. In 2003, a consultation reinitiated on maintenance dredging in the Cape Henry Channel, York Split Channel, York River Entrance Channel, and Rappahannock Shoal Channel, Virginia. In general, the resulting opinions from these consultations have concluded that the potential for a whale-vessel interaction is unlikely to occur either due to the project location or the slow speed at which dredges operate. Nevertheless, these consultations included similar conservation measures to those described above for the dredging activities in the Southeast. The conservation measure is as follows: "When whales are present in the action area, vessels transiting the area should post a bridge watch, avoid

intentional approaches closer than 100 yards (or 500 yards in the case of right whales) when in transit, and reduce speeds to below 4 knots."

Cape Cod Canal

The USACE Marine Traffic Controllers have partnered with NOAA in support of the Northeast Region Right Whales Sighting Advisory System. These duties include communicating known whale locations of right whales to vessel masters transiting the Cape Cod Canal, and protecting whales from vessel traffic when they occasionally are found in the canal.

A memorandum of understanding (MOU) was signed by the USACE in March 2004 to formalize ongoing efforts between NMFS and the Cape Cod Canal Office. These efforts include:

- 1. Alerting ships' masters of right whale locations as provided by NMFS when right whales are spotted in areas where Canal traffic may transit. Such alerts to include right whale sightings in Cape Cod Bay and the SBNMS should be given to all eastbound canal traffic. Such alerts to include right whale sightings in Rhode Island and Block Island Sounds and off Long Island should be given to westbound canal traffic. Westbound traffic reporting to the Traffic Controllers at the east approach channel (CCB Buoy) should also be given alerts for right whale sightings in the southwest quadrant of Cape Cod Bay.
- 2. Alerts shall be given to all vessels 65 feet and greater.
- 3. Providing reasonable protection and separation of vessel traffic from right whales within the canal and within the east or west approach channels.
- 4. Contributing to mariner's awareness of the potential for collisions with whale by including information about right whales and guidance on actions to protect right whales in a separate page of the Cape Cod Canal Tide Tables.