ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

Approval and Promulgation of Implementation Plans; State of Kansas

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve the State Implementation Plan (SIP) revision submitted by the state of Kansas for updating the maintenance plan to maintain the ozone standard in Kansas City.

DATES: Comments on this proposed action must be received in writing by July 26, 2006.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R07–OAR–2006–0365 by one of the following methods:

2. E-mail: kneib.gina@epa.gov.
3. Mail: Gina Kneib, Environmental Protection Agency, Air Planning and Development Branch, 901 North 5th Street, Kansas City, Kansas 66101.
4. Hand Delivery or Courier. Deliver your comments to: Gina Kneib, Environmental Protection Agency, Air Planning and Development Branch, 901 North 5th Street, Kansas City, Kansas 66101. Such deliveries are only accepted during the Regional Office’s normal hours of operation. The Regional Office’s official hours of business are Monday through Friday, 8 to 4:30, excluding legal holidays.

Please see the direct final rule which is located in the Rules section of this Federal Register for detailed instructions on how to submit comments.

FOR FURTHER INFORMATION CONTACT: Amy Algoe-Eakin at 913 551–7942, or by e-mail at algoe-eakin.amy@epa.gov.

SUPPLEMENTARY INFORMATION: In the final rules section of the Federal Register, EPA is approving the state’s SIP revision as a direct final rule without prior proposal because the Agency views this as a noncontroversial revision amendment and anticipates no relevant adverse comments to this action. A detailed rationale for the approval is set forth in the direct final rule. If no relevant adverse comments are received in response to this action, no further activity is contemplated in relation to this action. If EPA receives relevant adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed action. EPA will not institute a second comment period on this action. Any parties interested in commenting on this action should do so at this time. Please note that if EPA receives adverse comment on part of this rule and if that part can be severed from the remainder of the rule, EPA may adopt as final those parts of the rule that are not the subject of an adverse comment. For additional information, see the direct final rule which is located in the rules section of this Federal Register.


James B. Gulliford,
Regional Administrator, Region 7.

[FR Doc. 06–5622 Filed 6–23–06; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 224

[Docket No. 040506143–6016–02. I.D. 101205B]

RIN 0648–AS36

Endangered Fish and Wildlife; Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes regulations to implement speed restrictions on vessels 65 ft (19.8 m) or greater in overall length in certain locations and at certain times of the year along the east coast of the U.S. Atlantic seaboard. The purpose of this proposed rule is to reduce the likelihood of deaths and serious injuries to endangered North Atlantic right whales that result from collisions with ships. These measures are part of NMFS’ Ship Strike Reduction Strategy to help recover the North Atlantic right whale. NMFS is requesting comments on the proposed regulations.

DATES: Written comments must be received at the appropriate address or facsimile (fax) number (see ADDRESSES) no later than 5 p.m. local time on August 25, 2006.
The North Atlantic right whale (Eubalaena glacialis) was severely depleted by commercial whaling and, despite protection from commercial harvest since 1935, has not recovered. The population is believed to be at or less than 300 individuals, making it one of the most critically endangered large whale species in the world.

North Atlantic right whales occur in coastal and nearshore waters off the eastern United States and Canada, areas also used by fishing and other maritime activities that adversely affect the species. Deaths from collisions with ships and entanglement in fishing gear are significant impediments to the recovery of the species. Knowlton and Kraus (2001) documented 41 right whale deaths from 1970 to 1997, with at least 23 attributed to human activities.

In the period 1997 to 2001, human-caused mortality and serious injury to North Atlantic right whales from ship strikes and fishery entanglements was an estimated average of 2.0 per year (Waring et al., 2004). Kraus et al. (2005) indicated that the overall mortality rate increased between 1980 and 1998 to a level of at least four percent per year, a rate at which the survival of this species is not sustainable. Deaths from human-related activities are believed to be the principal reason for a declining adult survival rate (Caswell et al., 1999) and the lack of recovery in the species.

One of the greatest known causes of deaths of North Atlantic right whales from human activities is ship strikes. Kraus, 1990; Knollton and Kraus, 2001; NMFS, 2005). Waring et al. (2004) reported that 12 known right whale ship strike deaths occurred between 1991 and 2001; Kraus et al. (2005) reported 19 known ship strike deaths from 1986 to present. Three of these (possibly a fourth) occurred since March 2004 (Kraus et al., 2005). The actual number of deaths is almost certainly higher than those documented as some deaths go undetected or unreported, and in many cases it is not possible to determine the cause of death from recovered carcasses.

Another factor in slowed recovery has been inconsistent reproduction. Calf production has been highly variable. Since 1980, the number of calves has ranged from 1–31 per year, an annual average of 12.8. However, since 2000, calf production has averaged more than 20 calves per year. Although recent calf production is encouraging, the number of births still is not sufficient to compensate for the number of adult deaths over the past two decades (Kraus et al., 2005). Of particular significance is the recent loss of breeding females, the most important demographic component of the population.

For the North Atlantic right whale population to recover, death and injury from human activities, in particular those resulting from interactions with vessels because this is the greatest source of known deaths, must be reduced. The recently revised North Atlantic Right Whale Recovery Plan (NMFS, 2005) identified reduction or elimination of injuries from ship strikes among its highest priorities, and indicated that developing and implementing an effective strategy to reduce the threat was essential to recovery of the species.

**Summary of Right Whale Protection Measures**

Right whales are protected under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). The Northern right whale, which includes both the North Atlantic and North Pacific right whales, was listed as endangered under the Endangered Species Conservation Act in June 1970 (35 FR 8495), the precursor to the ESA. The species was subsequently listed as endangered under the ESA in 1973, and designated as depleted under the MMPA.

The ESA gives authority to the Secretary of Commerce (Secretary) for protecting most endangered marine species, including right whales. The ESA also gives authority to the Secretary to develop and implement recovery plans for endangered species.


NMFS, in collaboration with other agencies and organizations, has taken a number of steps to reduce the threat of ship strikes to North Atlantic right whales. Much of this activity involves limiting vessel approach to right whales, increasing the awareness of mariners using U.S. east coast ports about the vulnerability of right whales to ship strikes, and providing right whale sighting locations to mariners. A summary of activities follows.

**Right Whale Minimum Approach Regulation:** On February 13, 1997, NMFS published a regulation (62 FR 6729), prohibiting all approaches within 500 yards (460m) of any right whale, whether by vessel, aircraft or other means. The goal was to limit disturbance of right whales.

**Right Whale Sighting Networks:** Beginning in 1993 in waters off the U.S. southeast coast, and in 1997 off the coast of New England, NMFS has participated in, or supported, an extensive program of aircraft surveys for right whales. Surveys are flown over northeast U.S. waters year round on virtually every day weather permits. Surveys cover peak right whale abundance periods in Cape Cod Bay (principally between January and May) and in the Great South Channel (between March and July). Sighting information is also provided by U.S. Coast Guard (USCG) vessel operators, research and other ships operated by NMFS, the Commonwealth of Massachusetts, and other sources. NMFS assembles the reports, and “alerts” are disseminated to mariners via an automated facsimile system, USCG Broadcast Notices to Mariners, broadcasts over NOAA Weather Radio, Army Corps of Engineers (ACOE) Cape Cod Canal Traffic Controllers, and postings on several web pages. Shipping agents, pilots and port authorities disseminate the information to inbound and outbound shipping traffic. Further information on this program can be found at: [http://rwhalesightings.nefsc.noaa.gov/](http://rwhalesightings.nefsc.noaa.gov/).

In the southeastern United States, the survey program is a cooperative effort by the U.S. Navy (USN), USCG, ACOE, and the States of Georgia and Florida. Sighting location information is gathered and disseminated by the USN through a number of media, including USCG Broadcast Notice to Mariners, NAVTEX (the USCG international
Mandatory Ship Reporting System (MSRS): established in July 1999, the MSRS requires all commercial ships 300 gross tons or greater to report into a shore-based station when entering two key right whale aggregation areas, one each in waters off the U.S. northeastern and southeastern coasts. The U.S. northeast system operates year-round; the U.S. southeast system is in effect from November 15 to April 15, when right whales aggregate in these waters. The MSRS requires mariners to report such things as entry location, destination, and ship speed. Reporting prompts an automated return message providing right whale sighting locations and information on how collisions can be avoided, thereby providing information on right whales directly to mariners as they enter right whale habitat. A compilation of incoming reports also provides NMFS with a means to obtain information on ship traffic volume, routes, and speed to assist in identifying measures to reduce future ship strikes (see, for example, Ward-Geiger et al., 2005). The program is jointly funded by the USCG and NMFS, and administered primarily by the USCG. Further information can be found at: http://www.nmfs.noaa.gov/pr/shipstrike/msr/

Updating Navigational Aids and Publications: The U.S. Coast Pilot is a set of regionally-specific references on marine environmental conditions, navigation hazards, and regulations. Currently, captains of commercial vessels 1600 gross tons and above are required to carry the Coast Pilot when operating in U.S. waters. Since 1997, NMFS has provided updated information for U.S. eastern seaboard Coast Pilot guides, including information on the status of right whales, times and areas that they occur, threats posed by ships, the MSRS, and advice on measures mariners can take to reduce the likelihood of hitting right whales. In 2005, NMFS began including ship speed advisories (to transit at 12 knots or less). Similarly, NOAA navigational charts are routinely updated as they are reprinted to include right whale advisories.

NOAA provides current information on right whales to National Imagery and Mapping Agency’s (NIMA) Notice to Mariners. This publication, in addition to NIMA’s Sailing Directions, provides guidance for mariners traveling in international waters. These publications are updated quarterly. Similar language has been provided to the United Kingdom’s Admiralty Publications.

Right Whale Recovery Plan Implementation Teams: Following completion of the 1991 Right Whale Recovery Plan, NMFS established Recovery Plan Implementation Teams, comprised of federal and state agencies and other organizations, to advise NMFS on actions to aid in the recovery of the species. Many of the Teams’ activities have centered on reducing ship strikes. Both the Northeast and Southeast Implementation Teams were instrumental in developing and operating the aircraft survey programs described above. In addition, the Teams have developed and disseminated right whale material to mariners including brochures, placards, and training videos. The Teams have also funded various studies and have been an important conduit for information to and from the shipping industry and between Federal agencies.

Conservation Actions by Federal Agencies: Through consultations under section 7(a) (2) of the ESA, Federal agencies conducting ship operations have modified vessel operating procedures. For example, the USCG is, among other things, providing protected species training for USCG personnel and posting lookouts when operating in areas where right whales occur, issuing notices to mariners about right whale sighting locations, issuing guidance to its vessel operators to proceed with caution and at the “slowest safe speed” in the vicinity of right whales, and supporting NMFS emergency efforts in responding to right whale strandings. In addition to actions taken as a result of ESA section 7 consultations, the USN has made efforts to limit interactions between its vessels and whales, which include issuing advisories to its fleets to “use extreme caution and use slow safe speed” when near right whales, limiting vessel transits through right whale habitat when not adversely affecting a vital mission, and posting trained marine mammal lookouts.

As a result of its numerous ESA consultations, ACOE operators and contractors in waters off Georgia and Florida post trained whale lookouts and avoid nighttime transits. During periods of low light or limited visibility, ACOE dredges are required to slow to 5 knots or less when operating in areas where whales have been sighted. In addition, NMFS requested that ACOE Cape Cod Canal Traffic Controllers notify mariners using the Canal about right whales; as of March 2004, Controllers alert ships’ masters of right whale locations when right whales are detected in areas where Canal traffic may transit.

In addition, in 2005, NMFS contacted all relevant Federal agencies and asked that vessels proceed at 12 knots or less when in right whale habitat. Most have voluntarily complied when vital missions are not compromised.

The Need for Additional Action

Despite conservation efforts developed and undertaken by agencies, stakeholders, partners and industry throughout the 1990s, right whale deaths from ship strikes continue. NMFS believes that existing measures have not been sufficient to reduce the threat of ship strikes or improve chances for recovery (for example, a study of mariner compliance with NOAA-issued speed advisories in the Great South Channel reported that 95 percent of ships tracked (38 out of 40) did not slow down or route around areas in which right whale sightings occurred (Moller et al., 2005)). Accordingly, NMFS determined that further action was required. This led to the development of NMFS Ship Strike Reduction Strategy.

Development of a Ship Strike Reduction Strategy

NMFS convened a series of over 20 stakeholder meetings between May 1999 and April 2001 along the eastern seaboard from Boston, MA to Jacksonville, FL to discuss ways to reduce ship strikes. These discussions culminated in a report on management options for addressing the threat (Russell, 2001).

Ship Strike Working Group: NMFS formed an internal Working Group in November 2001 to develop a strategy to reduce ship strike mortality to right whales. To this end, the group reviewed all relevant information pertaining to ship strikes, including the distribution and occurrence of known ship strikes; data on right whale distribution, aggregations, and migrations; vessel traffic patterns; recommendations from stakeholder meetings and the management options report; and legal precedents and authorities. The group met 11 times from February to October 2002. It identified well over 100 measures, both regulatory and non-regulatory, for reducing the threat of ship strikes and assessed their feasibility and effectiveness with regard to conservation of right whales, as well as the projected impact on industry. The group completed its draft Right Whale Ship Strike Reduction Strategy (Strategy) in January 2003. Since that time, NMFS has presented the Strategy at a number of stakeholder and public meetings. A number of summary documents providing justification and background for the Strategy are posted at http://www.nero.noaa.gov/shipstrike/.
Elements of the Strategy

NOAA’s Strategy consists of five elements for reducing the threat of ship strikes. Elements 1–4 are non-regulatory and are not addressed by this proposed rulemaking. Only portions of element 5—operational measures for recreational and commercial mariners—are the subject of this proposed rulemaking.

In short, the elements are: (1) continue ongoing conservation and research activities to reduce the threat of ship strikes; (2) develop and implement additional mariner education and outreach programs; (3) conduct ESA section 7 consultations, as appropriate, with Federal agencies that operate or authorize the use of vessels in waters inhabited by right whales; (4) develop a Right Whale Conservation Agreement with the Government of Canada; and (5) establish new operational measures for commercial and recreational mariners. The latter includes establishing vessel speed restriction by regulation and establishing certain routing measures. A brief description of each of the five elements of the Strategy follows.

Element 1. Continue ongoing research and conservation activities: NMFS intends to continue its existing right whale conservation activities related to ship strikes, and the Strategy is not intended to supplant those programs. While these activities alone are not adequate to sufficiently reduce the threat of ship strikes, they do have conservation value. This program is described in “Summary of Right Whale Protection Measures” above.

Element 2. Mariner education and outreach programs: Mariner awareness is a key component to reducing this threat. And, while indications are that the maritime community is increasingly aware of the problem, NMFS intends to develop and implement a comprehensive education and outreach program for mariners and the general boating public which highlights the severity of the ship strike problem and provides steps that can be taken to reduce the threat. This work is underway. NMFS has developed a comprehensive list of tasks to raise mariner awareness that targets all segments of the recreational and commercial shipping industries, other agencies, and the general public. Tasks include developing curricula for maritime training academies, providing training modules for captain re-licensing, providing advice on voyage planning for domestic and foreign flagged vessels, and ensuring all east coast pilots have material to distribute to inbound ships. Key groups such as the Right Whale Recovery Plan Implementation Teams and others are assisting in reviewing, prioritizing, and performing the tasks.

Element 3. Conduct ESA Section 7 consultations: Because of the special missions of Federal agencies vessels owned or operated by, or under contract to, federal agencies would be exempt from the proposed regulations. This exemption is not intended to relieve Federal agencies of their responsibilities under the ESA, including the requirements of section 7. NMFS will use ESA section 7 consultations to analyze and mitigate impacts of vessel activities authorized, funded or carried out by Federal agencies. To that end, NMFS will review actions (including those subject to the conditions of existing Biological Opinions) involving vessel operations of federal agencies (e.g., the ACOW, Environmental Protection Agency, Maritime Administration, Military Sealift Command, Minerals Management Service, NOAA Corps, USCG, and USN) and determine whether to recommend initiation or re-initiation of section 7 consultation to ensure those activities are not jeopardizing the continued existence of North Atlantic right whales or destroying or adversely modifying their critical habitat.

Element 4. Development of right whale agreement with Canada: Similar conservation issues exist in both U.S. and Canadian waters. In this regard, NOAA intends, with the appropriate federal agency or agencies, to initiate the negotiation of a bilateral Conservation Agreement with Canada to ensure that, to the extent possible, protection measures are consistent across the border and as rigorous as possible in their protection of right whales. Although specific language of such an agreement has not been identified, NOAA has already communicated the need for an agreement and cooperative efforts to Canadian officials.

Element 5. New operational measures for commercial and recreational mariners: NMFS has developed a set of vessel operational measures. Some operational measures would be implemented through regulation and are the subject of this proposed rulemaking (see Proposed Regulations below). However, several will not require regulations.

Non-Regulatory Operational Measures

Port Access Route Studies and Recommended Routes: NOAA has proposed establishing recommended shipping traffic areas in the waters entering or departing the ports of Jacksonville, FL, Fernandina, FL, and Brunswick, GA, and in Cape Cod Bay. Recognizing the need for analysis of the routes, NMFS asked the USCG to conduct a Port Access Route Study (PARS). NMFS’s intent was to ensure navigational safety in the routes by providing them to USCG for analysis and public comment. Subsequently, Congress made the same request under the Coast Guard and Maritime Transportation Act enacted in August 2004, and requested that the USCG provide a report to Congress within 18 months. The USCG announced its intent to initiate a PARS in the Federal Register (70 FR 8313, February 18, 2005), indicating the geographic description of the areas under study, explaining the contemplated actions and their possible impacts, and inviting public comment. The PARS report is expected in February 2006.

PARS are conducted under the Ports and Waterways Safety Act (PWSA) (33 U.S.C. 1223) to provide safe access routes in designating necessary fairways and traffic separation schemes. They are conducted for such things as proposed or existing PARS, or to make such changes as to the designation of recommended routes and anchorage/no anchorage areas. In so doing, a PARS considers ship traffic density and vessel traffic characteristics, types of measures, conflict with existing measures, and environmental hazard concerns. With regard to the PARS on proposed routes in Cape Cod Bay and the ports of Jacksonville, Fernandina, and Brunswick, NMFS and the USCG met regularly to exchange information and to work collaboratively on the analysis.

If the USCG’s PARS report of the routes determines that the proposed shipping routes are free of navigational and environmental hazards, recommended routes in Cape Cod Bay and those southeastern U.S. ports are intended to be established. A range of routes is being considered and the exact locations of the routes have not been determined; much depends on the outcome of the PARS report. Again, that action is not addressed in this proposed rulemaking. After recommended routes have been established, NMFS intends to monitor mariner use of the routes. If the routes are not used routinely, consideration will be given to making them mandatory through regulation.

Shifting the Boston Traffic Separation Scheme (TSS): NOAA also intends to propose a reconfiguration of the TSS servicing Boston, MA. Reconfiguration of the TSS was also analyzed by the USCG’s PARS. Analysis by NOAA’s National Marine Sanctuaries Office indicates that an approximate 12 degree shift in the axis of the northern leg of the TSS and narrowing the two traffic
lanes of the TSS by approximately 1/2 nautical mile (nm) (.93 km) each would avoid known aggregation locations of right and humpback whales, yielding an estimated 58–percent reduction in the risk of ship strikes to right whales, while also reducing ship strike risk to other endangered large whale species by an estimated 81 percent. The proposed change in the TSS was developed after the development of NMFS’s Ship Strike Reduction Strategy, however, it is fully consistent with the purpose and framework of the Strategy. The action requires proposing the change to, and endorsement by, the International Maritime Organization (IMO). A proposal would have to be submitted by the United States in April 2006.

Area to be Avoided: In addition to the above routing measures, the Strategy proposes the creation of an IMO Area To Be Avoided (ATBA), for all ships 300 gross tons and greater, in the waters of the Great South Channel. Such a proposal would have to be submitted to, and adopted by, IMO. A description and map of the ATBA can be found in NOAA’s Advance Notice of Proposed Rulemaking (69 FR 30857; June 1, 2004).

Advance Notice of Proposed Rulemaking (ANPR) and Public Participation

The elements of the Strategy, and the vessel operational measures being proposed here, were described in the Federal Register as an ANPR on June 1, 2004 (69 FR 30857). The ANPR provided for a 60-day comment period. During that time (and subsequent extensions of the comment period), NMFS convened five public meetings in Boston, MA; New York/New Jersey; Wilmington, NC; Jacksonville, FL; and Silver Spring, MD. Public comments were provided at these meetings and transcripts of oral comments are available from NMFS (see for Further Information Contact). NMFS extended the ANPR comment period to November 15, 2004 (September 13, 2004; 69 FR 55135), to allow for additional meetings to maximize public input, to determine concerns regarding practical considerations involved in implementing the Strategy, and to determine if NMFS was considering an appropriate range of alternatives. NOAA held 11 stakeholder meetings during the extended comment period in: Baltimore, MD; Boston, MA; Jacksonville, FL; Morehead City, NC; Newark, NJ; New Bedford, MA; New London, CT; Norfolk, VA; Portland, ME; Savannah, GA; and Silver Spring, MD. Stakeholder meetings were attended by 142 individuals representing 40 companies (shipping, passenger vessel, towing, cruise ship servicing); 13 industry associations (regional, national, and international); 12 Federal (maritime operating and regulatory) and state agencies; seven pilots’ associations; one labor union; one marine architect company; 10 states and city port authorities; six environmental organizations; two newspapers; five academic or private institutions; and three U.S. Senate and House of Representative staff. Presentations made at these meetings, summary reports of the meetings, a list of the attendees, the ANPR, public comments, and background materials are provided at http://www.nero.noaa.gov/shipstrike.

Comments and Responses to Comments on the ANPR

NMFS received 5,288 comments on the June 1, 2004, ANPR from governmental entities, individuals, and organizations. They were received in the form of e-mails, letters, website submissions, correspondence from action campaigns (e-mail and U.S. postal mail), faxes, and phone calls. Of those, 88 contained substantive comments. All comments have been compiled and posted at http://www.nmfs.noaa.gov/pr/shipstrike. Here we address issues that directly relate to the measures in this proposed rulemaking.

Vessel Speed Restrictions: We received a number of comments and questions on NMFS’s proposal to use speed restrictions in the range of 10–14 knots as a means to reduce the occurrence of ship strikes. Many comments were supportive of speed restrictions and encouraged NOAA to use the lower limit of the range. Other comments questioned the value of such restrictions in protecting whales from ship strikes.

NOAA’s proposed use of speed restrictions to reduce ship strikes is based on several types of evidence. An examination of all known ship strikes indicates vessel speed is a principal factor. Records of right whale ship strikes (Knowlton and Kraus, 2001) and large whale ship strike records (Laist et al., 2001; Jensen and Silber, 2003) have been compiled. In assessing records in which vessel speed was known, Laist et al. (2001) found “a direct relationship between the occurrence of a whale strike and the speed of the vessel involved in the collision.” The authors concluded that most deaths occurred when a vessel was traveling in excess of 13 knots.

In perhaps the most complete summary to date, Jensen and Silber (2003) detailed 292 records of known or probable ship strikes of all large whale species from 1975 to 2002. Of these, vessel speed at the time of collision was reported for 58 cases. Operating speeds of vessels that struck various species of large whales ranged from 2.51 knots with an average speed of 18.1 knots. The majority (79 percent) of these strikes occurred at speeds of 13 knots or greater. When the 58 reports are grouped by speed, the greatest number of vessels were traveling in the ranges of 13–15 knots, followed by speed ranges of 16–18 knots, and 22–24 knots, respectively (Jensen and Silber 2003).

Of the 58 cases, 19 (32.8 percent) resulted in serious injury (as determined by blood in water, propeller gashes or severed tailstock, and fractured skull, jaw, vertebrae, hemorrhaging, massive bruising or other injuries noted during necropsy) to the whale and 20 (34.5 percent) resulted in death. Therefore, in total, 39 (67.2 percent) ship strikes in which ship speed was known serious injury or death resulted. The average vessel speed that resulted in serious injury or death was 18.6 knots. Using a total of 64 records of ship strikes in which vessel speed was known, Pace and Silber (2005) tested speed as a predictor of the probability of a whale death or serious injury. The authors concluded that there was strong evidence that the probability of death or serious injury increased rapidly with increasing vessel speed. Specifically, the predicted probability of serious injury or death increased from 45 percent to 75 percent as vessel speed increased from 10 to 14 knots, and exceeded 90 percent at 17 knots. In a related study, Vanderlaan and Taggert (in review) analyzed all published historical data on vessels striking large whales. Looking at cases where a strike occurred, the authors found that the probability that a strike would result in lethal rather than non-lethal injury ranged from 20 percent at 9 knots, to 80 percent at 15 knots, to 100 percent at 21 knots or greater. NMFS assumes that the conclusions from pooled data on all known large whale ship strikes also apply to right whales ship strikes specifically.

Pace and Silber (2005) also examined the distribution of speeds at which known ship strikes occurred versus the speeds of ships reporting into the MSRS, which were considered representative of speeds that ships travel in general. They found that the two distributions were significantly different. That is, these data suggest that vessels that struck whales were going faster than ships tend to travel in general.
There are only two definitive strikes to right whales where associated vessel speed is known with absolute certainty. One incident occurred on July 6, 1991, when a right whale calf was killed east of the Delaware Bay by a ship traveling at 22 knots. A second right whale, a juvenile, was killed on January 5, 1993, between Mayport and Fort Pierce, Florida by an 82–ft. (24.9 m) vessel operating at 15 knots. A third collision that may have involved a right whale occurred in the winter of 1972–73 east of Boston, Massachusetts. A bulbous bow container ship traveling at 21–23 knots collided with an unidentified whale, killing it. Laist et al. (2001) listed this case as a possible right whale. In November 2004, a Federal vessel traveling 12 knots struck a large whale outside the mouth of the Chesapeake Bay. Although not linked definitively to the strike, a dead adult right whale washed ashore in North Carolina shortly thereafter with massive injuries.

In addition, computer simulation modeling studies (Clyne, 1999;Knowlton et al., 1995) found that the hydrodynamic forces that pull whales toward the vessel hull increase with increased speed. Similar studies of the occurrence and severity of strikes relative to vessel speed have been reported in other species. Laist and Shaw (2005) examined the effectiveness of boat speed restrictions to limit the number of Florida manatee deaths, in particular as it related to enforcement of restrictions. They summarized the locations and circumstances of 48 known manatee deaths occurring between 1986 and 2005, and found that deaths were lower or non-existent in locations where enforcement efforts were greatest. The paper concluded that “speed restrictions can be effective in reducing collision risks with manatees if they are well developed and enforced” and stated that “similar measures may be useful for other marine mammal species vulnerable to collision impacts to vessels (e.g., North Atlantic right whales).”

The relationship between increasing vehicle speed and wildlife mortality is not limited to marine environments. The link between terrestrial wildlife mortality and vehicle speed has been documented in numerous species (Gunther et al., 1998; Knapp et al., 2004; Groot Bruinderink and Hazebroek, 1996). The use of speed restrictions has also been successfully implemented in endangered terrestrial species such as the Florida Panther (Schaefer et al., 2003) and the Florida panther (Calvo and Silvy, 1996) to protect depleted species from death by vehicle strikes.

Proceedents for Speed Restrictions: In several geographic regions and for varying purposes, ship speed restrictions have been imposed. The National Park Service established a 13 knot speed limit for vessels 262 ft (80 m) or greater, in Glacier Bay National Park on a year-round basis to reduce the likelihood of ship strikes to humpback whales (National Park Service, 2003). In Florida state waters, the U.S. Fish and Wildlife Service imposes speed restrictions on vessels in certain areas to protect manatees. In addition, State pilots require that vessels slow their port approach speeds ranging from 5–10 knots so a pilot can board a vessel. And, the Port of Los Angeles requests that every vessel entering or leaving the Port reduce its speed to 12 knots to reduce smog forming emissions. Ships have voluntarily observed this speed limit since 2002.

The USCG has required vessel speed restrictions at various times and locations, primarily to enhance national security (e.g., 66 FR 53712; 67 FR 41337; 68 FR 2201). For example, in one rule (66 FR 53712) the USCG required vessels 300 gross tons or greater to travel at speeds of eight knots or less in the vicinity to Naval Station Norfolk. Based on comments that speeds of eight knots might adversely affect large vessel maneuverability, the USCG increased the limit to 10 knots (68 FR 35173).

Ships’ Maneuverability: Several commenters indicated that large ships would lose steering at low speeds. Based on conversations with shipping industry representatives and the USCG regulations mentioned above, NMFS believes that most ocean going vessels maintain steerage at speeds of 10 knots or greater. In addition, we note the USCG has implemented ship speed restrictions in some river and port entrances ranging from five to ten knots (see, for example, 68 FR 66753; 67 FR 41337; 68 FR 2201; and 66 FR 53712). Based on this information and absent evidence to the contrary, NMFS believes that ships operating under the proposed regulations will be able to maintain maneuverability, but requests further comment on this topic.

Economic Burden to Vessel Operators: A number of comments were received regarding the potential economic impacts to commercial vessel operators arising from the proposed regulations. Economic impacts are addressed in the Draft Environmental Impact Statement, Regulatory Impact Review, and Regulatory Flexibility Act analysis.

Notice of Intent to Prepare a Draft Environmental Impact Statement

NMFS published a Notice of Intent (NOI) to prepare a Draft Environmental Impact Statement (DEIS) on June 22, 2005 (70 FR 36121). In the notice, NMFS invited public comment on the various alternatives and solicited information bearing on the National Environmental Policy Act (NEPA) analyses. In conjunction with preparation of the DEIS, NMFS held a number of meetings along the eastern seaboard to discuss potential economic impacts of the proposed rule. Further, public comment was also solicited through the USCG’s PARS of several suggested recommended routes. The DEIS will be made available for public comment.

In sum, NMFS encouraged public comment through an ANPR, a NOI, and now proposed rulemaking and the DEIS. As a result, NMFS has conducted numerous public meetings, held several rounds of discussions with various segments of the shipping community and other stakeholders, and described the content and purpose of the ship strike reduction program in various public forums.

Proposed Rulemaking

Current efforts to reduce occurrence of North Atlantic right whale deaths and serious injury from ship strikes have not been sufficient to alter the trajectory of this species toward extinction. The regulatory measures proposed here are part of NOAA’s Ship Strike Reduction Strategy. They are designed to significantly reduce the likelihood and severity of collisions with right whales while also minimizing adverse impacts on ship operations.

NOAA is proposing these regulations pursuant to its rulemaking authority under MMPA section 112(a) (16 U.S.C. 1382(a)), and ESA 11(f) (16 U.S.C. 1540(f)). These proposed regulations also are consistent with the purpose of the ESA “to provide a program for the conservation of [...] endangered species” and “the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species [...] and shall utilize their authorities in furtherance of the purposes of [the ESA],” 16 U.S.C. 1531(b), (c). Some provisions of the proposed regulations differ from the ANPR based on comments received and additional analysis by NMFS.

Requirements and Applicability

Speed Restrictions: NMFS proposes to establish vessel speed restrictions in the areas identified below. NMFS’s
proposed rulemaking will impose vessel speed restrictions of 10 knots or less. However, NMFS also invites comments on vessel speed restrictions of 12 knots or less, and 14 knots or less, in light of data, summarized here and in the DTS, about the additional reduction in risk to the right whale population and increased costs of incrementally stricter speed limits. The proposed regulations seek to reduce the likelihood and severity of ship strikes through restrictions on vessel speed. Given the lower costs of relatively higher speed limits under the same mix of management measures (preferred alternative 6 in the DTS), comments should address the degree to which the lower speed limits will serve this purpose.

Vessels Subject to Proposed Rule: These proposed regulations apply to all vessels subject the jurisdiction of the United States 65 ft (19.8 m) and greater in overall length, except U.S. vessels owned or operated by, or under contract to, the Federal Government; and all other vessels 65 ft (19.8 m) and greater in overall length entering or departing a port or place under the jurisdiction of the United States. NMFS examined sizes of vessels involved in known North Atlantic right whale ship strike deaths to determine vessel size classes that should be subject to the requirements. Available data indicate that most lethal collisions are caused by large vessels (Laist et al., 2001; Jensen and Silber, 2003). In this proposed rulemaking, NMFS proposes 65 ft (19.8m) as the vessel size threshold for speed restrictions. NMFS is aware that right whale collisions can occur with vessels smaller than 65 ft (19.8 m) and result in serious injury or death. Sixty-five feet (19.8m) is a size threshold recognized in the maritime community and commonly used in maritime regulations to distinguish between motorboats and larger vessels, of which the latter are subject to additional regulatory requirements (e.g., Automatic Identification System (AIS) requirements; International Navigational Rules Act, Rules of the Road sections).

Exemption of Federal vessels: The proposed regulations described herein will not apply to vessels owned or operated by, or under contract to, Federal agencies. This exemption would also extend to foreign sovereign vessels when they are engaging in joint exercises with the U.S. Department of the Navy. NMFS believes that the national security, navigational, and human safety missions of some agencies may be compromised by mandatory vessel speed restrictions. As noted above, however, this exemption would not relieve Federal agencies of their obligations under the ESA, including section 7. NMFS will be reviewing Federal actions involving vessel operations to determine where ESA section 7 consultations would be appropriate. NMFS also requests all Federal agencies to voluntarily observe the conditions of the proposed regulations when and where their missions are not compromised.

Regional and Seasonal Implementation of the Speed Restrictions: Due to regional differences in right whale distribution and behavior, oceanographic conditions, and ship traffic patterns, NMFS’s proposed speed restrictions would apply only in certain areas and at certain times of the year, or under certain conditions. These are roughly divided into: (a) waters off the Southeast U.S. coast, (b) waters off the U.S. mid-Atlantic coast, (c) waters off the northeast U.S. coast, and (d) dynamically managed areas. These proposed regulations were developed to be consistent with right whale movement, distribution, and aggregation patterns. The timing, duration, and geographic extent of the speed restrictions have been tightly defined to take into account the biological data while also minimizing potential impacts to ship operations.

Southeast United States (SEUS)

Waters off the SEUS coast are a vital aggregation area for North Atlantic right whales, and reducing impacts from human activities in this area is essential to the species’ recovery. Mature females and their calves, key reproductive components of the population, use these shallow, relatively benign waters in winter. The loss of one of these individuals represents a significant impact to the recovery of the population. In addition, certain behavior patterns of cow/calf pairs (e.g., relatively greater amounts of time at the surface due to limited diving ability and agility of the calf) make them particularly susceptible to ship collisions. The area also hosts substantial ship traffic.

SEUS Operational Measure: NMFS proposes to restrict vessel speed (see above) from November 1 through April 30 each year around each of the port or bay entrances identified below and the designated area around Block Island Sound. The areas are defined as the waters within a 30 nm area with an epicenter located at the midpoint of the COLREG demarcation line crossing the entry into the following designated ports or bays (Fig. 2):

(a) Ports of New York/New Jersey;
(b) Delaware Bay (Ports of Philadelphia and Wilmington);
(c) Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore);
(d) Ports of Morehead City and Beaufort, NC;
(e) Port of Wilmington, NC;
(f) Port of Georgetown, SC;
(g) Port of Charleston, SC; and
(h) Port of Savannah, GA.

At Block Island Sound, the designated area is a box with a 30-nm width extending south and east of the mouth of the Sound (reference points: Montauk Point and the western end of Martha’s Vineyard) (Fig. 2).

Northeast United States (NEUS)

Right whales occupy and forage in four distinct areas in the NEUS: Cape Cod Bay; the area off Race Point (at the northern end of Cape Cod); the Great South Channel (extending south and east of Cape Cod); and the northern Gulf of Maine (Fig. 3).

Right whales feed in Cape Cod Bay in winter, when the water is inspiring. Right whale food resources in Cape Cod Bay wane by the end of April, causing right whales to
leaves the area in search of resources elsewhere. At that time, many of these whales travel to the Great South Channel, where they are found in large aggregations in spring and early summer. Before entering the Great South Channel, right whales commonly transit or reside in other nearby areas; these include Stellwagen Bank, areas to the east of Stellwagen Bank, and the northern end of the Provincetown Slope (the area on the ocean side of Cape Cod that extends to the Great South Channel). The Boston Traffic Separation Scheme (TSS) concentrates ship traffic through this region, and hundreds of ships’ transits occur here annually (Ward-Geiger et al., 2005). Therefore, right whales are vulnerable to ship strikes in these areas.

The Great South Channel is one of the most important habitats for right whales. Right whales aggregate in the Channel in spring and early summer to feed on dense prey patches. In some years, more than one-third of the North Atlantic right whale population can be found in this area, and it is likely that well over half the population feeds in, or at least passes through, this area during the course of the year. Some individually identified right whales observed in the Great South Channel are seen rarely or not at all in other areas, further indicating the importance of this area to the population. For much of the time in the Great South Channel, whale distribution overlaps with those of commercial ship traffic, exposing them to risk of collision.

Right whales use the Gulf of Maine in summer and fall, primarily observed as feeding or socializing aggregations, or en route to aggregation areas in Canadian waters. However, whale occurrence in this area often is not consistently or predictably in high densities. Moreover, vessel traffic in this area, other than transits into Portland, ME, does not exhibit predictable patterns.

**Cape Cod Bay Operational Measures:** NMFS proposes to restrict vessel speed from January 1 - May 15 each year throughout all of Cape Cod Bay. The proposed area consists of all waters in Cape Cod Bay, extending to all shorelines of the Bay, with a northern boundary of 42°12’ N. lat. (Fig. 3).

**Off Race Point:** NMFS proposes to restrict vessel speed from March 1 to April 30 each year in a box approximately 50 nm by 50 nm to the north and east of Cape Cod, MA (Fig. 3). The proposed area consists of all waters bounded by straight lines connecting the following points in the order stated:

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**Great South Channel:** NMFS proposes to restrict vessel speed from April 1 to July 31 in the Great South Channel (Fig. 3). The proposed area consists of all waters bounded by straight lines connecting the following points in the order stated:

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**Atlantic Ocean**

The specific speed limit areas proposed above are based on known recurring North Atlantic right whale aggregations and behavioral patterns in those particular areas and times of year. These areas are tightly bounded both temporally and spatially based on predictable right whale movement and occurrence as well as existing vessel traffic patterns. However, right whales also occur at other, less predictable, times and locations when, for example, food resources are present. Right whale prey concentrations are ephemeral; their occurrence is dictated by a confluence of oceanographic conditions that may vary annually. As a result, right whale aggregations may occur outside the specific NEUS, MAUS, and SEUS areas and times described above. In addition, certain right whale behavior patterns may increase the chance of a fatal strike. Actively feeding or socializing right whales are highly focused on the activity and perhaps less aware of oncoming ships. Other social group types or activities may also render right whales vulnerable to ship strikes. For example, mother calf pairs may be at risk due to the limited swimming or diving ability of the calf. And, right whales lingering in the vicinity of shipping lanes or high vessel traffic areas are susceptible to ship strikes. Therefore, NMFS proposes to restrict vessel speed in areas or times outside the above-mentioned seasonal restrictions when whale groups are sighted.

**Dynamic Management Areas**

NMFS proposes to establish temporary “dynamic management areas” (DMAs) in areas where right whales occur outside the SEUS, MAUS, and NEUS areas described above or during such times both within as well as outside these areas when the seasonal management measures are not operational. Designation of such an area would be triggered by (a) a concentration of three or more right whales, or (b) one or more whales within a Traffic Separation Scheme (TSS), designated shipping lane, or within a Mid-Atlantic 30 nm port entrance zone and the whales show no evidence of continued coast-wise transiting (e.g., they appear to be non-migratory or feeding). In the designated area, mariners will have the option to traverse at a speed no greater than 10 knots, or route around the area.

NMFS’ decision to trigger a DMA and the size of the DMA will be based on a number of considerations, including, but not limited to: the experience, training and qualifications of the person(s) sighting the right whale(s); the reliability of the sighting; and the aggregation and behavior of whales. In addition to these considerations, NMFS will also consider criteria developed by Clapham and Pace (2001), which provided a description and analysis of triggering criteria for temporary fisheries closures, to help determine the size of the DMA. Those criteria suggest that for each individual sighting event, NMFS will plot the sighting and draw a circle with a radius of at least 2.8 nm around the sighting. The radius would emanate from the geographic center of all whales included in the sighting event. This radius would be adjusted for the number of whales such that a density of 0.04 whales per square nm (i.e., a density of 4 whales per 100 square nm) is maintained. That is, the radius would be 2.8 nm for a single right whale, 3.9 nm for two whales, 4.8 nm for three whales, etc. In addition, a larger circular zone will be designated that will extend an additional 15 nm beyond the core area to allow for possible whale movement.

A DMA will remain in effect for 15 days from the date of the initial designation and automatically expire after that period if NMFS does not modify the duration of the DMA. The period may be changed if subsequent surveys within the 15-day period demonstrate that: (a) whales are no longer present in the zone, in which case the DMA zone will immediately expire; or (b) the
aggregation has persisted (as indicated by subsequent sightings in the same zone), in which case NMFS would extend the period for an additional 15 days from the date of the most recent sighting in the zone.

NMFS would notify ship operators of a DMA, including location(s), dimensions, and dates, through publication in the Federal Register, actual notice through USCG broadcast notice to mariners and other commonly used marine communication channels (e.g., NOAA Weather Radio alerts, and any available media outlets). NMFS is considering making DMAs effective from the date specified in the actual notice (USCG broadcast notice to mariners) of the DMA and seeks comment on that proposal as well.

While DMAs can be a logistical challenge and may involve a heavy resource commitment (i.e., due to the need for extensive aircraft surveys, flights to verify sighting locations, and infrastructure to process and issue the restrictions and monitor compliance), they allow NMFS to minimize the size of the seasonally managed areas as well as the time when these seasonal management measures are operational, while allowing for real-time protection of right whales by establishing protection measures in areas where right whales appear unexpectedly.

Evaluation of the Effectiveness and Enhancing the Rigor of the Measures

The success of this program is vital to the recovery of the species. Therefore, NMFS will monitor the effectiveness of the ship strike reduction measures and consider implementing larger seasonally managed areas, further reducing ship speed, or other measures if appropriate.

Literature Cited


Classification

This proposed rule has been determined to be economically significant for purposes of Executive Order 12866.
Based on the most recently available data, the annual direct and indirect economic impacts are estimated to be $116 million for the preferred alternative at the 10 knot speed restriction. This estimate is based on the following direct economic impacts: shipping industry vessels ($49.4 million), cumulative effect of multi-port strings ($5.8 million), rerouting of southbound coastwise shipping ($2.5 million), commercial fishing vessels ($1.0 million), charter fishing vessels ($1.2 million), passenger ferries ($5.6 million), whale watching vessels ($0.9 million); it also includes the indirect economic impact of port diversions ($49.7 million). The estimated annual economic impact exceeds $100 million. Therefore, the proposed rule would be considered an economically significant regulatory action for the purposes of E.O. 12866.

NMFS estimates of the costs of this proposed rule focus on direct economic costs to ships and the indirect costs to ports of diverted ship traffic and do not include the costs to passengers for the additional time spent in transit. NMFS requests comment on these costs as well.

The benefits of this proposed rule would be the reduction of right whale ship strikes. Data suggest that there is an average of about two known ship strikes per year with at least one resulting in death. The actual number of ship strike related deaths is almost certainly higher than those documented as some deaths go undetected or unreported. This rule will reduce the risk of both ship strikes and ship strike mortality.

In the DEIS, NMFS analyzed the costs of a series of alternatives to the rule, including three different speed limits for each alternative set of management measures. This analysis is summarized in the Regulatory Impact Analysis. Under the preferred alternative, NMFS estimated the costs of a 12 knot speed restriction to be $62.4 million annually and a 14 knot speed restriction to be $34.6 million annually. NMFS believes that these alternative speed limits would not be as effective in reducing the risks of ship strikes as a 10 knot speed limit.

Endangered Species Act consultation under section 7 will be completed prior to the issuance of any final rule.

NMFS has prepared a Draft Environmental Impact Statement (D/EIS) pursuant to the requirements of the National Environmental Policy Act. Notice of Availability of the D/EIS will be published in the Federal Register.

Pursuant to the Regulatory Flexibility Act, NMFS prepared the following Initial Regulatory Flexibility Analysis (IRFA).

IRFA

A description of the action, why it is being considered, and the legal basis for this action are contained in the preamble to this proposed rule. This proposed rule does not duplicate, overlap, or conflict with other Federal rules. This IRFA analyzes the proposed alternatives and other alternatives described in the preamble to the rule and does not address alternatives previously considered and subsequently dismissed in the DEIS. There are no recordkeeping or reporting requirements associated with this proposed rule. There most likely will be a compliance cost or benefit associated with changes in fuel consumption from speed restrictions measures. These changes are likely to be small given that they would occur only in a 20–30 nm (37–55.6 km) area. However, given the heterogeneous characteristics of the many types, lengths, gross tonnage, and horsepower equivalents of vessels impacted by this rule, it is not possible to make this estimate on a vessel, firm, or aggregate basis.

As discussed below, NMFS believes that there may be disproportionate economic impacts among types of small entities within the same industry as well as between large and small entities of different vessel types occurring within different industries. While the economic impacts discussed in this IRFA would reflect the impact on the typical vessel within each classification, NMFS recognizes that there may be variation of impacts among different vessels within each classification from the implementation of this proposed rule. NMFS recognizes that there may be disproportionate impacts between or among vessels servicing different areas or ports. However, there is no hard data or evidence to indicate that this is the case. In addition, changes in annual revenues are used as a proxy for changes in profitability since cost data is not readily available. For the most part, NMFS does not expect any small entity to cease operation as a result of this rulemaking, regardless of the alternative implemented by the agency. There are, however, two cases where small entities might cease operation if no adjustments are made to the composition of their operations. They include small entities comprised entirely of fast-speed ferry services and fast-speed whale watching vessels. Without the ability to pick up the increased demand for regular-speed ferry or fast-speed whale watching trips as a result of temporary cessation of high-speed vessel operations whenever a DMA is in place, these entities might cease operations under any alternative containing DMAs. The economic impacts of the proposed rule as it relates to small entities are as follows.

Description of Affected Small Entities

There are seven industries directly affected by this proposed rulemaking as follows: commercial shipping, high-speed passenger ferries, regular-speed passenger ferries, high-speed whale watching vessels, regular-speed whale watching vessels, commercial fishing vessels, and charter fishing vessels. This analysis uses size standards prescribed by the Small Business Administration (SBA). Specifically, for international and domestic shipping operators, the SBA size standard for a small business is 500 employees or less. The same threshold applies for international cruise operators and domestic ferry service operators. For whale watching operators and charter fishing commercial fish harvesters, the SBA threshold is $6.0 million of average annual receipts. For commercial fishing operators, the SBA threshold is $3.5 million of average annual receipts. The number of small entities affected by the proposed rule-making by industry are as follows: 372 commercial shipping vessels of various classifications, 33 passenger ships, 345 commercial fishing vessels, 40 charter fishing vessels, 9 high-speed passenger ferries, 8 regular-speed passenger ferries, 3 high-speed whale watching vessels and 5 regular-speed whale watching vessels.

Economic Impacts

Proposed Alternative (Right Whale Ship Strike Reduction Strategy)

The proposed alternative is comprised of management measures that would define specific areas on a seasonal basis and requires vessels to reduce speed to avoid right whale strikes. In addition, the proposed alternative would implement dynamic management areas (DMAs) on a case-by-case basis outside of designated areas specified in this proposed rule. In addressing the speed reduction option, NMFS analyzed impacts of a speed restriction of 10, 12, and 14 knots.

The proposed option of a speed restriction of 10 knots would reduce annual revenues to vessels as follows. Commercial shipping 0.18 percent of annual receipts, passenger cruise vessels 0.20 percent, high-speed passenger ferries 9.8 percent, regular-speed passenger ferries 7.5 percent, high-speed whale watching vessels 8.3 percent, regular-speed whale watching vessels
3.8 percent, commercial fishing vessels 0.4 percent, charter fishing vessels 8.9 percent.

At a speed of 12 knots, all vessels defined as small entities, with the exception of high-speed passenger ferries and high-speed whale-watching vessels, show less adverse economic impact than the proposed option ranging from less than 0.1 percent of annual receipts for commercial fishing vessels to 5.2 percent for regular-speed passenger ferries. The economic impact to high-speed passenger ferries and whale-watching vessels are estimated to be the same as the proposed option, 9.8 percent and 8.3 percent, respectively.

For the 14-knot option, with the exception of the high-speed passenger ferries and high-speed whale-watching vessels which incur the same economic impact as compared with the proposed option, 9.8 percent and 8.3 percent, all vessels show less adverse economic impacts than the proposed option from less than 0.1 percent reduction in annual receipts for commercial fishing vessels to 2.6 percent for regular-speed passenger ferries.

Based on this analysis, NMFS concludes that operators of regular-speed passenger ferries, regular-speed whale-watching vessels, and charter fishing vessels would prefer either the 12- or 14-knot options. However, NMFS’ scientists and other independent scientists have determined that a higher speed restriction increases likelihood of a ship striking a right whale.

Furthermore, scientists have shown that only a small percentage of ship strikes occur at 10 knots, and those that do usually result in injury rather than death. Therefore, among the three speed restriction options, the 10-knot option would afford the preferred option for right whale recovery and from a biological standpoint, a speed restriction of either 12 or 14 knots are not preferred options for protecting the critically endangered right whale.

NMFS concludes that there would be disproportionate impacts from implementation of this proposed option between the group consisting of passenger ferries, high-speed whale watching vessels, and charter fishing vessels and all other types of vessels included in this IRFA. In addition, NMFS has determined that there may be disproportionate impacts between large commercial shipping and large passenger vessels, such as Chevron, Maersk, Carnival Cruise Lines, etc., and the group consisting of passenger ferries, high-speed whale watching vessels, and charter fishing vessels. This conclusion is based on the assumption these large vessels would be less adversely affected than their companion small commercial and shipping vessels which were found to be adversely affected, on average, by the 0.18 percent for the 10-knot speed restriction, whereas, reductions to revenues for small passenger ferries, high-speed whale watching vessels, and charter fishing vessels would range from 7.9 percent to 9.8 percent.

**No-Action Alternative**

The no-action option would be preferable to all small entities, particularly to all passenger ferries, high-speed whale watching vessels, and charter fishing vessels. This determination is based on the fact that the reduction in annual revenues as a percentage of total revenue for these three classes of vessels under the proposed alternative and proposed speed restriction would exceed approximately 8 percent annually.

**Dynamic Management Areas (DMA) Only Alternative**

One alternative considered in the DEIS is the use of DMAs as described in the preamble, excluding all other options that are part of the proposed rule. NMFS has determined that this alternative would be preferable to small businesses as compared to the proposed alternative because vessels would not be required to reduce speeds in seasonally managed areas as described in the preamble. Vessels would simply be required to follow speed restrictions for shorter time frames in a smaller DMA in response to right whale sightings. However, relying solely on this alternative would not afford the needed protection to right whales. This measure calls for being able to identify right whale aggregations in order to trigger DMAs, but as identification of right whale aggregations is not always possible in practice, relying on this measure would have only a minor, positive effect on right whale population size and may not reduce ship strikes sufficiently to promote population recovery. In addition, relying on this alternative would impose substantial costs on government resources in terms of the monitoring and assessment activities needed to implement the DMAs.

**Speed Restrictions in Designated Areas Only Alternative**

An alternative considered in this proposed rule is the use of speed restrictions in designated areas that are more extensive than those prescribed in the proposed rule. The designated areas considered under this alternative are both larger in size and would extend for a greater length of time, with the exception of those located in the southeastern part of the United States where speed restriction would be in place for a shorter length of time. This would require vessels to travel at slower speed for a greater period of time and throughout a greater range, which may cause greater adverse economic impacts to small entities when compared to the proposed alternative. However, this alternative does not attempt to route ships away from high-density areas of right whales through identified shipping lanes. Furthermore, right whales that are sighted outside of these areas are not protected under this alternative because DMAs are not included. Therefore, as a stand-alone measure, this alternative is less likely to aid the recovery of the right whale population when compared to the proposed alternative.

**Use of Recommended Shipping Routes Alternative**

This alternative would simply designate recommended shipping lanes away from areas where right whales are known to congregate without any other measures. NMFS has not yet designated port access routes; therefore the economic impact of this alternative on small entities is indeterminate at this time. If, in the future, NMFS decides to implement this alternative, an IRFA will be conducted when all port access routes are known and analyzed. This alternative would not provide sufficient protection to effectively reduce the occurrence and severity of ship strikes because right whales still may occur in the designated lanes; therefore it is also less likely to aid in the recovery of right whale populations when compared with the proposed alternative.

**“Combination of Alternatives” Alternative**

This alternative combines the more restrictive designated areas, DMAs, and recommended shipping routes (the previous three alternatives considered in this IRFA). Impacts to small entities are expected to be greater under this alternative when compared to the proposed alternative, due to the use of designated areas that are generally greater in size and greater in length of time as compared to those prescribed in the proposed alternative. Therefore, NMFS has determined that this alternative will be less preferable to small businesses since it has more adverse economic impacts. This alternative would provide a higher level of protection to the right whale population since it would reduce the amount and/or severity of ship strikes.
when compared with the proposed alternative.

List of Subjects in 50 CFR Part 224

Endangered marine and anadromous species.


James W. Balsiger,
Acting Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 224 is proposed to be amended as follows:

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

1. The authority citation for 50 CFR Part 224 continues to read as follows:


2. In part 224, a new § 224.105 is added to read as follows:

§ 224.105 Speed restrictions to protect North Atlantic right whales.

(a) The following restrictions apply to:

all vessels subject to the jurisdiction of the United States greater than or equal to 65 ft (19.8 m) in overall length, except those owned or operated by, or under contract to, Federal agencies; and all other vessels greater than or equal to 65 ft (19.8 m) in overall length entering or departing a port or place under the jurisdiction of the United States. These restrictions do not apply to foreign sovereign vessels engaging in joint exercises with the U.S. Department of the Navy.

(1) Southeast U.S.: Vessels shall travel at a speed of 10 knots or less during the period of November 15 to April 15 each year in the area bounded by: the shoreline, 31°27′N lat., 29°45′N lat., and 89°51′6″W long.

(2) Mid-Atlantic U.S.: Vessels shall travel 10 knots or less in the period November 1 to April 30 each year.

(i) Within a 30–nautical mile (nm) (55.6 km) radius (as measured from COLR/G delineated coast lines and the center point of the port entrance) (Fig. 2) at the

(A) Ports of New York/New Jersey;
(B) Delaware Bay (Ports of Philadelphia and Wilmington);
(C) Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore);
(D) Ports of Morehead City and Beaufort, NC;
(E) Port of Wilmington, NC;
(F) Port of Georgetown, SC;
(G) Port of Charleston, SC; and
(H) Port of Savannah, GA; and
(ii) In Block Island Sound, in the area with a 30–nm (55.6 km) width extending south and east of the mouth of the Sound (reference points: Montauk Point and the western end of Martha’s Vineyard) (Fig. 2).

(3) Northeast U.S.:

(i) In Cape Cod Bay, MA: Vessels shall travel at a speed of 10 knots or less during the period of January 1 to May 15 in Cape Cod Bay, in an area that includes all waters of Cape Cod Bay, extending to all shorelines of the Bay, with a northern boundary of 42°12′N lat. (Fig. 3).

(ii) Off Race Point: Vessels shall travel at a speed of 10 knots or less during the period of March 1 to April 30 each year in waters bounded by straight lines connecting the following points in the order stated (Fig. 3):

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(iii) Great South Channel: Vessels shall travel at a speed of 10 knots or less during the period of April 1 to July 31 each year in all waters bounded by straight lines connecting the following points in the order stated (Fig. 3):

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(4) Atlantic Ocean: At all times of the year and in all waters along the Atlantic seaboard, including the U.S. Exclusive Economic Zone, that are not otherwise specified in the regulations above, a dynamic management area will be designated when NMFS determines that there exists

(i) A concentration of three or more right whales, or

(ii) One or more right whales within a Traffic Separation Scheme, designated shipping lane, or within a Mid-Atlantic 30 nm port entrance zone which show no evidence of continued coast-wise transiting. Upon such a determination, NMFS will establish an area, which will be adjusted for the number of right whales in the sighting such that a density of no more than 0.04 right whales per square nm is maintained within an inner circle. A larger circle will be designated to extend 15 nm (27.8 km) from the perimeter of the circle around each core area. NMFS will require mariners in that area to travel at speeds of 10 knots or less. Notice of the specific location of the area will be published in the Federal Register. Restrictions within the area will be in effect for 15 days from the initial designation or lifted by subsequent publication in the Federal Register. At the conclusion of the 15–day period the area will expire automatically, unless extended.

(b) It is unlawful under this section:

(1) For any vessel subject to the jurisdiction of the United States to violate any speed restriction established in paragraph (a) of this section; or

(2) For any vessel entering or departing a port or place under the jurisdiction of the United States to violate any speed restriction established in paragraph (a) of this section.
Figure 1. Southeast United States.
Figure 2. Mid-Atlantic United States.
Figure 3. Northeast United States.