EXECUTIVE SUMMARY

The National Oceanic and Atmospheric Administration (NOAA)'s National Marine Fisheries Service (NMFS) has prepared this final environmental impact statement (FEIS) pursuant to the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the NOAA environmental review procedures (NOAA Administrative Order 216-6).

ES.1 Proposed Action

The proposed action is to implement vessel operational measures in waters off the East Coast of the United States to reduce vessel collisions with the endangered North Atlantic right whale. Due to regional differences in right whale distribution and behavior, oceanographic conditions, and ship traffic patterns, the proposed vessel operational measures would apply only in certain areas and at certain times of the year, or under certain conditions. To account for regional variations, the US East Coast is divided into three regions: northeastern United States (NEUS), mid-Atlantic United States (MAUS), and southeastern United States (SEUS). All vessels 65 ft (19.8 m) and greater in overall length and subject to US jurisdiction would be required to abide by the operational measures, except for vessels owned or operated by, or under contract to the Federal government, and law enforcement vessels of a state, or political subdivision thereof, when engaged in enforcement or human safety missions. An additional exemption would apply for vessels to maintain safe maneuvering speed under certain conditions. The measures considered include the following:

- Seasonal Management Areas (SMAs). SMAs are predetermined and established areas within which seasonal speed restrictions apply.
- **Dynamic Management Areas (DMAs).** DMAs are temporary areas consisting of a circle around a confirmed right whale sighting. The radius of this circle expands incrementally with the number of whales sighted and a buffer is included beyond the core area to allow for whale movement. Speed restrictions apply within DMAs, which may be mandatory or voluntary and apply only when and where no SMA is in effect.
- **Routing Measures.** These consist of a set of routes designed to minimize the cooccurrence of right whales and ship traffic. Use of these routes is voluntary; therefore, they constitute a non-regulatory measure. However, mandatory speed restrictions would apply in the portions of the routes located within an active SMA. NMFS would monitor these routes and consider making them mandatory if use is low.

Within the proposed SMAs (when in effect) and DMAs (when in effect), NMFS' proposed restriction is 10 knots; however, for comparison purposes, the FEIS also considers speed limits of 12 and 14 knots.

Not all measures are considered for all regions: the specific measures considered for each of the three regions of implementation are shown in Table ES-1. Each of the action alternatives

evaluated in the FEIS, including Alternative 6, the proposed action, include one or more of the measures. Table ES-1 also shows which alternatives include each measure.

Region	Proposed Measures	Period of Application	Included in Alternative	
	Southeast SMA off the coast of Georgia and Florida, bounded to the north by latitude 31°27'N, to the south by latitude 29°45'N, to the east by longitude 80°51.6'W, and to the west by the shoreline.	November 15 to April 15	6	
	or			
Southeast (SEUS)	SMA including all waters within the Mandatory Ship Reporting System (MSRS) WHALESSOUTH reporting area and the presently- designated right whale critical habitat	November 15 to April 15	3 and 5	
	and/or			
	Recommended routes into and out of the ports of Jacksonville and Fernandina Beach, Florida, and Brunswick, Georgia.	Year-round	4,5, and 6	
Mid-Atlantic (MAUS)	Six Separate SMAs, including under one option a 30-nm (56- km)-wide rectangular SMA south and east of the mouth of Block Island Sound; SMAs with a 20-nm (37-km) radius around the entrances to the ports of New York/New Jersey, the Delaware Bay and Chesapeake Bay, and Morehead City and Beaufort, North Carolina; finally, a continuous SMA from the shore out to 20 nm (37 km) from Wilmington, NC, south to Brunswick, GA. Under another option, the 20-nm SMAs would be 30-nm (56-km) in size.	November 1 to April 30	6 (20-nm SMAs Option)	
	or			
	One continuous 25-nm SMA between Block Island Sound and Savannah, GA	October 1 to April 30	3 and 5	

Table ES-1Summary of Proposed Operational Measures by Region

Region		Proposed Measures	Period of Application	Included in Alternative	
		CCB SMA, covering the entire bay, including the Cape Cod Bay critical habitat and the area directly west of the critical habitat to the shoreline	January 1 to May 15	6	
	Cape Cod Bay	or			
Northeast (NEUS)		Critical Habitat SMA, coinciding with the designated critical habitat	Year-round	3 and 5	
		and/or			
		Recommended Routes from Cape Cod Canal through the Critical Habitat, on the western side of the bay, towards Massachusetts Bay and other points north	Year-round	4,5, and 6	
	Off Race Point	Off Race Point SMA, an area approximately 50 by 50 nm (93 by 93 km) in size to the north and east of Cape Cod	March 1 to April 30	6	
		or			
		SAM West SMA, coinciding with the expanded Seasonal Area Management (SAM) West identified in the Atlantic Large Whale Take Reduction Plan (ALWTRP)	Year-round	3, and 5	
		GSC SMA, within a defined area of the Great South	April 1 to July 31	6	
	Great South Channel	Channel or SAM East SMA, coinciding with the expanded Seasonal Area Management (SAM) East identified in the ALWTRP	Year-round	3 and 5	
		Mandatory DMAs throughout	Year-round	2 and 5	
All Three Regions		or Voluntary DMAs throughout	Vegr-round	6	

ES.2 Purpose and Need

NMFS' purpose and need for the vessel operational measures considered in the FEIS is to reduce the occurrence and severity of vessel collisions with North Atlantic right whales, thereby contributing to the recovery and sustainability of the species while minimizing adverse effects on the shipping industry and maritime commerce.

NMFS has authority and responsibility under both the ESA and the MMPA to protect the endangered North Atlantic right whale. Although various measures to reduce ship strikes have been in place for several years, these measures have not significantly reduced the number of vessel collisions with right whales. A continued lack of recovery, and possibly extinction, will occur if deaths from ship strikes are not reduced. Therefore, additional action is needed for NMFS to fulfill its responsibility. Collision with vessels is the primary anthropogenic cause of serious injuries and deaths to right whales. Therefore, NMFS is proposing to reduce this threat by taking the regulatory approach expected to be most effective at facilitating population recovery while minimizing adverse economic impacts. The proposed action consists of vessel operational measures that would impose regulatory speed restrictions and provide for nonregulatory routing measures on specific vessel classes to reduce the ship-strike threat to right whales without imposing an undue economic burden on the shipping industry. The combination of speed restrictions and reducing the co-occurrence of right whales and vessel traffic is expected to be an effective means to reduce the occurrence and severity of ship strikes and promote population growth and recovery.

ES.3 Alternatives

As a result of public comment and additional research, the alternatives have evolved from those originally proposed in the notice of intent (NOI) to prepare a draft environmental impact statement (DEIS), to those in the DEIS, and the final alternatives in the FEIS. With the exception of Alternative 1, each of the alternatives would enact one or more of the vessel operational measures summarized in Table ES-1. Table ES-2 summarizes the alternatives. In addition to the alternatives described below, the FEIS incorporates by reference DEIS alternative 6 (preferred alternative of the DEIS) and associated analyses.

	Alternative						
Operational Measure	1	2	3	4	5	6 ¹ (Proposed Action)	
Recommended Routes	No	No	No	Yes	Yes	Yes	
DMAs	No	Yes, mandatory	No	No	Yes, mandatory	Yes, voluntary	
SMAs	No	No	Yes, SAM East, SAM West, and Critical Habitat SMAs; Continuous 25-nm SMA; MSRS WHALES- SOUTH/Criti- cal Habitat SMA	No	Yes, SAM East, SAM West, and Critical Habitat SMAs; Continuous 25-nm SMA; MSRS WHALES- SOUTH/Criti- cal Habitat SMA	Yes, CCB SMA, Off Race Point SMA, GSC SMA, Separate SMAs (20- nm SMAs option), Southeast SMA	

 Table ES-2

 Summary of Alternatives Considered in the FEIS

ES.3.1 Alternative 1 – No Action

No new operational measures would be implemented under the No Action Alternative. NMFS would continue to implement existing measures and programs to reduce the likelihood of ship strikes. Research would continue and existing technologies would be used to determine whale locations and disseminate this information to mariners. Non-regulatory actions may be taken and existing conservation measures would remain active.

ES.3.2 Alternative 2 – Mandatory Dynamic Management Areas

Alternative 2 would incorporate the elements of Alternative 1 (i.e., continuing existing conservation measures) plus the mandatory DMA component of the proposed operational measures. Compliance with DMAs would be mandatory because DMAs are a stand-alone measure under this alternative. DMAs would be defined, as warranted by right whale sightings in all US territorial waters and within the Exclusive Economic Zone (EEZ) along the East Coast.

¹ The operational measures proposed under Alternative 6 will expire 5 years from their date of effectiveness.

ES.3.3 Alternative 3 – Speed Restrictions in Designated Areas

Alternative 3 includes the elements of Alternative 1 plus the following measures:

- In the SEUS region, the MSRS WHALESSOUTH/Critical Habitat SMA.
- In the MAUS region, the Continuous 25-nm SMA Option.
- In the NEUS region, the SAM West, SAM East, and Critical Habitat SMAs.

SMAs would be larger or last longer under Alternative 3 than under the other alternatives that include SMAs.

ES.3.4 Alternative 4 – Recommended Shipping Routes

This alternative includes all the elements of Alternative 1 plus the recommended routes for the SEUS and the NEUS regions. This alternative does not include speed restrictions. No measures would apply to the MAUS region.

ES.3.5 Alternative 5 – Combination of Alternatives 1-4

All of the measures previously mentioned under Alternatives 1, 2, 3, and 4 would apply under Alternative 5.

ES.3.6 Alternative 6 – Proposed Action (Preferred Alternative)

Under Alternative 6, the proposed action, NMFS would implement the following operational measures:

- In the SEUS region, Southeast SMA and recommended routes.
- In the MAUS region, Separate SMAs (20-nm SMAs option)
- In the NEUS region, CCB SMA, Off Race Point SMA, and GSC SMA as well as recommended routes.
- In all three regions, Voluntary DMAs. (NMFS would evaluate the compliance rate and effectiveness of the DMA measures and use this information to inform future agency action, including consideration of mandatory DMAs.)

Additionally, the operational measures proposed under Alternative 6 would expire five years after their date of effectiveness.

ES.4 Impacts

In general, for alternatives in which speed restrictions apply, both the biological and economic impacts increase in magnitude with the speed restriction (e.g., 10 knots vs. 14 knots). In the first three sections below, the impacts of speed restrictions are discussed in general and not for 10, 12, and 14 knots specifically. All costs refer to estimated annual economic impacts based on vessel arrivals in 2004 (i.e., the costs reflect the impacts as if the operational measures had been in place in 2004). With regard to Alternative 6, because under this alternative the proposed

operational measures would expire five years after they become effective, the economic impacts described in this section would only last five years. The major positive impacts on right whales also would occur only during the five years the measures would be effect.

ES.4.1 Impacts on the North Atlantic Right Whale

Alternative 1 would have significant, direct long-term, negative effects on the right whale population and recovery. Alternative 2 would have minor, direct, long-term, positive effects on the right whale population. Alternative 3 would have direct, long-term, positive effects on the right whale population. Alternative 4 would have direct, long-term, positive effects on right whales in the NEUS and SEUS, although it would offer no protection in the MAUS and does not include speed restrictions, therefore the overall effects would be minor. Alternative 5 would have significant, direct, long-term, positive effects on the right whale population; this alternative would provide the highest level of protection to the population. Alternative 6 would have major direct positive effects on the right whale population.

ES.4.2 Impacts on Other Marine Species

Alternative 1 would have indirect, long-term, adverse effects on marine mammals. Any positive impacts on sea turtles that would result from the proposed measures (see below) would not occur under the No Action alternative. Alternative 2 would have no significant effects on marine mammals and sea turtles. Alternative 3 would have minor, indirect, long-term, positive effects on marine mammals and sea turtles that occur in the designated areas with speed restrictions. Alternative 4 would result in minimal effects on marine mammals and sea turtles, depending on their distribution with respect to the recommended routes. Alternative 5 would have major, indirect, long-term, positive impacts on other marine mammals, although benefits to sea turtles would be less likely. Alternative 6 would also have indirect positive effects on marine mammals and sea turtles.

ES.4.3 Impacts on the Physical Environment

Alternative 1 would not affect bathymetry and substrate, water quality, air quality, or ocean noise levels. Alternatives 2 through 6 would not affect bathymetry and substrate. Alternative 2 would have negligible effects on water quality, and minor, direct positive impacts on air quality and ocean noise. Alternative 3 would have a negligible effect on water quality, direct, short-term positive impacts on air quality, and potentially direct, short- and long-term positive impacts on ocean noise levels. Alternative 4 would have negligible or minor adverse effects on water quality, no significant effects on air quality, and minimal, direct, short-term, adverse effects on ocean noise levels. Alternative 5 would have negligible or minor adverse effects on water quality, minor, direct, long-term, positive effects on air quality, and potentially minimal, direct, long-term, positive effects on ocean noise. Alternative 6 would have negligible impacts on water quality in the NEUS and minor adverse impacts in the SEUS, and minor, direct positive effects on both air quality and ocean noise.

ES.4.4 Impacts on Port Areas and Vessel Operations

Alternative 1 would not affect port areas or vessel operations. The other alternatives would have adverse impacts due to the additional operating costs resulting from compliance with speed restrictions and/or routing measures. The impacts detailed below are per year and were estimated based on 2004 port arrival data: that is, they reflect the costs associated with the proposed measure as if these measures had been in place in 2004 (the analysis in the main text also provides estimates based on 2003 conditions.). However, operating costs were updated to reflect 2008 fuel prices.

Alternative 2 would result in an estimated direct economic impact of \$27.6 million annually with a 10-knot speed restriction, \$17.7 million annually with a 12-knot restriction, and \$10.8 million annually with a 14-knot restriction. Alternative 3 would result in an estimated total (including both direct and indirect impacts) annual economic impact of \$301.4 million at 10 knots, \$186.3 million at 12 knots, and \$106 million at 14 knots. Alternative 4 would result in a direct economic impact of \$2.8 million annually (no measures involving speed restrictions are proposed under this alternative). Alternative 5 would result in an estimated total annual economic impact of \$326.3 million at 10 knots, \$199.6 million at 12 knots, and \$118 million at 14 knots. Alternative 6 would result in an estimated total economic impact of \$120.1 million annually at 10 knots, \$65.6 million annually at 12 knots, and \$36.9 million annually at 14 knots.

To determine whether these increased shipping costs would significantly affect the price and volume of traded goods via East Coast ports, the estimated economic impacts were compared to the value of East Coast trade. At 10 knots, the Alternative 2 impact would represent 0.008 percent of total trade value; impacts from Alternatives 3 and 5 would represent 0.050 and 0.051 percent, respectively; Alternative 4 would have almost no impact relative to trade value (0.001 percent); and Alternative 6 impacts would represent 0.022 percent of trade value. These results indicate that implementation of the proposed operational measures would not have a measurable impact on the volume of merchandise traded through East Coast ports.

Ocean freight costs are considered a conservative proxy for shipping industry revenues, and thus can help assess the significance of the abovementioned costs for the shipping industry. For example, at 10 knots, the Alternative 2 impacts would represent 0.160 percent of ocean freight costs; Alternative 3 impacts would represent 0.940 percent; Alternative 4 impacts, 0.016 percent; Alternative 5 impacts, 0.968 percent, and Alternative 6 impacts 0.409 percent. These results indicate that implementation of the proposed operational measures would have a minimal impact on the financial revenues and hence the financial performance of the vessel operators calling at East Coast ports.

ES.4.5 Impacts on Commercial Fishing Vessels

There would be no impacts on commercial fishing vessels under Alternative 1. There would be negligible adverse impacts on commercial fishing vessels under Alternative 2 at any of the speed restrictions. Alternative 3 would not affect commercial fishing vessels at a 12- or 14- knot speed restriction, but there would be a measurable economic impact at a 10-knot speed restriction, estimated at \$1.7 million annually. Alternative 4 would result in negligible impacts on commercial fishing vessels. Alternative 5 would result in the same impacts as Alternative 3. Alternative 6 would not affect vessels at a 12- or 14- knot speed restriction, but the economic

impact at a 10-knot speed restriction would be \$1.3 million annually, representing less than 0.2 percent of the East Coast commercial fishery landings for all vessels in 2004. Also, only fishing vessels 65 ft (19.8 m) long or more would be affected, and among those, only those vessels traveling at speeds more than 10 knots, which represent only 40 percent of the total. When compared to the total annual revenue generated in 2004 by these affected vessels only, the estimated annual impact would amount to 0.5 percent of this revenue.

ES.4.6 Impacts on Ferry Vessels and Ferry Passengers

The vast majority of passenger ferry vessels operate within inland waters that would not be affected by the proposed operational measures. Among the vessels that would be affected – specifically, those that operate in southern New England – impacts would vary depending on whether the companies utilize fast ferry services (with typical speeds ranging from 24 to 39 knots) or regular ferry services (with typical speeds ranging from 12 to 16 knots). The No Action Alternative would not affect ferry vessel operations. There would be direct, long-term, adverse impacts on ferry vessels under Alternative 2, in the amount of \$8.1 million annually at 10 knots, \$6.1 million annually at 12 knots, and \$4.1 million annually at 14 knots. Alternative 3 would result in annual direct, long-term, adverse economic impacts in the amount of \$13.0 million at 10 knots, \$11.1 million at 12 knots, and \$8.3 at 14 knots. Alternative 3. There would be direct ferry vessels. Alternative 5 would result in the same impacts as Alternative 3. There would be direct adverse economic impacts on ferry vessels under Alternative 6, in the amount of \$8.6 million annually at 10 knots.

Under Alternative 6 with a 10-knot speed restriction, the annual impact on affected high-speed ferry operators would amount to 4.9 percent of the annual revenue generated by the affected vessels; the impact on affected regular-speed ferry operators would amount to 7.9 percent of the annual revenue of the affected vessels. These numbers assume 100 percent compliance with voluntary DMAs. Should ferry operators choose not to comply with DMA speed restrictions, however, then annual revenues; and \$132,000 for regular-speed ferries, or about 0.2 percent of annual revenues. It should also be noted that the large majority of passenger ferries operate within the COLREG lines, and therefore, would not be affected at all by the proposed measures.

Alternatives 1 and 4 would have no effect on ferry passengers. Alternative 3 and 5 would have an adverse effect amounting to \$12 million annually with a 10-knot speed restriction, \$8.9 million with a 12-knot restriction, and \$5.5 million with a 14-knot restriction. Alternative 6 would have an annual adverse effect estimated at \$5.2 million at 10 knots, \$3.9 million at 12 knots, and \$2.5 million at 14 knots. The effects of Alternative 2 would be \$4.5 million annually at 10 knots; \$3.4 million at 12 knots; and \$2.3 million at 14 knots.

ES.4.7 Impacts on Whale-Watching Vessels

The majority of whale-watching vessels are 65 ft (19.8 m) and longer and would be affected by the operational measures, although impacts would vary according to whether the operations deploy high-speed vessels (typical speeds of from 25 to 38 knots) or regular-speed vessels (with typical speeds of from 16 to 20 knots). Alternative 1 would not affect whale-watching vessels. Alternative 2 would result in annual direct, long-term, adverse economic impacts of \$1.3 million

at 10 knots, \$0.9 million at 12 knots, and \$0.7 million at 14 knots. Alternative 3 would have a larger direct, long-term, adverse economic impact, with an estimated \$5.6 million annually at 10 knots, \$3.1 million at 12 knots, and \$1.9 million at 14 knots. There would be no impacts under Alternative 4. Alternative 5 would have the same impacts as Alternative 3. Alternative 6 would have direct adverse economic impacts estimated at \$1.3 million annually at 10 knots, \$0.9 million at 12 knots, and \$0.7 million at 14 knots.

With the exception of the New England Aquarium, all the potentially affected whale-watching operators are small entities (the Aquarium accounts for one affected vessel out of 18). Considering these small operators only, the annual impacts under Alternative 6 (10-knot speed restriction) would amount to an estimated 4.2 percent of the total annual revenue generated by the affected high-speed vessels and 3.8 percent of the revenue generated by affected regular-speed vessels. However, only a small minority of the total number of whale watching operations (approximately 13 percent) and of vessels (approximately 7 percent) would be affected. Also, all above estimates conservatively assume full compliance with DMAs. Should vessels operators choose not to observe the voluntary speed restrictions, as they would be free to do, there would be no impacts.

ES.4.8 Impacts on Charter Vessels

There would be no impacts to charter vessel operations under Alternatives 1, 2, or 4. Alternatives 3 and 5 would result in minor, direct, long-term, adverse impacts on charter vessels, estimated at \$1.0 million annually at 10 knots, \$598,000 at 12 knots, and \$299,000 at 14 knots. Alternative 6 would have a slightly larger annual direct adverse economic impact of \$796,000 at 10 knots, \$480,000 at 12 knots, and \$240,000 at 14 knots. For headboats more than 65 ft (19.8m) in length, these costs would result from an increase in roundtrip steaming time.

Under Alternative 6 with a 10-knot speed restriction, the impacts would represent 3.9 percent of the annual revenue generated by the potentially affected boats. However, the proportional impact would be much less when compared to the total revenue generated by the charter fishing industry since most of the industry's fleet consists of boats less than 65 ft (19.8 m) long, which would not be affected by the proposed measures.

ES.4.9 Impacts on Environmental Justice

Although ten of the 26 port areas considered in this FEIS could be considered environmental justice communities, the economic impacts from the proposed measures under any of the action alternatives on these areas would not disproportionately affect minority or low-income populations. Rather, the impacts would be distributed throughout the entire region or local economy.

ES.4.10 Impacts on Cultural Resources

No cultural resources have been identified on the ocean surface in waters that would be affected by the operational measures. Therefore, there are no impacts on cultural resources under any of the alternatives.

ES.5 Areas of Controversy

NMFS has provided many opportunities for public involvement and comments on the advanced notice of proposed rulemaking; proposed rulemaking; NOI to prepare a DEIS; DEIS; and various public meetings. As the purpose of the proposed operational measures is to reduce serious injury and deaths of right whales from ship strikes *while* minimizing the adverse economic effects on the maritime industry, NMFS has incorporated elements of the public comments and recommendations into the FEIS to balance both industry and environmental perspectives. The major areas of controversy raised by the stakeholders are:

• **Speed Restrictions.** Some members of the public commented on the basis of the speed restrictions and in general were concerned that the speed restrictions may not effectively reduce the occurrence and severity of ship strikes. Environmental stakeholders generally believed that restricting speeds to 10 knots would be the most effective, but that 12 knots would also reduce ship strikes. Industry stakeholders generally preferred less stringent speed restrictions, if any, and would rather have routing measures implemented. To show the entire range of impacts, this FEIS analyzes speed restrictions of 10, 12, and 14 knots.

NMFS is proposing a 10-knot speed restriction, although the agency requested comments on restrictions set at 12 and 14 knots as well, and the FEIS analyzes impacts for all three speeds. The proposed restriction of 10 knots is based on historical and recent studies that indicate that 10 knots or less is the optimal speed limit in the range considered for right whale recovery. Lower speeds have greater protective value but the proposed 10-knot restriction balances protection and cost.

• **Federal Vessels.** The majority of Federal agencies supported the exemption of Federal vessels, whereas other stakeholders, from both industry and environmental groups, commented that the operational measures should apply to all vessels unless the Federal vessels were operating under mitigation measures from a Section 7 consultation.

The proposed regulations would not apply to vessels owned or operated by, or under contract to, Federal agencies. This exemption would also extend to foreign sovereign vessels engaging in joint exercises with the US Department of the Navy or engaged in innocent passage in US waters. NMFS believes that the national security, navigational, and human safety missions of some agencies may be compromised by mandatory vessel-speed restrictions. However, this exemption would not relieve Federal agencies of their obligations under the ESA, including Section 7. NMFS will be reviewing the 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.

• **Navigational Safety.** Representatives from the shippping industry expressed concerns about complying with the speed restrictions during hazardous weather conditions and when transiting breakwaters or other confined areas.

The proposed measures include an exemption that allows for a vessel, under severe conditions, to operate at a speed above the required 10 knots in order to maneuver safely. A vessel would be able to operate at a speed necessary to maintain safe maneuvering instead of the required 10 knots only if justified because the vessel is in an area where

oceanographic, hydrographic and/or meteorological conditions severely restrict the maneuverability of the vessel and the need to operate at such speed is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel. If a deviation from the 10-knot speed limit is necessary, the reasons for the deviation, the speed at which the vessel is operated, the latitude and longitude of the area, and the time and duration of such deviation would be entered into the logbook of the vessel. The master of the vessel would attest to the accuracy of the logbook entry by signing and dating it.

• **Dynamic Management Areas.** Stakeholders across the board were concerned with the lag time between an aggregation of right whales that would trigger a DMA and the time when it would actually be implemented through publication of a notice in the *Federal Register*. Industry representatives, specifically those from the whale-watching and ferry-vessel companies, were concerned about a DMA being implemented in their operating area(s) during peak season. Several of these companies indicated that such a situation would potentially put them out of business. Others, however, favored this measure over SMAs.

In response to these comments, and given the current limitations in agency resources that would prevent the immediate establishment of a DMA, NMFS is proposing a voluntary DMA program under the preferred alternative. NMFS would announce DMAs to mariners through its customary maritime communication media and any other appropriate media channels. Vessel operators would be expected, but not required, to proceed through the area at 10 knots or less, or to route around the DMA. Voluntary DMAs would alleviate some of the economic burden of DMAs, especially if a DMA was established in the route of a whale-watching or ferry vessel during peak summer months.