

constructive dialogue concerning this proposed rule. We encourage the public's involvement in such ESA matters.

Classification

National Environmental Policy Act

The 1982 amendments to the ESA, in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing to the best scientific and commercial data available. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F.2d 825 (6th Cir.1981), we have concluded that ESA listing actions are not subject to the environmental assessment requirements of the National Environmental Policy Act. (see also NOAA Administrative Order 216-6.)

Executive Order (E.O.) 12866, Regulatory Flexibility Act and Paperwork Reduction Act

As noted in the Conference Report on the 1982 amendments to the ESA, economic impacts cannot be considered when assessing the status of a species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. In addition, this rule is exempt from review under E. O. 12866. This proposed rule does not contain a collection-of-information requirement for the purposes of the Paperwork Reduction Act.

Federalism

E.O. 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations where a regulation will preempt state law, or impose substantial direct compliance costs on state and local governments (unless required by statute). Neither of these circumstances is applicable to this proposed listing determination. In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual State and Federal interest, this proposed rule will be given to the relevant state agencies in each state in which the North Pacific right whale is believed to occur, who will be invited to comment.

Government-to-Government Relationship With Tribes E.O. 13175

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or

are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. E. O. 13175 - Consultation and Coordination with Indian Tribal Governments- outlines the responsibilities of the Federal Government in matters affecting tribal interests.

We have determined the proposed listing of the North Pacific right whale would not have tribal implications, nor affect any tribal governments or issues. The North Pacific right whale is not hunted by Alaskan Natives for traditional use or subsistence purposes.

References Cited

A complete list of all references cited in this rulemaking is available upon request from the NMFS (see ADDRESSES).

List of Subjects in 50 CFR Part 224

Administrative practice and procedure, Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Dated: December 20, 2006.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, we propose to amend 50 CFR part 224 as follows:

PART 224 ENDANGERED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 224 continues to read as follows:

Authority: 16 U.S.C. 1531-1543 and 16 U.S.C. 1361 *et seq.*

2. Revise § 224.101(b) to read as follows:

§ 224.101 Enumeration of endangered marine and anadromous species.

* * * * *

(b) *Marine mammals.* Blue whale (*Balaenoptera musculus*); Bowhead whale (*Balaena mysticetus*); Caribbean monk seal (*Monachus tropicalis*); Chinese river dolphin (*Lipotes vexillifer*); Cochito (*Phocoena sinus*); Fin or finback whale (*Balaenoptera physalus*); Hawaiian monk seal (*Monachus schauinslandi*); Humpback whale (*Megaptera novaeangliae*); Indus River dolphin (*Platanista minor*); Mediterranean monk seal (*Monachus monachus*); North Pacific right whale

(*Eubalaena japonica*); Saimaa seal (*Phoca hispida saimensis*); Sei whale (*Balaenoptera borealis*); Sperm whale (*Physeter catodon*); Western North Pacific (Korean) gray whale (*Eschrichtius robustus*); Steller sea lion, western population, (*Eumetopias jubatus*), which consists of Stellar sea lions from breeding colonies located west of 144° W. longitude.

* * * * *

[FR Doc. 06-9908 Filed 12-26-06; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 224

[Docket No. 061212328-6328-01; I.D. 120706B]

RIN 0648-XB58

Endangered And Threatened Species; Proposed Endangered Status for North Atlantic Right Whales

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

ACTION: Proposed rule; request for comments.

SUMMARY: We, NMFS, have completed a comprehensive status review of right whales in the northern hemisphere under the Endangered Species Act (ESA). Based on the findings from the status review, we have concluded these right whales exist as two species, the North Atlantic right whale (*Eubalaena glacialis*) and the North Pacific right whale (*E. japonicus*). We have also determined that each of these species is in danger of extinction throughout its range. To reflect this taxonomic revision, we are issuing two proposed rules to designate each separately as an endangered species. This proposed rule is to list the North Atlantic right whale; a proposed rule to list the North Pacific right whale is issued separately. We are soliciting public comment on this proposed listing determination.

DATES: Comments on this proposed rule must be received by close of business on February 26, 2007. Requests for public hearings must be made in writing by February 12, 2007.

ADDRESSES: Send comments to Mark Minton on the North Atlantic right whale. Comments may be submitted by:
• E-mail:
NARW.ProposedRule@noaa.gov.
Include in the subject line the following

document identifier: "NARW Proposed Rule." E-mail comments, with or without attachments, are limited to 5 megabytes.

- Webform at the Federal eRulemaking Portal: www.regulations.gov. Follow the instructions at that site for submitting comments.

- Mail: Mark Minton, NMFS Northeast Region, One Blackburn Drive, Gloucester, MA 01930

- Hand delivery to: NMFS Northeast Region, One Blackburn Drive, Gloucester, MA 01930

- Fax: 978-281-9394

The proposed rule and other materials relating to this proposed rule can be found on NMFS' Northeast Region website: <http://www.nero.noaa.gov/>.

FOR FURTHER INFORMATION CONTACT:

Mark Minton, NMFS, Northeast Region, 978-281-9328, ext. 6534; or Marta Nammack, NMFS, Office of Protected Resources, 301-713-1401, ext. 180.

SUPPLEMENTARY INFORMATION:

Background

Status Review

We have completed a status review report that assesses the status of right whales in the North Atlantic and North Pacific Oceans. Specifically, we describe the population structure and examine the extent to which phylogenetic uniqueness exists between right whales found in the North Atlantic and North Pacific. We also examine the biological status and adverse impacts on the right whale and its habitat in those oceans.

Biology of Right Whales in the North Atlantic Ocean

The right whale is a large baleen whale. Adults are generally between 45 and 55 feet (13.7 - 16.8 m) in length and can weigh up to 70 tons (63.5 metric tons). Females are larger than males. The distinguishing features of right whales include a stocky body, generally black coloration (although some individuals have white patches on their undersides), lack of a dorsal fin, large head (about 1/4 of the body length), strongly bowed margin of the lower lip, and callosities on the head region. Two rows of long (up to about eight feet (2.4 m) in length), dark baleen plates hang from the upper jaw, with about 225 plates on each side. The tail is broad, deeply notched, and all black with smooth trailing edge.

The International Whaling Commission (IWC) recognizes two right whale populations in the North Atlantic: a western and eastern population (IWC, 1986). The current distribution and migration patterns of

the eastern North Atlantic right whale population are unknown. Based on whaling records, it appears that the eastern population migrated along the coast from northern Europe to northwest Africa. Sighting surveys from the eastern Atlantic Ocean suggest that right whales present in this region are rare (Best *et al.*, 2001). The western North Atlantic population is believed to contain only about 300 individuals, and it is unclear whether its abundance is remaining static, undergoing modest growth, or declining, as recent modeling exercises suggest (Caswell *et al.*, 1999).

Prior to extensive exploitation, the North Atlantic right whale was found distributed in temperate, subarctic, coastal and continental shelf waters throughout the North Atlantic Ocean rim (Perry *et al.*, 1999). Right whales prefer shallow coastal waters, but their distribution is also strongly correlated to the distribution of zooplankton prey. In both northern and southern hemispheres, right whales are observed in low latitudes and in nearshore waters during winter where calving takes place. During the summer and fall months, right whales tend to migrate to the high latitudes where their distribution is likely linked to the patchy distribution of their principal zooplankton prey (Winn *et al.*, 1986; Perry *et al.*, 1999).

In the western North Atlantic, right whales migrate along the North American coast from Nova Scotia to Florida. Considerable data exist documenting use of areas in the western North Atlantic Ocean where right whales presently occur. Right whales have been observed from the Mid-Atlantic Bight northward through the Gulf of Maine during all months of the year. Foraging right whales (and their habitat) appear to be concentrated in New England waters. In New England, peak abundance of right whales in feeding areas occurs in Cape Cod Bay beginning in late winter. In early spring (May), peak right whale abundance occurs in Wilkinson Basin to the Great South Channel (Kenney *et al.*, 1995). In late June and July, right whale distribution gradually shifts to the northern edge of Georges Bank. In late summer (August) and fall, much of the population is found in waters in the Bay of Fundy and around Roseway Basin (Winn *et al.*, 1986; Kenny *et al.*, 1995; Kenny *et al.*, 2001). Variation in the abundance and development of suitable food patches appears to modify the general patterns of movement by reducing peak numbers, stay durations, and specific locales (Brown *et al.*, 2001; Kenny, 2001). In particular, large changes in the typical pattern of food abundance will dramatically change the

general pattern of right whale habitat use (Kenny, 2001). Known wintering areas for the North Atlantic right whale occur along the southeastern U.S. coast where calving occurs from December through March (Winn, 1984; Kraus *et al.*, 1986; IWC, 1986). In the North Atlantic it appears that not all reproductively active females return to the calving grounds each year (Kraus *et al.*, 1986; Payne, 1986). The location of the majority of the population during the winter months remains unknown (NMFS, 2005).

Knowlton *et al.* (1992) reported several long-distance movements as far north as Newfoundland, the Labrador Basin, and southeast of Greenland; in addition, recent resightings of photographically identified individuals have been made off Iceland, arctic Norway, and in the old Cape Farewell whaling ground east of Greenland. The Norwegian sighting (September 1999) represents one of only two sightings this century of a right whale in Norwegian waters, and the first since 1926. Together, these long-range matches indicate an extended range for at least some individuals and perhaps the existence of important habitat areas not presently well described. Similarly, records from the Gulf of Mexico (Moore and Clark, 1963; Schmidly *et al.*, 1972) represent either geographic anomalies or a more extensive historic range beyond the sole known calving and wintering ground in the waters of the southeastern United States (Waring *et al.*, 2004).

Listing Determinations under the ESA

The ESA defines an endangered species as one that is in danger of extinction throughout all or a significant portion of its range, and a threatened species as one that is likely to become endangered in the foreseeable future throughout all or a significant portion of its range (sections 3(6) and 3(20), respectively). The statute requires us to determine whether any species is endangered or threatened because of any one of the following five factors: (1) The present or threatened destruction, modification or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence (section 4(a)(1)(A)-(E)). We are to make this determination based solely on the best available scientific information after conducting a review of the status of the species and taking into account any efforts being made by states or foreign governments to protect the species. The focus of our

evaluation of the ESA section 4(a)(1) factors is to evaluate whether and to what extent a given factor represents a threat to the future survival of the species. The focus of our consideration of protective efforts is to evaluate whether and to what extent they address the identified threats and so ameliorate a species' risk of extinction. The steps we follow in implementing this statutory scheme are to: (1) delineate the species under consideration; (2) review the status of the species; (3) consider the ESA section 4 (a)(1) factors to identify threats facing the species; (4) assess whether certain protective efforts mitigate these threats; and (5) predict the species' future persistence.

Review of "Species" Delineation

Since 1974, NMFS has maintained the right whale listing as originally listed by the United States Fish and Wildlife Service (USFWS) under the Endangered Species Conservation Act of 1969, the precursor to the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*; the ESA)(35 FR 18319, December 2, 1970) -- *Eubalaena* spp., i.e., all the species within the genus *Eubalaena*. The USFWS maintains the official lists of threatened and endangered species and is required to add species to the official lists when NMFS or USFWS determines species under its jurisdiction should be listed. The USFWS has changed the nomenclature for right whales several times over the years in various iterations of the list of threatened and endangered wildlife. NMFS also changed the nomenclature for a period of time after one of the USFWS changes, but later reverted back to the original *Eubalaena* spp. listing. The changes may have been made as a reflection of the discussion in the scientific literature over the appropriate taxonomic status of right whales. At no point did the USFWS ever propose delisting any of the species that were included in the original listing of *Eubalaena* spp. Regardless of the changes to the list, NMFS maintains that right whale species were listed as *Eubalaena* spp., which reflects the predominant view that existed in 1974: that right whale species are distinct from bowhead whales (*Balaena mysticetus*), they belong in the genus *Eubalaena*, and the genus *Eubalaena* contains at least two species: *E. glacialis* in the northern hemisphere and *E. australis* in the southern hemisphere.

Recent investigations of right whale genetics confirm the distinction between *E. glacialis* and *E. australis* at the species level and suggest that the North Pacific form of *E. glacialis* should be recognized as a separate species and named *E. japonica*, distinct from the

other two species. NMFS is proposing to adopt this view and, in a separate rulemaking, to modify its listing to add *E. japonica* to the current listing *Eubalaena* spp. (which includes *E. glacialis* and *E. australis*).

Taxonomy of Right Whales

All whales belong to the mammalian order Cetacea, which is divided into two suborders: Odontoceti (toothed whales) and Mysticeti (baleen whales). The Mysticeti are further divided into four families: the Eschrichtiidae, a monotypic family (i.e., containing only one species), the gray whale; Neobalaenidae, another monotypic family containing only the pygmy right whale; Balaenidae, which contains two genera: *Balaena* (bowhead whales) and *Eubalaena* (right whales); and Balaenopteridae, which contains all of the other baleen whales.

Balaena is the genus name for the bowhead whale (*Balaena mysticetus*), recognized by Linnaeus in 1758. *Eubalaena* is the genus name for right whales, first proposed by Gray in 1864. The first right whale to be named was what we today call the North Atlantic right whale or Nord-Kaper (*Balaena glacialis*, Muller, 1776), from North Cape, Norway. The second right whale to be named was what we today call the North Pacific right whale (*Balaena japonica*, Lacepede, 1818), from Japan. And the third right whale to be named was what we today call the Southern right whale (*Balaena australis*, Desmoulins, 1822), from Algoa Bay, Cape of Good Hope, South Africa. In the 1970s when all baleen whales were being considered for listing as endangered under the Endangered Species Conservation Act of 1969, authors disagreed on the taxonomic status of right whales. One view was that they belonged in the genus *Balaena* along with bowhead whales and that the genus contains two species: *Balaena mysticetus* and *Balaena glacialis* (Rice, 1977). The subspecific composition of *B. glacialis* was unclear. The other view was that right whales were distinct from bowhead whales at the genus level and that right whales should be identified as *Eubalaena* (Schevill, 1986). This later view is currently the prevailing view, and it is the view embraced by USFWS and NMFS.

There were also two views about the species composition of *Eubalaena*. One view was that there was only one species *Eubalaena glacialis* containing several subspecies (*E. glacialis glacialis* (North Atlantic), *E. glacialis sieboldii* (North Pacific), and *E. glacialis australis* (Southern oceans)) (Tomilin, 1957). Hershkovitz (1966) also describes these three subspecies, except that he refers to

North Pacific right whales as *E. glacialis japonica*. The other view was that *Eubalaena* comprised two species *E. glacialis* and *E. australis* (Omura, 1958; Omura *et al.*, 1969). This is the view represented by the designation of *Eubalaena* spp. in the original listing by USFWS in 1970 and by NMFS in its first listing in 1974. Generally accepted taxonomic nomenclature recognized the term "spp." as an abbreviation for multiple species within a genus.

The two-species view is summarized by Perry *et al.*'s (1999) summary of morphological (Muller, 1954) and genetic data (Schaeff *et al.*, 1991), both of which recognized distinct species in the northern and southern hemispheres. Cummings (1985) used *E. australis* for all right whales below the equator (southern right whales). The International Whaling Commission also recognizes the presence of two distinct species, *E. glacialis* and *E. australis*, in the schedule appended to the Convention in which species under purview of the Commission are listed.

Conclusion

Although the listing of right whales has changed from the original nomenclature of *Eubalaena* spp., there is no indication in the record that USFWS ever intended to delist any of the species contained in the original listing of the entire genus. Since the original 1970 listing was described as "*Eubalaena* spp.", the logical interpretation is that at least two species of right whale were listed, the northern right whale (*E. glacialis*) and the southern right whale (*E. australis*), since "spp." refers to more than one species, not "subspecies." Even if three separate species had been recognized in 1970, southern right whale (*E. australis*) would have been one of them. Each plausible scenario results in the right whale in the Southern Hemisphere being recognized as a separate species. Since NMFS has maintained its listing as "Right whales, *Eubalaena* spp.", and USFWS has never proposed delisting any of the species included in the original listing, we conclude that both *E. glacialis* and *E. australis* were listed in 1970, carried forward to the list created pursuant to the ESA, and determined to be endangered in our listing in 1974.

Right Whale Species Currently Being Considered for Listing

As discussed above, genetic data now provide unequivocal support to distinguish three right whale lineages as separate phylogenetic species: (1) the North Atlantic right whale (*Eubalaena glacialis*), ranging in the North Atlantic Ocean; (2) the North Pacific right whale

(*Eubalaena japonica*), ranging in the North Pacific Ocean, and (3) the southern right whale (*Eubalaena australis*), historically ranging throughout the southern hemisphere's oceans (Rosenbaum *et al.*, 2000). Based on evidence from recent genetic studies (Gaines *et al.*, 2005), we conclude that the current taxonomic classification of right whales in the northern hemisphere should be revised consistent with the generally accepted analyses by Rosenbaum *et al.* (2000). We have determined that listing right whales in the North Atlantic and the North Pacific as two separate species is warranted in light of the compelling evidence provided by recent scientific studies on right whale taxonomy and classification. In accordance with the applicable statutory definitions and requirements, the North Atlantic right whale (*E. glacialis*) and the North Pacific right whale (*E. japonica*) are being considered for listing as separate species under the ESA.

Refining the taxonomy of these endangered cetaceans is critical to the recovery planning and conservation of these species. The separate listings of these two species in the northern hemisphere will allow for consistent scientific practice and management policies in recovering these species.

Status of the Three Right Whale Species

The determination that right whales in the North Atlantic and North Pacific Oceans are two separate species requires us to consider these species separately for the purposes of listing under the ESA. We will consider the status of the North Atlantic right whale (*E. glacialis*) in this proposed rule and that of the North Pacific right whale (*E. japonica*) in a separate proposed rule in today's issue of the **Federal Register**. At the final rule stage, we will address both species in the same rule so that any changes become effective together. The southern right whale, *E. australis*, will remain listed as endangered, though we intend to conduct a 5-year review of its status in the near future. In the following discussion of the status of the North Atlantic right whale, *E. glacialis*, we provide the rationale for today's proposal to list this species as a separate endangered species. The other proposed rule in today's issue of the **Federal Register**, referenced above, provides the rationale for the proposal to list the North Pacific right whale, *E. japonica*, as a separate endangered species. We also identify the southern right whale, *E. australis* (one of two species that was listed in 1970 and is still listed) in the regulatory language as a separate

endangered species and remove *Eubalaena* spp. from the list.

Status of the North Atlantic Right Whale (*Eubalaena glacialis*)

Abundance and Trends

Sighting surveys from the eastern Atlantic Ocean suggest that right whales present in this region are rare (Best *et al.*, 2001). In 1992, based on a census of individual whales identified using photo-identification techniques and the assumption that whales not seen for 7 years are dead, the western North Atlantic stock size was estimated to be 295 individuals (Knowlton *et al.*, 1994). In 1998, an updated analysis using the same method gave an estimate of 299 animals (Kraus *et al.*, 2001). Because this was a nearly complete census, it is assumed that this represents a minimum population size estimate. However, no estimate of abundance with an associated coefficient of variation has been calculated for this population. Calculation of a reliable point estimate is likely to be difficult, given the known problem of heterogeneity of distribution in this population. An IWC workshop on status and trends of western North Atlantic right whales gave a minimum direct-count estimate of 263 right whales alive in 1996 and noted that the true population was unlikely to be substantially greater than this (Best *et al.*, 2001).

The population growth rate for North Atlantic right whale reported for the period 1986–1992 by Knowlton *et al.* (1994) was 2.5 percent (coefficient of variation=0.12), suggesting that the stock was showing signs of slow recovery. In contrast, southern right whale populations (those off Argentina, Australia, and South Africa) are increasing at annual rates on the order of 7 to 8 percent (IWC, 1998). However, Caswell *et al.* (1999) found that crude survival probabilities for North Atlantic right whale decreased from about 0.99 per year in 1980 to about 0.94 in 1994, and that population growth rate declined from about 5.3 percent in 1980 to a negative 2.4 percent in 1994 (Caswell *et al.*, 1999). The decline was statistically significant. This model suggested that the western population of North Atlantic right whales was headed for extinction with an upper bound on the expected time to extinction of 191 years (Caswell *et al.*, 1999). Modified versions of the Caswell *et al.* (1999) model as well as several other models were reviewed at the 1999 IWC workshop (Best *et al.*, 2001). Despite differences in approach, all of the models indicated a decline in right whale survival in the 1990s relative to

the 1980s with female survival, in particular, apparently affected (Best *et al.*, 2001; Waring *et al.*, 2002).

In 2002, our Northeast Fisheries Science Center (NEFSC) hosted a workshop to review right whale population models to examine: (1) potential bias in the models, and (2) changes in the subpopulation trend based on new information collected in the late 1990s (Clapham *et al.*, 2002). Three different models were used to explore right whale survivability and to address potential sources of bias. Although biases were identified that could negatively affect the results, all three modeling techniques resulted in the same conclusion; survival has continued to decline and seems due to female mortalities (Clapham *et al.*, 2002).

Life History Characteristics

Females give birth to their first calf at an average age of 9 years (Best *et al.*, 1998; Hamilton *et al.*, 1998a). Standard reproductive rates for the western North Atlantic population have yet to be calculated. The calving interval for right whales is between 2 and 7 years, with means ranging from 3.12 (95 percent confidence interval (CI) 3.05–3.17) to 3.67 years (95 percent CI 3.3–4.1) (Knowlton *et al.*, 1994; Best *et al.*, 2001; Burwell, 2001; Cooke *et al.*, 2001). In the western North Atlantic, there was a significant increase in the calving interval from 3.67 years for the period 1980 to 1992 (Knowlton *et al.*, 1994) to 5.8 years for the period 1990 to 1998 (Kraus *et al.* 2001). The increase in the calving interval is of particular concern and, together with other perplexing biological parameters, may suggest the population is under rather unusual biological, energetic, or reproductive stress. Most recently (2001–2005), a dramatic increase in North Atlantic right whale calving (23 calves per year) may have decreased the interval to levels more similar to that of the southern right whale (Kraus *et al.*, in press).

Since 1999, 125 right whale calves have been observed, including 31 right whale births during a record calving season in 2000–2001 (B. Pike, New England Aquarium, pers. comm.). Calving numbers have been sporadic, with large differences among years. The three calving years (1997–2000) prior to the record year in 2000–2001 provided low recruitment with only 10 calves born. The last five calving seasons (2001–2005) have been substantially better (31, 21, 19, 16, and 28 calves, respectively). Despite improved calving rates over the last several years,

mortalities of calves, juveniles, and adults have continued.

An analysis of the age structure of this population suggests that it contains a smaller proportion of juvenile whales than expected (Hamilton *et al.*, 1998a; Best *et al.*, 2001), which may reflect low recruitment and/or high juvenile mortality. In addition, it is possible that the apparently low reproductive rate is due in part to unstable age structure or to decreased reproduction due to aging (i.e., reproductive senescence) on the part of some females (Waring *et al.*, 2004).

Genetic Diversity

The size of the western population of the North Atlantic right whale at the cessation of whaling is unknown, but generally it is believed to have been very small. Such a reduction of population size may have resulted in a loss of genetic diversity that could affect the ability of the current population to successfully reproduce (e.g., decreased conceptions, increased abortions, increased neonate mortality). Studies by Schaeff *et al.* (1997) and Malik *et al.* (2000) indicate that the western population of the North Atlantic right whale is less genetically diverse than southern right whale populations. However, several apparently healthy populations of cetaceans, such as sperm whales and pilot whales, have even lower genetic diversity than observed in the western North Atlantic right whales (IWC, 2001b).

Summary of Factors Affecting the North Atlantic Right Whale

Section 4(a)(1) of the ESA requires the Secretary of Commerce (Secretary) to determine whether a species is endangered or threatened because of any of the following factors: (A) the present or threatened destruction, modification or curtailment of a species' habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation factors; (D) the inadequacy of existing regulatory mechanisms; (E) other natural or manmade factors affecting its continued existence. A discussion of these considerations follows:

The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

Habitat loss or degradation is not believed to be a causal factor placing the North Atlantic right whale in danger of extinction at this time or in the foreseeable future. Unlike many terrestrial species, right whales and other cetaceans do not compete directly

with human populations for space (Clapham *et al.*, 1999). Because right whales are dependent on coastal waters adjacent to highly developed coastline, however, habitat degradation may adversely affect this species. Consequently, threats to right whales may arise from onshore and near shore activities.

Right whales frequent coastal waters where dredging and dredge spoil disposal occur on a regular basis, such as along the southeastern U.S. coast (Perry *et al.*, 1999). Dredging of harbors and port channels occurs in a number of locations in or near areas where right whales aggregate. Noise, increased ship traffic, disposal of dredge material, and related activities may all contribute to degrade right whale habitat. It is unknown to what extent these activities affect right whales (Perry *et al.*, 1999). It appears that more information is needed to determine specific habitat impacts, if any, from these activities. Increased ship traffic associated with dredging activities may increase the risk of ship strikes of right whales resulting in serious injury and mortality. At present, efforts made to reduce adverse effects on right whales include posting observers on ships transporting dredge spoils to reduce the risk of ship strikes.

One potential source of habitat degradation for baleen whales is oil pollution. General concerns with regard to oil pollution, some of which are direct impacts on the whales rather than habitat impacts, are ingestion of contaminated prey, potential irritation of skin and eyes, inhalation of toxic fumes, and abandonment of polluted feeding habitat (Geraci and St. Aubin, 1980; Geraci, 1990). However, data on the effects of oil pollution on cetaceans are inconclusive, and the large baleen whales appear to be generally unaffected by oil per se (Geraci, 1990; Loughlin, 1994).

Offshore oil and gas exploration activities have been proposed off the U.S. Atlantic coast. At the present time however, there are no known plans for oil exploration in the major habitats of the western population of the North Atlantic right whale, but the possibility remains for future oil and gas exploration and development activity.

In addition to oil and gas exploration and production, the undersea exploration and development of techniques for mining minerals deposits could threaten the North Atlantic right whale and its habitat (Perry *et al.*, 1999).

An additional potential source of habitat degradation for right whales is chemical contaminants. The impact of pollution on right whales is debatable. O'Shea and Brownell (1994) conclude

that there is currently no evidence for significant contaminant-related problems in baleen whales. Although more research is needed, the existing data on mysticetes support the view that the lower trophic levels at which these animals feed should result in lower levels of contaminant accumulation than would be expected in many odontocetes, which typically show concentrations that differ from those of baleen whales by an order of magnitude (O'Shea and Brownell, 1994). However, the manner in which pollutants negatively impact animals is complex and difficult to study, particularly in taxa such as large whales for which many of the key variables and pathways are unknown (Aguilar, 1987; O'Shea and Brownell, 1994). A more plausible potential problem is that of transgenerational accumulation (Colborn and Smolen, 1996), but this remains unstudied in right whales or any other cetacean species.

Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Right whales have not been the target of commercial hunting in the North Atlantic since 1935, and relatively few catches were made in the 20th century prior to that date. Historical whaling activities are responsible for the significant depletion of the eastern population of the North Atlantic right whale and the current severely depleted numbers of individuals remaining in the western population. The small population size of the North Atlantic right whale is probably the most significant factor affecting its continued existence because small populations are subject to extinction from a variety of factors that would not seriously affect a larger population. The North Atlantic right whale is in danger of extinction throughout its range because of historical whaling. Unlike right whales in the North Pacific, there is no evidence of the illegal harvest of right whales.

An estimate of pre-exploitation population size is not available. Basque whalers may have taken substantial numbers of right whales at times during the 1500s in the Strait of Belle Isle region (Aguilar, 1986), and the stock of right whales may have already been substantially reduced by the time colonists began whaling in the Plymouth area in the 1600s (Reeves and Mitchell, 1987). A modest but persistent whaling effort along the coast of the eastern United States lasted 3 centuries, and the records include one report of 29 whales killed in Cape Cod Bay in a single day during January 1700. Based

on incomplete historical whaling data, Reeves and Mitchell (1987) could conclude only that there were at least some hundreds of right whales present in the western North Atlantic during the late 1600s. In a later study (Reeves *et al.*, 1992), a series of population trajectories using historical data and an estimated present population size of 350 were plotted. The results suggest that there may have been at least 1,000 right whales in this population during the early to mid-1600s, with the greatest population decline occurring in the early 1700s. The authors cautioned, however, that the record of removals is incomplete, the results were preliminary, and refinements are required. Based on back calculations using the present population size and growth rate, the population may have numbered fewer than 100 individuals by the time international protection for right whales came into effect in 1935 (Hain, 1975; Reeves *et al.*, 1992; Kenney *et al.*, 1995). However, too little is known about the population dynamics of right whales in the intervening years to estimate a pre-exploitation population size with confidence.

An intense period of whaling in the eastern North Atlantic between 1902 and 1967 (including harvest off the Shetlands, Hebrides, and Ireland in the years 1906–1910) was particularly catastrophic for the eastern North Atlantic right whale population. Since that time, there have only been sporadic sightings of right whales in the eastern North Atlantic (Best *et al.*, 2001). In two recent winter surveys of Cintra Bay (off the northwestern coast of Africa), no evidence was found to suggest that right whales still use the area; this absence of evidence also corresponds to a lack of recent observations in northern European waters (Reeves, 2001). Based on the paucity of sighting information, current distribution and migration patterns of the eastern North Atlantic right whale population are unknown.

With respect to recreational and educational use, problems may arise from vessels whose operations are directed at the whales themselves (i.e., whale watching from either commercial or recreational vessels). These activities have the potential to disturb right whales or disrupt their activities and behavior such as feeding, courtship, and nursing. The impact of such harassment on the reproductive success of individuals has not been studied and is unknown. Currently, Federal regulations prohibit the close approach by vessels within 500 yards (457.2 m) of North Atlantic right whales in U.S. waters. This activity is allowed, however, in Canadian waters.

Scientific research on right whales frequently involves close approaches to the animals for the purpose of photographic, genetic, or behavioral sampling. These activities are controlled by permits in both U.S. and Canadian waters, and the potential adverse impact on the animals is considered during the permitting process. Efforts are needed to ensure coordination of research activities between the United States and Canada, as well as among U.S. researchers themselves to minimize any potential adverse impact to right whales.

Disease or Predation

Disease and predation are not believed to be factors causing the North Atlantic right whale to be in danger of extinction. Unlike in some dolphin and pinniped (i.e., seals and sea lions) species, there have been no recorded epizootics in baleen whales. The occurrence of skin lesions on the bodies of North Atlantic right whales has been documented in recent years, with an apparent increase in frequency culminating in a peak in 1995 when they were observed on 24 percent of photographed individuals (Marx *et al.*, 1999). The origins and significance of these lesions are unknown. Further research is required to determine whether they represent a topical or systemic health problem for the affected animals.

In October 2006, we declared an unusual mortality event (UME) for humpback whales in the Northeast United States. At least 17 dead humpback whales have been discovered since March 2006. There has also been a documented bloom of *Alexandrium* sp., a toxic dinoflagellate that causes red tide from Maine to Massachusetts. Prior to the most recent UME, there had been only three other known cases of a mass mortality involving large whale species along the east coast: 1987–1988, 2003, and 2005. Geraci *et al.* (1989) provide strong evidence that, in the former case, these deaths of humpback whales resulted from the consumption of mackerel whose livers contained high levels of saxitoxin, a naturally occurring red tide toxin, the origin of which remains unknown. It has been suggested that the occurrence of a red tide event is related to an increase in freshwater runoff from coastal development, leading some observers to suggest that such events may become more common among marine mammals as coastal development continues. There is currently no conclusive evidence linking red tide toxins to the deaths or chronic health problems in right whales. Doucette *et al.* (2006) assessed the

occurrence of paralytic shellfish poisoning (PSP) toxins in right whales and in co-occurring zooplankton assemblages dominated by *Calanus finmarchicus*, the primary food of the North Atlantic right whale. Samples of right whale feces collected from at least 11 different whales by these researchers in the Bay of Fundy tested positive for PSP toxins. These results suggest that trophic transfer of marine algal toxins may be a factor inhibiting the recovery of the North Atlantic right whale.

Predation of right whales by killer whales and large shark species is likely to occur, but the level is not documented. North Atlantic right whales bearing scars thought to be from killer whale attacks have been photographed (Kraus, 1990), but the number of whales killed by this predator is unknown (Perry *et al.*, 1999). Mehta (2004) more recently concluded that scars recorded on the flukes and bodies of North Atlantic right whales are more consistent with harassment by some smaller cetacean, possibly pilot whales (*Globicephala* spp) and do not originate from killer whales.

The Inadequacy of Existing Regulatory Mechanisms

Right whales are protected under both U.S. and Canadian law, and internationally by the IWC. Death and serious injury resulting from ship strikes and fishing gear interactions are significant factors that, at current rates, place the North Atlantic right whale in danger of extinction throughout its range. There are numerous ongoing conservation efforts to reduce the impact of ship strikes on the survival and recovery of the species. These efforts involve Federal, state, local, conservation, academic, and industry agencies and organizations. We, in cooperation with other state, Federal, industry, and private groups and organizations, have developed a plan to implement a broad Ship Strike Reduction Strategy (SSRS) designed to reduce the impacts of vessel interactions on the survival of the North Atlantic right whale.

The SSRS consists of both regulatory and non-regulatory components. As part of efforts to implement the SSRS, we published an advanced notice of proposed rulemaking (ANPR) on June 1, 2004 (69 FR 30857) and proposed regulations on June 14, 2006, that contain speed restrictions and routing measures to reduce the likelihood of collisions between vessels and endangered North Atlantic right whales (71 FR 36299).

We have implemented a number of measures to reduce the impact to right

whale survival due to fishing gear interactions. We, with the assistance of the Atlantic Large Whale Take Reduction Team (ALWTRT), developed the Atlantic Large Whale Take Reduction Plan (ALWTRP). The goal of this plan is to reduce the level of serious injury and mortality of three strategic stocks of large whales, including North Atlantic right whales, in commercial gillnet and trap/pot fisheries. In general, the ALWTRP consists of a combination of regulatory and non-regulatory programs, including broad gear modifications, time-area closures, expanded disentanglement efforts, extensive outreach efforts in key areas, gear research, and an expanded right whale surveillance program to supplement the Mandatory Ship Reporting System.

Since its implementation in 1997, the ALWTRP has been modified on several occasions in response to the serious injury and mortality of large whales in gillnet and lobster trap/pot gear. Recent amendments to the ALWTRP include restrictions to the Southeast Atlantic gillnet fishery (67 FR 59471, September 23, 2002; 68 FR 19464, April 21, 2003). Other amendments to the ALWTRP include additional gear modifications for lobster trap/pot gear in particular management areas and changes to the lobster trap/pot and gillnet take reduction technology lists (67 FR 1300, January 10, 2002; 67 FR 15493, April 2, 2002), a Seasonal Area Management (SAM) program (67 FR 1142, January 9, 2002; 67 FR 65722, October 28, 2002), a Dynamic Area Management (DAM) program (67 FR 1133, January 9, 2002; 67 FR 65722, October 28, 2002), and implementation of gear modifications determined to sufficiently reduce the risk of entanglement to right whales (68 FR 10195, March 4, 2003; 68 FR 51195, August 26, 2003).

We continue to work with the ALWTRT to evaluate the ALWTRP and determine whether additional modifications are necessary to meet the goals of the MMPA and the ESA. On June 30, 2003, we published a Notice of Intent (NOI) to announce the agency's intent to prepare an Environmental Impact Statement (EIS) to analyze the impacts of alternatives for amending the ALWTRP (68 FR 38676). On June 21, 2005, we also published a proposed rule (70 FR 35894) that details how modifications to the ALWTRP would be implemented.

Despite previous efforts, ship strikes and fishing gear interactions remain a serious factor negatively affecting the continued survival and recovery of the species. As the new conservation measures discussed above are

implemented, the frequency of ship strikes and fishing gear interactions will need to be monitored to assess the effectiveness of measures in reducing the impact of these factors on the survival of the species. Based on the efficacy of these measures, it may be necessary to continue or enhance existing regulations or promulgate new regulations to reduce or eliminate the effect of these factors on the survival and recovery of the species.

Other Natural or Manmade Factors Affecting its Continued Existence

Ship strikes and fishing gear interactions are the most common anthropogenic causes of mortality in western North Atlantic right whales, and place the North Atlantic right whale in danger of extinction throughout its range. The available evidence strongly suggests that the North Atlantic right whale cannot sustain the current number of deaths that result from vessel collisions and fishing gear interactions. If mortality from these activities continues at current rates, it is likely to result in the extinction of the North Atlantic right whale.

Ship Strikes - Collisions with ships are the single largest cause of right whale mortality in the western North Atlantic. Of 45 confirmed deaths of western North Atlantic right whales between 1970 and 1999, 16 are known to have been caused by ship strikes, and two additional collisions were possibly fatal (Knowlton and Kraus, 1998). There were two known ship strike right whale deaths in 2001, one in both 2002 and 2003, and two in 2004. The low incidence (7 percent) of photographically identified whales showing scars and wounds from ship propellers compared to the high rate of ship propeller wounds on stranded carcasses indicates that a high proportion of interactions between ships and whales are fatal to the whale (Kraus, 1990). It should be noted that with improved reporting and more thorough necropsies in recent years, the rate of detection and confirmation of ship-strike deaths has probably increased. This may confound efforts to determine trends in the frequency of collisions.

Concern has been raised over the possible adverse effects of whale watching and scientific research activities on right whale aggregations, particularly in the western North Atlantic (e.g., Cape Cod Bay and lower Bay of Fundy). On February 13, 1997, we published an interim final rule (62 FR 6729) to prohibit both boats and aircraft from approaching any right whale closer than 500 yards (457.2 m). These minimum distance regulations

are designed to reduce the potential to disturb right whales or disrupt their activities and to reduce the adverse effect of vessel collisions. However, collisions between whale-watching boats and a humpback (2001) and a minke whale (1998) indicate that much more serious consequences (e.g., death or serious injury) are also possible. In addition, the number of high-speed (capable of speeds ≤ 28 knots) whale watching vessels, ferries, and other craft has increased recently in areas where right whales occur. Consequently, the threat of collisions has potentially grown. It may be necessary to examine the effects of whale watching in the vicinity of right whales and issue additional regulations and/or guidelines regarding the number of vessels, and their speed, manner, and distances of approaches near whales.

Scientific research on right whales frequently involves close approaches to the animals for the purpose of photographic, genetic, or behavioral sampling. These activities are controlled by permits in both U.S. and Canadian waters, and the potential adverse impact on the animals is considered during the permitting process. Efforts are needed to ensure coordination of research activities between the U.S. and Canada, as well as among U.S. researchers themselves to minimize any potential adverse impact to right whales.

Fishing Gear Interactions - The exact magnitude and nature of fisheries interactions with right whales is not known. Kraus (1990) estimated that 57 percent of right whales in the western North Atlantic bear scars and injuries indicating fishing gear interactions. More recent analysis estimated that 61.6 percent of right whales exhibit evidence of fishing gear entanglement (Hamilton *et al.*, 1998b). The 1998 North Atlantic Stock Assessment Report (Waring *et al.*, 1999) indicated NMFS-monitored fisheries showed a mean annual mortality of 1.0 right whale from 1992 through 1996. Sources of interaction are mainly gillnets, lobster pots, seine nets, and fish weirs (NMFS, 1991), which, with the exception of gillnet fisheries, are largely not monitored. Gear entanglement was estimated to account for 7 percent of the known mortality in right whales in the western North Atlantic from 1970 through early 1993 (Kenney and Kraus, 1993). There were at least two additional entanglement deaths between late 1993 and 1999 (Knowlton and Kraus, 2001). Since 2001 there has been at least one additional mortality due to entanglement. These mortalities involved entanglements with fixed fishing gear. Of 45 known deaths between 1970 and 1999, three were

directly linked to entanglements, and eight were suspected to have been linked to entanglements (NMFS, 2005). Entanglements may be responsible for more deaths than indicated by the stranding and necropsy data. It is possible that fishing gear was responsible for some of the deaths for which a cause could not be determined. In addition, some whales may become entangled, drown, and fail to resurface. Injuries and entanglements that are not initially lethal may result in a gradual weakening of entangled individuals, making them more vulnerable to some other direct cause of mortality (Kenney and Kraus, 1993). For example, entanglement may reduce a whale's ability to maneuver, making it more susceptible to ship strikes. Entanglement-related stress may decrease an individual's reproductive success or reduce its life span. This may in turn depress population growth.

Noise - The effect on behavior (e.g., foraging, mating, nursing) of noise pollution from shipping or oil and gas development is unclear, though various observations suggest that marine mammals can habituate well to even quite high levels of sound (Geraci and St. Aubin, 1980; Richardson *et al.*, 1995). Playback experiments on gray and bowhead whales indicate that whales will actively avoid a very loud sound source (Malme *et al.*, 1983), but whether real-life sources (such as drilling platforms) negatively impact behavior to the point that it diminishes reproductive success and population productivity is unclear. It appears that right whale sensitivity to noise disturbance and vessel activity is related to the behavior and activity in which they are engaged in at the time (Watkins, 1986; Perry *et al.*, 1999).

Recreational boat traffic - Some studies suggest increased recreational boat traffic can disrupt whale behavior (Glockner-Ferrari and Ferrari, 1990). Pleasure boat traffic occurs in various coastal areas with little regulation or enforcement; however, its impact on right whales is unknown.

Conservation Measures

Section 4(b)(1)(a) of the ESA requires that determinations of whether a species is threatened or endangered be based solely on the best scientific and commercial data available and after taking into account those efforts, if any, being made to protect the species. Right whales have been listed under the ESA for many years and numerous conservation measures have been implemented in order to protect and conserve the species. On March 28, 2003, we and the USFWS (the Services)

published the final policy for evaluating conservation efforts (PECE)(68 FR 15100). The PECE provides guidance on evaluating current protective efforts identified in conservation agreements, conservation plans, management plans, or similar documents (developed by Federal agencies, state and local governments, tribal governments, businesses, organizations, and individuals) that have not yet been implemented, or have been implemented but have not yet demonstrated effectiveness. The PECE establishes two basic criteria for evaluating current conservation efforts: (1) the certainty that the conservation efforts will be implemented, and (2) the certainty that the efforts will be effective. The PECE provides specific factors under these two basic criteria that direct the analysis of adequacy and efficacy of existing conservation efforts.

Right whales were protected by the 1931 Convention for the Regulation of Whaling, which took effect in 1935. Since 1949, right whales have been protected from commercial whaling by the IWC and its implementing convention. In U.S. waters, right whales are protected by the MMPA and the ESA.

Current North Atlantic right whale conservation efforts in the North Atlantic are extensive. These efforts reflect a cooperative collaboration between numerous state and Federal agencies, industry groups, conservation organizations, academic institutions, and other interested parties and individuals. These efforts are vital to the survival and recovery of the North Atlantic right whale.

Current conservation efforts have resulted in the implementation of a number of regulatory and non-regulatory measures intended to enhance the survival and recovery of the species, particularly fishing gear modifications and ship strike reduction strategies. Moreover, a number of conservation measures being developed and/or considered will further reduce the adverse affect of fishing gear interactions and ship strikes. However, despite these ongoing efforts to mitigate factors affecting the species, right whales have continued to suffer serious injury and mortalities due to ship strikes and fishing gear interactions.

As discussed, direct and indirect impacts from human activities, particularly vessel collisions and fishing gear entanglements, place the species in danger of extinction throughout its range and have contributed to a lack of recovery. Currently, we are working with state, Federal, private, and industry groups to address these two

factors affecting the survival and recovery of the species.

Vessel Interactions

As discussed, ship strikes are responsible for the majority of human-caused right whale mortalities (Jensen and Silber, 2003). The ESA provides authority to the Secretary to establish implementation teams to, among other things, review recovery activities and provide recommendations to NMFS on actions necessary for the survival and recovery of the species. Two such teams have been formed: one in the southeastern U.S., the second in the northeastern U.S. Although both teams have addressed a variety of right whale conservation issues over the years, they have evolved over time to focus on issues related primarily to the reduction of ship strikes of right whales.

Southeastern U.S. Implementation Team (SEIT) - In August 1993, the SEIT was formed. The team consists of representatives from Federal, state, and local agencies, as well as other private organizations. Since its inception, the SEIT has met regularly and has been active in a number of areas related to ship strike mitigation. Among other things, the SEIT was instrumental in developing a system of aircraft surveys and communication systems that alert mariners to the presence of right whales in the southeast United States (SEUS) in real time. Two agencies represented on the SEIT, the Georgia Department of Natural Resources (GDNR) and the United States Coast Guard (USCG), implemented a local Notice to Mariners broadcast about right whale calving grounds. Additionally, the USCG and the GDNR have developed and implemented procedures for broadcasting right whale locations over NAVTEX (the USCG international communication system). The SEIT has also coordinated a number of efforts to educate mariners about the threat of ship strikes, including development and distribution of brochures, pamphlets, and posters. In addition, the SEIT provides us with recommendations regarding measures to reduce the possibility of ship strikes, development of safe operating procedures for large vessels transiting right whale habitat, minimum vessel approach distances, research needs, and measures necessary to reduce fishing gear interactions in right whale calving areas.

Northeast U.S. Implementation Team (NEIT) - The NEIT was established in 1994 and is coordinated by our Northeast Regional Office. The NEIT was originally created to implement recovery tasks for both the North

Atlantic right whale and the humpback whale.

The NEIT's responsibilities have evolved since its inception in 1994. Initially, the NEIT's focus was the mitigation of the threat to right whales of fishing gear interactions. More recently the NEIT's charge has shifted to focus primarily on issues related to ship strike reduction. The NEIT Ship Strike Subcommittee assisted in the development of NOAA's SSRS. The NEIT most recently has been reorganized to function as a continuation of the former Northeast Large Whale Recovery Plan Implementation Team's Ship Strike Committee. The goal is for the NEIT to assist, where possible, with various ship-strike reduction-related strategies.

SSRS

We, in cooperation with other state, Federal, industry, and private groups and organizations, have developed a broad SSRS designed to reduce the danger posed by vessel interactions to the survival of the North Atlantic right whale. The SSRS is an Atlantic coast initiative consisting of both regulatory and non-regulatory components. The ship strike reduction conservation efforts have been implemented, in large part, under the statutory authority of the ESA and the MMPA. Certain details of the SSRS are still under development. The SSRS consists of five elements: (1) Establishment of new operational measures for the shipping industry, including consideration of routing measures and speed restrictions; (2) negotiation of a Right Whale Conservation Agreement with the Canadian Government to address the issue of ship strikes; (3) development and implementation of ship strike education and outreach programs; (4) initiation of Section 7 consultations under the ESA with all Federal agencies that have vessels operating in waters inhabited by right whales; and (5) continuation of ongoing research and conservation activities.

Ship Strike Reduction Strategy Proposed Rule - We published an advanced notice of proposed rulemaking (ANPR) on June 1, 2004 (69 FR 30857), and proposed regulations on June 26, 2006 (71 FR 36299). The proposed regulations would establish speed restrictions and routing measures to reduce the likelihood of collisions between vessels and endangered North Atlantic right whales.

Mandatory Ship Reporting System - In 1998, the USCG, on behalf of the U.S. Government, submitted a proposal developed by NOAA with the assistance of the Marine Mammal Commission and

the International Fund for Animal Welfare to the International Maritime Organization (IMO). The proposal requested approval of two mandatory ship reporting systems. The proposal received IMO endorsement and systems became operational in 1999. The systems obligate all commercial ships 300 gross tons (272 metric tons) and greater entering areas designated as right whale critical habitat to call into a shore-based station. The systems provide information on right whales directly to mariners as they enter right whale habitat, the right whales' vulnerability to ship strikes, and steps that can be taken to reduce the chance of collision. They also provide a means to obtain information on ship traffic volume and routes to assist in identifying measures to reduce future ship strikes. The systems are administered primarily by the USCG.

Aerial Surveys - In 1993, the SEIT developed a system to help alert area ship traffic to the presence of right whales, thereby reducing the possibility of ship strikes. The central feature of the system has been an aerial survey program designed to obtain accurate, current information on the locations of whales. Aerial surveys were initiated in 1993 in the waters off the SEUS and have continued each year since. Continuously updated right whale sighting information from survey teams is immediately relayed to area mariners via centralized communication systems operated by the USCG and the U.S. Navy. Information is provided through a number of real time media, including USCG Broadcast Notices to Mariners, NAVTEX and NOAA Weather Radio. Among other measures, vessels are advised to proceed at reduced speeds to reduce the likelihood of serious injury or death if a collision occurs. However, even in very good sighting conditions, not all whales are detected. Therefore, whales may be present but not always reported to mariners.

In 1997, an aerial survey program was initiated in waters off the northeastern United States. These efforts focused on Cape Cod Bay (CCB) and the Great South Channel (GSC) in late winter and early spring. From 1997 to present, aerial surveys supported by NMFS and the State of Massachusetts have been conducted to cover peak abundance periods, principally between January and March in CCB, and between March and early July in the GSC. Aerial surveys have been recently expanded in the Gulf of Maine and waters of Rhode Island, New York, and New Jersey.

Sightings from aerial survey platforms, right whale researchers, and multiple other sources are reported to

our NEFSC. These data are plotted using a Geographic Information System with sightings grouped and 'circled' with a buffer zone. Right whale sighting advisories, or 'alerts,' are disseminated to notify mariners of the presence of right whales via a number of mechanisms. The USCG issues Broadcast Notices to Mariners and via NAVTEX. NOAA Weather Radio provides geographic and positional data on the sightings periodically. The Cape Cod Canal Traffic Controllers contact ships and provide positions and a radius for each sighting.

Notifications to individual ships, commercial fishing vessels, and military vessels are made directly from the aircraft when observed vessels are transiting close to a whale. In addition, these surveys have provided sightings of entangled and floating right whales, and provide photo identification data for numerous studies. Current plans are to continue the surveys into the foreseeable future. While dedicated aircraft surveys may be the best available means to attempt to alert mariners about the presence of right whales, these programs have a number of limitations. For example, aerial surveys are costly to implement. Also, the surveys are limited by weather and can be conducted only in daylight and under the best of survey conditions. In addition, it is likely that, even under good conditions, many whales are missed by observers, especially since only those whales at or near the surface can be seen. Nonetheless, until effective alternatives are identified, the surveys are expected to continue.

Vessel Approach Regulations - As discussed, on February 13, 1997, an interim final rule (62 FR 6729) was published that prohibits both boats and aircraft from approaching any right whale closer than 500 yards (457.2 m). Exceptions for closer approach are provided for emergency situations and where certain authorizations are provided.

Updating Navigational Publications - The National Ocean Service publishes and periodically updates nautical charts and a series of regional books called U.S. Coast Pilots. These are basic references on regional environmental conditions, navigation hazards, and rules. In U.S. waters, captains of ships greater than 1,200 gross tons (1,088 metric tons) are required to carry Coast Pilots. Information contained in the Coast Pilots covering the entire eastern United States has been updated to include information on the status of right whales, the times and areas where they occur, the threats posed to whales by ships, and advice on measures

mariners might take to avoid hitting right whales. Also, updated information regarding right whale critical habitat and regulations about approaching right whales are published on nautical charts when they are re-printed.

Educational Materials and Outreach - A number of agencies and organizations have collaborated on developing brochures, pamphlets, and informational papers to educate mariners about the vulnerability of right whales to ship strikes. We have published magazine articles directed to the shipping industry. Also, as noted above, a video on this subject was prepared and is being distributed to the shipping industry. The SEIT and NEIT are developing a comprehensive education and outreach strategy and have played a key role in past education and outreach efforts. These efforts include providing training at mariner academies and local marinas.

Boston Harbor Ship Routing Measures - Part of NOAA's SSRS includes consideration of ship traffic routing measures, including shifting the port of Boston's Traffic Separation Scheme (TSS). In 2006, NOAA developed a proposal that was submitted by the USCG on behalf of the U.S. Government to the IMO to narrow and re-align the northern leg of the Boston TSS 12 degrees to the north to redirect shipping traffic through areas with lower densities of right whales and other baleen species. The shift is expected to significantly reduce the risk of ship strikes for both right whales and other baleen whale species. The IMO endorsed the proposal in December 2006. The United States expects to implement the change by July 2007.

Canadian Ship Routing Measures - In July 2003, with approval from the IMO, Canada moved shipping lanes in the Bay of Fundy four nautical miles (7.4 km) to the east to protect the feeding whales from ship collisions. During summer and early fall, right whales aggregate to feed in the Bay of Fundy, between New Brunswick and Nova Scotia, Canada. During this time the whales are exposed to heavy vessel traffic in major shipping channels that pass through the area.

Fishing Gear Entanglement

Death and serious injury resulting from entanglement in fishing gear are significant factors causing the North Atlantic right whale to be in danger of extinction throughout its range. Under the MMPA, we are required to develop a List of Fisheries (LOF) that classifies all U.S. commercial fisheries into one of three categories based on the level of marine mammal deaths and serious

injuries that occur incidental to the fishery. The categorization of a fishery in the LOF determines whether participants in that fishery may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements.

The Atlantic Large Whale Take Reduction Plan - Numerous actions and activities have been implemented to reduce the danger posed by gear entanglement to the survival and recovery of the North Atlantic right whale. Under the 1994 amendments to the MMPA, we are required to establish take reduction teams (TRT) to develop and implement take reduction plans (TRP). The principle goal of the TRT process is to reduce the levels of mortality and serious injury of strategic stocks of marine mammals in Category I and II fisheries (i.e., those with frequent or occasional mortality and serious injury of marine mammals). In general, the purpose of the TRT is to provide recommendations and assist us in developing management measures as part of the take reduction planning process. Take reduction teams are composed of representatives from the fishing industry, fishery management councils, state and Federal resource management agencies, the scientific community, and conservation organizations. After a plan is implemented, the TRT provides us with recommendations on implementation activities, feedback on the effectiveness of current management measures, and strategies for modifying the plan as necessary.

We, with the assistance of the ALWTRT, developed the ALWTRP to reduce the level of serious injury and mortality of three strategic stocks of large whales, including North Atlantic right whales in commercial gillnet and trap/pot fisheries. In general, the ALWTRP consists of a combination of regulatory and non-regulatory programs, including broad gear modifications, time-area closures, expanded disentanglement efforts, extensive outreach efforts in key areas, gear research, and an expanded right whale surveillance program to supplement the Mandatory Ship Reporting System.

Since its implementation in 1997, the ALWTRP has been modified on several occasions to address the serious injury and mortality of large whales in gillnet and lobster trap/pot gear. Recent amendments to the ALWTRP include restrictions to the Southeast Atlantic gillnet fishery (67 FR 59471, September 23, 2002; 68 FR 19464, April 21, 2003). Other amendments to the ALWTRP include additional gear modifications

for lobster trap/pot gear in particular management areas and changes to the lobster trap/pot and gillnet take reduction technology lists (67 FR 1300, January 10, 2002; 67 FR 15493, April 2, 2002).

In addition, a Seasonal Area Management (SAM) program was implemented (67 FR 1142, January 9, 2002; 67 FR 65722, October 28, 2002), which identified two management areas based on annual predictable aggregations of right whales. The SAM program also requires gear modifications for lobster trap/pot and anchored gillnet gear in these areas on a seasonal basis.

A Dynamic Area Management (DAM) program (67 FR 1133, January 9, 2002; 67 FR 65722, October 28, 2002) was also implemented to protect unexpected aggregations of right whales that met an appropriate trigger by temporarily restricting lobster trap/pot and anchored gillnet fishing in a designated DAM area. Subsequent to the introduction of the DAM program, gear modifications determined to sufficiently reduce the risk of entanglement to right whales and, therefore, deemed acceptable for fishing in DAM zones were implemented (68 FR 10195, March 4, 2003; 68 FR 51195, August 26, 2003).

We reconvened the ALWTRT in 2003 to help evaluate the ALWTRP and discuss additional modifications necessary to meet the goals of the MMPA and the ESA. Particular emphasis was placed on those options designed to reduce the potential for entanglements and minimize adverse impacts if entanglements occur. On June 30, 2003, we published a NOI to prepare an Environmental Impact Statement (EIS) that would analyze the impacts of alternatives for amending the ALWTRP (68 FR 38676). On June 21, 2005, we also published a proposed rule (70 FR 35894) that discussed how modifications to the ALWTRP would be implemented.

Disentanglement Efforts - The 1991 right whale recovery plan called for establishment of a marine mammal disentanglement program. We established a team of scientists from the Center for Coastal Studies and the New England Aquarium to respond to all marine mammal entanglements, with an emphasis on right whale and humpback whale entanglements. The current disentanglement effort consists of one primary team and basic field support in the Bay of Fundy, Gulf of Maine, the mid-Atlantic, and Georgia/Florida. The program covers nearshore disentanglement events along the eastern seaboard, though the team can be deployed in some offshore locations.

There are, however, limitations; for example, the northern Gulf of Maine/ Bay of Fundy field stations are operational only when biologists are conducting seasonal whale research, and, even then, disentanglement response relies on the timely transfer of the team and its equipment to the entanglement site. In the southeast United States, trained biologists are available to assist, and disentanglement equipment caches have been established at key locations.

Coordination of Federal Agency Recovery Activities under the ESA

Under section 7(a)(1) of the ESA all Federal agencies, in consultation with and with the assistance of the Secretary, must use their authorities in the furtherance of the ESA by carrying out programs for the conservation of endangered and threatened species listed pursuant to section 4 of the ESA. Under Section 7(a)(2) of the ESA, all Federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of endangered or threatened species or destroy or adversely modify designated critical habitat. These agencies must consult with us on any action that may affect listed species or critical habitat for species under our jurisdiction (including right whales). As a result of these consultations, we issue either a letter of concurrence that the activity is not likely to adversely affect a species or critical habitat, or a Biological Opinion for activities likely to adversely affect a species or critical habitat. A Biological Opinion evaluates whether the activity is likely to jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitat and, if so, provides reasonable and prudent alternatives to the activity. In those cases where we conclude that an action (or implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed species is not likely to jeopardize the continued existence of listed species, we specify reasonable and prudent measures necessary and appropriate to minimize effects of the action on the species of concern.

We have consulted under section 7(a)(2) of the ESA with the ACOE, USCG, and the U.S. Navy on several occasions for a variety of activities. We have also conducted consultations on our fishery management plans.

Canadian Recovery Efforts

In 2000, the Canadian Department of Fisheries and Oceans published a recovery plan for the North Atlantic

right whale (*E. glacialis*). The recovery plan proposes five broad recovery strategies for the North Atlantic right whale: (1) reduction of vessel collisions; (2) reduction of the impacts of encounters with fishing gear; (3) reduction of disturbance from human activities; (4) reduction of exposure to contaminants and habitat degradation; and (5) population monitoring and research.

Despite ongoing conservation efforts, the North Atlantic right whale remains in danger of extinction throughout its range.

Proposed Listing Determination

The best available scientific and commercial data supports the classification of right whales in the North Atlantic as a separate species under the ESA. Based on the review of the status of this species and the section 4(a)(1) factors (see above), and after taking into account any ongoing conservation efforts to protect the species, we conclude that the North Atlantic right whale is in danger of extinction throughout its range because of the following factors:

Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Historically, North Atlantic right whale populations were severely depleted by commercial whaling. While North Atlantic right whales have been protected since 1931 under the Convention for the Regulation of Whaling and more recently by the IWC (circa 1949) and in U.S. waters under the MMPA (1972) and the ESA (1973), the North Atlantic right whale is in danger of extinction throughout its range because of past whaling and has not exhibited signs of recovery from the effects of commercial whaling.

The Inadequacy of Existing Regulatory Mechanisms

While regulatory mechanisms have provided increased protection to right whales in the North Atlantic, human activities still result in serious injuries and mortalities of right whales. The inadequacy of existing regulatory mechanisms is a factor that places the North Atlantic right whale in danger of extinction throughout its range.

Other Natural or Manmade Factors Affecting Its Continued Existence

The most significant factor currently placing the North Atlantic right whale in danger of extinction remains human-related mortality, most notably, ship collisions and entanglement in fishing gear. The available evidence strongly

suggests that the western population of North Atlantic right whale cannot sustain the number of deaths that result from ship strikes and fishing gear interactions. If the impact of these activities continue at current rates, it is likely to result in the extirpation of the western population of North Atlantic right whales. Given the low population size of North Atlantic right whales in the eastern Atlantic Ocean, the extirpation of right whales in the western Atlantic Ocean would render the entire species effectively extinct. No natural factors are known to be threatening the continued existence of the North Atlantic right whale at this time.

Conclusion

Based on an analysis of the best scientific and commercial data available, the North Atlantic right whale is a separate species, *E. glacialis*. There is reason for serious concern about the future of the North Atlantic right whale. Due to the continued anthropogenic factors affecting the survival of the species, and the whale's life history, the North Atlantic right whale is in danger of extinction throughout its range. Because the right whale is a long-lived species, extinction may not occur in the immediate future, but the possibility of biological extinction in the next century is very real. Based on an analysis of the best scientific and commercial data available and after taking into consideration current population trends and abundance, demographic risk factors affecting the continued survival of the species, and ongoing conservation efforts, it is clear that the North Atlantic right whale is in danger of extinction throughout its range and because of: (1) overutilization for commercial, recreational scientific, or educational purposes; (2) the inadequacy of existing regulatory mechanisms; and (3) other natural and manmade factors affecting its continued existence.

Prohibitions and Protective Measures

Section 9 of the ESA prohibits certain activities that directly or indirectly affect endangered species. These prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction.

Sections 7(a)(2) and (4) of the ESA require Federal agencies to consult with us to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or a species proposed for listing, or to destroy or adversely modify critical habitat or proposed critical habitat. If a Federal action may affect a listed species or its

critical habitat, the responsible Federal agency must enter into consultation with us. Examples of Federal actions that may affect the North Atlantic right whale include coastal development, oil and gas development, seismic exploration, point and non-point source discharge of contaminants, contaminated waste disposal, water quality standards, emerging chemical contaminant practices, vessel operations and noise level standards, and fishery management practices.

Sections 10(a)(1)(A) and (B) of the ESA authorize us to grant exceptions to the ESA's Section 9 "take" prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-federal) for scientific purposes or to enhance the propagation or survival of a listed species. The type of activities potentially requiring a section 10(a)(1)(A) research/enhancement permit include scientific research that targets North Atlantic right whales. Under section 10(a)(1)(B), the Secretary may permit takings otherwise prohibited by section 9(a)(1)(B) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

NMFS Policies on Endangered and Threatened Fish and Wildlife

On July 1, 1994, we and FWS published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270) and a policy to identify, to the maximum extent possible, those activities that would or would not constitute a violation of section 9 of the ESA (59 FR 34272).

Role of Peer Review

The intent of the peer review policy is to ensure that listings are based on the best scientific and commercial data available. Prior to a final listing, we will solicit the expert opinions of three qualified specialists, concurrent with the public comment period. Independent specialists will be selected from the academic and scientific community, Federal and state agencies, and the private sector.

Identification of Those Activities That Would Constitute a Violation of Section 9 of the ESA

The intent of this policy is to increase public awareness of the effect of our ESA listing on proposed and ongoing activities within the species' range. We will identify, to the extent known at the time of the final rule, specific activities that will be considered likely to result in violation of section 9, as well as

activities that will not be considered likely to result in violation. Activities that we believe could result in violation of section 9 prohibitions against "take" of the North Atlantic right whale include, but are not limited to, the following: (1) Operating vessels in a manner that results in ship strikes or disrupts foraging, resting, or care for young or results in noise levels that disrupt foraging, communication, resting, or care for young; (2) fishing practices that can result in entanglement when lines, nets, or other gear are placed in the water column; (3) coastal development that adversely affects North Atlantic right whales (e.g., dredging, waste treatment); (4) discharging or dumping toxic chemicals or other pollutants into areas used by North Atlantic right whales; (5) scientific research activities; (6) Land/water use or fishing practices that result in reduced availability of prey species during periods when North Atlantic right whales are present.

We believe, based on the best available information, the following actions will not result in a violation of ESA Section 9: (1) federally funded or approved projects for which ESA section 7 consultation has been completed, and that are conducted in accordance with any terms and conditions we provide in an incidental take statement accompanying a biological opinion; and (2) takes of North Atlantic right whales that have been authorized by NMFS pursuant to section 10 of the ESA.

These lists are not exhaustive. They are intended to provide some examples of the types of activities that we might or might not consider as constituting a take of North Atlantic right whales.

Critical Habitat

Critical habitat is defined in section 3 of the ESA (16 U.S.C. 1532(3)) as: "(i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the provisions of [section 4 of this Act], on which are found those physical or biological features (I) essential to conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed in accordance with the provisions of [section 4 of this Act], upon a determination by the Secretary that such areas are essential for the conservation of the species." Conservation means to use and the use of all methods and procedures needed to bring the species to the point at

which listing under the ESA is no longer necessary.

Section 4(a)(3)(a) of the ESA (16 U.S.C. 1533(a)(3)(A)) requires that, to the maximum extent prudent and determinable, critical habitat shall be designated concurrent with making a determination that a species is an endangered species or threatened species, unless some limited exceptions apply.

In July 2002, we received a petition to revise the current critical habitat designation for right whales in the North Atlantic. On August 28, 2003, we published a determination that the petitioned action was not warranted at that time (68 FR 51758). This notice stated that we would continue to analyze the physical and biological habitat features (PCEs) essential to the conservation of the species. Our Northeast Region and Southeast Region are developing a proposed rule to designate critical habitat for the North Atlantic right whale.

Public Comments Solicited

We are soliciting public comments and information from the public, other concerned governmental agencies, the scientific community, industry, and any other interested parties on this proposed listing of the North Atlantic right whale (*E. glacialis*) under the ESA as an endangered species throughout its range.

Classification

National Environmental Policy Act

The 1982 amendments to the ESA, in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing to the best scientific and commercial data available. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F. 2d 825 (6th Cir. 1981), we have concluded that ESA listing actions are not subject to the requirements of the National Environmental Policy Act. (See NOAA Administrative Order 216 6.)

Executive Order (E.O.) 12866, Regulatory Flexibility Act, and Paperwork Reduction Act

As noted in the Conference Report on the 1982 amendments to the ESA, economic impacts cannot be considered when assessing the status of a species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. In addition, this proposed rule is exempt from review under E.O. 12866. This proposed rule

does not contain a collection-of-information requirement for the purposes of the Paperwork Reduction Act.

E.O. 13132 - Federalism

E.O. 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations where a regulation will preempt state law, or impose substantial direct compliance costs on state and local governments (unless required by statute). Neither of these circumstances is applicable to this proposed listing determination. In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual state and Federal interest, we intend to provide this proposed rule to relevant state agencies and invite their comments on it.

References Cited

The status review report of the right whales in the North Atlantic and North Pacific forms the basis for the proposed listing determinations for both the North Atlantic and the North Pacific right

whales. This status review report and a complete list of references used in its preparation is available online on our website at <http://www.nero.noaa.gov/> and is available upon request from our Northeast Regional Office in Gloucester, Massachusetts (see **ADDRESSES**).

List of Subjects in 50 CFR Part 224

Administrative practice and procedure, Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Dated: December 20, 2006.

Samuel D. Rauch III.,

*Deputy Assistant Administrator for
Regulatory Programs, National Marine
Fisheries Service.*

For the reasons set out in the preamble, we propose to amend 50 CFR part 224 as follows:

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 224 continues to read as follows:

Authority: 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 *et seq.*

2. Revise § 224.101(b) to read as follows:

§ 224.101 Enumeration of endangered marine and anadromous species.

(b) Marine mammals. Blue whale (*Balaenoptera musculus*); Bowhead whale (*Balaena mysticetus*); Caribbean monk seal (*Monachus tropicalis*); Chinese river dolphin (*Lipotes vexillifer*); Cochito (*Phocoena sinus*); Fin or finback whale (*Balaenoptera physalus*); Hawaiian monk seal (*Monachus schauinslandi*); Humpback whale (*Megaptera novaeangliae*); Indus River dolphin (*Platanista minor*); Mediterranean monk seal (*Monachus monachus*); North Atlantic right whale (*Eubalaena glacialis*); Saimaa seal (*Phoca hispida saimensis*); Sei whale (*Balaenoptera borealis*); Sperm whale (*Physeter catodon*); Western North Pacific (Korean) gray whale (*Eschrichtius robustus*); Steller sea lion, western population, (*Eumetopias jubatus*), which consists of Stellar sea lions from breeding colonies located west of 144[deg] W. longitude.

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