BEFORE THE SECRETARY OF COMMERCE

PETITION TO LIST THE NORTH PACIFIC RIGHT WHALE (*Eubalaena japonica*) AS AN ENDANGERED SPECIES UNDER THE ENDANGERED SPECIES ACT

CENTER FOR BIOLOGICAL DIVERSITY
PETITIONER

August 16, 2005
Notice of Petition

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Petitioner Center for Biological Diversity formally requests that the National Marine Fisheries Service (“NMFS”) list the North Pacific right whale (*Eubalaena japonica*) as endangered under the Endangered Species Act.¹ This petition is filed under 5 U.S.C. § 553(e)² and 16 U.S.C. § 1533(b)(3). Because *E. japonica* is classified in the order Cetacea, NMFS has jurisdiction over this petition.³ This petition sets in motion a specific administrative process as defined by 50 C.F.R. § 424.14(b), placing mandatory response requirements on NMFS.

¹ Endangered Species Act, 16 U.S.C. § 1531-1544 [Hereinafter ESA].
² Administrative Procedure Act, 5 U.S.C. § 551-559 [Hereinafter APA].
³ Memorandum of Understanding between the U.S. Fish and Wildlife Service and the National Marine Fisheries Service Regarding Jurisdictional Responsibilities and Listing Procedures under the ESA, August 28, 1974.
The Center for Biological Diversity is a non-profit environmental organization dedicated to the protection of native species and their habitats in the Western Hemisphere. The Center for Biological Diversity submits this petition on its own behalf and on behalf of its members and staff, with an interest in protecting *É. japonica* and its habitat.

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Executive Summary

This petition requests that the National Marine and Fisheries Service (“NMFS”) lists the North Pacific right whale, *Eubalaena japonica*, as an endangered species under the Endangered Species Act. This action offers NMFS the opportunity to protect and recover the North Pacific right whale population.

Once abundant throughout the Northern Pacific, the right whale is now among the most endangered of all the great whales. At its historical peak, the North Pacific right whale population numbered around 11,000. Scientists now approximate that only 25 right whales may exist today. Indeed, North Pacific right whales have become so rare that some observers believed the population was effectively extinct. Nonetheless, sightings from this past summer show that recovery is possible if the correct steps are taken.

In September 2004, a research expedition funded by SPLASH and the National Marine Mammals Laboratory (“NMML”) sighted three cow-calf pairs in the Southeast Bering Sea. This sighting follows a previous cow-calf pair sighting in the same area in 2001. These are the only two confirmed right whale calf sightings in the eastern North Pacific Ocean in the past century.

On the one hand, the overall lack of cow-calf sightings is a serious cause for concern. At the same time though, the sightings reveal that potential for recovery exists and resides in the Southeast Bering Sea. By considering the scientific data in this petition and acting upon its recommendations, NMFS can successfully help recover the North Pacific right whale population.

NMFS should take into account the scientific literature that establishes the North Pacific right whale as a separate species of right whale. In 2000, Rosenbaum *et al.* (2000) conducted a genetic study of right whale populations. After analyzing mitochondrial DNA, they concluded that there are three distinct species of right whale: *E. australis* in the southern hemisphere’s oceans, *E. glacialis* in the North Atlantic Ocean, and *E. japonica* in the North Pacific Ocean. This three-species classification for right whales has been adopted by the International Whaling Commission’s Scientific Committee and was even briefly adopted by the NMFS. Due to such widespread recognition of *E. japonica* as a distinct species, it is time for NMFS to list it as an endangered species under the Endangered Species Act (“ESA”).

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I. Natural History & Status of the North Pacific Right Whale

A. Natural History

1. Species Description

The right whale is a rotund, medium-sized baleen whale. Adults generally range in length between 45 and 55 feet and can weigh up to 70 tons. The right whale’s distinctive features include a black coloration with variable white patches on the throat and belly, the absence of a dorsal fin, a large head comprising more than one-quarter of the body length, a narrow upper jaw, a strongly bowed lower jaw, and distinguishing callosities on the head. In addition to being indicative of the species, callosities can be used with other marks to identify individual right whales.

2. Taxonomy

Right whales are members of the family balaenidae. Until recently, North Pacific and North Atlantic right whales were considered a single species, Eubalaena glacialis, while the southern right whale, Eubalaena australis, was considered a separate but closely related species. The southern and northern right whales were originally separated based on morphological characteristics. However, recent genetic studies conducted by Rosenbaum, C.A. Gaines et al. provide persuasive evidence of separate species status for North Pacific, Southern Pacific and North Atlantic right whales. The recent study by C.A. Gaines et al. analyzed both mitochondrial and nuclear DNA to prove beyond doubt that North Pacific, North Atlantic, and Southern Pacific right whales are each distinct species. The set of taxonomic classifications suggested by C.A. Gaines et al. was accepted by the International Whaling Commission and was also briefly recognized by NMFS in 2003. Those classifications are as follows: the North Atlantic right whale, E. glacialis; the North Pacific right whale, E. japonica; and the Southern right whale, E. australis.

The Rosenbaum et al. study demonstrated a relatively strong historical separation of North Atlantic, North Pacific, and Southern Ocean right whale maternal lineages, leading to the conclusion that these populations are now three distinct evolutionary entities. In addition, the study noted that the probability of future interbreeding between the three lineages is extremely low considering the species’ antitropical distribution. The differences in migratory behavior from right whales within each hemisphere, along with the antitropical distribution, maintain and promote these boundaries to gene flow.

In a NMFS Memorandum in May of 2001, citing the Rosenbaum et al. study, NMFS concluded that the right whales should be regarded as three separate species.

5 NATIONAL MARINE FISHERIES SERVICE, FINAL RECOVERY PLAN FOR THE NORTHERN RIGHT WHALE 1 (1991) [hereinafter FINAL RECOVERY PLAN].
6 Muller 1954.
7 Rosenbaum et al. 2000. See also Draft recovery plan, p.6.
8 The International Whaling Commission’s Scientific Committee formally recognized the three species classifications for right whales at their 2000 meeting in Adelaide, Australia (IWC 2000:p.46, Rept of Sci Comm).
9 Federal Register Vol. 68, No. 69 17560-17561.
NMFS submitted these technical revisions regarding the taxonomic nomenclature of the right whale to FWS for revision to the List of Endangered and Threatened Wildlife.\textsuperscript{10} Reclassification of the North Pacific right whale as \textit{Eubalaena japonica} was recognized by NMFS in the April 10, 2003 final rule: “Due to recent genetic findings, NMFS is changing the species name of the northern right whale as follows: the North Atlantic right whale, \textit{Eubalaena glacialis}, and the North Pacific right whale, \textit{Eubalaena japonica}.”\textsuperscript{11} Yet, due to procedural and substantive flaws committed by NMFS, it had to rescind its April 2003 ruling that recognized \textit{Eubalaena japonica} as a distinct species. As of August 16, 2005, \textit{Eubalaena japonica} is no longer legally or technically recognized as a distinct and endangered species by NMFS.\textsuperscript{12} This ruling runs contrary to current scientific research that clearly establishes \textit{Eubalaena japonica} as a distinct species of Right Whale.

\section*{B. Abundance and Distribution}

\subsection*{1. Abundance}

The North Pacific right whale is estimated to have once numbered at least 11,000 animals.\textsuperscript{13} These whales were heavily exploited by commercial whaling from 1835, and remain severely depleted\textsuperscript{14}. Presently, no reliable population estimate exists for this stock. Upper-bound estimates show that the North Pacific population is most likely fewer than 500\textsuperscript{15} while estimates by Tynan et al. have placed the current population of North Pacific right whales in the tens.\textsuperscript{16} This past summer, scientists on the SPLASH summer leg sighted and photographed 20 right whales in the Southeast Bering Sea. These sightings increased the number of individually identifiable North pacific right whales to 25.\textsuperscript{17} While statistical estimates of the abundance of the North Pacific right whale are currently unavailable experts agree that the population is critically small.\textsuperscript{18,19}

\subsection*{2. Historic Distribution}

Historically, right whales occurred across the entire North Pacific from the western coast of North America to the Russian Far East.\textsuperscript{20} The pre-exploitation distribution probably included the temperate and subarctic, coastal, and/or continental

\begin{thebibliography}{99}
\bibitem{11} Id. 17560-17561.
\bibitem{12} Federal Register vol. 70 no. 7, 1830-1831.
\bibitem{13} Ferrero et al. 2000.
\bibitem{15} Email attachment from Smith to Payne, Jan. 24, 2001 re rw ch petition, Attachment was Draft Memorandum for Hogarth from Balsiger, Jan. 2001.
\bibitem{16} Tynan et al. 2001.
\bibitem{17} “Scientists Double Tally of Known Right Whales.” NOAA Press Release, October 1, 2004.
\bibitem{18} Ferrero et al. 2000.
\bibitem{19} Brownell et al. 2001; LeDuc et al. 2001.
\bibitem{20} Brownell et al. 2001.
\end{thebibliography}
shelf waters of the North Pacific Ocean. However, post-exploitation distribution is extremely limited.

In 1840, the North Pacific right whale was common or abundant during summer in the Gulf of Alaska, North Pacific, southeast Bering Sea, among the Kuril Islands, and in the southern Sea of Okhotsk. Ten years later it was rare, and twenty years later it was nearly extinct. During summer, whales were found in the Okhotsk Sea, along both coasts of the Kamchatka Peninsula, the Kuril Islands, the Aleutian Islands, the southeastern Bering Sea, and in the Gulf of Alaska. Those whales summering in Alaskan waters were mostly found between 50 and 63 degrees North latitude from April to September. The following figure (fig. 1) displays recorded sightings of summering whales from 1941 through 1999.

Figure 1: Confirmed sightings of summering right whales (1941-1999)

Summering grounds for right whales in the Bering Sea were mainly located in a triangular area of the southeastern region between Atka, St. Matthew, and Nunivak Islands. Small groups were also found between the Pribilof Islands and Bristol Bay and

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21 Draft recovery plan, p.7.
22 Id.
26 Lowry et al. 1982.
between the Pribilofs and Nunival Islands. Brownell et al. notes a concentration of Japanese sightings in the Bering Sea, loosely centered around 55 degrees N, 170 degrees W, suggesting that this region was an important summer habitat for North Pacific right whales. The majority of recent sightings are centered around 56 degrees N, 164 degrees W. This is only slightly east of the historic Japanese sightings, confirming that this area of the southeast Bering Sea has consistently been and continues to be an important summering habitat for the whales.

Fall and spring distribution of right whales are the most widely disbursed, with whales occurring in mid-ocean waters and extending from the Sea of Japan to the eastern Bering Sea. In winter, the whales were found in the Ryukyu Islands, the Bonin Islands, the Yellow Sea, and the Sea of Japan.

3. Current Distribution

Since 1960, sightings of right whales in the North Pacific have been rare. Indeed, until just this past year, there were only 13 documented right whales in the East Pacific. And yet, the documented sightings reveal an area of high use in the Bering Sea. The following figure (fig. 2) displays recent summer sightings of right whales in the Southeast Bering Sea.

This area of high-use and high-observation is referred to colloquially as the “right whale box.” This box is bound by 58 00 N and 56 30 N latitude and 62 20 W and 166 50 W longitude. Between 1996 and 2002, there were 12 sightings in this rectangle of 6 to 10

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27 Berzin and Rovnin 1966.
28 LeDuc, R. 2003
29 Brownell et al., 2001.
30 Draft recovery plan, p.8.
whales per sighting. The following figure (fig. 3) displays all confirmed sightings of right whales in this box from 1982 to 2000.

This past October (2004), Scientists working for the National Oceanic and Atmospheric Association (“NOAA”) made a significant observation. During the Alaska summer leg of SPLASH, scientists sighted a right whale group just south of the “right whale box” in the Bering Sea. They took 20 biopsies, increasing the known number of North Pacific right whales to at least 25 individuals.

A NMML survey team working on the Alaska Cetacean Ecosystem Survey also studied right whales in the Bering Sea. This survey team tagged a whale with a satellite-tracking device. From the date of the tagging on 8/10/04 through 9/19/04 when the NMML expedition ended, this right whale stayed in and around the “right whale box.” The additional data collected by NOAA and SPLASH emphasizes the importance of this region for the right whale and shows the consistent nature of its summer feeding habits.

At the same time, it must also be noted that the ‘right whale box’ receives more attention from scientists that other parts of the Bering Sea. Increased attention in this area naturally leads to an upward bias in sightings. As such, it must be noted that right whales often forage outside of the ‘right whale box.’ Indeed, scientific research shows that right whales forage over large continental shelves. The location of the ‘right whale box’ in the Middle Shelf establishes this as the preferred foraging shelf for right whales in the Bering Sea.

C. Feeding

Right whales are selective surface feeders, and usually do not dive to depths below 20 meters (Klumov 1962). They generally feed at or near the surface, skimming the water with their mouths widely open. In the North Pacific, they feed on small zooplanktonic crustaceans, particularly on concentrations of the copepods *Calanus cristatus* and *C. plumchrus* (Omura 1958; Klumov 1962; Nemoto 1963). They also feed on krill (*Euphausia pacifica*) (Omura et al 1969). Unlike the generally coastal distribution of right whales in the North Atlantic, North Pacific right whales appear to feed over broad continental shelf areas, and in particular in the Middle Shelf of the Southeast Bering Sea.34

In 1997, a coccolithophore bloom of *Emiliania huxleyi* was observed in the Bering Sea.35 This phenomenon was not previously documented in the region.36 The bloom was found from July to August. The dominant copepod species in the bloom was *Calanus marshallae*. Although the bloom was observed again in 1998, the water temperatures of the southeastern Bering Sea had returned to normal by November of 1997.37 The coccolithophore bloom returned again in 1999, 2000 and 2001.38 However, bloom levels were not as extensive in 2001 as they were in the previous years.39

In 1999, Tynan suggested that the North Pacific right whale changed its habitat and prey within the Bering Sea in response to the coccolithophore bloom and other oceanographic changes recently observed in the area.40 The Tynan study specifically noted that the right whale had changed its habitat moving from the shelf edge to the middle shelf, where the bloom persisted.41 Tynan also claimed that the right whale had shifted its prey species from *Calanus plumchrus* and *Calanus cristatus* (both of which are historically found along the shelf break) to *C. marshallae*, the dominant species in the coccolithophore bloom.42 In 2001, Tynan, DeMaster and Peterson again reported that the right whale was foraging on *C. marshallae* on the middle shelf.43 Tynan et al. noted that the increase in *C. marshallae* may explain why the right whales are now occupying the middle shelf during summer.

In 2001, Brownell, Pitman and LeDuc ("Brownell") responded to the Tynan et al. 2001 report. Brownell stated that Tynan et al. incorrectly asserted that the right whale may have changed both its habitat and prey.44 Specifically, Brownell noted that by dealing only with the recent history of the right whale, Tynan et al. 2001 mistakenly conclude that a habitat shift has occurred, when in reality, the whales are currently restricted to a small portion of their former distribution. Brownell further discredited

34 Morris, unpublished.
36 Id. at 61.
37 Id. at 64.
38 Id. at 65 and personal communications with Terry Whittlestone of the University of Alaska.
39 Personal communications with Terry Whittlestone of the University of Alaska.
40 Tynan 1999.
41 Id. at 116.
42 Id. at 116-117.
43 Tynan et al. 2001.
Tynan’s conclusion by explaining that it is based on low sample size, indirect evidence, and inadequate data upon which to base such a sweeping conclusion.

Thus, while limited scientific research exists regarding the feeding habits of the North Pacific right whale, sightings of the Right Whale feeding in the Southeast Bering Sea can be traced as far back as 1840 and possibly even further back. Indeed, since the coccolithophore bloom subsided in 2001, right whales have continued to visit the same “right whale box” that they visited before and during the bloom. This temporal consistency, in spite of oceanographic fluctuations, emphasizes the importance of the Southeast Bering Sea as a summer foraging ground for the right whale.

II. Criteria for Endangered Species Act listing for the North Pacific Right Whale

A. The North Pacific right whale is a “species” under the ESA

The Endangered Species Act provides for the listing of all species warranting the protections afforded by the Act. The term “species” is defined broadly under the Act to include “any subspecies of fish or wildlife or plants and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.”45 According to available scientific evidence, the petitioner believes that the North Pacific right whale is a valid species, and conforms to the definition of “species” under the ESA.

The discovery of *Eubalaena japonica* as a distinct species occurred in 2000 when Howard Rosenbaum *et al.* conducted a genetic study of right whale populations. Upon analyzing mitochondrial DNA of North Atlantic, North Pacific, and Southern Ocean right whales, they discovered that there were three distinct species, not two as scientists previously believed. *Eubalaena japonica*, the North Pacific right whale, was the newly discovered species.

In February 2005, Doctor Howard Rosenbaum built upon his previous research and analyzed both the nuclear and mitochondrial DNA of right whales. According to Rosenbaum, “our recent analysis using both mitochondrial and nuclear DNA has produced even stronger support for this taxonomic revision, proving that both types of genetic material can be used in tandem to test and revise species classifications and subsequently redirect conservation efforts for those populations most in need.”46 The results of this robust test of nuclear and mitochondrial DNA show that North Pacific right whales are a distinct species, separate from the North Atlantic species and the Southern Ocean species.47 Both the International Whaling Commission (IWC) and NMFS have recognized *Eubalaena japonica* as a distinct species of right whale.

At a meeting in 2000, the IWC’s Scientific Committee’s formally recognized the three species classification of right whales (*E. australis, E. glacialis, E. japonica*). In a 2003 “Notice of Technical Revision to Right Whale Nomenclature and Taxonomy under the US Endangered Species Act,” NMFS cited both the Rosenbaum *et al.* study and the IWC’s classification. NMFS stated, “Genetic data now provide unequivocal support to

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45 16 U.S.C. § 1532(16)
distinguish three right whale lineages as three separate phylogenetic species.\textsuperscript{48} In light of available scientific evidence, the petitioner believes that \emph{Eubalaena japonica} is a valid species and does conform to the definition of “species” under the ESA.

**B. The North Pacific right whale is endangered under the ESA**

The National Marine Fisheries Service is required to determine, based solely on the best scientific and commercial data available, whether a species is endangered or threatened because of any of the following 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.\textsuperscript{49}

1. **Present or threatened destruction, modification, or curtailment of its habitat or range**

Potential gas and oil development in the Bering Sea threatens the right whale’s summer foraging habitat. Currently, the Alaska Department of Natural Resources is mobilizing efforts to increase Alaskan Oil Production. For example, in 2005, they hope to triple the number of wells drilled.\textsuperscript{50} Part of this program focuses on the Alaska Peninsula. There are already 8 oil and gas operations on the Northwestern side of the Peninsula. The Division of Oil and Gas (DOG) hopes to add to this number through a proposed Alaska Peninsula Areawide Oil and Gas Lease Sale. This sale is scheduled to take place in October of 2005. After a brief title review period, the leases will become effective on April 1, 2006. These future leases may threaten the high-use foraging ground of the right whale.

As noted previously, most recent sightings of right whale in the Bering Sea have occurred in an area known as the ‘right whale box.’ This area is located off the Northwest coast of the Alaskan Peninsula. Tidal studies of the Bering Sea show a dominant current that moves North-East along the Peninsula and then hooks out into the Bering Sea. Thus, an oil spill or discharge along the Alaska Peninsula where DOG intends to issue new oil and gas leases could be transported directly into the ‘right whale box.’ This would adversely affect foraging right whales as they skim the surface with their mouths wide open, making them especially vulnerable to surface oil pollution.\textsuperscript{51} The most recent oil spill in the area occurred this past December.

On December 8, 2004, the Malaysian freighter, Selendang Ayu, ran aground near the Aleutian Island of Unalaska after its engine failed in severe weather. At least 40,000 gallons of the wrecked ship's 470,000 gallons of fuel have leaked into the right whale’s habitat: the Bering Sea. The potential for further oil contamination poses a clear and

\textsuperscript{48} Federal Register, Vol. 68, No. 69, Thursday April 10 2003, 17561.
\textsuperscript{49} 16 U.S.C §§ 1531(a)(1) and 1533(b).
\textsuperscript{50} “Alaska’s Oil and Gas Frontiers.” Presented by Mark D. Meyers, Director of Natural Resources Division of Gas and Oil, to PAC COM Expo and Conference, February 19, 2004.
\textsuperscript{51} Morris unpub.
present danger to the right whale. Freighters like the Selendang Ayu generate another
form of pollution: noise pollution.

Noise pollution from oil and gas activity poses a threat to whales in the vicinity. The Bering Sea is already polluted by noise from fishing vessels and shipping activity. The additional anthropogenic noise pollution caused by oil and gas drilling could disturb or displace right whales from their feeding grounds. In particular, right whales might be displaced from the ‘right whale box’ due to the noise pollution that will originate from near-by oil and gas exploration on the Peninsula. Displacement from this high-use foraging area could threaten the species future survival.

2. Disease or predation

Due to the small population of North Pacific right whales, disease and predation may pose significant threats to the species. Indeed, recent human predation has had a devastating impact on the North Pacific population. From the 1950’s through the early 1970’s, Soviet whalers illegally killed 508 right whales in the North Pacific. Signs of recovery from these illegal takings were not observed until recently.

In 2004, a research expedition funded by SPLASH and the National Marine Mammals Laboratory (NMML) sighted three cow-calf pairs in the Southeast Bering Sea. Before they mature into adult right whales, these three claves will have to avoid possible diseases that could wipe them out and possibly even wipe out the whole species. They also have to avoid predation by Orcas, which are known hunters of Baleen whales.

3. Inadequacy of existing regulatory mechanisms

Currently, right whales receive protection from a number of national and international agencies. In 1949, the International Whaling Commission implemented its convention that protects the right whale from commercial whaling. The Marine Mammal Protection Act (“MMPA”) further protects the right whale. Finally, Northern right whales as a whole receive protection under the Endangered Species Act. Considering all these protections, one might imagine an array of policies and regulations aimed at protecting North pacific right whales. This is not the case. Rather, most protection efforts have focused primarily on the North Atlantic right whale, Eubalaena glacialis.

In June of 1994, the Western North Atlantic right whale received Critical Habitat protection for 1) coastal Florida and Georgia 2) the Great South Channel and 3) Massachusetts Bay and Cape Cod Bay. The species has also benefited from a system to prevent ship strikes in the Atlantic, the Take Reduction Plan implemented in 1999 to reduce fishing gear entanglements, and numerous research and observation expeditions. So far, few benefits have accrued to the North Pacific right whale. As such, there are currently no regulations in place in the Bering Sea to supervise fishing or commercial

52 Issue Advisory, 2-05-01.
54 Final Recovery Plan, 1991 at p. 31
shipping activity with respect to right whales. Such unequal treatment of the North Pacific right whale needs to be addressed by NMFS before extinction.

4. Overutilization for commercial, recreational, scientific, or educational purposes

Overutilization for recreational purposes may pose a future threat to the right whale. Whale watching is currently a rapidly growing activity on the East and West Coasts of the United States. Indeed, regulations already exist on the North Atlantic seaboard to limit whale watching and protect right whales from any additional threats associated with the activity. In the future, whale watchers may visit more remote locations, such as the Southeast Bering Sea, which is well known as a critical foraging ground for right whales. This potential for future whale watching could increase the chance of ship collisions with the right whale.55

5. Natural or manmade factors affecting its continued existence

Ship strikes may affect the continued existence of right whales. Studies of western North Atlantic right whales show that more die from collisions with ships than any other single cause of mortality.56 NMFS maintains that the Bering Sea has significant vessel traffic. In an Issue Advisory to William Hogarth, NMFS made the following statements regarding fisheries and right whales:

The continental shelf of the Bering Sea supports a large and productive commercial fishery for at least 24 species of fish. By 1995 the groundfish fleet for the Bering Sea/Aleutian Islands fishery comprised over 1,545 vessels. Commercial fishing is the most common activity that would be encountered by right whales in the southeastern Bering Sea. Right whales feed and rest on the surface of the water, and often show little avoidance reaction to on-coming vessels, thus predisposing them to ship strikes by any vessel. The waters of the southeastern Bering Sea proposed as critical habitat are also important shipping lanes, lying on or near the great circle routes for the North Pacific.57

The Great Circle Route is the primary shipping route between the West Coasts of North America and Asia. Each month, hundreds of ships travel this route, navigating through the Bering Sea by passage of the Amchitka and Unimak Passes. The following figure (fig. 4) shows the route trans-continental freighters take through the Bering Sea.

56 Draft Updated Plan, supra note 33.
57 Memorandum for William Hogarth, Acting Assistant Administrator for Fisheries From James Balsiger, Subject: Petition to revise critical habitat for northern right whales under the Endangered Species Act to include the Bering Sea–ISSUE ADVISORY, January 2001. [Hereinafter, Issue Advisory, 01-01].
These commercial freighters pose a threat to foraging right whales in the Bering Sea. Not only do they generate noise pollution and sometimes oil pollution, but they may also pose the threat of ship strikes to right whales. In addition to trans-pacific freight activity, the Bering Sea is a center of commercial fishing activity. Commercial fishing boats and other small vessels also can strike and kill right whales. As reported in the May 2005 edition of Right Whale News, a total of 14 instances of small boat (less than 65 ft.) interactions involving 20 boats were observed during the 2005 season. This included a 43 ft. yacht striking a right whale at 20 knots. http://www.graysreef.nos.noaa.gov/rtwh/rwmay05.pdf. Thus, boats far smaller than commercial freighters can strike, injure, and possible kill right whales.

Few observations of right whale strikes have been reported in the Pacific for a reason: the extreme rarity of the right whale. Indeed, scientists have only been able to gather a limited number of reported sightings of the right whale. Demanding a record of frequent ship strikes is an unrealistic burden of proof. Under a standard of probable cause, NMFS would judge ship strikes to be a serious threat to right whales.

In order to assess the threat of ship strikes, NMFS should analyze scientific research that has been conducted in the North Atlantic. According to this research, more western North Atlantic right whales die from collisions with ships than any other single cause of mortality.58 Out of twenty-seven documented mortalities in the North Atlantic between 1970 and 1991, six (twenty-two percent) were caused by ship propellers severing the tail stock or spine, or causing mortal crushing blows to the head.59 Between 1991 and 1999, an additional ten mortalities were attributed to ship strikes.60 Between 1991 and 1996, the average mortality and serious injury rate due to vessel collisions was calculated as 1.3 per year.61 Between 1995 and 1999, the average mortality and serious injury rate due to vessel collisions was calculated as 1.2 per year.62,63,64,65 These figures

58 DRAFT UPDATED PLAN, supra note 33.
59 FINAL RECOVERY PLAN, supra note 11.
60 Robert D. Kenney and Scott D. Kraus, Right Whale Mortality – A Correction and Update, 9 MAR. MAMM. SCI. (1993).
62 Id.
63 Id.
highlight the magnitude of the ship strike threat to right whales. For a population such as the North Pacific right whales that numbers in the tens, even one added death per year due to anthropogenic causes could prove fatal to the long-term survival of the species. As such, it would be unreasonable and unscientific for NMFS to overlook the threat of ship strikes.

Scientific research from the North Atlantic also details the threat of fishing gear entanglement. Studies done by Hamilton et al. in the North Atlantic show that 61.6 percent of right whales in the Western North Atlantic bear scars and injuries indicating fishing gear entanglement. In particular, right whales can become entangled in lobster gear. From 1970 to 1999, there were two reported fatalities because lobster pots entangled North Atlantic right whales. The 2000 North Atlantic Stock Assessment Report indicated that, between 1995 and 1999, the total estimated mortality and serious injury to right whales due to entanglement in fishing gear was 1.0 right whales per year. This figure does not account for the scarring and physical trauma caused by non-fatal entanglement. Although fishing gear entanglement clearly poses a threat to North Atlantic right whales, NMFS perceives no comparable threat to North Pacific right whales.

Over 50% of the fish consumed in the US come from the Bering Sea. To support this demand, a large fishing industry has arisen in the Bering Sea. In 1995, over 1,545 fishing vessels scoured the Bering Sea. The possibility of a ship strike between these fishing vessels and right whales exists. NMFS responded to this possible threat by stating that, “Many of the larger fishing vessels in the eastern Bering Sea are required to have observers, and these observers have never reported an entanglement of a right whale in fishing gear in the eastern Bering Sea.” This comment contrasts with the standpoint of National Oceanic and Atmospheric Association (“NOAA”). NOAA acknowledged that “the probability of entanglement is not remote” for north pacific right whales. Additionally, entanglements have been documented for bowheads in the North Pacific—including one whose fishing gear was similar to those used in the Bering Sea and three which had ropes attributed to commercial offshore fishing pot rigging (crab pots most likely).

According to a recent NOAA Trawl Survey, one fishery or another utilizes virtually the entire Bearing Sea and Aleutian Islands (BSAI) area. Indeed, the amount of crab fishing in the BSAI area has become problematic due to an excess capacity of

**Footnotes:**


65 Knowlton and Kraus, *supra* note 81.


67 *DRAFT UPDATED PLAN, supra* note 33.


71 *Id.*

fishing vessels and the ‘race for fish.’ In August of 2004, NOAA conducted an Environmental Impact Statement (EIS) of the BSAI crab fisheries. The conclusions and rationalization proposals of this EIS have a direct effect on the future survival of the North Pacific right whale.

NMFS trawl surveys show that the Southeast Bering Sea is the site of a large distribution of red king crabs. Estimates for 2003 place the red king crab population in this area at 178.1 million pounds. The geographical distribution of this population is displayed in the following figure (fig. 5):

NMFS Trawl Surveys estimated the population of snow crabs in the Bering Sea to be 306.2 million pounds. The following figure (fig. 6) illustrates the 2003 NMFS Trawl Surveys of Snow Crabs:
The distributions of red king and snow crabs coincide with the preferred foraging grounds of the right whale. As indicated earlier in the petition, the majority of recent right whale sightings have occurred in the “right whale box.” Not only do red king and snow crabs spawn in the “right whale box,” but the crabs also spawn across the Middle Bering Sea Shelf. This is the same sea shelf where right whales forage for small zooplanktonic crustaceans. Crab harvesting that takes place in these spawning areas threatens foraging right whales.

Currently, the red king crab population is not expected to approach the Minimum Stock Size Threshold (MSST) of 44.8 million in the near future. As such, the red king crab fishery is open and operating in the Southeast Bering Sea. Previously, the BSAI crab fisheries operated on a seasonal basis depending on Total Allowable Catch and quotas. As such, NMFS has argued that there is no temporal overlap between right whale foraging in the Bering Sea and crab harvesting. This is no longer a valid argument.

According to the BSAI Final Environmental Impact Statement, the BSAI crab fisheries have decided to adopt a three-pie voluntary cooperative program. As such, “It is anticipated that seasons would be allowed to occur during most of the year …”73. In order to catch crabs, harvesting vessels use gear known in the Pacific as crab pots.

In a 2002 “Determination on a Petition to Revise Critical Habitat for Northern Right Whales in the Pacific,” NMFS discounted the issue of fishing gear entanglement stating:

Pot gear used in the Bering Sea crab fishery is different from the lobster pot gear that has entangled whales on the East coast. Lobster pots are connected using small-diameter,

floating polypropylene line that has a track record of entangling right whales. Bering sea crab gear is different. The pots are much larger, requiring heavier line, and the gear generally does not contain the “entangling” features of lobster gear.” (Federal Register vol. 67 No. 34, 7664).

This statement contradicts views stated by NMFS own experts. Brad Smith, the editor of the Agency Final Determination, emphasized “but they [ship strikes and entanglement threats] ARE present. SEE my original wording.” 74 The confusion and contradictions at NMFS reveals a crucial point: available scientific data indicates a potential threat to right whales from fishing gear entanglement.

NMFS needs to consult the available science on crab pots and entangling fishing gear. Currently, scientists have only individually identified 25 right whales in the North Pacific. So far, none of these right whales have managed to become entangled in crab pot gear. This fact does not disprove the potential threat of crab pots to right whales. Rather, it further demonstrates the rarity of right whales. As such, NMFS should consider comparable scientific research.

In the North Atlantic, right whales have become entangled in fishing gear. The 2000 North Atlantic Stock Assessment Report75 indicated that, between 1995 and 1999, the total estimated mortality and serious injury to right whales due to entanglement in fishing gear was 1.0 right whales per year. Comparable scientific research can even be found in the Bering Sea. Although there are no reports yet of Bowhead whales entangled in fishing gear in the Bering Sea, they have been sighted on a few occasions “with ropes caught in their baleen and with scarring caused by rope entanglement.”76 This type of entanglement does not immediately kill the whale. Rather, the entanglement may weaken or otherwise hinder a right whale so that it is more likely to become vulnerable to various threats.77

It must be noted that the research on Bowhead whales did not rule out entanglement in crab pot gear. Indeed, it is possible that the sighted Bowhead whales had pot line rope caught in their baleen. NMFS should grant the right whale the benefit of the doubt. The possibility of gear entanglement should be reason enough to implement protection and regulations aimed at promoting the future survival of the species.

C. The right whale is protected under International agreement

Under the Endangered Species Act, international agreements or recommendations by State Agencies may constitute sufficient evidence to determine that a species is endangered or threatened. The ESA specifically states in section 50 CFR 424.11(e):

(e) The fact that a species of fish, wildlife, or plant is protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (see part 23 of this

74 Brad Smith’s edits for Mike Payne’s draft Agency Final Determination on Petition, Oct. 18, 2001 (emphasis in original).
75 Waring et al., supra note 23.
76 BSAI Crab Fisheries Final EIS. August, 2004. 251.
77 Waring et al., supra note 23.
title 50) or a similar international agreement on such species, or has been identified as requiring protection from unrestricted commerce by any foreign nation, or to be in danger of extinction or likely to become so within the foreseeable future by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish, wildlife, or plants, may constitute evidence that the species is endangered or threatened. The weight given such evidence will vary depending on the international agreement in question, the criteria pursuant to which the species is eligible for protection under such authorities, and the degree of protection afforded the species. The Secretary shall give consideration to any species protected under such an international agreement, or by any State or foreign nation, to determine whether the species is endangered or threatened.

In 1946, the International Whaling Commission implemented its Convention for the Regulation of Whaling. This international convention prohibits and regulates the whaling activities of 59 member nations. In the case of right whales, the IWC recognizes three species of right whales: *Eubalaena glacialis*, *Eubalaena australis*, and *Eubalaena japonica*. As such, it provides for complete protection based on this three species classification. The actions of IWC, both past and present provide a compelling precedent for NMFS. According to the ESA, NMFS should give weight to “international agreements” such as the IWC convention.

To summarize, the North Pacific right whale should be listed as an endangered species for the following three reasons: 1) scientific research has discovered that *Eubalaena Japonica* is a new species, 2) the species is threatened under all five statutorily defined areas of the ESA, particularly by oil and gas development, ship strikes, and entanglement in fishing gear, and 3) the right whale has already received protection under international agreements which qualify it for listing under the ESA. To insure that right whales in the Pacific are protected during the listing process, NMFS must proceed with this listing proposal in two steps. First, NMFS must publish a proposed and finalized rule to list the North Pacific right whale as a separate species under the ESA. Second, NMFS must publish a proposed and finalized rule to remove the Pacific population of *E. glacialis* from the North Atlantic right whale’s listing determination, which is contingent on *E. japonica* being finalized.

D. Conclusion

This past summer, scientists doubled the tally of known individual right whales. They also sighted three cow-calf pairs during the same research expedition. These sightings demonstrate that there is a strong potential for recovery of the North Pacific right whale population. They also present NMFS with the opportunity to translate this potential for recovery into an actual population recovery. In order to do this, NMFS needs to list the North Pacific right whale as an endangered species.