

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814

3 January 2006

Ms. Kaja Brix
Assistant Regional Administrator
Protected Resources Division, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802

Dear Ms. Brix:

Since 1996 small numbers of highly endangered North Pacific right whales have been sighted in the southeastern Bering Sea and northern Gulf of Alaska as well as off Washington, California, and Hawaii. Based on the relative density of those sightings, which has been greatest in the first two areas, the Center for Biological Diversity petitioned the National Marine Fisheries Service in October 2000 to designate most of the eastern Bering Sea as right whale critical habitat under the Endangered Species Act. The Marine Mammal Commission commented in support of the action on 11 July 2001. On 20 February 2002 the Service published a *Federal Register* notice announcing that it had determined that the action was not warranted at that time. However, in June 2005, a U.S. district court ordered the Service to take action with respect to designating critical habitat for the northern right whale in the North Pacific Ocean no later than 28 October 2005 (*Center for Biological Diversity v. Evans*, Civ. No. 04-04496, N.D. Cal., June 14, 2005) and to have a final rule in place by June 2006.

On 2 November 2005 the Service published a *Federal Register* notice requesting comments on a proposed rule to revise the current critical habitat designation for the northern right whale (*Eubalaena glacialis*) by designating additional areas within the North Pacific Ocean. The two specific areas proposed for designation include one in the Gulf of Alaska and another in the Bering Sea, comprising approximately 36,750 square nautical miles of marine habitat.

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors, has reviewed the proposed rule. Based on that review, the Marine Mammal Commission recommends:

- (1) take into account the habitat needed to promote recovery of the population in its designation of critical habitat for the North Pacific right whale, including areas that may currently be unoccupied by the remnant population;
- (2) include the eastern Aleutian Island passes from Unimak Pass to and including Umnak Pass among the areas designated as critical habitat;
- (3) review the sighting/catch records of North Pacific right whales over the past century and designate as critical habitat those areas where whale concentrations overlap with known areas of

prey concentration or where whale concentrations suggest that areas have served as important feeding grounds.

(4) conduct research needed to assess habitat-use patterns, including habitat used for breeding and calving; stock structure; population abundance, composition, and condition; and risk factors that may impede the recovery of the North Pacific right whale.

The rationale for these recommendations is provided below. Our intent is not to promote designation as critical of all habitat that would be used by a recovered North Pacific right whale population. Right whales are known to occur, or certainly to have occurred historically, in much of the North Pacific Ocean, and a great deal remains to be learned about their movements and habitat-use patterns. In the absence of information about what areas are important to these whales for reproduction, we focus on what are thought to be primary areas of feeding habitat in the Gulf of Alaska and Bering Sea and in the Aleutian Island passes that connect those bodies of water. We believe the available evidence is sufficient to identify certain areas that are essential to the conservation of right whales and that require special management consideration.

Endangered Species Act Standards

The goal of the Endangered Species Act is to prevent the unnatural extinction of species by facilitating their recovery. This goal is evident in the definitions of “conserve,” “conserving,” and “conservation,” which are defined in the Act to mean “to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which measures provided pursuant to this chapter are no longer necessary” (emphasis added). We interpret that point to be when recovery has occurred and, therefore, the adequacy of critical habitat should be judged relative to its capacity to support recovery of the population, rather than merely to maintain it in its endangered or threatened state.

Section 3 of the Act defines critical habitat as “(i) the specific areas within the geographical area occupied by the species, at the time it is listed, ... on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed upon a determination by the Secretary that such areas are essential for the conservation of the species.” Implementing regulations for critical habitat designation (50 C.F.R. § 424.12(b)) require the Service to identify “primary constituent elements”(PCE) of proposed critical habitat. The only PCE the Service identifies in the proposed rule is the presence of “large copepods in areas where right whales are known to feed.” PCEs can also be physical features such as geological formations. Clearly, ocean channels and inter-island passes that right whales and other species use as migratory routes fit within this definition.

Habitat known to be currently in use

The Service’s 2 November 2005 proposal shows areas in the Gulf of Alaska and Bering Sea where right whale sightings have occurred since listing of the species in 1973. Although useful, these

sightings obviously do not represent the full extent of habitat presently used by North Pacific right whales and that is essential to recovery of the population, including habitat with physical or biological features that require special management consideration. In particular, they do not include the eastern Aleutian passes that connect the North Pacific Ocean and the Bering Sea. Although recent sightings do not include animals in these passes, there is no reason to doubt that the whales use them to move between the two bodies of water. The passes are narrow migratory corridors essential to the completion of the whales' annual movement patterns and distribution, and therefore they are physical features essential to recovery.

We believe that these passes may require special management consideration. Unimak Pass, in particular, is the gateway for vessels (fishing, commercial shipping, military, tourism, and scientific) moving into the Bering Sea from the eastern North Pacific. As is evident for the North Atlantic right whale, ship strikes pose a potentially serious risk to North Pacific right whales and that risk will increase as shipping in the region increases and the whale population begins to recover. In addition, commercial fisheries in the vicinity of these passes may pose a serious risk to right whales, particularly if they use longline or pot gear or any gear that involves putting potentially entangling line in the water column. Here, too, experience with the North Atlantic right whale strongly indicates that special management considerations might be required.

Habitat not currently known to be in use but essential for conservation

Designating unoccupied essential habitat also is important. Basing critical habitat solely on the area occupied at the time of listing without consideration of what is needed for recovery undermines recovery efforts and works against the intent of the Act. For example, a population listed at 10 percent of its recovered abundance and using a correspondingly small portion of the habitat needed to sustain a recovered population could, in effect, be put at a disadvantage because it was not listed at, say, 50 percent of its recovered size when it would be using a larger portion of that habitat. Thus, the second element of the critical habitat definition is an explicit recognition that the critical habitat may extend beyond those areas in use at the time of listing and that the determining factor should be what is needed to bring about the recovery of the population.

Because of the scarcity of available sightings of the extant population, it can reasonably be assumed that those sightings do not indicate all the areas currently occupied by the population. Because of the extraordinarily low number of North Pacific right whales, it also can reasonably be assumed that the extant whales do not occupy all of the habitat that would be essential for achieving a recovered population. The question, then, is how to determine the habitat that is essential for recovery but not known to be in use at present.

At least two approaches are possible. One would be to identify areas where the primary constituent elements of right whale habitat are found and to use those as a basis for identifying critical habitat. The other would be to use sighting and catch records as indicators of critical habitat based on the reasonable assumptions that (a) the animals themselves are integrating the available environmental information to choose their preferred habitat and (b) areas used when the population was larger will become increasingly important as the population recovers. The Service's *Federal*

Register notice recognizes both of these approaches but is inconsistent and contradictory in its use of them. In this regard, the notice states that:

- [r]ight whales feed daily during the spring and summer...” (page 66338);
- “[a]vailability of [prey] greatly influences the distribution of the small North Pacific population on their feeding grounds in the Southeastern Bering Sea (SEBS) and Gulf of Alaska (GOA)” (page 66338);
- “...consistent sightings of right whales ... in a specific area in spring and summer over a long period of time is sufficient indication that the area is a feeding area...” (page 66338);
- “...NMFS must rely upon the whales themselves to indicate the location of important feeding areas in the North Pacific” (page 66338);
- “NMFS concludes that ... right whale sightings ... are a suitable proxy for the presence of the PCEs [primary constituent elements] and therefore proposes this area as critical habitat...” (page 66339); and
- “no reason exists today that the right whales that remain alive today inhabit a substantially different range than right whales alive during the time of the Soviet catches” (page 66334).

In spite of these statements, the Service rejects the use of sightings and catch data from the previous century that (1) show areas of concentrated occurrence; (2) suggest relative consistency in habitat use in spite of expected environmental variation over the relatively long periods when the data were collected; and (3) are based on a relatively large number of observations made at a time when the population was larger, thereby providing a more reliable indication of what the distribution of a recovered population would be. Although the areas proposed by the Service include the locations where a large proportion of recent sightings occurred, it is clear that the whales are not always in those areas and therefore are using additional locations for feeding and other critical activities. It is also clear that, as the population recovers, some of the whales will depend on habitat outside the proposed areas and, in the absence of better data, that other habitat can most readily be inferred on the basis of historical records. In essence, the Service’s exclusion of sightings and catches from before 1973 precludes the designation of areas of critical habitat that otherwise are justified by the Service’s own reasoning. The Service does state (page 66339):

“NMFS has used sighting records since the time of listing to make this determination because these records are more recent and are taken to be a more reliable indicator of current distribution of feeding whales than historical sightings, especially given that most of the latter were removed from the population by whaling and are thus no longer extant” (page 66339).

However, this statement is contrary to other parts of the notice and implies that the Service’s aim is to provide protection only for the population as it existed in 1973. Here again, the Service’s proposal does not appear adequate to ensure the conservation of the population, which, by definition, aims at recovery.

The best strategy in this case would be to use a combination of the methods described above (i.e., identification of areas of prey concentration and evaluation of areas of whale concentration on

the feeding grounds). Describing specific areas of prey concentration at any one time is difficult because environmental conditions, primary production, and food web composition and structure vary in ways that we do not fully understand. Nevertheless, studies of productivity in the Bering Sea have revealed some broad-scale patterns. For example, Springer et al. described a “green belt” of productivity in the Bering Sea that extends from the Aleutian Archipelago to the northwest along the shelf break. The waters in this region, particularly in the “horseshoe” region (i.e., the waters north of the Aleutian Archipelago and extending along the southern portion of the shelf break) are known to be particularly productive, as is evident from the distribution of fish stocks, the concentration of fishery catches, and the sighting records for many marine mammals and birds.

The areas of high productivity, particularly in the southern portion of this green belt, are consistent with historical right whale sightings and catches. Records from 1940 to 2005 compiled by the Alaska Fisheries Science Center (attached and available at http://www.fakr.noaa.gov/protected_resources/whales/nright/NPRWbasemap.pdf) reveal the numerous sightings in this region. Similarly, records from 1924 to 1968 compiled by Shelden et al. (2005; figure 5) indicate a concentration of sightings and catches in this region. Some of the same records likely were included in both of these compilations so they are probably not independent. Nonetheless, they suggest consistency between the locations of observations of right whales and the areas of high productivity in the Bering Sea. Although many sightings and catches also have occurred in the region south of Kodiak Island in the Gulf of Alaska, it will not be possible to compare them to productivity patterns until more studies of prey distribution are conducted in that region. Nonetheless, high productivity in this region would be a reasonable expectation, based on historical information. In general, we believe the consistency between areas of prey concentration and sighting/catch records for right whales over the past century is sufficient to identify feeding areas that are likely to be essential to the recovery of the North Pacific right whale. Specific areas should include the southeastern Bering Sea, including the southern portion of the shelf break and the area of high prey and whale concentration to the west of the shelf break (i.e., the area known generally as the “horseshoe”).

Essential Research

The Commission believes that the endangered status of North Pacific right whales and consistent recent observations of a few whales in U.S. waters justify a substantial investment in research to ensure that information is adequate for identifying and implementing protection measures needed to ensure recovery. Accordingly, the Marine Mammal Commission recommended above that the Service conduct, fund, or otherwise facilitate the research needed to promote recovery. That research should include, but not be limited to:

1. assessment of past and current habitat-use patterns and the physical and ecological characteristics of right whale habitat in the Bering Sea, Gulf of Alaska, and other regions of the North Pacific (e.g., Hawaii, Washington, California, and Mexico), including foraging and breeding/calving areas;
2. assessment of stock structure throughout the North Pacific;
3. assessment of population numbers, composition, and condition over time; and

Ms. Kaja Brix
3 January 2006
Page 6

4. assessment of existing evidence and potential risks of interactions with vessels, commercial fisheries, and other factors that pose a threat to right whales.

This research should include collaboration with scientists from other North Pacific countries, including Russia, Japan, and the Republic of Korea, as these countries may have valuable records of right whale distribution and ecology that have not yet been studied and incorporated into our current body of knowledge on this population.

I hope these comments and recommendations are helpful. If you or your staff have questions, please call.

Sincerely,



David Cottingham
Executive Director

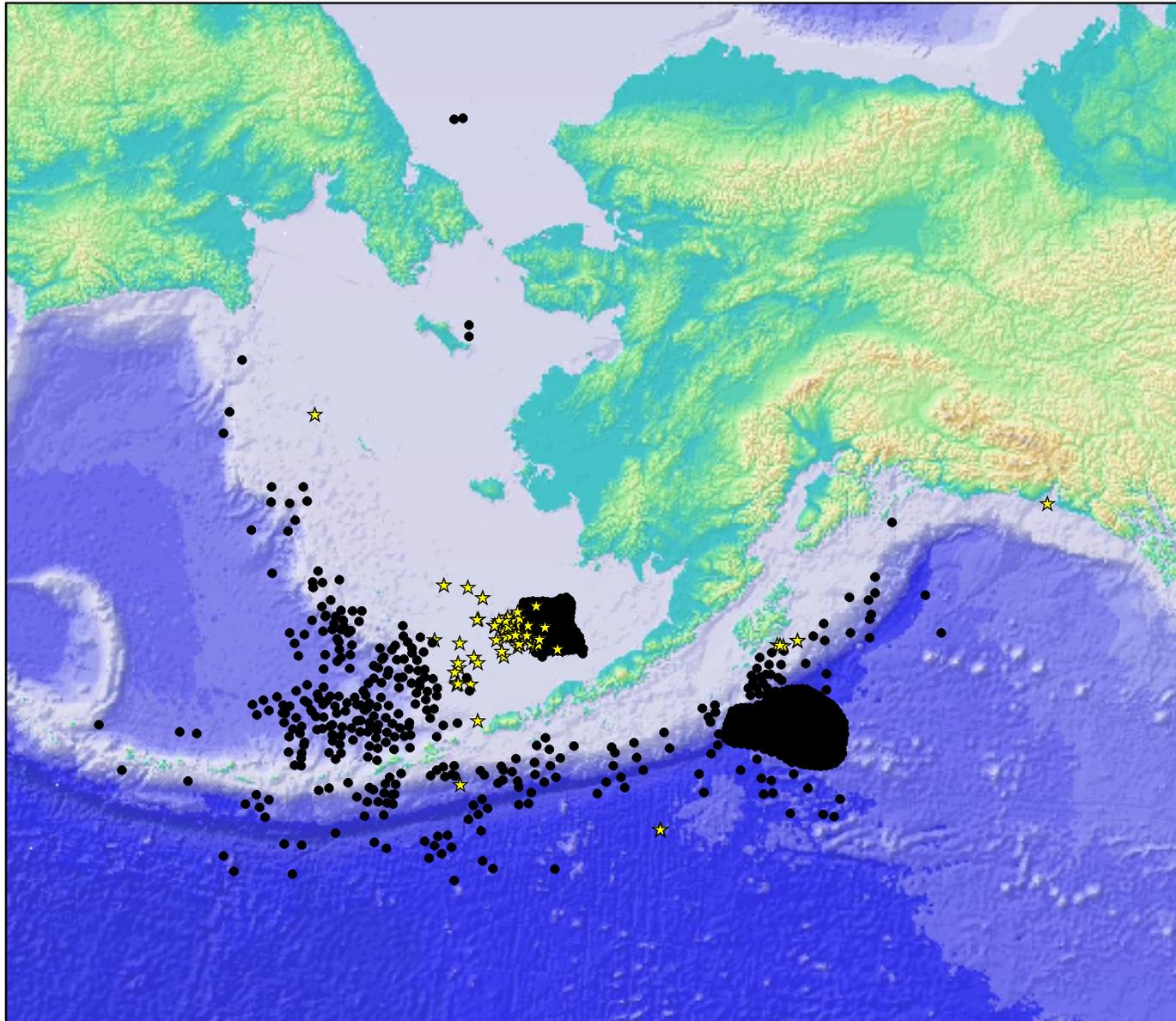
Attachment

References

Shelden, K.W., S.E. Moore, J.M. Waite, P.R. Wade, and D.J. Rugh. 2005. Historic and current habitat use by North Pacific right whales *Eubalaena japonica* in the Bering Sea and Gulf of Alaska. *Mammal Review* 35 (2):129–155.

Springer, A.M., C.P. McRoy, and M.V. Flint. 1996. The Bering Sea Green Belt: Shelf-edge processes and ecosystem production. *Fisheries Oceanography* 5:205–223.

Observations of North Pacific Right Whales in U.S. Waters from 1940 to 2005



Legend

- ★ Observations made following listing under the Endangered Species Act (1973 to present)
- Observations 1941-1967, prior to listing under the Endangered Species Act

Observation data was gathered from scientific studies, historic whaling reports and incidental sightings, compiled in Sheldon, K., S.Moore, J.Waite, P.Wade and D.Rugh. 2005. Historic and current habitat use by North Pacific Right Whales *Eubalaena japonica* in the Bering Sea and Gulf of Alaska. Mammal Review 35:129-155.



Data mapped by NOAA
Fisheries Service, Alaska Region,
Protected Resources Division.
August 2005

