Billing Code: 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[Docket No. 1206013325-3912-03]

RIN 0648-XA983

Endangered and Threatened Wildlife; Notice of 12-Month Finding on a Petition to List the Sperm Whale (Physeter macrocephalus) as an Endangered or Threatened Distinct Population Segment (DPS) in the Gulf of Mexico

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

ACTION: Status review; notice of finding.

SUMMARY: We, NMFS, announce a 12-month finding on a petition to list the sperm whale (Physeter macrocephalus) in the Gulf of Mexico as an endangered or threatened distinct population segment (DPS) under the Endangered Species Act of 1973 as amended (ESA). We conducted a review of the status of this population, as described below. Based on the best available scientific and commercial information, we find that the petitioned action is not warranted.

DATES: The finding announced in this notice was made on [Insert date of publication in the FEDERAL REGISTER].

ADDRESSES: Information used to make this finding is available for public inspection by appointment during normal business hours at NMFS Headquarters, Protected Resources Office, 1315 East-West Highway, Silver Spring, MD 20910. This file includes the information

provided by the public and scientific and commercial information gathered for the status review. The petition and a list of the references we used can also be found at http://www.nmfs.noaa.gov/pr/.htm.

FOR FURTHER INFORMATION CONTACT: Marta Nammack, NMFS, Office of Protected Resources, (301) 427-8469.

SUPPLEMENTARY INFORMATION: On December 9, 2011, we received a petition from WildEarth Guardians to list the sperm whale (Physeter macrocephalus) population in the Gulf of Mexico as an endangered or threatened Distinct Population Segment (DPS) under the Endangered Species Act (ESA); sperm whales are currently listed as a single endangered species throughout their global range (35 FR 8495; June 2, 1970). The petitioner also requested designation of critical habitat concurrent with the listing.

After reviewing the petition, the literature cited in the petition, and other literature and information available in our files, we found that the petition met the requirements of the regulations under 50 CFR 424.14(b)(2) and determined that the petition presented substantial information indicating that the petitioned action may be warranted (78 FR 19176; March 29, 2013). At that time, we commenced a status review of the sperm whale in the Gulf of Mexico and solicited information pertaining to the population. Section 4(b)(3)(B) of the ESA requires that when a petition to revise the List of Endangered and Threatened Wildlife and Plants is found to present substantial scientific and commercial information, we make a finding on whether the petitioned action is (a) not warranted, (b) warranted, or (c) warranted but precluded from listing by other pending proposals of higher priority. This finding is to be made within 12 months of the date the petition was received, and the finding is to be published promptly in the Federal Register.

There are two key tasks associated with conducting an ESA status review. The first is to determine whether the petitioned entity qualifies as one or more species under the ESA. The ESA defines the term "species" to include "any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." If the petitioned entity qualifies as a species, the second task is to conduct an extinction risk assessment to determine whether the species is threatened or endangered. The ESA defines the term "endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range." The term "threatened species" is defined as "any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range." Thus, we interpret an "endangered species" to be one that is presently in danger of extinction. A "threatened species," on the other hand, is not presently in danger of extinction, but is likely to become so in the foreseeable future (that is, at a later time). In other words, the primary statutory difference between a threatened and endangered species is the timing of when a species may be in danger of extinction, either presently (endangered) or in the foreseeable future (threatened).

Species Background

The sperm whale (Linnaeus, 1758) is listed as an endangered species under the ESA. It was first listed under the precursor to the ESA, the Endangered Species Conservation Act of 1969, and remained on the list of threatened and endangered species after the passage of the ESA in 1973 (35 FR 18319; December 2, 1970). Whaling was the main reason for listing the sperm whale. Commercial whaling for this species ended in 1988 with the implementation of a moratorium against whaling by the International Whaling Commission (IWC). While whaling was eliminated by the IWC whaling moratorium, several potential threats remain, as discussed in the sperm whale recovery plan (NMFS, 2010a). Sperm whales are deep and prolonged divers

and use the entire water column, even in very deep areas. Most sperm whales are found in very deep waters (>3,000 m), but they generally feed between 500–1,000 m where most of their prey is found. Sperm whales feed primarily on large- and medium-sized squid, but the list of documented food items is fairly long and diverse, including other cephalopods and medium-and large-sized demersal fish, such as rays, sharks, and many teleosts (Berzin, 1972; Clarke 1977, 1980; Rice, 1989). The diet of large males in some areas, especially in high northern latitudes, is dominated by fish (Rice, 1989). Lockyer (1981) estimated sperm whales consumed about 3.0–3.5 percent of their body weight per day.

Sperm whales are perhaps the most widely distributed mammal species on Earth. The social organization of most mammals is characterized by female philopatry and male dispersal. Groups of females and juveniles are found mainly at low latitudes, while males reach polar waters, returning to tropical and subtropical waters to breed. Sperm whales are organized in groups in which females (some related to each other and some not) travel with their sub-adult offspring. Mature female and immature sperm whales of both sexes are found in more temperate and tropical waters from the equator to around 45ºN throughout the year. Adult males will move extensively, even to polar waters, and then return to tropical and subtropical waters.

Sperm whales mature slowly and can live to ages in excess of 60 years (Rice, 1989). Females usually begin ovulating at 7–13 years of age and usually conceive at about age 9 (Rice, 1989). Maturation in males usually begins in this same age interval, but most individuals do not become fully mature until their twenties. In the North Atlantic Ocean, the peak breeding season for sperm whales occurs during the spring (March/April to June), although some mating activity occurs December to August. In the South Atlantic the peak breeding season is presumed to occur in the austral spring. During mating seasons, prime bulls in their late twenties and older

rove among groups of females. Because females within a group often come into estrus synchronously, the males need not remain with the females for the breeding season to achieve maximal breeding success (Best and Butterworth, 1980) and their association with a group can be as brief as several hours. Gestation lasts well over a year, with credible estimates of the normal duration ranging from 15 months to more than a year and a half. Lactation lasts at least 2 years, and the inter-birth-interval is 4–6 years (Best et al., 1984) for prime-aged females. Female sperm whales rarely become pregnant after the age of 40 (Whitehead, 2003). Two particular aspects of the sperm whale's reproductive biology are relevant to recovery. First, the maximal rate of increase in reproduction is very low, perhaps no more than one or two percent per year. Second, selective killing of large males by modern whaling could have had the residual effect of reducing reproductive rates (Whitehead et al., 1997).

Status Review

Our 90-day finding accepting the petition solicited information from the public and initiated a status review of the sperm whale in the Gulf of Mexico (GOM) to gather any additional information to inform our review of the petitioned action and our application of the DPS policy. We reviewed the best available information, and we conducted a DPS analysis to determine whether the GOM population of the sperm whale qualifies as a DPS under the ESA. Here we review the best available information on physical, physiological, ecological, and behavioral factors to determine whether the GOM population is discrete.

Are Sperm Whales in the Gulf of Mexico Discrete from Other Sperm Whale Populations?

The ESA provides for listing species, subspecies, or DPSs of vertebrate species. When we evaluate a petition to list an entity as threatened or endangered under the ESA, we must first determine whether the petitioned entity qualifies as a species under the ESA. This petition

argues that the Gulf of Mexico sperm whale population meets the requirements for being identified as a DPS and requests we list sperm whales in the Gulf of Mexico as a threatened or endangered DPS.

Our joint NMFS-U.S. Fish and Wildlife Service (USFWS) Policy on Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act (DPS policy) (61 FR 4722; February 7, 1996) identifies two elements that must be considered when identifying a DPS: (1) the discreteness of the population segment in relation to the remainder of the species (or subspecies) to which it belongs; and (2) the significance of the population segment to the species to which it belongs. A population segment of a vertebrate species may be considered discrete if it satisfies either one of the following conditions: (1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation; or (2) it is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the ESA. If a population segment is considered discrete by one or more of the above conditions, its biological and ecological significance will then be considered in light of Congressional guidance (see Senate Report 151, 96th Congress, 1st Session) that the authority to list DPSs be used ‘‘… sparingly’’ while encouraging the conservation of genetic diversity. The DPS policy directs us to consider available scientific evidence of the discrete population segment’s importance to the taxon to which it belongs. This consideration may include, but is not limited to, the following: (1) Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon; (2) evidence that loss of the discrete population segment would result in a significant

gap in the range of a taxon; (3) evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range; or (4) evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

DPS Analysis

To determine if the sperm whale in the GOM meets the DPS criteria, we evaluate the best available information to determine whether sperm whales in the Gulf of Mexico are markedly separated as a consequence of physical, physiological, ecological, or behavioral factors from other populations of the sperm whale.

Genetics - An examination of the best available genetic information reveals that, although there is strong mtDNA evidence of population structuring indicating differences between the GOM population and sperm whales in the northwest Atlantic, this is not coupled with nDNA evidence that would indicate that males from the GOM are genetically different from males in the northwest Atlantic. Physically mature male sperm whales typically range over huge distances on their own (Best, 1979; Rice, 1989; Whitehead, 1993; Whitehead and Weilgart, 2000; Teloni et al., 2008). In contrast to females, males disperse from their natal units at a mean estimated age of 6 years, when they migrate slowly into higher latitudes prior to attaining sexual maturity at 18-21 years (Whitehead and Weilgart, 2000). This is reflected in high variability and a lack of geographical structure in nDNA relative to mtDNA (Lyrholm et al., 1999).

There are statistically significant patterns of mtDNA differentiation between oceans (Engelhaupt, 2004; SWSS, 2008; Engelhaupt et al., 2009; NMFS, 2010a); however, studies

examining nDNA reveal either no significant (Lyrholm et al., 1999) or low (Bond, 1999) degrees of population structuring between oceans. Engelhaupt et al. (2009) suggest that the discrepancy between mtDNA and nDNA differentiation may reflect sex biased dispersal, and male mediated gene flow may connect geographically isolated regions on an oceanic scale. Their analysis of nDNA showed no significant difference between whales sampled in the GOM and those from other areas of the North Atlantic, indicating that mature males move in and out of the GOM. The results of the Engelhaupt et al. (2009) study indicate that population structuring is different for mtDNA compared with population structuring for nDNA.

At best, mtDNA evidence suggests that females are philopatric; however, mtDNA does not alone describe population structure. Because mtDNA is maternally inherited, differences in mtDNA haplotypes between populations do not necessarily mean that the populations are substantially reproductively isolated from each other because they do not provide any information on males. Due to the wide ranging nature of mature male sperm whales, males from one population may breed with females from other populations. We have indicated in other status reviews that mtDNA data may indicate that populations are discrete, but in species where female and male movement patterns differ, nDNA data may indicate that the populations are homogeneous (see e.g., loggerhead sea turtle, 68 FR 53947, September 15, 2003 at 53950-51 and Conant et al., 2009, at 18, 22, 25-28; southern resident killer whale, Krahn et al., 2002, at 23-30). As noted in SWSS (2008), a male sperm whale tagged in 2002 moved into the North Atlantic for more than 2 months, providing the first evidence that the GOM population may not be a stock isolated from the North Atlantic (SWSS, 2008; Waring et al., 2012). Its return to the GOM included an extended stay off the northwest Cuban coast, and it summered in two different regions of the upper GOM and visited the Gulf of Campeche

twice (SWSS, 2008). While some may view this as support for separate stocks in the GOM and the North Atlantic, SWSS (2008) notes that few males were sampled in the GOM. Because the tags were deployed from June to early August, more individuals were tracked during the summer months (SWSS, 2008). Therefore, it is likely that mature males were not in the GOM at this time, as they spend most of their time in colder waters at high latitudes and only visit tropical waters to reproduce (Best 1979; Whitehead and Arnbom 1987; Whitehead 2003, as cited in SWSS (2008)).

The fact that males move in and out of the GOM and interbreed with females from other populations when mature, as evidenced by the homogeneity of the nDNA, indicates that the GOM population is not markedly separated from other populations in the Atlantic Ocean. Engelhaupt et al. (2009) demonstrate that a single, undivided genetic population of sperm whales is found from the GOM to at least northern Europe. As we have summarized here, the best available genetic information indicates that sperm whales in the GOM are not discrete from other sperm whale populations.

Vocalization – We next examined information on codas. Sperm whale social structure is complex, with females, calves, and immature animals of both sexes living in relatively stable social "units" containing on average 11-12 animals that persist for decades (Rendell and Whitehead, 2004). These sperm whale social groups communicate via codas: repeated stereotyped sequences of 3-40 broadband (0-16 kHz) clicks generally heard during periods of socializing (Watkins and Schevill, 1977). Codas are shared among individuals of a social unit and are considered to be primarily for intra-group communication (Weilgart and Whitehead, 1997; Rendell and Whitehead, 2004). These distinctive, short, patterned series of clicks are

associated with social behavior and interactions within social groups (Weilgart and Whitehead, 1993).

Significant differences in vocalization or coda repertoire exist amongst smaller social groups or "units" of sperm whales, and this variation amongst social units or groups is commonplace for sperm whales (Weilgart and Whitehead, 1997; Rendell and Whitehead, 2004). Differences in vocalization are culturally transmitted by the matrilineal line, and there is a difference between geographical sperm whale variation in codas (macrogeographic) and coda "dialects" (microgeographic) (Mundinger, 1982). In a study of sperm whales in the southern Pacific Ocean, Weilgart and Whitehead (1997) found that the sperm whale groups they encountered had distinctive dialects in coda usage based on analyses of interclick intervals (ICIs), the time intervals between clicks in a coda, standardized to total coda length. The group-specific dialects that are found in sperm whales have even been deemed as similar to those which occur in killer whale "vocal clans" (Weilgart and Whitehead, 1997; Rendell and Whitehead, 2003).

Codas and mtDNA have been linked; a study of six sperm whale groups revealed a clear link between mtDNA and coda repertoire as groups with similar mtDNA tended to have similar coda usage dialects (Whitehead et al., 1998). These results indicate codas are transmitted across generations matrilineally. Whitehead et al. (1998) suggested vertical cultural transmission (offspring learn codas from their mothers) as the best explanation for this pattern. This may reflect the mtDNA information presented above suggesting population structure, without consideration of the nDNA. The sperm whale seismic study (SWSS, 2008) cited in the petition found variation in vocalization between the north central GOM and the northwest GOM. Because there is evidence of different types of coda variation (i.e.,

macrogeographic versus microgeographic dialects) within the GOM, communication is passed down from the mother, and adult male sperm whales travel outside the Gulf of Mexico, the communication difference between GOM sperm whales and sperm whales from other populations does not indicate sperm whales in the GOM are "markedly" separate.

Group size – While group size in the GOM is smaller on average than in other oceans, group size is variable throughout their global range. The fact that group sizes are similar to those in the Caribbean and smaller than group sizes in some other oceans (SWSS, 2008) does not show a "marked" separation from other sperm whale group sizes. Christal et al. (1998) note that estimated social unit size in the Galapagos, for example, ranged from 3 to 24 individuals and presented evidence of splitting and merging of units and of transfer of individuals between units. The considerable variation in unit size (perhaps caused by demographic processes) suggests that the benefits of remaining in a social unit usually outweigh selection for some optimal unit size (Christal et al., 1998). Richter et al. (2008) note that it could be argued that differences in ecological conditions in which various sperm whale populations live are reflected in the parameters of their social behavior, such as group size and association rate (Richter et al., 2008). The best available evidence does not indicate that sperm whale group size in the GOM is different from all other populations of the sperm whale.

Whale size – Mean size of sperm whales in the GOM (8.5 m) has been reported to be smaller than that of other sperm whale populations (e.g., 10 m for the Gulf of California population) (SWSS, 2008). While photographic data on known males and sound pulse studies showed that those measured in the GOM were smaller than breeding males elsewhere (Jaquet et al., 2006; Antunes et al., 2006), no mature males have been observed in the GOM. This only confirms that younger male whales that have recently departed from their mothers are smaller

than those at full maturity, which is not noteworthy. Older males, which apparently only pass through the GOM for breeding, are larger than the younger males that have not yet migrated out of the GOM. Further, whale size data from these studies have never been normalized to account for age, so a reliable comparison cannot be made. Finally, Jochens et al. (2008) argue that female/adolescent size differences among sperm whale populations may be the result of nothing more than differences in prey, suggesting that "it is possible that the population studied is smaller because smaller animals may prefer the shallower waters relative to their diving ability and/or availability of suitable prey." Whales may assort themselves by water depths to match their body sizes. Finally, even if GOM whales are a little smaller on average than other populations of sperm whale, such a modest difference is not sufficient to demonstrate that the GOM population is "markedly separated" from other sperm whale populations.

International boundaries - In examining whether a population is discrete based on international governmental boundaries, we are to examine differences in the control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the ESA. Section 4(a)(1)(D), the inadequacy of existing regulatory mechanisms, is one of the five factors we must evaluate to determine whether to list a species. We did not find any information pointing to significant differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms between the population of sperm whales in the GOM and any other particular population of the sperm whale such that the population of the sperm whale in the GOM could be considered discrete from a sperm whale population outside of the GOM. The ESA extends prohibitions against take of endangered species by any person subject to the jurisdiction of the United States within the United States, its territorial waters, or on the high seas. While the

ESA may provide less protection to species under the jurisdiction of other countries, these differences in ESA protections apply for any sperm whale population that spends time in waters of the United States, including sperm whales within the GOM because Mexican waters are also outside of U.S. jurisdiction. Therefore, we cannot rely on differences in ESA protections for sperm whales within the GOM and outside of the GOM as support for the discreteness criterion of the DPS policy.

With regard to other regulatory mechanisms, the United States and Mexico are both parties to the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the sperm whale is listed on Cites Appendix I, which means, aside from exceptional circumstances, commercial trade of products of sperm whales across international borders of member countries is prohibited. However, many other countries within the range of the sperm whale are parties to CITES and, therefore, are subject to the same prohibitions. The United States and Mexico are also members of the International Whaling Commission (IWC) and have therefore adopted the IWC's General Principles for Whalewatching, which include: managing the development of whalewatching to minimize the risk of adverse impacts; designing, maintaining, and operating platforms to minimize the risk of adverse impacts on cetaceans, including disturbance from noise; and allowing the cetaceans to control the nature and duration of interactions. But again, many other countries are members of the IWC, too. We find that regulatory mechanisms with respect to sperm whales in the GOM do not differ significantly from regulatory mechanisms with respect to other sperm whale populations. Therefore, we find that the GOM population is not discrete from other populations of the sperm whale based on differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms.

Relation between "stock" and DPS - NMFS has identified the Northern Gulf of Mexico sperm whale population as a stock for purposes of the Marine Mammal Protection Act (MMPA) http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2012whsp-gmxn.pdf (Waring et al. (2012). However, a stock under the MMPA is not equivalent to a DPS under the ESA. Under the MMPA, a "population stock" or "stock" is "a group of marine mammals of the same species or smaller taxa in a common spatial arrangement that interbreed when mature" (16 U.S.C. 1362(11)). The term "stock" is interpreted consistent with Congressional findings and policy: "...the primary objective of their management [of stocks] should be to maintain the health and stability of the marine ecosystem. Whenever consistent with this primary objective, it should be the goal to obtain an optimum sustainable population keeping in mind the carrying capacity of the habitat." 16. U.S.C. 1361(5). The guidelines for preparing stock assessment reports under the MMPA include guidelines for identifying stocks, and they note that ideally, a stock would be a management unit that identifies a demographically isolated biological population (NMFS, 2005). Demographic isolation means that the population dynamics of the affected group are more a consequence of births and deaths within the group (internal dynamics) rather than immigration or emigration (external dynamics) (NMFS, 2005, http://www.nmfs.noaa.gov/pr/pdfs/sars/gamms2005.pdf). A major goal of identifying stocks under the guidelines is to avoid potential for localized depletion where marine mammals are subject to human-caused mortality and serious injury.

As described above, our joint USFWS-NMFS DPS policy contains different criteria for identifying a population as a DPS. The ESA's purpose of providing for the conservation of species and the ecosystems upon which they depend, along with the Congressional direction to use the provision sparingly, guided the development of the DPS policy. The DPS

policy requires that a population be both discrete from other populations and significant to the taxon to which it belongs. While in most circumstances we evaluate some or all of the same evidence in determining whether a population of marine mammals should be considered a stock under the MMPA or a DPS for purposes of the ESA, demographic independence alone does not suffice to establish a DPS. Therefore, the fact that the GOM population is considered a stock under the MMPA does not qualify the population as a DPS under the ESA.

In the 2006 NMFS Workshop on Conservation Units of Managed Fish, Threatened or Endangered Species, and Marine Mammals (NOAA Tech Memo NMFS-OPR-37, 2008), NMFS elaborated on the distinctions:

"Conservation units under the ESA should be substantially reproductively isolated from one another to be listed under this act. On the other hand, objectives of the MMPA include keeping populations or stocks of animals above their Optimum Sustainable Populations OSP levels. The Magnuson-Stevens Act (MSA) allows for management units that may contain multiple species as members of a complex, but the concept of demographically independent stocks within a species is commonly used to determine the status of fishery resources. Thus, demographic independence is an appropriate basis for identifying conservation units (distinguishing among populations or stocks) for the MSA and MMPA."

"A low amount of exchange among groups for breeding may be sufficient to prevent development of important genetic differences; however, these groups may remain demographically independent from one another. Therefore, it is generally expected that conservation units identified on the basis of reproductive isolation would be larger than those identified on the basis of demographic independence. Thus, discrete groups under the DPS

policy would generally be larger than discrete groups identified for management under the MSA or MMPA. Furthermore, marine mammal biology includes internal fertilization, live birth, parental care, and maintenance of family groups; these features act as barriers to mixing among groups and help produce fine-scale population structure."

While Waring et al. (2012) note that results of multi-disciplinary research conducted in the GOM since 2000 confirm speculation by Schmidly (1981) and indicate that GOM sperm whales constitute a stock that is distinct from other Atlantic Ocean stocks(s) (Mullin et al. 2003; Jaquet 2006; Jochens et al. 2008), it is important to note that Waring et al. (2012) is a stock assessment conducted under the MMPA. A conclusion that northern GOM sperm whales constitute a stock under the MMPA does not demonstrate that the GOM population of sperm whales is a DPS.

Recovery Plan and DPSs - Our Recovery Plan (NMFS, 2010a) and 5-year review of the sperm whale (NMFS, 2009) recognize that there may be potential sperm whale DPSs, but they also state that further information is needed to determine a global DPS structure. Further, the Recovery Plan did not use the criteria in the DPS policy when making its assertion. Neither document concluded that at this time sufficient evidence exists to identify any population as a DPS under the ESA. Further information to support this is not available.

DPS Analysis – Discreteness Conclusion

To summarize, the best available information on genetics, size, behavior, and regulatory mechanisms does not indicate the sperm whales in the GOM are discrete from other populations of the sperm whale. The weight of the evidence does not indicate the GOM population of the sperm whale is "markedly separated" from other populations. While

mtDNA analysis indicates some population structuring, nDNA analysis indicates that successful reproductive-mixing is occurring and that the GOM sperm whales are not reproductively isolated. Average size of the individuals and number in a group may differ throughout the range, but this does not indicate "marked" differences between sperm whales in the GOM and sperm whales in other geographic areas. With regard to behavioral differences, there is evidence that sperm whales in the GOM may use different codas for communication, but this differentiation is also seen within and between smaller social groups. We found that regulatory mechanisms with regard to sperm whales in the GOM do not differ significantly from those with regard to sperm whales in other areas. We believe the best available scientific and commercial information does not show that GOM sperm whales are "markedly" separated from other sperm whales as a consequence of physical, physiological, ecological, or behavioral factors.

Conclusion Regarding DPS

On the basis of the best available information, as described above, we conclude the GOM population is not discrete from other sperm whale populations and therefore does not meet the DPS criteria. Because the GOM sperm whales are not discrete from other sperm whale populations, we do not need to determine whether the GOM population of the sperm whale is significant to the global taxon of sperm whale, per the DPS policy. In any event, even if the GOM population of the sperm whale qualified as a discrete population, it does not meet the significance criterion of the DPS policy. It does not persist in an ecological setting unusual or unique for the taxon, as there are other areas within the range of the sperm whale with similar features to the GOM (e.g., Mediterranean Sea, which is another semi-enclosed, partially land-locked, intercontinental, marginal sea (www.gulfmex.org/about-the-gulf/gulf-of-mexico-facts/).

Loss of the GOM population would not result in a significant gap in the range of the sperm whale, as the range of the GOM population (1,500,000 sq km, www.gulfbase.org/facts.php - visited on September 27, 2013) is only a small portion (0.47 percent) of the global range (317,453,000 sq km, ngdc.noaa.gov/mgg/global/etopo1_ocean_volumes.html). The GOM population is not the only surviving natural occurrence of the sperm whale, as the species occurs in the Pacific, Indian, and Atlantic oceans. Finally, as discussed above, the GOM population does not differ markedly from other populations of the species in its genetic characteristics.

Therefore, the GOM population of the sperm whale does not qualify as a DPS.

Analysis of ESA Section 4(a)(1) Factors

Because the sperm whale population in the GOM does not qualify as a DPS under the ESA, we did not conduct an inquiry of the factors identified in Section 4(a)(1) of the ESA. The sperm whale is currently listed globally as endangered and receiving the full protection of the ESA.

Finding

We find that the GOM population of the sperm whale does not meet the DPS Policy criteria for qualifying as a DPS. Therefore, listing this population as a separate DPS under the ESA is not warranted.

Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Dated: November 6, 2013.

Samuel D. Rauch III,
Deputy Assistant Administrator
for Regulatory Programs,
performing the functions and duties of the
Assistant Administrator for Fisheries
National Marine Fisheries Service.

[FR Doc. 2013-27180 Filed 11/12/2013 at 8:45 am; Publication Date: 11/13/2013]