



**BILLING CODE 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**RIN 0648-XF566**

**Marine Mammal Stock Assessment Reports**

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

**ACTION:** Notice; response to comments.

**SUMMARY:** As required by the Marine Mammal Protection Act (MMPA), NMFS has considered public comments for revisions of the 2017 marine mammal stock assessment reports (SAR). This notice announces the availability of the final 2017 SARs for the 75 stocks that were updated.

**ADDRESSES:** Electronic copies of SARs are available on the Internet as regional compilations at the following address: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region>.

A list of references cited in this notice is available at [www.regulations.gov](http://www.regulations.gov) (search for docket NOAA-NMFS-2017-0065) or upon request.

**FOR FURTHER INFORMATION CONTACT:** Lisa Lierheimer, Office of Protected Resources, 301-427-8402, [Lisa.Lierheimer@noaa.gov](mailto:Lisa.Lierheimer@noaa.gov); Marcia Muto, 206-526-4026, [Marcia.Muto@noaa.gov](mailto:Marcia.Muto@noaa.gov), regarding Alaska regional stock assessments; Elizabeth Josephson, 508-495-2362, [Elizabeth.Josephson@noaa.gov](mailto:Elizabeth.Josephson@noaa.gov), regarding Atlantic, Gulf of

Mexico, and Caribbean regional stock assessments; or Jim Carretta, 858-546-7171, [Jim.Carretta@noaa.gov](mailto:Jim.Carretta@noaa.gov), regarding Pacific regional stock assessments.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

Section 117 of the MMPA (16 U.S.C. 1361 *et seq.*) requires NMFS and the U.S. Fish and Wildlife Service (FWS) to prepare stock assessments for each stock of marine mammals occurring in waters under the jurisdiction of the United States, including the Exclusive Economic Zone (EEZ). These reports must contain information regarding the distribution and abundance of the stock, population growth rates and trends, estimates of annual human-caused mortality and serious injury (M/SI) from all sources, descriptions of the fisheries with which the stock interacts, and the status of the stock. Initial reports were completed in 1995.

The MMPA requires NMFS and FWS to review the SARs at least annually for strategic stocks and stocks for which significant new information is available, and at least once every three years for non-strategic stocks. The term “strategic stock” means a marine mammal stock: (A) for which the level of direct human-caused mortality exceeds the potential biological removal level (PBR) (defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population); (B) which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the Endangered Species Act (ESA) within the foreseeable future; or (C) which is listed as a threatened species or endangered

species under the ESA. NMFS and the FWS are required to revise a SAR if the status of the stock has changed or can be more accurately determined. NMFS, in conjunction with the Alaska, Atlantic, and Pacific independent Scientific Review Groups (SRG), reviewed the status of marine mammal stocks as required and revised reports in the Alaska, Atlantic, and Pacific regions to incorporate new information.

NMFS updated SARs for 2017, and the revised draft reports were made available for public review and comment for 90 days (82 FR 60181, December 19, 2017). NMFS received comments on the draft 2017 SARs and has revised the reports as necessary. This notice announces the availability of the final 2017 reports for the 75 stocks that were updated. These reports are available on NMFS' website (see **ADDRESSES**).

**Technical corrections to the final common bottlenose dolphin Barataria Bay Estuarine System and Mississippi Sound, Lake Borgne, Bay Boudreau SARs**

In the draft 2017 common bottlenose dolphin Barataria Bay Estuarine System (BBES) and Mississippi Sound, Lake Borgne, Bay Boudreau (MS Sound) SARs, we updated the abundance estimates but listed the recovery factor for both of these stocks as 0.5, which is the appropriate factor for stocks with unknown status (Wade and Angliss 1997). We should have updated the recovery factor for each stock to 0.4 because the coefficient of variation (CV) of the shrimp trawl mortality estimates for Louisiana bays, sounds, and estuaries (BSE) stocks (BBES SAR) and Mississippi and Alabama BSE stocks (MS Sound SAR) is greater than 0.8 (Wade and Angliss 1997). Based on the recovery factor of 0.4, we recalculated PBR for both stocks; the PBR decreased from 21 to 17 for the BBES stock and from 29 to 23 for the MS Sound stock. In the final 2017

SARs for these two stocks, we have updated the “Potential Biological Removal” section, as well as the Atlantic SARs Summary Table 1, to reflect the update in recovery factor from 0.5 to 0.4 and adjusted PBR values. These technical corrections do not affect the strategic status for either stock.

### **Comments and Responses**

NMFS received letters containing comments on the draft 2017 SARs from the Marine Mammal Commission; seven non-governmental organizations (Cascadia Research Collective, Center for Biological Diversity (CBD), Hawaii Longline Association, Humane Society Legislative Fund, The Humane Society of the United States, Point Blue Conservation Science, and Whale and Dolphin Conservation); and three individuals. Responses to substantive comments are below; comments on actions not related to the SARs are not included below. Comments suggesting editorial or minor clarifying changes were incorporated in the reports, but they are not included in the summary of comments and responses. In some cases, NMFS’ responses state that comments would be considered or incorporated in future revisions of the SARs rather than being incorporated into the final 2017 SARs.

#### *Comments on National Issues*

*Comment 1:* The Commission comments that the SARs are a valuable reference to scientists and managers and the parameters in the summary tables for each region are a vital resource for issues involving multiple stocks, or when managing at regional or national levels. The Commission notes the value of the tables would be improved if there were more consistency among regions in the types of information presented and how it is

presented. The Commission recommends that NMFS convene a panel, including SAR authors from all three regions, to identify the key information to be included, decide how to present that information in a consistent manner in the summary tables for all regions, and facilitate the implementation of these changes for the final 2018 SARs. The Commission notes they would be interested in participating in the panel discussions.

*Response:* We acknowledge and appreciate the Commission's suggestion, and agree with the Commission that consistency among the regions, particularly the information included in the summary tables, is important. We will look into convening a panel to address how the information we present in the summary tables for each region could be more consistent across the regions and would welcome the Commission's participation in the panel discussions. However, due to timing constraints for the publication of the draft and final 2018 SARs and other priorities, we cannot commit to setting up a panel and incorporating any recommended changes in time to include in the final 2018 SARs. We will strive to have revised summary tables included in the draft 2019 SARs.

*Comment 2:* The Humane Society of the United States, Humane Society Legislative Fund, and Whale and Dolphin Conservation (the Organizations) note that NMFS' late release of the draft 2017 SARs led to a situation where the draft 2018 SARs were drafted and reviewed by the SRGs prior to the finalization of the 2017 reports. The Organizations argue that this overlap in timing of the SARs did not allow the agency an opportunity to meaningfully consider public comments on the draft 2017 SARs before developing the 2018 reports. The Organizations argue that NMFS has failed to make its

draft stock assessments “based on best scientific information available” and has repeatedly failed to meaningfully consider the advice of SRGs and the best available science when publishing its final stock assessments. The Organizations suggest that in order to properly consider public comment, SRG input, and best available science, NMFS should follow the following timeline each year: NMFS sends the draft SARs for the current year to the SRGs early in the year; the SRGs meet shortly after to discuss the drafts; the draft SARs are open for public comment; NMFS publishes the final SARs for the current year by the end of the year; NMFS sends the draft SARs for next year to the SRGs early the next year.

*Response:* We acknowledge and agree with this comment regarding the importance of following the SAR process timeline so the current year’s draft SARs do not overlap with the final SARs from the previous year. Unfortunately, the publication of the draft 2017 SARs was delayed until the end of the year. This was an anomaly, and we are actively working to publish the 2018 draft SARs in order to have the 2018 SARs finalized, with submitted public and SRG comments considered, by the end of the year (before the SRGs meet in early 2019 to review the draft 2019 SARs).

NMFS respectfully disagrees with the Organizations’ statement that we do not meaningfully consider the comments we receive from the public or the recommendations made by the SRGs. We carefully consider and respond to all substantial comments we receive from the public and the SRGs on the draft SARs and incorporate any revisions into the final SARs. In the event that a report changes substantively as a result of public

comment after the SRG has reviewed the next cycle's draft reports, we would provide the SRGs an opportunity to review such changes.

*Comment 3:* The Hawaii Longline Association (HLA) continues to assert that the SARs are not based upon the best available scientific information because they are based upon data that are at least two years old—even when new, relevant data are otherwise available. NMFS has yet to provide a credible justification for continuing the present two-year delay in the use of information. HLA maintains that the MMPA's requirement that the SARs be based on the "best scientific information available" is not being met as the SARs do not incorporate the most recent marine mammal interaction information that has been reported by observers and for which the agency has made a serious or non-serious injury determination. HLA notes that for marine mammal interaction purposes, those data are the best available, and yet NMFS does not report it.

*Response:* As noted in previous years, the marine mammal SARs are based upon the best available scientific information, and NMFS strives to update the SARs with as timely data as possible. In order to develop annual mortality and serious injury estimates, we do our best to ensure all records are accurately accounted for in that year. In some cases, this is contingent on such things as bycatch analysis, data entry, and assessment of available data to make determinations of severity of injury, confirmation of species based on morphological and/or molecular samples collected, etc. Additionally, the SARs incorporate injury determinations that have been assessed pursuant to the NMFS 2012 Policy and Procedure for Distinguishing Serious from Non-Serious Injury of Marine Mammals (NMFS 2012), which requires several phases of review by the SRGs.

Reporting on incomplete annual mortality and serious injury estimates could result in underestimating actual levels. The MMPA requires us to report mean annual mortality and serious injury estimates, and we ensure that we are accounting for all available data before we summarize those data. With respect to abundance, in some cases we provide census rather than abundance estimates, and the accounting process to obtain the minimum number alive requires two years of sightings to get a stable count, after which the data are analyzed and entered into the SAR in the third year. All animals are not seen every year; waiting two years assures that greater than 90 percent of the animals still alive will be included in the count. As a result of the review and revision process, data used for these determinations typically lag two years behind the year of the SAR.

*Comments on Alaska Issues*

*Comment 4:* The Commission notes that information on subsistence hunting and harvest is becoming increasingly important in light of the pace of changes occurring in the Arctic and sub-Arctic. Over the past several years, the Commission has repeatedly recommended that NMFS improve its monitoring and reporting of subsistence hunting and harvest in collaboration with its co-management partners. The Commission appreciates the updates made by NMFS to the SARs in response to these recommendations and encourages NMFS to continue to provide updated information whenever it becomes available, even if it pertains only to a limited number of villages or a subset of years.

The Commission states that tracking the numbers of marine mammals successfully hunted as well as the numbers struck and lost, is critical to the management

of harvested stocks. The Commission noted that the struck and lost data in the U.S. subsistence harvest information for four stocks of beluga whales in the draft 2017 SARs was absent, presumably due to “inconsistencies in reporting.” The Commission encourages the inclusion of all available data, with any uncertainties or needed explanations about the values noted in the SAR, and recommends that NMFS include all available data in the SARs and clearly delineate landings, struck and lost, and total numbers harvested for each beluga whale stock. In addition, the Commission recommends that NMFS work with the Alaska Beluga Whale Committee to improve the completeness of and consistency in reporting harvest data, with a focus on struck and lost information for these stocks.

*Response:* We are actively working to improve reporting of struck and lost animals associated with beluga whale subsistence harvests. NMFS works closely with the Alaska Beluga Whale Committee, and there is consensus that collecting information on struck and lost animals, along with the numbers of harvested beluga whales, is important to document. We will continue to coordinate with the Alaska Beluga Whale Committee to improve this reporting so we can include these data in future SARs.

*Comment 5:* The Commission referenced their previous comments on draft SARs for the Southeast Alaska (SEAK) stock of harbor porpoise and noted that the harbor porpoise abundance estimates were calculated using an assumption that  $g(0)$  (the probability of detection on the trackline) was 1.0, which they stated is almost certainly not adequate. They noted the agency had responded that preliminary data had been collected on  $g(0)$  and recommended that this information should be used in lieu of an

assumption of 1.0; if this is not possible, the Commission recommended that NMFS choose a value from a study, or studies, that most closely matches the SEAK population and survey in terms of factors that most significantly influence  $g(0)$ .

*Response:* The Alaska Fisheries Science Center's (AFSC) Marine Mammal Laboratory attempted to conduct an experiment to estimate  $g(0)$  during their 2012 vessel survey of harbor porpoise in Southeast Alaska. Unfortunately, the analysis of the preliminary data indicated that the sample size from the survey was insufficient to compute  $g(0)$ . In the absence of a  $g(0)$  specific to surveys of Southeast Alaska harbor porpoise, the AFSC will select an appropriate value of  $g(0)$  from similar surveys of other harbor porpoise populations to compute new abundance estimates from the 2010-2012 data for the inland waters of Southeast Alaska and for the northern and southern regions of the inland waters. After review by the Alaska Scientific Review Group, we will include these new estimates (and corresponding values for  $N_{\text{MIN}}$  and PBR) in the draft 2019 Southeast Alaska harbor porpoise SAR.

*Comment 6:* The Commission notes that for several years, NMFS has been reporting an M/SI estimate for the SEAK population of harbor porpoises based on data obtained by fisheries observers from the Yakutat salmon set gillnet fishery in 2007 and 2008, and from the SE Alaska salmon drift gillnet fishery in 2012 and 2013 (Districts 6, 7 and 8, only). That M/SI estimate, of 34 porpoises per year, is considered to be a minimum because observations did not cover all the gillnet fisheries with the potential to take SEAK harbor porpoises. In addition, the estimate is imprecise (aggregate CV = 0.77)

because of the very low observer coverage rates on which it is based (5.3 to 7.6 percent per year).

Prior to 2017, because of the substantial uncertainty in M/SI estimates, NMFS classified the SEAK harbor porpoise stock as “strategic” under the MMPA. In the draft 2017 SAR, NMFS proposed classifying the stock as “strategic” in light of the large difference between the estimated M/SI and the calculated PBR. Because of the bias in PBR associated with the  $g(0)$  estimate described above, the problem could be less severe than it appears or, because of the incomplete observer coverage, it could be worse. Additionally, knowledge of other harbor porpoise populations and preliminary research results presented at the 2018 Alaska SRG meeting suggest that it is quite possible that what currently is delineated as the SEAK harbor porpoise stock in fact consists of two or more stocks. Until the stock structure, and the PBR and M/SI for each stock, are known with more certainty, the magnitude of the threat posed by gillnet fishing will not be fully apparent. In any case, applying the best available science and taking into account the uncertainty in the assessment, it is most likely that the level of take of SEAK harbor porpoises by gillnet fisheries is unsustainable.

*Response:* We acknowledge the Commission’s comment and agree that we cannot fully understand the magnitude of the threat until we acquire more information on stock structure, M/SI, and PBR. NMFS will continue to pursue avenues to better understand these parameters.

*Comment 7:* The Commission states that the uncertainty of the seriousness of the Southeast Alaska harbor porpoise bycatch problem centers on three factors: 1) statistical

uncertainty in the bycatch rate, 2) bias in the value of PBR, and 3) uncertainty regarding stock structure. To address these issues, the Commission recommends that NMFS: 1) provide funding and work with the State of Alaska to increase observer coverage throughout all gillnet fisheries in SEAK to a level that will produce a bycatch estimate with a CV less than 0.3; 2) improve the accuracy of the abundance estimate by using the best available estimate of  $g(0)$  for this population or an appropriately selected estimate from a similar population; and 3) continue to give high priority to funding and conducting innovative eDNA investigations of SEAK harbor porpoise stock structure by the Alaska Fisheries Science Center.

*Response:* NMFS agrees with the Commission's recommendations. 1) While we recognize the need for more current observer coverage of State-managed fisheries, we do not currently have the funds necessary for the Alaska Marine Mammal Observer Program or a similar program that could provide these insights into marine mammal M/SI associated with these fisheries; 2) the AFSC will select an appropriate value of  $g(0)$  from similar surveys of other harbor porpoise populations to improve the accuracy of the abundance estimates for harbor porpoise in the inland waters of Southeast Alaska; and 3) NMFS agrees that funding research on eDNA investigations of Southeast Alaska harbor porpoise stock structure is a high priority and hopes to support this work at some level in FY18.

#### *Comments on Atlantic Issues*

*Comment 8:* The Commission notes that in the Gulf of Mexico Bryde's Whale SAR, the Stock Definition section was revised to include information on acoustic

detections in addition to visual sightings, but it did not include citations for the acoustic detections. Širović *et al.* (2013), Rice *et al.* (2014), and possibly Soldevilla *et al.* (2017) are three recent studies that reported on acoustic detections of Bryde's whales. The Commission recommends that NMFS include the source documents for acoustic detections of Bryde's whales in the Gulf of Mexico and update the map and caption for Figure 1 in the SAR accordingly.

*Response:* NMFS has added the additional citations regarding acoustic detections of Bryde's whales to the Gulf of Mexico Bryde's Whale SAR. We have not updated the map with locations of acoustic detections (deployment locations for Marine Autonomous Recording Units and sonobuoys that recorded whale vocalizations) because this information would not alter what we know about Bryde's whale spatial distribution at this time.

*Comment 9:* The Commission points out that the Habitat Issues section of the Gulf of Mexico Bryde's Whale SAR states that the estimated mortality of Bryde's whales from the Deepwater Horizon oil spill was 3.8 whales between 2011 and 2015, based on population modeling. The Commission recommends that NMFS report the estimate of oil spill-caused mortality of 3.8 whales in the Human-Caused Mortality and Serious Injury section of the Bryde's whale SAR to clarify how NMFS derived an annual mean mortality of 0.7 whales per year for the period 2011-2015, based solely on the reported 22 percent decline in abundance as a result of the oil spill. The Commission also recommends that NMFS add a statement to the Current Population Trend section to

reflect the projected 22 percent decline in population size resulting from the spill, as was done for the Baratavia Bay bottlenose dolphin stock.

*Response:* We have taken the Commission’s recommendation and expanded the Other Mortality text within the Annual Human-Caused Mortality and Serious Injury section to clarify that the 0.8 (corrected from 0.7) annual mean mortality is derived from the mortality estimate of 3.8 whales for the period 2011–2015 due to the *Deepwater Horizon* oil spill. However, we have not made any further edits to the Current Population Trend section as this section already makes a statement regarding the 22 percent decline in population size.

*Comment 10:* One commenter pointed out that North Atlantic right whales and Gulf of Maine Humpback whales have undergone “significant mortality events” in the past year(s) which do not appear to be included in the M/SI estimates in the 2017 SARs.

*Response:* See response to Comment 3. The 2017 SAR covers data from 2011-2015. Mortality events in 2016 will first appear in the 2018 SARs, and those from 2017 will appear in the 2019 SARs. We will make an exception in the North Atlantic right whale 2018 SAR and include the unusual number of events in 2017 in the text, but these events will not be included in the table or in estimates of mortality until the 2019 SAR.

*Comment 11:* One commenter suggested inclusion of data on the shifting baseline in the marine environment and habitat factors in the SARs for North Atlantic right whale and Gulf of Maine humpback whales, analogous to the Essential Fish Habitat component for fisheries management used under the Magnuson-Stevens Sustainable Fisheries Act. This type of data could provide insights on changes in distribution/abundance in

space/time. The shifting baseline phenomenon from increased human usage and environmental changes requires some type of dynamic component to the SAR models which would allow confidence intervals for the abundance and M/SI values.

*Response:* NMFS thanks the commenter for raising concerns about the shifting baseline phenomenon and the importance of including habitat factors and note that we are taking these issues into consideration in our modeling approaches. For example, we are currently working on seasonal habitat models for all cetaceans that may be useful in tracking humpback, fin and sei whale area use patterns because they are based on malleable oceanographic features.

#### *Comments on Pacific Reports*

*Comment 12:* The Commission notes that NMFS has reported a substantial recent increase in the number of entanglements of humpback and blue whales on the West Coast. Prior to 2015, no entanglements of blue whales had been reported, but 12 blue whale entanglements were confirmed between 2015 and 2017. From 1982 to 2013, the number of confirmed West Coast entanglements of humpback whales averaged 2.1 animals per year. The Commission stresses that the substantial number of entanglements of humpback whales that have occurred recently on the West Coast is a matter of concern and may reflect a problem that has gone undetected for much longer.

The Commission points out that with the addition of M/SI from other causes (*e.g.*, entanglements in other gear types and ship strikes), the average confirmed M/SI over 2011-2015 was 9.2 whales per year, which is very close to the PBR of 11 whales for this stock. Considering undetected entanglements, the average M/SI of humpback whales

almost certainly was greater than PBR for this period. The uncertainty associated with undetected M/SI is compounded by undetected ship strikes. Two recent publications (Rockwood *et al.*, 2017 and Nichol *et al.*, 2017) assessing large-whale ship-strike risk on the West Coast were not cited in the draft 2017 Pacific SARs.

The MMPA requires SARs for strategic stocks be reviewed at least annually and updated when necessary, as in the case of a significant increase in M/SI. Given recent increases in entanglements and in M/SI, the Commission notes the delay in reviewing these two stocks is unacceptable and recommends that NMFS either incorporate the best available science into the 2017 SARs or prepare draft 2018 SARs for the West Coast humpback and blue whale stocks, to be reviewed intersessionally by the Pacific SRG, so that they can be included in the final 2018 SARs.

*Response:* We acknowledge and appreciate the Commission's concerns. The publication of the Rockwood *et al.* (2017) vessel strike estimates occurred after the draft 2017 SARs had been submitted for agency clearance. We have updated the final 2017 SARs to note the availability of these new estimates, and we will incorporate the results of those vessel strike estimates into the draft 2018 SARs for both humpback and blue whales.

*Comment 13:* Point Blue and Cascadia Research suggest that NMFS incorporate the results from their recent publication (Rockwood *et al.*, 2017) on the assessment of mortality from ship strikes for both blue and humpback whales into the 2017 SARs. This publication uses a new approach to estimate one of the key parameters regarding ship strike mortality, the underreporting rate, and shows that based on this new analysis (that

is consistent with other data on recovery rates) ship strike mortality is being severely under estimated. They note the SARs have acknowledged that documented cases of ship strikes are certain to be underestimates of the true number of deaths, and assert that their research provides a metric for how many ship strike deaths actually occur relative to the number documented. Rockwood *et al.* (2017) reports a best conservative estimate of 18 blue and 22 humpback whale deaths per 6-month season. Based on these predictions and the average annual strike reports from 2006-2016 (1.0 for blue and 1.4 for humpback whale), they calculated that 95 percent of blue whale and 94 percent of humpback whale strike deaths go undocumented. Given the uncertainty in accounting for whale collision avoidance, they also calculated strike mortality in the case of no avoidance, producing estimates of 40 blue and 48 humpback whale deaths. In addition, Point Blue notes that the lack of detected blue whale strike deaths from 2011-2015 results in an assumption of zero strike mortality and a determination that the current level of serious injury and mortality is less than 10 percent of PBR. They stress that the Rockwood *et al.* (2017) results should be included in the 2017 SAR since it provides evidence that blue whale ship strike mortality is almost certainly ongoing and well above zero.

*Response:* See response to Comment 12.

*Comment 14:* Cascadia Research notes the CA/OR/WA humpback whale SAR does not include that in addition to the underestimated ship strike mortality, fishery mortality is also being dramatically underestimated based on information available at the time of the draft document that would certainly put this overall stock well above PBR. Entanglement mortality of humpback whales off California went through a dramatic

increase starting in 2015 and continuing through 2016 and 2017. Fishery mortality in the draft SAR is based on a 5-year average through 2015 so only includes one of these three years of elevated mortality in the 5-year average. Cascadia Research suggests the SAR should mention this increased mortality known for those added years and that new calculations conducted in a similar fashion with the known 2016 or 2017 entanglements would have put the 5-year average above the PBR. Further, like ship strike mortality, observed entanglement rates dramatically underestimate true mortality and no correction for this underreporting is made in the SAR. The concerns above that would result in mortality exceeding PBR do not include this under-reporting and compound the downward bias to how this is represented in the SAR.

*Response:* See response to Comment 3. The review cycle for the draft 2017 SARs results in data through 2015 being available for incorporation into the draft reports. Entanglement data through 2016 will be incorporated into the draft 2018 SARs for blue and humpback whales.

*Comment 15:* Cascadia Research notes that the humpback whale SAR may give the mistaken impression that the new status of humpback whales under the ESA may change how the PBR's are calculated and alter the mortality exceeding PBR. However, they suggest that as the small endangered Central America humpback whale DPS is made up almost entirely of whales that feed off the California coast, the observed mortality will exceed PBR in future years due to the California entanglements regardless of how the new calculations are made.

*Response:* As described in our Federal Register notice requesting comments on the Draft 2017 Marine Mammal Stock Assessment Reports (82 FR 60181, December 19, 2017), NMFS is currently in the process of reviewing stock structure under the MMPA for all humpback whales in U.S. waters, following the change in ESA listing for the species in 2016, to determine whether we can align the stocks with the DPSs under the ESA. The most current SAR does not delineate a Central America DPS of humpback whales as a stock under the MMPA. Until such time that the humpback whale stock structure under the MMPA with respect to the ESA listing has been completed, we are retaining the current stock delineations and it is premature to hypothesize calculations of PBR in future years. Any changes in stock delineation or MMPA section 117 elements (such as PBR or strategic status) will be reflected in future stock assessment reports.

*Comment 16:* CBD comments that NMFS is required to review and incorporate new scientific information in the stock assessments and revise the assessment for strategic stocks, such as the humpback whale, at least annually. While NMFS began the process to examine the stock structure in the spring of 2016, including considering revising the stock assessment to incorporate information about the breeding population, it has not finalized its analysis. CBD stresses that NMFS should not further delay publishing a final revision to the humpback whale stock assessment report in accordance with the best available science to reflect the distinct population segments off the U.S. West Coast. They note the practical implication of the delay is that ship strikes and fisheries continue without adequate mitigation, including recategorizing West Coast pot and trap fisheries, which present the largest known fisheries threat to humpback whales, as

“Category I.” CBD asserts that assessing PBR at the level of the distinct population segment (DPS) is more informative for determining the population impact of the effect of ship strikes on humpback whales.

*Response:* We agree that revising the stock structure for humpback whales is a high priority; however, the process of reviewing stock structure under the MMPA has taken longer than anticipated. See response to Comment 15 above.

*Comment 17:* CBD comments that humpback whale stocks on the West Coast should correspond to the distinct population segments (as listed under the Endangered Species Act in 2016) and the Mexico and Central America DPSs should not be considered in one stock. They assert that to protect the precariously low abundance of Central America humpback whales, the PBR for whales off California, Oregon and Washington should be based on the abundance of the Central America DPS (a PBR level of 0.8), and all injury and mortality of humpback whales that occurs off California should be assigned to the Central America DPS. CBD is concerned that the delay in action jeopardizes the future of humpback whales in the Central America distinct population segment and recommends that NMFS revise the draft stock assessment to show that at a maximum, the smallest stock of humpback whales on the West Coast has no more than 411 individuals.

*Response:* As described in our response to Comment 15 above, we are in the process of reviewing the MMPA humpback whale stock delineations; until such time that the humpback whale stock structure under the MMPA with respect to the ESA listing has been completed, we are treating existing MMPA stocks that fully or partially coincide

with a listed DPS as depleted, and stocks that do not fully or partially coincide with a listed DPS as not depleted for management purposes. Therefore, in the interim, we will continue to treat the California/Oregon/Washington stock as endangered and depleted. Currently, there is no Central America DPS stock of marine mammals delineated under the MMPA.

*Comment 18:* CBD requests that the final stock assessment report for Southern Resident Killer whales accurately reflects the recent decline and alarmingly low population. The death of the two-year-old male orca known as “J52” was confirmed in September 2017 by the Center for Whale Research, which reported malnutrition as the likely cause. The population of critically endangered Southern Resident killer whales, which makes its home in Puget Sound and migrates along the West Coast, dipped from 83 in 2016 to only 76 by the end of 2017. This change represents the biggest decline in population from year-to-year ever recorded. CBD suggests that especially in light of the decline, NMFS should update the draft SARs to ensure it contains accurate and timely information.

*Response:* NMFS drafted the 2017 SAR before the end-of-year 2017 population size estimates were available. We will include new estimates in the draft 2018 SAR for southern resident killer whales.

*Comment 19:* The HLA recognizes that the false killer whale draft 2017 SAR appropriately calculates separate M/SI rates for only the years 2013 through 2015, so that the fisheries, as currently managed, can be more accurately evaluated against the relevant PBRs. However, HLA reiterates that NMFS should eliminate the five-year look-back

period and report only data generated after the False Killer Whale Take Reduction Plan (FKWTRP) regulations became effective, and the data prior to 2013 should no longer be used because it is no longer part of the best available scientific information.

HLA suggests that, at a minimum, NMFS should not continue to use pre-2013 data for the Main Hawaiian Islands Insular FKW Stock (Insular Stock) and asserts that the TRP has resulted in decreased interactions with the Insular Stock because (i) the TRP regulations closed the fishery to almost all of the Insular Stock's range, (ii) effort in the Insular Stock's range has drastically reduced to almost zero as a consequence, and (iii) the fishery has had zero interactions with the Insular Stock since 2013. They stress that this is the situation contemplated by the Guidelines for Assessing Marine Mammal Stocks (GAMMS), which recommends "if within the last five years the fishery has changed (*e.g.*, fishing effort or the mortality rate per unit of fishing effort has changed), it would be more appropriate to use only the most recent relevant data to most accurately reflect the current level of annual mortality." HLA states that if NMFS continues to regulate the deep-set fishery as if it has interactions with the insular stock, it will undermine any TRT discussions regarding the Insular Stock and HLA may also be forced to reconsider its position on the Insular Stock closure.

*Response:* NMFS has responded to similar versions of this comment previously. As noted in prior responses, if there have been significant changes in fishery operations that are expected to affect incidental mortality rates, such as the 2013 implementation of the FKWTRP, the GAMMS (NMFS 2016) recommend using only the years since regulations were implemented. The SAR contains information preceeding and following

the FKWTRP, 2008-2012 and 2013-2015 respectively, and reports M/SI for these two time periods as well as the most recent 5-year average. Both the 3 year post-TRP average take rate, as well as the 5-year average that spans the period before and after the TRP, indicate the pelagic stock fishery take is below PBR; and, therefore, the stock is not considered strategic. NMFS continues to report the 5-year average in the Status of Stock section for the pelagic stock because various assessments of FKWTRP effectiveness note that neither overall take rate nor the rate of non-serious injury for the pelagic stock are significantly reduced through the implementation of the FKWTRP. NMFS does agree with HLA that the expanded longline exclusion area implemented under the FKWTRP offers near complete protection to this stock from interactions with the longline fishery, and as such has modified the Status of Stock section for this stock to reflect this change.

*Comment 20:* The HLA notes that for a decade (until this year) NMFS has reported a M/SI rate for the deep-set fishery that exceeds PBR for the Hawaii pelagic false killer whale stock (“pelagic stock”). However, the best available information suggests that the number of false killer whales in the Hawaii EEZ has not declined during the same time that the supposedly unsustainable M/SI rate was occurring. The HLA disagrees with the M/SI levels reported in the draft SAR and with NMFS’ conclusion that the vast majority of all fishery interactions with the pelagic stock cause injuries that “will likely result in mortality.” If that were the case, then after a decade or more of allegedly unsustainable levels of take, there would be some evidence of a declining pelagic stock abundance. No such evidence exists. The HLA recommends that the draft SAR expressly

recognize this discrepancy, and NMFS should revisit the manner in which it determines M/SI for false killer whale interactions.

*Response:* This comment has been addressed previously (see 78 FR 19446, April 1, 2013, comments 45 and 51; 79 FR 49053, August 18, 2014, comment 26; 80 FR 50599, August 20, 2015, comment 34; 81 FR June 14, 2016, comment 44; and 82 FR June 27, 2017, comment 44). The comment contends that the stock abundance has not declined in over a decade and attributes this persistence of false killer whales despite high levels of fishery mortality to NMFS' improper assessment of the severity of injuries resulting from fisheries interactions, improper assessment of population abundance and trend, or both. Assessment of injury severity under NMFS' 2012 serious injury policy (NMFS 2012) has been discussed in numerous previous comment responses and is based on the best available science on whether a cetacean is likely to survive a particular type of injury. Further study of false killer whales would certainly better inform the assigned outcomes; but, until better data become available, the standard established in the NMFS 2012 policy on distinguishing serious from non-serious injuries will stand. Further, assessments of pelagic false killer whale population trend are inappropriate for several reasons: 1) the entire stock range is unknown, but certainly extends beyond the Hawaii EEZ, such that the available abundance estimates do not reflect true population size; 2) there have been only two surveys of the entire Hawaii EEZ, an insufficient number to appropriately assess trend, shifts in distribution, or any examination of false killer whale population health; and 3) the available survey data were collected with different protocols for assessing false killer whale group size, a factor that will significantly impact the

resulting abundance estimates. A robust assessment of population trend will require additional data and inclusion of environmental variables that influence false killer whale distribution and the proportion of the population represented within the survey area during each survey period.

*Comment 21:* The HLA notes that the draft false killer whale SAR updates the Insular Stock population estimate to 167 based upon an unpublished paper by Bradford *et al.*, which concludes that the population size of the Insular Stock of false killer whales in certain study areas has consistently ranged between 144 and 187 animals over a 16-year period. However, in reporting 167 as the population size for the Insular Stock, the Draft SAR states that the Bradford *et al.* annual estimate “represents only the animals present in the study area within that year.” HLA suggests that, if the reported 2015 abundance estimate of 167 applies only to a study area that is smaller than the range of the Insular Stock of false killer whales, then the actual abundance of the entire Insular Stock must be some amount *higher* than 167. HLA states that they are unable to sufficiently comment on this issue because the Bradford *et al.* paper is unpublished and not available for public review.

*Response:* NMFS notes that although the abundance estimates provided in Bradford *et al.* are limited to the number of animals in the survey area in each survey year, they are still the best available estimates of population size. The new estimates account for many sources of potential bias, and although we expect that limiting estimates to the surveyed area for a given year does likely result in an under estimation of abundance in years when the surveyed area is smaller than the stock area, we do not have

sufficient information to correct annual estimates for the extent of the survey area.

NMFS feels the use of estimates derived from the best available data spanning 15 years of surveys is far better than use of catalog size, the previous metric for the minimum population estimate ( $N_{min}$ ) in the Main Hawaiian Islands (MHI) insular false killer whale SAR. Further, the  $N_{min}$  derived from the new mark-recapture estimates meets the definition of  $N_{min}$  provided within the GAMMS (NMFS 2016). Although cited as “in review,” the Bradford *et al.* paper was reviewed by the Pacific SRG at its 2017 meeting and is currently in review for journal publication.

*Comment 22:* The HLA incorporates by reference its more specific comments on previous draft SARs related to: 1) the assignment of a recovery factor to the pelagic stock of false killer whales, and continues to maintain that NMFS should apply a recovery factor to the pelagic stock that is greater than 0.5; 2) the 2010 Hawaiian Islands Cetacean Ecosystem and Assessment Survey (HICEAS) and the assumptions made by NMFS based upon the data from that survey, and assert that NMFS has inappropriately withheld acoustic data that should be publicly disclosed and reported; and 3) NMFS’ assumption that the insular stock of false killer whales has declined is speculative.

*Response:* NMFS reiterates its responses to these comments from previous SARs. Specifically: 1) Reanalysis of existing datasets to derive more precise estimates does not constitute an increase in population size. There are only two EEZ-wide estimates of abundance (484 from a 2002 survey and 1,540 from a 2010 survey). These estimates may not be directly compared due to changes in group size enumeration methods between those surveys. For this reason, the current status of pelagic false killer whales is

unknown. 2) NMFS has not made any attempt to withhold the acoustic data from the HICEAS 2010 survey. It can be made available by request. NMFS has used the HICEAS 2010 data for a variety of analyses, including the development of automated routines to detect and classify false killer whale and other species' sounds, to assess false killer whale sub-group spatial arrangements, and other projects. There were many changes in array hardware during the survey, complicating streamlined analyses of these data, such that a full-scale analysis of this dataset for abundance is not appropriate, efficient, or cost-effective at this time. 3) NMFS makes no assumption that MHI insular stock abundance has declined in recent years. The minimum estimate reflects the number of individuals enumerated during the stated period and may reflect not only changes in actual population abundance, but also changes in encounter rates due to survey location or animal distribution.

Dated: July 6, 2018.

---

Donna S. Wieting,  
Director, Office of Protected Resources,  
National Marine Fisheries Service.

[FR Doc. 2018-14811 Filed: 7/10/2018 8:45 am; Publication Date: 7/11/2018]