

## **Response to Public Comments on NMFS Procedure 02-204-02: Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E)**

The National Marine Fisheries Service (NMFS) received nine comment letters on the draft Procedure 02-204-02: Criteria for Determining Negligible Impact under the Marine Mammal Protection Act (MMPA) Section 101(a)(5)(E). Comments were received from California Coast Crab Association, Hawaii Longline Association, Marine Mammal Commission (Commission), Oceana, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, Washington Dungeness Crab Fishermen's Association, Western Pacific Regional Fishery Management Council, Center for Biological Diversity, Conservation Law Foundation, Defenders of Wildlife, Humane Society Legislative Fund, Humane Society of the United States, and Turtle Island Restoration Network and Whale and Dolphin Conservation sent a joint letter (CBD et al.). Responses to substantive comments are below. Comments not related to the draft Criteria for Determining Negligible Impact under MMPA Section 101(a)(5)(E) are not included.

**Comment 1:** Oceana states that the draft directive does not address the underlying reasons NMFS gives for revising the negligible impact criteria. For the reasons described in their letter, they assert the draft directive does not address the problems identified with the current criteria for determining negligible impacts under MMPA 101(a)(5)(E). Previous to NMFS proposed criteria, the Commission suggested NMFS “establish improved criteria that are clear, logical, internally consistent, and cover all probable scenarios.”

**Response:** We disagree. During our workshop with the Commission (Spring 2015) the two agencies identified the following problems with the 1999 criteria in need of resolution: 1) the criteria relied upon the Potential Biological Removal (PBR) level of a stock and PBR is not available for some stocks; 2) the criteria did not account for all fishery/marine mammal take scenarios; 3) the language was ambiguous and could lead to inconsistent interpretation of the criteria; 4) the threshold of 10% PBR for total human-caused mortality and serious injury (M/SI) in criterion 1 is up to an order of magnitude more conservative than the Commission’s 1990 recommendation of no more than a 10% delay in time to recovery; and 5) the criteria did not allow the agency to evaluate the impact of individual fisheries, only total fisheries impact.

We are confident that the revised criteria address each of these shortcomings. 1) The new metrics (Negligible Impact Threshold Total,  $NIT_t$ , and Negligible Impact Threshold Single,  $NIT_s$ ) can be calculated independent of PBR. 2) The revised criteria account for all fishery/marine mammal take scenarios by establishing thresholds and providing formulae for their calculation. The criteria also provide a means to rely on an alternative minimum abundance ( $N_{min}$ ) in cases where  $N_{min}$  is unavailable. 3) Language in the revised criteria is unambiguous and clear, while providing flexibility to the analyst to account for unusual circumstances. 4) The NIT threshold will ensure no more than a 10% delay in time to recovery. We selected the 10% delay in time to recovery based on the Commission’s initial recommendation to us regarding negligible impacts from commercial fisheries on Endangered Species Act (ESA) listed marine mammals, as well as the original PBR framework. 5) The two-tiered approach allows the agency to evaluate the impact of individual fisheries on marine mammal stocks in cases where total human-caused M/SI exceeds  $NIT_t$ .

**Comment 2:** Washington Department of Fish and Wildlife, Washington Dungeness Crab Fishermen's Association, and Oregon Department of Fish and Wildlife appreciate the inclusion of language, under Sections B and D of the directive, that provides the flexibility to consider such management measures and the best data timeframes to use when comparing the individual fishery M/SI estimate to  $NIT_s$ .

**Response:** We appreciate and acknowledge this comment.

**Comment 3:** California Coast Crab Association and Hawaii Longline Association support the two-tiered approach under which a fishery may be evaluated in isolation or fishery impacts may be evaluated collectively. They note that this is an important change that will help to avoid situations in which a fishery that has a negligible impact is penalized because other fisheries may have significant impacts on a marine mammal stock. Additionally, they support the provisions that allow for flexibility in deciding what data and other circumstances should be considered for the negligible impact determination (NID) analysis. Such flexibility is essential when addressing fisheries that have experienced management changes that significantly impact marine mammal interaction rates. They commend NMFS for building more flexibility into the NID process, but suggest presenting the proposed formulae as options rather than standards. The directive should specify that NMFS may reach a NID through any other means (whether formulaic or not) based upon the best available information the specific circumstances presented.

**Response:** We acknowledge and appreciate the support of the two-tiered approach and the flexibility provided to the analyst regarding data and circumstances to consider in the analysis. Regarding reaching a NID through other means, see response to Comment 19.

**Comment 4:** Four commenters expressed concern that the draft directive is not precautionary enough. Washington Department of Fish and Wildlife states that the draft directive “reduces protection for small, declining stocks of marine mammals,” and recommends “that small, declining stocks be identified and afforded extra precautionary measures within the guidelines.” CBD et al. notes that thresholds in the directive “are insufficiently protective of ESA-listed marine mammals and do not fulfill Congress’ plainly-expressed intent that these species receive additional protections over those provided to all marine mammal species by section 118.” They note that NMFS’ proposed approach essentially equates PBR with “negligible impact” and that by changing the  $NIT_t$  from around 10% of PBR to approximately PBR with no logical reason, the draft directive would increase the threshold under which all fisheries will be considered to have negligible impacts by up to a factor of 10 and violates the plain language of the MMPA by failing to give independent meaning to both section 118 and section 101(a)(5)(E). The Commission states that the proposed NID criteria should be more stringent than the PBR-linked take reduction requirement of MMPA section 118 and equally or more stringent than the Zero Mortality Rate Goal (ZMRG,  $\leq 10\%$  of PBR). Oceana states that NMFS is proposing to use a NID equal to PBR and instead “must ensure negligible impacts are consistent with the ZMRG.” Oceana does not support the draft procedural directive and opposes a directive that eases protections for marine mammals listed under the ESA. They state that the draft directive would allow fisheries to kill or seriously injure a greater number of marine mammals from populations failing to recover and those at risk of extinction even if the M/SI is higher than the PBR level and that stock is not maintaining its optimum sustainable population. They recommend NMFS abandon the draft directive and instead work closely with the Commission to revise the existing NID criteria consistent with the MMPA, ESA, and a precautionary approach.

Conversely, three commenters expressed concern that the directive is overly precautionary. Western Pacific Regional Fishery Management Council commented that the draft directive “remains more conservative than necessary to meet conservation objectives under the MMPA” and requests that NMFS consider a tiered approach that would allow adjustment of Negligible Impact Factor (NIF) values based on other available information, such as the level of uncertainty in abundance data and listing status (endangered or threatened). Similarly, both California Coast Crab Association and Hawaii Longline Association object to using the same NIF for both endangered and threatened species and state that “the NIF factor should be adjustable on a sliding scale.” Furthermore, the California Coast Crab Association asserts that the proposed thresholds arbitrarily apply a factor applicable to one type of species (endangered) to a species with a very different status (threatened). There must be different, appropriate standards established for endangered species, on one hand, and threatened species, on the other hand. NMFS cannot rationally evaluate a species that may be highly abundant (e.g., ringed seals) or exhibiting strong population growth (e.g., some humpback whale populations) under a standard designed for a smaller, endangered stock.

**Response:** We appreciate the concerns that commenters raise regarding the thresholds in the directive being overly precautionary or not precautionary enough. We appreciate the opportunity to clarify several issues raised in these comments.

First, as stated in the draft directive, while we have used negligible impact determination criteria since 1999, these criteria were “never formalized as an official agency policy.” As such, to say we are changing or increasing its thresholds or reducing protections is inaccurate because these thresholds were never formally established.

Second, it is true that  $NIT_t$  is equivalent to PBR for an endangered stock if, and only if, the default Recovery Factor ( $F_r$ ) is used in calculating PBR; but in all other cases (i.e., for threatened stocks and for any endangered stock not using the default  $F_r$ )  $NIT_t$  is less than PBR. Thus,  $NIT_t$ , and the negligible impact determination it informs, is afforded independent meaning and the assertion that the directive would lead to authorization of commercial fishery-related M/SI at levels greater than PBR is untrue (also see response to Comment 11).

Third, the suggestion to have  $NIT_t$  be equal to ZMRG (i.e., 10% of PBR), would not give the term “negligible impact” independent meaning from that of “ZMRG.” Furthermore, setting  $NIT_t$  at a value below  $NIT_t$  would unnecessarily require all commercial fisheries to have M/SI of ESA-listed species below that which is necessary to meet ZMRG, and such a requirement is specifically prohibited by MMPA Section 118(b)(2).

Finally, as stated in the draft directive, in contrast to  $F_r$ , NIF values do not vary depending on the status of the stock because they are determined solely to ensure no more than a specified delay in time to recovery for a hypothetical marine mammal stock, irrespective of its status. This differs from  $F_r$ , which, with the exception of the 0.1 value for endangered stocks, is based on other criteria such as stock status and potential bias in estimates of key parameters. However, we acknowledge that there may be cases when the default NIF values are not appropriate. Thus, we have revised the directive to note that:

“NIF values can be adjusted to accommodate additional information and to allow for management discretion as appropriate and consistent with the goals of the MMPA so long as: (a) there is strong justification for why an alternative NIF is more appropriate, and (b) the alternative NIF used in the calculation of  $NIT_t$  does not exceed the value of the  $F_r$  used in the calculation of PBR for that stock.”

We fully acknowledge comments of both opinions that express the need for more flexibility to consider factors outside those solely captured by the NID thresholds such as those noted by Washington Department of Fish and Wildlife that might be exhibited by small population, or those noted by the California Coast Crab Association that may differ between endangered and threatened stocks. Thus, we have revised the directive to clarify that when M/SI is slightly below or above the NID thresholds these other factors should be considered (see response to Comment 5 below).

**Comment 5:** The Commission recommends that negligible impact determinations should be allowed to take other factors into account, for example, data uncertainty or reliability, population size (abundance), rate of population growth relative to the maximum to be expected given the size of the stock, and expected trends in fisheries impacts and population growth. In related comments, California Coast Crab Association and the Hawaii Longline Association note that the draft directive ignores stock population trend information and that the agency should take this into account in the NID analysis (see Comment 4 above).

**Response:** We agree and have modified the directive to allow for qualitative consideration of other factors when the appropriate M/SI estimate is slightly below or above the negligible impact threshold(s):

“There may be circumstances, such as when the M/SI estimate is slightly below or slightly above the negligible impact threshold(s), where the analyst may deviate from the determination that would be dictated by strictly adhering to the NIT thresholds. Such deviations may be due to the consideration of additional factors affecting the likelihood or impact of the incidental M/SI such as data uncertainty and reliability, information on the population trend, and expected trends in commercial fisheries impacts including implemented or concurrently implemented management measures aimed at reducing M/SI below the threshold.”

**Comment 6:** CBD et al. acknowledges that in previous NID analyses, NMFS considered state commercial fisheries M/SI so that impacts of takes from the federally-managed fisheries could be understood in the context of all known fishery-related M/SI. They note that the draft directive creates the  $NIT_s$  threshold to analyze incidental take from a single fishery; however, this  $NIT_s$  threshold creates a loophole where state commercial fisheries are neither considered nor authorized under MMPA 101(a)(5)(e). CBD et al. requests NMFS revise the draft directive to allow the authorization of incidental take of ESA-listed species in Category I or II state commercial fisheries.

**Response:** The directive states that the analyst should use the current MMPA List of Fisheries (LOF) to identify all of the U.S. commercial fisheries (including state- and federally-managed fisheries) that have incidental M/SI of ESA-listed marine mammal stocks. State fisheries are classified on the LOF; and, therefore, Category I and II state fisheries are considered, and the authorization of take of ESA-listed species incidental to those fisheries is possible under either the  $NIT_t$  or  $NIT_s$  thresholds.

**Comment 7:** CBD et al. state that the draft directive fails to adequately protect endangered and threatened marine mammals when fisheries information is insufficient to obtain statistically-reliable estimates of fisheries-related M/SI. They note that the MMPA (16 U.S.C. § 1387(d)) requires the Secretary establish a program to monitor marine mammal incidental M/SI during commercial fishing operations. They further state, NMFS does not have a bycatch monitoring program for every commercial fishery that causes M/SI of ESA-listed species or has defunded programs critical to assessing marine mammal bycatch. CBD et al. requests NMFS revise the draft directive to state that any fishery causing M/SI of ESA-listed species and lacking a monitoring program to collect statistically-reliable bycatch estimates cannot receive a negligible impact determination under section 101(a)(5)(E).

**Response:** MMPA section 101(a)(5)(E) and implementing regulations (50 CFR 229.20) provide for NMFS to authorize the incidental taking of marine mammals from a species or stock, designated as depleted because of its listing under the ESA, in the course of commercial fishing operations if NMFS determines, after notice and opportunity for public comment, that:

1. The incidental M/SI from commercial fisheries will have a negligible impact on the affected species or stock;
2. A recovery plan has been developed or is being developed for such species or stock under the ESA; and
3. Where required under MMPA section 118, a monitoring program has been established, vessels engaged in such fisheries are registered, and a take reduction plan has been developed or is being developed for such species or stock.

Per statute and regulation, we cannot issue a MMPA 101(a)(5)(E) authorization unless all three standards are met. Therefore, any commercial fishery causing M/SI of ESA-listed species and lacking a monitoring program to collect statistically-reliable bycatch estimates cannot receive authorization under section 101(a)(5)(E). It is unnecessary for us to revise the criteria for making negligible impact determinations.

**Comment 8:** Both Oceana and the Commission state that the directive should establish NID thresholds based on fisheries-related M/SI instead of all human-caused M/SI. They recommend NMFS propose a NID threshold based solely on fisheries-related M/SI to ensure that fisheries are not, individually or cumulatively, having a non-negligible impact on ESA-listed species. They note that the draft directive would allow a NID for a fishery even if it accounted for a majority both of the total M/SI and the stock's PBR. For instance, a stock's total human-caused M/SI may be slightly below PBR, but one or two fisheries may be responsible for a significant portion of that M/SI and yet still be determined to be negligible under a Tier 1 analysis. They additionally note that a stock's M/SI could be caused solely by fisheries and be above PBR, yet each individual fishery may receive a NID so long as each fishery's M/SI is below 13% of PBR under a Tier 2 analysis.

**Response:** The Commission recommended we determine negligible impact for ESA-listed marine mammals if the M/SI incidental to commercial fishing operations, "by itself and in combination with other sources of mortality," would cause no more than a 10% increase in the time to recovery. This recommendation recognizes that total removals, and not just fisheries-related removals, drive the stock's dynamics and recovery to optimum sustainable population. MMPA 101(a)(5)(E) requires that we evaluate whether fisheries-related M/SI is negligible, but we consider total human-caused M/SI to put the fisheries

M/SI in context. Having two thresholds is a more flexible approach, and allows us to consider the relative contribution of the fishery-related M/SI to the total. Here, an individual fishery may be above  $NIT_s$  and still have a negligible impact, as long as total human-caused M/SI is below  $NIT_t$ . Oceana and the Commission's recommendation here to rely solely on commercial fishery related M/SI also directly contrasts with CBD et al.'s recommendation to instead consider other sources of M/SI in both the Tier 1 and Tier 2 analyses (see Comment 9 below). As it relates to ensuring that fisheries are not, individually or cumulatively, having a non-negligible impact on ESA-listed species, see response to Comment 11.

**Comment 9:** CBD et al. notes that the draft Tier 2 analysis eliminates consideration of total commercial fisheries mortality or other sources of human-caused mortality, at the risk of causing extinctions, further depletions or impairing recovery to optimum sustainable population. They provide the Central America humpback whale distinct population segment (DPS), which has a population estimate of fewer than 800, as a prime example of the problems with the  $NIT_s$  threshold. Because this is a transboundary stock with PBR apportioned according to the time whales spend in U.S. waters, individual fisheries lethally taking whales from this stock move to a Tier 2 analysis, which looks solely at the M/SI from that fishery to make the negligible impact determination. CBD et al. notes that the problem with this method is that it does not weigh the additional mortality to the stock in that individual fishery against the background levels of mortality already occurring, potentially incrementally pushing an endangered marine mammal closer to extinction. CBD et al. requests NMFS revise the directive to allow NMFS to consider other sources of human-caused mortality in the Tier 2 analysis.

**Response:** We appreciate CBD et al.'s concern about the Tier 2 analysis not considering other sources of M/SI. However, including other sources of M/SI in the Tier 2 analysis would conflate the Tier 1 and 2 analyses and result in the Tier 2 analysis no longer serving its purpose. As stated in the directive, the purpose of the Tier 2 analysis is to evaluate the contribution of the individual fishery M/SI to the overall human-caused M/SI and whether or not this contribution is negligible. That is, the Tier 2 analysis is not intended to examine whether the fishery specific M/SI is below the number of removals from the population that is deemed to be negligible (i.e.,  $NIT_t$ ), rather it is designed to evaluate whether or not the fishery specific M/SI makes up a small enough proportion of the total human caused M/SI that it, by itself, has a negligible impact. In doing so, the Tier 2 analysis compares M/SI from individual fisheries against a reduced threshold,  $NIT_s$ , which is equivalent to a 1% delay in time to recovery. It is true that this Tier 2 analysis considers only M/SI from individual fisheries, not other sources of human-caused M/SI, but it relies on a much lower threshold.  $NIT_s$  is roughly equivalent to 2.6% of PBR for a threatened species and 13% of PBR for an endangered species. We disagree that this would risk causing extinctions, furthering depletions, or impairing recovery to optimum sustainable populations. Interestingly, CBD et al.'s recommendation here directly opposes Oceana and the Commission's recommendation to rely solely on commercial fishery related M/SI for the entire NID analysis (see Comment 8 above), which further suggests that the approach proposed in the directive does not increase risk of extinctions, depletions, or impairing recovery to optimum sustainable populations.

**Comment 10:** Oceana commented that under the draft directive, NMFS may permit an individual fishery that has a non-negligible impact on an ESA-listed stock because the directive "fails to account for the negative bias in total M/SI estimates and in attribution of M/SI to individual fisheries." Washington Department of Fish and Wildlife similarly notes that the simulations used to calculate percent time to

recovery assume unbiased estimates of abundance, M/SI, and Rmax, but that these values are often negatively biased, especially for small populations.

**Response:** We appreciate Oceana and Washington Department of Fish and Wildlife’s comments and the opportunity to clarify the text in the directive they refer to: “assuming no biases in the estimates of abundance, M/SI, or Rmax,” particularly with respect to M/SI.

This statement refers specifically to Section 5.3 of the directive (Development of the Two NIT Thresholds) and is referring to the underlying assumptions of the simulations conducted therein. Thus, while it is true that the simulations assume no bias, this does not mean that the overall negligible impact determination also assumes no bias in these parameter estimates. In fact, throughout the directive, analysts are asked to consider biases and they are provided direction on what to do if a bias is suspected, particularly for M/SI. For example, in Section B.2.1 Data Sources and Best Available Science the directive discusses using extrapolated M/SI estimates and specifically states, “The analyst should be cautious when using un-extrapolated estimates, since they are known to be underestimates.” Then, in B.2.2 Data Timeframe the directive notes that “pooling more years may be necessary to reduce bias and increase precision of M/SI estimates from rare take events.” Thus, while the simulations, and as a result the NIT criteria, assume no biases, the NID analysis as a whole does not.

With regard to attribution of M/SI to individual fisheries, we again appreciate the commenters’ concern and agree that in many cases, it is difficult or nearly impossible to attribute particular fishery-related M/SI events to individual fisheries. Thus, we revised the directive to provide direction on how to consider such unattributed M/SI when conducting a NID analysis:

“In addition, in some cases, estimates of commercial fishery specific M/SI may be underestimated or unavailable but likely non-zero, as evidenced by a non-zero estimate for the total fishery related M/SI. This may occur when interactions with fishing gear cannot be easily attributed to individual fisheries. In cases where NIT<sub>t</sub> is exceeded and commercial fishery specific M/SI estimates are unavailable or suspected to be underestimates, analysts should consider ways to assess the relative proportion of the total commercial fishery related M/SI that may be due to individual commercial fisheries listed on the LOF and/or planned mitigation measures that will ensure any future M/SI specific to the individual commercial fishery can be monitored for exceedance of NITs (e.g., gear marking).”

**Comment 11:** Washington Department of Fish and Wildlife, the Commission, and CBD et al. commented on how the evaluation of individual fisheries using NIT<sub>s</sub> may result in additive, cumulative, or aggregate effects that are non-negligible. Washington Department of Fish and Wildlife comments “it is unclear whether multiple fisheries with M/SI below NIT<sub>s</sub> could have additive impacts above NIT<sub>t</sub>; this possibility should be addressed and eliminated.” The Commission recommends the directive be revised so that “individual fisheries may be permitted even if the total fisheries impact is non-negligible, so long as the aggregate impact of fisheries that would be permitted does not exceed the ‘negligibility threshold.’” CBD et al. states that the draft directive “fails to consider the potentially devastating cumulative impacts of many different fisheries and/or other sources of human-caused mortality on ESA-listed species or stocks, each of which standing alone might be considered negligible under NMFS’s proposed standard.”

**Response:** We appreciate the concern regarding additive impacts from individual fisheries that, together may have a non-negligible impact. We recognize that there may be rare cases where the total M/SI from commercial fisheries that is determined to be negligible for individual fisheries (i.e., each fishery individually was below  $NIT_s$ ) could exceed  $NIT_t$  in aggregate. However, when we make negligible impact determinations and issue 3-year section 101(a)(5)(E) authorizations, M/SI will continue to be monitored and management action implemented if warranted. For example, if the combined fisheries-related M/SI exceed  $NIT_t$ , a take reduction team may be convened and we may develop regulations to reduce M/SI below PBR for one or more fisheries that kill or injure the stock and to ultimately achieve ZMRG. Thus, while the concern raised by the commenters is valid, we have additional regulatory tools, in particular those under MMPA Section 118, to address the issue. Furthermore, the directive specifically notes that fisheries should not be redefined or split on the MMPA LOF solely to facilitate a negligible impact determination and based on the current LOF, the scenario of concern appears unlikely to occur.

**Comment 12:** Oceana and CBD et al. expressed concern with the possibility that a NID may be made for stocks that are not increasing or for which there is uncertainty regarding its population trend. Oceana comments that the directive, “must make clear that a NID cannot be made for ESA-listed species that are not increasing or for which there is uncertainty around the stability of the population.” While CBD et al. states that the directive “must explicitly state that incidental take of ESA-listed marine mammals by commercial fisheries stocks with uncertain population trends or populations that do not show growth for any reason cannot be authorized under section 101(a)(5)(E).” The Commission also commented that a NID should not be made for a stock that does not conform to the PBR framework.

In contrast, Western Pacific Regional Fishery Management Council, California Coast Crab Association, and Hawaii Longline Association expressed concern that under the draft directive, a NID would not be made for stocks that do not conform to the PBR framework, such as those that are declining for reasons unrelated to direct human-caused M/SI. Western Pacific Regional Fishery Management Council requests NMFS revise the draft directive to “allow for NID to be issued if a single fishery's impact is small when a stock is declining due to non-fishery impacts.” California Coast Crab Association also states that “NMFS cannot deny a NID based on non-fishery impacts or impacts beyond the scope of the specified activity.” Finally, Hawaii Longline Association requests NMFS remove the statement in the draft directive that a NID cannot be made for stocks that do not conform to the PBR framework.

**Response:** We appreciate Oceana, CBD et al., and the Commission’s concerns about stocks that are not increasing, have uncertain population trends, or do not conform to the PBR framework. As noted in the draft directive, the simulations and methodology used to determine NIF for  $NIT_t$  and  $NIT_s$  assume stocks conform to the underlying assumptions of PBR; that is, depleted stocks should show growth, some fraction of which can be removed without preventing recovery. In this way, the NID analysis framework proposed in the draft directive may, in some cases, not be appropriate for stocks that are not increasing, have uncertain population trends, or do not conform to the PBR framework.

However, we recognize the points made by Western Pacific Regional Fishery Management Council, California Coast Crab Association, and Hawaii Longline Association in that there may be circumstances in which a NID is possible for stocks that are not increasing, have uncertain population trends, or do not conform to the PBR framework. Perhaps one of the simplest examples, at least of a population that is not increasing in the absence of human-caused mortality, is that of a population that has reached carrying

capacity ( $K$ ). We recognize that this is likely not the case for stocks for which a 101(a)(5)(E) authorization is required. Nevertheless, as noted by the commenters that opposed the draft directive regarding this issue, the MMPA does not require stocks to be increasing, have known population trends, or conform to the PBR framework in order for a NID to be made. Given this, and keeping in mind that the proposed NID analysis framework assumes stocks conform to the PBR framework, we have modified the directive to provide more flexibility to consider such situations on a case by case basis. The modified directive now reads:

“The model simulations supporting the negligible impact thresholds (see section 5.3, Development of the Two NIT Thresholds) inherently assume that the ESA-listed stock’s dynamics conform to the underlying assumptions of PBR; that is, depleted stocks should show growth, some fraction of which can be removed without preventing recovery. However, there are some circumstances where an ESA-listed stock does not conform to the PBR framework, if, for example a stock is failing to recover for reasons unrelated to known direct human-caused M/SI (e.g., Cook Inlet beluga whales). In such cases, the NIT criteria and following NID process may still be appropriate, but the analyst should consider how the stock’s not conforming to the underlying assumptions of PBR affects the NID analysis and whether an alternative approach is necessary.”

**Comment 13:** California Coast Crab Association and Hawaii Longline Association state that NMFS provides no explanation for why  $NIT_s$  is set at a level that assures no more than a 1% delay in time to recovery. They assert that aside from having no scientific or policy basis, this level is extremely conservative, particularly given that the other values in the formulae are already very conservative. The commenters feel the consequence of using this unsupported 1% standard is that it will be nearly impossible for many fisheries that truly have a “negligible impact” to obtain a NID. They feel that  $NIT_s$  should be adjusted to be more realistic and supported by both the best available scientific data and a reasoned explanation.

**Response:** We have added the following additional explanation to the text of the directive:

“The 1% delay in time to recovery was selected to provide reasonable assurance that the contribution of M/SI from any individual commercial fishery to the Total M/SI would not have a significant effect on the population dynamics of any marine mammal stock. Furthermore, any delay in recovery of 1% or less would be virtually undetectable given natural variation in population trajectories due to random stochasticity and environmental factors. That is, it would be virtually impossible to detect the difference between a population recovering with no human-caused mortality and one recovering with human-caused mortality at a level expected to cause a 1% delay or less in the time to recovery.”

Also, see response to Comment 4 above regarding the directive being overly precautionary vs. not precautionary enough.

**Comment 14:** California Coast Crab Association and Hawaii Longline Association assert that the draft directive arbitrarily “reduce[s] the NIF from 0.18 to 0.1 in the calculation of the metric used for the first tier analysis (NIT),” despite the fact that the NIF of 0.18 is already a precautionary calculation that is designed to “ensure no more than a 10% delay in time to recovery.” They state that there is no principled basis for reducing an already precautionary number by over 40%. They note that this will have very

significant negative effects on future NID analyses and will result in assumed impacts that do not exist. Similarly, Western Pacific Regional Fishery Management Council states that by reducing NIF from 0.18 to 0.1, “NMFS is setting a NIF that is overly conservative to avoid a conflict with another existing NMFS guidance, rather than providing a biological basis for reducing the value.”

**Response:** Contrary to this assertion, the draft directive included explicit justification for why the NIF for  $NIT_t$  was reduced from 0.18 to 0.1, which we retain in the final directive. As explained in section 5.3 Development of the Two NIT Thresholds, “using a NIF in the calculation of  $NIT_t$  that is larger than the  $F_r$  in the calculation of PBR would result in  $NIT_t$  exceeding PBR for an endangered stock. To avoid this situation, NMFS reduced the NIF from 0.18 to 0.1 in the calculation of the metric used for the first tier analysis ( $NIT_t$ ).” A NIF of 0.1 was specifically chosen to align with the 0.1  $F_r$  used in the calculation of PBR for endangered species. Thus, this reduction is not arbitrary and the rationale for it is explicitly detailed in the directive.

**Comment 15:** CBD et al. comments that in addition to complying with the MMPA, NMFS must comply with Section 7 of the ESA and that NMFS must not “conflate the negligible impact determination for commercial fisheries under section 101(a)(5)(E) of the MMPA with the jeopardy standard of section 7(a)(2) of the ESA.” Furthermore, they note that under the ESA, NMFS must consider not just M/SI, but also “sublethal impacts of fishing gear interactions”.

**Response:** We agree with CBD et al.’s comment, though question its relevance to this directive, which is specifically about NIDs under section 101(a)(5)(E) of the MMPA, and not our overall compliance with both the MMPA and ESA, or other laws. As noted in the directive in Section IV. Relationship of Negligible Impact Thresholds to Other Thresholds: “The conclusion that an action and the resulting incidental take of an ESA-listed species will not violate ESA section 7(a)(2) and the conclusion regarding negligible impact under MMPA 101(a)(5)(E) are separate and the applicable standards are not the same; therefore, a conclusion of negligible impact under MMPA section 101(a)(5)(E) may inform a conclusion regarding jeopardy under ESA section 7(a)(2), but it is not necessarily determinative of that decision. Similarly, a conclusion regarding jeopardy under ESA section 7(a)(2) may inform a conclusion of negligible impact under MMPA section 101(a)(5)(E), but is not necessarily determinative of that decision.”

Thus, the directive explicitly states that these two statutory standards should not be conflated, as suggested by CBD et al., and one example of why is the very concern CBD et al. expresses: that under the ESA sublethal impacts should be considered, while under section 101(a)(5)(E) under the MMPA such impacts are not. Regardless, given that the directive is concerned with MMPA 101(a)(5)(E) and Section IV of the directive is provided for context and background, and not as prescriptive policy on our overall environmental compliance, we have not revised the directive as it relates to this comment.

**Comment 16:** Oregon Department of Fish and Wildlife asks for the directive to consider stronger expectations regarding peer-review of information other than the Stock Assessment Reports (SARs), specifically, that peer-review should be the expectation.

**Response:** We agree with this comment and the directive does not minimize peer-review in any way. We acknowledge that there may have been confusion with respect the peer-review expectations given the

wording of the sentence Oregon Department of Fish and Wildlife quotes: “Pursuant to 50 CFR 600.315(a)(6), criteria to consider for best available science are relevance, inclusiveness, objectivity, transparency and openness, timeliness, verification, and validation, and peer review, as appropriate.” We have revised this sentence to remove *as appropriate*, which was meant to apply to all criteria listed but may have been read as indicating that the peer-review criteria would only be considered as appropriate:

“...50 CFR 600.315(a)(6) provides informative criteria to consider when evaluating best available science, including relevance, inclusiveness, objectivity, transparency and openness, timeliness, verification and validation, and peer review.”

**Comment 17:** Washington Dungeness Crab Fishermen’s Association raised questions regarding how humpback whale M/SI incidental to the coastal crab pot fishery off of Washington will be assigned between the ESA-listed and non-listed DPSs. They note that according to Wade et al. (2016), approximately 50% of humpback whale occurrences off Washington are from the Hawaii DPS, which is not listed as threatened or endangered. Conversely, the occurrence of non ESA-listed Hawaiian stocks off Oregon and California is expected to be zero (Wade et al. 2016). The commenter asks if the NIT calculations for humpback whales off Washington would be apportioned according to the proportionate probable occurrence rate in Wade et al. (2016) to allocated M/SI between the ESA listed and non-listed stocks. They note that it is essential that the latest SAR, with data collected through 2018, be used when calculating NIT and making NIDs.

**Response:** The directive clearly states the NID analysis must rely on the best available science as described generally under the National Oceanic and Atmospheric Administration Information Quality Guidelines and in conformance with Administrative Procedure Act (5 U.S.C. § 500 et seq.). If verified information more recent than what is contained in the latest SAR is considered the best available science (e.g., abundance, bycatch estimates, stranding and serious injury determination reports), then the analyst should include it in the NID analysis. For cases where ESA-listed and non-ESA listed stocks mix, such as that of humpback whales of the U.S. West Coast, the NID analysis should rely on the best available science regarding the proportion of M/SI that is likely to occur to each stock.

**Comment 18:** Washington Department of Fish and Wildlife strongly encourages NMFS to allocate funding to update population assessments for depleted stocks, given that the basis of  $NIT_s$  and  $NIT_t$  in part, relies on estimates of the minimum population size.

**Response:** We agree that depleted stocks, and in particular those designed as depleted due to their listing under the ESA, should be prioritized for stock assessment purposes. As required by the MMPA Section 117, we review all stock assessments for ESA-listed stocks annually; and, if this review indicates that the status of the stock has changed or can be more accurately determined, the assessment is revised. Given the limited funds available to assess marine mammal stocks, we continue to prioritize assessing stocks with critical data gaps and those that have outdated information.

**Comment 19:** California Coast Crab Association and Hawaii Longline Association state both the 1999 criteria and the draft directive improperly attempt to quantitatively define an ambiguous statutory term (“negligible impact”) through a guidance process, as opposed to a formal rulemaking. They assert the law does not permit NMFS to interpret and apply statutory standards in such a rigid manner without engaging

in formal rulemaking under the Administrative Procedure Act. This legal deficiency could be cured with an express clarification that the quantitative formulae set forth in the draft directive are tools that can be used, when and where appropriate, but that NMFS may also issue NIDs based on any other methods or information that are most appropriate for specific situations.

**Response:** The NID criteria are articulated as a directive within our Policy Directive System. Contents of [NMFS' Policy Directive System](#) do not have the force and effect of law and are not meant to bind the public. These documents are intended to articulate agency policy and provide clarity to the public regarding existing requirements under the law. Furthermore, several portions of the directive provide analysts with flexibility in conducting NID analyses in order to accommodate case-specific circumstances and when the procedures in the directive may not be appropriate. This flexibility includes, but is not limited to, NIF values, data sources and time frames, deviations from the determination that would be dictated by strictly adhering to the NIT thresholds based on other factors, and alternative approaches in the event stocks do not conform to the PBR framework.

**Comment 20:** CBD et al. claim that by not publishing the draft NID Criteria in the *Federal Register*, NMFS failed to ensure that all potentially interested members of the public were informed and failed to ensure meaningful public comment and transparency.

**Response:** The draft directive was distributed via email to interested parties soliciting comments for 30 day. The draft NID criteria and public comment solicitation was also posted on [NMFS website](#). In response to several requests, the comment period was extended by 30 additional days to a 60-day comment period. Furthermore, the directive is part of our Policy Directive System. Contents of [NMFS' Policy Directive System](#) do not have the force and effect of law and are not meant to bind the public. These documents are intended to articulate agency policy and provide clarity to the public regarding existing requirements under the law.