

27 March 2018

Acting Director Paul N. Doremus, Ph.D.
Office of International Affairs and Seafood Inspection (OIASI)
Attn: MMPA Petition
NMFS, F/IASI
1315 East-West Hwy
Silver Spring, MD 20910

Dear Dr. Doremus,

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors, has reviewed the National Marine Fisheries Service's (NMFS) "Notification of Receipt of a Petition to Ban Imports of All Fish and Fish Products from New Zealand That Do Not Satisfy the Marine Mammal Protection Act [MMPA]" published on 25 February 2019 (84 Fed. Reg. 5977) and the underlying petition. This petition¹ for emergency rulemaking was filed by Sea Shepherd Legal, Sea Shepherd New Zealand Ltd., and the Sea Shepherd Conservation Society to address the impacts of fishing and the contribution of U.S. imports of fish and fish products to those impacts on the critically endangered Māui dolphin (*Cephalorhynchus hectori Māui*), a subspecies of Hector's dolphin (*Cephalorhynchus hectori*), which is endemic to New Zealand. NMFS has requested comments on the petition, and in particular on the following issues identified in the notice:

- 1) Whether the apparent decline in the Māui dolphin population due to commercial fishing meets the standard of "immediate and significant adverse impact on a marine mammal stock" within the MMPA;
- 2) The adequacy of existing measures regulating commercial fishing throughout the range of the Māui dolphin;
- 3) Whether such measures can be considered comparable in effectiveness to the U.S. regulatory program; and
- 4) Which specific fisheries are or may be directly associated with potential mortality of Māui dolphin and therefore fall within the scope of the petition for emergency action.

The petitioners argue that, because Māui dolphins are critically endangered and at risk of extinction due to high mortality rates associated with incidental capture in fishing gear, the United States should ban all imports of fish and fish products that are caught in or derived from fisheries using gear or engaging in activities (primarily gillnet and trawl fisheries) that contribute or could contribute to the death of Māui dolphins. They further argue that the situation with Māui dolphins is

¹ Available at http://www.nmfs.noaa.gov/ia

similar to that of the vaquita, a small porpoise endemic to the upper Gulf of California and also near extinction due to incidental capture in gillnets. Although the evolutionary significance of the vaquita and the Māui dolphin differs², the Commission agrees with the petitioners that the situations concerning taking incidental to fisheries and the impact such taking is having on the status of the stock are similar. The Commission further agrees that the petition makes a serious case that an import ban in the case of Māui dolphin may be appropriate.

Based on its review of the petition and related documents, the Commission offers the following comments and recommendations on the rulemaking petition.

Background

Section 101(a)(2) of the Marine Mammal Protection Act (MMPA)³ provides that "[t]he Secretary of the Treasury shall ban the importation of commercial fish or products from fish which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of United States standards." That provision goes on to require the Secretary of Commerce to "insist on reasonable proof from the government of any nation from which fish or fish products will be exported to the United States of the effects on ocean mammals of the commercial fishing technology in use for such fish or fish products...." Despite the fact that these requirements have been included in the MMPA since its original enactment in 1972, NMFS did not publish regulations implementing this provision until 2016⁴. Those regulations (the Import Rule) require nations that capture or export fish and fish products entering the United States to provide evidence that their management measures and mitigation of marine mammal bycatch is comparable to that of the United States. As noted in the preamble to the Import Rule, to receive a comparability finding "the harvesting nation must...demonstrate it has adopted and implemented, with respect to an export fishery, a regulatory program governing the incidental mortality and serious injury of marine mammals in the course of commercial fishing operations in its export fishery that is comparable in effectiveness to the U.S. regulatory program."⁵ The Import Rule established a five-year exemption period during which exporting countries would be expected to achieve and demonstrate comparability. However, the preamble to the Import Rule discusses an exception that allows NMFS, during the five-year exemption period, to "consider emergency rulemaking to ban imports of fish and fish products from an export or exempt fishery having or likely to have an immediate and significant adverse impact on a marine mammal stock."6 NMFS also noted that, before initiating such an emergency rulemaking, it intended to "consult with the nation with the relevant fishery and urge it to take measures to reduce the incidental mortality and serious injury and effectively mitigate such immediate and significant adverse impact on the marine mammal stock(s)," and to consider imposing a ban on the country's fish imports only if it fails to take the requested corrective measures.

² The Vaquita is a distinct species that split from its closest taxonomic relatives 4.8 million years ago, while the Maui dolphin is a subspecies of Hector's dolphin.

³ 16 U.S.C. § 1371(a)(2)

⁴ 81 Fed. Reg. 54390, 15 August 2016

⁵ Ibid at 54391

⁶ Ibid at 54395

⁷ Ibid at 54395

The Commission notes that the MMPA directs the Secretary of Commerce to "insist on reasonable proof' from each exporting country that its fisheries are meeting the comparability requirements as a condition for access to the U.S. market and that, for fisheries that clearly are not meeting such standards and that are having or likely to have an immediate and significant adverse impact on a marine mammal stock, particularly one that is critically endangered and at a heightened risk of extinction, there is a compelling need for NMFS to act quickly. In this regard, the Commission notes that neither the MMPA nor the implementing regulations specifically require consultation with the exporting country before moving forward with an emergency rulemaking or import ban. While it would be preferable to be able to consult and work cooperatively with the exporting country to address bycatch problems prior to imposing an import ban, this is a luxury that a declining marine mammal population cannot always bear. 8 NMFS needs to recognize that emergency situations require emergency action. Although the Commission appreciates that NMFS is consulting with the New Zealand government and is seeking public input on the Māui dolphin petition before considering further action, if the agency believes that the petitioners are making a credible case that fisheries are having an immediate and significant adverse impact on the subspecies, it should proceed directly to the rulemaking stage.

1) Whether the apparent decline in the Māui dolphin population due to commercial fishing meets the standard of "immediate and significant adverse impact on a marine mammal stock" within the MMPA

The Commission agrees with the petitioners that fishing, as the primary cause of the decline in Māui dolphin numbers, has had an "immediate and significant adverse impact" on the subspecies. The subspecies is listed as 'endangered' under the Endangered Species Act,⁹ "critically endangered" on the IUCN Red List,¹⁰ and "nationally critical" in New Zealand's Threat Classification system (NZDOC 2011). In addition, the Scientific Committee of the International Whaling Commission (IWC) has repeatedly cautioned that the risk of extinction for this subspecies would be increased by the death of even a single individual (IWC 2018, IWC in press). Estimates of the subspecies' abundance and its rate of decline have varied among analyses as methods have been refined and data added. The most recent abundance estimate, from 2016, is 57 animals based on genetic mark-recapture data (Cooke et al. 2018). That estimate is roughly half the estimate of 111 Māui dolphins in the late 1990s (Slooten et al. 2004), and 40 percent of the 1985 population estimate of 140 (Dawson and Slooten 1988). Most strikingly, the most recent estimate is less than four percent of the roughly 1500 Māui dolphins believed to have existed in the 1960s. An analysis of recent population estimates

⁸ Here, the Commission calls attention to the situation concerning the vaquita. On 1 March 2017, the Commission first recommended to NMFS that it consider emergency rulemaking to impose an import ban on certain fish and fish products from Mexico under section 101(a)(2) of the MMPA. NMFS received a petition to initiate such a rulemaking from a conservation organization on 18 May 2017. Three months later, NMFS invited public comment on that petition. On 21 September 2017, the Commission again recommended that NMFS use emergency rulemaking procedures to impose an immediate import ban on offending fish and fish products, noting that, if the agency were to follow its normal rulemaking timeline in taking action to protect the vaquita from additional fishing-related mortality, that action would likely be too late to contribute to saving the species from extinction. Six months later, when no further action had been taken on the rulemaking, petitioners filed a lawsuit to compel NMFS to impose an import ban, an action ultimately ordered by the Court of International Trade. From the time when the Commission first called on NMFS to issue emergency regulations to the time when the court finally compelled NMFS to impose the import ban, approximately half of the 30 or so then remaining vaquitas were lost to fisheries bycatch (CIRVA 2019).

⁹ 82 Fed. Reg. 43701, 7 September 2017

¹⁰ https://www.iucnredlist.org/species/39427/44200192

indicated that the population has been declining by roughly two percent per year since 1985 (Slooten and Dawson 2018a). Although Slooten and Dawson (2018) acknowledged that it is uncertain whether the population is still declining at this rate, Bayesian population projections indicate a high probability that the population is declining and will continue to decline (Slooten and Dawson 2018, Cooke et al. 2018).

Incidental catch in gillnets and trawl nets has been identified as the primary source of human-caused mortality of Māui dolphins. A risk assessment conducted by the New Zealand government (Currey et al. 2012) estimated that 95.5 percent of all human-caused deaths were the result of fisheries interactions. The same assessment estimated that five Māui dolphins, on average, were killed each year due to fisheries interactions. Furthermore, it is likely that that study underestimated the rate of incidental mortality due to a number of factors (e.g., bias due to low observer coverage, low reporting rates for stranded dolphins, and other forms of cryptic mortality; Slooten and Dawson 2018, Slooten and Dawson 2017). In contrast, by calculating the potential biological removal (PBR) standard, which is the United States' formalized metric for assessing impacts of fishing-related takes, Slooten and Dawson (2018) concluded that the Māui dolphin population could sustain losses no greater than one individual roughly every 8 to 20 years. This corresponds to PBR values of between 0.12 and 0.05 removals per year. The range in these values reflects different possible choices about the appropriate intrinsic rate of population growth (R_{max}) to use in calculating PBR. Although there is considerable uncertainty in some of the estimates used, the best available information supports the conclusions that the population has been greatly reduced, abundance is at a precariously low level, the subspecies most likely is continuing to decline and faces a substantial risk of extinction in the foreseeable future, and fisheries interactions are having major impacts on the population.

Neither the MMPA nor NMFS's implementing regulations specify what constitutes an immediate and significant adverse impact on a marine mammal stock. Nevertheless, given the small numbers of Māui dolphins remaining, the population's trend, the low capacity of the species to withstand further losses, and the ongoing number of deaths attributed to fisheries bycatch, it is plainly evident that commercial fisheries are having such an impact on the Māui dolphin.

2) The adequacy of existing measures regulating commercial fishing throughout the range of the Māui dolphin

Since 2003, New Zealand has created "prohibition zones" to protect Māui dolphins from fishing and other impacts (seabed mining and noise from seismic surveys). However, those zones protect only a small portion of Māui dolphin habitat. Gillnetting has been prohibited in less than 30 percent and trawling in just eight percent of Māui dolphin habitat (Leathers and Leslie 2018). However, Māui dolphins are not uniformly distributed within their range, and the effectiveness of such protection depends on the overlap of the prohibited zones with the dolphins' high-density use areas. For example, although Māui dolphins occur from inshore waters to distances of more than 10 nm from shore (Nelson and Radford 2018), protection is provided for only a portion of that depth range.

¹¹ https://www.doc.govt.nz/sanctuary-variation; Currey and Lundquist 2016

Fisheries observers have been placed on some vessels, but the coverage has been too low to estimate the magnitude of incidental catch of Māui dolphins precisely or accurately or to detect trends in the catch. A rule of thumb used in U.S. fisheries is that observer coverage should be sufficient to provide an acceptably precise incidental catch estimate, which is achieved when the estimate's coefficient of variation (CV) is less than 0.3. Coverage rates to achieve that criterion typically exceed 20 percent, and only rarely can it be achieved with coverage rates less than 10 percent. In the case of Hector's dolphin (here meant to refer to both subspecies of *C. hectori*), the observer coverage needed to achieve a CV of 0.3 has been estimated to be 56-83 percent (Baird and Bradford 2000). However, coverage rates for gillnet and trawl fisheries in New Zealand (throughout the combined ranges of both Hector's dolphin subspecies) have averaged less than 5 percent over the past two decades (Slooten and Dawson 2018).

The two population estimates produced since the establishment of the prohibition zones, made five years apart, were very similar (Fig. 7 in Slooten and Dawson 2018), suggesting that protection provided by the prohibition zones may have slowed or halted the population's decline. However, uncertainty in those estimates, and the fact that there have been just two estimates, makes it very difficult to assess whether the existing regulation is having a positive effect, or enough of an effect so that emergency action by NMFS is not warranted. Slooten and Davies (2011) estimated that the protection zones established off the east coast of the South Island in 2008 reduced the incidental catch of Hector's dolphins there by 50-66 percent, but data necessary to make a similar assessment for Māui dolphin are lacking. Moreover, the extremely low level of observer coverage in gillnet and trawl fisheries makes it nearly impossible to determine if the number interactions has changed since 2008.

3) Whether such measures can be considered comparable in effectiveness to the U.S. regulatory program

Standards applicable to U.S. fisheries under the MMPA place limits on the numbers of marine mammals that can be killed or seriously injured incidental to commercial fishing operations. While the New Zealand management system includes many of the elements found in the U.S. system, the dire situation facing Māui dolphins, and their declining trend and the lack of confidence in the measures in place to reverse this trend, suggests that New Zealand's program is not comparably effective. While there are protective measures in place, the Scientific Committee of the IWC, at its most recent annual meeting in May 2018, noted that New Zealand had not implemented any new protective measures for the subspecies since 2013 (IWC in press). The Committee further concluded and reiterated the view that "existing management measures in relation to bycatch mitigation fall short of what has been recommended previously" and the Committee expressed "continued grave concern over the status of this small, severely depleted subspecies" (IWC in press). To address the unacceptably high level of mortality and serious injury of a subspecies such as Māui dolphin, it is likely that NMFS long ago would have (i) assigned highest priority to developing a take reduction plan to reduce mortality and (ii) invoked the emergency rulemaking provisions under MMPA section 118(g) given the apparent "immediate and significant adverse effect" of fisheries on the population. It is also likely that NMFS would have substantially increased observer coverage to better understand and track the impacts of fisheries interactions. It is not clear that New Zealand's efforts to date have been comparable to what is required of NMFS and U.S. fisheries under the MMPA.

Over the past several years, the IWC Scientific Committee has commented on the status of and threats facing Māui dolphins. It concluded at its annual meeting in May 2018 that "highest priority should be assigned to immediate management actions to eliminate bycatch of Māui dolphins including closures of any fisheries within the range of Māui dolphins that are known to pose a risk of bycatch to dolphins (i.e. gillnet and trawl fisheries)" (IWC 2019). The Marine Mammal Commission agrees with the IWC Scientific Committee, and notes that a complete ban on gillnetting and trawling within the core range of Māui dolphins is the one measure most likely to achieve a significant reduction in mortality from bycatch and to make New Zealand's efforts to conserve this subspecies comparable with U.S. standards.

The Commission recognizes that New Zealand is currently developing a revised threat management plan (the TMP) expected to contain further measures to reduce the impact of fishing on Māui dolphins. The TMP is projected to be completed by the end of the year. The Commission appreciates New Zealand's commitment to developing and implementing the plan, but we note that such processes often take much longer than expected and do not always achieve the desired results. Further, it is likely that, once the TMP is completed, considerable time will be required to implement it or to ascertain whether the implementation is effective. The Commission believes that Māui dolphins are at too great a risk of further decline and extinction to allow for customary, but potentially drawn-out procedures that, in the end, may not sufficiently mitigate the main threats facing Māui dolphins.

4) Which specific fisheries are or may be directly associated with potential mortality of Māui dolphins and therefore fall within the scope of the petition for emergency action

As discussed above, there is abundant evidence that fishing with gillnet and trawl gear pose the greatest threat to the continued existence of the Māui dolphin. However, due to very low observer coverage, it is difficult if not impossible to determine precisely which fisheries are responsible for or the primary contributors to the decline of Māui dolphins. In the absence of more detailed information and recognizing that such information cannot be obtained within a reasonable timeframe, the Commission agrees with the petitioners that the specific fisheries which are, or may be, directly associated with mortality of Māui dolphins are the gillnet and trawl fisheries that operate within the core range of the Māui subspecies. Although the Import Rule focuses on identifying particular offending fisheries, it is the statutory language that should be controlling. In this case, the language of the MMPA states, "[t]he Secretary ... shall ban the importation of commercial fish or products from fish which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of United States standards." (emphasis added). We call your attention to the reference to fishing technology (e.g., gear type) rather that particular fisheries.

Conclusions

The preamble to the Import Rule indicates that "[b]efore NMFS initiates an emergency rulemaking, NMFS would consult with the nation with the relevant fishery and urge it to take measures to reduce the incidental mortality and serious injury and effectively mitigate such

immediate and significant adverse impact on the marine mammal stock(s)."¹² The Commission understands that NMFS has already initiated this process. Further, the preamble explains that: "[i]f the harvesting nation fails to take measures to reduce the incidental mortality and serious injury and mitigate such immediate and significant adverse impact, NMFS would consider prohibiting the imports of fish and fish products from the relevant export or exempt fishery through notice and comment rulemaking." The Commission agrees that the appropriate action in response to a failure to take measures that adequately reduce mortality should be to ban the corresponding imports. In fact, in light of the parallels between this situation and that involving the vaquita and considered by the Court of International Trade (*NRDC* v. *Ross*), ¹³ NMFS might not have a lawful alternative other than imposing such a ban.

Therefore, the Commission recommends that NMFS accelerate its emergency rulemaking process by:

- 1) concluding its consultations with New Zealand;
- 2) promptly publishing a proposed or final rule to ban imports of fish or fish products from fisheries known or likely to take Māui dolphins in excess of U.S. standards unless it has received new information that supports a conclusion that New Zealand is implementing additional mitigation measures that are highly likely to reduce the mortality and serious injury of Māui dolphins incidental to gillnet and trawl fisheries to a level lower than the species' PBR level; and
- 3) considering invoking the "good cause" exception¹⁴ to the notice and comment requirements of the Administrative Procedure Act to implement an immediate import ban.

If NMFS concludes that New Zealand has adopted measures likely to reduce the mortality and serious injury of Māui dolphins incidental to gillnet and trawl fisheries to a level comparable to U.S. standards, the Commission recommends that the agency make the information on which such a conclusion is based available to the public and provide an additional opportunity for public comment.

The Commission recognizes that it may be difficult at this time to track fish and fish products to specific offending fisheries. If that is the case and NMFS does move forward with a ban, the Commission recommends that NMFS include imports of fish and fish products from all gillnet and trawl fisheries that operate, even partially, in the core of the Māui dolphin's range.

¹² 81 Fed. Reg. 54390 at 54395

¹³ In the relevant part, the court found that "it is undisputed that because of bycatch in the gillnet fishing technology, the vacuita is being killed and is on the verge of extinction -- a result which perforce contravenes. United States standards

vaquita is being killed and is on the verge of extinction -- a result which perforce contravenes United States standards. Countenancing a regulations-imposed delay until 2022 for consultations with the Mexican government...while the vaquita goes extinct, would be inconsistent with the MMPA's general moratorium on marine mammal takings and the Imports Provision's direction that the Secretary of the Treasury "shall ban" offending imports in order to meet the "immediate goal that the incidental kill or incidental serious injury of marine mammals permitted in the course of commercial fishing operations be reduced to insignificant levels approaching a zero mortality and serious injury rate." ¹⁴ 5 U.S.C. § 553(b)(3)(B)

We hope these comments and recommendations are helpful. Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,

Peter O. Thomas, Ph.D., Executive Director

Peter o Thomas

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