



March 19, 2021

Ms. Kitty M. Simonds, Executive Director
Western Pacific Fishery Management Council
1164 Bishop Street, Suite 1400
Honolulu, Hawaii 96813

Dear Director Simonds and Council Members:

We submit the following comments on Agenda Item 7, on behalf of the Conservation Council for Hawai'i and Kona-based Moana Ohana.

At this meeting, the Western Pacific Fishery Management Council must adopt recommendations pursuant to the Magnuson-Stevens Act for domestic regulations to address the relative impact of U.S. fishing vessels on the Western and Central Pacific oceanic whitetip shark stock, as well as recommendations for international actions that will end overfishing and rebuild the stock. *See* 16 U.S.C. § 1854(i)(2).

Domestic management measures also will be important for meeting the requirements of the Endangered Species Act (ESA), as oceanic whitetip shark was declared threatened under the ESA two years ago. *See* 83 Fed. Reg. 4153 (Jan. 30, 2018). The National Marine Fisheries Service (NMFS) currently is developing multiple Biological Opinions to address the impact of U.S.-managed fisheries on oceanic whitetips, and management measures likely will be necessary to mitigate impacts of U.S. longline fleets in the Western and Central Pacific.

Given the species' overfished and threatened status, the domestic management goal must be to minimize oceanic whitetip catch to the greatest degree possible, and to increase survival rates for any individuals caught. Not only will doing so help fulfill the Council and NMFS's management obligations under the Magnuson-Stevens Act and the ESA, but it can serve to establish best practices for pelagic longline fisheries – which the United States can then work to export through Regional Fishery Management Organizations (RFMOs) to international and foreign management jurisdictions.

For these reasons, the Council should consider all possible options thoroughly and recommend a robust suite of management measures to NMFS. The Council specifically should evaluate and recommend the following management measures:

I. Domestic Measures

A. Require Monofilament Leaders

The undersigned organizations support the Hawaii Longline Association (HLA) proposal to transition to monofilament leaders. This is a good idea from a conservation perspective, and the industry's leadership in this regard should be encouraged.

Wire leaders have been used in the Hawaii deep-set fishery to prevent flyback of weighted swivels, but wire leaders generally prevent sharks from biting through the line and freeing themselves. They also make it difficult for crew to minimize trailing gear on released animals.

In the past few years, flyback prevention devices and similar innovations have been developed to help mitigate the safety concerns associated with mono leaders and weighted branch lines. With these techniques available, mono leaders are a viable option and should be pursued.

A transition to mono leaders is expected to result in some modest amount of shark bite-offs, which increases survival for those animals that are able to free themselves. Potentially more important, however, is the ability of crew to cut the leader close to the hook when mono leaders are used. This allows trailing gear to be minimized, and trailing gear is well-understood as a significant cause of post-release mortality. *See, e.g.,* Melanie Hutchinson et al., PIFSC Data Report DR-21-001: Quantitative Estimates of Post-Release Survival Rates of Sharks Captured in Pacific Tuna Longline Fisheries (Mar. 10, 2021).

Because minimizing trailing gear will require some changes to handling practices, HLA's industry-funded training for crew members is an important component of the transition to mono leaders. The Council should encourage NMFS to support this training as needed. Further, the Council should consider adding a crew training program as a sub-option within the alternatives in the Wire Leader Regulatory Amendment, if NMFS indicates such an addition is possible. It is critical that training reaches all parts of the fleet and is repeated sufficiently.

While we support a change to mono leaders, it is critical to ensure that leaders—as well as branch lines—have a sufficiently high breaking strength to be able to straighten hooks under

the False Killer Whale take reduction measures. We understand there is some concern that current line strength requirements, *see* 50 C.F.R. § 229.37(c), are not sufficient, and that branch lines and/or leaders are breaking before hooks are straightened. The Council should flag this issue for NMFS and consider how it may be addressed going forward.

In terms of structuring a mono leader requirement, the undersigned groups recommend Alternative 3 in the draft Regulatory Amendment, which would make it mandatory and applied to all longline fleets—as well as adding a handling practices training sub-option, as noted above. Making mono leaders mandatory will ensure uniform compliance across the fleet, such that HLA members are not disadvantaged. It also is necessary if the measure is to be considered and accounted for under ESA consultation.

Finally, the largest conservation gains can be made at the international level and setting a uniform requirement for mono leaders in all of our domestic fleets will position the U.S. delegation to the Western and Central Pacific Fisheries Commission (WCPFC) to advocate strongly for an international mono leader requirement.

For these reasons, the Council should take initial action to identify Alternative 3 in the Draft Wire Leader Regulatory Amendment together with a crew training program as the preliminary preferred alternative, and set the matter for final action on a future meeting agenda.

B. Add a Circle Hook Requirement for the American Samoa Fleet

All domestic fleets currently use circle hooks, either as a regulatory requirement or as a matter of practice. The Hawaii shallow-set fishery is required to use circle hooks under Magnuson regulations, *see* 50 C.F.R. § 665.813(f), and the deep-set fishery is required to use circle hooks under false killer whale take reduction regulations, *see id.* § 229.37(c)(1)(i). In the American Samoa longline fishery circle hooks are not required, but as a matter of practice the fleet uses size 13/0 and 14/0 circle hooks. *See, e.g.,* Hutchinson et al., *supra*, at 37.

The Council should establish a circle hook requirement for the American Samoa longline fishery in order to complete the coverage of our domestic longline fleets under circle hook requirements. Given widespread current use of circle hooks in the American Samoa fishery, a regulatory requirement would not involve changes on the water, but rather would situate the United States to advocate for mandatory circle hooks at the international level.

Once all domestic fleets are covered by a circle hook requirement, the U.S. delegations to the Pacific RFMOs can make a stronger case for circle hook requirements internationally. An international circle hook requirement is already being discussed as a striped marlin measure relative to WCPFC. Completing our domestic coverage would give the United States a solid position if it were to pursue an international longline circle hook requirement in the striped marlin context, or in a subsequent shark initiative. And an international circle hook requirement would bring substantial benefits, given that some high-effort foreign fleets currently do not use circle hooks.

The Council should include a circle hook requirement for the American Samoa fleet as a domestic recommendation for oceanic whitetip shark under Section 304(i) of the Magnuson-Stevens Act, and should move forward swiftly with adopting it in the Pelagics Fishery Management Plan so as to facilitate international action on circle hooks.

C. Require Non-Stainless Steel Hooks

Bycatch species like sharks are often released with hooks embedded in their mouths. Embedded hooks can affect sharks directly, and they also serve as anchor points for trailing gear—which is well-established as an energetic drain and source of post-release mortality. *See* Hutchinson et al., *supra*.

When hooks are made from corrodible metals, they rust out and can be shed much more quickly than stainless steel hooks. Research bears this out, showing that non-stainless hooks have a shorter residence time in sharks. *See, e.g.,* Michel Bègue et al., Prevalence, Persistence and Impacts of Residual Fishing Hooks on Tiger Sharks, 224 Fisheries Res. 105462 (2020). Corrodible hooks therefore offer the potential for lower post-release mortality of sharks and other bycatch species. As they break free of the animal, they not only remove the foreign object embedded in that animal's tissue, but they also release any attached trailing gear.

For precisely this reason, a number of other U.S. fisheries have adopted non-stainless hook requirements. *See, e.g.,* 50 C.F.R. § 635.21 (U.S. Atlantic pelagic and bottom longline fisheries); *id.* § 635.22 (U.S. East Coast and Gulf of Mexico recreational shark fisheries); *id.* §§ 622.30, 622.188 (U.S. Southeast reef fish and snapper-grouper fisheries). The Hawaii-based and American Samoa longline fisheries, however, are not currently required to use non-stainless hooks. *See id.* §§ 665.798-819.

A non-stainless hook requirement is an important complement to (1) mono leaders and (2) circle hooks, and would significantly help to minimize post-release mortality of these vulnerable sharks. Mono leaders give crew the opportunity to cut lines close to the shark, while non-stainless hooks allow the hook and any remaining line to shed off from the shark more quickly after the initial line cutting. These measures reinforce each other, and together effectively minimize trailing gear in sharks. Further, because mono leaders will require regular inspection and replacement, crew will already be inspecting the terminal tackle regularly and can replace rusted hooks at the same time. While these inspection and replacement tasks do take crew time, there is efficiency in doing them together.

Circle hooks reinforce and make more effective a non-stainless hook requirement as well. Circle hooks ensure that the vast majority of hooking occurs in sharks' mouths, rather than internally; this location is better for corrodible hooks in that it is less sensitive than internal areas and provides an optimal place from which corrosion-induced weakening can release the hook. *See, e.g.,* Heather M. Patterson & Michael J. Tudman, Australian Fisheries Management Authority, *Chondrichthyan Guide for Fisheries Managers*, at 69 (2009) (pointing out that “[c]ertain combinations of the mitigation options identified may compliment each other and achieve better results than if working in isolation,” and specifically, “changing from non-corrodible J-hooks to corrodible circle hooks at the same time will be more cost efficient and likely more effective than making a single gear change”).

A non-stainless hook requirement therefore would have added effectiveness in U.S. Pacific longline fisheries, given current circle hook usage and the anticipated mono leader requirement.

For these reasons, the Council should recommend a non-stainless hook requirement for all U.S. Pacific longline fisheries and move swiftly to adopt the requirement. This approach not only would be consistent with the Council's duties under Section 304(i) of the Magnuson-Stevens Act, but it also could allow the Council to have a more active role in shaping management measures under the current ESA consultations.

Moreover, as with the two measures discussed above, a domestic non-stainless hook requirement would position the United States to push for a similar requirement at the international level—which would have huge conservation implications.

As a final note, like the mono leader requirement, a non-stainless hook requirement could necessitate some analysis of the weak hook measures under the false killer whale take reduction plan. Non-stainless hooks have different tensile strengths than stainless hooks, so it is possible

that current regulations would need to be changed in order for the weak hook and hook-straightening protocols to work successfully. This should not be used as a reason to ignore non-stainless hooks, but rather as an opportunity to ensure that the weak hook measures are working as intended.

D. Consider a Gear Configuration Requirement for the Hawaii Deep-Set Longline Fishery to Eliminate Shallow Hooks

In addition to adopting the measures described above into regulations, the Council should consider is a gear configuration requirement for the Hawaii deep-set longline fishery to eliminate or redistribute shallow hooks.

The shallowest hooks in a longline array are well-understood to preferentially catch sensitive epipelagic species like oceanic whitetip sharks. *See, e.g.,* Jordan T. Watson & Keith A. Bigelow, Trade-Offs Among Catch, Bycatch, and Landed Value in the American Samoa Longline Fishery, 28 *Conserv. Biol.* 1012 (2014); Keith Bigelow & Bruno Mourato, PIFSC Working Paper WP-10-005: Evaluation of Longline Mitigation to Reduce Catches of North Pacific Striped Marlin in the Hawaii-Based Tuna Fishery (2010).

For this reason, gear configuration requirements have been proposed in some fisheries to ensure the shallowest hooks are at least 100 meters in depth. *See id.*; Steve Beverly et al., Effects of Eliminating Shallow Hooks from Tuna Longline Sets on Target and Non-Target Species in the Hawaii-Based Pelagic Tuna Fishery, 96 *Fish. Res.* 281 (2009). When shallow hooks are redistributed to lower points on the mainline, studies show that vessels can maintain target species catch rates and ex-vessel values, albeit with some amount of added labor. *Id.* at 286-87.

The American Samoa longline fishery has a gear configuration requirement under which float lines must be at least 30 meters and branch lines must be more than 70 meters from any float line, which results in the shallowest hooks being deeper than 100 meters. *See* 50 C.F.R. § 665.813(k). The Hawaii-based tuna longline fishery, however, does not have a comparable gear requirement. *See id.* § 665.800 (definition of “deep-set” gear).

The undersigned organizations recommend the Council consider a gear configuration requirement for the Hawaii deep-set fishery to ensure all hooks are deeper than 100 meters. An existing template for regulation is available in the American Samoa provisions, and eliminating shallow hooks would be consistent with minimizing U.S. bycatch and restoring protected species under the ESA.

E. Set Annual Catch Limits

Under the Magnuson-Stevens Act, NMFS must set annual catch limits for all managed species. The agency has misinterpreted Congressional language on the deadlines by which it was supposed to establish annual catch limits, *see* 16 U.S.C. 1853 note, to create an exemption for all internationally-managed species, which it applies to oceanic whitetip shark. *See, e.g.*, 82 Fed. Reg. 18,716 (Apr. 21, 2017) (failing to set annual catch limits for pelagic management unit species).

The law requires NMFS to establish annual catch limits for oceanic whitetip sharks. This requirement is all the more urgent given that oceanic whitetips are overfished and subject to overfishing, and have been listed as a threatened species under the ESA. These overlapping legal designations mean that annual catch limits for oceanic whitetip shark must sufficiently reduce and constrain the U.S. contribution to the stocks mortality to facilitate rebuilding and recovery. The Council should urge NMFS to comply with its legal duties under sections 303(a)(15) and 304(i) of the Magnuson-Stevens Act, and establish annual catch limits for oceanic whitetip shark.

II. International Measures

Under the Magnuson-Stevens Act, the overfished declaration for oceanic whitetip shark gives this Council the duty to formally “develop and submit recommendations to the Secretary of State, and to the Congress, for international actions that will end overfishing in the fishery and rebuild the affected stock[.]” 16 U.S.C. § 1854(i)(2)(B). We encourage the Council to use this opportunity to advocate for strong, precautionary management of oceanic whitetip sharks at the international level.

Adopting effective conservation measures for the domestic fleet and exporting these measures to international fisheries will help meet the Council’s duties to end overfishing and rebuild the oceanic whitetip shark population and will put the United States fleets on a more equal footing with foreign longline fleets. In addition, actions to end overfishing and rebuild oceanic whitetip sharks will, in many cases, have conservation benefits for more than just this species of shark, so we encourage the Council to think broadly in developing its international recommendations.

A. Increase Observer Coverage

Oceanic whitetips are caught primarily in Pacific longline fisheries, which have very low levels of observer coverage basin-wide. Domestic observer coverage levels normally are around 20% in the Hawaii deep-set and American Samoa longline fisheries, and 100% for the Hawaii shallow-set fishery. The Oceanic Whitetip Working Group recommends an increase in observer coverage at the international level to 10%, including compliance via electronic monitoring. *See* OCS-WG Findings Report, at 7 (Mar. 2021). We agree that electronic monitoring could play an important role, and encourage the Council to be more ambitious and recommend an international requirement of 20% observer coverage for longline fisheries. Such a requirement, if adopted by the WCPFC and IATTC, would provide much-needed data from foreign fleets, and would aid in monitoring compliance with international conservation measures.

B. Require Circle Hooks

Circle hooks are not currently required at the WCPFC, and some of the high-effort foreign fleets are understood to use tuna hooks or other non-circle hooks. These hooks are known to have higher catch rates for species like oceanic whitetip sharks, and in some cases can result in damaging gut-hooking of animals. *See generally* Shelley Clarke et al., U.N. FAO Fisheries & Aquaculture Technical Paper No. 588, *Bycatch in Longline Fisheries for Tuna and Tuna-Like Species*, at 47 (2014). We agree with the Oceanic Whitetip Shark Working Group that “the use of circle hooks in international longline fisheries [would] be [an] important step[] to reduce fishing mortality.” OCS-WG Findings Report, at 7.

The Council should recommend that the United States advocate for a conservation and management measure (CMM) that requires circle hooks at the international level. As explained above, circle hook use by all longline fleets would be expected to reduce catch of oceanic whitetip sharks and other species and promote post-release survival. It also can work with other measures (such as non-stainless hooks and mono leaders) in efficient ways to further reduce shark mortality. This should be a high-priority goal at the international level.

C. Ban Shark Lines

At the WCPFC, CMM 2019-04 allows nations to choose between wire leaders and shark lines. This should not be a choice. Shark lines in a deep-set longline fishery have no function other than to catch sharks. Given the international retention bans on oceanic whitetip and silky

sharks, the high discard rates of many other shark species, and the risk of finning in under-monitored fisheries, shark lines should be prohibited.

The United States should press for a complete ban on shark lines in longline fisheries at the WCPFC. This would dramatically reduce mortality on oceanic whitetip sharks and other shark species, and would go a long way toward the goal of ending overfishing and rebuilding the stock. The undersigned organizations urge the Council to recommend such a measure.

D. Require Monofilament Leaders and Handling Protocols

As described above, mono leaders can—when combined with good handling protocols—allow for reduced trailing gear on released sharks. We agree with the Oceanic Whitetip Working Group and urge the Council to build on its domestic action toward mono leaders by recommending a similar requirement at the international level. *See* OCS-WG Findings Report, at 7-8. This would involve revising the other half of WCPFC CMM 2019-04, such that wire leaders are no longer an option. Crew training will be critical in this scenario, so the Council and NMFS should consider how best practices can be spread at the international level. *See id.* at 8 (discussing international handling practices).

E. Require Non-Stainless Hooks

Hundreds of thousands of animals—if not millions—are released from longline fisheries every year in the Pacific basin, with hooks embedded in their mouths or elsewhere in their bodies. The United States' share is likely in the tens of thousands of animals, and we can address this share by requiring non-stainless hooks domestically, as described above.

All the rest of these animals, however, are waiting for a non-stainless hook requirement at the international level. The Council should build on a domestic non-stainless hook requirement by recommending a similar measure internationally. While the precise reduction in post-release mortality may be difficult to quantify, at least immediately, the concepts underlying corrodible hooks are well established and the results have been observed in situ. *See* Bègue et al., *supra*. Non-stainless hooks further complement circle hooks and mono leaders, as noted above. This should be a high-priority measure for the Council and NMFS.

F. Establish an International Rebuilding Plan

Rebuilding plans at the international level provide an important framework for managing overfished stocks that are shared by multiple countries. The undersigned organizations encourage the Council to recommend creation of an international rebuilding plan for oceanic whitetip shark, as one of its recommendations under Section 304(i) of the Magnuson-Stevens Act for “international actions that will . . . rebuild the affected stock[.]” An international rebuilding plan with a target biomass and time frame for rebuilding would be helpful, as it would create a focal point for international management of oceanic whitetip shark and would provide leverage for strengthening international management measures for the species.

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Thank you for your consideration, and we look forward to the discussion at the Council’s upcoming meeting.

Yours truly,

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