WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Pelagic Fishery Ecosystem Plan Team Meeting Report

March 3 and 4, 2021
1:00 p.m. – 5:00 p.m.

1. Welcome and Introductions

Donald Kobayashi, Chair, introduced new Pelagic Plan Team members Jason Helyer (Hawaii Division of Aquatic Resources, DAR) and Frank Villagomez (CNMI).

Plan team members also in attendance were Keith Bigelow, Felipe Carvalho, Emily Crigler, Stefanie Dukes, Michael Fujimoto, Melanie Hutchinson, Russell Ito, T. Todd Jones, Michael Kinney, Kirsten Leong, Minling Pan, Sean Felise, Brent Tibbatts, Ashley Tomita, Phoebe Woodworth-Jefcoats, Rebecca Walker, and Domingo Ochavillo. Council staff present were Mark Fitchett, Asuka Ishizaki, Zach Yamada, and Joshua DeMello.

2. Approval of Agenda

The agenda was approved by consensus.

3. Oceanic Whitetip Working Group Report

A. Monte Carlo Analyses of Longline Mitigation Measures

Keith Bigelow, PIFSC, presented a summary of expected analyses of longline mitigation measures using a Monte Carlo analytical approach, which pools together the US observer data and all international observer data, and evaluates a series of 'what-if scenarios'. The modeling framework is parameterized by catchability propensity due to impact of placement of hooks, type of hooks, use of gear modifications such as wire leader materials. The analyses are expected to be completed in April 2021. Bigelow also presented some data analyses on the Hawaii longline fishery looking at the impact of leader material on catchability or interaction rate using a negative binomial modeling approach. The analyses indicated that tuna hooks were phased out and being replaced with circle hooks since 2005 to 2013, and all deployed hooks since then are circle hooks. The use of mono leaders is sparse in the data series. Early data had poor sample sizes for combinations of gear configurations and had little consistency in use of gear configurations. Bigelow noted no statistically significant difference for catchability of oceanic whitetip sharks by leader types, but was hesitant to put confidence in that result due to severe data limitations and rarity of encounters with the species. Bigelow sought Plan Team and SSC guidance, but at the time prefers to borrow parameters from other studies and from more

definitive significant shark analyses. These analyses could inform impacts of the Hawaii Longline Association (HLA) proposed voluntary action on prohibiting wire leaders in longline fisheries.

B. Working Group Report and Options Document to Address MSA 304(i) Obligations

Bigelow reported on the Oceanic Whitetip Working Group (OCS WG), its findings, and options to address the Council's statutory requirements to act under its MSA 304(i) obligations. These include improved handling, reduction of trailing gear left on sharks in domestic and international fisheries, increased international observer coverage in particular regions where risk of interactions are highest, and development of effective line-cutter devices/protocols. The OCS WG developed a literature review summary of analyzed impacts of wire leader and handling aspects on catchability, mortality (at vessel and post-release), and effectiveness. The OCS WG developed five viable options (2 domestic and 3 international) for satisfying MSA 304(i) obligations.

A Plan Team member inquired what other shark species with ample information on mortality of sharks at haul-back could also inform oceanic whitetip mortality with respect to at-vessel mortality due to physiological stress. A Plan Team member noted that physiologically and ecologically, silky sharks are more applicable and similar to oceanic whitetip sharks. Another Plan Team member noted that based on dock-side observations, a lot of the Hawaii longline vessels have already transitioned to monofilament leaders and remain optimistic about the prospect of transitioning away from wire leaders.

4. Regulatory Amendment for Removal of Wire Leaders in Hawaii Deep-set Longline Fishery

Asuka Ishizaki, Council staff, presented the draft regulatory amendment evaluating the options to prohibit the use of wire leaders in the Hawaii deep-set longline fishery. The Council at the 184th meeting in December 2020 recommended development of the amendment in response to the Hawaii Longline Association proposal to voluntarily eliminate the use of wire leaders by July 1, 2021, and use monofilament nylon leaders or other similar materials in its place. In addition to the literature review on potential effects of leader material on oceanic whitetip sharks, the draft amendment includes a summary of available information on the effects on target and non-target species, protected species, and socioeconomic factors.

The Pelagic Plan Team recognized that catch rate and bite-off differentials between wire and mono leaders could use more analysis with respect to circle hook gear. There are clear benefits to oceanic whitetip shark post-release survivorship and through reduction in trailing gear. Benefits of post-release survivorship and trailing gear removal are shared with other taxa such as marine mammals, sea turtles, billfish, and other sharks. With respect to conservation benefits, the Pelagic Plan Team noted that there is no downside to switching from wire to mono leaders.

The Plan Team discussed the necessity of implementing a voluntary action into a regulation, noting the burden of an administrative process with associated costs and benefits. The Plan Team

discussed concerns over taking final action on the prohibition of wire leaders in the Hawaii longline prior to completion of analyses to discern impacts. The Plan Team did reach consensus to support the Council taking initial action, with the understanding that analyses in progress would be needed to be completed prior to informing the Council on final action. The benefits to a regulatory amendment, if considered necessary, include that it:

- articulates recognition to HLA's proactive conservation commitment in added cost, added work to implement, and work to reduce risk of fly-back injury;
- ensures that the voluntary conservation measure reaches adoptive fruition;
- transitions the voluntary conservation measure to binding enforceability;
- creates equitability across all participants in the fleet and not just HLA to prevent the "free-rider" problem which keeps the prohibition of wire leaders fair for all fishery participants;
- is consistent with actions necessary under MSA and ESA (be transparently proactive); and
- strengthens the US position with respect to conservation advice passed to the international community, thus ensuring the US is not perceived as hypocritical.

5. Public Comment

Seth Atkinson, Earthjustice, provided a summary of their comment letter included in the briefing materials. Atkinson echoed the narrative that the implementation for prohibiting wire leaders in longline fisheries is a "win-win" and supports the voluntary commitment on wire leaders. His organization recognizes that the transition from wire to mono leaders reduces trailing gear. Atkinson was not waiting for "statistical significance", but results show the benefits of wire leader prohibition. Earthjustice is looking from MSA, international, and ESA angles. The ongoing ESA consultation may yield some changes. The Council should be involved in those changes to help oceanic whitetip sharks recover. There is a good result when there is Council and industry involvement in this process. Earthjustice would also like to see removal of shallow-hooks in deep-set fisheries, requirement of circle hooks in the American Samoa longline fishery, and requirement to use non-stainless steel hooks.

David Gershman, Ocean Foundation, thanked the Council staff, OCS WG, and HLA and noted that the oceanic whitetip stock is 5% of unfished biomass. Lack of perfect information should not delay the move to transition away from wire leaders. Australia banned the use of wire trace in their longline fishery to reduce shark bycatch. Gershman echoed the discussion that codifying a voluntary action will be useful through regulation. Internationally there is a need to reduce bycatch and provide additional monitoring. He stated 10% observer monitoring of longline fisheries may not be enough, but could be a stepwise progression.

Eric Kingma, HLA, echoed the comments made by Earthjustice and Ocean Foundation representatives, aligning the industry with the conservation community. Looking into the literature and consulting with experts, HLA made the decision to proactively remove wire leaders. Having enforcement capability is needed, as HLA does not do law enforcement. Monofilament leader is 'more work' than using wire and requires more replacement with an associated cost. Despite all of these issues, HLA wants to proceed to reduce the impact on oceanic whitetip sharks. Kingma expressed concerns on removing shallowest hooks, specifically as to how it may be enforced and the low likelihood it would be adopted by international fleets. Non-stainless hooks have an associated cost and are more brittle and could have issues with false

killer whales with respect to hook-straightening. Economic concerns are not trivial, considering a loss of $45 million in 2020, but despite these issues, HLA wants to move forward with removing wire leaders in Hawaii longline fisheries.

Brettny Hardy, Earthjustice, thanked the OCS WG and Plan Team. Hardy supports a regulatory change rather than a voluntary measure. The regulatory change would ensure MSA and ESA requirements are met. The oceanic whitetip shark stock is expected to move towards extinction and from a conservation perspective, there is a sense of timeliness that needs to be addressed.

Chelsey Young, PIRO Protected Resources Division, noted that from the perspective of the oceanic whitetip shark recovery plan coordinator, the species may need several measures to reduce at-vessel and post release mortality. A regulatory measure to prohibit wire leaders in longline fisheries goes very much in mind with the recovery plan and its timeline. This does take into consideration the best available science at the moment, and thus it warrants movement for action.

6. Seabird Mitigation Measures for the Hawaii Longline Fisheries: Options for the Shallow-set Fishery and Tori Line Specifications for the Deep-set Fishery

Ishizaki presented on the option paper on the potential modifications to the Hawaii shallow-set longline fishery seabird mitigation measures. The options paper considers whether blue-dyed bait and/or offal discharge requirements in the shallow-set fishery may warrant modifications at the same time that the Council considers action on those measures for the deep-set longline fishery later in 2021. There is limited available data to determine whether removal of blue-dyed bait and/or offal could lead to increased interactions, if removed without replacement measures. Additional research will likely be needed to consider replacement measures in the shallow-set fishery. Industry representatives have indicated that a higher priority would be to allow for start of setting operations before sunset (currently required to night-set if stern-setting), and thus additional research and development of combination of measures would be warranted. Ishizaki noted that the tori line specifications for the deep-set fishery are still in development and will be discussed at a later time.

The Pelagic Plan Team noted that it would be helpful to look at the effectiveness of existing measures as well as tori lines in the shallow-set fishery. Any new measures should align with international requirements. A Plan Team member asked what the need is in focusing on the shallow-set fishery, considering that the effort is limited compared to the deep-set, and most seabirds caught in the shallow-set fishery are released alive. Ishizaki explained that the existing measures were implemented in the early 2000s to comply with the US Fish and Wildlife Service BiOp, whereas the Council originally wanted to provide vessel operators flexibility, and there is now opportunity to consider modifications, including looking at ways to provide more operational flexibility while maintaining mitigation measure effectiveness.

7. North Pacific Striped Marlin Annual Catch Limits

Mark Fitchett, Council staff, presented on US catch limits for striped marlin north of the equator and within WCPFC Convention Area. The Western and Central North Pacific striped marlin

("North Pacific striped marlin") is overfished and experiencing overfishing. The Council will need to act based on its MSA 304(i) obligations to recommend domestic measures to reduce overfishing by accounting for the relative impacts of US fishing vessels under the Council's Pelagic FEP. Alternatives under consideration are 1) no action, 2) catch limits from 2021-2024 that correspond to a 13.4% reduction from 2013-2017 US catch biomass, 3) catch limits from 2021-2024 that correspond to a 34.4% reduction from 2013-2017 US catch biomass, and 4) annual catch limit of 457 mt, consistent with previous Council action and WCPFC CMM 2010-01. Fitchett presented on conservation and economic costs and benefits of each of the alternatives. The Plan Team was asked to provide guidance on improving monitoring of striped marlin, what analyses would be needed to better facilitate adaptive management approaches to reduce relative impacts of US vessels, and prioritizing analyses to reduce regulatory discard mortality.

A Plan Team member asked whether indicator monitoring similar to bigeye tuna and swordfish included in the SAFE report might be of interest for striped marlin. Council staff responded that size based indicators, perhaps on a seasonal basis, could be of interest to determine fishery impacts. Another Plan Team member noted CPUE and economic indicators should be explored. Anecdotally, a Plan Team member has heard about recent expansions to spawning seasons for striped marlin and for some other species, including nearshore and pelagic species. These species may be spawning year-round, as compared to before when they had a smaller window of opportunity to spawn.

A Plan Team member noted that the region is in a similar situation it was with oceanic whitetip sharks, and thus perhaps the Plan Team may want to look into analyses to reduce regulatory discards, develop priorities for analyses for monitoring, and develop a working group after the WCPFC Science Committee convenes in August 2021. Council staff noted that the Council is not held by any statutory deadlines beyond reducing US impacts on the stock once it addresses its MSA 304(i) obligations and that there will be a blue marlin stock assessment August 2021, and there is a need to what the international realm does with both billfish stocks. Therefore having this working group after the WCPFC Science Committee would be ideal.

A Plan Team member noted that the FEP Amendment should account for possible international management changes and be flexible enough to adapt to new incoming information. Additionally, the Council staff should consider analyzing a scenario of non-retention of striped marlin for comparative purposes.

A Plan Team member noted there is a need to work with economic impacts on the stock and asked if there will be changes with other species fishery performance or negative consequences with other fisheries. Council staff noted that proposed catch limits would not change the nature of fishing, since affected longline fisheries target bigeye tuna. The fishery would simply not retain striped marlin beyond a point and therefore impacts on other fish stocks or protected species are not expected to change.

8. Public Comment

Theresa Labriola, Wild Oceans, thanked the Plan Team for its presentation on domestic

approaches to rebuilding striped marlin. Wild Oceans supports the Council's approach to catch limits and the phased approach. Wild Oceans is interested in coupling live releases with a catch limit to minimize regulatory discard mortality. Labriola supports seasonality indicators and area-based management to be explored. Wild Oceans requests analyses for implementing accountability measures for thresholds with mandatory releases, noting excessive dead discards when a limit is reached. Although supporting a phased approach to catch limits, Labriola supports these alternatives to include a future default catch limit to rebuild the stock.

Labriola asked if overfishing would persist if catch limits were enacted by the US alone and if the ISC has reviewed the assessment and stock projections. Council staff said that if the US acts unilaterally under the alternatives presented, overfishing would still persist. Council staff also mentioned that if the US ceased fishing mortality of striped marlin, the stock would remain overfished. The ISC and ISC Billfish Working Group has reviewed the stock assessment and initial stock projection analyses, but would be reviewing the updated analyses the following week.

9. Pelagic Plan Team Discussion and Recommendations

Regarding Domestic Options Presented by the Oceanic Whitetip Shark Working Group, in order to satisfy MSA 304(i) obligations, the Pelagic Plan Team:

1. Endorses the Hawaii Longline Association (HLA) proposal to replace wire leaders with monofilament nylon or other similar material as a potentially significant means to reduce catch rate, trailing gear and post release mortality of oceanic white tip sharks, as well as to provide potential conservation benefit to other species of concern including sea turtles, marine mammals, billfish, other shark species, and rays. The Plan Team recommends the Council further consider a regulatory amendment, if needed.

2. Recommends the Council work with HLA and NMFS to implement captain and crew training on proper shark handling and gear removal[1] in US fisheries, as proposed by HLA, with attention to innovations that further safety at sea and promote post-release shark survivability. This training should include proper implementation of line-cutters.

Regarding International Options Presented by the Oceanic Whitetip Shark Working Group, in order to satisfy MSA 304(i) obligations, the Pelagic Plan Team:

3. Recommends the Council work with the State Department and NMFS to support an increase in international observer coverage and/or electronic monitoring (EM) in areas with higher likelihood of oceanic whitetip shark capture. Fishery monitoring is a necessity for non-target species and there is a reasonable argument to increase coverage to at least 10% in equatorial waters (10°S northward to 10°N).

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1 Hutchinson, M., Bigelow, K., and F. Carvalho (2019) Quantifying post release mortality rates of shark bycatch in Pacific tuna longline fisheries and identifying handling practices to improve survivorship. WCPFC Scientific Committee 15th Regular Session. WCPFC-SC15-2019/EB-WP-04, Pohnpei, Federated States of Micronesia

4. Recommends the Council work with the State Department and NMFS to advance the reduction of wire leader usage and the use of circle hooks in international longline fisheries as important steps to reduce fishing mortality of non-target species.

5. Recommends the Council work with the State Department and NMFS to progress best handling practices of sharks and rays into internationally binding measures to appreciably reduce total mortality of those species.

Regarding Western and Central North Pacific (WCNPO) Striped Marlin, the Pelagic Plan Team:

6. Recommends the Council use the phase-in approach to implement catch limits of WCNPO striped marlin, adapting future catch limits from catches from previous years or as best scientific information becomes available.

7. Recommends the Council assemble a working group of subject matter experts to prioritize research needs to reduce discard mortality, improve monitoring, and develop options for international fisheries to reduce overfishing of the WCNPO striped marlin stock after the 17th WCPFC Scientific Committee.

Work Item

The Plan team should investigate appropriate fishery indicators (i.e., seasonality, average size, CPUE, etc.) for WCNPO striped marlin by the 2022 May Pelagic Plan Team meeting.

10. Other Business

Fitchett introduced the Monterey Bay Aquarium Seafood Watch review of the Hawaii longline fishery by a Seafood Watch consulting researcher. The Plan Team was asked to review the report and scoring, noting that there were mostly positive reviews of the fishery except for very low scores with regards to non-target and bycatch. The Plan Team was asked to consider the scoring and the criteria.

Plan Team members noted that this year's report seems more transparent than before and asked if the Council can weigh in on the report. Council staff responded that it has provided comments which Monterey Bay considered and used to modify its report.

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