WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

MINUTES OF THE

177th MEETING OF THE

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL
(via Teleconference)

Friday, April 12, 2019

Council Conference Room
1164 Bishop Street, Suite 1400, Honolulu, HI 96813

Native American Samoa Advisory Council Office Conference Room, Pavaʻiaʻi Village
Pago Pago, American Samoa, 96799

Department of Land and Natural Resources
Lower Base Drive, Saipan, MP 96950

Guam Hilton Resort and Spa
202 Hilton Road, Tumon Bay, Guam 96913

Approved by Council:

Taotasi Archie Soliai, Chair
Western Pacific Regional Fishery Management Council

Table of Contents

I. Welcome and Introductions

The following members of the Western Pacific Regional Fishery Management Council were in attendance in person:

- Dean Sensui, acting chair (vice chair for Hawai‘i)
- Michael Goto (Hawai‘i)
- Edwin Watamura (Hawai‘i)
- Ryan Okano, Hawai‘i Department of Land and Natural Resources (Hawai‘i DLNR) (designee for Suzanne Case)
- Michael Tosatto, National Marine Fisheries Service (NMFS) Pacific Island Regional Office (PIRO)

The following Council members were in attendance via teleconference:

- Taotasi Archie Soliai, chair (American Samoa)
- John Gourley, vice chair (Commonwealth of the Northern Mariana Islands) (CNMI)
- Michael Duenas, vice chair (Guam)
- McGrew Rice (Hawai‘i)
- Augustin Kaipat, Commonwealth of the Northern Mariana Islands (CNMI) Department of Lands and Natural Resources (CNMI DLNR) (designee for Raymond Roberto)
- Henry Sesepasara, American Samoa Department of Marine and Wildlife Resources (DMWR)
- Brian Peck, US Fish and Wildlife Service (USFWS)

Council Executive Director Kitty Simonds and NOAA Office of General Counsel Fred Tucher were also in attendance in person, and Scientific and Statistical Committee (SSC) member James Lynch was in attendance via teleconference. Council members Christinna Lutu-Sanchez (American Samoa), Michael Brakke (US Department of State) and Rear Adm. Kevin Lunday (United States Coast Guard) (USCG) were absent.

Soliai opened the 177th meeting of the Council, welcomed Council members and the public and then handed the meeting to Sensui. Council members and staff introduced themselves.

II. Approval of the 177th Agenda

Sensui asked for any requests to change the agenda. Hearing none, he asked for a motion to approve the agenda.

Moved by Goto; seconded by Sesepasara.
Motion passed.

III. Draft Biological Opinion for the Hawai‘i-Based Shallow-Set Longline Fishery

Ann Garrett, PIRO Protected Resources Division (PRD), presented the draft biological opinions (BiOp) for the Hawai‘i-based shallow-set longline (SSLL) fishery. Garrett provided

background information regarding the Endangered Species Act (ESA), Section 7 consultations and BiOps. Pursuant to Section 7 of the ESA, a federal action shall not "jeopardize the continued existence of" a species or appreciably suppress the state of a species. Section 7 charges a federal agency to aid in the recovery and conservation of a species. Garrett described the steps in the section 7 analyses, which include identifying the action area and conducting exposure analysis, response analysis, and the risk analysis. The current BiOp evaluates stressors associated with the SSLL fishery for ESA listed species that may be adversely affected based on the biological evaluation from the PIRO Sustainable Fisheries Division (SFD), which is the action agency for this consultation.

Garrett provided a high level overview of the draft BiOp, focusing on leatherback turtles, the North Pacific loggerhead turtle distinct population segment (DPS) and oceanic whitetip sharks. Leatherbacks and the North Pacific loggerhead DPS are listed as endangered. Oceanic whitetip sharks are listed globally as threatened. Garrett provided an overview of the impacts of the SSLL fishery on the three species. Based on the review of the current status and the environmental baseline for the action area, the effects of the proposed action do not jeopardize any of the listed species.

For non-jeopardy BiOps, an incidental take statement (ITS) is issued to identify the amount or extent of take that is expected to occur from the proposed action. In the draft BiOp, the annual ITS for leatherback turtles is 21 interactions and a maximum of three mortalities, 36 loggerhead turtle interactions and a maximum of six loggerhead mortalities, and 102 oceanic whitetip shark interactions and a maximum of 32 oceanic whitetip mortalities. The ITS exempts action agencies from the ESA Section 9 prohibition so long as they comply with the reasonable and prudent measures (RPM) and associated terms and conditions necessary to minimize the effects of the take on listed species. The terms and conditions are non-discretionary. The RPMs and associated terms and conditions may only make minor changes to an action.

Garrett reviewed the RPMs in the draft BiOp pertaining to loggerhead and leatherback turtles. The first RPM specifies that SFD require individual vessel limits for loggerhead and leatherback turtles to reduce the impact of a small number of vessels causing a large portion of interactions and to provide early detection of higher fleet-wide interactions. The associated terms and conditions require SFD to initiate rule-making within three-months of the final BiOp and to set an annual per vessel limit not to exceed two leatherback turtles or six loggerhead turtles. The terms and conditions also require NMFS to conduct an analysis of interactions to evaluate patterns of interactions with the two sea turtle species within 18 months of the final BiOp and provide a report with an action plan for working with vessels that interact with a disproportionate number of leatherback and loggerhead turtles.

The second RPM requires that SFD develop and implement minimization measures within two years of receiving a final BiOp to reduce the incidental capture and associated mortality of leatherback and loggerhead turtles with a goal of at least a 25 percent reduction. The associated terms and conditions specify that SFD include in its evaluation of potential measures consideration of closing the area east of 140° W in the first and fourth quarters of the year and prohibiting fishing in the dynamic boundary within sea surface temperatures associated with TurtleWatch. The terms and conditions for this RPM also require that SFD set an annual

interaction limit of 16 leatherback turtles and 36 loggerhead turtles for the SSLL fishery within three months of receiving a final BiOp. Additionally, SFD will be required to conduct a workshop to determine whether more effective methods exist for removing more fishing gear from leatherbacks to increase post-hooking survival.

Garrett also provided a summary of the seventh RPM, which pertains to oceanic whitetip sharks. The RPM requires SFD to use temporal and spatial data on oceanic whitetip shark and giant manta ray interactions to inform decision making and to modify fishing practices to minimize incidental capture and mortality. The terms and conditions for this RPM also require evaluation and adoption of minimization measures to reduce incidental bycatch and increase survivability of these two species using such tools as dehooking devices and removing trailing gear. The terms and conditions also includes coordination with the Council to explore options such as vessel limits, move-on limits, trip limits or other similar measures to redirect fishing efforts away from areas where spatial and temporal patterns indicate higher take rates for the two species.

Goto asked Garrett to verify the number of vessels involved with a large number of interactions. He thought there was a discrepancy with his knowledge of the number of vessels fishing.

Garrett provided additional information on PRD's analysis of vessel-specific interactions. She said that the pattern found in winter of 2017 and 2018 prompted PRD to look through the data and it found that across the 16-year time frame 41 percent of leatherback interactions were attributable to five vessels, which represents 15 percent of the vessels in a cumulative number of vessel interactions. Fifty-nine cumulative vessels had one leatherback interaction in a year in the same period, 15 cumulative vessels had two interactions, and only 5 vessels had three or more interactions. For loggerhead turtles, PRD found that 40 percent of loggerhead turtle interactions are attributed to four vessels, or 11 percent of the vessels. Garrett said that applying the RPM of an individual vessel limit of two for leatherbacks per year across 16 years of data would have reduced the take of six leatherbacks, or 6 percent. Similarly, for loggerheads, an annual vessel limit of six would have affected vessels in only two of the 16 years and would have resulted in a return of 10 loggerheads. On average, the number of vessels that would be affected by a vessel limit of two would be 1.25 vessels per year. While developing the RPMs, an annual vessel limit for leatherback sea turtles of three was considered but doing so would have had a conservation benefit of only one leatherback sea turtle. Garrett said that PRD considered trip limits but concluded that they may not provide the conservation benefit of vessel limits because the vessel could return and encounter more leatherback and loggerhead turtles, and trip limits do not address other potential issues of fishing selectivity such as geographic area, timing or other operational influences that affect interaction rates.

Watamura asked what constitutes "mortality" for a sea turtle compared to an "interaction."

Garrett said that the mortality coefficients from the Ryder et al. (2006) NOAA Technical Memorandum have been used for the last several consultations. The coefficients were developed by sea turtle experts and veterinarians based on data from multiple studies to use as the best

predictor of the animals' risk of mortality based on where they are hooked, how they are hooked and how much gear remains. The mortality coefficients are applied to the total number of captured animals.

Watamura asked what percentage of the leatherback and loggerhead turtles are released alive compared to known mortalities.

Garrett said that she did not have those data on hand, but all turtles were immediately released alive except for two loggerheads that died on the vessel. However, the coefficients account for latent mortality associated with injuries associated with the interaction.

Watamura asked if the estimated latent mortality would change if the trailing gear associated with sea turtle interactions were to be cut shorter.

Garrett said that best available information suggests that the length of remaining line does factor into morality risk. There is an RPM in the draft BiOp for more survivability studies on leatherback sea turtles because of the concern of how well they do after interactions.

Sesepasara asked how the population of the oceanic whitetip shark is calculated.

Garrett said the data for the species are not ideal, but a thorough assessment of the species status is in NMFS' recent listing documents and associated Status Review. The Pacific population is estimated at 200,000 individuals.

Gourley asked for clarification on whether it is correct to assume that it is not known why the vessels with higher interaction rates with sea turtles have those higher rates.

Garrett said that this was correct and that PRD did not look into it in depth. She added that SFD has been asked to evaluate this issue.

Gourley said that it would be useful to identify whether interaction rates are associated with spatial, geographic or vessel captain factors, by comparing interaction rates of vessels fishing in similar areas.

Garrett concurred.

Muna-Brecht asked if any other fishing selectivity factors were considered and if they presented an increase or decrease in the frequency of interactions. She wondered if there is an indication that the geographic area, timing or the other operational influences may increase or decrease the frequency of occurrence.

Garrett said that there are, noting sea surface temperatures identified in PIFSC's TurtleWatch as well as particular geographic areas such as those west of 140° W.

Muna-Brecht asked about potential temporal factors in these areas of elevated interactions and whether the increased likelihood of vessel occurrence and turtle presence can be differentiated.

Garrett said the answer is yes based on a PIFSC analysis. She noted that there are distinct overlap areas for loggerhead and leatherback turtles with the fishing effort.

Muna-Brecht asked if the overlap areas have been associated with the vessels that have the highest sea turtle interactions.

Garrett said that a spatial analysis of vessels with relatively higher interaction rates has not been completed. The analysis focused on the number of sea turtles impacted relative to permit number.

Muna-Brecht asked if determinations of mortality for released sea turtles are predictions or observations and if there is a way to confirm that sea turtles released alive have actually died.

Garrett said that these values are estimates based on scientific studies.

Muna-Brecht asked if this meant the estimations are based in theory.

Garrett said that the estimations are based in empirical evidence.

Muna-Brecht said that the estimated mortalities are not an actual determination of death and that theory needs to be proven. She said it sounds like it is known that two turtles died, but the rest may have survived but are presumed dead.

Garrett said that it is not assumed that all of the turtles died. The estimate is based on empirical evidence from various fisheries and accumulation of studies, but Muna-Brecht was correct in stating it is not a specific mortality value for the Hawai‘i SSLL fishery.

Sensui asked for clarification on the Council's previously recommended trip limit compared to the vessel limits.

Garrett said that PRD considered Council staff's analysis of trip limits, which focused on a loggerhead limit of five per trip. The PRD decided on the vessel limit approach because it was recognized that the SSLL fishery is not the cause of the decline of the species and the action does not jeopardize the listed species, but it is NMFS' responsibility to reduce the capture and mortality of protected species as much as possible. The proposed RPMs are designed to support an open fishery and avoid long seasonal closures. The annual vessel limit is designed to put the burden on those few vessels that have been interacting with the bulk of the turtles.

Rice asked if the socioeconomic impacts of the trip and vessel limits were evaluated.

Garrett said that evaluation of socioeconomic impacts is not required through the ESA consultation, but that is a part of what NMFS would do through rule-making or through the

Magnuson-Stevens Fishery Conservation and Management Act (MSA) process working with the Council. Based on PRD's analysis, Garrett said that the chances of interactions are relatively evenly distributed and that only one or two vessels would be impacted in a given year.

Rice said that there are only 15 boats in the fishery, so one or two vessels impacted could be a relatively big effect on the fishery.

Tosatto said that the greatest economic benefit to a fishery is to have it operate all year long every year, but the net positive effects of the proposed vessel limit should be considered.

Watamura noted that the loggerhead and the leatherback turtles have different population projections, with one going down and the other going up, but the two species are lumped together in the RPMs.

Tosatto said that, while there are slight differences between the two turtle species in terms of interactions and the population dynamics, the mandate is the same. In neither case is the species in jeopardy, but the RPMs are meant to minimize impacts. That is why they are generally the same. He said the difference is in the number specified for the vessel limits and the lower hard cap for leatherback turtles.

Watamura asked why the 25 percent reduction was included for both species when only one of the populations is on the decline.

Tosatto said that the driver to minimize impacts is the same for both populations. Some RPMs are more immediate for leatherbacks and may be less immediate for loggerheads. Although current estimates show an increase in population and good nesting population data, there are associated uncertainties. He said he considered the goal of reducing interactions for both species by 25 percent is prudent and the approach is reasonable.

Soliai asked how the 25 percent level was determined.

Garrett said that a review of available information such as TurtleWatch and analysis in the BiOp indicated that 25 percent appears to be an easy reduction. The publication by Evan Howell and colleagues demonstrated a measurable reduction if the TurtleWatch temperature bands were used as a constraint. The RPM was also designed to be flexible such that the SFD could consider a suite of minimization measures, including the issue of gear removal on leatherback turtles.

Soliai said that he thought there would be a more scientific explanation behind the 25 percent number.

Sesepasara asked if NMFS has evaluated interactions based on movement of the turtles based on nesting.

Garrett said that such information was considered as part of the status of the species section of the BiOp. PRD also considered satellite tracking and presence-absence information along with some model outputs about their predicted presence.

Sesepasara asked if the information on sea turtle movement was considered in the estimates of turtle interactions.

Garrett said that the interaction rate is largely driven by the 100 percent observer coverage in the fishery. However, PRD considered the presence and location of the fishery relative to where turtles are expected to occur.

Goto said that the vessel limits could displace vessels from the fishery for an entire year, which is detrimental to the owner of the vessel and the fishery itself. The BiOp suggests that having a vessel limit of two will result in maybe six turtles being saved over a course of a decade or more. He said that this is a small benefit relative to the risk of displacing the fishery. He asked if there were any additional conservation benefit to having a vessel limit over a trip limit.

Garrett said that the challenge with trip limits is with leatherbacks, which is declining at a rate of 5 percent a year and creating a greater concern than loggerheads. PRD believed that trip limits will not help the leatherback turtle population but may have some conservation benefit for loggerheads.

Goto said that he understands the position, but it appears that the only net effect is removing effort from the water, aside from the perceived saving of a few turtles. He said the vessel limits do not seem equitable as they disproportionately risks fishery effort for some small conservation benefit.

Garrett said it is a difficult situation and, if there is another model that demonstrates conversation for the species, the Council should provide that to NMFS.

Gourley asked what the 25 percent reduction represents and whether it is a reduction for a given year or a 25 percent reduction of a running average.

Garrett said that the RPM is written with the expectation that NMFS would spend the next two years looking at how it could devise mitigation measures designed to create a reduction of at least 25 percent. The 25 percent reduction is not expected to be met within the next two years. The RPM has flexibility for defining what the 25 percent represents through the course of the workshops and discussions in developing the tools to meet the 25 percent goal.

Gourley said he is worried that 25 percent is specifically stated as a goal but an explanation on the consequences of not meeting that goal does not exist. He also noted the high level of interannual variability for turtle interactions in the fishery. If the reason for some vessels having relatively higher interaction rates is unknown, it is unclear how the success of the minimization measures can be determined.

Tosatto said that the BiOp is currently a draft and input is being accepted to clarify the RPMs. He said the BiOp give some guidance of what minimizing impacts on endangered species looks like. For him, specifying a goal of 25 percent is better than having an abstract requirement to minimize interactions as it provides a timeframe and a goal. The verification will come over the next several years of understanding the variability and figuring out if the necessary minimization was accomplished. The consequence of not meeting this goal is stipulated by an ITS, which means the agency would have to re-enter consultation.

Gourley said that this is concerning because it is not clear how NMFS will be able to design, develop and implement minimization measures within two years and parse out that data from inherent variability. He suggested re-wording the RPM to something that might actually be met while also achieving the goal of reducing turtle interactions.

IV. Biological Opinion Review Advisory Panel Report and Recommendations

James Lynch presented the report and recommendation of the BiOp Review Advisory Panel convened on April 12, 2019. The panel focused its review of the Hawai‘i SSLL fishery draft BiOp on accuracy and comprehensiveness of the information and analyses as they pertain to loggerhead turtles, leatherback turtles and oceanic whitetip shark. Its key findings and recommendations were as follows:

1. For loggerhead and leatherback turtles, the draft BiOp presents comprehensive assessment of risk of exposure to the SSLL fishery and uses appropriate tools to evaluate the risk; however, a number of decisions made in the draft BiOp likely overestimates the threat posed from the SSLL fishery
2. For oceanic whitetip sharks, the draft BiOp summarizes much of the information on oceanic whitetip sharks; nevertheless, the draft BiOp missed some key conclusions regarding fishing impacts from longlining reported after the 2012 stock assessment, and treatment of uncertainty could be improved
3. The draft BiOp’s conclusions regarding transferred effects are inadequate due to lack of supporting details on methods to generate foreign interaction rates and inaccurate due to deficient acknowledgement of uncertainties around estimated foreign fisheries interaction rates.
4. General RPM Issues
    a. Include RPMs that do not alter the basic design, location, scope, duration or timing of the action and that involve only minor changes. [50 CFR §402.14(i)(2)].
    b. Include RPMs that are developed in coordination with the Council.
    c. Revise RPMs 1 and 2 to be more consistent with input obtained from the Council and the Scientific and Statistical Committee (SSC) or explain in more detail why RPMs 1 and 2 are not consistent input from the Council and the SSC.
    d. Clarify the terms and conditions associated with RPMs 1, 2 and 7 to provide specific methods on how they may be accomplished consistent with agency regulations.
5. RPM 1: Vessel Limits
    a. This RPM should be modified to Individual trip limits for consistency with the Council recommendation that has been comprehensively analyzed and reviewed.

6. RPM 2: Minimization measures with 25-percent reduction goal
    a. Supporting evidence for 25-percent reduction goal is not provided in the draft BiOp
7. RPM 7: Oceanic whitetip shark measures
    a. The necessity of RPM 7.b. (explore options for minimizing incidental bycatch of oceanic whitetip sharks and giant manta rays) is not demonstrated in the draft BiOp given the extremely low estimated impact of the fishery and given that fishing techniques known to pose a particular risk to oceanic whitetips do not occur in this fishery (e.g., use of shark lines or wire leader). Further, any consideration of spatial modelling and move-on rules would need to be done in a multi-species framework.

Simonds asked Justin Hospital, BiOp Review Advisory Panel member, to elaborate on the panel's findings regarding the transferred effects.

Hospital said the main concerns with the Indirect Effects section of the BiOp were related to a lack of clarity in the methods used in analyzing transferred effects. The draft BiOp compares Hawai'i shallow-set interaction rates with foreign interaction rates, and the literature that NMFS cites does not compute the interaction rates in the same way that is reported in the draft BiOp. Further, the draft BiOp was unclear on the methods used for the comparison. The draft BiOp did not highlight the uncertainties associated with the comparison of interaction rate estimates, and the strong conclusions drawn in the draft BiOp regarding transferred effects were not supported given the uncertainties associated with the estimates of foreign interaction rates.

V. Managing Loggerhead and Leatherback Sea Turtle Interactions in the Hawai'i-Based Shallow-Set Longline Fishery (Final Action)

Asuka Ishizaki, Council staff, provided an overview of the Council action under consideration. At the 173rd Council meeting held June 2018, the Council recommended amending the Pelagic Fishery Ecosystem Plan (FEP) to establish a management framework for the shallow-set fishery that consists of annual limits for loggerhead and leatherbacks and individual trip interaction limits for loggerhead and leatherbacks. At that time, the Council recommended a fleet-wide hard cap limit of 37 loggerheads and 21 leatherbacks as well as a limit of five loggerhead interactions per trip and no limit to be specified for the leatherbacks. Including the trip limit for both species in the framework was meant to allow the Council to recommend a new number at a later time. Other associated recommendations included establishing a timeline for monitoring, development and review of industry-implemented turtle interaction avoidance pilot program through fleet communication on a three-year timeline. Additionally, the Council requested NMFS to provide funding support to research in minimizing trailing gear to further reduce post-hooking mortality rates of loggerhead and leatherback turtles given the relative rarity of interactions.

At the 174th Council meeting held October 2018, the Council received presentations on the approach to the analysis and the loggerhead and leatherback population models, but the draft BiOp was not received. The Council recommended convening a Council meeting to review the draft BiOp and consider specifying leatherback trip limits if necessary given the updated leatherback population status. At the 175th Council meeting held December 2018, the Council

deferred taking additional action on leatherback turtles given the population status. The Council at the 175th meeting reiterated the previous recommendation regarding funding support for research and minimizing trailing gear and specifically recognized that development of additional tools and techniques might be warranted to allow quick and safe removal of trailing gear for large turtles not brought onboard.

Ishizaki provided an overview of the Hawai‘i SSLL fishery and sea turtle interactions. The remainder of the presentation focused on analyses comparing the Council's 173rd meeting recommendation and the RPMs in the draft BiOp most pertinent to the Council's management action. Specifically, Ishizaki reviewed the no action, 173rd meeting preferred alternative and draft RPMs as they pertain to hard caps and vessel versus trip limits for loggerhead and leatherback turtles.

Regarding hard caps, the no action alternative would keep the fleet-wide annual limit at 17 loggerheads and 26 leatherbacks. The Council's preferred alternative would revise the limits to 37 loggerheads and 21 leatherbacks. The leatherback hard cap under the 173rd Council recommended action represents a 19 percent reduction from the no action. The RPMs in the draft BiOp revise the loggerhead hard cap to 36 and the leatherback hard cap to 16. The leatherback hard cap under the draft BiOp represents a 24 percent reduction from the Council's recommended action and 38 percent reduction from the no action.

Regarding the trip versus vessel limits, Ishizaki explained that the Council's focus in evaluating these measures in 2018 was to provide responsive measures that can help ensure a year-round operation while addressing the needs for protected species conservation, especially in light of the higher loggerhead turtle interactions observed in late 2017 through early 2018. However, the Council did consider whether additional measures were needed for leatherbacks and at that time the information did not suggest that there would be concentration of interactions or any expected increase in interactions based on the past data. The intent of the vessel limit, as identified in the draft BiOp, is to reduce the impact of a small number of vessels causing a large proportion of the interactions and to provide early detection of relatively high fleet-wide interactions. At the 173rd meeting, the Council selected trip limits over vessel limits because trip limits were considered to have sufficient economic incentive to minimize interactions. The Council also found that the trip and vessel limits were likely to result in similar level of conservation benefits and that the additional burden of prohibiting vessels from fishing shallow-set if a vessel limit was reached would not likely result in meaningful conservation gains.

Ishizaki presented detailed analyses comparing trip and vessel limits, including a breakdown of per trip and per vessel interactions by year and simulation applying a range of trip and vessel limits to past data. For loggerhead turtles, the simulation showed that the Council-recommended trip limit would have had greater reduction in interactions compared to the draft BiOp vessel limit. For leatherback turtles, the simulation showed vessel limits having a larger number of potential reductions in interactions, although the average number of reduction per year would be 0.1 leatherbacks with a trip limit and 0.4 leatherbacks with a vessel limit. Removing a vessel or a trip in these evaluations often did not result in additional turtle interaction savings because those vessels had only two leatherback turtles. Ishizaki also presented data on the percent of vessels or trips removed on a yearly basis when applying the leatherback trip and

vessel limit of two, which showed that the proportion of vessels affected by a vessel limit of two can be as high as 20 percent.

Ishizaki discussed whether vessel limits for leatherbacks are likely to reduce impacts of a small number of vessels causing the large proportion of interactions over time as intended by the RPMs. Past data show that vessels with disproportionately large numbers of interactions would typically have only one or two interactions per year in any given year. Additionally, the vessels with disproportionately higher interactions were also in the top five ranking in terms of effort over time and have been the long-time participants that have consistently been in the fishery every year, and there is no evidence of operational effects driving interaction occurrence. The vessel limits would likely disproportionately affect these long-time fishery participants. The vessel limit may also discourage participation in the fishery after the first interaction, and it appears that that the first interaction is a random event. Conversely, trip limits would allow the vessels to remain in the fishery while encouraging avoidance behavior, and a trip limit of two leatherback turtles may contribute to reduction in interactions if vessels exhibit avoidance behavior after the first interaction. The trip limit would also allow managers to collect data, allow the fleet to innovate, experiment and learn from that experience to improve its avoidance behavior.

Ishizaki additionally discussed limitations of time-area closures in light of the second RPM requiring SFD to evaluate spatial closures, as well as the benefits of focusing on removal of trailing gear.

Okano asked if the target catch-per-unit effort (CPUE) in the shallow-set longline fishery increased as fishery participation decreased.

Ishizaki said that density of vessels is not high enough such that it could impact CPUE in that way. The North Pacific swordfish stock is currently harvested at rates well below maximum sustainable yield, and whether the Hawai‘i fishery has 20 or 10 vessels is not likely to have a significant impact on the CPUE based on the stock assessment.

Okano asked if vessel limits could be used for one turtle species and trip limits for the other species.

Ishizaki said that the Council could always consider different limits but may want to consider the complexity of such limits for fishery participants.

Tosatto said that this meeting has two purposes, with one being the consideration of the Council action and the other being the review of the draft BiOp. He said there are merits to this Council action, but it is not responsive to the draft BiOp or its RPMs. He said that if the Council transmits the action, it could be approvable.

Watamura said there were 8,632 total estimate loggerhead nesters and 37 anticipated interactions. Looking at the reality of this issue on a worldwide basis, the trip and vessel limits for the Hawai‘i SSLL fishery have zero conservation benefit compared to the potential impact of what is happening to the nesters. There should be some way that funding can be provided for better protection and policing of the nesting beaches.

Rice said that the amount of turtles being saved compared to the economic impact for fishermen is problematic, because under MSA the Council's action is doing the right thing but under ESA it is insufficient, and that discrepancy is hurting people.

Simonds said that the Council knows it has to do its part and it has been since 2002. She asked PIRO if the United States helped other countries with their fishery interaction issues.

Tosatto said issues like that are considered in the cumulative effects section of the BiOp, and he would have to gather a compendium of the various science and management activities for the government as a whole, as some of the support is coming from other agencies.

Simonds said that it is about management of the turtle populations. The United States is part of many international organizations and has spent millions of dollars working with countries to help reduce take at nesting beaches, but it seems that nothing has improved. She asked about international relations among countries impacting the same turtles the Hawai'i SSLL fishery is impacting. She wanted to know about the effort since the Council stopped funding the nesting beach work.

Tosatto said he believed the fishery is the model fishery for the region, but they are working hard in the international forum to make things equal. The United States is proposing a sea turtle measure, but it is not as strict as the draft BiOp RPM. The sea turtle measures in the Western and Central Pacific Fisheries Commission would not be there had the United States not put them there. He was not sure whether the activities that Simonds described have been replaced over time, but the PIRO sea turtle recovery coordinator can put together a compendium of those activities, which ones are continuing, which ones have merged, which ones have been transferred to Papua New Guinea and Indonesia, and how successful those are deemed. Internationally-coordinated recovery plan efforts are in place where those nesting beaches are for several species on both sides of the ocean.

Garrett said that the Pacific Islands Region, one of the smallest of NMFS, has provided grant funds working in these areas with international partners on nesting beach surveys, protections, and outreach and education to local communities. She estimated the annual spending on these grants to be between $300,000 and $750,000.

Simonds asked for the percentage of improvement in these fisheries after all of the projects implemented since 2002. She said she was not looking for an immediate answer, but she wanted to have some context for the Council members.

Tosatto said he appreciated the perspective of noting the expenses and benefits. The problem is complex, requiring an international response that the United States is leading. Since the early 2000s, the Western Pacific Region received earmarks for Hawai'i sea turtles which have since been incorporated into PIRO's budget. Unfortunately, the best use of the funds has been offsetting a shortfall in Observer Program funding, but he has been working with NMFS Headquarters to nationally rebalance observer priorities.

Gourley said that removing particular vessels with high interaction rates from the fishery would take away from the research to investigate why their interactions may be high in the first

place. He said perhaps the Council should let the fishery fish and then use the information to determine what is happening and identify problems with the vessels that have high interaction rates.

Sensui said that it would be daunting for those considering entering this fishery knowing that a vessel limit of two interactions could take them out of the fishery for a whole year. He did not know anyone who would be willing to place a bet on that kind of investment.

VI. Public Comments

Sean Martin provided comments on behalf of the Hawaii Longline Association (HLA). Since 2004, the SSLL fishery has been subject to most highly restrictive, comprehensive management regime implemented in any pelagic longline fishery. He expressed disappointment that the SSLL fishery was closed in April 2019 while under a restrictive loggerhead hard cap that was not based on the best scientific information available. The closure could have been avoided had NMFS not delayed the preparation of the BiOp. As a result of the closure, HLA members have suffered substantial economic losses and market confidence in the continuity of swordfish production by Hawai‘i vessels has been damaged.

HLA supported the conclusion of the draft BiOp that the SSLL fishery is not likely to jeopardize the continued existence of ESA-listed species. Additionally, HLA did not believe the hard caps are a necessary tool for effective and lawful management of the SSLL fishery but would not oppose the Council's proposed implementation of hard caps. HLA regarded the proposed vessel limits as unlawful and preferred trip limits over vessel limits despite finding them both to provide negative incentives. Regarding time-area closures, HLA found these to be unlawful as an RPM because they alter the nature of the fishery. HLA also believed that closing waters within given sea surface temperature bands is also unlawful. Martin believed that these associated issues may lead to the end of the Hawai‘i longline swordfish fishery.

Martin said that HLA would not oppose the potential Council action with respect to proposed sea turtle management framework with a hard cap limit for loggerheads of 36 and a hard cap limit of 16 for leatherbacks, a trip limit of five loggerhead turtles per trip and a limit of three leatherback turtles per trip. HLA is committed to funding the development of a line cutter device, working with NMFS on training for captains and crews to coordinate with observers to facilitate sea turtle tagging opportunities onboard the vessel, education and outreach to crews, and the development of industry-implemented cooperative framework to avoid reaching hard caps.

Watamura said he fully agreed with Martin and would like to come up with an alternative incentive to hard caps that impact the fishers as well as other socioeconomic factors in the nation.

Rice agreed with Martin’s comments, especially regarding negative economic incentives and hard caps.

Muna-Brecht expressed her support, noting that Guam is looking to establish similar kinds of fisheries in the near future.

Roger Dang provided comments as a vessel owner active in the Hawai‘i SSLL fishery. He noted the cost of preparing for a fishing trip can be as much as $30,000 to $40,000. A vessel limit of two that would remove the vessel from the fishery would discourage fishermen from fishing given the high cost to start. He described this as a "broad stroke approach" since managers are not sure as to why a relatively small proportion of the total vessels are responsible for a majority of the interactions. He said that at least with trip limits, fishermen would be allowed to utilize an avoidance behavior to remain in the fishery. He went on to discredit vessel limits, noting that an obstacle is being created that no one can control and that the majority of the vessels would not put effort into this fishery, which would effectively close the fishery. Another issue with vessel limits is that it is the captain that interacts with the turtles rather than the vessel and a captain can transfer to another vessel. Dang also talked about the American seafood market and how swordfish imports from South America have been increasing in recent years, especially from Ecuador and Costa Rica. The people who buy fish from American fishers will go to other countries to get their supply because demand does not wane simply because the Hawai‘i fishery was closed. He said the majority of swordfish product in the United States right now is from South America.

Goto agreed with Dang's last point saying that the RPMs essentially force outsourcing to foreign fisheries.

Mark Fitchett, Council staff, confirmed that a notable amount of swordfish product is coming from Brazil to the East Coast of the United States. The Brazilian fleet primarily operates in the South Atlantic, where the swordfish stock is overfished and experiencing overfishing. In the Eastern Pacific where Ecuador's product would originate, the fishing capacity has increased significantly. In contrast, the Western and Central Pacific stock of swordfish is in excellent shape.

Eric Kingma provided public comment regarding HLA's position on the BiOp. While HLA did provide comments on several sections prior to the draft BiOp, it did not see many of its changes incorporated into the draft BiOp. HLA did not believe the current fishery closure is based on the best available science. HLA did agree with the conclusion that the fishery is not jeopardizing any ESA-listed species but had concerns regarding some of the specific content. HLA believed that NMFS has unlawfully misused and misapplied the benefit of the doubt concept in the analysis and has manipulated fishery interaction data to create worst-case scenarios of the fishery that have a 5 percent or less probability of occurring. HLA believed what is reasonably expected to occur should also be fully analyzed. Kingma said the BiOp fails to present a proper assessment of the effects of the action of the leatherback sea turtle species. A substantial number of foreign fisheries have large impacts on leatherbacks, but there was no meaningful evaluation on how they impact the species as a whole. Additionally, HLA believed that the draft BiOp contains incorrect statements of NMFS' legal obligation under ESA Section 7 that imply a far more ambiguous and lower bar for jeopardy than mandated by law. HLA also believed that the RPMs would violate the ESA because they would alter the basic design, location and timing of the action. Kingma said that NMFS has a duty to include HLA in the

development of RPMs because they are an Applicant, but HLA has not received additional or early consultations regarding them. He said that HLA would like to coordinate with NMFS to identify which RPMs are reasonable and lawful.

VII. Council Discussion and Recommendations

Regarding the management of loggerhead and leatherback turtle interactions in the Hawai'i-Based longline fishery, the Council:

1. **Maintained the recommendation from the 173rd meeting for amending the Pelagic FEP to establish a management framework for the Hawai'i SSLL fishery consisting of the following measures:**
   a) **Establish an annual limit on the number of North Pacific loggerhead and leatherback turtle interactions that the Council will recommend to NMFS consistent with the anticipated level of annual interactions that is set forth in the current valid BiOp. Once either one of these interaction limits is reached, the fishery closes for the remainder of the calendar year.**
   b) **Establish individual trip interaction limits for loggerhead and leatherback turtles for the Hawai'i limited entry permit vessels that declare their trips as a shallow-set trip.**
      i. **Upon determining that a vessel has reached either the loggerhead or leatherback turtle trip interaction limit based on data from NMFS observers, shallow-set vessels will be required to return to port without making additional sets.**
      ii. **The vessel may resume shallow-set fishing operations after returning to port and providing the required 72-hour notification under 50 CFR 665.803 prior to departure.**
      iii. **The Council may make recommendations to NMFS to revise the individual trip limits upon periodic review of the effectiveness of the limits.**
2. **Recommended the Hawai'i SSLL fishery be reopened and the following limits be implemented under the management framework:**
   a) **Annual limit of 36 loggerhead turtles and 16 leatherback turtles, consistent with the draft BiOp. For the 2019 fishing year, interactions occurring from Jan. 1, 2019, until the fishery closure on March 19, 2019, shall apply against the 36 loggerhead and 16 leatherback limit; and**
   b) **Individual trip limits of five loggerhead turtles and two leatherback turtles.**
3. **Recommended an annual review of the Hawai'i SSLL fishery's performance under the individual trip limits in the Annual Stock Assessment and Fishery Evaluation Report.**

Further, the Council deemed that the regulations implementing the recommendations are necessary or appropriate in accordance with Section 303(c) of the MSA. In doing so, the Council directed Council staff to work with NMFS to complete regulatory language to implement the Council's final action. Unless otherwise explicitly directed by the Council, the Council authorized the executive director and the chair to review the draft regulations to verify that they are

consistent with the Council action before submitting them, along with this determination, to the Secretary on behalf of the Council. The executive director and the chair were authorized to withhold submission of the Council action and/or proposed regulations and take the action back to the Council if, in their determination, the proposed regulations are not consistent with the Council action.

Tosatto said that while he may have much to say about the recommendation, he would abstain from making those comments and would abstain from voting as the recommendation will be coming to him for a decision.

Okano said he is a person who fishes and values conservation, so he tries to find a balance in his practice. He said he would vote to support the recommendation as he sees it as a balance of conservation and supporting the longline industry.

Watamura said that in a wider scope of turtle interactions worldwide, he wished that there was an alternative that would not shut down the fishery. He said the recommendation is a move in the right direction but he thinks the bigger picture should be considered.

Rice agreed with Watamura, adding he wished there was another way to help the fishery given that foreign vessels fishing next to the Hawai‘i fleet are not regulated in the same way.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

Regarding the draft BiOp for the Hawai‘i SSLL, the Council **directed staff to send a letter to NMFS providing comments on the draft BiOp reflecting the report from the Biological Opinion Review Advisory Panel and Council discussion.**

Tosatto said that this recommendation was a difficult one to decide whether he is voting for it as it is directing staff to send a letter but the recommendations in the letter would come to him. He said he would abstain so as not to lend undue support or refutation. He asked that Council staff to be as accurate to the Council discussion as possible.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

Regarding the draft BiOp for the Hawai‘i SSLL fishery, the Council **requested NMFS meet with Council staff to discuss comments regarding the draft BiOp.**

Tosatto said that while he supports the request, he cannot commit at this time to the meeting given the limited amount of time to address a large number of comments, and a meeting to discuss Council comments was not envisioned in the ESA Integration Agreement.

Moved by Goto; seconded by Watamura.
Motion passed.

Regarding the draft BiOp for the Hawai‘i SSLL, the Council **requested NMFS consider revising the RPMs for consistency with the Council recommended action and**

implement RPMs with immediate timelines through the MSA regulatory process for Council actions.

Tosatto said he would abstain from voting because it was a comment on the draft BiOp.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

VIII. Other Business

There was no other business.

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

MINUTES OF THE

177th MEETING OF THE

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL
(via Teleconference)

Friday, April 12, 2019

Council Conference Room
1164 Bishop Street, Suite 1400, Honolulu, HI 96813

Native American Samoa Advisory Council Office Conference Room, Pava'ia'i Village
Pago Pago, American Samoa, 96799

Department of Land and Natural Resources
Lower Base Drive, Saipan, MP 96950

Guam Hilton Resort and Spa
202 Hilton Road, Tumon Bay, Guam 96913

Approved by Council:

_____

Taotasi Archie Soliai, Chair

Western Pacific Regional Fishery Management Council

Table of Contents

I. Welcome and Introductions

The following members of the Western Pacific Regional Fishery Management Council were in attendance in person:

- Dean Sensui, acting chair (vice chair for Hawai‘i)
- Michael Goto (Hawai‘i)
- Edwin Watamura (Hawai‘i)
- Ryan Okano, Hawai‘i Department of Land and Natural Resources (Hawai‘i DLNR) (designee for Suzanne Case)
- Michael Tosatto, National Marine Fisheries Service (NMFS) Pacific Island Regional Office (PIRO)

The following Council members were in attendance via teleconference:

- Taotasi Archie Soliai, chair (American Samoa)
- John Gourley, vice chair (Commonwealth of the Northern Mariana Islands) (CNMI)
- Michael Duenas, vice chair (Guam)
- McGrew Rice (Hawai‘i)
- Augustin Kaipat, Commonwealth of the Northern Mariana Islands (CNMI) Department of Lands and Natural Resources (CNMI DLNR) (designee for Raymond Roberto)
- Henry Sesepasara, American Samoa Department of Marine and Wildlife Resources (DMWR)
- Brian Peck, US Fish and Wildlife Service (USFWS)

Council Executive Director Kitty Simonds and NOAA Office of General Counsel Fred Tucher were also in attendance in person, and Scientific and Statistical Committee (SSC) member James Lynch was in attendance via teleconference. Council members Christinna Lutu-Sanchez (American Samoa), Michael Brakke (US Department of State) and Rear Adm. Kevin Lunday (United States Coast Guard) (USCG) were absent.

Soliai opened the 177th meeting of the Council, welcomed Council members and the public and then handed the meeting to Sensui. Council members and staff introduced themselves.

II. Approval of the 177th Agenda

Sensui asked for any requests to change the agenda. Hearing none, he asked for a motion to approve the agenda.

Moved by Goto; seconded by Sesepasara.
Motion passed.

III. Draft Biological Opinion for the Hawai‘i-Based Shallow-Set Longline Fishery

Ann Garrett, PIRO Protected Resources Division (PRD), presented the draft biological opinions (BiOp) for the Hawai‘i-based shallow-set longline (SSLL) fishery. Garrett provided

background information regarding the Endangered Species Act (ESA), Section 7 consultations and BiOps. Pursuant to Section 7 of the ESA, a federal action shall not "jeopardize the continued existence of" a species or appreciably suppress the state of a species. Section 7 charges a federal agency to aid in the recovery and conservation of a species. Garrett described the steps in the section 7 analyses, which include identifying the action area and conducting exposure analysis, response analysis, and the risk analysis. The current BiOp evaluates stressors associated with the SSLL fishery for ESA listed species that may be adversely affected based on the biological evaluation from the PIRO Sustainable Fisheries Division (SFD), which is the action agency for this consultation.

Garrett provided a high level overview of the draft BiOp, focusing on leatherback turtles, the North Pacific loggerhead turtle distinct population segment (DPS) and oceanic whitetip sharks. Leatherbacks and the North Pacific loggerhead DPS are listed as endangered. Oceanic whitetip sharks are listed globally as threatened. Garrett provided an overview of the impacts of the SSLL fishery on the three species. Based on the review of the current status and the environmental baseline for the action area, the effects of the proposed action do not jeopardize any of the listed species.

For non-jeopardy BiOps, an incidental take statement (ITS) is issued to identify the amount or extent of take that is expected to occur from the proposed action. In the draft BiOp, the annual ITS for leatherback turtles is 21 interactions and a maximum of three mortalities, 36 loggerhead turtle interactions and a maximum of six loggerhead mortalities, and 102 oceanic whitetip shark interactions and a maximum of 32 oceanic whitetip mortalities. The ITS exempts action agencies from the ESA Section 9 prohibition so long as they comply with the reasonable and prudent measures (RPM) and associated terms and conditions necessary to minimize the effects of the take on listed species. The terms and conditions are non-discretionary. The RPMs and associated terms and conditions may only make minor changes to an action.

Garrett reviewed the RPMs in the draft BiOp pertaining to loggerhead and leatherback turtles. The first RPM specifies that SFD require individual vessel limits for loggerhead and leatherback turtles to reduce the impact of a small number of vessels causing a large portion of interactions and to provide early detection of higher fleet-wide interactions. The associated terms and conditions require SFD to initiate rule-making within three-months of the final BiOp and to set an annual per vessel limit not to exceed two leatherback turtles or six loggerhead turtles. The terms and conditions also require NMFS to conduct an analysis of interactions to evaluate patterns of interactions with the two sea turtle species within 18 months of the final BiOp and provide a report with an action plan for working with vessels that interact with a disproportionate number of leatherback and loggerhead turtles.

The second RPM requires that SFD develop and implement minimization measures within two years of receiving a final BiOp to reduce the incidental capture and associated mortality of leatherback and loggerhead turtles with a goal of at least a 25 percent reduction. The associated terms and conditions specify that SFD include in its evaluation of potential measures consideration of closing the area east of 140° W in the first and fourth quarters of the year and prohibiting fishing in the dynamic boundary within sea surface temperatures associated with TurtleWatch. The terms and conditions for this RPM also require that SFD set an annual

interaction limit of 16 leatherback turtles and 36 loggerhead turtles for the SSLL fishery within three months of receiving a final BiOp. Additionally, SFD will be required to conduct a workshop to determine whether more effective methods exist for removing more fishing gear from leatherbacks to increase post-hooking survival.

Garrett also provided a summary of the seventh RPM, which pertains to oceanic whitetip sharks. The RPM requires SFD to use temporal and spatial data on oceanic whitetip shark and giant manta ray interactions to inform decision making and to modify fishing practices to minimize incidental capture and mortality. The terms and conditions for this RPM also require evaluation and adoption of minimization measures to reduce incidental bycatch and increase survivability of these two species using such tools as dehooking devices and removing trailing gear. The terms and conditions also includes coordination with the Council to explore options such as vessel limits, move-on limits, trip limits or other similar measures to redirect fishing efforts away from areas where spatial and temporal patterns indicate higher take rates for the two species.

Goto asked Garrett to verify the number of vessels involved with a large number of interactions. He thought there was a discrepancy with his knowledge of the number of vessels fishing.

Garrett provided additional information on PRD's analysis of vessel-specific interactions. She said that the pattern found in winter of 2017 and 2018 prompted PRD to look through the data and it found that across the 16-year time frame 41 percent of leatherback interactions were attributable to five vessels, which represents 15 percent of the vessels in a cumulative number of vessel interactions. Fifty-nine cumulative vessels had one leatherback interaction in a year in the same period, 15 cumulative vessels had two interactions, and only 5 vessels had three or more interactions. For loggerhead turtles, PRD found that 40 percent of loggerhead turtle interactions are attributed to four vessels, or 11 percent of the vessels. Garrett said that applying the RPM of an individual vessel limit of two for leatherbacks per year across 16 years of data would have reduced the take of six leatherbacks, or 6 percent. Similarly, for loggerheads, an annual vessel limit of six would have affected vessels in only two of the 16 years and would have resulted in a return of 10 loggerheads. On average, the number of vessels that would be affected by a vessel limit of two would be 1.25 vessels per year. While developing the RPMs, an annual vessel limit for leatherback sea turtles of three was considered but doing so would have had a conservation benefit of only one leatherback sea turtle. Garrett said that PRD considered trip limits but concluded that they may not provide the conservation benefit of vessel limits because the vessel could return and encounter more leatherback and loggerhead turtles, and trip limits do not address other potential issues of fishing selectivity such as geographic area, timing or other operational influences that affect interaction rates.

Watamura asked what constitutes "mortality" for a sea turtle compared to an "interaction."

Garrett said that the mortality coefficients from the Ryder et al. (2006) NOAA Technical Memorandum have been used for the last several consultations. The coefficients were developed by sea turtle experts and veterinarians based on data from multiple studies to use as the best

predictor of the animals' risk of mortality based on where they are hooked, how they are hooked and how much gear remains. The mortality coefficients are applied to the total number of captured animals.

Watamura asked what percentage of the leatherback and loggerhead turtles are released alive compared to known mortalities.

Garrett said that she did not have those data on hand, but all turtles were immediately released alive except for two loggerheads that died on the vessel. However, the coefficients account for latent mortality associated with injuries associated with the interaction.

Watamura asked if the estimated latent mortality would change if the trailing gear associated with sea turtle interactions were to be cut shorter.

Garrett said that best available information suggests that the length of remaining line does factor into morality risk. There is an RPM in the draft BiOp for more survivability studies on leatherback sea turtles because of the concern of how well they do after interactions.

Sesepasara asked how the population of the oceanic whitetip shark is calculated.

Garrett said the data for the species are not ideal, but a thorough assessment of the species status is in NMFS' recent listing documents and associated Status Review. The Pacific population is estimated at 200,000 individuals.

Gourley asked for clarification on whether it is correct to assume that it is not known why the vessels with higher interaction rates with sea turtles have those higher rates.

Garrett said that this was correct and that PRD did not look into it in depth. She added that SFD has been asked to evaluate this issue.

Gourley said that it would be useful to identify whether interaction rates are associated with spatial, geographic or vessel captain factors, by comparing interaction rates of vessels fishing in similar areas.

Garrett concurred.

Muna-Brecht asked if any other fishing selectivity factors were considered and if they presented an increase or decrease in the frequency of interactions. She wondered if there is an indication that the geographic area, timing or the other operational influences may increase or decrease the frequency of occurrence.

Garrett said that there are, noting sea surface temperatures identified in PIFSC's TurtleWatch as well as particular geographic areas such as those west of 140° W.

Muna-Brecht asked about potential temporal factors in these areas of elevated interactions and whether the increased likelihood of vessel occurrence and turtle presence can be differentiated.

Garrett said the answer is yes based on a PIFSC analysis. She noted that there are distinct overlap areas for loggerhead and leatherback turtles with the fishing effort.

Muna-Brecht asked if the overlap areas have been associated with the vessels that have the highest sea turtle interactions.

Garrett said that a spatial analysis of vessels with relatively higher interaction rates has not been completed. The analysis focused on the number of sea turtles impacted relative to permit number.

Muna-Brecht asked if determinations of mortality for released sea turtles are predictions or observations and if there is a way to confirm that sea turtles released alive have actually died.

Garrett said that these values are estimates based on scientific studies.

Muna-Brecht asked if this meant the estimations are based in theory.

Garrett said that the estimations are based in empirical evidence.

Muna-Brecht said that the estimated mortalities are not an actual determination of death and that theory needs to be proven. She said it sounds like it is known that two turtles died, but the rest may have survived but are presumed dead.

Garrett said that it is not assumed that all of the turtles died. The estimate is based on empirical evidence from various fisheries and accumulation of studies, but Muna-Brecht was correct in stating it is not a specific mortality value for the Hawai‘i SSLL fishery.

Sensui asked for clarification on the Council’s previously recommended trip limit compared to the vessel limits.

Garrett said that PRD considered Council staff’s analysis of trip limits, which focused on a loggerhead limit of five per trip. The PRD decided on the vessel limit approach because it was recognized that the SSLL fishery is not the cause of the decline of the species and the action does not jeopardize the listed species, but it is NMFS’ responsibility to reduce the capture and mortality of protected species as much as possible. The proposed RPMs are designed to support an open fishery and avoid long seasonal closures. The annual vessel limit is designed to put the burden on those few vessels that have been interacting with the bulk of the turtles.

Rice asked if the socioeconomic impacts of the trip and vessel limits were evaluated.

Garrett said that evaluation of socioeconomic impacts is not required through the ESA consultation, but that is a part of what NMFS would do through rule-making or through the

Magnuson-Stevens Fishery Conservation and Management Act (MSA) process working with the Council. Based on PRD's analysis, Garrett said that the chances of interactions are relatively evenly distributed and that only one or two vessels would be impacted in a given year.

Rice said that there are only 15 boats in the fishery, so one or two vessels impacted could be a relatively big effect on the fishery.

Tosatto said that the greatest economic benefit to a fishery is to have it operate all year long every year, but the net positive effects of the proposed vessel limit should be considered.

Watamura noted that the loggerhead and the leatherback turtles have different population projections, with one going down and the other going up, but the two species are lumped together in the RPMs.

Tosatto said that, while there are slight differences between the two turtle species in terms of interactions and the population dynamics, the mandate is the same. In neither case is the species in jeopardy, but the RPMs are meant to minimize impacts. That is why they are generally the same. He said the difference is in the number specified for the vessel limits and the lower hard cap for leatherback turtles.

Watamura asked why the 25 percent reduction was included for both species when only one of the populations is on the decline.

Tosatto said that the driver to minimize impacts is the same for both populations. Some RPMs are more immediate for leatherbacks and may be less immediate for loggerheads. Although current estimates show an increase in population and good nesting population data, there are associated uncertainties. He said he considered the goal of reducing interactions for both species by 25 percent is prudent and the approach is reasonable.

Soliai asked how the 25 percent level was determined.

Garrett said that a review of available information such as TurtleWatch and analysis in the BiOp indicated that 25 percent appears to be an easy reduction. The publication by Evan Howell and colleagues demonstrated a measurable reduction if the TurtleWatch temperature bands were used as a constraint. The RPM was also designed to be flexible such that the SFD could consider a suite of minimization measures, including the issue of gear removal on leatherback turtles.

Soliai said that he thought there would be a more scientific explanation behind the 25 percent number.

Sesepasara asked if NMFS has evaluated interactions based on movement of the turtles based on nesting.

Garrett said that such information was considered as part of the status of the species section of the BiOp. PRD also considered satellite tracking and presence-absence information along with some model outputs about their predicted presence.

Sesepasara asked if the information on sea turtle movement was considered in the estimates of turtle interactions.

Garrett said that the interaction rate is largely driven by the 100 percent observer coverage in the fishery. However, PRD considered the presence and location of the fishery relative to where turtles are expected to occur.

Goto said that the vessel limits could displace vessels from the fishery for an entire year, which is detrimental to the owner of the vessel and the fishery itself. The BiOp suggests that having a vessel limit of two will result in maybe six turtles being saved over a course of a decade or more. He said that this is a small benefit relative to the risk of displacing the fishery. He asked if there were any additional conservation benefit to having a vessel limit over a trip limit.

Garrett said that the challenge with trip limits is with leatherbacks, which is declining at a rate of 5 percent a year and creating a greater concern than loggerheads. PRD believed that trip limits will not help the leatherback turtle population but may have some conservation benefit for loggerheads.

Goto said that he understands the position, but it appears that the only net effect is removing effort from the water, aside from the perceived saving of a few turtles. He said the vessel limits do not seem equitable as they disproportionately risks fishery effort for some small conservation benefit.

Garrett said it is a difficult situation and, if there is another model that demonstrates conversation for the species, the Council should provide that to NMFS.

Gourley asked what the 25 percent reduction represents and whether it is a reduction for a given year or a 25 percent reduction of a running average.

Garrett said that the RPM is written with the expectation that NMFS would spend the next two years looking at how it could devise mitigation measures designed to create a reduction of at least 25 percent. The 25 percent reduction is not expected to be met within the next two years. The RPM has flexibility for defining what the 25 percent represents through the course of the workshops and discussions in developing the tools to meet the 25 percent goal.

Gourley said he is worried that 25 percent is specifically stated as a goal but an explanation on the consequences of not meeting that goal does not exist. He also noted the high level of interannual variability for turtle interactions in the fishery. If the reason for some vessels having relatively higher interaction rates is unknown, it is unclear how the success of the minimization measures can be determined.

Tosatto said that the BiOp is currently a draft and input is being accepted to clarify the RPMs. He said the BiOp give some guidance of what minimizing impacts on endangered species looks like. For him, specifying a goal of 25 percent is better than having an abstract requirement to minimize interactions as it provides a timeframe and a goal. The verification will come over the next several years of understanding the variability and figuring out if the necessary minimization was accomplished. The consequence of not meeting this goal is stipulated by an ITS, which means the agency would have to re-enter consultation.

Gourley said that this is concerning because it is not clear how NMFS will be able to design, develop and implement minimization measures within two years and parse out that data from inherent variability. He suggested re-wording the RPM to something that might actually be met while also achieving the goal of reducing turtle interactions.

IV. Biological Opinion Review Advisory Panel Report and Recommendations

James Lynch presented the report and recommendation of the BiOp Review Advisory Panel convened on April 12, 2019. The panel focused its review of the Hawai‘i SSLL fishery draft BiOp on accuracy and comprehensiveness of the information and analyses as they pertain to loggerhead turtles, leatherback turtles and oceanic whitetip shark. Its key findings and recommendations were as follows:

1. For loggerhead and leatherback turtles, the draft BiOp presents comprehensive assessment of risk of exposure to the SSLL fishery and uses appropriate tools to evaluate the risk; however, a number of decisions made in the draft BiOp likely overestimates the threat posed from the SSLL fishery
2. For oceanic whitetip sharks, the draft BiOp summarizes much of the information on oceanic whitetip sharks; nevertheless, the draft BiOp missed some key conclusions regarding fishing impacts from longlining reported after the 2012 stock assessment, and treatment of uncertainty could be improved
3. The draft BiOp’s conclusions regarding transferred effects are inadequate due to lack of supporting details on methods to generate foreign interaction rates and inaccurate due to deficient acknowledgement of uncertainties around estimated foreign fisheries interaction rates.
4. General RPM Issues
    a. Include RPMs that do not alter the basic design, location, scope, duration or timing of the action and that involve only minor changes. [50 CFR §402.14(i)(2)].
    b. Include RPMs that are developed in coordination with the Council.
    c. Revise RPMs 1 and 2 to be more consistent with input obtained from the Council and the Scientific and Statistical Committee (SSC) or explain in more detail why RPMs 1 and 2 are not consistent input from the Council and the SSC.
    d. Clarify the terms and conditions associated with RPMs 1, 2 and 7 to provide specific methods on how they may be accomplished consistent with agency regulations.
5. RPM 1: Vessel Limits
    a. This RPM should be modified to Individual trip limits for consistency with the Council recommendation that has been comprehensively analyzed and reviewed.

6. RPM 2: Minimization measures with 25-percent reduction goal
    a. Supporting evidence for 25-percent reduction goal is not provided in the draft BiOp
7. RPM 7: Oceanic whitetip shark measures
    a. The necessity of RPM 7.b. (explore options for minimizing incidental bycatch of oceanic whitetip sharks and giant manta rays) is not demonstrated in the draft BiOp given the extremely low estimated impact of the fishery and given that fishing techniques known to pose a particular risk to oceanic whitetips do not occur in this fishery (e.g., use of shark lines or wire leader). Further, any consideration of spatial modelling and move-on rules would need to be done in a multi-species framework.

Simonds asked Justin Hospital, BiOp Review Advisory Panel member, to elaborate on the panel's findings regarding the transferred effects.

Hospital said the main concerns with the Indirect Effects section of the BiOp were related to a lack of clarity in the methods used in analyzing transferred effects. The draft BiOp compares Hawai'i shallow-set interaction rates with foreign interaction rates, and the literature that NMFS cites does not compute the interaction rates in the same way that is reported in the draft BiOp. Further, the draft BiOp was unclear on the methods used for the comparison. The draft BiOp did not highlight the uncertainties associated with the comparison of interaction rate estimates, and the strong conclusions drawn in the draft BiOp regarding transferred effects were not supported given the uncertainties associated with the estimates of foreign interaction rates.

V. Managing Loggerhead and Leatherback Sea Turtle Interactions in the Hawai'i-Based Shallow-Set Longline Fishery (Final Action)

Asuka Ishizaki, Council staff, provided an overview of the Council action under consideration. At the 173rd Council meeting held June 2018, the Council recommended amending the Pelagic Fishery Ecosystem Plan (FEP) to establish a management framework for the shallow-set fishery that consists of annual limits for loggerhead and leatherbacks and individual trip interaction limits for loggerhead and leatherbacks. At that time, the Council recommended a fleet-wide hard cap limit of 37 loggerheads and 21 leatherbacks as well as a limit of five loggerhead interactions per trip and no limit to be specified for the leatherbacks. Including the trip limit for both species in the framework was meant to allow the Council to recommend a new number at a later time. Other associated recommendations included establishing a timeline for monitoring, development and review of industry-implemented turtle interaction avoidance pilot program through fleet communication on a three-year timeline. Additionally, the Council requested NMFS to provide funding support to research in minimizing trailing gear to further reduce post-hooking mortality rates of loggerhead and leatherback turtles given the relative rarity of interactions.

At the 174th Council meeting held October 2018, the Council received presentations on the approach to the analysis and the loggerhead and leatherback population models, but the draft BiOp was not received. The Council recommended convening a Council meeting to review the draft BiOp and consider specifying leatherback trip limits if necessary given the updated leatherback population status. At the 175th Council meeting held December 2018, the Council

deferred taking additional action on leatherback turtles given the population status. The Council at the 175th meeting reiterated the previous recommendation regarding funding support for research and minimizing trailing gear and specifically recognized that development of additional tools and techniques might be warranted to allow quick and safe removal of trailing gear for large turtles not brought onboard.

Ishizaki provided an overview of the Hawai‘i SSLL fishery and sea turtle interactions. The remainder of the presentation focused on analyses comparing the Council's 173rd meeting recommendation and the RPMs in the draft BiOp most pertinent to the Council's management action. Specifically, Ishizaki reviewed the no action, 173rd meeting preferred alternative and draft RPMs as they pertain to hard caps and vessel versus trip limits for loggerhead and leatherback turtles.

Regarding hard caps, the no action alternative would keep the fleet-wide annual limit at 17 loggerheads and 26 leatherbacks. The Council's preferred alternative would revise the limits to 37 loggerheads and 21 leatherbacks. The leatherback hard cap under the 173rd Council recommended action represents a 19 percent reduction from the no action. The RPMs in the draft BiOp revise the loggerhead hard cap to 36 and the leatherback hard cap to 16. The leatherback hard cap under the draft BiOp represents a 24 percent reduction from the Council's recommended action and 38 percent reduction from the no action.

Regarding the trip versus vessel limits, Ishizaki explained that the Council's focus in evaluating these measures in 2018 was to provide responsive measures that can help ensure a year-round operation while addressing the needs for protected species conservation, especially in light of the higher loggerhead turtle interactions observed in late 2017 through early 2018. However, the Council did consider whether additional measures were needed for leatherbacks and at that time the information did not suggest that there would be concentration of interactions or any expected increase in interactions based on the past data. The intent of the vessel limit, as identified in the draft BiOp, is to reduce the impact of a small number of vessels causing a large proportion of the interactions and to provide early detection of relatively high fleet-wide interactions. At the 173rd meeting, the Council selected trip limits over vessel limits because trip limits were considered to have sufficient economic incentive to minimize interactions. The Council also found that the trip and vessel limits were likely to result in similar level of conservation benefits and that the additional burden of prohibiting vessels from fishing shallow-set if a vessel limit was reached would not likely result in meaningful conservation gains.

Ishizaki presented detailed analyses comparing trip and vessel limits, including a breakdown of per trip and per vessel interactions by year and simulation applying a range of trip and vessel limits to past data. For loggerhead turtles, the simulation showed that the Council-recommended trip limit would have had greater reduction in interactions compared to the draft BiOp vessel limit. For leatherback turtles, the simulation showed vessel limits having a larger number of potential reductions in interactions, although the average number of reduction per year would be 0.1 leatherbacks with a trip limit and 0.4 leatherbacks with a vessel limit. Removing a vessel or a trip in these evaluations often did not result in additional turtle interaction savings because those vessels had only two leatherback turtles. Ishizaki also presented data on the percent of vessels or trips removed on a yearly basis when applying the leatherback trip and

vessel limit of two, which showed that the proportion of vessels affected by a vessel limit of two can be as high as 20 percent.

Ishizaki discussed whether vessel limits for leatherbacks are likely to reduce impacts of a small number of vessels causing the large proportion of interactions over time as intended by the RPMs. Past data show that vessels with disproportionately large numbers of interactions would typically have only one or two interactions per year in any given year. Additionally, the vessels with disproportionately higher interactions were also in the top five ranking in terms of effort over time and have been the long-time participants that have consistently been in the fishery every year, and there is no evidence of operational effects driving interaction occurrence. The vessel limits would likely disproportionately affect these long-time fishery participants. The vessel limit may also discourage participation in the fishery after the first interaction, and it appears that that the first interaction is a random event. Conversely, trip limits would allow the vessels to remain in the fishery while encouraging avoidance behavior, and a trip limit of two leatherback turtles may contribute to reduction in interactions if vessels exhibit avoidance behavior after the first interaction. The trip limit would also allow managers to collect data, allow the fleet to innovate, experiment and learn from that experience to improve its avoidance behavior.

Ishizaki additionally discussed limitations of time-area closures in light of the second RPM requiring SFD to evaluate spatial closures, as well as the benefits of focusing on removal of trailing gear.

Okano asked if the target catch-per-unit effort (CPUE) in the shallow-set longline fishery increased as fishery participation decreased.

Ishizaki said that density of vessels is not high enough such that it could impact CPUE in that way. The North Pacific swordfish stock is currently harvested at rates well below maximum sustainable yield, and whether the Hawai‘i fishery has 20 or 10 vessels is not likely to have a significant impact on the CPUE based on the stock assessment.

Okano asked if vessel limits could be used for one turtle species and trip limits for the other species.

Ishizaki said that the Council could always consider different limits but may want to consider the complexity of such limits for fishery participants.

Tosatto said that this meeting has two purposes, with one being the consideration of the Council action and the other being the review of the draft BiOp. He said there are merits to this Council action, but it is not responsive to the draft BiOp or its RPMs. He said that if the Council transmits the action, it could be approvable.

Watamura said there were 8,632 total estimate loggerhead nesters and 37 anticipated interactions. Looking at the reality of this issue on a worldwide basis, the trip and vessel limits for the Hawai‘i SSLL fishery have zero conservation benefit compared to the potential impact of what is happening to the nesters. There should be some way that funding can be provided for better protection and policing of the nesting beaches.

Rice said that the amount of turtles being saved compared to the economic impact for fishermen is problematic, because under MSA the Council's action is doing the right thing but under ESA it is insufficient, and that discrepancy is hurting people.

Simonds said that the Council knows it has to do its part and it has been since 2002. She asked PIRO if the United States helped other countries with their fishery interaction issues.

Tosatto said issues like that are considered in the cumulative effects section of the BiOp, and he would have to gather a compendium of the various science and management activities for the government as a whole, as some of the support is coming from other agencies.

Simonds said that it is about management of the turtle populations. The United States is part of many international organizations and has spent millions of dollars working with countries to help reduce take at nesting beaches, but it seems that nothing has improved. She asked about international relations among countries impacting the same turtles the Hawai'i SSLL fishery is impacting. She wanted to know about the effort since the Council stopped funding the nesting beach work.

Tosatto said he believed the fishery is the model fishery for the region, but they are working hard in the international forum to make things equal. The United States is proposing a sea turtle measure, but it is not as strict as the draft BiOp RPM. The sea turtle measures in the Western and Central Pacific Fisheries Commission would not be there had the United States not put them there. He was not sure whether the activities that Simonds described have been replaced over time, but the PIRO sea turtle recovery coordinator can put together a compendium of those activities, which ones are continuing, which ones have merged, which ones have been transferred to Papua New Guinea and Indonesia, and how successful those are deemed. Internationally-coordinated recovery plan efforts are in place where those nesting beaches are for several species on both sides of the ocean.

Garrett said that the Pacific Islands Region, one of the smallest of NMFS, has provided grant funds working in these areas with international partners on nesting beach surveys, protections, and outreach and education to local communities. She estimated the annual spending on these grants to be between $300,000 and $750,000.

Simonds asked for the percentage of improvement in these fisheries after all of the projects implemented since 2002. She said she was not looking for an immediate answer, but she wanted to have some context for the Council members.

Tosatto said he appreciated the perspective of noting the expenses and benefits. The problem is complex, requiring an international response that the United States is leading. Since the early 2000s, the Western Pacific Region received earmarks for Hawai'i sea turtles which have since been incorporated into PIRO's budget. Unfortunately, the best use of the funds has been offsetting a shortfall in Observer Program funding, but he has been working with NMFS Headquarters to nationally rebalance observer priorities.

Gourley said that removing particular vessels with high interaction rates from the fishery would take away from the research to investigate why their interactions may be high in the first

place. He said perhaps the Council should let the fishery fish and then use the information to determine what is happening and identify problems with the vessels that have high interaction rates.

Sensui said that it would be daunting for those considering entering this fishery knowing that a vessel limit of two interactions could take them out of the fishery for a whole year. He did not know anyone who would be willing to place a bet on that kind of investment.

VI. Public Comments

Sean Martin provided comments on behalf of the Hawaii Longline Association (HLA). Since 2004, the SSLL fishery has been subject to most highly restrictive, comprehensive management regime implemented in any pelagic longline fishery. He expressed disappointment that the SSLL fishery was closed in April 2019 while under a restrictive loggerhead hard cap that was not based on the best scientific information available. The closure could have been avoided had NMFS not delayed the preparation of the BiOp. As a result of the closure, HLA members have suffered substantial economic losses and market confidence in the continuity of swordfish production by Hawai‘i vessels has been damaged.

HLA supported the conclusion of the draft BiOp that the SSLL fishery is not likely to jeopardize the continued existence of ESA-listed species. Additionally, HLA did not believe the hard caps are a necessary tool for effective and lawful management of the SSLL fishery but would not oppose the Council's proposed implementation of hard caps. HLA regarded the proposed vessel limits as unlawful and preferred trip limits over vessel limits despite finding them both to provide negative incentives. Regarding time-area closures, HLA found these to be unlawful as an RPM because they alter the nature of the fishery. HLA also believed that closing waters within given sea surface temperature bands is also unlawful. Martin believed that these associated issues may lead to the end of the Hawai‘i longline swordfish fishery.

Martin said that HLA would not oppose the potential Council action with respect to proposed sea turtle management framework with a hard cap limit for loggerheads of 36 and a hard cap limit of 16 for leatherbacks, a trip limit of five loggerhead turtles per trip and a limit of three leatherback turtles per trip. HLA is committed to funding the development of a line cutter device, working with NMFS on training for captains and crews to coordinate with observers to facilitate sea turtle tagging opportunities onboard the vessel, education and outreach to crews, and the development of industry-implemented cooperative framework to avoid reaching hard caps.

Watamura said he fully agreed with Martin and would like to come up with an alternative incentive to hard caps that impact the fishers as well as other socioeconomic factors in the nation.

Rice agreed with Martin’s comments, especially regarding negative economic incentives and hard caps.

Muna-Brecht expressed her support, noting that Guam is looking to establish similar kinds of fisheries in the near future.

Roger Dang provided comments as a vessel owner active in the Hawai‘i SSLL fishery. He noted the cost of preparing for a fishing trip can be as much as $30,000 to $40,000. A vessel limit of two that would remove the vessel from the fishery would discourage fishermen from fishing given the high cost to start. He described this as a “broad stroke approach” since managers are not sure as to why a relatively small proportion of the total vessels are responsible for a majority of the interactions. He said that at least with trip limits, fishermen would be allowed to utilize an avoidance behavior to remain in the fishery. He went on to discredit vessel limits, noting that an obstacle is being created that no one can control and that the majority of the vessels would not put effort into this fishery, which would effectively close the fishery. Another issue with vessel limits is that it is the captain that interacts with the turtles rather than the vessel and a captain can transfer to another vessel. Dang also talked about the American seafood market and how swordfish imports from South America have been increasing in recent years, especially from Ecuador and Costa Rica. The people who buy fish from American fishers will go to other countries to get their supply because demand does not wane simply because the Hawai‘i fishery was closed. He said the majority of swordfish product in the United States right now is from South America.

Goto agreed with Dang’s last point saying that the RPMs essentially force outsourcing to foreign fisheries.

Mark Fitchett, Council staff, confirmed that a notable amount of swordfish product is coming from Brazil to the East Coast of the United States. The Brazilian fleet primarily operates in the South Atlantic, where the swordfish stock is overfished and experiencing overfishing. In the Eastern Pacific where Ecuador’s product would originate, the fishing capacity has increased significantly. In contrast, the Western and Central Pacific stock of swordfish is in excellent shape.

Eric Kingma provided public comment regarding HLA’s position on the BiOp. While HLA did provide comments on several sections prior to the draft BiOp, it did not see many of its changes incorporated into the draft BiOp. HLA did not believe the current fishery closure is based on the best available science. HLA did agree with the conclusion that the fishery is not jeopardizing any ESA-listed species but had concerns regarding some of the specific content. HLA believed that NMFS has unlawfully misused and misapplied the benefit of the doubt concept in the analysis and has manipulated fishery interaction data to create worst-case scenarios of the fishery that have a 5 percent or less probability of occurring. HLA believed what is reasonably expected to occur should also be fully analyzed. Kingma said the BiOp fails to present a proper assessment of the effects of the action of the leatherback sea turtle species. A substantial number of foreign fisheries have large impacts on leatherbacks, but there was no meaningful evaluation on how they impact the species as a whole. Additionally, HLA believed that the draft BiOp contains incorrect statements of NMFS’ legal obligation under ESA Section 7 that imply a far more ambiguous and lower bar for jeopardy than mandated by law. HLA also believed that the RPMs would violate the ESA because they would alter the basic design, location and timing of the action. Kingma said that NMFS has a duty to include HLA in the

development of RPMs because they are an Applicant, but HLA has not received additional or early consultations regarding them. He said that HLA would like to coordinate with NMFS to identify which RPMs are reasonable and lawful.

VII. Council Discussion and Recommendations

Regarding the management of loggerhead and leatherback turtle interactions in the Hawai'i-Based longline fishery, the Council:

1. **Maintained the recommendation from the 173rd meeting for amending the Pelagic FEP to establish a management framework for the Hawai'i SSLL fishery consisting of the following measures:**
   a) **Establish an annual limit on the number of North Pacific loggerhead and leatherback turtle interactions that the Council will recommend to NMFS consistent with the anticipated level of annual interactions that is set forth in the current valid BiOp. Once either one of these interaction limits is reached, the fishery closes for the remainder of the calendar year.**
   b) **Establish individual trip interaction limits for loggerhead and leatherback turtles for the Hawai'i limited entry permit vessels that declare their trips as a shallow-set trip.**
      i. **Upon determining that a vessel has reached either the loggerhead or leatherback turtle trip interaction limit based on data from NMFS observers, shallow-set vessels will be required to return to port without making additional sets.**
      ii. **The vessel may resume shallow-set fishing operations after returning to port and providing the required 72-hour notification under 50 CFR 665.803 prior to departure.**
      iii. **The Council may make recommendations to NMFS to revise the individual trip limits upon periodic review of the effectiveness of the limits.**
2. **Recommended the Hawai'i SSLL fishery be reopened and the following limits be implemented under the management framework:**
   a) **Annual limit of 36 loggerhead turtles and 16 leatherback turtles, consistent with the draft BiOp. For the 2019 fishing year, interactions occurring from Jan. 1, 2019, until the fishery closure on March 19, 2019, shall apply against the 36 loggerhead and 16 leatherback limit; and**
   b) **Individual trip limits of five loggerhead turtles and two leatherback turtles.**
3. **Recommended an annual review of the Hawai'i SSLL fishery's performance under the individual trip limits in the Annual Stock Assessment and Fishery Evaluation Report.**

Further, the Council deemed that the regulations implementing the recommendations are necessary or appropriate in accordance with Section 303(c) of the MSA. In doing so, the Council directed Council staff to work with NMFS to complete regulatory language to implement the Council's final action. Unless otherwise explicitly directed by the Council, the Council authorized the executive director and the chair to review the draft regulations to verify that they are

consistent with the Council action before submitting them, along with this determination, to the Secretary on behalf of the Council. The executive director and the chair were authorized to withhold submission of the Council action and/or proposed regulations and take the action back to the Council if, in their determination, the proposed regulations are not consistent with the Council action.

Tosatto said that while he may have much to say about the recommendation, he would abstain from making those comments and would abstain from voting as the recommendation will be coming to him for a decision.

Okano said he is a person who fishes and values conservation, so he tries to find a balance in his practice. He said he would vote to support the recommendation as he sees it as a balance of conservation and supporting the longline industry.

Watamura said that in a wider scope of turtle interactions worldwide, he wished that there was an alternative that would not shut down the fishery. He said the recommendation is a move in the right direction but he thinks the bigger picture should be considered.

Rice agreed with Watamura, adding he wished there was another way to help the fishery given that foreign vessels fishing next to the Hawai‘i fleet are not regulated in the same way.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

Regarding the draft BiOp for the Hawai‘i SSLL, the Council **directed staff to send a letter to NMFS providing comments on the draft BiOp reflecting the report from the Biological Opinion Review Advisory Panel and Council discussion.**

Tosatto said that this recommendation was a difficult one to decide whether he is voting for it as it is directing staff to send a letter but the recommendations in the letter would come to him. He said he would abstain so as not to lend undue support or refutation. He asked that Council staff to be as accurate to the Council discussion as possible.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

Regarding the draft BiOp for the Hawai‘i SSLL fishery, the Council **requested NMFS meet with Council staff to discuss comments regarding the draft BiOp.**

Tosatto said that while he supports the request, he cannot commit at this time to the meeting given the limited amount of time to address a large number of comments, and a meeting to discuss Council comments was not envisioned in the ESA Integration Agreement.

Moved by Goto; seconded by Watamura.
Motion passed.

Regarding the draft BiOp for the Hawai‘i SSLL, the Council **requested NMFS consider revising the RPMs for consistency with the Council recommended action and**

implement RPMs with immediate timelines through the MSA regulatory process for Council actions.

Tosatto said he would abstain from voting because it was a comment on the draft BiOp.

Moved by Goto; seconded by Watamura.
Motion passed with Tosatto abstaining.

VIII. Other Business

There was no other business.