



WESTERN  
PACIFIC  
REGIONAL  
FISHERY  
MANAGEMENT  
COUNCIL

MINUTES OF THE  
175<sup>th</sup> MEETING OF THE  
WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

December 17, 2018  
Council Office  
Honolulu, Hawai'i

Approved by Council:

  
\_\_\_\_\_  
Archie Soliai, Chair

Western Pacific Regional Fishery Management Council

## Table of Contents

I.	Welcome and Introductions .....	1
II.	Approval of Agenda.....	1
III.	Managing Loggerhead and Leatherback Sea Turtle Interactions in the Hawai‘i Based Shallow-Set Longline Fishery .....	1
IV.	Advisory Committee Report and Recommendations .....	7
V.	Public Hearing .....	7
VI.	Council Discussion and Recommendations.....	8
VII.	Other Business .....	8

## **I. Welcome and Introductions**

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

- John Gourley, acting chair (Commonwealth of the Northern Mariana Islands) (CNMI)
- Dean Sensui, vice chair (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)
- Lt. Cmdr. Conor Sullivan (United States Coast Guard) (USCG) (designee for Rear Adm. Kevin Lunday)

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

- Michael Duenas, vice chair (Guam)
- McGrew Rice (Hawai‘i)
- Raymond Roberto, CNMI Department of Lands and Natural Resources (CNMI DLNR)
- Christinna Lutu-Sanchez (American Samoa)
- Henry Sesepasara, American Samoa Department of Marine and Wildlife Resources (DMWR)
- Taotasi Archie Soliai, vice chair (American Samoa)

Council Executive Director Kitty Simonds, NOAA Office of General Counsel Fred Tucher, and Scientific and Statistical Committee (SSC) member James Lynch were also in attendance. Council members Matt Sablan (Guam) and Michael Brakke (US Department of State) were absent.

Gourley opened the 175<sup>th</sup> meeting of the Council, and welcomed Council members and the public. Council members and staff introduced themselves.

## **II. Approval of Agenda**

Gourley asked if there were any requests for changes to the agenda. Hearing none, Gourley asked for approval of the agenda. The agenda was approved with no changes.

## **III. Managing Loggerhead and Leatherback Sea Turtle Interactions in the Hawai‘i Based Shallow-set Longline Fishery**

Asuka Ishizaki, Council staff, presented an overview of the Pelagic Fishery Ecosystem Plan (FEP) amendment on managing loggerhead and leatherback sea turtle interactions in the Hawai‘i based shallow-set longline fishery under consideration for final action at the 175<sup>th</sup> meeting of the Council. The fishery was closed on May 8, 2018, pursuant to the Ninth Circuit

decision and associated settlement agreement, and was scheduled to re-open on Jan. 1, 2019. Upon re-opening, the Hawai‘i shallow-set longline fishery will have a new loggerhead hard cap of 17, reduced from the previous hard cap of 34 turtles. The new loggerhead cap of 17 comes from the 2004 Biological Opinion, as parts of the 2012 Biological Opinion pertaining to loggerhead turtles was vacated and remanded as a result of the Ninth Circuit decision and associated settlement agreement. The hard cap in the Hawai‘i based shallow-set longline fishery for leatherback sea turtles will remain at its previous value of 26. The settlement agreement of the Ninth Circuit decision also states that NMFS shall not increase this loggerhead turtle hard cap except through new regulations after the new Biological Opinion is completed.

At the 173<sup>rd</sup> Council meeting in June 2018, the Council recommended amending the Pelagic FEP to establish a management framework for the Hawai‘i shallow-set longline fishery consisting of both an annual hard cap as well as individual trip limits for loggerhead and leatherback sea turtle interactions. At the 174<sup>th</sup> Council meeting in October 2018, the draft Biological Opinion was not made available as scheduled, but the Council reviewed the approach to the analysis for the Biological Opinion. The Council also received information on the Pacific Island Fisheries Science Center (PIFSC) loggerhead and leatherback sea turtle population model that showed loggerheads on a long-term increasing trend and leatherbacks on a long-term decreasing trend. Also at the October 2018 meeting, NOAA General Counsel briefed Council members on considerations from the Ninth Circuit decision given the model results showing a declining leatherback sea turtle population. Ishizaki explained that the outcome of the new Biological Opinion to be completed by Jan. 31, 2019, was unclear at this time, but the Council had the option to consider additional leatherback mitigation measures to inform the development of Reasonable and Prudent Measures or Alternatives.

The fishery has seen a significant reduction in sea turtle interactions since the implementation circle hook and mackerel bait regulations in 2004. The number of loggerhead interactions was anomalously high in 2017 and 2018, with concentrations of interactions in certain trips and certain vessels. These higher interactions highlighted a need for a mechanism to detect areas of higher interaction rates (or “hot spots”) that may lead to a rapid accumulation of interactions to the point of the fishery reaching the hard cap and being closed early in the season.

Ishizaki provided a summary of PIFSC’s loggerhead and leatherback population model, noting that the SSC at its October 2018 meeting pointed out that the underlying data in the leatherback nesting trends show potential rebound capacity for the species despite the long-term leatherback population decline. Background information on leatherback turtle interaction patterns in the shallow-set fishery was also provided, which showed relatively low and stable interactions compared to loggerhead turtles. When interactions are observed in the fishery, they are mostly with large sub-adults and adults, which are not brought on board due to their size. All leatherback turtles observed since 2004 have been released alive, but NMFS has assigned an approximately 20 percent mortality rate from these interactions due largely to remaining trailing gear. Ishizaki also described the spatial overlap of leatherback and fishing effort distributions.

Ishizaki presented leatherback options for Council consideration that had been previously evaluated at the June 2018 Council meeting, including individual trip limits, individual vessel limits, in-season temporary closures, real-time spatial management measures, additional research to minimize impacts from trailing gear, and time/area closures.

- Individual trip limits would set a maximum number of loggerhead and/or leatherback sea turtle interactions per shallow-set trip. If a vessel reached the trip limit, it must return to port but could resume shallow-set fishing after providing the required 72-hour notice to get observer placement. Individual trip limits are intended to mitigate a large proportion of interactions from occurring on a small number of trips and to use the potential for shortened trips as an individual incentive to avoid interactions. Trip limits were included by the Council in its framework for managing leatherback sea turtle interactions in the Hawai‘i shallow-set longline fishery, but no number was recommended. The Council had an option of recommending a number under the previously recommended framework.
- Individual vessel limits would set a limit on the maximum number of sea turtle interactions per vessel when shallow-setting. If a vessel reached its limit, it must return to port and is prohibited from shallow-setting for the rest of the year. Vessel limits incentivize avoiding interactions; however, the Council at its June 2018 meeting prioritized trip limits over vessel limits because the additional burden of prohibiting individual vessels from fishing would likely not result in substantial conservation gains. Council staff presented an analysis that compared individual trip limits and vessel limits including simulation results applying varying limits to past interaction data.
- In-season temporary closures would implement a fleet-wide closure when a certain percentage of the fleet-wide hard cap is reached within the first three quarters of the year. The in-season closures would alleviate the discrepancy between hard caps being implemented annually and fisheries operating on a more seasonal basis. This measure was not included in the sea turtle management framework due to the conservation benefits being minimal, especially if the hard cap remains while additional trip limits are implemented. Additionally, the implementation of in-season temporary closures could introduce a significant administrative burden.
- Real-time spatial management measures would identify certain “hot spots” and close those areas on a real-time or near-real-time basis to keep vessels away. It is based on the understanding that loggerhead sea turtles have some degree of temperature-dependence in their interactions with the fishery. The SSC, however, previously found that information on real-time hot spots in the North Pacific is not well known at this point, so the data on how fishing behavior changes in response to these turtle interactions are insufficient. Additionally, real-time measures are difficult to implement under a regulatory framework because mechanisms would be needed to close and reopen the fishery immediately. This management measure would likely be best developed and implemented by the industry.
- Minimizing impacts from trailing gear would lower the mortality estimate of turtle interactions by having the line cut as close to the hook as possible. All leatherback turtle interactions in this fishery have been released alive, but due to trailing gear and other criteria applied to these actions there is an overall 20 percent post-hooking mortality rate. If the estimated post-hooking mortality rate had been reduced from 20 to 10 percent, the result would be a total of 10 fewer estimated leatherback mortalities from 2004 to 2018. Therefore, the Council at its 173<sup>rd</sup> meeting recommended that NMFS provide funding to support research on reducing trailing gear, and NMFS indicated it would pursue research opportunities, as appropriate, subject to available funding. Ongoing work to develop a

line cutter that would slide down the branchline and allow for remote trigger of the cut so as to reduce the post-hooking mortality for sharks could also be a useful tool for turtles.

- Time-area closures would essentially be a simpler version of the real-time spatial management measure. For example, a month in an area known to have high interaction rates could be selected based on past data and closed on a regular basis. However, available data indicate that even months considered to have higher interaction rates may have zero interactions in some of years, producing no turtle conservation benefit. While these types of static, pre-defined closures are simple, they likely do not produce the benefit sought after by the Council and do not meet the purpose and need of this particular Council action of developing responsive measures that react to current interaction data and fishing conditions.

Okano asked if any analysis was considered looking at how the potential trip and/or vessel limits would simultaneously impact the fishery.

Ishizaki said yes, fishery impacts were determined by calculating how many trips or vessels would have been removed from the fishery given the number of interactions in that year relative to the simulated limits. However, analysis on the impact from the timing of trip or vessel removal or resulting catch has not been conducted.

Sensui asked if there were statistics available on turtle interactions comparing US fishing fleets to foreign fleets.

Ishizaki said that, while efforts have been made to look at interaction rates in the Western and Central Pacific Ocean (WCPO), the performed analysis did not look at the actual number of interactions across the Pacific. However, the impacts of Hawai'i shallow-set fishery are likely much less than other fisheries due to the required use of circle hooks and mackerel bait, as well as handling requirements for minimizing post-hooking mortality.

Sensui asked about the contribution of other countries in the Pacific to the protection or demise of loggerhead and leatherback turtle populations.

Ishizaki said that is also unknown. In the recent analysis looking at interaction rates throughout the WCPO, most of the data came from the Hawai'i fishery, which has 100 percent observer coverage and high confidence in the numbers and impact. Most other fisheries have low observer coverage, in the range of 5 percent.

Goto asked if there is a way to separate Hawai'i-based and California-based shallow-set vessels when considering loggerhead and leatherback turtle interaction rates.

Ishizaki said separate analysis for the vessels landing at different ports has not been conducted. All of the vessels operate under a Hawai'i permit and are considered a single fishery.

Okano asked if there are any indicators prior to leatherback turtle interactions occurring, such as fishermen seeing a lot of turtles.

Ishizaki said no. Turtle interactions are typically not encountered on the average trip, and it is not common for fishermen to see aggregation of turtles that would suggest potential

interactions. Part of the difficulty is that circle hooks and mackerel bait have been so successful in reducing these interactions that the interactions are rare, making it difficult to reduce them further. Ishizaki said that the only time she was aware of industry making note of a lot of turtles was during the last season when loggerhead interactions were anomalously high.

Wamura said that he listened to the Protected Species Advisory Committee (PSAC) discussion earlier in the day about trailing gear. The method being used now to remove trailing gear involves a long pole that is difficult to situate correctly, especially in rough weather, and it also does not create a safe distance between the turtle and the vessel. He mentioned a device that can be slid down the branch line before cutting it to reduce danger to the turtle and said he hoped for further development of similar devices.

Sensui asked if the census of turtles based on nesting beaches includes all known nesting beaches.

Ishizaki said that the index beaches represent a portion of all known nesting beaches. The leatherback turtle index beaches included in the model represent about 85 percent of the known turtle nesting abundance. Most leatherback nesting beaches have been likely identified, and any remaining beaches are likely to hold small number of nests.

Sensui asked if people are harvesting eggs on these nesting beaches and who conducts enforcement patrolling.

Ishizaki said egg harvesting was extensive prior to conservation programs implemented in the early 2000s and continues to be a threat today. However, the egg harvesting on these nesting beaches is more likely under control with program staff patrolling the beaches, sometimes employing those people who used to harvest from the nests. While the threat of egg harvesting is much lower, other threats such as pig predation on nests persist. Beach patrolling is done by several different groups working on the main nesting beaches, one of which is advised by NMFS.

Gourley suggested that a meeting be coordinated between NMFS and the individual developing the line cutter device to assist with the final stages of development of the trailing gear-cutting tool. He asked how close the real-time spatial management is to implementation, and if NMFS or the industry would need to be the driving force behind such an action.

Ishizaki said, based on experience from Alaska and West Coast fisheries, it is impossible to do real-time mitigation measures in a federal system. Having individual or fleet-wide quotas provides a framework for the industry to manage those quotas in the most efficient manner. The Hawai'i-based fleet is not always a cohesive group, which makes it difficult to get the support of some vessels, but some industry members are interested in developing a system for a portion of the fleet, which could later be expanded to the remaining vessels.

Sesepasara asked whether the previously mentioned hot spots for turtle interactions with the shallow-set longline fleet are mostly on the high seas or in the US exclusive economic zone.

Ishizaki said this is not exactly known, but most of the Hawai'i shallow-set longline effort is on the high seas to the north and northeast of the main Hawaiian Islands. There is not

enough additional information beyond the TurtleWatch products to determine where the hot spots will occur.

Sesepasara asked what the current sea turtle mortality rate is in the Hawai'i shallow-set longline fishery if the discussion is to reduce the sea turtle mortality rate by 10 percent.

Ishizaki clarified that the 10 percent from her presentation was a hypothetical given that the current overall mortality estimate for leatherbacks is 20 percent. The 10 percent number presented was meant to show that mortalities would be reduced by 10 turtles if the post-hooking mortality rate was reduced by this amount.

Lisa Sztukowski, CNMI Endangered Species Program Manager, asked about the basis of the mortality rates and whether tracking of turtles was ongoing to inform real-time management.

Ishizaki said the presented mortality rates are based a 2005 NOAA Technical Memo resulting from a workshop. There has since been another workshop that looked at updated data in 2011, but they did not find new information that would change these criteria. Regarding tagging, the tagging information is likely insufficient to inform real-time management.

Celestino Aguon, Guam Division of Aquatic and Wildlife Resources, asked if turtles involved in observed sea turtle interactions with the Hawai'i shallow-set longline fishery had been tagged after the interactions.

Ishizaki said tags have been deployed on hard-shell turtles post-hooking, but none has been deployed on leatherbacks in the Hawai'i shallow-set longline fishery because the turtles are usually too large to be brought aboard and would require different tags.

Rice asked what the least amount of mitigation that could be done without an expected lawsuit if an action is taken without the new Biological Opinion being completed.

Tucher said there is no explicit answer to this. Right now, what additional mitigation might be necessary is being determined given the Population Viability Analysis model prepared by Dr. Jones. This has become an issue of timing because what the Biological Opinion will state is not known. If the Biological Opinion results in a no jeopardy determination, then the range of discretion to implement conservation measures that mitigate the impact, while taking into account fishery economics, is broad. However, if there was a jeopardy opinion, conditions would be different and would require actions to avoid appreciable reduction of the likelihood of survival and recovery. Tucher said that there is a question of timing, given that the Biological Opinion is not yet available. The Council could decide to add mitigation measures now and NMFS would consider that as the overall proposed action, and if the result is no jeopardy, then the Council has done its due diligence in mitigating the impact of the action on sea turtles. However, if it is a jeopardy decision, then it would mean that the Council's action was insufficient, and NMFS would formulate a Reasonable and Prudent Alternative with the Applicant's input, at which point the Council would have to reconsider its decision. He advised that the Council has the option of taking action at this meeting or waiting for the draft Biological Opinion to be made available.

Rice asked if the Council made a recommendation at this meeting, for example for an individual limit of two turtles, whether the Council could later change this number if the new Biological Opinion resulted in a non-Jeopardy decision.

Tucher said the Council could, though it may trigger the re-initiation of consultation of another Biological Opinion. Action taken now would become a piece of the overall federal action under the ongoing consultation. If the Council then recommended a change after the Biological Opinion, NMFS would need to consider whether the removal or change to that measure is significant new information that would require the agency to prepare a new Biological Opinion.

Gourley asked if any foreign shallow-set fishing fleets had adopted simple measures such as changing the hooks or bait.

Ishizaki said that the Western and Central Pacific Fisheries Commission (WCPFC) at its 2018 meeting held the week prior to the 175<sup>th</sup> Council meeting adopted a revised sea turtle measure that closed the loop on applying circle hooks or mackerel bait to swordfish-targeting shallow-set only by requiring that all shallow-set vessels use these measures.

#### **IV. Advisory Committee Report and Recommendations**

Lynch reported on the Sixth PSAC meeting, which took place earlier in this day, Dec. 17, 2018. The consensus among PSAC members was that trailing gear is relatively important and that existing research should be acknowledged and new research should be completed on minimizing trailing gear to reduce post-hooking mortality when considering management of loggerhead and leatherback sea turtle interactions in the Hawai‘i-based shallow-set longline fishery. The PSAC members also agreed that the specification of individual trip limits to incentivize fishers to avoid these turtle interactions may be beneficial in some circumstances, though it was not deemed crucial to implement immediately. For all other measures, the committee agreed that more study would be required prior to any implementation. The trip limits did seem more acceptable to fishers than the other measures discussed by the committee.

#### **V. Public Hearing**

There were no public comments made in person.

Sean Martin made a comment on behalf of the Hawai‘i Longline Association (HLA) via teleconference. He said NMFS has put the Council in a tough position with the delay of the Biological Opinion. While the HLA remains supportive of mitigation measures to reduce the total number of shallow-set turtle interactions, measures implemented in the Hawai‘i fishery have not been similarly implemented in foreign fleets. HLA did not believe that the shallow-set fishery as currently implemented has anything more than negligible impacts on loggerhead and leatherback turtles. The HLA was concerned with the development of additional measures without supporting scientific evidence showing that such measures are needed to reduce a perceived unacceptable level of impact by the shallow-set fishery. Martin said HLA cannot take a firm position on this action at this meeting in the absence of the draft Biological Opinion and does not believe the scientific information upon which to base any additional measures is sufficient. HLA was further concerned that any measures that may not be supported by sufficient

available information may in appropriately establish a precedent for future actions or Biological Opinions.

## VI. Council Discussion and Recommendations

*Regarding the management of loggerhead and leatherback sea turtle interaction in the Hawai'i shallow-set longline fishery, the Council reiterated its recommendation from the 173<sup>rd</sup> Council meeting requesting that NMFS provide funding to support research in minimizing trailing gear to further reduce post-hooking mortality rates of loggerhead and leatherback sea turtles. Available observer data since 2004 indicate that reducing trailing gear on leatherback turtles would reduce post-hooking mortality rates. Development of additional tools and techniques would be warranted to allow quick and safe removal of trailing gear for large turtles that cannot be brought on board, consistent with existing requirements to disentangle and remove the gear, or cut the line as close as possible to the hook or entanglement. The Council further recommended that NMFS review the application of its sea turtle post-hooking mortality criteria to enter actions in the Hawai'i longline fishery to reduce uncertainties in mortality estimates.*

*Moved by Sensui; seconded by Watamura.*

*Motion passed. Tosatto abstained.*

*Regarding the management of leatherback sea turtle interaction in the Hawai'i shallow-set longline fishery, the Council deferred action on additional leatherback sea turtle mitigation measures until such time that the Draft Biological Opinion and more complete information on the impacts of the fishery on the Western Pacific leatherback turtles is available to fully inform the Council decision.*

Goto asked if this recommendation essentially means the shallow-set longline fishery will open with a limit of 17 loggerhead and 16 leatherback sea turtles on Jan. 1, 2019.

Ishizaki said it would be 17 loggerhead and 26 leatherback sea turtles.

*Moved by Sensui; seconded by Watamura.*

*Motion passed.*

Simonds asked if the plan for delivering the draft Biological Opinion was still on target.

Tosatto said that per its agreement with the Applicant, PIRO is due to deliver an effects analysis on Dec. 31, 2018, and they are on target for that. The draft Biological Opinion will be delivered on Jan. 31 and the final Biological Opinions will be delivered on Feb. 28, 2019.

Simonds said that the Council members should expect to convene again before March.

## VII. Other Business

There was no other business. The meeting was adjourned at approximately 2:15 p.m.