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FISHERY
MANAGEMENT
COUNCIL

MINUTES OF THE

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WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

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Archie Taotasi Soliai, Chair

Western Pacific Regional Fishery Management Council

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I. Welcoming Ceremony

High Talking Chief Malemo Tausaga welcomed members of the Western Pacific Regional Fishery Management Council and the public and described the importance of the *'ava* ceremony in the Samoan culture. He said the 'ava cup was presented to only special persons to accept and drink on everyone's behalf for safe arrivals, good health and safe returns home. Ceremony participants drink from the same cup to symbolize peacemaking between the host and the travelers. He led the ceremony and blessed the Council meeting.

Council Chair Archie Taotasi Soliai explained the custom of reciprocating in native Samoan the highest form of respect that the 'ava ceremony entails. On behalf of the Council members, he thanked the Office of Samoan Affairs, governor and lieutenant governor for holding the prestigious ceremony. He then officially opened the 180th meeting of the Council with a Samoan proverb and moment of prayer.

II. Opening Remarks

A. The Honorable Lt. Governor Lemanu Peleti Mauga

Lt. Governor Lemanu Peleti Mauga presented Gov. Lolo Letalu Matalasi Moliga's remarks. He thanked the Council for the many projects that it has sponsored in American Samoa to sustain the fishing community. He requested additional support to build alia fishing boats locally as many inshore fishermen cannot afford alia boats from off-island. He asked that financial support go to fishermen in Manu'a as fishing grants generally stay on Tutuila Island. He spoke about the economic dilemma of keeping the local cannery open, including the October 9, 2019, closing of the Effort Limit Areas for Purse Seiners (ELAPS). He said that, if the cannery does not get fish from US-flagged vessels, they will have to reach out to China. He urged the Council and NOAA to consider other solutions such as collaborating nationally with programs that work for fishing management and conservation in the open seas and teaching the next generation about the ocean so they can help with scientific research and decision-making. He acknowledged that enforcement is a major challenge.

B. The Honorable Congresswoman Aumua Amata Coleman Radewagen

Congresswoman Aumua Amata Coleman Radewagen said the ocean is a part of the Samoan way of life and fishing has sustained them for their entire history. Traditional ways of fishing are still practiced, and many people fish for food and recreation. American Samoa's economy relied heavily on fishing and the cannery. Her message in Washington, DC, is that American Samoa needs more certainty, including a stable multi-year economic development tax policy that applies to the remaining cannery and restoration of the Territory's fishing waters for US vessels. The closure of the US exclusive economic zone (EEZ) around American Samoa caused the US fishing boats to travel much greater distances and pay off nations to fish in their waters. Through the South Pacific Tuna Treaty, US tuna purse-seine vessels are able to secure access to the EEZ of 16 Pacific Islands countries. Competition from other purse-seine fishing nations, notably China, has driven higher fees (up to $2 million annually), which caused some US vessel operators to sell their boats to foreign operators. Other solutions, in addition to the South Pacific Tuna Treaty, are needed, including restoring access to the marine monument

waters. Securing more days on the high seas through legislation is another way forward. The United States must also be alert to the actions of China, monitor how that affects the fleet and be constantly active and engaged in the Pacific region. The Chinese longline fleet has soared to more than 500 vessels and now catches 45 percent of the South Pacific albacore, while the American Samoa longline fleet has dropped from 60 vessels to 13 active vessels. Radewagen said that US negotiators and the American Samoa local governments should support the US longline fleets based in American Samoa and Hawai‘i with their quota and fishing access needs.

Soliai thanked both speakers and noted that everyone needs to work together to meet the challenges mentioned, which the Council faces in each of the jurisdictions.

Council Executive Kitty Simonds thanked the speakers and said the Council believes it is everyone’s collective duty to sustain not only the fish stocks, protected species and habitat but also to protect our nation's fishermen and fisheries. Everyone needs to address the US seafood trade deficit and the illegal, unreported and unregulated (IUU) fishing, which are goals of the current Administration. These goals can be met by ensuring that US fishermen continue to have access to fishing grounds and the ability to catch and market fish. Fishermen need to compete with global markets and do not need to be burdened with closed US waters and closed seasons imposed upon them due to regulatory action.

Mauga said that he had heard and appreciated a report about an almost 24-hour meeting or negotiation involving Sam Rauch and Simonds in trying to work the high seas to benefit the island nations.

III. Welcome and Introductions

The following members of the Council were in attendance:

- Taotasi Archie Soliai, chair (American Samoa)
- Michael Duenas, vice chair (Guam)
- John Gourley, vice chair (Commonwealth of the Northern Mariana Islands [CNMI])
- Ed Watamura, vice chair (Hawai‘i)
- Monique Genereux (Guam)
- Michael Goto (Hawai‘i)
- McGrew Rice (Hawai‘i)
- Chelsa Muna-Brecht, Guam Department of Agriculture (DOAg)
- Ryan Okano, Hawai‘i Department of Land and Natural Resources (Hawai‘i DLNR) (designee for Suzanne Case)
- Henry Sesepasara, American Samoa Department of Marine and Wildlife Resources (DMWR)

- Michael Tosatto, National Marine Fisheries Service (NMFS) Pacific Islands Regional Office (PIRO)
- Brian Peck, US Fish and Wildlife Service (USFWS)
- Jason Holstead, US Coast Guard (USCG) (designee for Rear Adm. Kevin Lunday, USCG District 14)

Also in attendance were Simonds; NMFS Deputy Assistant Administrator for Regulatory Programs Sam Rauch III; NOAA Office of General Counsel, Pacific Islands (GCPI) Kristen Johns; and Scientific and Statistical Committee (SSC) Chair James Lynch. Council members Howard Dunham (American Samoa), Anthony Benavente (CNMI Department of Lands and Natural Resources [CNMI DLNR]) and Michael Brakke (US Department of State) were absent.

IV. Oath of Office – Archie Soliai, Howard Dunham, Monique Genereux

Tosatto swore Soliai and Genereux into office.

V. Approval of the 180th Agenda

Soliai asked for a motion to approve the 180th meeting agenda.

Moved by Gourley; seconded by Duenas.
Motion passed.

VI. Approval of the 178th and 179th Meeting Minutes

Soliai asked for a motion to approve the 178th and 179th meeting minutes.

Moved by Gourley; seconded by Duenas.
Motion passed.

VII. Executive Director's Report

Simonds said that many of the sentiments expressed by the two guest speakers overlapped with her executive director's report. She highlighted a few items on the agenda. She noted that without good data the annual catch limits (ACLs) are not commensurate with the actual fish population levels and provided some history about this issue. In the 1970s, the Honolulu Laboratory began collecting data from the Honolulu fish auction. Former Council member Frank Goto provided receipts in shoe boxes. The economist at the Honolulu Laboratory would then input the data into his computer model. In the early 1980s, data collection was expanded to the Territories and the creel surveys began. Over the years both NMFS and the Council provided funds, held workshops and made recommendations for changes to data collection, but the surveys were never improved. Simonds expressed her gratitude for the data summit with the Territories convened this year by Michael Seki, director of the Pacific Islands Fisheries Science Center (PIFSC). She said the Council would hear more about the recommendations from the summit, which included a panel of reviewers. She expressed her hope that the recommendations will be implemented in a timely fashion and that communications

among the Council, NMFS and the fishery-management agencies in the Territories will improve to accomplish this, along with other ongoing amendments and issues. Simonds reported that the NMFS PIRO and Council staffs have been working constructively on the Fishery Ecosystem Plans (FEPs) since the June Council meeting. She expressed her concern that the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) threaten the existence of the longline and purse-seine fleets and her hope to have better communications, information and models moving into the next decade.

Soliai acknowledged and thanked Taotasi Lelei Peau from the National Marine Sanctuary (NMS) of American Samoa for allowing the Council to meet in the Tauese P. F. Sunia Ocean Center.

VIII. Agency Reports

A. National Marine Fisheries Service

1. Pacific Islands Regional Office

Tosatto presented the PIRO report. He noted that some of the sections including the strategic planning process and the protected species discussions would be covered in other agenda items, and did not elaborate further under his report.

PIRO implemented the 2019 catch limits for bigeye tuna in the Hawai‘i longline fishery and published a Final Rule for the Territory arrangements to allow limits for the Territories and then an allocation amount. PIRO closed the Hawai‘i longline fishery because it reached the Western and Central Pacific Fisheries Commission (WCPFC) bigeye tuna limit. The Specified Fishing Agreement with CNMI went into effect, and a 1,000 ton allocation began in August. He estimated it would be used up within the next couple of weeks. PIRO was reviewing a second agreement with the American Samoa government that should be in place.

NMFS implemented a high seas limit for purse-seine fishing days. It allowed the agency to combine the US EEZ and high seas in a single ELAPS. Those days were used up by early October, and the high seas were subsequently closed to purse-seine fishing. Some relief will come later in 2019 or early 2020 as PIRO and the West Coast Region are developing a rule regarding the overlap area between WCPFC and the Inter-American Tropical Tuna Commission (IATTC) that may provide some opportunities for purse-seine fishing that would not be accrued against the high seas fishing limit within the Western and Central Pacific area.

PIRO hosted the National Recreational Fisheries Annual Coordinator’s meeting in Honolulu. In rethinking how to engage with recreational fishers in the region, PIRO is developing a pilot federal funding opportunity for recreational fisheries for fiscal year 2020. PIRO will set the objectives and provide the funding amount and timeline. Andrew Torres, PIRO’s recreational fisheries coordinator, will be the point of contact.

Nationally the Department of Commerce and NOAA have a high interest in increasing aquaculture production throughout the country. PIRO will develop its Programmatic Environmental Impact Statement for Aquaculture, taking on a few of the Council’s past

recommendations and analyze those for the region. Hawai‘i Sea Grant received a large grant that it will make available to projects throughout the region, including the Freely Associated States. Including those foreign countries can complicate the matter, but he hoped that aquaculture development and technology could be transferred to other Pacific Island areas. A Saltonstall-Kennedy (SK) award for a feasibility study for aquaculture in American Samoa was underway, conducted by Sarah Pautzke, who helped PIRO develop its Coastal and Marine Spatial Plan. PIRO's efforts in CNMI include a pilot coral nursery project, which is part of its overall effort in coral conservation and coral recovery for listed species. The Territory governments have been informed that NMFS is developing critical habitat designation for the seven listed coral species in the Pacific Islands Region (Guam, CNMI and American Samoa—none currently in Hawai‘i). The proposal will probably be out in the spring. Critical habitat is often a misunderstood designation, and PIRO is willing to help the Territories understand why it designates and what it means to federal actions in those areas.

The US-hosted the WCPFC Northern Committee meeting in Portland, Oregon. The latter allowed the West Coast albacore and bluefin tuna industries to participate since the meeting is normally held in Japan. The Technical and Compliance Committee meeting was also held and is the last formal meeting before the full Commission meeting in December in Papua New Guinea. In early October, PIRO held the US Permanent Advisory Committee meeting to discuss the US position at the December meeting with its advisers.

In closing, Tosatto highlighted PIRO's Annual Federal Programs Office Report, which lists all of the grants and cooperative agreements issued during the year. The Council received a large portion of the amount distributed to the region. PIRO invests in various fishery-development projects, along with broader conservation and marine education and training.

Gourley said that the coral farm is up and running in CNMI. No coral was lost in the most recent typhoon a couple of weeks ago. He asked about the ESA Section 7 consultation status for the Sustainable Fisheries Fund bottomfish demonstration project. He said that he understood that people can go out fishing but not bait their hooks or drop them in the water. He asked if the issue was related to the National Environmental Protection Act (NEPA).

Tosatto said he did not know and would have to get an answer. He knew a couple of projects were working through the NEPA process, which is not complete until the consultation is done.

Simonds said she believed it was a combination of the oceanic whitetip shark ESA consultation and NEPA. The bottomfish boat has been in CNMI since June 2019, but it cannot go fishing and provide data until those requirements are complete.

Gourley said the project plan included collection of life history data for all the fish that are caught from the bottomfishing training and the grantees are anxious to start.

Watamura asked about the recreational fishing grant funding for 2020 and how to find more information about it.

Tosatto said the details had not been finalized and to get in contact with Torres.

Rice asked if the State of Hawai‘i Division of Aquatic Resources (DAR) would be in control of the funds.

Tosatto said it will be a federal funding opportunity through PIRO. DAR can participate if interested once the objectives are identified or be an applicant reviewer.

Goto asked for an update on the possibility of having a multi-year specification process for the Hawai‘i deep-set longline fishery, which the Council discussed in the past. The annual specification process produces varying, he noted.

Tosatto said he would have to go back to the meeting records to see what the Council's action has been. He asked Council staff to update him on the status. He believed that the Council is proceeding to consider multi-year specifications to give flexibility now that the region is no longer in an overfishing category.

Simonds said the PIRO Sustainable Fisheries Division (SFD) and the Council staff have been working together and the amendment is with the Council staff to complete.

Muna-Brecht asked for clarification if Guam DAR would be eligible to apply for the recreational fishing grant when it is available.

Tosatto said that the State and Territories should be eligible if their projects meet the objectives.

Muna-Brecht asked who to follow up with regarding the critical habitat plan for the listed coral species. Guam DAR has been aligning a lot of its priority with NOAA and is working on its conservation plan.

Tosatto said that PIRO is still in the process of developing the proposal, taking into account information from various sources. The lead within the PIRO Protected Resources Division is Lance Smith, who is working along with contractors because they are developing this rule along with a similar rule in the NMFS Southeast Region. He noted that the Guam coral reef specialist position is currently vacant but that the PIRO liaison in Saipan, Steve McKagan, is helping to cover and would be another good person to consult. The proposal may be near publication or published by the March 2020 meeting and he will look for opportunities to provide briefings. Once a proposal is published, PIRO will conduct public hearings to describe the designation process and take input from the public. It will be a proposed and then final designation.

Sesepasara asked about the coral restoration project in Saipan. USFWS funds a similar project in American Samoa under the disaster funds from the 2009 tsunami. The restoration project was very successful in Leone Village with just one species of coral. He asked what is happening in CNMI and how many species have been covered under their program.

Gourley said that the existing NOAA-funded coral farm has a permit to culture *Acropora globiceps* (currently listed as threatened) and is targeting other species, mostly Acropora. Planning is underway for a second farm. Permission will be requested to potentially farm all

three species found in the Mariana Islands, along with a wide variety of massive corals and branching corals.

Sesepasara said his scientists are looking at transplanting some species from one area to another. It is not working well. He asked if CNMI scientists are looking at a similar situation.

Gourley said that the project scientists are taking detailed notes on transplantation and that there are a lot of different variables that go into the success of corals.

Sesepasara asked Tosatto to remind him of the person or agency involved with the aquaculture project that is coming to American Samoa.

Tosatto said it is a Hawai‘i Sea Grant project with Pautzke as the principal investigator. She will connect with Sesepasara as the project moves forward.

Okano asked if the aquaculture funding opportunity was available for traditional aquaculture practices such as fishponds.

Tosatto said he did not know and to ask Darren Okimoto at Hawai‘i Sea Grant.

Gourley invited Sesepasara to bring his coral specialist to the Mariana Islands when the next Council meeting is held there in 2020 to talk with the people running the coral farms.

Muna-Brecht added that Guam also has coral planting in a couple locations through the University of Guam Marine Lab. Guam uses it as part of a mitigation plan for the telecommunications and utility companies that are going to disturb coral beds and for the port, which is expanding one of their wharves. The companies have contracted people from the US mainland who have a 90 percent success rate with coral out planting. Jeff Maynard and Garrett Williams recently conducted resilience studies for Guam’s coral reef to identify the species that appear to be more resilient during bleaching or to other stressors.

Soliai encouraged Muna-Brecht, Gourley and Sesepasara to continue the conversation to share resources.

2. Pacific Islands Fisheries Science Center

Evan Howell presented the PIFSC report and mentioned several topics coming up in the agenda including the Pacific Insular Fisheries Monitoring Assessment and Planning Summit (PIFMAPS), stock assessments for North Pacific striped marlin, oceanic whitetip shark, the territorial bottomfish and Guam reef fish. He expanded on PIFMAPS and said that data represents the foundation of what goes into stock assessments, which can only be as good as the data collected. PIFMAPS was the opportunity to gather all of the Territorial agencies and people collecting data on the ground to evaluate the data collection programs and come to terms with how to move forward and make decisions based on the review panel recommendations. The Territorial Data Collection Program has been facilitated through the Western Pacific Fisheries Information Network for many years, and the intent was to use the PIFMAPS recommendations

to refresh this program. Howell listed some of the recommendations and noted that full presentations on PIFMAPS would be given later in the agenda.

PIFSC personnel updates include the selection of Felipe Caralho, former stock assessment scientist, to replace Annie Yau as lead for the Stock Assessment Program; T. Todd Jones to replace Chris Boggs as the director of the Fisheries Research and Monitoring Division; and new hires Michelle Sculley (stock assessment scientist), Ryan Rykaczewski (research oceanographer) and Michael Kinney (Life History Program research biologist). The three new federal employee hires are to bolster PIFSC's pelagic activities. Danika Kleiber, who has previously done work in American Samoa for community fisheries, is returning as a research social scientist in April 2020. Jonathan Sweeney is returning in January 2020 as a federal research economist.

The NOAA Ship *Oscar Elton Sette* had two cruises, one for protected species camp recovery (Hawaiian monk seals and sea turtles) and one for the main Hawaiian Islands Bottomfish Life History Program. The NOAA Ship *Rainier*, which replaced the *Hi'ialakai*, supported the Northwestern Hawaiian Islands Reef Assessment Monitoring Program (HARAMP) cruise for 16 days. Plans to map the habitat for the Maui Nui area were not completed as the *Rainier* was equipped to do bathymetry but not habitat mapping. Howell said that PIFSC hopes to augment its habitat mapping for some of the bottomfish work, especially since the ship will go to the Marianas in 2020. PIFSC had monk seal research and response field teams at Kure, Midway, Pearl and Hermes Reef, etc. and conducted ship-based surveys at Mokumanamana, Nihoa and Ni'ihau. A total of 143 pups were surveyed, 44 monk seal interventions took place, two rehabilitated seals were returned to the field and four new seals were identified and brought to Ke Kai Ola with help from the USCG.

During the Bottomfish Life History cruise, PIFSC gathered information for three species of interest: onaga, ta'ape and hogo (scorpion fish). For onaga, enough reproductive information was gathered for the entire four-year spawning cycle. For ta'ape, an intern examined life history on sexual dimorphism as a senior thesis project. For hogo, PIFSC does not know much about hogo and wanted to gather preliminary life history information as part of the sampling focus of that cruise. PIFSC continued to use its staple advanced technology camera system (Modular Optical Underwater Survey System, or MOUSS) to gather fishery-independent data used in its bottomfish assessment. PIFSC is also attempting to incorporate 360-degree camera systems to get a full view of the water column, since the MOUSS can currently view only a part of an underwater area. PIFSC is testing how to make the two systems work together. Also during the Bottomfish Life History cruise, PIFSC conducted preliminary eDNA feasibility studies for two reasons: 1) Try to use eDNA, along with the camera readings, to get a population abundance estimate (first with 'opakapaka), and 2) Study eDNA degradation up to 50 miles out from a fishery hot spot (e.g., off Lana'i) to give information about how relevant eDNA is for a particular area and how far PIFSC can infer. These studies help PIFSC to better understand the use of eDNA to bolster stock assessments.

The cetacean program is participating in a collaborative Unmanned Aerial Survey (UAS) project with the Hawai'i Institute of Biology at the University of Hawai'i and Dolphin Quest on the Big Island on a preliminary study to improve the accuracy of the estimated population size for smaller cetaceans. Many UAS projects are with large cetaceans, but not many are with

smaller cetaceans. The study is to ensure PIFSC can use this platform to go beyond just using the large research vessels and physical surveys that have been done in the past.

PIFSC completed fieldwork in the Mariana Islands with turtles partnering with local agencies, such as Guam DOAg, to conduct in-water surveys, sampling and tagging on green sea turtles and hawksbill turtles. The purpose was to better estimate the population dynamics and understand habitat use for the two turtles. Scientists completed 55 in-water surveys, 14 captures and deployed 12 satellite tags.

PIFSC partnered with the State of Hawai‘i and others to create a plot to measure and monitor heat stress of corals over time due to concerns about severe coral bleaching in 2019, similar to the last major bleaching event in 2015. The plot showed degree-heating weeks, which measures both the temperature and duration of the high heat events, and illustrated that 2019 appeared to have a trajectory similar to 2015. PIFSC will use this to determine future steps for restoration.

Howell highlighted a report on an American Samoa Longline Cost Earning Study done by Minling Pan in 2017 with data from 2016, copies of which were made available at the Council meeting. The report showed that more cash returns in 2016 per vessel as compared to a previous study done in 2009, but not nearly as good as in 2001. The report also showed that, while there was an increased cash return in 2016, variability among the vessels was greater, such that not everyone had the same average cash return.

Watamura asked if the new 360-degree camera has the ability to look higher up in the water column or if it was still stuck on the seafloor.

Howell said the intent of the 360-degree camera would be to see above the seafloor. Current testing will allow PIFSC to verify how far up the camera can see. A sphere view should allow the camera to record at variable depths.

Watamura said that sounded exciting because, when he is bottomfishing, most of the fish were usually 10 to 15 fathoms above the seafloor and not on it.

Okano asked for confirmation that the eDNA for the bottomfish was used not only for presence/absence but also to estimate abundance.

Howell said that would be the goal if scientists could match the eDNA with the camera studies.

Goto congratulated Jones on his appointment as the Fisheries Research and Monitoring Division director.

Duenas asked if any of the Life History Program projects would be done in the Marianas or if they were Hawai‘i-specific.

Howell said it depends on ship availability. PIFSC would be in American Samoa in June 2020 to possibly do life history work on bottomfish, pending Council recommendations at this

meeting due to sensitivities about taking fish given the assessment results, and plans to schedule ship time in the Marianas also.

B. NOAA Office of General Counsel, Pacific Islands Section

Johns reported that the NOAA Office of GCPI had six items to present, including four cases pending in federal court and two Notices of Intent to Sue (NOI) under the ESA.

Territory of American Samoa v. NMFS is coming out of the District of Hawai‘i and is now on appeal in the Ninth Circuit Court of Appeals. This case involves an exemption that NMFS had provided to eligible longline vessels from fishing in the Large Vessel Prohibited Area (LVPA). In 2017, the District Court's finding was against NMFS. It said NMFS had not adequately considered cultural fishing as required under the Instruments of Cession, which the court found to be other applicable law under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). NMFS has appealed this decision. The case had been scheduled to be argued the week of the 180th Council Meeting. Due to some scheduling conflicts, it is being considered for arguments in February 2020 in Honolulu.

American Tunaboat Association (ATA) v. Ross is pending in the District Court of Appeals, District of Columbia. ATA is an association representing the US purse-seine vessels operating in the Western and Central Pacific Ocean (WCPO). It had requested to be considered a formal applicant under the ESA Section 7 for an ongoing consultation for the purse-seine fishery. ESA Section 7 of that act gives formal applicants certain participatory rights in terms of NMFS's consultation. NMFS denied this request as NMFS does not find that applicants are appropriate in broad-scheme programmatic consultations. This decision was upheld in a District Court decision in July 2019. The court found that NMFS's decision was reasonable and entitled to deference. ATA has filed a timely Notice of Appeal.

A pending complaint in the District Court of District of Columbia filed by the Center for Biological Diversity (CBD) in August 2019 alleges that NMFS was required to designate critical habitat for several threatened species of coral in the Caribbean and Pacific as of 2015 under Section 4 of the ESA, and NMFS has not yet done this. PIRO is working on proposing critical habitat designations sometime in spring 2020.

Another complaint is in regards to CBD's request that NMFS designate cauliflower coral as threatened or endangered under Section 4 of the act. NMFS had published a 90-day positive finding that listing may be warranted. NMFS was required to file a final finding 12 months after the petition, but that deadline was missed in March. CBD filed the complaint on Oct. 10, 2019, seeking injunctive relief and requesting that NMFS make the final decision.

A NOI from the Conservation Council of Hawaii is for NMFS's failure to complete ESA consultation for the oceanic whitetip shark regarding the two Hawai‘i longline fisheries, American Samoa longline fishery and the purse-seine fishery. A NOI from the Hawaii Longline Association is for NMFS's failure to meet its statutory deadline to complete a consultation on the Hawai‘i deep-set longline fishery. NMFS has been providing periodic updates to the organizations that submitted these NOIs.

Sesepasara asked if there is a set date for the next step in the LVPA case.

Johns said that the oral arguments are being considered by the Court for February 2020, most likely the week of February 3, but the dates are not finalized and are pending attorney scheduling confirmation.

Sesepasara asked what the next step would be after the oral hearing.

Johns said the Ninth Circuit Court Panel will hear the arguments and take the case under consideration, including the oral arguments made and the briefs filed, and then make a decision.

Sesepasara asked about the timeframe on that process and what happens after a decision.

Johns said it was unclear. If the Ninth Circuit Court affirms the District Court's decision, essentially affirming the decision that NMFS had not adequately considered cultural fishing, then that would be the Ninth Circuit Court order. NMFS could appeal that decision to the Supreme Court.

Sesepasara expressed his concern about the time this process takes and the limitations it places on the American Samoa longline fishing fleet.

Simonds asked if the American Samoa government would like to withdraw its suit.

Sesepasara said the government has no intention of withdrawing.

C. National Marine Sanctuary Update

Peau presented the NMS report. He welcomed meeting participants to the Sanctuary meeting venue and described how NMS of American Samoa fits into the national system along with the general purpose of sanctuaries. He gave a brief history and statistics for the NMS of American Samoa. It was established in 2012 and is the only one NMS in the southern hemisphere. He listed several of the many species protected by NMS and by MMPA, ESA and other regulations. He described several sanctuary programs and partners to address threats to the resources. The agency worked closely with local and federal partners to remove a grounded vessel from an important fishing area near Aunu'u in August 2016. A crown of thorns removal project was completed in 2014-2015. After a coral bleaching episode in 2015 and to address future vulnerability, the sanctuary completed a Rapid Vulnerability Assessment and adaptation strategies for American Samoa. The sanctuary is currently implementing other strategies, such as a climate change education program, and pursuing funding to implement others, such as a pre-identified coral nursery project.

Community engagement and education are major programs of the sanctuary. They include a fishing tournament, co-sponsored by the American Samoa DMWR, which is used as an opportunity to dispel misconceptions about fishing regulations and to talk about benefits and how to engage with the sanctuary throughout the year. The Ocean Warriors program combines school-based conservation and field projects to address issues such as marine debris, along with an annual summer science course. The sanctuary also engages tourists through short films on

Samoan culture and conservation. The inaugural 2019 Fautasi (Samoan boat) Heritage Symposium and Exhibit, co-sponsored with the American Samoa Historic Preservation Office, celebrated the community and villages and aimed to sustain traditional history for future generations. The sanctuary introduced remotely operated vehicle (ROV) competitions in classrooms.

The sanctuary was chosen as a sentinel site for ocean acidification in the southern hemisphere and partners with Ocean Exploration Trust and its exploration vessel *Nautilus* to look at unexplored sites within the sanctuary. Ten ROV dives yielded 18 fish and benthic transect surveys, 19 photogrammetry images, 123 biological samples and the discovery of a new hydrothermal plume at the Vailulu‘u Seamount. The sanctuary wants to establish annual research projects in Tutuila, Aunu‘u and Ta‘u and has hired its first full-time research coordinator.

NMS of American Samoa wants to improve its interpretive sanctuary experience by developing a Fautasi Heritage magazine to document the significant maritime cultural heritage in American Samoa, improve its building infrastructure and ensure its boat is ready to carry out the planned monitoring and research programs. The sanctuary hopes to partner with the Council in two areas: 1) capacity building to allow two interns per year to work on sustainable fishing resource management and develop outreach materials in the English and Samoan language to inform communities about fisheries and the health of coral reefs; and 2) developing more workshops to support the local Department of Education. Peau said the NMS of American Samoa’s research coordinator will provide a presentation later in the day about key priorities for conservation science.

Muna-Brecht praised Peau for the educational work the NMS of American Samoa is doing and talked about a recent trip to Palau, which had updated its science curriculum in consultation with traditional experts. One discussion item was establishing a partnership between youth groups and doing an exchange program during the summer, which she thought could also work for American Samoa.

Simonds asked if the sanctuary had sufficient funds and staffing for all of the monitoring Peau described.

Peau said the agency currently has two staff positions and plans to fill one more position. A local NOAA officer will also join in early January 2020.

Simonds mentioned Peau’s suggestion to support his program through capacity building and described the Council’s scholarship program, including the requirement that students return to their island of origin to work at the local fishery-management agency. She suggested that sharing the students with Peau if Sesepasara did not need all of them.

Sesepasara said he needs them all.

Simonds said that, when she and others were at Aunu‘u, the High Chief and Talking Chief Kitara Vaiau talked about different things that he hoped the sanctuary would help fund.

Sesepasara said that the high chief and his representative expressed some disappointment about the long wait for some projects that the Aunu‘u Village and the sanctuary discussed, such as a vessel to police the sanctuary and jobs for the village and residents of Aunu‘u that the sanctuary had promised it would help provide.

Simonds said she asked Vaiau to come to the Council meeting to discuss his requests and concerns.

Peau thanked Simonds and Sesepasara for bringing these concerns to his attention. He said the only way to resolve some of the misconceptions is to have Representative Vaiau present to speak to everyone. Peau said that he felt he had addressed these concerns in the past and that the representative understood that NMS is not in business to enforce as the enforcement responsibility is with the Office of Law Enforcement.

Sesepasara said that those involved in the Joint Enforcement Agreement (JEA) work with DMWR on enforcement issues. He asked Peau to talk with the high chief and representative. Sesepasara reiterated that as for sharing students funded through the Council scholarship program, he really meant what he said about needing them. One student currently at the University of Hawai‘i at Hilo is from Manu‘a. He needs her to return to Manu‘a to run the programs there. Staff members living in Tutuila who are from Manu‘a do not want to return there.

Simonds asked if Val Brown would be the person developing the sanctuary’s research plan.

Peau confirmed that it is and she would be speaking later in the afternoon.

D. US State Department

Mark Fitchett, Council staff, provided several updates pertaining to the US State Department’s involvement in negotiations of the Biodiversity Beyond National Jurisdiction (BBNJ) and informal consultations of Parties to the United Nations Fish Stocks Agreement. The next steps for the agreement are yet to be determined. The 34th United Nations Committee on Fisheries (COFI 34) will be held in Rome July 17 to 21, 2020. This is a very important meeting because discussions on fisheries governance in the high seas and BBNJ will commence. Lastly, deep-sea mineral mining is an issue of concern, and the State Department is developing a platform that will be addressed at the March 2020 Council meeting.

E. US Fish and Wildlife Service

Peck reported that the USFWS Sport Fish and Wildlife Restoration program grants to the State and the Territories are underway, with all of the permitting accomplished and projects underway. The USFWS and NMFS staff in Hawai‘i have joined efforts to assist with coral bleaching surveys and monitoring the bleaching in the Hawaiian Islands. Peck reported that he just finished an Embassy Science Fellow Program, during which he spent a month and a half in Benin, West Africa, to do a USFWS assessment of the entire country. Peck wrote a report and recommendations. He was able to visit all of the major markets, including the saltwater and

freshwater fish markets and found all of the fisheries to be severely overfished. Most of the fish were undersized, immature and very unsustainable. Peck said the place needs to build up its management and enforcement.

F. Enforcement

1. US Coast Guard

Holstead summarized the USCG's enforcement activities from June 1 to Sept. 30, 2019. A US Navy vessel, along with a USCG Boarding Team, patrolled the WCPFC High-Seas Boardings and Inspection area from June 10 to 23. The USCG did not conduct boardings during this time due to weather and the location of the fishing vessels at the time. On July 23, the USCG transported an injured monk seal from Moloka'i via helicopter and subsequently to a C-130 after the helicopter was re-tasked for a Search and Rescue case. The injured monk seal was taken to the Ke Kai Ola Marine Mammal Center in Kona for rehabilitation. From July 25 to August 30, USCG cutters *Walnut* and *Joseph Gerczak* patrolled the US EEZ surrounding Hawai'i and America Samoa and conducted ship rider boardings in Samoa in support of Operation Aiga. The USCG proved that its new fast-response cutters deployed to American Samoa could patrol around the US EEZ. During this time, the USCG conducted a WCPFC boarding and a domestic fishing vessel boarding with the cutter *Walnut*. The USCG conducted five boardings during this patrol with the cutter *Joseph Gerczak*, four inside the US EEZ and one outside on the high seas. On Aug. 13, the Coast Guard C-130 departed Honolulu for Pohnpei, Micronesia, to patrol for potential IUU fishing. The aircraft was diverted to Palau in-flight for Search and Rescue tasks. On Aug. 14, the C-130 crew flew a sortie out of Palau, successfully located the vessel in distress and then resumed patrol intentions, completing an IUU patrol on Palau's EEZ and returning to Air Station Barbers Point on Aug. 19. On Sept. 3, four monk seals were transported by Air Station Barbers Point C-130 to Kona for rehabilitation. On Sept. 30, an aircraft from Air Station Barbers Point conducted an enforcement surveillance operation of the Papahanaumokuakea Marine National Monument. During this patrol, the aircraft flew over 11 flight hours while conducting a morning and evening flight. The aircrew reported multiple sightings but observed no evidence of illegal fishing. Lastly, from Sept. 16 to 30, the cutter *Joseph Gerczak* was scheduled to patrol the main Hawaiian Islands to support living marine resources enforcement and recreational boating safety and to counter drug operations. On Sept. 17, the USCG received a report of a fire aboard the commercial fishing vessel *Miss Emma*. The cutter *Joseph Gerczak* was diverted to assist, along with USCG Station Honolulu response boats and an aircraft from Air Station Barbers Point. All crew members from the vessel along with a NOAA observer were safely rescued, but the vessel was completely destroyed. Holstead said that the USCG will continue to support multiple living marine resources enforcement missions and activities, as well as MMPA activities, in addition to attending Council meetings.

a) Report on USCG Rotation Working Group Meeting

Holstead said there was no substantial update on the issue of providing a permanent position to be stationed in American Samoa. The USCG is trying to determine the best course of action and make a permanent solution, but there was no official update at this time on the position change.

Soliai asked if there was a timeline set to come up with a final decision.

Holstead said there was no timeline, but Commander West, who is leading this issue for the 14th USCG District, assured him that he is working on it and anticipated a final decision soon.

Sesepasara asked if there were any plans for a USCG vessel or other type of enforcement platforms in American Samoa.

Holstead said the USCG recognizes the need for that in American Samoa since it is an unguarded asset for resources, but there are no current plans to have one. He explained that was one of the reasons the USCG scheduled patrols for the fast response cutters to American Samoa, to ensure that it has a capable resource that can respond quickly if the need arises.

Soliai commended the local detachment for the role they played in the recent used oil disposal operation that has been a pressing concern for the maritime vessels but the overall port.

2. NOAA Office of Law Enforcement

Bill Pickering presented the NOAA Office of Law Enforcement (OLE) report. During this period, NOAA OLE had 234 incidents pertaining to protected species, fishery management and sanctuary.

NOAA OLE is working with the Territories to finalize the JEAs for the upcoming year. The agency sent an audit team to evaluate the reporting required to facilitate the amount of money to be transferred from Hawai‘i to the respective Territories once they have completed their work. The goal is a more streamlined reporting system, along with a faster response time by NOAA OLE when the work is finished. An online training is now available for the JEA officers regarding basic boardings under MMPA, ESA and the other fisheries laws.

NOAA OLE was not able to patrol around Tinian and Rota often due to the amount of manpower located in Guam (one agent and one uniformed person) to operate in and around Guam and Saipan. In the last reporting period, NOAA OLE had the JEA officers out of CNMI go to Tinian and Rota to make their presence known by conducting boardings and working with the people on the ground in Tinian.

NOAA OLE was able, via the USCG cutter, to patrol the waters surrounding American Samoa including Rose Atoll. Some people have the misconception that overfishing is occurring within the sanctuary and rumors can get out of hand. He was pleased to be able to quell some of the rumors by being present in the area. To get to Fagatele Bay, NOAA OLE obtained permission and paid for access via land from the owner near the bay. NOAA OLE and American Samoa DMWR are doing a good job serving the sanctuary, but Pickering acknowledged that the area to police is large. NOAA OLE (along with the USCG) faces the same problem in the Northwestern Hawaiian Islands (NWHI). The availability of JEA officers to patrol provides a trifecta of different enforcement entities that perform a valuable mission. He hoped that additional funds would become available to allow the agencies to increase enforcement efforts.

Pickering introduced the NOAA OLE Deputy Director Logan Gregory, who was attending the Council meeting all week.

3. NOAA Office of General Counsel, Enforcement Section

Elizabeth O'Sullivan gave the NOAA Office of General Counsel, Enforcement Section (GCE) report. She introduced herself as the new Pacific Islands Enforcement Attorney replacing Duane Smith. GCE had nine cases pending consideration on the issuance of a civil penalty. Two active cases involved a tourist who harassed a monk and the fishing vessel *Triple Dragon* with an expired permit. Seven resolved cases included 1) *Yaozaa* fishing in a closed area of the main Hawaiian Islands area; the case settled with a compromised penalty of $7,000; 2) *Pintan I* charged with three counts of fishing for deep-water shrimp in the US EEZ without a permit and two counts of failing to submit required logbooks in violation of the MSA; the case was settled for a compromised penalty of $18,000; 3) Two vessels, *Four Sisters* and *Victoria Natalia*, violating transshipment rules under the WCPFC Implementation Act in the WCPFC Convention Area; the case settled for $27,000; 4-6) MMPA cases with the *Sea Bounty*, *Ocean Conquest* and *Ocean Challenger*; all of which set their purse-seine net on tuna schools associated with marine mammals; all three cases settled; and 7) *Blue Sky* charged with fishing on an expired permit; the compromised penalty paid was $22,050.

Goto asked if the *Pintan I* was a foreign-flagged vessel.

O'Sullivan replied no, it was US-flagged.

Soliai asked if all of the vessels mentioned were US-flagged vessels.

O'Sullivan said yes.

Duenas asked in what area the *Pintan I* was caught.

O'Sullivan said inside the US EEZ around Hawai'i. The vessel was filing State of Hawai'i reports as it was fishing in State waters, but it was caught fishing in federal waters.

G. Public Comment

There were no public comments.

H. Council Discussion and Action

There was no Council discussion or action.

IX. American Samoa Archipelago

A. Motu Lipoti

1. Data Collection Programs and Fishery Presentations

Domingo Ochavillo, DMWR chief fisheries biologist, reported on the activities of the Department's Marine Protected Areas (MPA), Creel Survey, Key Reef Species, Fishing Aggregating Devices (FAD) and Restoration Programs during the previous quarter. He said a meeting was held with the village mayors to get their input on the improvement of the MPAs. He provided data on the Department's shore- and boat-based (pelagic and bottomfish) and spearfishing creel surveys. The Key Reef Species Program is working on a life history project, collecting otoliths and gonads from *Naso lituratus* and *Cloris japensis*. Additionally, the staff was continuing existing genetics projects that address various impacts due to threats to the Territory's reefs. Ochavillo also provided information on the department's seafood vendor commercial receipt program. Analysis of the data from the past five-year period shows a decline in sales for both coral reef fish and bottomfish over that period, while pelagic fish had increased since 2014. The number of participating vendors increased since 1990 from 20 to 60. Regarding the FAD Program, FAD B was deployed the previous week and FAD C is scheduled to be deployed soon. The DMWR's Restoration Grant was funding work in the village of Leone where Acropora had been successful in attracting fish.

Ochavillo also discussed data trends in the bottomfish fishery and noted a decline since the 1980s when there were more than 50 fishing boats. Only 20 boats currently fish, of which only are two full-time bottomfish boats. Data interviews cover roughly 30 percent coverage of the fleet. Participation in the rod-and-reel fishery has also declined since the 1990s.

Tepora Lavatai, DMWR Fisheries staff, reported on workshops and meetings that the Department had conducted with fishermen and the local vendors and acknowledged the Council's efforts in assisting with the commercial invoice system used to track the purchase of seafood, including the purchase of digital scales. Sixty-six vendors are currently enrolled in the program. She noted that the program needed translation for Chinese-owned businesses. She said the department relies on its Seafood Vendor Forum events, which allows them an opportunity to answer vendor questions and provide training, while developing a relationship between the staff and the store owners.

Lavatai reported that Sesepasara conducted outreach with high school students in Manuʻa during the October alia tournament on Taʻu. He spoke to them about career paths in natural resources and shared information on the Council's scholarship program. Eleven alia and on solo kayak participated in the tournament. Three of the boats were from Ofu. The Council supported the event with fuel.

Alice Lawrence, DMWR Coral Reef Advisory Group Division (CRAG), presented on the Department's coral reef projects and work coordinating the various agencies involved. CRAG's focus is mainly research and monitoring. Projects include mapping surveys, such as the Valonia algae and water quality testing around those affected areas, the shipwreck removal in Leone Bay

and a mobile radar mapping of community-based MPAs. Other ongoing DMWR projects include reducing stormwater pollution on the reefs and water quality sampling of streams.

Soliai asked how DMWR differentiates imported and locally caught bottomfish in its reporting.

Lavatai said the commercial invoice system deals mainly with commercial vendors and there is also a registry of licensed fishermen (currently 35 registered fishermen for 2019). Four fishermen import fish (reef fish only and no bottomfish) from Apia.

Soliai asked if the Department accounts for that reef fish and if it is separated out from local stocks.

Lavatai said it is separated and DMWR's data collection staff conducts training so vendors are able to identify imported versus local fresh and frozen fish.

Sesepasara said fuel continues to be a major problem for Manu'a fishermen and the process of transporting fuel is dangerous. He said he viewed his role with high school students like an Army recruiter for marine sciences and mentioned the two students enrolled at the University of Hawai'i Hilo on Council scholarships who will work for DMWR upon graduation.

Simonds asked Sesepasara if the fuel drums used in Manu'a were the same ones provided by the Council.

Sesepasara said they were not. They were built off-island because USCG could not approve the existing ones in Manu'a to transport fuel. The company that built the original tanks no longer exists so the USCG could not be provided with the specifications it needed.

Duenas said a 55-gallon drum is small enough to not require double-wall and other requirements.

Simonds recalled that the drums provided by the Council were repaired by a company in American Samoa the previous year.

Sesepasara said DMWR has been working on the vessel removal project for over a year but funds have been unavailable. He met the boat owner in Apia, Western Samoa, who agreed to remove the vessel and pay for an independent contractor to do the work. The Army Corps of Engineers permit is in place, and DMWR is assisting the contractor in the removal project, ensuring the coral is not damaged. DMWR was unsuccessful in locating the owner of another vessel grounded by the airport, and the government is seeking funds to remove that vessel from the reef. The recent US Coral Reef Task Force meeting in Palau included discussions about the Federal Emergency Management Agency (FEMA) becoming involved and potentially having funds for the removal of that vessel.

2. Report on Data Collection Improvement Efforts from PIFMAPS

This item was covered under the previous agenda item.

3. National Marine Sanctuary of American Samoa Research Plan

Valerie Brown, NMS of American Samoa research coordinator, provided an update on the Sanctuary's research plan for its American Samoa units. The work is guided by the sanctuary's Management Plan and Conservation Science Needs Plan. With a large area covered and many habitats, the sanctuary consulted with local partners and stakeholders to identify three primary targets: 1) characterize and assess Sanctuary resources, 2) understand and address priority threats, and 3) communicate that science to the community, stakeholders and partners. Brown is currently looking at the prioritization and implementation of some of the projects that have been set in motion but not fully implemented. The sanctuary is looking to add an additional science staff member and a NOAA Corp Officer to support operations in the next year. Current projects include establishing annual coral reef monitoring sites in all of the sanctuary's units, covering fish, benthic cover, coral and key vertebrates and utilizing 3D photographic monitoring to track changes in the benthic topography quantitatively. Additionally, the sanctuary has deployed acoustical equipment at the Fagatele unit to collect data. The sanctuary is partnering with the National Park Service, CRAG, researchers at the University of Hawai'i, Bishop Museum and Papahanaumokuakea Marine National Monument to conduct mesophotic monitoring in the near future. The sanctuary's accomplishments in the past year include deep-sea exploration aboard the exploration vessel *Nautilus* and the ROVs *Hercules* and *Argus*, collecting biosamples and creating photo grids, and building restoration capacity with DMWR-CRAG and the local community college. The sanctuary is also working on getting baseline information on ocean acidification and a condition report for the NMS of American Samoa to provide decision-making information for the sanctuary's other action plans. In the area of capacity-building, the sanctuary has two Kupu intern positions, which the sanctuary is working to fill.

B. Fono Report

Nate Ilaoa, Council staff in American Samoa, reported that the Fono did not take up any fishery-related issues since the last Council meeting in June.

C. Enforcement Issues

Sesepasara reported that the only major issue was three vendors cited for not reporting their seafood sales. Each was fined $50.

1. Marine Safety Detachment Rotation Update

Holstead said there was nothing further to report.

D. Community Activities and Issues

1. American Samoa Ocean Plan

Michael McDonald, territorial planner for the American Samoa Department of Commerce (ASDOC), gave an update on the American Samoa Ocean Plan, which was completed last year with assistance from the Pacific Islands Regional Planning Body. The plan is being implemented by ASDOC with the hope that it can be integrated with the current

Comprehensive Economic Development Strategy (CEDS), which serves as a roadmap for economic development and is required for projects to receive Economic Development Administration (EDA) funding. The super alia project is part of the CEDS. An application will be submitted in November for funding to purchase the first vessel, which will be used as a training platform. The application will also fund an incubator program to train fishermen and business owners. On the topic of fresh fish export, McDonald mentioned the Island Fisheries Inc. fresh fish market in Fagatogo Village and DMWR's work in getting that space utilized. ASDOC recently installed solar panels for the fish market, funded by US Department of Agriculture with matching funds from the department to help the tenants offset high utility costs. McDonald said the ASDOC also supports the Shipyard Modernization Initiative, assisting the Shipyard with developing its application for EDA funding. The project would help provide new equipment to facilitate improvements in productivity.

Rice asked if the super alia project was the same project that has been in development for a number of years.

McDonald said it was, and the cost of construction was the major obstacle.

Rice asked if having super alia fishing would allow export of fish via Hawaiian Airlines.

McDonald said there have already been exports utilizing Hawaiian Airlines and the cold storage facility installed at the Tafuna International Airport. The larger vessel would allow for longer trips, which would increase catches.

Soliai asked if the target species for the super alia was bottomfish.

McDonald said it could be used for both bottomfish and trolling.

Soliai asked if they were confident in receiving EDA funding for the project.

McDonald said preliminary discussions with EDA have been positive and the aspects of workforce training and job creation fit their priorities He asked the Council, on behalf of ASDOC, to consider drafting a letter of support for the funding proposal to EDA.

2. American Samoa Gross Domestic Product and Importance of the Cannery

Nathaniel Clayville, ASDOC senior economist, presented information on the cannery's importance to the Territory's Gross Domestic Product (GDP). The information was based on a 2018 study ASDOC conducted on the impacts of recent federally mandated issues with which the cannery is dealing. For each cannery job, there is roughly one other job in the economy in an indirect or induced capacity. That equals over 4,000 non-farm workers who are directly attributed to the cannery, which is 25 percent of the total non-farm labor force. Eighty percent of all exports from American Samoa are from the cannery, which subsidizes shipping costs in the territory by about 40 percent and fuel cost by at least 30 percent. A loss of the cannery would mean a near $200 million decrease in GDP immediately, with substantial increase over time.

3. American Samoa Government Development Projects

a) Aunu‘u Alia Development Project

Sesepasara reported that Council members and staff visited Aunu‘u the day before to see the site. The ice maker is installed at the boat ramp building at the Aunu‘u harbor.

b) Malaloa Dock Expansion

Sesepasara reported that DMWR purchased a portion of the dock’s outer edge to allow commercial vessels to utilize the dock without conflicting with USFWS Sport Fish Restoration Fund requirements. Funds from the bigeye tuna quota transfer to the Hawaii Longline Association had been used to purchase the dock area, relieving the issue of dock space for local boats that deliver fish to StarKist.

c) Longline Fresh Fish Project

Sesepasara said that, DMWR with Council staff assistance has developed a project to outfit American Samoa longline vessels with ice makers to test the viability of providing fresh fish to local and export markets.

d) Bottomfish Fresh Fish Project

Sesepasara reported that the Fagatogo Fish Market is a popular spot on Fridays, but supply is an issue. He spoke about the bottomfish demonstration survey conducted with fishermen from Hawai‘i over the previous weekend and the interest of local fishermen to learn how to use electric reels to catch bottomfish in a similar fashion. He said fishermen are aging and the younger generation has not continued fishing. DMWR is looking to redevelop the interest.

4. Fagatogo Fish Market

This agenda item was covered in previous agenda items.

5. Fishing Tournaments

a) 2nd Pago Pago Open Fishing Tournament

This was reported during a previous agenda item.

b) 1st All Manu‘a Alia Fishing Tournament

Sesepasara summarized the Manu‘a Fishing Tournament on Ta‘u earlier in the month. In just over a half day of fishing, a lot of fish was caught, as previously reported by Lavatai. The tournament was much more successful than the recent IGFA tournament in Western Samoa.

Rice inquired about the possibility of bottomfish being exported to Western Samoa, especially since it has a larger tourism market.

Sesepasara said it has not been considered yet but it was a good idea. A lot of reef fish are imported from Western Samoa but not bottomfish. He would bring up this potential export with the local fishermen.

E. Education and Outreach Initiatives

1. American Samoa High School Summer Course Recap

Ilaoa reported on the summer high school course that was completed in August 2019. Thirteen students completed the three-week course instructed by Paula McDonald. The course combined in-class and field lessons to teach students about the fisheries, fishing methods and work underway to manage marine resources in American Samoa. In addition, the students were CPR and First Aid certified and learned to sail and to cook with locally caught seafood. The course is a bridge to the Council's scholarship program, which helps to build local capacity in fisheries and marine management.

F. Advisory Group Report and Recommendations

1. American Samoa Fishery Ecosystem Plan Advisory Panel

Ilaoa presented the Advisory Panel (AP) report and recommendations.

Regarding data collection in American Samoa, the American Samoa AP recommended the Council request DMWR to provide a plan on following up with recommendations to improve fishery data that resulted from PIFMAPS.

Regarding Sustainable Fisheries Fund projects, the American Samoa AP recommended the Council request DMWR expedite the Sustainable Fisheries Fund projects to improve fisheries in American Samoa.

2. American Samoa Regional Ecosystem Advisory Committee

Marlowe Sabater, Council staff, presented the American Samoa Regional Ecosystem Advisory Committee (REAC) report and recommendations. The meeting was attended by representatives from the National Weather Service, ASDOC, USFWS, DMWR, NMS, Cook Islands Foreign Fisheries Office and CRAG. The primary purpose of the meeting was to scope what type of monitoring each agency is conducting related to ecosystems.

Regarding the focus of future ecosystem-based fishery management (EBFM) work, the American Samoa REAC identified the bottomfish fishery as the focus. Wetlands should be incorporated into the local EBFM model as requested by ASDOC. Further, ASDOC Coastal Management Program should solicit data availability that can support ecosystem modeling or climate change impacts.

Regarding Coral Reef Grant projects, the American Samoa REAC recommends working with CRAG on priorities for American Samoa.

Referring to a discussion from an earlier agenda item, Rice asked if StarKist accepted fish from China or only Chinese Taipei.

Soliai said they take fish from Taiwanese boats.

Rice asked where fish would go if American Samoa longline boats contracted with China.

Soliai said it was a theoretical question and he did not have an answer.

Rice asked if that fish would go to the Cook Islands or bunker ships or to StarKist.

Soliai said the majority of fish caught in Pacific waters are being caught by foreign fleets and end up in China in containerized shipments.

Simonds said StarKist accepts foreign fish so would accept it.

3. Scientific and Statistical Committee

There were no SSC recommendations for American Samoa.

G. Public Comment

There were no public comments.

H. Council Discussion and Action

Regarding American Samoa fisheries, the Council **directed staff to undertake the following:**

1) **Work with the American Samoa Environmental Protection Agency and the Department of Commerce Coastal Zone Management Program to solicit data availability that can support the ecosystem modeling work on climate change impacts; and**

2) **Assist DMWR with improving the fishery data collection in American Samoa and outreach to the fishing community on the importance of data collection.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding American Samoa fisheries, the Council **recommended that DMWR provide a plan outlining its approach to addressing the recommendations to improve fishery data from the recent PIFMAPS Summit.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding American Samoa fisheries, the Council **requested DMWR expedite the Sustainable Fisheries Fund Projects to improve fisheries in American Samoa.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding American Samoa fisheries, the Council **directed staff to send a letter of support to EDA for the American Samoa Department of Commerce grant for construction of the *alia tele*.**

Sesepasara asked for clarification if the alia tele was the same as the super alia.

Soliai said it was the same.

Simonds said the word "support" was missing.

Duenas and Gourley agreed to the change.

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding American Samoa fisheries, the Council **recommended DMWR meet with National Marine Sanctuary of American Samoa to address concerns of the Aunu'u chiefs regarding enforcement of Sanctuary rules and other important pending issues.**

Moved by Duenas; seconded by Gourley.
Motion passed.

X. Public Comment on Non-Agenda Items

There were no public comments on non-agenda items.

XI. Pelagic and International Fisheries

A. American Samoa Longline Annual Fishery Report

Keith Bigelow, PIFSC, provided the American Samoa longline fishery semi-annual report with data received through Sept. 15, 2019, covering fishery statistics such as participation, effort and catch. In the first half of 2019, the fishery had 15 active vessels, an increase since 2018. However, two vessels have recently returned to Hawai'i. The number of trips in the first half of 2019 is 80, compared to 24 the previous year, but the number of sets has decreased. Alia boat activity increased, with two active alia in 2019. The fleet set 17 million hooks in 2007, but only 1.5 million hooks have been set so far in 2019 with a projected 3 million hooks to be set by the end of the year. Albacore catch rates in 2019 are 10 fish per 1,000 hooks, which is a decrease from the previous year when catch rates were 14 fish per 1,000 hooks. Yellowfin catch-per-unit effort (CPUE) has been 2.4 fish per 1,000 hooks this year.

Soliai asked why some data on the slides were shown as confidential.

Bigelow said any data shown must have numbers that include three or more fishers or vessels and fewer than three vessels fished outside of the EEZ during the reporting period.

Sesepasara asked if the data reflect all of the tuna longline landed, including outside the 50 miles and inside the 50 miles.

Bigelow said yes. The data come from log sheets submitted by longline vessels as well as alia that target albacore.

B. Hawai‘i Longline Annual Fishery Report

Bigelow provided the 2019 semi-annual report for the Hawai‘i longline fishery (deep- and shallow-set components) with data submitted through Sept. 15, 2019, including fishery statistics such as participation, effort and catch. The deep-sector had more than 600 trips per quarter in 2019. The shallow-set sector was closed in March 2019 due to sea turtle interactions. The number of sets is typically 20,000 sets per year, and the fishery is on pace for that, about 5,000 sets per quarter thus far. The fishery is projected to have deployed 30 million hooks in 2019, which is a record year. Fishing effort has been primarily outside of the EEZ in the last few years. After record-high bigeye tuna CPUE in 2015 and 2016, the bigeye tuna CPUE this year is moderately lower with four fish per 1,000 hooks. The shallow-set fishery caught 10 swordfish per 1,000 hooks. The number of boats participating has increased by five. The number of sets and hooks has increased. If effort continues, the fishery is set to exceed the record of 58 million hooks set in 2018. Bigeye catch in 2019 is larger than in 2018. In April and June, a surplus of bigeye made its way to auction. Two false killer whale takes closed the fishery in the Southern Exclusion Zone (SEZ).

Goto said that the closure of the SEZ and the shallow-set fishery for a second consecutive year has put the market into a precarious situation again.

Rice asked for additional details on the number of billfish caught in Bigelow’s slides.

Bigelow said 4,000 billfish were caught per quarter thus far in 2019 with lower amounts of blue marlin compared to striped marlin and spearfish.

Rice said the billfish prohibition of sales to the mainland has likely had an effect.

Bigelow said he thinks 98 percent of the billfish are still landed, so the behavior may not be changing so far.

Watamura asked if California-based vessels with Hawai‘i permits were included in the report.

Bigelow affirmed that those boats were included in catch and effort statistics.

Watamura asked how much was being landed in California compared to the amount landed in Hawai‘i from Hawai‘i-based fishers, and whether there were any seasonal patterns.

Bigelow said 11 to 15 vessels have been operating out of California, and some of them operate year-round and others do it seasonally. Hawai‘i has a better market structure than California, fuel was slightly more expensive in California compared to Hawai‘i, and bait seems to be more variable and harder to obtain in California. Some boats have returned to Hawai‘i from California.

Watamura asked if it was a recent anomaly that more Hawai‘i boats were offloading in California.

Bigelow said the trend began about five years ago with 10 or 11 boats, which is less than 10 percent of the fleet.

Tosatto said that the Hawai‘i fishery operating out of California is something the region needs to address. The California fishery operates in the EEZ off the West Coast through two permits; otherwise, vessels have to fish on the high seas. Therefore, the California boats make a determination business-wise to come back to Hawai‘i and go back to California to fish. The California landings were primarily swordfish in the past but have shifted to bigeye or other species. He asked if the increase in skipjack and ono landings with a decrease in yellowfin is due to California landings.

Bigelow said it probably does not have an impact. Hawai‘i catches more skipjack than California, and an increase in retention may be the result of the market response.

Goto agreed with Bigelow and attributed more skipjack to a dried fish market, noting that skipjack does not keep well after a short period. Therefore, much of it is likely frozen.

Tosatto said it may be a good idea for PIFSC to look at California-landed fish and the small but growing swordfish fishery off California as a separate data module. The Pacific Fishery Management Council has been looking into the growing swordfish and tuna fisheries.

Bigelow said that the fishery is relatively advantageous in Hawai‘i because the dealers are centralized and they report their landings every week. One difficulty in getting California-based landings is, while there are only a few dealers, PIFSC does not receive that data. PIFSC is working with Southwest Fisheries Science Center and the West Coast Regional Office to get that data in the future.

Sesepasara asked if landings by dual-permitted vessels in American Samoa were included in the Hawai‘i report.

Bigelow said the information in his report were for all vessels that land in Hawai‘i.

Sesepasara asked if the reporting of species groups (single species or combined species) differed in the American Samoa and Hawai‘i reports.

Bigelow said he only presented the dominant species, but the log sheets for both fisheries list individual species.

C. Oceanic Whitetip Shark Stock Assessment and Projections

Fitchett summarized the 2019 oceanic whitetip stock assessment. In 2017, the species was listed as threatened under the ESA. The stock is currently overfished and experiencing overfishing at a rate that exceeds a mortality rate that can lead to imminent extirpation. The new stock assessment has new catch reconstruction and scenarios of post-release survival based on new scientific information. The assessment scientists also switched to a slower growth and later length at maturity, which represented some updated biological information that may be more realistic. Scientists improved the stock assessment by constraining the recruitment assumptions to give a more realistic outlook on the recruitment capability of the stock. Spawning biomass in the absence of fishing is below 10 percent, which shows that the stock remains in an overfished and overfishing state. However, in the last four years in the assessment time series (2012-2016), estimated recruitment steadily increased for the first time in the entire time series. CPUE was also observed to increase since 2011. These increases follow a WCPFC measure that prohibited the retention of oceanic whitetip sharks. Given these changes, the 15th Science Committee of the WCPFC recommended that projections be carried out to determine future impacts of the 2011 measure and if the stock is expected to rebuild.

Gourley asked if life history of the species has been reconciled.

Fitchett said that there was no information on life history and stock structure issues remain unanswered. The stock is considered a homogenous Western and Central Pacific stock.

Gourley asked if there is any ongoing research on this species.

Fitchett was unaware of any.

Goto asked if work is being done in the WCPFC with regards to stock assessments for oceanic whitetip sharks.

Fitchett said it was unclear if there would be another stock assessment for the species in the future. Shelley Clarke in previous meetings has mentioned that it was a significant step to even get the WCPFC to assess the species this year. The projections recommended by the Science Committee to elucidate impacts of the non-retention measure, CMM 2011-01, which began in 2013, is much needed and may show some recovery.

D. Evaluating Additional Mitigation Measures under the Hawai‘i Shallow-Set Longline Fishery Biological Opinion Reasonable and Prudent Measures

Tosatto presented a draft work plan developed by PIRO SFD staff in coordination with Council and PIFSC staffs for implementing the Reasonable and Prudent Measures (RPMs) and Terms and Conditions in the Hawai‘i shallow-set longline fishery biological opinion (BiOp). The draft work plan was included in the briefing document. The plan looks at each of the RPMs and Terms and Conditions and identifies the steps needed to address each item and who will be involved. A team approach will be taken to consider analyses and additional measures. Tosatto noted that the Council took action at the last meeting on several of the items under RPM 1, and PIRO is working with the Council to develop the Amendment 10 package including the hard

caps and trip limits. He reminded the Council that the Incidental Take Statement and the RPMs are structured such that, if alternative measures are developed in the future to meet the goal specified in the BiOp, they could replace the hard cap and trip limits.

Goto asked if the working group can bring the information back to the Council.

Tosatto replied affirmatively, stating the Terms and Conditions are written in such a way that the alternative measures would have to come back to the Council for deliberation and adoption under the FEP. The measures would need to demonstrate that they would meet the goal commensurate with the 25 percent reduction of impacts. Tosatto said some of the analysis outcomes may come back to the Council after they have been completed.

Goto suggested to Simonds that these discussions happen through the Pelagic Plan Team to make sure the Council receives the recommendations.

Simonds said the intent while developing the work plan was to have the discussions go through the Pelagic Plan Team. She asked staff to elaborate why the current draft is written as a team led by PIRO.

Asuka Ishizaki, Council staff, said that Council staff worked with SFD and others in the initial development of the work plan. At the initial stages the intent was to form a working group through the Pelagic Plan Team. When the work plan underwent review within SFD, Council staff received feedback that PIRO had decided that it would be a SFD working group without much additional explanation. Ishizaki said that the benefit of having the working group be part of the Council process would be the ability to have the discussion in a transparent process through a public forum. Some discussions involving vessel-level data may need to be done in a confidential forum, but the Council process has ways to handle that. Additionally, if the working group's deliberations lead to Council action, the working group deliberations through a transparent public process would aid in the record building.

Tosatto said that several of the RPMs, such as those addressing fleet interaction rates, could not be discussed in a public forum due to data confidentiality. The BiOp requirements are on the Action Agency, which is SFD, so he will require leadership of this process through SFD and that is likely unchangeable. Those aspects that can be done transparently will be done so, but he would be holding SFD responsible for the outcomes, and some RPMs will have to be addressed first before moving onto the transparent part of the process.

Simonds said she understands where Tosatto is coming from and asked that he reconsider and have a discussion on the matter after returning to Honolulu.

Tosatto said the plan is deliberately presented as a draft for this purpose so they can take input. He said that changes could be made once there is more clarity on which RPMs can be addressed through a transparent process.

Gourley asked how Tosatto arrived at a goal of 25 percent for reducing take.

Tosatto said he was not willing to discuss details on how that goal was set in the development of the RPMs, as the current discussion is on the implementations of RPMs.

Gourley said the goal of 25 percent is interesting because nothing would happen if that goal is not met.

Tosatto said not necessarily, as any alternative measures must be commensurate with the goal to reduce impacts by 25 percent before it can be approved. He said there is a lot of room for how the analysis is done to determine whether a measure may be commensurate with the goal. It is not as clear as saying the goal is reducing all the way to zero, but ESA does require NMFS to minimize the impacts of fisheries. NMFS has to put aside what other fisheries are doing and focus on the fishery that is under consultation to determine what is reasonable for meeting the requirements of minimizing impacts while allowing the opportunity for alternatives. The 25 percent reduction goal provides a way to evaluate the potential effect of alternative measures.

Gourley again asked if the 25 percent reduction was per year or over a lifetime.

Tosatto said it depends on the alternatives and the analyses the Council presents to NMFS.

E. Assessing Population Level Impacts of Marine Turtle Interactions in the Hawai‘i and American Samoa Longline Fisheries

T. Todd Jones, PIFSC, presented the marine turtle take model for assessing population level impacts of marine turtle interactions in the Hawai‘i shallow-set longline fishery. In 2018, PIFSC developed a population viability assessment (PVA) to estimate current abundance and trend projections of the Western Pacific leatherback and North Pacific loggerhead turtle populations. The PVA was conducted in response to a request from PIRO to support the shallow-set fishery ESA Section 7 consultation. Independent review of the PVA model, as well as a review at an SSC meeting, resulted in recommendations to apply fishery take or post-interaction mortality to the PVA modeling framework. The PIFSC team that developed the PVA model received a directive from the PIFSC Director’s Office to implement the recommendation for developing a take model.

The population metric available for conducting sea turtle PVAs is nesting females, due to the difficulty of gathering in-water information. As such, age-based demographic models are difficult to do for sea turtle populations, and exponential growth models are frequently used instead. For the loggerhead and leatherback turtle PVA and take models, the modeling team used nesting beach data from two main index beaches for leatherback turtles representing about 75 percent of all nesting in the Western Pacific and from three major beaches for loggerhead turtles representing about 52 percent of all nesting in the North Pacific.

The full take model comprises of three components: data imputation for generating the nesting female time series data; trend analysis of nest count data; and future projections of population size and assessment of impacts of the anticipated take levels on the projections. Jones reviewed the first two components, which was developed in 2018 for the initial PVA model and

went through independent review. Based on the model, the current estimated annual growth rate is 2.3 percent increase for loggerhead turtles and 6.1 percent decrease for leatherback turtles.

Jones described the process for including the take from the shallow-set fishery into the PVA model. Anticipated take levels generated by PIFSC were incorporated into the model by applying individual attributes of take (demographic parameters and mortality estimate based on past interaction data) to estimate adult nester equivalence for each take. The take model results showed no difference in the loggerhead turtle population projections between the take and no-take scenarios and a slight difference in the leatherback turtle population projections between the take an no-take scenarios. For the leatherback turtle population, the model projected the population to reach zero five years earlier with take compared to the no-take scenario over the 100 year projection period. The model also considered the past take on the historical population trend, which indicated that the take has no discernible difference on the trend. External reviewer comments indicated that the model approach was appropriate and adequate given the limited data available.

Rice asked if the model shows that the estimated take associated with the Hawai‘i shallow-set longline fishery does not cause a measurable impact on the leatherback or loggerhead populations.

Jones clarified that the impact shown was on post-interaction mortality. For the loggerhead turtles, there was no discernible impact from the past and predicted interactions in the shallow-set fishery. For the leatherback turtles, he left interpretation of the model results up to PIRO and the Council, noting the slight differences in the population trajectory with and without take and a slight difference in the time it takes for the population to reach zero.

Gourley asked if the model can be applicable to the Hawai‘i deep-set and the American Samoa longline fisheries.

Jones said yes. The modeling team’s intent was to develop a robust model that could be used across different fisheries. However, it will not be a simple plug and play due to the lower observer coverage in the Hawai‘i deep-set and American Samoa fisheries compared to the 100 percent in the shallow-set fishery, which would require an extra step in the analysis. The model could be used for the two other longline fisheries in the region and other fisheries in the Gulf of Mexico and in the Atlantic.

Okano asked if the model accounted for climate change impacts, such as nesting habitat loss and sex ratio changes due to the warming of nests.

Jones said the PVAs reflect the trend to date and the projections assume that everything that is taking place now would continue at the same level in the future. For example, the current PVA includes all threats to the turtles, including fishery take across the Pacific, habitat loss and impacts to nesting beaches. Based on those model characteristics, any impacts from climate change, such as changes in sex ratio, would be carried forward in the model at the level that it is now. PIFSC is currently working on models for the Hawai‘i green turtle to incorporate impacts from climate change, but those are not ready to be applied to the PVA or take model.

Rice asked if the model allows the opportunity to determine at what point the fishery could cause significant impacts and if the model can predict what level the sea turtle interaction would result in measurable impacts to the sea turtle populations.

Jones said that the model could be used to answer those questions, but it would not be done under an ESA evaluation. For federally permitted actions, PIRO would consider the predicted or estimated level of interactions and then ask PIFSC to look at the impact of that specific action.

Watamura asked if the amount of take that resulted in a negligible difference in leatherback survivability between take and no-take scenarios was based on historical numbers.

Jones said yes. The anticipated take level used in the model was generated by PIFSC's Stock Assessment Program based on historical effort and the number of interactions in the past.

Gourley asked for clarification on the finding that there was no major impact from the fishery in the loggerhead and leatherback models.

Jones said that for the loggerhead population, there is no difference in the trend between the take and no-take scenario, and there is complete overlap of the median and the uncertainty. For example, the probability of staying above or falling below the 50 percent population threshold is 33 percent, and for those model runs that did fall below this threshold, the mean time to fall below was 25 years. The difference between the take and no-take scenarios in this instance is 0.01 years, which is about 3 days. For the leatherback model, the mean time for the population to fall below the 50 percent threshold is 12.7 years in both the take and no-take scenarios, with the difference again being 0.01 years or 3 days.

Gourley asked at what point the difference in take and no-take scenarios becomes significant.

Jones deferred to PIRO, noting that the question of significance is not one that PIFSC considers as it is a question to the management side or to the Council.

Goto asked if the information used in the take model was available when the original PVA model was developed in 2018.

Jones said that no new data are collected when developing population models. When a modeling request comes in, PIFSC starts by obtaining the source data from Japan and Indonesia. For the take model, no new nesting data or other information was needed.

Goto asked why the take model was not done until 2019 if the data were available.

Jones said he would defer to Tosatto to respond. PIFSC did not do a take model in 2018 because the original request from PIRO was for PVAs and current abundances.

Goto asked Tosatto why PIRO did not request a take model for consideration in the shallow-set BiOp.

Tosatto said that PIRO asked PIFSC for information needed to follow the BiOp assessment approach that had been previously presented to the Council. He hoped no one makes a presumption that PIRO is at odds with the take model, as the outcome supports the shallow-set BiOp and a model that can be used across the country is good. If PIRO reconsults on the shallow-set fishery in the future, it would consider the take model in that assessment. Tosatto said he did not know how PIRO would use the take model in future consultations such as the Hawai‘i deep-set longline fishery, but it is proceeding with PIRO’s approach to ESA consultations. The take model is not a jeopardy-determining model. It is a piece of information among many other pieces of information to support a jeopardy analysis from which PIRO makes a jeopardy determination.

Gourley asked for the point where the fishery would appreciably reduce the turtle populations.

Tosatto said that neither he nor Jones could answer that. Notwithstanding the take model evaluation, PIRO found that the shallow-set fishery does not appreciably reduce the likelihood of survival or recovery.

Okano asked about the greatest threats are to the leatherback and loggerhead turtle populations.

Jones said leatherbacks have high incidents of interactions in gill net fisheries around nesting beaches in the Western Pacific. Direct harvest is also a threat in Indonesia, where PIFSC has found more than 100 animals harvested a year ago by harpoons. Direct take at nesting beaches in Indonesia is no longer a large threat, but egg harvest used to be an issue. Depredation of eggs by feral pigs and dogs is also a threat.

Goto said that major effects are coming from either foreign sources or foreign fisheries, where very little information is available. It is unfortunate that the Hawai‘i shallow-set fishery is being affected and taking the burden of a fishery closure two years in a row despite having management measures in place for sea turtles.

Watamura said that so much effort is going toward save such a small number of turtles in the shallow-set fishery. More time and resources should be devoted toward addressing the major risks. He asked if any funding is going toward other organizations that would mitigate the major threats to leatherback turtles.

Jones said that PIRO funds activities carried out by PIFSC to address these major risks, including work in Indonesia and Solomon Islands. Projects based in Hawai‘i include building tag heads for leatherback turtles to allow satellite tagging from a fishing vessel and developing a sliding line cutter to remove trailing gear. There is a lot of collaborative work ongoing between PIRO, PIFSC and the Council, but time is always the limited resource.

Gourley asked if PIRO has asked PIFSC to apply the take model to the Hawai‘i deep-set and American Samoa longline fisheries.

Tosatto said that the deep-set longline consultation has been underway for over a year and that PIRO has a preliminary draft in review. PIRO requested and received inputs from PIFSC under the existing assessment approach for the BiOp. PIRO anticipates that PIFSC will proceed with applying the take model to the deep-set fishery, but PIRO may or may not be in a position to use it in the current BiOp. PIRO would need to consider the Technical Memorandum for the shallow-set take model when it is available to determine how to integrate the model into PIRO's consultation approach. Tosatto reiterated that the take model was done as a directive from the PIFSC Director's Office and that PIRO did not request it.

Gourley asked how long it would take to run the deep-set model.

Jones said the current estimate from PIFSC is that the written report for the deep-set take model will be completed by the end of February 2020.

Gourley asked how this release date would correspond with a deep-set BiOp timeline.

Tosatto estimated the BiOp would be done by the end of the 2019 calendar year.

Gourley asked when would the 25 percent reduction goal end or be sufficient, recalling Tosatto's remarks from the 179th Meeting that the goal was to approach zero take.

Tosatto said in his dreams the take would be at zero. The mandate is to minimize any harmful effects on ESA-listed species. What "any" means is discretionary, which could be zero or all. Applying that mandate to the BiOp, PIRO came up with RPMs that are a minor change to the action that it felt was needed to minimize harmful effects. The 25 percent reduction would be the goal against which any alternative measures would be evaluated at the time of the design. The intent is not to have an annual 25 percent reduction as if it was compounding interest.

Simonds said that the earlier Council discussion regarding the working group and measures to be developed as part of that effort such as line cutters could be considered toward addressing the 25 percent reduction goal.

Gourley asked if Tosatto would be open to further discussing developing RPMs, either adding or taking some away, that would achieve the 25-percent reduction goal.

Tosatto said yes, noting that the RPM Terms and Conditions allow for alternatives to be considered and to replace hard caps and trip limits.

F. Electronic Reporting in the Hawai‘i Longline Fishery

1. Status of Electronic Reporting Implementation

Bigelow presented an update on the implementation of an electronic reporting (ER) logbook system in the Hawai‘i longline fishery. ER was developed in the fishery to improve the timeliness of data dissemination. Currently, PIFSC receives 22,000 log sheets that are key-punched each year. Implementation of ER is through the use of mobile tablet applications. A new feature implemented on the tablet since the last Council update was the ability for captains to see how many of each species they had in their hold during their trip. PIFSC also provided

funds to translate software guides into Korean and Vietnamese and made them available on the tablets. Of the 145 vessels in the Hawai‘i longline fishery, 50 vessels are voluntarily participating; 28 vessels are ready to have the system implemented; eight volunteered to participate by have incompatible vessel monitoring systems (VMS); 44 are yet to be approached; and14 vessels prefer to use paper. Approximately 3,800 fishing set forms have been received, and only 15 fishing set forms have required re-sending (less than 0.5 percent). PIFSC is working with a new vendor, SkyMate, for VMS used in the fishery with the tablets, which are not yet compatible.

One of the incentives for participation suggested by the Hawaii Longline Association is to have a secure online data portal whereby permit holders could access their daily catch and effort data. PIFSC is working to address security issues to implement that feature. Other ongoing efforts for ER implementation include drafting an ER Implementation Plan, one-on-one training and developing a one-page brochure to distribute at the docks to gather more volunteers. The ER systems will allow PIFSC to expedite catch reporting and monitoring of bigeye tuna quotas. Bigelow also provided an update on the development of electronic monitoring (EM). Sixteen vessels currently participate. Each participating vessel has two cameras mounted, one in mid-ship to look at the retained catch and another over the rail to look at the catches coming to the boat. A recent NOAA Technical Memorandum analyzed 238 sets that had concurrent trips with EM and at-sea observers. Catch accountability was compared between observer reports and EM. EM located and identified 98 percent of the retained fish in the shallow-set fishery and 100 percent of the fish in the deep-set fishery. However, EM does not record non-retained catch well, such as sharks and seabirds. Many of these are not in view of the cameras. PIFSC is also working on ideal video speed to analyze data as well as standard operating procedure. In a test to evaluate optimum speed, observers detected 32 sea turtles and seven marine mammals while the EM system detected 31 turtles and six marine mammals. In both cases, the missed sea turtle and marine mammal were visible on the video for several minutes, but the four times speed review is too slow such that reviewers lose patience and missed those two animals. The tests found that 16 times speed was too fast. PIFSC, thus, has recommended that future review be conducted at the eight times speed. Future plans for EM to be funded through Fisheries Information Systems funds include catch handling, protected species injury determinations and trailing gear estimates, and machine learning. EM will also be used in the tori line cooperative research project through the Council.

Bigelow reported on a new EM cost allocation directive, which indicates that no electronic technology-based fishery-dependent data collection program will be approved by NOAA if its provisions create an unfunded or unsustainable cost of implementation or operation contrary to applicable law or regulation. NMFS-supported costs include program administration support, certification of EM service providers, EM program performance monitoring or auditing of third-party video review. Industry costs, which Bigelow said were lower, include equipment purchases, leases and installation, equipment maintenance and upkeep, data transmittal and potentially more expensive video processing and storage. However, the directive also states that, if NMFS determines that EM is necessary and appropriate to meet legal obligations (e.g., ESA requirements) and sufficient appropriated funds are available, NMFS intends, as a matter of policy discretion, to fund the sampling costs of such programs, unless the MSA specifically provides otherwise. A policy directive on EM data retention is anticipated to be released soon.

2. Mandatory Electronic Reporting

Bigelow provided an update on the regulatory processes and requirements for mandatory ER. Following a Council recommendation, the Electronic Technology Steering Committee was convened to develop an implementation plan to move the voluntary ER to a mandatory program. The Steering Committee perceives two options. One is a non-regulatory option to reduce the existing requirements, which were modified in 2007, to give fishermen the option to submit electronic forms. Under this option, PIRO would notify participating vessels that the new preferred method of reporting would be logbook submissions and vessels would be phased into the program accordingly. The other option is more complex than a simple Federal Register Notice and would require a regulatory or FEP amendment. This latter option would require a greater time commitment, as PIRO SFD indicates that each amendment takes on average about 67 weeks. Under this second option, the Council would analyze different options to require electronic logbook submissions in the fishery and make a recommendation to NMFS for implementation. Assuming there could be user-pay options, analysis under this option would consider the economic impacts of the fleet. The Steering Committee is seeking guidance from the Council on which option might be preferred. Goto asked when the Hawai‘i longline fishery should expect full implementation of ER.

Bigelow said the system is mature and some training work is needed, which could be completed by June 2020.

Rice asked if other countries in the WCPFC are using ER and EM.

Bigelow said Korea uses ER for its longline vessels and Philippines for its purse-seine vessels. Most international purse-seine fleets such as Philippines and those fishing in Parties to the Nauru Agreement (PNA) waters use a platform called the Integrated Fisheries Information Management System (iFIMS), through which they submit daily log-sheet data.

Tosatto said he expects the PNA to push the iFIMS system onto longline fleets as it shifts to vessel day schemes for longline fisheries operating in the PNA zones. Tosatto also commented on the NMFS cost allocation policy. He said that the Council will need to address it in the future because it is not the norm for this Council to recommend a system and transfer that cost to the industry. The NMFS policy in place limits his ability to make decisions for the agency to bear the cost. Based on that policy, some of the observer program costs currently borne by the agency would be relieved and shifted to industry for an EM to replace at-sea human observers.

Goto said the Council should be discussing the cost issue in the future to determine what the actual cost burden will be on the industry. It is important for owners and operators to have access to the data if they are financially contributing. He asked if that is a possibility.

Bigelow said in the coming year the Electronic Technology Implementation Plan will flesh out cost options and options on data. Discussion on data ownership may be deferred to GCPI. He said currently the permit holder can obtain EM data through a Freedom of Information Act Request (FOIA) request, which has happened occasionally this year.

Fred Tucher, GCPI, confirmed that those who submit the data can obtain them through a FOIA request.

Bigelow said that, for the ER data, PIFSC is working on setting up an online portal where permit holders can access their data without going through the FOIA process.

Tosatto said that, similar to VMS data, ER data could be sent simultaneously to the portal and the agency's official data collection location. For an EM system in which the owner buys and installs a system, there could be a way that an output is recorded for both the owner and for the agency at the owner's expense, to the extent that the system is tamper-proof.

Rauch said that on a halibut vessel in Alaska, the vessel owner or operator can see the video real-time through a monitor on-board. However, in every system he has seen, once the video data goes to a reciprocal, that data is no longer accessible to the boat except through a FOIA request after the fact.

Bigelow said the EM systems are the same in Hawai‘i, with the ability to see the video in real-time while the captains are in the wheelhouse. The ability to obtain video data later depends on whether the system is collected through government equipment or through industry equipment. If it is collected by the industry, the government likely has an audit of a certain number of sets or trips, but that would be the only way the government sees the data.

Simonds asked if the Council wished to recommend that the government should assume the sampling cost because the data collection needs for the region's fisheries are driven by ESA and MMPA and if that should be included in the implementation plan.

Tosatto said that existing RPMs do not require 100 percent observer coverage and does not require EM, so he does not see an ESA mandate for the fishery. He acknowledged that maintaining observer coverage is necessary to monitor the RPMs (hard caps and trip limits). If that monitoring is done through human observers, the agency would bear the cost. If a decision is made to monitor the RPMs through EM, that would be a choice rather than an ESA mandate.

Rauch said that, while there is no direct policy about human observers, the underlying principle in the EM cost allocation policy applies to any increase in monitoring because there are no more discretionary funds unless appropriated by Congress. If the Council adopts any increase in monitoring, an evaluation has to be made about how that will be paid for. It cannot be assumed going forward that the government will pay for it.

Bigelow said the Council stated in correspondence when the cost allocation policy was in development that, if ESA is the purpose for monitoring, then NMFS should bear sampling costs. The Implementation Plan will outline some costs and options from the PIRO and PIFSC perspective.

Simonds asked if there was a response to the Council's comment letter.

Bigelow said he only saw the letter that the Council sent but noted that the final language in the NMFS policy directive appears to be in response to the Council's comments.

Goto suggested that staff work with the Steering Committee on the cost allocation issues. He asked if ER is going to be mandatory.

Bigelow reiterated that the Steering Committee thinks there are those two option previously described for moving forward with mandatory ER. The Council took initial action on the mandatory ER issue in October 2018, and Council discussion on preference of a date to implement mandatory ER would be beneficial. The earliest possible date would be June 2020, with some suggesting Jan. 1, 2021, as an appropriate date. There are other priorities with PIRO that may hold up a mandatory ER amendment.

G. International Fisheries

1. Inter-American Tropical Tuna Commission Meeting

Fitchett presented the outcomes of the 2019 IATTC meeting held July 22-26, 2019, in Bilbao, Spain. A notable topic included issues with the expansion of floating FADs used in the tropical purse-seine fishery in the eastern Pacific. It resulted in a resolution on the definition of FADs, which did not include efforts on reducing the volume of drifting FADs. Other measures passed included acknowledging the need for releasing sea turtles alive, adding management strategy evaluation to the science work plan, prohibiting the setting of purse seines on whale sharks, inserting IUU vessels on an inter-Regional Fisheries Management Organization (RFMO) registry, reducing silky shark mortality and the annual IATTC budget. Tropical tuna measures were not revisited at the Commission meeting because the IATTC Science Advisory Committee (SAC) lacks consensus on the stock assessments for bigeye and yellowfin. A recommendation to increase observer coverage in longline fisheries to 20 percent, which has been put forth each year, did not pass.

Rice asked how the sea turtle measure will be enforced or monitored if IATTC fisheries have difficulty achieving 5 percent observer coverage.

Fitchett said it would have to be in good faith. In the WCPFC, the US disproportionately contributes to observer data used for bycatch estimation. The situation will likely be the same in the IATTC.

Rice said his observation is that the United States is importing swordfish from nations that do not have the same regulations as the United States.

Fitchett said that many nations do not have the domestic measures and many of the international measures for the protection of sea turtles are nonbinding.

Tosatto clarified that, while resolutions under WCPFC are non-binding, resolutions under the IATTC are binding measures that are equivalent to WCPFC's Conservation and Management Measures. He would have to double check if the IATTC sea turtle protection measure is the same as WCPFC, but NMFS has worked in all of the RFMOs to have binding sea turtle protection measures as an international obligation. He acknowledged that whether fleets are complying is a different matter.

Rice said that the difference is that the United States has binding regulations while some other countries do not, and those countries can still export fish to the United States while the Hawai‘i fleet is not fishing.

2. Western and Central Pacific Fisheries Commission

a) 19th International Scientific Committee Plenary

Fitchett presented on outcomes of the 19th Session of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC19) held July 11-17, 2019, in Taipei. The members are Canada, Chinese Taipei, Japan, the Republic of Korea, Mexico and the United States. The People's Republic of China is also a member but has been absent from the plenary and from working groups since 2012. Within the ISC, the stocks that are not overfished and not experiencing overfishing are blue marlin, North Pacific albacore, blue shark, swordfish and shortfin mako according to the most recent stock assessments. A new stock assessment on North Pacific striped marlin was presented at ISC19. The plenary endorsed the findings that the Western and Central North Pacific striped marlin stock is overfished, that overfishing is occurring relative to maximum sustainable yield (MSY) reference points and that the stock assessment is considered to be the best available science. Spawning stock biomass of striped marlin in 2017 was estimated to be below 1,000 metric tons. However, spawning stock biomass at MSY is about 2,600 metric tons. Fishing mortality has been slightly above and below fishing mortality at MSY. Prior to this stock assessment, the corresponding age at maturity for striped marlin was considered to be five. PIFSC put out a working paper that showed striped marlin are mature by age two, which is more realistic and commensurate with the other billfishes. Life history remains a major source of uncertainty for billfish under ISC purview. Blue marlin is expected to be assessed in 2021, and the stock status of that billfish stock is concerning. Other issues at ISC19 included catch corrections for albacore stocks, a management strategy evaluation for the North Pacific albacore stock, shark working group reports and bluefin tuna management advice.

Gourley said that the uncertainty in Japanese data and life history is noteworthy and asked if there is any new data collection from the United States or if the science is reliant on foreign sampling.

Fitchett said that the data used for striped marlin growth came from Taiwan and may not be representative of the stock as a whole. The study also used fin spines, which elicit a lot of observation error. There is concern that the expected maximum size of striped marlin is high relative to observed lengths in fishery data. A study presented by Fitchett at the March 2019 SSC meeting incorporating tagging data and observed ages from Hawai‘i fish showed a much lower expected maximum size.

Rice asked if striped marlin moving to different part of the ocean was discussed in the context of the stock assessment, given that tagging data has shown striped marlin moving from Hawai‘i to California and vice versa.

Fitchett said that one in five recovered fish that were conventionally tagged in California was recovered near Hawai‘i. Satellite tagging efforts also show movement outside stock

boundaries. Genetics studies suggest inclusion of eastern Pacific striped marlin with Hawai‘i fish. The assessment, however, only accounted for waters within the WCPFC jurisdiction, west of 150° W in the Pacific Ocean, so the stock may be truncated by the assessment and true stock biomass may not be considered.

Rice asked what this information can do to impact the assessment.

Fitchett said that the biomass may not be geographically consistent through the years. CPUE is increasing in the eastern Pacific and decreasing in the western and central Pacific. That may bias outcomes.

Gourley asked if blue marlin is also heading toward an overfished/overfishing status.

Fitchett said that the stock trajectory is of concern and declining.

Gourley asked what research is needed for blue marlin.

Fitchett said that a new growth model is anticipated for blue marlin, from Taiwan data. It would ideally include otoliths or samplings from throughout the entire Pacific, given the stock assessment assumes a Pan-Pacific stock.

Gourley asked if the United States is locally collecting life history data.

Fitchett replied he is not aware of any collection ongoing for blue marlin.

Watamura said it would be a good idea for the PIFSC to look at locally caught blue and striped marlin, collect biological samples and look into the genetics work.

Rice commented on known blue marlin movements throughout the Pacific.

b) 15th Science Committee

Fitchett provided the outcomes of the 15th Science Committee (SC15) of the WCPFC held Aug. 12 to 20, 2019, in Pohnpei, Federated States of Micronesia. Presentations included status of catch, effort and species composition by fisheries and new stock assessments on Western and Central Pacific skipjack tuna, Southwest Pacific striped marlin and oceanic whitetip shark. Conservation advice and recommendations for these stocks plus the North Pacific striped marlin stock were made. The long-term recruitment scenarios in stock projections show an optimistic outlook while the recent recruitment shows a drastically different outcome on the stock status in the projected years. Other notable topics included improving observer coverage in longline fisheries, FADs, bycatch issues (particularly seabirds) and harvest strategies for tropical tunas. South Pacific albacore target reference points (TRP) and time to achieve TRPs was a discussion topic. The Commission adopted a TRP for South Pacific albacore at 56 percent spawning biomass in absence of fishing, a 4-percent increase from the current status determination. The United States and Territories may elect to prefer reaching that TRP sooner, rather than in 20 years. A series of harvest scenarios were discussed.

Muna-Brecht asked for clarification on TRPs.

Fitchett explained that a TRP is based on preferred metrics of performance or stock status, not one that determines overfished or overfishing status. There is a harvest plan to get the stock to reach this target in a determined amount of time.

Muna-Brecht asked if other species had a catch allocation scheme to reach a target.

Fitchett said only longline bigeye tuna had an allocation scheme and other species are to be considered.

Tosatto said the Commission will ultimately adopt harvest strategies and allocation for other tunas, including all bigeye, yellowfin and skipjack. The South Pacific albacore allocation scheme is simpler than multi-sector fisheries because only longline fisheries are primarily harvesting the stock.

Rice asked about pole-and-line fisheries being accounted for or ignored in allocation.

Tosatto said they are 5 percent of catches but not ignored.

Gourley asked who fills WCPFC data gaps and what gaps could be filled by PIFSC.

Fitchett said the SPC, which is the WCPFC science provider, fulfills those requests or member countries fulfill research on their own or jointly. Bigeye growth is a hot topic regarding validation of growth models through either chemical markers like oxytetracycline or bomb radiocarbon dating.

Gourley said, from the Council perspective, it would be worthwhile to pursue some of those recommendations.

Tosatto provided additional details on the role of science providers under the WCPFC as well as of each of the countries, noting that research is coordinated through the science providers and then through the WCPFC SC.

Sesepasara asked if foreign purse-seine vessels identify themselves as the Pacific Island fleet.

Fitchett said the Pacific Island fleet is composed of foreign-owned purse-seine vessels operating under charter agreements with a host country.

c) 15th Technical and Compliance Committee

Tosatto presented on the WCPFC 15th Technical and Compliance Committee (TCC) meeting held Sept. 25 to Oct. 1, 2019, in Pohnpei. The TCC has not passed a permanent measure on compliance, but the current measure has been continued for another year. Flag State investigations of noncompliance are used to verify catch reports and honoring of quota, but standards for this process have not been agreed upon. The United States has promoted a greater level of transparency in the Compliance Monitoring Review Process. Panama, a transshipping country within the WCPFC, is being scrutinized for noncompliance. The purse-seine fishery has

100 percent observer coverage. FAD deployment and management are issues for that fishery, for which the United States has had issues with meeting compliance.

Goto said that Eric Kingma, Hawaii Longline Association executive director, was poignant about the lack of compliance by most of the member nations and that the 2019 TCC meeting was the worst on record with respect to violations. As a WCPFC commissioner, Goto said he hoped the State Department and NMFS will support the industry in calling for the need to separate a compliant responsible member from others at this year's annual meeting.

Rice said that the US delegation to the WCPFC needs to ensure that a level playing field exists for US fisheries.

d) 15th Northern Committee

Tosatto presented on the WCPFC 15th Northern Committee meeting (NC15) held Sept. 2-6, 2019, in Portland, Ore. Notable topics included a US proposal for a rebuilding plan for North Pacific striped marlin, limit reference points for swordfish, management strategy evaluation of the North Pacific albacore stock and harvest strategies for bluefin tuna. A quorum was not met at the NC15. China did not participate again nor did some small Pacific Island Countries who have membership. Bluefin tuna fishing for "fattening" small bluefin in captivity was a topic of concern. Japan would like to increase its catch of bluefin and will get a small transfer of bluefin from Chinese Taipei. Japan is also credited with domestic fishery measures that are contributing to the stock's recovery. NC15 agreed on an F-based limit reference point at FMSY as a limit reference point for North Pacific swordfish. NC15 did not adopt a rebuilding target for striped marlin for a rebuilding plan.

Simonds asked what Chinese Taipei received in return for allocating 300 tons of bluefin to Japan.

Tosatto said the question was asked of Japan but an answer has not been received.

e) Permanent Advisory Committee

Tosatto presented on the WCPFC Permanent Advisory Committee (PAC) meeting convened on Oct. 10-11, 2019, in Honolulu. This year's PAC meeting had a record number of recommendations at 62. Topics included the Tropical Tuna Measure, Compliance Monitoring Scheme, bluefin tuna, South Pacific albacore, North Pacific albacore, sharks, harvest strategies, American Samoa-based purse-seine fisheries under Article 30 and transshipment.

Rice asked Council to draft a letter to the Trump Administration outlining the precarious state of the international affairs with the US fishery in the Pacific. This includes, but is not limited to, the expansion in the marine monument in Hawai‘i, the lack of recourse for failures in compliance and compliance monitoring, the lack of incentives for compliance and exceeding observer coverage in the US fishery, and the lack of fishing capacity controls, especially China.

Sesepasara asked that NMFS work to grant purse seiners that operate primarily out of American Samoa the privileges of a small island developing state (SIDS) under Article 30 of the WCPFC. This is to relieve the hardship of ELAPS, which was closed in October

Muna-Brecht recommended that NMFS and the US delegation to the WCPFC work with other international delegations to develop a target reference point for South Pacific albacore that includes CPUE of SIDS and Participating Territories to reach historical levels, in addition to the biomass target reference point. This target should be reached earlier than 20 years. The US delegation should also press to develop an allocation scheme for countries and cooperating members where the SIDS and Participating Territories are exempt from annual catch reductions to reach the target reference point or that the SIDS and Participating Territories can maintain catches commensurate with historical optimal levels.

3. North Pacific Fisheries Commission

Gourley presented on the Fifth meeting of the North Pacific Fisheries Commission (NPFC) and the associated 4th Technical and Compliance Committee meeting held in July 2019 in Tokyo, Japan. The NPFC is represented by eight members: Canada, China, Japan, Korea, Russia, Chinese Taipei, United States and Vanuatu. Under NPFC, target bottomfish species include North Pacific armorhead (which is in Hawai‘i), splendid alfonsino, oreos, mirror dory and sablefish. Pelagic species under the NPFC include Pacific saury, chub mackerel, spotted mackerel, Japanese sardine, neon flying squid and Japanese flying squid. Stacey McCorkle is the new State Department representative. The European Union wishes to participate and bring in two vessels, but it was rejected in 2019. Panama was admitted as a cooperating non-contracting party to transship with China.

Tosatto said transshipment between Panama (which was previously cited for not having authority to transship) and China had some compliance issues. Both parties are technically IUU fishing.

Rice asked if the squids managed by NPFC are found in Hawai‘i.

Gourley did not know.

Sesepasara asked if it was correct that there are no US vessels fishing in the NPFC area, but the US is a member of the Commission.

Gourley said that is correct but noted the North Pacific armorhead is a management unit species (MUS) under the Council’s FEP and is part of the Hancock Seamount Ecosystem Management Area, which is considered overfished.

4. 3rd Session of the Biodiversity Beyond National Jurisdiction Conference

Fitchett presented the outcomes of the 3rd Session of the Intergovernmental Conference on Marine Biodiversity Beyond National Jurisdiction held Aug. 19-30, 2019, in New York. The US State Department released an official position on BBNJ with respect to area-based

management tools. It states that any bodies established under the BBNJ agreement cannot and should not purport to have any oversight over any global, regional or sectorial bodies, such as RFMOs, the International Maritime Organization or the International Seabed Authority. Regarding MPAs, the US position is that management under MPAs should not exclusively mean closures. The US position regarding Area-based Management Tools implementation is that it should only be based on best available science and should allow for adaptive management tools. BBNJ was supported heavily by landlocked states and participants that come from PNA countries and some European countries. Fitchett said that BBNJ would disproportionately impact the Council but could also impact other US regional fishery management councils that have open-ocean or highly migratory species fisheries, including some in the southeastern United States and the polar regions in the North Pacific.

Goto commented to Rauch that the prospect of high seas closures and existing EEZ closures are problematic.

Gourley asked if the US State Department would refuse to sign any BBNJ agreement if its positions are not met and if the Council has written a letter to the State Department on BBNJ since the new official position statement.

Fitchett said the Council asked the State Department but before the development of its new official platform.

Simonds said the State Department is holding a meeting on Nov. 7, 2019, and has invited all of the US industries to attend to continue discussing their thinking about this movement.

Tosatto said that BBNJ is broader than just area-based management tools and includes many other controversial topics. The United States has not signed the UN Convention on the Law of the Sea for many of the same reasons.

Soliai said that enforcement will be a critical issue and vessels currently under restrictions are the only ones that may be enforceable while foreign fleets do not have such enforcement capacities scrutinizing them.

H. Advisory Group Report and Recommendations

1. Advisory Panel

There were no AP recommendations pertaining to pelagic and international fisheries.

2. Regional Ecosystem Advisory Committees

There were no REAC recommendations pertaining to pelagic and international fisheries.

3. Scientific and Statistical Committee

Lynch presented the SSC report and recommendations.

Regarding the American Samoa longline fishery report, the SSC recommended the Council request NMFS to compile and evaluate the catches of albacore from Chinese-flagged longline vessels operating in the southwest Pacific and compare to the catches and performance of the American Samoa longline fleet.

Regarding the assessment of population level impacts of marine turtle interactions in the Hawai‘i longline fishery, the SSC endorsed the take model developed for the shallow-set longline fishery as best scientific information available for evaluating the impacts of the fishery on loggerhead and leatherback turtle populations. The SSC recommended that PIFSC apply the model to the Hawai‘i deep-set longline fishery and the American Samoa longline fishery take data to provide a robust scientific assessment to be considered in the ongoing ESA consultations. The SSC encouraged the model to be published as a NOAA technical memo or other accessible and citable format.

The SSC further recommended that the Council direct staff to work with PIFSC on the development of a cost-benefit analysis to evaluate the impact of any management actions for reducing turtle interactions on the economic performance and socioeconomic effects of the shallow-set and deep-set longline fishery. The SSC further encouraged consideration of transferred effects of the US fishery longline fishery closure on target species as well as protected species.

The SSC reiterated that the 25 percent reduction goal in the RPM in the shallow-set longline fishery BiOp completed in June 2019 as aspirational, overly conservative and not supported by the scientific information presented in the final BiOp, especially in light of the results of the new take model. The SSC recommended that Council reevaluate its position on the RPMs in the shallow-set longline fishery BiOp completed in June 2019 in light of the model results.

Regarding the WCPFC, the SSC recommended the Council to request that PIFSC contribute to improve life history research, specifically on growth and maturity on North Pacific striped marlin. This work should be undertaken prior to future stock assessments.

I. Standing Committee Report and Recommendations

The Pelagic and International Standing Committee was cancelled.

J. Public Comment

Meafua Filoiali‘i spoke about the longline fishery. He is aware of a longline fishery in Pago Pago but not in Manu‘a. He asked Simonds and Sesepasara to provide support to develop an alia longline fishery in Manu‘a and for training and equipment to learn how to longline. Filoiali‘i said that, without a longline option, Manu‘a fishermen waste a lot of gas trolling, which also contributes to climate change.

K. Council Discussion and Action

Regarding the American Samoa longline fishery, the Council **requested that NMFS compile and evaluate the catches of albacore from Chinese-flagged longline vessels operating in the southwest Pacific compared to the catches and performance of the American Samoa longline fleet.**

Tosatto said, while he understands the intent of the question, it would be an apples to oranges comparison to compare industrial fleets throughout a broad range to the catches of the American Samoa longline fleet. He said that, to the extent possible, PIRO will try to answer SSC's question, but it will take some effort from PIFSC through the WCPFC science provider to conduct the right type of analysis to provide meaningful insight.

Moved by Goto; seconded by Rice.
Motion passed.

Regarding pelagic and international fisheries research priorities, the Council **requested that PIFSC investigate and/or contribute to sampling of growth of marlins (striped and blue) and prioritize pelagic life history research on pelagic MUS with incoming stock assessments and especially those that are likely to require management action in the near future.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the validation of bigeye tuna growth, the Council **requested that PIFSC contribute to the validation of Western and Central bigeye tuna growth models using bomb radiocarbon dating, as recommended by the WCPFC Science Committee.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding striped marlin, the Council **requested that NMFS and the US delegation to the WCPFC base any rebuilding plan for the Western Central North Pacific striped marlin stock on "long-term" recruitment scenarios until the ISC billfish working group reconciles uncertainty on the issue.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the population assessment of loggerhead and leatherback turtle interactions in the Hawai'i shallow-set longline fishery, **recognizing that SSC endorsed the PIFSC take model is best scientific information available for evaluating population-level effects of the shallow-set longline fishery on loggerhead and leatherback turtles, noting that PIFSC intends to complete an evaluation of effects of the deep-set longline fishery on the loggerhead and leatherback turtles using the existing PIFSC take model by the end of February 2020, and noting that PIRO intends to complete the deep-set**

longline consultation by the end of December 2019, the Council urged PIRO to delay the completion of the consultation and consider all anticipated scientific information including the PIFSC take model in the BiOp.

Tosatto said he has no comment on the measure, but he will be abstaining.

Simonds said the motion should read "SSC endorsed" rather than "SSC determined" to accurately reflect the SSC's recommendation.

Goto and Rice agreed to the change.

Moved by Goto; seconded by Rice.
Motion passed, with Tosatto abstaining

Regarding the population assessment of loggerhead and leatherback turtle interactions in the Hawai'i shallow-set longline fishery, the Council **urged PIRO to request that PIFSC apply the take model to the American Samoa longline fishery, evaluating its effects on leatherback turtles for consideration prior to completing that consultation.**

Tosatto said he has no comment on the action, but he will be abstaining.

Moved by Goto; seconded by Rice.
Motion passed, with Tosatto abstaining

Regarding the population assessment of loggerhead and leatherback turtle interactions in the Hawai'i shallow-set longline fishery, the Council **directed staff to work with PIFSC on the development of a cost-benefit analysis to evaluate the impact of any management actions for reducing turtle interactions on the economic performance and socioeconomic effects of the shallow-set and deep-set longline fisheries. The Council recommended that such analyses include consideration of transferred effect of the US fishery longline fishery closure on target species as well as protected species.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the population assessment of loggerhead and leatherback turtle interactions in the Hawai'i shallow-set longline fishery, the Council **recommended that NMFS review the RPMs in the Hawai'i shallow-set longline BiOp in view of the new scientific information, and work with the Council and the SSC in the review.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the population assessment of loggerhead and leatherback turtle interactions in the Hawai'i shallow-set longline fishery, the Council **recommended that NMFS work with the Council to develop any necessary RPMs or Reasonable and Prudent Alternatives (RPAs) for the Hawai'i deep-set longline fishery and the American**

Samoa longline fishery to ensure that such measures are appropriate and practicable to ensure the sustainability of the fisheries.

Tosatto said he will follow the law and NMFS policy regarding the MSA-ESA integration when moving forward on the two BiOps.

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the shallow-set longline BiOp RPM Work Plan, the Council **recommended the BiOp Action Team to be convened as a working group of the Pelagic Plan Team, comprising representatives from PIRO, PIFSC, Council and industry.**

Tosatto said he will vote no on this motion and reiterated the points he made during earlier discussion on the topic.

Simonds reminded Tosatto that he had also mentioned he was willing to work with the Council on how to develop the working group.

Moved by Goto; seconded by Rice.
Motion passed, with Tosatto opposing.

Regarding ER, the Council **directed staff, in coordination with the ER and Electronic Technologies Steering Committee, to develop an options paper for the March 2020 Council meeting addressing implementation issues including, but not limited to, cost allocation, necessary regulatory and non-regulatory changes for requiring daily logbook transmissions, and system requirements for providing data access to vessel owners and/or operators.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding PAC recommendations on South Pacific albacore, the Council **requested that NMFS and the US delegation to the WCPFC work with other international delegations to develop a target reference point for South Pacific albacore to include CPUE of SIDS and Participating Territories to reach historical levels in addition to a biomass target reference point.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding PAC recommendations on South Pacific albacore, the Council **requested that NMFS and the US delegation to the WCPFC work with other international delegations to develop a harvest plan for South Pacific albacore to achieve its target reference points "soonest" and under 20 years.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding PAC recommendations on South Pacific albacore, the Council **requested that NMFS and the US delegation to the WCPFC work with other international delegations to develop an allocation scheme for countries and cooperating members whereas SIDS and Participating Territories are exempt from annual catch reductions to reach the target reference point or that SIDS and Participating Territories can maintain catches commensurate with historical optimal levels. The allocation scheme must take into consideration charter arrangements and allocations should be accounted by fishing vessel registry, such that conservation benefits are not undermined.**

Tosatto said that he supports the motion, but he did not think there is any undermining effort. He reminded the Council that the PAC approved for the second year in a row a general principle that the US delegation not support exemption for SIDS. He said the motion seems slightly in conflict with the PAC principle, but he thought the overall intent is to duly consider SIDS status and participating history, so the US delegation would be able to use the Council's recommendation.

Moved by Goto; seconded by Rice.
Motion passed.

Regarding fisheries in the Western and Central Pacific, the Council **requested that NMFS and the US delegation to the WCPFC work with other international delegations to develop criteria for which fishing capacity in the WCPFC Convention Area does not exceed a determined amount from current or historical levels.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding fisheries in the Western and Central Pacific, the Council **directed staff to draft a letter to the Trump administration outlining the precarious state of international affairs with US fisheries in the Pacific. This includes, but is not limited to, the expansion of the marine monument in Hawai'i, US Territories and Pacific Remote Island Areas; the lack of recourse for failures in compliance and compliance monitoring; the lack of incentive for compliance and exceeding observer coverages in US fisheries; the lack of fishing capacity controls (specifically China), disproportionate burden of the United States in providing highest observer coverage and compliance standards; negotiations of the Compact of Free Association; and shortcomings of the South Pacific Tuna Treaty.**

Soliai said that the expansion of the monument also impacts American Samoa and asked for language to be added to reflect that.

Goto and Rice agreed to the addition of US Territories to the motion.

Peck said that each marine national monuments has a different history. Hawai'i and some PRIA monuments have been designated and then expanded. Others such as Rose Atoll have been designated but not expanded. He said the motion was a catchall that does not apply to all of the monuments but he understood the intent.

Soliai said the Pacific Remote Island Areas should also be added to the motion.

Okano said he would be abstaining.

Moved by Goto; seconded by Rice.
Motion passed, with Okano abstaining.

Regarding fisheries in the Western and Central Pacific, the Council **requested that NMFS work to grant purse seiners that operate "primarily" out of American Samoa to enjoy SIDS privileges under Article 30 of the WCPFC. This is to ameliorate hardships of US fisheries restricted by ELAPS rules.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding BBNJ, the Council **directed staff to draft a letter to the US State Department inquiring on any proposed process to implement "area-based management" under BBNJ and to request that US position to the Convention maintain that high seas waters adjacent to nations that implement existing spatial closures within their EEZs be exempt from further closures.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the American Samoa longline fishery, the Council **requested that DMWR to work in collaboration with the Council and NMFS to develop an alia longline fishery in the Manu'a Islands.**

Sesepasara offered the recommendation language in response to public comment from the Manu'a fishermen.

Simonds asked for confirmation that the motion was in reference to the alia longline using smaller boats.

Sesepasara confirmed and clarified that this recommendation would apply to all three of the Manu'a Islands.

Moved by Goto; seconded by Rice.
Motion passed.

XII. Protected Species

A. NWHI Green Turtle Research Update

Jones presented an update on the NWHI green sea turtle research by the Marine Turtle Biology and Assessment Program (MTBAP). He provided a brief background of the Central North Pacific green sea turtle population and then gave an update of the 2019 nesting season.

The Central North Pacific green sea turtle population is listed as threatened, primarily nesting in the NWHI and foraging in the main Hawaiian Islands. While nesting has been observed throughout the NWHI, the majority of nesting occurs at East Island (approximately 50 percent) and Tern Islands in French Frigate Shoals (FFS). Many other islands and islets within the atoll are used for basking. A recent model showed a population increase by about 3.2 percent annually since the 1970s. The MTBAP has recently increased efforts to collect more demographic information and vital rates, such as hatchling success, reproductive output and effect of temperature, as well as satellite tracking data.

Whale-Skate Island was lost in recent years due to changes in sea level and sand erosion. Trig Island disappeared in 2018. Also in 2018, Hurricane Walaka passed just north of FFS, damaging the islands and nesting habitat in the area. East Island was almost completely submerged and resulted in a loss of about 19 percent of the nests for that year. However, 2018 was a low year in terms of the number of nesting females so a stochastic event resulting in a loss of 19 percent is not a major loss for that particular year. Tern Island lost about 20 percent of the nests following Hurricane Walaka, although sand erosion was not as severe and much of the island remained above sea level.

A major uncertainty regarding the Central North Pacific green sea turtle population is where the turtles will nest now that East Island has eroded. As of 2019, Tern Island is still available for nesting as well as Gin and Little Gin. The Gins are low-lying so, if nesting occurs, the nests will likely be inundated by high tide or wave action associated with large storms. Past research has shown that the turtles know their way around FFS. Some females have nested on both Tern and East Islands in the same nesting season and used Trig or the Gins for basking. The turtles' ability to navigate the different islets and islands suggest that nesting females will be able to find areas to bask and nest within FFS. In 2019, a gravid female was satellite tagged on O‘ahu prior to the nesting season and was tracked from O‘ahu to FFS. She basked on the small part of Trig Island that was above sea level and nested on Tern Island.

In 2019, a total of 583 turtles were identified, of which 213 were male and 370 were female. The annual number of nesting females typically ranges between 100 and 900 turtles. Of the 370 nesting females, 251 females were observed nesting on Tern Island, which leads to the question as to whether the increase in nesting females on Tern Island is due to a high number of nesting females this year or a displacement from the East Island nesting females. A 40-year index of East Island and a new three-year index for Tern Island are being examined to help understand the displacement in nesting females. A longer record for Tern Island will be a primary focus for future years along with collecting and analyzing vital rates (such as hatching success, total nests laid by a female and total eggs per nest) in order to conduct a more robust assessment for this population.

Tern Island has an old airplane runway and other degrading infrastructure. Recent effort focused on cleanup because the number of monk seals and turtles using this habitat is increasing. Throughout the 2019 season, one to two turtles were entrapped per week on average in the hazardous infrastructure material. The loss of a barrier that prevented turtles from entering hazardous areas due to the storm resulted in increased entrapments.

In the beginning of the 2019 nesting season, East Island was larger than it was post-Hurricane Walaka. Due to the accumulation and erosion of sand with different wind and wave patterns, East Island is typically larger and more robust in the beginning of the nesting season and becomes smaller towards the end of the season. East Island eroded throughout the summer of 2019 resulting in all nests being lost and washed out with high tide or storms, and it is estimated that no nesting on East Island was successful.

The MTBAP is improving understanding of the population by collecting skin samples for a genomic project examining multiple paternities, breeding sex ratio and operational sex ratio and blood samples from hatchlings to examine primary sex ratios and future impacts from climate change. The MTBAP is also training Monk Seal Program researchers to collect data on turtles throughout the NWHI to help understand the displacement of turtles due to the loss of East Island. The largest basking population outside of FFS was on Pearl and Hermes with over 100 turtles followed by Midway Atoll with approximately 91 observed turtles. The MTBAP is also working with PIRO on the project Honu Count, which etches identification numbers into the turtle's shells to allow citizen scientists to report the identification number and location of the turtle to help understand movements between the NWHI and main Hawaiian Islands.

Tosatto gave a brief update on the effort to look at the changes in FFS over the last few years. PIFSC and PIRO held a Climate Science Workshop where the impacts of the storms and other ongoing climate issues on the NWHI were presented. Tosatto visited Midway Atoll with Hawai‘i DLNR and USFWS leadership and has engaged his counterpart at the USFWS Portland office to take a hard look at what has occurred and identify information gaps so that solutions can be considered. The islands may regrow by themselves. However, if they need help to regrow, consideration is needed on how that may be done. Tern Island has many issues such as it being a Super Fund site and the entrapment hazards, which will require resolution at the high level with Department of Defense, USCG, USFWS and the State of Hawai‘i. Tosatto assured the Council that this is just the beginning effort. He will report to the Council as more develops.

Simonds asked if relocating the turtle eggs to a higher island such as Ni‘ihau would be possible and how would it affect the breeding sex ratio.

Jones believed relocation is not necessary now. Turtle populations can withstand stochastic events, and losing all of the nests in a single season is not necessarily detrimental. Green sea turtles nest in the tropics where the nesting habitat is prone to cyclones, typhoons and hurricanes, and only a portion of the female population nests in any given year. Currently, the MTBAP is using temperature loggers to understand the micro-habitat throughout the NWHI. So instead of translocation of the turtles, determining the habitat where they may nest next will be of greater importance. He suggested that observing where the turtles will go within the NWHI through surveys and examining the micro-habitat and micro-climate is a good course of action.

Rice asked if it was possible to translocate nests from East Island to another island to reduce the number of eggs lost due to inundation.

Jones said that the translocation of eggs is possible and has been done globally with other sea turtles; however, this is a management decision. Since Tern Island is being used and hatching success is up to 80 to 90 percent, it is not necessary at the moment. Additionally, egg

translocation to another area involves other considerations such as differential currents that may affect hatchling dispersal. The majority of Hawai‘i green turtles currently nest in FFS. The hatchlings will leave the atoll and enter the pelagic environment. If the currents transport the hatchlings to an area where they can find food and grow, the turtles can eventually come back to the main Hawaiian Islands. If the eggs are transferred to a different area, the currents may transport the hatchlings to an area where growth may not be viable or to the Mariana Islands.

Okano asked, if the nest translocation were to Ni’ihau, would the turtles return to nest on Ni‘ihau once they reach adulthood.

Jones said yes. If the eggs are moved at the right time of the development process, the hatchling will imprint to the magnetic field of the location of embryonic development.

Simonds asked how one could obtain a permit to translocate a nest to Ni’ihau and see how the turtles respond.

Jones said that activities related to nesting are under USFWS purview.

B. False Killer Whale Abundance Estimates

Jones presented the progress report on the abundance estimates for the false killer whale in the US EEZ around Hawai‘i on behalf of Amanda Bradford, PIFSC. Estimates of false killer whales are based on ship-based line transect surveys conducted in the EEZ around Hawai‘i in 2002, 2010 and 2017. Previous false killer whale estimates were 484 based on the 2002 survey and 1,540 based on the 2010 survey. The recent estimate based on the 2017 survey uses a new approach that consists of integrating a line transect survey and a habitat model. There are pros and cons to each of these methods independently; however, taken together they can provide more robust estimates. The integrated approach can help interpret whether the differences in the false killer whale estimates between years represent true changes in the population or are due movement in and out of the EEZ attributed to factors such as forage or environmental changes.

The analytical framework in 2002 was group-based, which assumes that cetacean pods are a tight knit group and each individual in the group can be counted. However, a better understanding of the biology of false killer whales indicated that individuals in a pod and subgroups can occupy a relatively large spatial range. Therefore, in 2010, the analytical framework was changed to subgroup-based and the 2002 false killer whale abundance estimate is considered to be an underestimate. The 2017 estimates using the integrated approach is also subgroup based; however, the updated analysis requires information from the 2002 and 2010 estimates so assumptions used in the previous line transect surveys and analyses must also be updated. To date, both the abundance estimates based on the line transect survey and the habitat model have been completed and integrated. The next steps are to finalize the analysis, prepare the report and follow the proper review process including peer and internal reviews. The goal is to have an inter-sessional review by the Pacific Scientific Review Group (PSRG) before the March SSC and Council meeting.

Goto said he understood that the insular and pelagic stocks of false killer whale are now being considered together, which is of concern for the closure of the SEZ. He asked Tosatto how

NMFS is going to consider the new abundance estimate and how NMFS will determine the reopening of the SEZ based on the new information.

Tosatto said that the abundance estimates will go through the MMPA process to determine the Potential Biological Removal (PBR) levels. The SEZ closure trigger under the Take Reduction Plan is currently based on a PBR calculation, and a new PBR based on the new abundance estimates may potentially affect the SEZ trigger. If the abundance estimates result in a new PBR, the Take Reduction Team can amend the Take Reduction Plan. Under the current Take Reduction Plan, reopening of the SEZ is dependent on a variety of information, and a new PBR may be one of the many considerations for reopening the SEZ.

Goto said he is concerned that the SEZ is not likely to reopen at the beginning of the year, which will have major impacts on the fishery due to the limited accessibility inside the EEZ.

Simonds referred to Jones' last statement that PIFSC is going to try very hard to provide the new abundance estimate at the March SSC and Council meetings. She said she trusts that PIFSC will try very hard to get the PSRG to meet prior to the March meetings.

Rice asked for confirmation that PIFSC would notify the Council if the abundance estimate shows an increase in false killer whales.

Jones said that PIFSC stands behind what the science and the estimates show and that is what will be presented.

Watamura asked if the insular and pelagic abundance estimates can still be separated out.

Jones said that part of the abundance estimates is teasing out the movement in and out of the EEZ to get an estimate of the true number of insular animals.

Rice said that he has seen a pod of false killer whales come in close to Kona Point, and scientists could not tell if they were part of the pelagic or insular stock. He asked how the new abundance estimates affect the Take Reduction Plan measures.

Tosatto said the Take Reduction Plan regarding the SEZ closure is based on the PBR. The first year when the SEZ closure trigger is met, the SEZ is closed for the remainder of the year. If the trigger is met for a second consecutive year, the reopening procedure must follow a different part of the regulations. If the false killer whale abundance estimate and the PBR both increase, that may relieve the fishery of the original trigger. However, he would still have to follow the existing reopening process, which means that the SEZ will remain closed until NMFS determines that reopening is warranted. An increase in PBR would not result in an instantaneous reopening of the SEZ and would require engagement with the Take Reduction Team.

C. Updates on Endangered Species Act and Marine Mammal Protection Act Actions

Tosatto presented the updates regarding ESA and MMPA actions.

In 2018, NMFS published a positive 90-day finding regarding the listing of cauliflower coral indicating that the petitioned action may be warranted. NMFS is conducting a range-wide status review of the species and will publish a 12-month finding based on this status review. NMFS exceeded the deadline to publish the 12-month finding, and the Center for Biological Diversity filed suit on Oct. 10, 2019. NMFS is continuing the status review to make a timely finding.

In 2017, NMFS was petitioned to list the Northwest Atlantic leatherback turtle as a distinct population segment (DPS). NMFS replied with a positive 90-day finding and proceeded with a global status review to determine if any subpopulations constitute a DPS and whether any warrant listing under the ESA. If DPSs are designated for leatherback, the BiOps would have to consider impacts to the affected DPSs rather than on populations of leatherback turtles.

NMFS is considering critical habitat designations for ESA-listed coral species, including seven species occurring in the Pacific Islands Region, which is expected to be published in early 2020. Of the seven species currently listed in the region, none are found in Hawai'i and a few are found in Guam, CNMI, American Samoa and the Pacific Remote Island Areas.

Designation of humpback whale habitat is currently underway. The Hawai'i and Oceania DPSs around Hawai'i and American Samoa are no longer listed under the ESA and do not need a critical habitat designation. However, the western North Pacific, Central American and Mexico DPSs potentially interact with our fisheries. NMFS has published a proposed rule to designate critical habitat for these DPSs in early October, and the public comment period is open until Dec. 9, 2019.

NMFS is developing a proposed draft recovery plan for the insular false killer whale, which is expected to be published and opened to public comment in 2020. PIRO is also participating in an effort to develop a recovery outline for the giant manta ray.

Tosatto provided a list of sea turtle recovery actions, and noted that a more thorough presentation on the actions will be presented at the March 2020 Council meeting. ESA consultations underway for the Hawai'i deep-set longline fishery, US Pacific purse-seine fishery, American Samoa longline fishery and bottomfish fisheries are anticipated to be completed by the end of December 2019.

The SEZ is closed for the second year in a row in accordance with the False Killer Whale Take Reduction Plan. The high number of false killer whale interactions, including three within the EEZ, triggered the closure of the SEZ in February 2019. The Take Reduction Team, to which the Council is a member, is considering recommendations to modify the Take Reduction Plan. NMFS would consider those for implementation if they reach consensus.

The 2020 proposed List of Fisheries was published in early October, and public comment closes in early November.

Rice asked if the Council would be involved in the development of RPMs for the Hawai'i deep-set longline, American Samoa longline and bottomfish BiOps.

Tosatto said that the Council will be involved consistent with the ESA-MSA Integration Policy. The Council has requested the opportunity to review a draft BiOp and would provide comment on the draft RMP or RPA.

D. Advisory Group Report and Recommendations

1. Advisory Panel

There were no AP recommendations regarding protected species.

2. Regional Ecosystem Advisory Committees

There were no REAC recommendations regarding protected species.

3. Scientific and Statistical Committee

Sabater presented the SSC recommendation.

Regarding the false killer whale abundance estimates, the SSC recommended PIFSC to provide early access to the draft final document for review and input and looks forward to reviewing the updated line transect-based false killer whale abundance estimates at the March 2020 SSC meeting.

E. Public Comment

There were no public comments regarding protected species.

F. Council Discussion and Action

Regarding Hawai‘i green turtles, the Council, **recognizing the vulnerability of nesting habitat on low-lying atolls from sea level rise, recommended NMFS and USFWS explore research to inform conservation efforts to mitigate such impacts, including feasibility and efficacy of nest relocation to resilient nesting beaches.**

Okano said he would like to see a study that evaluates where turtles would go if translocation were to Ni‘ihau. The Hawaiian green sea turtle population has recovered because it is a distinct population that stays in Hawai‘i. It is unlike many other turtle populations that may go somewhere unknown.

Simonds said that Jones indicated in an earlier discussion that turtles hatched on Ni‘ihau will return to Ni‘ihau to nest.

Okano said that his concern was whether the turtles would forage in the main Hawaiian Islands. If the turtles were to forage in the Marianas or if they forage outside of US waters, it is unclear what could happen to them.

Jones said that turtles from the Hawai‘i population seen in the Marianas or the Philippines could be due to currents transporting hatchlings across the Pacific. If nests are

translocated, the hatchlings will imprint on the nesting site but may end up in different foraging grounds where there are many uncertainties such as the availability of the same forage.

Okano asked if a study could be conducted to determine the best alternative nesting sites that would allow the turtles to forage in the main Hawaiian Islands.

Jones said that PIFSC in collaboration with PIRO is evaluating the NWHI and putting temperature loggers in nests to determine where turtles may nest in the future, although this study is not for the intent of translocation. Additionally, nesting on the main Hawaiian Islands is increasing. They are trying to determine more locations of where the turtles may potentially nest.

Ishizaki said that the Council discussion regarding additional studies is captured in the recommendation language pertaining to feasibility and efficacy.

Moved by Rice; seconded by Goto.
Motion passed.

Regarding the false killer whale abundance estimates, the Council **recommended NMFS PIFSC provide the final abundance estimates for review at the March 2020 SSC and Council meeting and provide early access to the draft final documents in advance of the meeting.**

Tosatto said that he encourages PIFSC to finalize the abundance estimate. However, he reminded the Council that this is the MMPA process and the abundance estimate must be reviewed by the PSRG, not the Council's SSC. He additionally reminded the Council that the Take Reduction Team, to which the Council is a member, is the marine mammal management planning body for addressing false killer whale interactions in the Hawai‘i longline fishery.

Moved by Rice; seconded by Goto.
Motion passed.

XIII. Program Planning and Research

A. Legislative Report

Gourley provided the legislative report. Fishery-related bills have not significantly moved because of the pending impeachment efforts. Congressman Don Young (Alaska) reintroduced the 2018 HR200 with some minor items removed. It is now HR3697, Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act. Pew Charitable Trust resisted the 60-page document and urged Congress to reject the proposal. Pew is conducting a campaign to gather support through an automated sign-up system. Congressman Jared Huffman (California) conducted two town hall meetings in California with intent to expand to regional meetings in order to introduce a bill in the spring.

HR2236 on Forage Fish Conservation Act is creating discussion within the Council Coordination Committee (CCC). The bill aims for more management measures for forage fish. The East Coast and Gulf Councils actively manage forage fish, while the Pacific Islands does not

have it as an MUS. Concerns were expressed that managing forage fish will take resources and funding from stock assessments on the main fisheries.

B. Report on the Western Pacific Stock Assessment Review of the Territorial Bottomfish Benchmark Stock Assessment

Sabater presented the outcome of the Western Pacific Stock Assessment Review (WPSAR) for the territory bottomfish benchmark assessment on behalf of the chair, Steve Martell, and the two Center for Independent Experts (CIE) reviewers, Joe Powers and John Nielson. The review was conducted at the Council office April 15-18, 2019. The assessment had a new CPUE standardization approach and new species composition following the Ecosystem Component amendment compared to the previous assessment that had 18 species. The assessment also used a new definition of a fishing trip, which is a trip that used the bottomfishing gear code, whereas previously a trip was defined as having more than 50 percent bottomfish MUS in the catch. The WPSAR covered three assessments, one each for American Samoa, Guam and CNMI. Sabater presented the panel decision for each of the 11 Terms of Reference (TOR). The panel agreed that the assessment met the TOR, that the results were suitable for management purposes and that no minor changes are required in the assessment document. For future improvements and research priorities, the WPSAR recommended the addition of the effects of each step to the changes in filtering methods and the effect they have on CPUE trends, which was incorporated into an appendix in the peer-reviewed version of the assessment.

C. Peer-Reviewed Benchmark Stock Assessment of the Bottomfish Management Unit Species Complex in American Samoa, Guam and Commonwealth of Northern Mariana Islands (Action Item)

Brian Langseth, PIFSC, presented the 2019 peer-reviewed benchmark stock assessment of the bottomfish MUS complex for American Samoa, Guam and CNMI. He provided the background of the fishery, biology of the MUS, available data, modeling approach, results, projections and conclusions. The assessment was done on 14 unique deep and shallow species of snappers, grouper, jacks and emperor, including 13 species for the Marianas and 11 species for American Samoa. These species have variable life history characteristics but are typically fast growing and long lived. They are caught using hook and line gear on vessels around 25 feet (with variability). The catches in 2017 were around 16,000 pounds for Guam; 70,000 pounds for CNMI; and 16,000 pounds for American Samoa.

Features of the 2019 benchmark assessment included 1) complete consideration of the data sources, which considered expanding and incorporating variation in the catch estimates; 2) adjusting the filtering and analysis of the catch and the CPUE data; 3) used a standardized CPUE; 4) incorporated Sensitivity Analyses; 5) incorporated six-year catch projections; and 6) updated the modeling software that allowed more flexibility in the production function.

The data sources used for this assessment are CPUE and catch collected by individual Territorial agencies. For CPUE, the creel survey interview data from the boat-based survey was used. The commercial purchase data was used as an additional data source to look at catch estimates on top of the shore- and boat-based catch data. The assessment used data since 1982

for Guam, 2000 for CNMI and 1986 for American Samoa. The coefficient of variation was calculated for the catch estimates.

The primary data filter used was “bottomfish gear” to define a bottomfish trip. The goal of the filtering steps is to get a representative indication of bottomfish MUS CPUE. The vast majority of bottomfish MUS were caught on bottomfish gear: 96 percent in Guam, 95 percent in CNMI and 72 percent for American Samoa. The assessment used interviews from vessels that caught bottomfish MUS at least once among all years. Charter fishing interviews and interviews with incomplete fields were removed. After completing the data filtering process over the entire time series, a total of 4,000 interviews remained for Guam, under 600 for CNMI and about 1,600 for American Samoa. The CPUE data that remained were standardized to account for factors that affect CPUE, including fishing area and depth.

The assessment used a Bayesian states-space surplus production model in a software package called Just Another Bayesian Biomass Assessment (JABBA). Guam and American Samoa used Pella-Tomlinson production curve while CNMI assumed a Schaefer production curve due to lack of contrast.

Langseth explained the stock status determination criteria and the procedure for interpreting the Kobe plot results. The biomass reference point is the minimum stock size threshold (MSST) while the fishing effort reference point is the maximum fishing mortality threshold (MFMT).

The results of the benchmark assessment for Guam shows the biomass in 2017 is below the MSST while the harvest rate is below MFMT, indicating that the Guam bottomfish is overfished but not experiencing overfishing. Langseth then explained the purpose of projections is to determine what levels of catch correspond to various risk of the population being overfished into the future. The assessment simulated catch ranging from zero to 2,000 in 1,000 pound increments. The assessment report describes the catches corresponding to 0 to 50 percent risk of overfishing in 1 percent increments. The higher risk means higher catch, and lower risk means lower catch. The overfishing limit (OFL) for Guam is 36,000 pounds in 2025.

The results for CNMI showed that biomass in 2017 is above MSST and harvest rate is below MFMT, indicating that the bottomfish MUS stock in CNMI is not overfished and the fishery is not experiencing overfishing. Langseth noted that there is a lot of uncertainty with the CNMI model because the CPUE time series had limited trend. The overfishing limit for CNMI in 2025 is estimated to be 94,000 pounds.

The results for American Samoa showed that the biomass in 2017 is below MSST and the harvest rate is above MFMT, indicating that the bottomfish MUS stock in American Samoa is overfished and the fishery is experiencing overfishing. The probability that the stock is in an overfished and overfishing state is 84 percent. The overfishing limit for American Samoa is 8,000 pounds in 2025.

Langseth concluded by comparing the 2017 catch with the projected OFLs. The projected OFL for Guam is twice the catch in 2017. The projected OFL for CNMI is higher than the 2017 catch. In contrast, the projected OFL for American Samoa is half of the estimated 2017 catch.

All of the sensitivity analysis for American Samoa resulted in the same stock status. Langseth provided the link to the document for the public to view and download.

Duenas asked what the difference is between the old and the new models.

Langseth said JABBA allows for greater flexibility in the production function that was used. The Schafer model assumes MSY occurs at half the carrying capacity while Pella-Tomlinson either allows MSY to be higher than half or lower than half of carrying capacity. It allows the data to inform the model rather than the pre-assigned assumptions to inform the model. Other changes include the number and species in the assessment; more data compared to the old assessment; and the data filtering method where the current assessment includes trips with zero catches compared to the old assessment that only included positive catches. The current assessment did not incorporate the fishery independent estimate of MSY because this estimate cannot be replicated. The exclusion of this estimate did not change the result based on the sensitivity analysis except for CNMI where the results is dependent on the MSY input due to the non-contrast in the CPUE time series.

Duenas sought confirmation that the big change in the filtering approach was definition of the gear and inclusion of zeros in the catch.

Langseth confirmed that the data filtering methods constituted the biggest change in the assessment results.

Genereux asked how much of the catch data used in the assessment came from fishermen and how much from scientist.

Langseth said that the catch and effort data are all from fishermen collected by the territory agencies. The interview data from fishermen are then expanded by the amount of effort from the participation survey to represent the population.

Genereux said that there is no regulation requiring fishermen to turn in their catch and that the majority of fishermen do not report their catch. She estimated that probably three fishermen can catch onaga not because there is lack of it but because most do not know how to catch it. Territories are not as regulated as the rest of the United States. The assessment results may not be reliable because they do not reflect what occurs in the territories. She expressed concern that such an assessment could potentially lead to a seasonal closure or reduce the amount of fish that can be caught when not a lot of fish are being caught in the first place. She said a further assessment is needed.

Langseth said he was not sure how to respond to the statements made but confirmed that the interviews are voluntary. He clarified that onaga is just one species in the stock complex.

Muña-Brecht commended the effort of the scientists. She described the difficulty she had, as Council member, to listen to the formula and nitty-gritty of the analysis. She recommended that the presentation be made in layman's terms to help members and the public understand. She asked how the expanded numbers from the surveys be a verifiable quantity of fishers and gear used. She also asked how the surveyor is able to validate whether the number of gear seen on the

boat is actually used and whether the data could be verified before they are used as a basis for the assessments and resulting determinations.

Langseth responded that the analyst is dependent on territorial agencies reporting what the fisherman reported using as their gear. There is only one gear code for bottomfishing, but there is some variability in the gear code where trolling is mixed with bottomfishing. The data are taken at face value. Regarding the expansion, the overall estimate of catch is derived by multiplying CPUE by an estimate of total effort, where CPUE is catch divided by effort.

Muña-Brecht asked for further clarification if CPUE is the amount of gear quantified.

Langseth clarified that CPUE would be how much catch the fishermen caught and how many hours and number of gears were used to catch that amount. For bottomfishing, it is the number of rods times hours fished.

Muña-Brecht wondered whether the CPUE could be a potential source of error.

Langseth was unsure of the protocol on how the data was collected but recalled that it is what the fisherman tells the interviewer in terms of how many gears were used and not the interviewer visually counting the number of electronic reels.

Genereux asked why the assessment was done on a complex of fish species that inhabit both shallow and deep waters.

Langseth said this concern was raised in the previous WPSAR review and was considered. Ultimately, the analyst used the complex as specified in the FEP and acknowledged that the amount of the species within it is variable.

Duenas said that the Guam fishermen have no confidence in the creel survey data. The collection is random. The surveyor could be present at the survey site during a typhoon or other factors that might affect the data. He also expressed concern regarding the quality of the surveyors and noted instances when the surveyors are sitting in their vehicle and not engaging the fishermen. He noted that the boat-based survey is done eight times a month and is used in the expansion and asked if there is a location for which the model would run perfectly and why does it not run the way it should in American Samoa and Guam.

Langseth said he is not sure what running the model perfectly would look like. The model used in the assessment is based on data made available to the analyst.

Duenas said perhaps the territories are not collecting the appropriate data and asked what is needed to collect the right data. If the problem is with the data collection, it should be fixed. Biosampling data is available; if it is not used in the assessment, how could it be? He described other available data, such as the Guam Fishermen's Cooperative's voluntary data on fish not sold to the cooperative and data collected at the military base and recreational spearfishing. He asked if these could be improved to a better resolution so that they can be fed into the model.

Langseth said the data used in the assessment is catch and CPUE. If there are other data sets available, those have not been considered. If those sources of data are able to provide overall catch estimates or trends in the bottomfish MUS fishery, it would be worthwhile to discuss and consider them. A discussion has been initiated regarding data collection as part of PIFMAPS.

Watamura asked whether using the depth filter addresses the mixing of shallow- and deep-water species in the assessment.

Langseth said that it remains to be seen whether water depth is indicative of a deep- or shallow-complex but that would be one way to separate it. This was discussed at the WPSAR review, and depth was incorporated and selected as a way to distinguish CPUE values. An attempt was made to get at that in a more refined manner by allowing that variable to be an interaction term with the year specifically looking at changes in where fishing occurs in terms of water depth. That variable was not selected as significant.

Watamura asked if habitat in terms of depth could be used to separate the deep and shallow species.

Langseth said it could. For this particular assessment that dealt with instances of no bottomfish MUS caught, the use of habitat would present challenges because it would be difficult to determine whether those instances with no bottomfish MUS caught was from a trip targeting deep or shallow species. PIFSC is aware of this issue, and discussions are ongoing to address the concerns.

Sesepasara said some data are not included and suggested looking for a better model rather than defining what a perfect model is. Referring to the slide showing the American Samoa catch history, he noted the fluctuating trend and asked whether an assessment was done in some of those times when the fishing was on the downtrend or uptrend.

Langseth said assessments were done in 2015, 2012 and 2007 with a two-year lag, so there are assessments that have applied the older time series of data.

Sesepasara said fishing might come back up and the assessment may show a different result if it were repeated.

Tosatto said that the results for American Samoa in the past three assessments was not overfished and not experiencing overfishing. Several changes in the 2019 assessment resulted in a change in stock status. Tosatto asked Langseth to explain the key elements of the changes in assessment approach that makes the current one a reliable assessment over the past ones even with the change in the outcome.

Langseth said the most significant changes were excluding the 50 percent filtering for the CPUE and incorporating interviews with lower percentages and no BMUS caught. The WPSAR deemed these changes as appropriate. A perfect model would be one in which catch, abundance and life history parameters are known perfectly, but he is not aware of such an assessment. Models always include uncertainty.

Soliai mentioned the meeting with the bottomfish fishermen held the previous evening and noted that the main points of discussion were on the model and data. The problem is the data, which are not as robust as where they should be. A perfect model is a model with robust data so that each jurisdiction presents a fair model based on more data. Since the fishery data are questionable, he said looking into fishery independent surveys is prudent. The fishermen in Manu‘a were never surveyed hence could not provide their data. However, future management actions will affect these people who have no means to submit the data. The Council should provide recommendations to improve the data.

Genereux said fishermen and management want to maintain the stock and opportunities to fish, both of which are in the MSA. Not many people in Guam know the importance of turning in information. As a Council member, she will make sure it will happen to prevent overfishing and give fishermen their livelihood. Before any decision is made enforcing data submission is needed.

Gourley asked if Langseth had ever seen a Kobe plot that had as much uncertainty field as the one from the CNMI assessment.

Langseth said the area of uncertainty would look smaller if the scales of the axis were adjusted, but he acknowledged the uncertainty is high.

Gourley said the problem is the data, noting that fewer than 600 interviews were used in the assessment. A discussion is needed on splitting the shallow and deep species. He also recommended combining the Guam and CNMI into one ecologically managed unit. The fishery data used in the assessment should also be augmented by fishery independent survey information.

Langseth said that the uncertainty is also due to the lack of contrast in the CPUE data, as the CNMI CPUE series has no trend.

Watamura said that the stock assessment and models do not necessarily reflect reality. A group of fishermen went to the banks during the Council’s recent demonstration fishing trip and caught large bottomfish in a four-hour period. If reality is not reflected in the assessment, then something is wrong.

D. Report on the National Standard 1 Subgroup on Carry-Over and Phase-Ins

Joshua DeMello, Council staff, reported on the outcome of the SSC subgroup review of the National Standard 1 (NS1) Technical Guidance document pertaining to carry-over and phase-in provisions. Revisions to the NS1 guidelines published in 2016 included two provisions that added flexibility in the process of specifying ACLs. One provision allowed the unused portion of an ACL to be carried over to the following year. A second provision allowed changes in catch limits to be phased in over a period of time not to exceed three years. Both provisions required that overfishing is still prevented. This added flexibility may have a number of benefits including increasing safety and economic performance and reducing social disruptions by creating stability in harvests over time. However, policies that allow acceptable biological catch (ABC) to be set closer to the OFL also have the potential to increase biological risk and should be properly

analyzed and adopted with caution. The technical guidance document is meant to support the implementation of the carry-over and phase-in provisions as described within the NS1 guidelines.

The SSC formed a subgroup to review the guidance document. The subgroup teleconference on Sept. 11, 2019, noted the following: 1) using the provisions would require improving the data, which would result in a need for increased resources; 2) stocks with frequent assessments and low turnover would be most appropriate for the use of carry over and phase in; 3) because the Council has stock complexes, the use of the provisions should be done cautiously; and 4) an analysis should be done to determine whether there are actual benefits to justify the additional administrative costs.

If the Council chooses to explore these provisions, the following considerations should be taken into account: 1) consider carrying over only a percentage of the underage instead of a blanket carryover of the total underage; 2) look at 'paying back' after overages occur; 3) utilize different policies for different tiers of stocks; 4) use a Management Strategy Evaluation to compare different phase-in scenarios; 5) request an improvement of life history and monitoring data streams to inform the provisions; 6) expand stock assessments to include projections of stock status relative to target reference points for carry over; 7) utilize the Social, Economic, Ecological and Management (SEEM) analysis process to adjust the ACL as needed; and 8) develop a cost-benefit analysis.

E. Report on the Councils Coordination Committee Habitat Working Group Workshop

DeMello reported on the outcome of the CCC Habitat Working Group Workshop. The purpose was to advance collective work toward effective essential fish habitat (EFH) consultations and share current practices and challenges across different regions for non-fishing impacts. The working group found that many non-fishing projects are common to multiple regions (e.g., oil and gas, but most deal with harbors). Each region developed an action plan. The Western Pacific developed three categories: 1) information and data to update the regional websites and potentially including EFH information in the Pacific Islands Ocean Observation System (PacIOOS); 2) communication to develop policy and disseminate the Council's habitat policy, and 3) clarifying habitat goals and research priorities using the REAC as the Habitat Committee. Another topic discussed was shadowing NMFS habitat staff on consultations to learn the process and how the mitigation measures are determined. The report was drafted and the findings will be reported at the May 2020 CCC meeting in Honolulu.

F. Pacific Insular Fisheries Monitoring and Assessment Planning Summit

Sabater presented on the outcome of PIFMAPS, which brought together territory fishery management agency leadership and their technical staff to dialogue with the federal partners on the future direction of fishery dependent data collection in their respective regions. The summit was held at the Ala Moana Hotel on Aug. 19-23, 2019. Reviewers Steve Turner, Jenny Suter and Robert Ryznar evaluated the information presented by the territorial and federal agencies and provided recommendations on the last day. The recommendations focused on the following topics: organizational; creel surveys, biosampling, commercial receipts and electronic reporting,

and communication and outreach. Organizational recommendations included removing duplicity and increasing alignment between the creel survey, biosampling and commercial receipts and the stock assessment program in order to obtain the best estimates of catch, effort and size composition. The concept of a unified territorial approach was suggested in several capacities. Creel survey recommendations included encouraging strong engagement with the Marine Recreational Information Program and the employment of a survey statistician to provide guidance for optimizing survey design to meet stated needs. The two main recommendations for the Commercial Receipt program include implementing mandatory and electronic reporting. Biosampling recommendations were mostly associated with updating the list of species that need further sampling, defining an appropriate biological sampling framework to optimize those sampling efforts (e.g., focusing sampling on bottomfish and on size/age), redesigning the data entry form and developing a visual monitoring system. Communication and outreach recommendations focused on promoting the importance of reporting accurate data and communication planning in each territory to engage the appropriate audience.

Watamura said that this workshop was much-needed to address gaps in data collection particularly the noncommercial fishery. He encouraged the use of apps to report catch. If apps are designed correctly, right information will be collected for stock assessments.

Rice encouraged Council members to tell their constituents about the importance of reporting accurately and to correct the wrong notion that fish are going to be taken away as a result of providing their reports.

Duenas asked where on the timeline can fishermen engage to provide their input to the interpretation of the data and the gaps.

Sabater said that for years the Council has been encouraging the PIFSC to conduct a data preparation workshop prior to developing an assessment. He cited the improvements in the main Hawaiian Islands deep-7 bottomfish assessment after the data workshop. He said the data prep workshop should be incorporated into the WPSAR schedule. Another means is through the annual Stock Assessment and Fishery Evaluation (SAFE) report development where territory Plan Team members are required to provide their local perspective to the trends in the data. The annual SAFE report is also vetted through the AP.

Okano asked when a PIFMAPS for Hawai‘i will be convened.

Sabater said that PIFSC has reached out to Brian Nielson to schedule it for 2021 to give the online dealer report project time to collect one year of data for evaluation.

Gourley noted that the summit is timely if not overdue and is relevant to the bottomfish issues. He asked who is taking the lead in the implementation.

Sabater said it is a collaborative effort of the Council, PIFSC and PIRO. The co-chairs Sabater, Stephanie Dukes and Brett Schumacher are developing the implementation plan. The plan will outline the responsibilities and obligations of the parties involved after the workshop.

Gourley said each territory should include in its island report the updates on compliance with the recommendations from PIFMAPS to keep track of the status.

Muña-Brecht said fisherman representative were included in the summit and suggested that Hawai‘i consider doing the same.

G. Report to Congress on Section 201 of Modernizing Recreational Fisheries Act

Sabater reported on the outcome of the SSC subgroup review of Section 201 of the Modernizing Recreational Fisheries Act of 2018. The NMFS Office of Science and Technology developed a draft report to Congress as required in Section 201 to address improvements in collection and incorporation of data by state and nongovernmental organizations. The draft report draws on many existing documents that provide guidance on best scientific information and data collection and analysis, including the Stock Assessment Improvement Plan, NS2 Guidelines and Marine Recreational Information Program Procedural Directives. It also provides nonbinding recommendations for facilitating greater incorporation of these data sources. The SSC Subgroup developed a process paper that addresses the incorporation of nongovernmental sources of information in federal fisheries management. The paper identifies the nodes to which these kinds of information can be considered in the existing Council process, including the data preparation workshop, WPSAR review, Plan Team meetings and SSC and Council meetings (including scoping meetings). The mechanism is primarily through data call outs and the public comment period of the meetings. NMFS is requesting comments from the Council before Dec. 31, 2019. The Council will submit comments based on the work by the SSC subgroup.

H. Updates to the Spatial Management Workshop Planning

Fitchett provided the planning update to the Spatial Management Workshop. The workshop will be held in Rome at the Food and Agriculture Organization (FAO) office. The scoping session for the workshop will be held on Nov. 22, 2019, during the Improving the Policy Science Nexus. The workshop will be held in late April following the Brussels Seafood Expo. The Council is working with Ray Hilborn, Nico Gutierrez and Manuel Barange. The focal points of the workshop are 1) determining suitable objectives for certain spatial management tool and the science available to support them; 2) data and criteria needed to evaluate spatial management performance metrics; and 3) realistic scientific evaluation and monitoring per level of enforcement and governance for high seas spatial management. Potential participants are science managers with RFMOs, fishery managers, FAO project managers, representatives from industry and nongovernment organizations. The Council is developing a list of participants, list of needs from FAO, terms of resources, manpower and provisional agenda.

I. Annual Climate Change Collaborative Meeting

Howell presented the outcome of the Climate Change Collaborative annual workshop on behalf of Phoebe Woodworth-Jefcoats. The workshop was held in September 2019 in Honolulu with the goal of identifying science products that align well with management needs and would be readily used for management purposes. Howell provided several examples where the science products are well aligned with management needs and readiness for use (e.g., use of the drop

camera and incorporating environmental variables in stock assessments) and those that do not align well and are not ready for use (e.g., the trip cost modeling and dynamic pelagic habitat for the pelagic fisheries). This exercise helps PIFSC understand where to focus communication and fine-tune the process to ensure that the science produced by PIFSC will be useful to managers. Howell provided a list of accomplishments and the projects that will be worked on in 2020.

J. OceanObs 19

Sylvia Spalding, Council staff, presented a summary of the OceanObs 19 conference held Sept. 16-20 in Honolulu. This was the first time that OceanObs was held in the United States, and the first time that it proactively engaged the indigenous community. The conference purpose is to plan how ocean observation should move forward for the next 10 years. The Council organized the special indigenous event on the opening day, involving 50 indigenous delegates from the United States, Canada, Pacific Island countries and New Zealand. There were daily indigenous meetings, and Simonds presented on the Integration Panel. The conference concluded with declarations from the scientists and from the indigenous group. The latter, called Aha Honua, calls the ocean observing community to 1) formally recognize the traditional knowledge of Indigenous peoples worldwide, as well as the articles of the UN Declaration on the Rights of Indigenous Peoples; 2) to establish meaningful partnerships with Indigenous communities, organizations and Nations to learn and respect each other's ways of knowing; 3) negotiate paths forward to design, develop, and carry out ocean observing initiatives; 4) share responsibility and resources, and 5) work with the ocean observing community to advance the UN Sustainable Development Goals and the UN Decade of Ocean Science for Sustainable Development.

K. First Stewards

Spalding presented information about the First Stewards, an organization that brings coastal indigenous communities together to address climate change. First Steward's mission is to unite indigenous voices to collaboratively advance adaptive climate change strategies to sustain and secure indigenous cultures and strengthen America's resiliency and ability to adapt to climate change. It meets these objectives by holding symposia and cultivating sustainable projects and educational opportunities within indigenous communities. Spalding provided additional background and history of First Stewards. Most of the organization's board members were at OceanObs 19, and thus a board meeting was convened.

L. Deep-Sea Mining Watch and Mining Expansion

Fitchett presented information about deep-sea mining expansion. He pointed to the Deep Sea Mining Watch and highlighted the activity around Hawai‘i. Some Chinese ventures are currently engaged in deep-sea mining activities south southeast of Hilo in the Clarion and Clipperton Ridges. The International Seabed Authority is also interested in an area just outside the US EEZ near Hilo, Hawai‘i. Russian, Japanese, Chinese and Korean mining ventures are seeking cobalt and polymetallic nodules. There is a large rush for expansion of deep sea mining. Doug McCalley, University of California–Santa Barbara, has raised concerns about biodiversity and ecosystem impacts, marine traffic, governance of minerals and fishing access. Deep sea mining is an issue in the Mariana Islands, where expansive mining activity has historically taken place and where Japanese ventures are currently operating just outside the US EEZ.

Gourley asked about the details of the mining operations.

Fitchett said deep-sea mining uses dollies that are dropped down and ROV dump trucks that scoop the minerals into the dollies.

Gourley asked about mining interests in hydrothermal vents in the Marianas.

Fitchett said that the Clarion Zone is a hydrothermal vent.

Muña-Brecht asked if they are mining in the monument area and under which authority deep sea mining falls.

Fitchett said mining is not occurring in the monument area. Deep-sea mining authority is with UN International Seabed Authority.

Muña-Brecht asked who negotiates on behalf of the Territories.

Simonds said that the Council is inviting the State Department representative to the March 2020 Council meeting because this is an interest under BBNJ.

Tosatto said that the draft Monument Management Plan will be released for public comment at some point soon. Any extraction in the monument area will have to be permitted. There has been no permit application submitted as of date. Permitting would include conducting deep-sea exploratory research. The Bureau of Ocean Energy Management has jurisdiction over extraction of minerals in the EEZ, but its coverage of submerged lands in the EEZ and Territories is unclear.

Simonds added that the CNMI governor wrote to the president to ask about exploratory mining in the CNMI zone during the monument review comment period.

M. Regional, National and International Outreach and Education

Amy Vandehey, Council staff, covered the various outreach and education activities including the *Pacific Island Fisheries News, Status of the Fisheries Report, Marianas Pond* and meeting of the Education Committee in the Mariana Archipelago and American Samoa. The Council launched its new website. The Council is also developing the online data portal for the pelagic annual SAFE report.

N. Advisory Group Report and Recommendations

1. Regional Ecosystem Advisory Committees

There were no REAC recommendations under Program Planning.

2. Advisory Panel

Clay Tam, AP chair, presented the AP recommendations.

Regarding program planning, the American Samoa AP recommended the Council assist DMWR with improving fishery data collection in American Samoa. Further, the AP recommended the Council assist with providing outreach to the American Samoa fishing community on the importance of collecting correct data.

Regarding program planning, the Guam AP recommended the Council not use the Territory Bottomfish Stock Assessment for management of Guam's bottomfish fishery as the assessment is not a true reflection of bottomfish in Guam due to the inadequate data.

Further, the Guam AP continued to recommend the Council request PIFSC to separate the shallow complex from the deep complex as recommended by the AP at its last meeting in June; by the Council's Data 2000 workshop in 1996, which recommended "investigating methods for separating and analyzing data and information on the shallow and deep bottomfish complexes"; and by the WPSAR report of the 2015 Territory Bottomfish Stock Assessment. The AP also recommended the Council request NMFS PIFSC to provide a presentation on Guam to explain the stock assessment to the Mariana bottomfish community.

3. Scientific and Statistical Committee

Lynch presented a summary of the SSC discussions and recommendations. On the topic of the bottomfish MUS benchmark assessment, the SSC raised issues about the data quality and uncertainty, and expressed concerns regarding the lumping of the two fisheries into a single complex.

Regarding the benchmark assessment of the bottomfish MUS, the SSC recommended that a SSC member knowledgeable with the given fishery be included in the data workshop with the affected communities regarding these uncertainties.

The SSC recommended the Council direct staff to develop an options paper for the revision of the bottomfish MUS complexes as soon as possible. The SSC also recommended that the new grouping be prioritized using the Stock Assessment Prioritization process, and a new benchmark assessment be developed after the Council takes final action on the bottomfish MUS revision amendment package.

The SSC recommended the Council implement the data collection improvement recommendations from the PIFMAPS data summit.

The SSC recommended the Council, PIFSC and PIRO incorporate a data preparation phase prior to future benchmark assessments in consideration of the WPSAR schedule. For the Territory bottomfish, the data preparation workshop should explore changes in targeting between the shallow and deep complexes over time. Findings from the data workshops could improve CPUE standardization in future assessments.

In order to support improved future assessments, the SSC recommended the Council request NMFS to implement fishery independent survey methods (e.g., camera system, eDNA and tag recapture data) for American Samoa and the Marianas given the

documented uncertainties in the CPUE and catch expansions from the creel surveys. This could validate the index of abundance generated from the creel survey-based CPUE.

The SSC accepted the 2019 benchmark assessment as best scientific information available in setting harvest limits for fishing year 2020, 2021 and 2022. The SSC noted uncertainties with the data. The SSC reiterated that a new benchmark assessment should be developed once the bottomfish MUS revision amendment package is subject to final action. The SSC recommended that the Council direct staff to convene the P* and SEEM working groups to quantify the uncertainties to set the ABC and specify the ACLs for the Territory bottomfish MUS for American Samoa and Guam. Regarding CNMI, the SSC recommends using the Tier 5 ABC control rule to determine the ABC and ACL.

The SSC also recommended PIFSC conduct timely outreach in the Marianas regarding the results of the benchmark stock assessment.

Lynch noted that some SSC members were reluctant to reach the conclusion that the 2019 benchmark assessment was the best scientific information available based on the quality of data and the uncertainty, but under the NSs, the SSC had no alternative information or approaches to suggest otherwise at this time.

Regarding the NS1 Technical Guidance on carryover and phase-ins, the SSC recognized the potential use of the phase-in and carry-over approaches for the fisheries in the Pacific Islands. The SSC endorsed the SSC Working Group report and recommended the Council direct staff to draft the comment letter based on the recommendations from the report for transmittal prior to the Jan. 15, 2020, deadline. Further, the SSC recommended the Council explore the potential use of the phase-in approach for the Territory bottomfish fishery in light of the new stock assessment.

Regarding PIFMAPS, the SSC recommended the Council work with NMFS PIFSC in the implementation of the reviewer recommendations particularly supporting the mandatory license and reporting using the ER platform. Further, the SSC recommended the Council direct staff to work with the Territory fishery agencies to ensure coordinated monitoring of fisheries in the territorial and federal waters.

Regarding the report to Congress on Section 201 of Modernizing Recreational Fisheries Act, the SSC recommended the Council direct staff to draft the comments to the Report to Congress on Section 201 of Modernizing Recreational Fisheries Act and provide the comments and process paper to NMFS prior to the Dec. 31, 2019, deadline.

Lynch presented a summary of an agenda item presented at the SSC meeting but not at the Council meeting. The SSC received a summary of a report undertaken by David Loomis from East Carolina University on how fishers feel about the performance of the regulatory mechanisms in the Pacific Island fishery. The SSC noted several uncertainties in the work presented and thought Loomis could benefit from seeing directly the discussion that the SSC had about his report instead of a distilling of that discussion into a series of recommendations. The SSC suggested that staff provide a transcript of the discussion to Loomis to review to help him improve the report. The SSC thought the report could provide useful information.

Regarding the fishing community perceptions on MPA siting, the SSC recommended that comments raised by SSC members be conveyed to the authors for consideration. The SSC also recommended that the report be considered as part of the NEPA process for fishery management actions.

O. Public Comment

Filoialiʻi provided public comment as chair of the Taisamasama Fishermen's Cooperative Association (the alia association on Taʻu). He said he is concerned about the Council reducing the allowable bottomfishing in American Samoa and requested that decisions regarding bottomfish be delayed.

Maselino Ioane, a long-time fisherman, asked Langseth why NMFS is using the unreliable data from American Samoa while it is sending its ships to American Samoa for research. He suggested working with DMWR on the data collected by the department. Further, he requested that decisions on bottomfish be delayed for another two or three years and that the data collection in American Samoa be corrected. He suggested that the Council provide funding to help local kids become scientists to work for the department because they have the language connection.

Clint Ilaoa provided public comment as president of Faleluanuʻu Fishermen's Cooperative Association, an association of alia fishermen in Ofu and Olosega. He said Manuʻa fishermen are not aware of the importance of data and they have not been interviewed despite fishing every day for bottomfish. They fish for bottomfish because fuel is limited in Manuʻa so it is more fuel efficient to bottomfish than to troll. He feels that the bottomfish fishery will be closed due to the results of an assessment based on bad data. He said there is a lot of fish and they fish for cultural purposes. If good data were collected, then the results of the assessment would have been different. He said fishermen should be educated on the importance of good data and requested help to get good data. He is willing to work with the Council to collect good data.

Tata Aga provided public comment as vice president of the Alia Fishing Association in American Samoa. Only 15 boats are still fishing for bottomfish. He feels the data presented is only 20 percent of the available data. Fishermen participate in the DMWR Fuel Subsidy Program that requires them to submit the data. He claims that there is plenty of fish for everyone and asked the Council to help in the collection of data. He also asked the scientist to redo the calculation. He further requested the Council help improve the fishing industry and asked the scientist to work with the fishing community in collecting the right information.

Lopeti Misa provided public comment as a longline and bottomfish fisherman with the Alia Fishing Association in American Samoa. He said there are lots of fish in American Samoa. He recommended the information be presented such that fishermen can understand it. He now knows the importance of data. He is disappointed with the numbers are being presented. If the fishing ground closed, he will still fish because that is what he does for a living. Outsiders cannot tell him what to do because he fishes as part of his culture. He asked for support and said he is willing to work with the Council and DMWR. He suggested an incentive program like 25 cents per fish. He added that it is difficult to fish for bottomfish due to the current.

Tony Langkilde provided public comment as Department of Commerce staff working on the super alia project. He suggested that the analyst look at South Banks and other areas known to bottomfish fishermen. He said location is important. Analyst should also consider how long the fish lived.

Soliai read the comments of Paepae Simi from Iliili. Simi said to not close American Samoa waters from bottomfishing. Fishing is his heritage, culture and livelihood. There has been no consideration that there are only two bottomfish fishermen. He also said weather has changed throughout the years and it has been rougher in recent years.

[The following public comments pertaining to bottomfish were received during the pelagic section of the agenda on Day 3. The voting for program planning agenda items occurred on Day 3 after the conclusion of the pelagic section.]

Kim Choi provided public comment as a bottomfish fisherman. He said, in the past year, the wind has been blowing 15 to 20 knots and there is only a small window of opportunity to fish. Therefore, there is no data to be provided. During the down time fishing crew look for another job and when the weather is good it is difficult to find a fishing crew. Fuel price is expensive. Adding up the cost of fishing, boat owners get only $50 to $100 maximum as net profit. There are some invisible costs like engine or gear repairs that chew on the profit. He said another threat to the local fisheries is the import of foreign fish. He reckoned that the data used in the assessment is only 5 percent of the actual data. He also pointed to the problem of not having any regular means to transport catch from Manuʻa to Tutuila; hence, the Manuʻa fishery is mostly cultural and subsistence in nature. He recommended that the bottomfish boats be improved to withstand rough weather. He concluded that there is a lot of fish to catch and asked the Council to review the situation and support the fishery.

Anateleʻa Petelo provided public comment as a member of the Manuʻa Cooperative. He asked the Council to reconsider its decision to stop bottomfishing because the Council knows that American Samoa has a different culture. The people of Manuʻa depend on bottomfishing for families and Samoan culture, not for business. He asked for funds to support fishing boats, equipment and training.

An additional written public comment regarding the bottomfish stock assessment from Tepora Lavatai was received after Council discussion and action concluded. Soliai entered the comment into the record.

P. Council Discussion and Action

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **expressed its concern that the available data used in the stock assessment do not accurately represent the current territorial bottomfish fisheries. The Council noted problems with the species composition of the bottomfish MUS complex defined in the American Samoa Archipelago and Mariana Archipelago (Guam and CNMI) FEPs. The mixing of the shallow- and deep-water species groups in the bottomfish MUS definition and the change over time in the proportion of deep and shallow species that the fisheries target may affect the CPUE and may require a re-evaluation of the**

current bottomfish MUS complex definition. The accuracy of the assessment is further complicated by the diversity in life history characteristics of the species defined in the current bottomfish MUS complex.

The Territorial bottomfish fisheries are comprised of only a few, generally smaller vessels that operate on a part-time basis and are heavily dependent on external factors, such as weather (wind and current), fuel costs and market demand. The local market for bottomfish is currently limited, especially in American Samoa, where the fishery is a small-boat fresh-fish fishery with a range limited to the habitats close to the islands. Fishery development projects underway and supported by multiple Territorial and federal agencies include, among others, a design for a larger multiple gear fishing vessel, financing schemes for fishermen to purchase the vessel and potential shipment of bottomfish to the Hawai‘i market, which American Samoa has done in the past.

The American Samoa bottomfish fishery for deeper species operates mostly in the offshore banks and deep-water habitats found in federal waters, while the shallow bottomfish fishery occurs on the inner shelf in American Samoa. In Guam, the deep bottomfish fishery occurs in both territorial and federal waters. Shallow bottomfishing also occurs in the offshore banks, highlighting the differences in the distribution of bottomfish per territory. In the CNMI, the bottomfish fishery operates near shore and around Farallon de Medinilla, whose waters are regularly closed by Department of Defense for military operations, as well in the Northern Islands, where vessels go in a caravan for safety when weather permits.

The Council recognized the potential impacts of the overfished and overfishing status of the bottomfish MUS in American Samoa and the overfished status in Guam. The Council is concerned that the precipitously lower overfishing limit in the 2019 Territory Bottomfish Benchmark Stock Assessment would severely limit the bottomfish fisheries in Guam and American Samoa. The conservative catch limit coupled with the overfished status will hamper the fishery development aspirations and approval of bottomfish fishery-related projects using federal funding.

In anticipation of the finalized 2019 benchmark stock assessment indicating the American Samoa bottomfish stock is subject to overfishing and overfished, and recognizing its obligation to immediately work with its SSC to ensure ABC is set appropriately to end overfishing in response to an overfishing determination, the Council requested NMFS to implement interim measures to reduce overfishing, consistent with MSA Section 304(e)(6), for the American Samoa bottomfish fishery. There is a drastic change in the stock status and harvest limits due to the 2019 benchmark stock assessment. Immediate ending of overfishing is expected to result in a severe economic and cultural impact to the communities that utilize these resources for commercial, subsistence, religious and cultural purposes. The Council requested that such an interim measure include implementation of an ACL for 2020 at a level that reduces overfishing while increasing biomass through the duration of the interim measure. Tosatto said he would vote no to maintain discretion in the Secretary's decision because the recommendation read as an emergency request under the MSA

where a unanimous vote would take away that discretion from the Secretary. He said he supports the recommendation as he thinks it is aligned with the criteria to use 304(e)(6).

Moved by Duenas; seconded by Sesepasara.
Motion passed with Tosatto opposing.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **directed staff to develop an options paper for revision of the bottomfish MUS complexes in the American Samoa Archipelago and Mariana (Guam and CNMI) Archipelago FEPs, which accounts for the stock throughout its range in the case of the Mariana Archipelago bottomfish fisheries, and to present the options paper at the 181st Council meeting in March 2020.**Okano asked whether the intent is to combine Guam and CNMI in the next assessment.

Sabater confirmed that the intent of the recommendation is to explore the option for a combined assessment throughout the range since there is only one FEP.

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **requested that the NMFS PIFSC immediately develop a new benchmark assessment after the Council takes final action on the bottomfish MUS revision amendment package.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **requested that, for future benchmark assessments, the WPSAR Steering Committee incorporate into its schedule a data preparation workshop to be held prior to the WPSAR review. For the Territory bottomfish fisheries, the data preparation workshop should explore changes in targeting between the shallow- and deep-water complexes over time as well as life history differences. Findings from the data preparation workshops could improve CPUE standardization in future assessments. Further, the Council recommended that the workshop include SSC members and the fishing community that is knowledgeable of the stock and fishery being assessed.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **recommended NMFS provide an alternative modeling inference in addition to the base case stock assessment model in instances in which data and data filtering are equivocal.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **recommended that NMFS, in collaboration with the Council and territory agencies, implement the data collection recommendations from the PIFMAPS in order to improve the fishery-dependent information to be used in future stock assessments. This would include mandatory licenses and reporting, supported by electronic reporting.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **directed staff to provide support to the Guam DOAg in developing regulatory language for the mandatory license and reporting requirement for the commercial and noncommercial fisheries.**

Moved by Duenas; seconded by Sesepasara
Motion passed

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **requested NMFS to implement fishery-independent surveys for American Samoa and the Mariana Archipelagos given the documented uncertainties in the CPUE and catch expansions from the creel surveys. This could validate the index of abundance generated from the creel survey based CPUE.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **recommended PIFSC conduct timely outreach in the Mariana Archipelago regarding the results of the benchmark stock assessment.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the 2019 Territory bottomfish benchmark stock assessment, the Council **directed staff to work with the PIFSC and the territory agencies to conduct extensive outreach on the importance of submitting accurate data.**

The Council directed staff to conduct an extensive training for the fishers and agency staff on the use and management of the ER application for the small boat fisheries.

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding NS1 Technical Guidance on phase-ins and carry-over, the Council **recognized the potential use of the phase-in and carry-over approaches for the fisheries in the US**

Pacific Islands. The Council directed staff to draft the comment letter based on the recommendations from the report for transmittal prior to the Jan. 15, 2020, deadline. Further, the Council directed staff to explore the potential use of the phase-in approach for the territory bottomfish fishery in light of the new stock assessment.

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the PIFMAPS, the Council **directed staff to work with NMFS PIFSC in the implementation of the reviewer recommendations, particularly supporting the mandatory license and reporting using the ER platform. Further, the Council directed staff to work with the territory fishery agencies to ensure coordinated monitoring of fisheries in the territorial and federal waters.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the Report to Congress on Section 201 of Modernizing Recreational Fisheries Act, the Council **directed staff to draft the comments on the Report to Congress on Section 201 of Modernizing Recreational Fisheries Act and provide the comments and process paper to NMFS prior to the Dec. 31, 2019, deadline.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding noncommercial fisheries data, the Council **requested NMFS continue to support future recreational summits or workshops on noncommercial fisheries data to continue the national exchange on noncommercial fishery reporting issues and initiatives.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding OceanObs, the Council **directed staff to continue to work with Ocean Networks Canada, PacIOOS, First Stewards and others to implement the Aha Honua Declaration presented at OceanObs '19 as well as the OceanObs '19 Declaration.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

Regarding the fishing community perceptions on the MPA siting and process and its implication, the Council **directed staff to convey the SSC comments on the report to the authors for future consideration. The Council also recommended that the report be considered as part of the NEPA process for fishery management actions.**

Moved by Duenas; seconded by Sesepasara.
Motion passed.

XIV. Mariana Archipelago

A. Guam

1. Isla Informe

Dueñas provided a report from the Guam fishing community. The 24th Guam Marianas International Fishing Derby held in September had a huge turnout with 70 boats participating, but the largest fish just missed out on a $10,000 prize by four pounds, likely due to shark depredation. The event was twice postponed due to weather and other issues. The Marianas Fishing Federation Spear Fishing Tournament was held on Oct. 19-20, 2019, hosted by the Marianas Underwater Fishing Federation and supported by the Malesso Mayor in conjunction with the Malesso Fiestan Tasi. Guam had a large mañahak (juvenile rabbitfish) run this year, which occurred a day after the spear fishing tournament. The mañahak is culturally significant on Guam.

Dueñas introduced Guam's new Council member, Monique Genereux, who comes from a long line of fishing families. Her brother Todd Genereux was the top winner in the recent spear fishing tournament in Malesso. Dueñas remembered manning the boat a few times for these fishermen back when he started fishing in middle school. Genereux is a licensed boat captain and was in the USCG as an active member for six years and a reservist for two years. She represented Guam often in off-island spear fishing tournaments. She co-owns a local restaurant, Mosa's.

Genereux said she joined the Council because she cares about fishing on Guam. Having fished her entire life and seen the decline of fish in a lot of areas, she sees room for improvement. She just arrived from the new Council member training in Silver Springs, Md.

Goto said he can understand having shark depredation with bottomfish and smaller species of fish but to see blue marlin torn up is something one never sees in Hawai‘i because blue marlin has a natural deterrent to depredation by having short spines.

Rice said Hawai‘i sees one to two blue marlins per year with shark depredation when the fish is fought for three to four hours. Other places in the world have shark problems with their marlin, but sometimes those have to do with the training of sharks. In St. Thomas and the Great Barrier Reef in Australia they are 100 percent catch and release and for 30 years they have been releasing fish that might not survive and in the process taught the sharks to eat those instead. In Australia sharks hear the boat slow down when there is a hook up and soon are on to the fish. They have instincts and also have the ability to learn. In Hawai‘i, if a fish is not going to survive, they take it home and eat it. Otherwise, the shark learns to eat the released fish.

Muña-Brecht reported that the pier on the east side of the island is still being worked on with the Guam Economic Development Authority. She recently reviewed a Memorandum of Understanding (MOU) for the Boating Access Fund to provide monies for bore testing and to

drill up to 300 feet deep to test the composite to see if the seafloor can withstand the weight of the pier. She also noted the MOU with the Department of Public Works to move forward with the reconstruction of the Agat Marina docks is near completion with signatures and include all the amendments made by the Attorney General's Office. These projects are making progress after being stalled for more than a year. The Harbor of Refuge is another project with work to be funded by a Boating Infrastructure Grant and falls under the same MOU as the Agat dock. The repair of the Merizo Pier will start soon.

Muña-Brecht reported on the following:

- The Kid's Fishing Derby was postponed in June due to government procurement issues and finally held on Sept. 21, 2019. Thirty-one kids participated. Many of the winners were girls. More derbies may be held next year and may include an adolescent age group. The current kid's derby stops at 12 years old.

- One FAD was scheduled for deployment, and four are going through the procurement process for deployment. Work is underway with marine tour operators and boaters to identify the best sites for shallow-water mooring buoys and advise on which ones are missing and need to be replaced.

- Six green sea-turtle strandings occurred within this reporting period. One was poached, and another with just the empty turtle shell. Some strandings were reported by local fishermen to the conservation officers' hotline. She recently joined Jones on PIFSC's turtle tagging fieldwork in Guam.

- Box jellyfish were recently seen along Guam's shores, which is a common occurrence.

- The US Coral Reef Task Force meeting held in Palau included attendance by Doug Domenech, the US Department of the Interior Assistant Secretary of Insular and International Affairs, and Rear Adm. Timothy Gallaudet, US Department of Commerce Assistant Secretary of Commerce for Oceans and Atmosphere. They emphasized their work with the All Islands and Task Force Steering Committees. They are committed to pursuing all of the areas' concerns that were raised, including coral bleaching and support to the eastern states that experienced stony coral tissue loss due to disease. Muña-Brecht said she hoped this disease does not find its way to the Pacific Ocean because the amount of coral loss in those areas was devastating and there are no solutions yet. It is believed that the disease trail followed the shipping lanes and may be associated with ballast water that ships carry. FEMA joined the task force indicating how critical the issue coral reefs are in the United States. Economic value has been placed on coral allowing for funding application with emphasis on the importance of how the reefs protect economies. <u>The next meeting will be in Washington, DC, in April 2020.</u>

Gourley asked if Guam has a seat on the Coral Reef Task Force.

Muña-Brecht said that Guam has a point of contact seat on the Steering Committee and All Islands Committees.

Gourley also asked if the CNMI has a seat on the Coral Reef Task Force and if a CNMI representative attended the meeting. He said the CNMI has been trying to get a seat at Task Force for about 10 years.

Muña-Brecht said Sesepasara is on the Task Force and CNMI also has a seat but the representative did not attend the meeting due to medical concerns.

Tosatto said that the CNMI has been a member of the Task Force for a long time and that a representative from the CNMI Department of Commerce has the seat.

Simonds said the territories were included since the Task Force's initial implementation. The Regional Councils have asked for a seat and a decision needed to be made on who would participate as there are three other councils that have coral reef plans and coral money at the time Gov. Tauesi Funia was the Task Force chair. Some members opposed having the Councils on the Task Force at the time. Letters were written to request a seat for the Councils because they work on coral issues.

Muña-Brecht said her involvement with the Council was helpful with some of the points she wanted included in the discussions as those who attended were experts on coral reefs. She recently had a priority alignment meeting with NOAA and brought up the importance of Guam's reef fish to the health of the coral, something coral people are not inclined to consider. Even in the resilience strategy meeting, the importance of the reef fish restocking project was mentioned only as an activity under an outcome even though it was a recommended activity.

Simonds said the Council shares its coral money with the territories and work together with them on coral budgets. Fisheries used to be at the forefront, but it depends on the Administration.

Tosatto said NOAA is a co-chair and each administration politically determines whether NMFS or National Ocean Service represents NOAA.

Sesepasara added that the members of the Task Force are the Governors from each of the territories, including Hawaii and also some from the federal agencies. Each Governor then appoints a Point of Contact. For American Samoa, Sesepasara is the Point of Contact.

a) Report on Data Collection Improvement Efforts from the Pacific Insular Fisheries Monitoring Assessment and Planning Summit

This item was covered under other agenda sections.

2. Legislative Report

a) SCUBA Ban Bill

Muña-Brecht updated the Council on the Scuba Ban Bill. Oversight Sen. Clynt Ridgell and Sen. Sabina Perez scheduled the first public hearing for the bill on Nov. 13. Conversations were held with Manny Dueñas, Guam Fishermen's Cooperative Association, about amendments

including giving consideration for limited entry permits. The bill has gained momentum within the fishing community and with school children who are slated to attend the public hearing. Comments will be reviewed, and the bill amended to incorporate changes before it is put on the voting file. A moratorium on night fishing will follow to help with enforcement. The bill is likely to pass with amendments.

b) Fishing License Update

Muña-Brecht said she plans to work on mandatory reporting for commercial vendors and will work on language that would allow permits and reporting from noncommercial fishermen.

3. Enforcement Issues

Muña-Brecht summarized recent violations, all of which pertained to illegal fishing in the marine preserves. She meets with her Law Enforcement Division (conservation officers) regularly and has requested for weekly work plans that show where they will be around the island and which marine preserves they will be monitoring. Data collection alignment will be a part of the reporting. She requested reports showing which areas have more problems and to target those areas for increased presence. A new Reservist Program with 10 candidates lined up to join will start in the next fiscal year. The Guam legislature provided additional funding to hire two more conservation officers increasing the force from six to eight. The conservation officers will also receive dedicated funding to help increase personnel once the cannabis rules and regulations are adopted.

Duenas said he has heard that three cutters are planned for deployment to Guam. He asked Holstead about the timeline and how the cutters would increase the USCG footprint on Guam.

Holstead said that three fast-response cutters will be assigned to Guam to help support USCG and US missions throughout Oceania. The first cutter will be deployed to Guam around July 2020. The other two are being built and are projected to be deployed in FY2021.

Genereux asked if any of the vessels will be buoy tenders that could deploy FADs.

Holstead said they are not. They will be replacing the 110-foot patrol boats.

4. Community Activities and Issues

a) Update on Marine Conservation Plan Review

Muña-Brecht reported that community outreach was conducted in three different areas of the island in preparation for the Guam Marine Conservation Plan (MCP) update. The process is on track to present the MCP to the Council in 2020.

5. Guam Reef Fish Stock Assessment

Langseth presented the Guam reef fish stock assessment on behalf of Marc Nadon, PIFSC/Joint Institute of Marine and Atmospheric Research. Langseth provided an overview of

the assessment for 12 species of Guam reef fish, including the assessment approach and a new stepwise tool to incorporate life history information into the models where data are not otherwise locally available. The Guam assessment is a continuation of similar work done in the main Hawaiian Islands for 27 reef fish species.

Species for the assessment were selected with a preference to have 20 species with the highest catch and the most amount of length information or local life history information. The individual species within the list were revised based on the FEP amendment for Ecosystem Components. The original assessment of 19 species went through WPSAR Review, of which 12 passed. Of the 12, five species can be used for ACLs.

The assessment focused specifically on reef fish caught around the main island of Guam and to a depth of the 200-meter contour due to data limitations. Connectivity studies show reef fish around Guam and the banks are likely connected, but the offshore banks were not included in the assessment. Information sources for the models for size structure, life history, biomass and catch were from PIFSC, Guam Division of Aquatic and Wildlife Resources (DAWR) creel survey data and non-local life history studies. Langseth described how data are used for different components of the model to calculate current fishing mortality rates and spawning potential ratio (SPR). SPR of 0.3 was used as the reference point, below which the stock is considered to be experiencing overfishing.

The assessment results indicate that among the 12 species, four species including kakaʻkaʻ (blacktail snapper) were estimated to have SPR below the reference point of 0.3 and may be experiencing overfishing and three others were close to the reference point. Langseth explained that the SPRs presented are median values and described the uncertainties around those median values. He presented examples of the probability of overfishing table to inform management options for establishing catch limits and minimum size. The assessment report also highlights two problem cases, the humpback snapper and the bluespine unicornfish, and describes how they were addressed in the assessment. Langseth concluded by describing the stepwise tool used for six of the 12 species for which there were no local life history information.

Gourley asked, in reference to size restrictions for management of parrotfish, if there were a concern about the species being female when small and male when larger and not incorporating these size of transformation between male and female in the size restrictions.

Langseth said he was not aware of hermaphroditism for parrotfish. It would be a concern if it exists.

Gourley said he was told it exists.

Langseth said there could be a concern if there is a difference in growth between the sexes. He clarified that the intent of mentioning size restrictions was that this model can provide a tool if size restrictions are an interest to the managers.

Gourley said we need to be careful because a lot of people in the Mariana Archipelago love size restrictions and apply them to any species without understanding the life history. When

size restrictions are put on hermaphrodites, then focus on the fishery is on one sex or the other, which is not a good idea.

Dueñas noted that the model used for the Guam reef fish assessment is a different model than JABBA used for the bottomfish assessment, where the reef fish model can incorporate biosampling data. He asked about the rationale in choosing the two different models.

Langseth said the model used for the reef fish assessment is a different type of model with different data inputs. The biomass dynamic model is typically preferred when reliable catch time series and CPUE data are available. This model used for the reef fish assessment is more of a data-limited approach incorporating just length information because that was what was available, whereas JABBA did not utilize length information. He was not sure how many catch values were used within the individual species, but diver biomass estimates were also available because reef fish are shallower species.

Dueñas asked for confirmation that the model used for the reef fish assessment was selected because data was more limited.

Langseth said yes. The approach also allows for single species estimates, whereas the bottomfish assessment was assessed as a complex.

Dueñas asked if this model would be used in the next bottomfish assessment and incorporate biosampling data.

Langseth said a number of models could be used. PIFSC typically uses models that are preferred nationwide and worldwide, such as biomass dynamic models when data are available. However, the model used of the reef fish assessment could be considered for the next bottomfish assessment.

Gourley said he heard the Nadon model will be applied to the CNMI reef fish data. In the CNMI, scuba spearfishing is not allowed. If a size-based data-poor model is applied to a biased fishing industry where only free-diving spearfishing is done and there are no catches from deeper waters, then there are species that ontogenetically move to deeper waters so it separates out the sizes. Gourley asked what type of model would be valid under the CNMI's regulatory system where free diving is the only catch allowed.

Langseth said he cannot comment in terms of valid management purposes. In terms of modeling from a scientific standpoint, the representative length is needed. So if only a very specific subset of the potential length in the fisheries exists, the model would be problematic. Nadon looked at these and looked at available length in the biosampling program within the creel survey incorporating a number of different gears, trying to ensure that the lengths that he had available were representative of the full fishery and not just a portion of it.

Gourley noted Guam has both scuba and free-diving spearfishing so the chances of getting a more representative sample are higher. That would not be the case in the CNMI.

6. Education and Outreach Initiatives

DeMello presented the education and outreach initiatives report. Council staff members were engaged in live radio interviews and meetings. Guam AP and SSC members were involved in the Fish 101 project funded through an SK grant with John Kaneko of the Hawaii Seafood Council. An event held at the Guam Museum and the University of Guam discussed improving fisheries and capacity-building for fisheries on Guam. The Guam Fishermen and Boating Association, which is in final stages of incorporating as a nonprofit, is expected to become more active with the Council soon.

a) High School Summer Course Recap

DeMello reported the high school course on marine fisheries and resources with the University of Guam's 4-H Program was held over the summer. The students learned about marine resource and resource conservation, fisheries, methods and gears, and the Council. The program included classroom instruction and guest speakers, such as a master *talayeru*.

b) GFCA International Derby

This agenda item was covered in a prior presentation.

B. Commonwealth of the Northern Mariana Islands

1. Arongol Falú

Gourley presented the Island Report and updates on behalf of the CNMI. Representatives from the CNMI could not be present due to a typhoon that was approaching the Marianas.

- The Sea Turtle Program conducted outreach during seven events. In addition, radio commercials were broadcast and an active hotline number is in use. A report of a turtle poaching incident was received through the hotline. Division of Fish and Wildlife conservation officers responded and collected the carapace of a green sea turtle.

- DFW Enforcement Program had no significant activities other than operating and conducting activities within their mandates.

- DFW Fisheries Section is developing a program to enhance fish habitat within the Saipan Lagoon. A scoping project has been proposed to consider the feasibility of implementing a coral propagation program. A tagging study is ongoing around Managaha Marine Conservation Area. The DFW Life History Program is working on improving sampling and processing capacity within DFW.

- The Marine Resource Assessment Program led by project manager Shane Abeare has conducted underwater surveys at the Bird Island Sanctuary. Sampling design and planning is underway for the expansion of the DFW's underwater data collection activities.

- DFW has acquired 12 FAD buoys and has executed a contract with the vendor to procure additional rigging materials. It is developing a contract with a vendor to deploy the FADs around Saipan, Tinian and Rota.

- Vendor compliance has increased to 45 vendors who have been consistently reporting pursuant to the mandatory reporting regulations. More vendors are expected to report as they become aware of the mandatory reporting policy.

- The shore-based creel surveys program is ongoing. Additional sample days are being considered to increase spatial coverage on Saipan. The boat-based creel surveys ceased since July. Total effort, CPUE data collected from the boat-based surveys will now be collected from commercial purchase data. Seafood import data collection is ongoing, and Sport Fish Restoration-funded staff has been reduced to two data agents. At least two more staff will be recruited to fill the vacant positions.

- DFW staff provided logistical support to US Navy Salvage personnel for the inspection of the *Lady Carolina*. Removal efforts of the *Grand Marianas* have been completed. Mitigation efforts for damaged sites are underway.

- Fisheries Research Program staff collaborated with a NOAA contractor to develop and maintain a coral nursery within the Saipan Lagoon. DFW has initiated communication with vendors on recent developments with DFW's fishery-dependent data collection programs.

a) Report on Data Collection Improvement Efforts from the Pacific Insular Fisheries Monitoring Assessment and Planning Summit

Gourley said there is nothing to report at this time.

2. Legislative Report

a) Surround-Net Bill

Gourley reported on a newly introduced Senate Bill 21-24 to allow surround nets in the Third Senatorial District during the seasonal run of bigeye scad. Another house bill was introduced to authorize a 1.5-inch net mesh to catch bigeye scad during the seasonal run. No action has been taken on either bill. The Senate and House are trying to work together to create one bill to allow surround nets.

b) Sunscreen Bill

Gourley reported on the House Bill to prohibit the sale, offer for sale and distribution in the CNMI of sunscreen containing oxybenzone and octinoxate without a prescription from a licensed healthcare provider. The bill is in committee, and no action has been taken on it.

c) Minimum Size Bill

Information on the minimum size bill was included in the written report.

3. Enforcement Issues

Gourley reported that DFW is conducting dockside vessel inspections and at-sea vessel patrols. It is intercepting bottomfish fishermen and informing them of the federal commercial bottomfish permit requirements.

4. Community Activities and Issues

a) Update on Marine Conservation Plan Review

Gourley reported that the CNMI DLNR created a MCP Committee to review and draft the MCP. The draft MCP is now with the Office of the Lt. Governor for review.

b) Garapan Fishing Base Update

Gourley reported that phase one of the Garapan Fishing Base Renovation Project was completed on June 29, 2019, for the design of the improvement of sea wall and launching ramp. DLNR is now communicating with the same engineering firm to begin phase two, involving permitting and construction. The construction would be conducted in three phases.

c) Bottomfish Training Project

Gourley reported that insurance coverage was obtained for the bottomfish fishery development project vessel with the help of Council staff, Gov. Torres and Lt. Gov. Palacios. The CNMI government is now looking at hiring two project managers to manage the MCP projects for the operation of the vessel and overseeing the bottomfish training. Gourley added that the bottomfish maintenance and vessel training was conducted from May 29 to June 4, 2019, and that a second vessel maintenance training was conducted Aug. 26-29, 2019, for agency staff and a nonprofit group.

d) Mandatory Data Regulations Update

Gourley reported that, following the DFW mandatory data reporting regulations, the Division has continued to provide outreach to roadside vendors, restaurants, hotels and harvesters. The Division is currently collecting fishery data only on Saipan and hopes, once resources are available, to expand the data collection program to Rota and Tinian.

5. Education and Outreach Initiatives

a) Fishing Tournaments and Derbies

Gourley reported that the 35th Saipan International Fishing Tournament was held on July 20-21, 2019. It is the longest and biggest running fishing tournament within the Marianas. Council staff provided outreach materials and banners and took photos. The tournament had a

total of 76 participants, of which 20 were from Guam. The grand prize winner was a 462-pound billfish. Gourley also reported that the 2019 Mariana Islands Fishing and Seafood Festival **was** held on Sept. 27-28, 2019, and included a fishing derby, a junior fishing clinic and a seafood cooking competition.

b) High School Summer Course Recap

Gourley reported on the 2019 Fisheries Summer Course on Marine Fisheries and Resources in the CNMI. Fifteen students learned about bottom fishing, aquaculture, marine protected areas, data collection, fish identification, traditional sailing and coastal management. Gourley supports the program each year at the Micronesian Environmental Services' lab with students learning to dissect fish and remove otoliths and gonads for the biosampling program.

C. Advisory Group Reports and Recommendations

1. Mariana Archipelago Fishery Ecosystem Plan Advisory Panel

Ken Borja, AP vice chair for Guam, presented the AP report and recommendations.

Regarding Guam fisheries, the Guam AP requested the Council provide the AP with a presentation/workshop on the (community) FAD process in order for the AP to plan and develop its own FAD in Guam and potentially collaborate with DAWR on FADs.

Regarding CNMI fisheries, the CNMI AP recommended the Council request participation from the CNMI DLNR or DFW in its future meetings to ensure good communication with the AP and put it in the loop with government projects. The AP would like to assist with projects and but needs to know how to be informed of what is going on or what the government needs.

Regarding CNMI fisheries, the CNMI AP recommended the Council include the schools in future lunar calendar development.

2. Regional Ecosystem Advisory Committees

a) Guam Regional Ecosystem Advisory Committee

Duenas reported that the Guam REAC report had no recommendations.

b) CNMI Regional Ecosystem Advisory Committee

Gourley presented the CNMI REAC report and recommendation.

Regarding ecosystem modeling, the CNMI REAC recommended the Council direct staff to work with the NOAA Coral Reef Conservation Program liaison Robbie Green and the CNMI Bureau of Environmental and Coastal Quality/Coastal Resource Management (David Benavente) to solicit data availability that can support the ecosystem modeling work on climate change impacts.

3. Scientific and Statistical Committee

There were no SSC recommendations pertaining to Mariana Archipelago.

D. Public Comment

There was no public comment.

E. Council Discussion and Action

Regarding Guam fisheries, the Council **directed staff to work with the Mariana AP on a plan for developing community FADs and collaborating with the local agencies on FAD development and deployment.**

Moved by Duenas; seconded by Gourley.
Motion passed.

XV. Hawai‘i Archipelago and Pacific Remote Island Areas

A. Moku Pepa

Goto reported that the longline fishery was extremely fluctuant this year with a two-month period in April and May when the catch rate was the highest it has ever been, followed by a two-month period where the catch rate declined. Catch rates have picked up more recently, which hopefully indicates a strong end to the year. The closure of the shallow-set swordfish fishery forced the 12 to 15 boats that traditionally target swordfish in the early months to convert from shallow- to deep-set, which may have played a factor in the catch rates.

Rice asked about the pricing of billfish and any potential impacts from the Billfish Conservation Act amendment.

Goto said that the blue marlin is the biggest component of the billfish sales at the auction and the amendment eliminated the top end of that market. The US mainland was a very active market for mostly blue marlin and some striped marlin. While the majority of the billfish has historically stayed in Hawai‘i, the mainland market was important and was severed. During the high April-May tuna run, the vessels were also catching a lot of billfish, and the market dilapidated with blue marlin selling for 10 cents per pound. The high quality product that would have normally been used for raw product could only be absorbed by the dried fish market. It still can rise to a respectable price every now and then, but that is due to direct volume. There is no import of marlin coming into the islands, so it is a pure Hawai‘i market. Goto said he hopes the fishery does not get to the point where boats are doing regulatory discards, but with the market restriction now it is unfortunate to continually see the drop in value of these products.

Rice said that NMFS PIFSC is working on researching that socioeconomic effect of the amendments and hopes something can be ready for the Council’s next meeting.

Watamura asked if the decline in catch for bigeye tuna was affected by the SEZ closure and the Papahānaumokuākea Marine National Monument.

Goto said that traditionally, the SEZ area for the deep-set and NWHI for the shallow-set have produced fish, but he did not know if the declines could be attributed to those closures.

Tosatto noted a continuing trend in increased trips and hooks and that the closures have clearly displaced effort. The indicators are access is affected but the fishery is continuing to increase its effort, with CPUE being relatively flat.

Rice reported that the blue marlin fishing in the past year has likely been the best that Kona has had in terms of numbers of fish. Size wise, not as much, even though there was one grander caught the end of August by *Marlin Magic*. It may have to do with water temperatures staying warmer than usual. He said fishermen on the north side of the harbor still do not have power and hoped some funds can be directed towards that from the State.

Okano provided a report from the State of Hawai‘i DAR. The bottomfish fishing year 2018-2019 included 317 licensed fishermen who made 2,001 trips and landed close to 180,000 pounds, or 36 percent of the ACL. This fishing year, the ACL is at 492,000 pounds, and so far 89 fishermen reported 169 trips landing 12,567 pounds, or 2.6 percent of the ACL. Four Bottomfish Restricted Fishing Areas (BRFA) were opened (BRFA C off Kaua‘i, BRFA F off Penguin Bank, BRFA J off Hana, Maui, and BRFA L, off of Leleiwi on Hawai‘i Island). The environmental impact statement for the aquarium fishery is expected to be prepared for the Hawai‘i Island collectors in October and one for O‘ahu six months later. Okano reviewed the data provided for the Hawaii Marine Recreational Fishing Survey, the replacement of FADs, the implementation of an online dealer report system and marine protected areas. He also addressed algal issues, noting that invasive algae have been documented at Pearl and Hermes and *limu kohu* (*Asparagopsis taxiformis*) is becoming significantly important, not only culturally but also as a marine organism, with one pound being sold for as high as $20. Recently, community and academia members have been requesting large quantities because this alga can reduce methane production in cows, which has added to the high cost.

Goto said the *limu kohu* issue is interesting because, if the price of *poke* goes up, the cause could be the cost of *limu*, and it will be a struggle going forward to balance that out.

Okano said they are hoping to collect and grow the *limu*, but previous attempts have not been successful.

Muna-Brecht noted the differences in import and export rules regarding commercial fish, saying that Guam was exploring aquaculture over wild caught fish for exports and asked if Hawai‘i has any concern regarding overharvesting for the aquarium fishery.

Okano said it depends on who you ask. A big portion of the aquarium fishery happens in West Hawai‘i which has a network of restricted areas, including fishery replenishment areas where aquarium fish collection is prohibited. While some people are concerned, the fishery has been one of the best managed fisheries with one of the longest coral reef data sets in the world.

Muna-Brecht said that Guam has many other concerns, including habitat and wanton loss, so she was interested in Hawai‘i’s approach.

Okano said that other considerations are coral bleaching and ecosystem services and how the loss of ecosystem services plays into the resilience of the coral reefs.

Muna-Brecht asked if the aquarium fishery needs to adhere to international standards.

Okano said that the State of Hawai‘i has conditions on its aquarium fish collector permit that inspectors can check to make sure the facilities are appropriate and maintained.

Sesepasara asked if aquarium fish are still being spawned in tanks on the Big Island.

Okano said that the Oceanic Institute on O‘ahu successfully bred yellow tang in tanks but the cost to run the operation is too high. The demand remains for wild caught aquarium fish because they are cheaper.

Sesepasara asked if yellow tang is the only species that can be spawned in tanks.

Okano said aquaculture of other marine species has been done successfully and provides a solution to any concerns regarding harvest.

Simonds asked about a lawsuit filed by an individual from Maui regarding the commercial marine license.

Okano said that he did not have any information on that.

Lynch said that the complaint was made by an individual to the Board of Land and Natural Resources (BLNR) alleging that DAR could not issue fishing permits to individuals that were not capable of coming ashore due to their visa status. Since those individuals could not come ashore to attain their permits, social issues or alleged mistreatment of people on board the boats is alleged. The BLNR took that complaint under consideration and rejected it. The individual is now appealing the BLNR decision to the Hawai‘i courts, where it currently sits.

B. Legislative Report

Okano provided the legislative report noting that the Legislature passed House Bill 808, which expands the existing prohibition on knowingly capturing or killing a manta ray in State marine waters to all ray species. The bill provides exceptions for special activity permits or research permits authorized by law and the exercise of traditional and customary Native Hawaiian rights. Gov. Ige signed this bill into law on July 5, 2019. House Bill 1133, which would have prohibited the issuance of more than 400 commercial use permits for any Marine Life Conservation District (MLCD) not accessible by land and limited access by commercial use permittees to 50 percent of permittees, was vetoed by the governor. It also would have required DLNR to immediately initiate rulemaking for Molokini Shoal. While the bill purported to limit commercial use of the Molokini Shoal MLCD, it would have hindered DLNR from addressing overcrowding concerns through its administrative rulemaking process.

C. Enforcement Issues

Okano reported that there were not many enforcement issues. DAR received a report of a poacher at a closed area in Kaupulehu, Kona, where extraction of fish is prohibited. The poacher was confronted by natural resource staff from an area hotel; the poacher told the hotel staff that DOCARE would not come because they are on Mauna Kea. Okano said the issues on Mauna Kea have an impact on and are not removed from fisheries management.

D. Ocean Resource Management of Hawai‘i

Okano reported that the Ocean Resource Management Plan (ORMP) is led by the Coastal Zone Management Program, which is a part of the State of Hawai‘i Office of Planning. Many partners contributed to the plan including federal, state, county and community representation. The plan started in 1985 and is continuously updated with input from the many partners. The ORMP is required under the Hawai‘i Revised Statutes and seeks to resolve coastal problems and issues that are not adequately addressed by existing laws and rules. The ORMP dashboard has 11 management priorities, some of which use information from DAR and DLNR. Two of the priorities are related to marine resource protection and aquatic invasive species. Both use data from DAR, particularly DAR's work to raise urchins to control invasive algae in Kane‘ohe Bay. The invasive species priority also uses DAR data to measure the amount of ballast water processed and fouling. Promoting sustainable fisheries is also a priority measure, and the data used includes the compliance by fishermen turning in commercial reports.

E. Review of the Terms of Reference for the Main Hawaiian Islands *Aprion virescens* (Uku) Benchmark Stock Assessment

Sabater presented the Terms of Reference (TOR) for the WPSAR of the Main Hawaiian Islands Uku Benchmark Assessment, which is scheduled to be reviewed the week of Feb. 24, 2020. The WPSAR TOR was also reviewed by the Council's SSC.

For the first set of questions in the TOR, the reviewers would provide yes or no answers. If necessary, a caveat may be provided but must be as specific as possible to provide direction and clarification to NMFS. The first question looks at the data considered for inclusion in the assessment and if the final decisions on inclusion/exclusion of particular data were appropriate, justified and well-documented. The second question refers to the CPUE standardization and if it was properly applied and appropriate for this species, fishery and available data. The third question refers to the assessment models and if they were reliable, properly applied, adequate and appropriate for the species, fishery, and available data. The fourth question looks at the decision points and input parameters to see if they were reasonably chosen. It also references whether the primary sources of uncertainty were documented and presented; whether the model assumptions are reasonably satisfied; whether the final results are scientifically sound, including but not limited to estimated stock status in relation to the estimated overfishing and overfished status determination criteria; and whether the methods used to project future population state are adequate, including the characterization of uncertainty, and appropriately applied for implementation of overfishing limits. The last two questions solicit future improvement and research priority recommendations and prioritization and whether each recommendation should

be addressed over an immediate short-, mid- or long- term. Draft individual reports from each of the panel reviewers and a summary report will be developed.

F. Updates on the Hawai‘i BioSampling Project

DeMello reported on a Council project to develop a Hawai‘i biosampling program, which uses the local markets to provide samples for length, weight, otoliths and gonads. He noted the Council's early biosampling efforts in Guam and CNMI, which were continued by NMFS PIFSC. Funding for the Hawai‘i project was provided by the NOAA Coral Reef Conservation Program. The Council contracted Poseidon Fisheries Research (PFR), which was founded by a couple of former students who had participated in the Council's capacity-building efforts.

Between July 2018 and July 2019, PFR measured and weighed more 10,000 fish representing 69 different species and 14 families. What they sampled in the market tracks with the data provided by fishermen on their commercial marine license (CML) reports. In summer 2019, PFR expanded its efforts to Maui to test if a similar sampling effort was possible in those markets. As of end of August 2019, it has measured 407 fish in Maui, collected 91 life history samples from five different species and coordinated with a high school in Maui to conduct the market sampling. Length and weight were taken to develop regressions, and otoliths were removed to determine fish age and gonads for reproduction and sexing of the fish. DeMello provided examples of age versus length curves and other data that PFR has developed as part of the project. Besides the data, PFR provided presentations to undergraduate students; hired undergraduate interns; provided training to DAR staff; collaborated with Conservation International; built community relationships with markets, fishing tournaments, fishermen organizations and individuals; and provided outreach at different events, including informational brochures that summarize the data collected. Preliminary results indicate that Hawai‘i markets are not as easy to get samples from and not as reliable as places like CNMI and Guam as fish arrive at different times so sampling is opportunistic. Because getting samples directly from fishermen is more efficient, PFR is focusing on tournaments and targeting the sizes needed. At the end of the project, the first life history journal article on palani and pualu will be completed, and a summary report of the project and data will be available at the end of 2020.

G. Review of Hawai‘i Small-Boat Fishery Performance under the Fishery Ecosystem Plans

Fitchett provided a review of pelagic small-boat fishery performance under the current FEPs. Pelagic small-boat fisheries in Hawai‘i include the palu-ahi and ika-shibi handline fisheries primarily for yellowfin and some bigeye; recreational and commercial troll fisheries; charter fishing; and weekend warriors. The review will help determine if the small-boat fisheries are being managed appropriately under the Pelagic FEP. Additionally, monitoring the small-boat fishery performance can provide a comparison of local availability versus regional or stock abundance indices.

Fitchett reviewed the available data provided by DAR through the CML and presented the results. Fishing effort around the main Hawaiian Islands has been substantial in the past five years, particularly on the seamounts, in terms of weight of catch. In terms of numbers of fish, a substantial amount is being harvested in the offshore areas utilizing troll and handline. A lot of

fish are being caught particularly in Kona, north of Maui and Hilo, as well as O‘ahu and the windward side of Kaua‘i.

The review showed that most reported troll and handline fishing days in Hawai‘i are presumably in federal waters. Catch and effort are greatest in federal waters. Although small in comparison to longline fisheries, the catch of tuna by troll and handline fisheries is significant. In some years, the troll and handline fisheries have caught about half of the total catch of yellowfin tuna. The small-boat fisheries account for between one-fourth and one-seventh of the blue marlin catch and a majority of the mahimahi catch. However, the proportion of the ono catch has been decreasing as the deep-set longline fishery increases their catch. Participation has waned over the last decade with the number of days fished declining by about one-third. However, troll catch rates for blue and striped marlin and handline catch of yellowfin tuna have increased. Fitchett said that the benefit of monitoring the small-boat fisheries is to account for local performance and provide an impetus to improve noncommercial catch and effort reporting.

Rice asked if the marlin data includes only dead fish or tag and release as well.

Fitchett said that it is only retained catch, so it does not include those fish that were released.

Rice asked for confirmation that the 3,000 or so billfish that get released are not considered.

Fitchett said that was possible. He would double check the data source.

Watamura asked why there was a lot of variability in the data.

Fitchett said at the Pelagic Plan Team discussed this point and attributed the variability to the mix of fisheries and gears involved, with possibly a mix of targeting.

Watamura said that the reason for the variability would be worth exploring with fishermen because changes in the market value of the fish determine what to target and a lot can be learned from fishermen.

Fitchett agreed and added that a more readily available data stream could help build some sort of decision process for fishermen to maximize their benefits in the fishery.

Simonds said that this was the first step in producing a discussion paper and/or workshop. She hoped the Council would begin thinking about the other fisheries and how it can help them as well.

H. Education and Outreach Initiatives

Vandehey presented the highlights of the Hawai‘i education and outreach activities since the last Council meeting. She noted the redesign of the Hawai‘i AP brochure in concert with AP members, which will be used for the 2019 to 2022 term. The brochure’s message invites the public to get involved in the Council process and gives examples of recent successful initiatives. The Hawaii AP brochure will be used as a template for the other island areas.

The Council continued the co-sponsorship of the *Go Fish* radio program with Mike Buck. The show hosts weekly interviews about current topics in fisheries, airs on Saturdays and Sundays and is archived on the Council website. The Council contributed to a monthly publication, the *Hawaii Fishing News* with an article in the August issue about the collaboration between bottomfish fishermen and fishery managers; the September issue focused on Peter Fithian, an original Council member and founder of the Hawaii International Billfish Tournament; and the October issue reported on the status of bigeye and skipjack tuna. The Council also provides an article for *Lawaia* magazine, with the latest article on a *koa* (offshore fish house) project conducted in Maunalua Bay.

This year's Hawai'i High School Summer Course, co-sponsored by NOAA Fisheries and in partnership with Moanalua High School, was about four weeks long and had 13 students, mainly girls. The students received one science credit through the Department of Education for completing the course. The course is a combination of classroom presentations and hands-on activities and field trips. The students also had an opportunity to participate in the June Council meeting since it overlapped with their course and to help out with the Fishers Forum. Students also had an opportunity to go fishing, some of them for the first time on a boat. The course was capped off with a trip to Moloka'i where students learned about traditional fisheries and fishponds from Raymond Naki and Mac Poepoe. The students' final project was to create a public service announcement to solicit students for next year's course.

Watamura commended Vandehey on the new look of the AP brochure and agreed that it will help to attract and convince fishermen to become part of the Council process.

I. Advisory Group Report and Recommendations

1. Hawai'i Archipelago Fishery Ecosystem Plan Advisory Panel

Gil Kualii, AP vice-chair for Hawai'i, presented the AP report and recommendations.

Regarding the uku fishery stock assessment, the Hawai'i AP recommended the Council request NMFS PIFSC to engage the AP on the uku fishery stock assessment to incorporate the insight and knowledge of Hawai'i fishermen.

Kualii said that AP's concern is that the habitat range of uku is very large. It is harvested from deep to shallow with different methods such as trolling, bottomfishing, shoreline fishing and spearfishing. Before the Council sets an ACL for this fishery based on the stock assessment, the AP hopes that this type of information will be taken into consideration.

2. Scientific and Statistical Committee

Lynch presented the SSC recommendations for the Hawai'i Archipelago agenda items.

Regarding the uku bottomfish stock assessment TOR, the SSC recommended the Council request PIFSC, in collaboration with the Council staff, to organize a meeting with the *Aprion virescens* (uku) fishermen in Hawai'i to solicit local knowledge of this fishery to inform the assessment. The SSC endorsed the TOR for the main Hawaiian Islands uku

benchmark assessment and appointed David Itano as the WPSAR chair.

Further, the SSC recommended that future assessment development should incorporate the "data call out" to comply with the requirements of the Modernizing Recreational Fisheries Act.

J. Public Comment

There was no public comment.

K. Council Discussion and Action

Regarding the NMFS PIFSC stock assessment on uku, the Council **recommended NMFS PIFSC engage Hawai'i fishermen on the uku fishery stock assessment to incorporate the insight and knowledge of Hawai'i fishermen prior to draft completion and WPSAR Review. An effort will be made to include fishermen who represent the variety of methods used to take uku.**

Okano requested addition of language to indicate that an effort will be made to include fishermen that represent a variety of methods used to take uku.

Goto and Rice agreed to the amended language.

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the NMFS PIFSC stock assessment on uku, the Council **endorsed the TOR for the main Hawaiian Islands uku benchmark assessment and appointed David Itano as the WPSAR Chair.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the NMFS PIFSC stock assessment on uku, the Council **recommended future assessments development should incorporate the "data call out" to comply with the requirements of the Modernizing Recreational Fisheries Act.**

Moved by Goto; seconded by Rice.
Motion passed.

Regarding the small boat fisheries in Hawai'i, the Council **directed staff to develop a scoping document to evaluate the effectiveness of the Council's management measures in relation to the small boat pelagic fisheries and present the information at the 181st Council meeting. Further, the Council directed staff to identify and include information gaps from the existing data collection programs to support more effective fishery management.**

Moved by Goto; seconded by Rice.
Motion passed.

XVI. Administrative Matters

A. Ethics Training

Tucher presented ethical rules, standards of conduct and activities for members of the Regional Fishery Management Councils. Training is conducted annually. The rules apply primarily to Council members who have been appointed and to staff. Tucher covered the distinctions for federal employees and informed the Council that the State, Territory and ex officio members are expected to follow their own agency's ethics rules as they conduct their business with the Council. The presentation discussion and roundtable questions included topics related to lobbying, the Hatch Act, conflicts of interest, financial disclosure and rules of conduct. Tucher said members could contact the NOAA Office of General Counsel or the Ethics and Law Programs Division at Department of Commerce.

Simonds asked about the previous request to NOAA GC to resolve Soliai's recusal issue as a StarKist employee addressed at a prior Council meeting.

Tucher stated that there is a rule, and that its NMFS interpretation which NOAA GC has advised on, that, if a Council member is an employee of an organization, it imputes the full ownership interest of that organization to the Council member. NOAA GC looks for a direct link between the organization and its interest in marketing, lobbying and harvesting when making a recusal determination. This includes reviewing the organization's financial interest and the matters being addressed by the Council.

Johns said the topic was discussed in the Recusal Regulations Working Group, which decided to leave the interpretation as is. The proposed rule was issued and the Council submitted comments, but Johns does not anticipate the interpretation to change.

Tosatto said NOAA GC reviews Council member financial disclosures before each Council meeting and makes a recusal notification based on the action items and other agenda topics on which the Council may deliberate. Council members may get assistance from NOAA GC about that determination and can also recuse themselves at any time.

B. Financial Reports

Simonds reviewed the financial reports for individual funding awards, the projects under each ending in the current fiscal year and added that Council staff is available to respond to any questions on those reports. The Council issued a check for $110,000 to the USFWS under the Sustainable Fisheries Fund for the area outside of the Malaloa dock. The Council should discuss dock usage in all Territories at a later time.

C. Administrative Reports

Simonds reviewed the administrative report. There have been no staff changes, but Thomas Remington's employment with the Council will terminate at the end of the month as he is returning to California. The audit was completed prior to deadline and is available on the Department of Commerce website. The Council has submitted its five-year Administrative and Protected Species requests. The Protected Species Special Grant for $405,000 will support turtle mitigation, Mariana shark depredation and small-boat fisheries work. Council staff is working on the Congressional request for information on the Sustainable Fisheries Funds; the information is being provided to NMFS, which is working with the House Resources Committee.

Goto reported the Hawaii Longline Association had sent two funding installments of the quota allocation agreements made with CNMI and American Samoa. CNMI received the complete funds for the 2019 allocation, and American Samoa received the first half of its compensation.

D. Statement of Policies and Procedures

Simonds reported on Statement of Policies and Procedures (SOPP) changes and the CCC discussion between the Regional Councils and Headquarters, in which a directive will be reviewed and a redraft may be presented at the next CCC meeting. The Council has removed policies that belong in a separate document and has discussed keeping implementing regulations and providing comments or outlining how the Councils operate in the SOPP with a separate handbook for staff.

E. Policy on Indirect Cost

Simonds requested that Ishizaki report on this agenda item as she has been working with NOAA GC on the language.

Ishizaki said, when the Council works on projects with an academic institution, it includes an indirect cost in the budget, which is predetermined by that institution. Universities typically have a separate agreement with the federal government, but the Council does not fall under that category. The Council is working to finalize a policy to set the maximum amount that would be allowed under those project budgets. This would also include the limit in the Request for Proposals and having a published policy on the Council website that indicates a maximum amount of 15 percent that applies to all academic institutions and with language for a case-by-case review. The Council has looked into different organizations' policies and has used those examples to draft language (including what qualifies as a direct or indirect cost) for GC review.

F. Council Coordination Committee–Council Member Ongoing Development

Simonds reported on a CCC initiatives for ongoing Council member development as some of the other Regional Councils requested ongoing training sessions. The CCC is working on developing a plan for that. A document should be available for review in March.

G. Geographic Strategic Plan (Action Item)

Tosatto requested Ariel Jacobs, PIRO, to provide an update on the development of the Geographic Strategic Plan.

Jacobs reported that the NOAA Fisheries Pacific Island Joint Geographic Strategic Plan for 2020 to 2024 is one of five Regional NOAA Fisheries joint Geographic Strategic Plans that are intended to support the National NOAA Fisheries Strategic Plan at 2019 to 2022. Jacob provided meeting updates between agencies from May to August 2019 with the additional review period and solicited feedback from Headquarters. The draft plan submitted on Oct. 1, 2019, included information about regional operating agreements to the local landscape section, challenges and risks based on Council feedback and added Strategy 3.6, which is to promote strategic coordination and collaboration across the Pacific Islands Region.

Simonds said that the staffs worked well together on the development of the plan. However, some aspects are still missing that would respond to the Secretary of Commerce's Strategic Plan about helping the American economy grow and NMFS' first strategic goal pertaining to economic value of commercial and recreational fisheries. Specifically, fisheries development especially in the Territories and underutilized species are a missed focus in the region's plan. She said she will draft a memo summarizing the remaining issues in the plan. She asked for confirmation on the final plan schedule coinciding with the November CCC meeting.

Tosatto said he does not expect to get the plan back from headquarters before the start of 2020 but expected an update from NMFS leadership at the CCC meeting. Regarding fisheries development, he said he shares the interest but noted it is not a core NMFS business as the focus is now on managing and preventing overfishing pursuant to MSA mandates. He said fisheries development should be in the plan as a general activity and he could consider how resources could be carved out for that considering the dwindling set of resources against a lot of priorities.

H. Council Family Changes

Regarding the American Samoa AP, DeMello reported the Edgar Feliciano stepped down as an alternate and the Council can choose to remove him or not. For the Hawai‘i AP, the Council was provided a list of people who applied to be alternates and can choose from that list of five individuals. CNMI has requested replacing Plan Team members on the Archipelagic and Pelagic Plan Teams and the Fishery Data Collection and Research Committee as there are additional staff now available aside from Tenorio.

Sabater said Plan Team changes from PIFSC include Felipe Carvalho replacing Annie Yau as the ex officio for stock assessment and Melanie Hutchinson joining the Plan Team.

Sesepasara asked the Council to reconsider some of the American Samoa AP members as it was indicated some members had a lack of interest with the AP and did not want to be involved with the Council yet wished to remain as members. He asked the Council to consider replacing those members with fishermen from Manu‘a, which lacks representation in the Council.

DeMello said the Council can remove those members and ask to solicit for members and send solicitation to Manu‘a. The Council can then appoint two members from the existing alternate list, from Manu‘a or new applicants at the next Council meeting.

Soliai clarified that the two American Samoa AP members said they would like to retain their seats on the Council but do not want to participate in any Council activities or have anything to do with the Council.

Simonds said that the Council submitted Christinna Lutu-Sanchez’s name to be a member of the South Pacific Fisheries Commission and notified the State Department and NMFS that she was not on the Governor’s list to be appointed, so another Council member’s name will need to be submitted to be a Commissioner.

I. Meetings and Workshops

Simonds reviewed the report on upcoming meetings and workshops and requested members to contact her if there are meetings they want to participate in or if they have other meetings that are of interest and relevant to the Council’s mission.

Tosatto said that NOAA will be participating in the upcoming Aquaculture Conference in February 2020 and it would be valuable opportunity for government representatives and potentially Council members as they go through feasibility studies for each of the Territories.

Simonds said the Council will be hosting the 2020 annual CCC meeting in May at Turtle Bay and asked Council members for ideas they have for displays or accomplishments. Simonds also plans to ask NMFS about what the Council should be discussing at the meeting, such as any big issues that could be addressed with all the Councils and requested any ideas from the Council members.

J. Standing Committee Report and Recommendations

This agenda item was covered under Council Discussion and Action.

K. Public Comment

There was no public comment.

L. Council Discussion and Action

Regarding administrative matters, the Council **approved changes to the Council’s SOPP to remove descriptions of “other ad hoc committees” and “other policies and procedures” and consolidate that information into two standalone documents to be hosted on the Council’s website.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **directed staff to work with NOAA GC to finalize a policy on a standard indirect cost rate to limit proposal submittals to a maximum rate of 15 percent when responding to Council contract solicitations and to post this policy on the Council's website.**

Tosatto stated his support and said the Council should check with the Federal Program Officer and the NOAA Grants Management Division to make sure this complies broadly with the circulars the Council is bound by.

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **noted that the intent of the Geographic Strategic Plan was that it be a joint product of the Region, Science Center and Council in each region. The near-final document produced for this region is a product of NMFS PIRO and NMFS PIFSC with input provided by the Council. As the Council prepares for the Nov. 5-7, 2019, CCC meeting, it will continue to carry forward its priorities for this plan, which remain to 1) improve coordination and collaboration between the Council and NMFS in establishing management and conservation measures in a timely way; 2) support communities and development of domestic fisheries in the region; and 3) utilize MSA as the principle mechanism to mitigate fishery impacts to ESA-listed and MMPA species to ensure consideration of socioeconomic impacts.**

Simonds noted that she will be working with the Regional Administrator on these points.

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **endorsed the following changes to the AP:**

a. **Removed Edgar Feliciano as an alternate on the American Samoa AP;**

b. **Appointed Chad Pacheco and Basil Oshiro as alternates to the Hawai'i AP;**

c. **Removed Carlos Sanchez and Krista Corry from the American Samoa AP for refusing participation with the Council and directed staff to open a solicitation to fill those positions on the AP.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **endorsed the following changes to the Plan Teams:**

a. **Appointed Francisco Villagomez (CNMI DFW) and Jude Lizama (CNMI DFW) to replace Mike Tenorio and Trey Dunn, respectively on the Archipelagic Plan Team;**

b. Appointed Trey Dunn (CNMI DFW) to replace Mike Tenorio on the Pelagic Plan Team;

c. Appointed Felipe Carvalho (PIFSC) as the stock assessment ex-officio to replace Annie Yau;

d. Appointed Melanie Hutchinson (PIFSC) to the Plan Team.

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **endorsed the following changes to the Fishery Data Collection and Research Committee -Technical Committee:**

a. Appointed Jude Lizama to replace Mike Tenorio on the Data Collection subcommittee;

b. Appointed Shane Abeare to replace Trey Dunn on the Research subcommittee.

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **supported Council participation in the CCC initiative to establish the new council member training program–Council Member Ongoing Development.**

Moved by Duenas; seconded by Gourley.
Motion passed.

Regarding administrative matters, the Council **elected the following members as Council officers for 2020: Archie Soliai, chair; Howard Dunham, American Samoa vice chair; John Gourley, CNMI vice chair; Mike Duenas, Guam vice chair; Ed Watamura, Hawai‘i vice chair.**

Moved by Rice; seconded by Goto.
Motion passed.

XVII. Election of Officers

This agenda item was discussed in the previous section.

XVIII. Other Business

Soliai thanked Peau and his staff for hosting the Council meeting in his venue and wished everyone safe travels back home.

Meeting adjourned.