



WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL

**Meeting Report of the
American Samoa Archipelago Fishery Ecosystem Plan
Regional Ecosystem Advisory Committee**

Wednesday, April 21, 2010, 9:00 a.m. – 4:00 p.m.

Governor H. Rex Lee Auditorium (*Fale Laumei*)

Pago Pago, American Samoa

1. Welcome and Introduction of Members

Lauvao Stephen Haleck, chairman of the Western Pacific Regional Fishery Management Council (Council) opened the meeting and welcomed members of the Regional Ecosystem Advisory Committee (REAC) and members of the public. REAC members and other attendees introduced themselves. Mr. Haleck served as chair of the meeting.

2. Approval of Draft Agenda

The draft agenda was presented and offered to the REAC for approval. Dr. Peter Craig, of the National Park Service (NPS), stated that he spoke on behalf of himself and not for the NPS and questioned why the Council included coral reef fisheries on the agenda as the Council's jurisdiction is in federal waters, i.e. 3-200 nautical miles. The Chair reminded Dr. Craig that the Council does manage coral reef fisheries in its area of responsibility and these species are of the same stocks that are found in Territorial waters. As requested by Dr. Craig, the draft agenda was modified to include a presentation by Dr. Craig on coral reef fisheries. The agenda was then approved by the REAC.

3. Federal Fishery Management Issues

Kelly Finn (Council staff) presented information on current federal fishery management issues including annual catch limits, catch shares, offshore aquaculture plan, and fisheries disaster relief from the September 2009 tsunami. REAC discussion on these issues focused on catch shares, and whether or not there are examples of implemented catch share programs for small-island fisheries. Finn reported that she is unaware of any island-based catch share programs that would be similar to American Samoa. It was noted by Sanele Tuiteleleapaga of the Office of Samoan Affairs, that Samoans have been conducting a form of catch sharing for thousands of years, in that fishermen bring the catch to the village chief who then divides and distributes the fish amongst the village. There was support amongst the meeting participants for the Council to conduct community meetings on catch shares in American Samoa. On the issue of the fisheries disaster relief request, Ufagafa R. Tulafono stated that the Governor's office has sent the request package to the Secretary of Commerce/National Marine Fisheries Service during the week of April 5, 2010.

4. Update on Fishing in the Rose Atoll Marine National Monument

Eric Kingma (Council staff) presented the Council's recent recommendations on management measures for non-commercial fishing in the Rose Atoll Marine National Monument (Monument). The Council recommended 0-12 nautical mile closure to all fishing around the Monument, and recommended to allow subsistence, sustenance, and traditional indigenous fishing for the purposes of customary exchange in the remaining open areas of the Monument. Customary exchange was defined by the Council to mean "*the non-market exchange of marine resources between fishers and community residents for goods, services and/or social support for cultural, social, or religious reasons, and may include cost recovery through monetary reimbursements and other means for actual trip expenses (e.g ice, bait, food, fuel) that may be necessary to participate in fisheries in the Western Pacific Region.*" The Council also recommended that recreational and for hire fishing be allowed in the Monument, but not for the purposes of customary exchange. Permit and reporting requirements were also recommended by the Council for all fishing activities occurring in the Monument. Discussion by the REAC on these measures involved the rationale for establishing the 0-12 nm closure, the impact the closure may have on residents of the Manua Islands, the purpose of the three year review period for the closure, and enforcement of the Monument regulations. A comment was made by Dr. Craig that the definition of customary exchange allows for commercial fishing. Kingma explained the differences between customary exchange and commercial fishing and provided examples of other federal fishing management regulations that allow noncommercial, subsistence fishermen to be reimbursed for trip expenses. Support for the definition of customary exchange came from several meeting participants and it was noted that customary exchange fits into the principal of reciprocity, which has been practiced in Samoan culture for thousands of years. A member of the public commented that the Council should consider exempting Manua Islanders from the 0-12 nm closure because *Muliava* (Rose Atoll) is part of the Manua group according to the Deeds of Cession. It was also requested that the Council recommendations be translated into Samoa. Mr. Fini Aitaota (Council Island Coordinator) translated the recommendations during the meeting and distributed them to participants.

A related issue discussed was the Fagatele Bay National Marine Sanctuary (FBNMS) management plan review process, in which FBNMS is considering adding additional sites around Tutuila, the Manua Islands, Swains Island, as well as the Monument. The Monument Proclamation instructs NOAA's sanctuary program to investigate the potential of adding the Monument to the FBNMS management structure. Kevin Grant (FBNMS) stated that the process of deciding if these new sites should be added is ongoing, but if villages do not want these additional sites to be added to the FBNMS then the sanctuary program will not force it on them. A request was made that the Fagatele Bay National Marine Sanctuary Program translate their proposal for additional sites into Samoan.

5. Marine and Coastal Ecosystem Policy and Program Initiatives

A. Marine Spatial Planning

Kelly Finn (Council Staff) presented an overview of marine spatial planning including the U.S. Ocean Policy's Interim Framework for Effective Coastal and Marine Spatial Planning. She also presented how the Council is looking at marine spatial planning initiatives under its jurisdiction. A current application of marine spatial planning is establishing no fishing areas or conversely,

fishing only areas. In American Samoa, examples of marine spatial planning include the Council's large vessel closure around Tutuila, Manua Islands, Rose Atoll and Swains Islands which prohibits vessels over 50 ft from fishing for pelagic species within 50 nautical miles of these areas. Currently, the National Marine Fisheries Service enforces the large vessel closure primarily through the vessel monitoring system (VMS) program. Christina Sanchez raised a recent issue regarding one of her longline vessels equipped with VMS, whereby her vessel was boarded by the USCG, which gave the vessel master a ticket for the VMS not working. The VMS units used in the American Samoa longline fleet are owned and maintained by the National Marine Fisheries Service. Currently, many vessel captains and owners do not know if their VMS units are working or not. Kevin Painter (NMFS Office of Law Enforcement) acknowledged that VMS cases are evaluated on a case by case situation, but recognizing that fishermen often do not know if their VMS is working or not, a vessel would not be forced to tie up if the VMS is not working and prior to it being fixed by NMFS. It was agreed that there needs to be better communication amongst fishermen, USCG, and NMFS to avoid unnecessary ticketing of VMS violations at sea.

B. Fono Report

Representative Va'amua Henry Seseapasara provided a report of recent Fono legislation and issues on behalf of Galumalemana Bill Satele and Fuamatu J.V. Fuamatu, whom chair the Fono's Senate and House committees with oversight on fisheries and marine resources. Mr. Seseapasara reported that there are a couple of bills in the House to assist villages that were damaged by tsunami that would appropriate funds to study and rehabilitate damaged nearshore areas. Last year the Fono passed a resolution stating disappointment on the establishment of the Rose Atoll Marine National Monument which was created without public review and without consideration on the impacts to Manua Islands people. The Resolution also requested that Governor Togiola Tulafono work with the Secretaries of Commerce and Interior to change the Monument's boundaries. Governor Tulafono wrote to the Fono stating his support of the Monument designation. Mr. Seseapasara indicated that people of the Manua Islands are still looking to change designation and are considering letter to President Obama, the Secretaries of Commerce and Interior as well as the Governor. Seseapasara concluded that the Fono may assist the Manua Islands people by offering their support of that letter.

C. Agency/NGO Initiatives

The Department of Education representative, Netina Sene, stated that they used to have a program in collaboration with the Department of Marine and Wildlife Resources to take teachers to Rose Atoll to conduct research and marine education. Meeting participants supported the idea of reinitiating the program.

6. Fisheries Development

A. Fish Market and Fishermen's Cooperative

Brian Jackson (consultant to the Ala Manuaia Fishermen's Cooperative) provided an update on the status of the newly established fishermen's cooperative which was reported to have the lease to the new fish market. Mr. Jackson stated that the cooperative has filed its Articles of Incorporation and is currently seeking fishermen to join as members. Membership could provide

discounted prices on ice and fuel and other benefits to fishermen. The Cooperative is seeking membership from fishermen from Tutuila and Aunuu as well as from Manua and Swains Islands. In addition to the fish market, the Cooperative is interested in accessing the school lunch program and potentially export markets. A meeting participant cautioned against increases in commercial fishing and the impact this may have in regards to the traditional distribution of fish within the village.

B. Marine Conservation Plan Projects

Eric Kingma (Council staff) identified several fisheries development projects identified in the American Samoa Marine Conservation Plan (MCP) that the Council may provide funding support. The projects include new boat ramps on Tutuila, boat fuel storage facilities in the Manua Islands, start-up funding for the fish market and Cooperative. Kingma reported that the Council continues to be interested the issue of adequate dockage for longline vessels in Pago Pago Harbor and that recent discussions with the American Samoa government indicate that reconstruction of vessel docks damaged by the tsunami may alleviate some of the current longline vessel dockage issues. Meeting participants indicated that the boat ramp in Pago Pago is in need of repair. Kingma stated that it is the Council's understanding the Federal Emergency Management Agency is providing funds to repair existing boat ramps. In addition to sites in Leone or Asili that may be appropriate for boat ramps, the area of Lyons Park in Tafuna was identified by meeting participants as being a good location for a boat ramp.

The issue of longline incidental catch was raised and the status of fish processing facilities in American Samoa. Kingma reported that a Council/NMFS funded fish processing facility was nearly complete when it was destroyed by the tsunami, but that restoration of facility is part of the fisheries disaster relief request. A comment was made that American Samoa needs new small, safer vessels to replace alia and that the new vessels should be able to do longlining, trolling, and bottomfishing. It further stated that once the vessels are in place then fish processing infrastructure will follow.

7. Data Collection and Monitoring

A. Sea Turtle Interaction Mitigation in the Longline Fishery

Steve Beverly (Secretariat of the Pacific Community; SPC) provided an overview of a Council funded study that is to be conducted on the use of large circle hooks (size 16) in the American Samoa longline fishery. Large circle hooks have been documented to reduce the number and severity of sea turtle interactions in other longline fisheries in the Pacific while maintaining high target catch rates. The fleet currently uses size 13,14, and 15 circle hooks and a comment was made that this size hook is good for the type and size of bait used in the fishery. Mr. Beverly will be conducting trials of the study in July and August.

In his position as Master Fishermen for the SPC, Mr. Beverly is involved in several fisheries development projects in the Pacific and was requested to provide information on market available vessels that may be appropriate to replace the alia fleet. He identified a single hulled vessel such as the Yamaha banana boat is a safe alternative to an alia, and is suitable for nearshore bottomfishing and trolling. These boats are manufactured in Papua New Guinea, equipped with outboard motors, and retail for approximately \$ 15,000 (US). He also provided

examples of similar vessels used in Central and South America for mother ship operations as far offshore as 200 nautical miles. He mentioned that there are larger, more expensive vessels being built by a New Zealand company for fishermen in New Caledonia to conduct various types of fishing. He stated that this vessel could also be appropriate to replace alia, which do not have good safety records. However, these small vessels may not be appropriate to do offshore longlining fishing out to 50 nm, and that to safely do offshore longline fishing, larger vessels between 40 and 50ft should be used. Mr. Carlos Sanchez commented that a proposal was made to conduct a mothership operation in American Samoa with alia vessels equipped with longline gear. Mr. Beverly responded that he did not think mothership operations were appropriate for American Samoa waters using alia or the small vessels described above.

B. DMWR Coral Reef Ecosystem Surveys

Marlow Sabater (DMWR chief biologist) provided a presentation on the coral reef ecosystem surveys conducted by DMWR. The surveys consist of belt transects to estimate biomass which is then correlated with catch and fishing effort data. When asked about the status of coral reef fisheries in American Samoa, Mr. Sabater indicated that currently there is not as much harvesting pressure on the reefs as in years past and coral reef stocks appear healthy. Mr. Will Sword asked about the status of reef sharks and Mr. Sabater replied that he does not have historical shark abundance information, but that currently sharks are not being landed. Mr. Haleck asked whether or not a study has been done on the cannery offshore dumping at its potential to attract sharks as well as the potential impacts of the dumping has on reefs around Aunuu and Tutuila. Mr. Sabater was unaware of any such studies.

C. Presentation by Dr. Craig on Coral Reef Fisheries

As mentioned earlier, Dr. Craig asked to present on the status of coral reef fisheries in American Samoa, as a follow-up to Mr. Sabater's presentation. Although Dr. Craig, waited under to give his presentation several agenda items later, an overview of his presentation is included here as it relates to Section 7B.

Dr. Craig began his presentation by saying that there several stressors to coral reef fisheries including habitat degradation and pollution, but he focused on the issue of overfishing as the primary driver for his observed low levels of abundance of coral reef fish species around Tutuila, Aunuu, and the Manua Islands. He showed data from islands throughout the Pacific that indicate a direct negative correlation between distance from population centers and overall abundance, i.e. the more populated the island, the less fish it has. For example, the average biomass of 12 lightly fished mid-Pacific reefs is approximately 3.5 mt/hectare, but Tutuila average biomass is approximately is 0.5 mt/hectare. Dr. Craig mentioned his study in the Manua Islands which suggested that that average fishing pressure is approximately 3 people fishing/hr over a 24 hour period, which equates to approximately 5000 lb fish/mile of shoreline per year. He considers the reefs of American Samoa significantly impacted by fishing pressure, with low fish biomass and loss of apex predators. Mr. Sabater questioned the abstractness of the distance from population centers and overall abundance concept and stated that it would be more useful to include impacts habitat degradation issues associated with island populations. Dr. Craig acknowledged that currently there is a significant reduction in fishing pressure than in years past, night-time coral reef fishing still occurs and that it may take time for recovery. Mr. Haleck suggested that Dr.

Craig also considered the other impacts to coral reef fisheries such as habitat degradation and pollution and to not only put the blame on fishermen. Mr. Sabater stated that DMWR has conducted sediment studies and have found sites with very high levels of sediment that restricts coral reef coverage in the reef flat areas. Mr. Sabater also stated that some of the larger reef fish such as humphead wrasse are limited by existing habitat (restricted to lagoon areas), so one would not expect to see high levels of biomass of this species in American Samoa. Dr. Craig concluded that he believes the Council should be taking more of a leadership role in the management of coral reef fisheries in the U.S. Pacific Islands.

D. DMWR Catch Monitoring Program

Mr. Sabater provided a report on DMWR's catch monitoring program, which targets shore-based and boat-based fishermen by DMWR personnel on Tutuila and the Manua Islands. The program relies on opportunistic intercepts of fishermen, therefore not all fishing effort is reported nor captured. Catch data that is received from the interviews is expanded to provide estimated landings for the entire Territory. Such data expansions often result in high statistical variability. The program is paid for through federal funding.

E. Biosampling

Mr. Dave Hamm (NOAA Fisheries Pacific Islands Fisheries Science Center) provided a report on the proposed biosampling program in American Samoa. Biosampling is the extraction of fish parts for use in studies to understand fish life history and genetics, which are important for conducting accurate stock assessments. NOAA Fisheries Pacific Islands Fisheries Science Center is conducting similar programs in Hawaii and the Marianas Archipelago.

F. Fishbox.org

Josh DeMello (Council staff) presented the Council's plan to engage fishing communities. One aspect of that plan is a website called Fishbox.org which provides useful links to fishermen, an electronic catch log database, and a forum for fishermen to exchange data and information with scientists. Fishbox.org includes a Google Earth feature that allows one to select American Samoa and mark fish catch location. The representative from the Department of Parks and Recreation asked if Fishbox.org will facilitate the sharing of information such as traditional knowledge across locations, e.g. between Hawaii and American Samoa. DeMello responded that there is potential for that, but that the Council has another website, ahamoku.org, that provides a forum on traditional ecological knowledge.

H. 2010/2011 Cooperative Research Priorities and Projects

Kelly Finn (Council staff) provided an overview of past cooperative research priorities and projects related to American Samoa. Past recommendations include the currently funded study to evaluate the effectiveness of large circle hooks in catching albacore tuna in the American Samoa longline fishery. A past recommendation that remains relevant is the tagging of migratory pelagic species in the American Samoa to determine resident times and as well as estimate local abundance.

8. Ecosystem Indicators

A. Physical/ Biological/Socioeconomic

Chairman Haleck asked members of the REAC and public if they have noticed any recent changes in the ecosystem that may warrant management response. The identification of ecosystem indicators would further implement ecosystem-based fisheries management under the American Samoa Archipelago Fishery Ecosystem Plan. No ecosystem indicators were identified at this time.

B. Update on Lunar Calendar

Okenaisa Fau'olo (American Samoa Community College) provided an update on the American Samoa lunar calendar that was developed through a partnership with the Council. Part of the project included a survey of community members on their perception of the lunar calendar. They interviewed 204 men and 300 women, of which most knew what a lunar calendar was. Overall, there was wide support for lunar calendars as well as for further development of the relationship between lunar phases and traditional fisheries management and practices. A comment was made that the calendar should provide interpretations of some of the Samoan phrases and legends used because they might be unfamiliar to younger generations. There was support for a reprint of the calendar because it was so well received and its importance in reminding people in the long-held significance of fishing in the Samoan culture. Council staff circulated a sign-up sheet for the REAC and members to receive the lunar calendar.

9. Review of Previous Recommendations

Eric Kingma (Council staff) provided a review and status update on REAC recommendations made in 2009.

10. Public Comments

The Chair asked for any additional public comment. None was provided.

11. REAC Discussion and Recommendations

The REAC recommended:

- 1) That all Council documents used in meetings in American Samoa be translated into Samoan.
- 2) That the Fagatele Bay National Marine Sanctuary Program translate their proposal for additional sites into Samoan.
- 3) That the Council reconsider the 0-12 nm area closed to fishing around Rose Atoll Marine National Monument to reduce impacts on Manua Island residents.

- 4) That the Federal government provide assistance using Monument and other Federal funding sources to the Department of Education and the Department of Marine and Wildlife Resources to reinstitute marine resource education and expeditions to Rose Atoll and various locations in the archipelago.
- 5) That NOAA and USCG work together in regards to VMS enforcement so that fishermen are not cited if their VMS is not working without their knowledge.
- 6) That the Lyons Park area in Tafuna be considered as a site for a new boat ramp.
- 7) That the American Samoa lunar calendar be reprinted and distributed widely and that the calendar include explanations of the Samoan words and legends used.
- 8) That the DMWR and EPA conduct a study on the potential attraction of sharks to cannery sludge dump site as well as investigation potential impacts of the sludge on coral reefs around Aunuu and the northeast side of Tutuila.
- 9) That the Council take a leadership role in initiatives to restore coral reef stocks in island areas of the Western Pacific Region.