



**WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL**

**American Samoa Fishery Ecosystem Plan
Report of the Regional Ecosystem Advisory Committee
Fale Laumei, Utulei, American Samoa
March 4, 2011**

1. Welcome and Introductions

Council Chairman Duenas provided the opening remarks meeting, describing why the Council was in American Samoa, what the Council does, and the purpose of the REAC to address ecosystem issues. He further stated that there are many issues the Council is considering that affect American Samoa communities and requested the REAC to consider these issues as well. Around 20 people attended the meeting, including representatives from the Office of Samoan Affairs, Dept. of Marine and Wildlife Resources, Dept. of Parks and Recreation, Sea Grant, members of the Fono representatives, Fagatele Bay National Marine Sanctuary, U.S. Fish and Wildlife Service, commercial fishermen, Council members, and members of the public.

2. Status of the 2010 REAC Recommendations

Fini Aitaoto, Council's American Samoa coordinator, provided the status of the REAC's 2010 recommendations.

Regarding the recommendation to translate all documents into Samoan, the Council has begun effort, but it does take time and resources, but will continue this effort into the future.

Regarding the recommendation that Fagatele Bay NMS program translate their proposal for additional sites into Samoan, translators can be contracted to do this.

Regarding the recommendation that the Council consider a 0-12 nm closed area around Rose Atoll MNM to reduce impacts on the Manua Island residents, the Council took final action to recommend prohibiting fishing for 0-12 nm around Rose Atoll, the Council is working with NMFS to formally transmit the document, but that is under review at NMFS headquarters.

Regarding the recommendation that the Federal government provide assistance using Monument and other Federal funding sources to the DOE and DMWR to reinstitute marine resource education and expeditions to Rose Atoll and other locations, NOAA research vessels occasionally invite local residents and students on research trips and there are also trips to Rose Atoll by DMWR and the NWR biologists that teachers and students may be able to join.

Regarding the recommendation that NOAA and the USCG work together with respect to VMS enforcement so fishermen are not cited if their VMS is not working without their knowledge, the Council wrote a letter to NOAA and the USCG to request that they work with the longline fishermen to resolve any VMS issues and establish better lines of communication between fishermen and enforcement agencies.

Regarding the proposed boat ramp at Lyon's Park and Leone, DMWR, with funding assistance from the Council, is planning to build a ramp at Lyon's Park and Fagaalu.

Regarding the request that the American Samoa lunar calendar be reprinted and widely distributed and include explanations of Samoan words and legends, the 2011 lunar calendar has been printed and distributed to the communities. Additional information gathered will be included in next year's calendar.

Regarding the request that DMWR and EPA conduct a study on the potential attraction of sharks to cannery sludge and the impacts of sludge on coral reefs around Au'nuu and the northeast side of Tutuila, DMWR and EPA have to conduct such a study.

Regarding the request that the Council take a leadership role in initiatives to restore coral reef stocks under Council jurisdiction, the Council has provided assistance for coral-related projects such as funding two boats for the MPA program and providing summer school courses for the high school. Possible funding may be available from the Coral Reef Conservation Program, and NOAA is funding DMWR's coral reef monitoring program.

Discussion

Rep. Henry Sesseparasara, speaking on behalf of the Manua people, supported the recommendation of the Council to reduce the closure from 50 nm to 12 nm. It was clarified that 0-12 nm was recommended as no-take area, while 12-50 allows non-commercial fishing, such as subsistence, traditional indigenous fishing and recreational fishing. It was also clarified, in response to a question about whether the Council has defined traditional indigenous fishing, that the Council has grouped traditional indigenous fishing into non-commercial fishing to avoid needing to address eligibility issues.

With respect to the translation of documents into Samoan, it was commented that the documents may be translated already, but they also need to be made available to the chiefs and mayors who meet every two weeks.

3. Coastal and Marine Spatial Planning

a) Overview of Coastal and Marine Spatial Planning

Roy Morioka, Council contractor, provided a presentation on coastal and marine spatial planning (CMSP), including that Obama signed an Executive Order on July 19, 2010, to establish the National Ocean Council and adopting the U.S. Interagency Ocean Policy Taskforce Framework for Effective Coastal and Marine Spatial Planning (Framework). The goal of CMSP is to protect, maintain, and restore health and biodiversity of ocean coastal ecosystems and resources, but it is a policy, not a mandate, and the Council does address these issues under its statutory obligations and fishery ecosystem plans. He described Council actions to date related to the new CMSP initiatives, including a recently held fishers forum in Honolulu. At the national level, the Council is waiting to see what its role will be.

b) Report on the American Samoa Climate Change Workshop

The MPA coordinator for the coral reef advisory group (CRAG), Alice Lawrence, provided a summary of summit held in February 2011 titled “Making Climate Change Local and Making Communities in the Pacific Resilient.” There was a good turnout from countries and territories around the Pacific. Presentations were provided from climate change experts in the Pacific Region. Students presented posters, views, and poems. Day 2 included four working groups that discussed coral reef ecosystems, human health, human infrastructure, and other issues. The groups talked about current management tools, management issues, and made recommendations for adaptation in American Samoa. The Governor of American Samoa has issued an Executive Order to establish a climate change working group that will make an action plan and associated community guidebook.

Discussion

A REAC member discussed concern voiced by a University of Hawaii presenter at the summit that there is a lack of models available at the local level upon which climate change plans could be based. There are many models at the Federal and national level, but there is a paucity of models available locally. Scientists have since offered one model and are now looking for two more. He stressed the importance of having local people doing the work using local information to determine what American Samoa residents can do for themselves. For example, one village has a curfew on fishing that is self-enforced, which is information that should be included in planning for local preservation and sustainability. Students must be trained and he recommended that local capacity building include scientific modeling at the local level using local people with local knowledge. Lawrence agreed that local capacity needs to be developed and told the REAC that NOAA will be doing sea level rise modeling following by subsequent community meetings to determine response plans.

Another REAC member recommended getting curriculum to schools about these issues because currently, students are very aware of environmental disasters happening around them, such as tsunamis and hurricanes. Students need to understand climate change, including potential impacts to American Samoa. Lawrence replied that there is a climate change curriculum being developed by CRAG, but that the findings of the CRAG curriculum subgroup need to be implemented so that students can learn about causes of these natural disasters.

Manny Duenas, Council chair, commented to the REAC that a caveat to capacity building is that it is a local endeavor. The American Samoa community should focus on getting experts locally, instead of importing them from off island. However, that being said, we need to realize that climate change is global, and must be incorporated into fishery management knowledge and actions.

Kitty Simonds, Council Executive Director, stated that the Council is planning to conduct a climate change workshop in coordination with the National Marine Sanctuaries Program in Hawaii based on the one she attended in American Samoa.

c) Fagatele Bay National Marine Sanctuary Update

Gene Brighthouse, FBNMS Superintendent and Deputy Superintendent, Kevin Grant, presented the upcoming management plan process for FBNMS, which is being updated for the first time since its establishment in 1996. The goal is to create the plan with the people, by the people, for

the people, so the NMS employees have gone to villages to hold various stakeholder meetings and meet with chiefs. The revision of the management plan will allow managers to address new issues and opportunities, provide multiple avenues for public input, reflect state of the art practices in approaches to marine management, ensure limited resources are focused on as priorities, and reflect the strategic direction of the Office of National Marine Sanctuaries. Their hope is that the plan reflects locally perceived threats and issues, as well as community goals in all individual units of the Sanctuary.

The proposed sites included in the sanctuary expansion were explained; the sites were recommended by the public and confirmed by a site selection working group. One area will be zoned no-take off of Au'nuu, while others will be designated multiple-use. The proposed sites include items such as hotspots of coral cover and high fish biodiversity and density. An area less than one square mile off Tau'u is proposed because of the extremely large *Porites* coral colonies. An area off Swains is proposed because Swains is isolated from the rest of the archipelago due to the south equatorial current, thus its fish and coral communities would be likely slow to recover from a disaster; the area also has unique coral and fish communities. Rose Atoll has a unique hotspot for fish and coral biomass. Also, because it is upstream from much of the rest of the archipelago, it would potentially be a source of species in the main part of the archipelago should a disaster occur. The representative from the Sanctuary office emphasized that for Rose Atoll, they are proposing no fishing regulations at this time because they are waiting for the Council's proposed fishing regulations.

Discussion

The REAC representative from the Nation Park Service asked about contiguous boundaries with the National Park for a proposed sanctuary site, or if there would be overlap. The response was that many alternatives were analyzed as required by NEPA, so overlay was analyzed as well as contiguous boundaries.

A REAC representative from Manua argued that the most important food item for them is fish, thus fishing restrictions will not be supported. Therefore the sanctuary program will need to consult the community. The response from the Sanctuary representative was that while the communities were already consulted, they did not feel comfortable or ready to comment because there was no final document prepared. After the draft is finalized, the Sanctuary program will go back the communities to explain the alternatives and hear feedback.

In response to the question about the Sanctuary's recommendation for fishing regulations on Tau'u, the Sanctuary representative replied that the proposed regulations include prohibition of seine, trammel, and fixed nets, scuba-assisted spear fishing, and explosives and electrical devices. Additionally, proposed regulations include prohibition on fishing, damage, etc of live rock, giant clams, crown of thorns, all species of live shell (except one), and coral. Hook and line and spear fishing are still permissible.

A REAC representative commented that because three of the five sites mentioned are on Tutuila, the community should understand that the proposed sites are federal, not local, therefore there is a difference in enforcement and other issues. The community should also be well-informed to understand the effects of the proposed regulations. One issue is that because when sites become

federal, many times they become off-limits to the local community, which results in children losing parts of their heritage.

The Council Chairman advised the NMFS has the ability to track foreign vessels on VMS which may reduce potential for vessel groundings.

The NMS representative described, upon request, the process that reduced the number of proposed areas down from nine to five, which included establishment of an advisory council with interested citizens as well as other people. They used criteria listed within the National Marine Sanctuary Act to rank the nine sites, which included closeness to other proposed areas, special habitat and species, and if it could be a good research area.

The NMS representative was asked what the benefits of the additional sites would be for the people of American Samoa. She replied that it is a recognition of the resources available to the residents of American Samoa, as well as provides resource protection along with compatible uses. She also argued that it is good to spotlight places like these at the national and global level for economic purposes to promote local enterprises at the local level. It will allow traditional people to be a part of sustainability. The NMS representative stated that the NMS program may provide a hyperbaric chamber – as it can help researchers, tourists, as well as help hospitals treat medical illnesses. Bigger picture, it can help bring in dive tourism by providing a security blanket against the safety issues associated with diving.

A REAC representative from the Office of Samoan Affairs complimented the Sanctuary program for their use of the Office of Samoan Affairs and that is the key that opens the lock to all 56 villages.

d) Rose Atoll Marine National Monument Update

U.S. Fish and Wildlife manager of Rose Atoll, Frank Milton, provided an update on the management of Rose Atoll. Primarily that the USFWS is working on a comprehensive plan for the Rose Atoll National Wildlife Refuge, which extends to the low water mark. After finalizing the refuge plan, the office will work to develop the whole Monument plan. The NWR is developing goals for the refuge that includes education and outreach, as well as heritage documentation.

The USFWS is planning a trip to the Rose Atoll NWR that will include several chiefs, three teachers, and six students in late March 2011. They will also bring a Samoan studies group to produce a report about history of the area. People will be taken to shore in stages to prevent all from being on land at the same time to reduce environmental impact. They will stop at the Manua Islands to get input from the local villages about options being currently worked on and those they would like considered in the future.

Discussion

The NWR representative was asked if any of the students will be from Ofu and Tau'u; it was confirmed that all students will be from Manua.

A REAC representative cautioned the NWR representative to be very careful of the birds and turtles when going to shore at Rose Atoll. Another REAC representative echoed those sentiments because it can also be dangerous to the people when transiting the lagoon channel and while anchoring in the lagoon due to ebb and flood tidal movements.

e) Impact of Marine Protected Areas on the Fishermen on Guam

Charles Ka'ai'ai, Council staff, described a study done that looked at whether the loss of inshore fishing grounds due to creation MPAs (10% of coastline) along with defacto MPAs due to pollution and the military has put fishermen at greater drowning risk. The drowning risk has potentially increased due to fishermen displacement to areas they are less familiar with or that may be more dangerous. The study assessed three study groups of victims who died while fishing: all residents, all Chamorros, and all non-Chamorros. The study also assessed drowning death by area.

Council Chairman Duenas stated that fishermen of Guam presented their views to the Council, who initiated the project after their concerns fell on deaf ears locally. MPAs were created to maintain the sustainability of the resources for tourism, but arguably the people of Guam were forgotten – primary fishing grounds were turned into MPAs in which fishing types and styles were restricted. Now only fishing from shore is permitted, which restricts access to previous training grounds for more dangerous fishing areas. Thus, new local fishermen who fish for subsistence reasons are drowning because they are unable to train in the safer areas before heading to the more dangerous areas outside MPAs. He stated that preservation and protection are all for naught if youngsters cannot learn safe fishing techniques.

Discussion

It was asked if a follow-up studies will be done to address questions that arose from the preliminary study and if additional traditional knowledge could help enhance the report. Additionally, it was asked if there was any way other areas in the Pacific could utilize the safety lessons learned to enhance management. Council staff responded saying that this report points out the need for more studies about drowning rates in the Pacific territories. Further, in Hawaii, drowning deaths have not been disaggregated into native and non-native communities.

Another Council staff member commented that they have been working with researchers to identify missing data that could have been added, such as aerial surveys, to inform the studies. Access to police records about drownings would also be helpful.

Council staff was thanked because assessing side effects of MPAs, such as safety concerns related to displaced fishermen, has not previously been considered. They were asked if the amount of drowning deaths were related to an increase in the number of fishermen, but it seems unrelated because the numbers of fishermen have decreased by 75% over the last 30 years.

An audience member asked if MPAs were being established to protect fish or to protect fishermen from drowning. It was clarified that they were established for resource protection.

A REAC member asked if protective measures, such as angel bells, are utilized on Guam. The Council Chairman responded that it is difficult to monitor everyone's fishing activities, and 2 drowning deaths last year happened within 200 feet of the road.

A REAC member stated that there are experts in American Samoa villages who know the currents, cross currents, and undercurrents, and warn people about where to not go. However, the population of these knowledgeable people is decreasing as the younger people drift away from knowledge of their environment.

f) Pago Pago Coastal and Marine Spatial Planning Sample Site

Eric Kingma, Council staff, provided an overview of why Pago Pago Harbor could be good CMSP sample site and asked the REAC if there was value in using it to address current issues.

Discussion

One REAC representative commented that there is a great need for docking spaces in the harbor because of the longline fleet and other fishing vessels, as well as yachts and sailboats. The natural harbor in Tutuila is wonderful but not big enough. He asked if the Council could do a study to compile all the different uses of the harbor.

4. Community Development

a) American Samoa Fishery Development

Ueta Faasili, Council contractor, described four fisheries development projects that include Tutuila boat ramps, Manua Islands fuel storage, Manua Islands ice making facilities, and a fish market and fishermen's cooperative. Work started in 2010. With regards to the Tutuila boat ramps, funds will be used to assist DMWR in the construction of boat ramps in Fagaalu Park and Lyons Park. Multiple permits were acquired for the construction of the boat ramps including a land use permit, certification from the EPA, an ACE permit, and more. Bids are now being solicited for construction.

Faasili also provided an update on the development of fuel storage and icemaker facilities. Project site visits are completed to pinpoint possible locations for these facilities, so engineers could understand the locations' features, and to collect basic data that helps determine various dimensions of the project. Permits are pending, as well as solicitation of bids. With respect to the icemaker facility, the contractor will purchase the equipment and install it, while for the fuel storage, the DMWR will purchase the fuel tanks and equipment as well as do the construction.

With respect to the fish Market and Fishermen's Coop, the co-op is formally registered but not active. For the fish market, there are plans to relocate the cement benches, office, chilling room, and ice storage, as well as to modify waste water flow. The plan has been approved by the Fagatogo Market Board of Directors and has been forwarded to the DPW for planning.

Discussion

It was asked if there has been any development projects or plans for the two boat ramps, Pago Pago boat ramp and Fagasao boat ramps, which were damaged during the tsunami and were heavily used. The reply was that the boat ramp at Fagasao is completed and the other boat ramp is being worked on for siting.

There was a question about whether there are plans in the works for storage space for fish at the market. The reply was that the request could be included in the next phase, as well as cold storage space at the Fagatogo market. There was a question about cold storage at Swains, and the reply was that the Council would need to weigh in on that – Manua and Tutuila were prioritized last year.

It was suggested that the location of the fuel tanks at Ta'u wharf could be more conveniently located for alia because currently they are five miles away from the harbor.

b) Status of Disaster Relief Package for the 2009 Tsunami

Eric Kingma reported that the government of American Samoa submitted a disaster relief request for \$5 million in September 2010, nearly a year after the tsunami. The Council assisted DMWR in developing a survey for fishermen to filled out regarding damage to vessels, gear, facilities, equipment, and the data compiled formed the basis of the government's request. The Council was copied last week on a letter to Governor Tulafono from NMFS that stated the request has been received and further information is needed to characterize specific losses incurred, including the value of fishery landings, the value of the vessels, and other items.

Discussion

There will be more discussion about the relief package at the Council meeting next week, as well as consultation with DMWR. The representative from PIRO confirmed that no doubt a disaster occurred, but that NMFS has to follow a process.

c) Status of the Tuna Canneries

Craig Gilbert, from Tri Marine, described the ongoing work to transfer the Chicken of the Sea cannery into a facility that will produced canned tuna as well as conduct fresh fish export. A longterm solution is being looked for with the goal of bringing the ability to Samoa to package high quality fresh fish that would benefit the local fishing community.

Discussion

In response to a question about the plans for producing fish meal, the Tri Marine representative replied that when canning begins, the company will be looking for things to do with byproducts. They're working with local agencies, EPA, and others to minimize local impact. The question was asked because of aquaculture plans – byproduct may be good for fish meal.

A REAC member commented that American Samoa has a small alia fleet, but Tri Marine is a global corporation. Because the facility is going to open an export market, the REAC member wondered if Tri Marine would finance a project to allow local fishermen to purchase boats up to 50' so they could target fish for the market, particularly because the tsunami destroyed all the alias. He reminded everyone that Starkist provided the ability to fish on credit – a vessel pays back the loan through part of each catch. The response was that Tri Marine is developing fish packaging and they are interested in working with the fishermen to understand their needs because their interest is in a longterm sustainable fishery.

d) Marine Conservation Plan

Alofa Tuamu, Deputy Director of DMWR, provided the importance of the MCP to the Territory. Eric Kingma provided an overview of the projects and objectives in the current MCP, which expires in August 2012. The objectives of the MCP include promoting responsible domestic fisheries development, an ecosystem approach to fishery management, recognizing the importance of island culture, and more. The next steps are for the REAC members to work with the public and DMWR to determine additional or revised projects and objectives that will then be considered by the Council and submitted to the Secretary of Commerce for approval.

5. Upcoming Council Action Items

a) Pelagic Action Items

1) Vessel Area Closure

Paul Dalzell, Council staff, presented alternatives in the draft amendment considering potential changes to the large vessel prohibited vessel area for vessels greater than 50 ft in length. He also discussed the effects on large longline fishing vessels from the establishment of Rose Atoll MNM incongruent boundaries with the large vessel prohibited area, which reduced the area available to longline fishermen by approximately 1,809 sq nm.

Discussion

A REAC member commented that if it is not broken, it should not be fixed – he argued that there is no issue currently. He said it was unclear why the amendment focuses on the alia fleet, while ignoring the larger vessels. According to the REAC member, many people quit the alia fleet was because albacore catch was low. With Tri Marine now entering the area market, there is potential for the fleet to expand and provide fresh fish. He commented that the biggest stumbling block for new boats is financing – disaster funds would be great if it could fund even one vessel big enough to fish within 50 miles of our closure.

A REAC member, who is the only surviving longline alia fisherman on the island, commented that the 50 nm closure is necessary for the alia fleet fishermen of American Samoa.

A REAC member commented that there is no wharf in Swains and boats are at the mercy of the navigational skills of the captains. He asked why tenders could not be used in American Samoa that would take catch from the alia and other vessels from Swains to Tri Marine or Starkist. He argued that the 50 nm closure should be left around Swains and the incongruity in the south should be fixed.

A representative from Swains stated that one of the most discouraging statements heard about Swains is that no one lives there. He explained the agreements between American Samoa and Swains through the years, as well as the coconut farms, and added that Swains brought a lot of additional amount of EEZ for the U.S. He argued that they get a small amount of the American Samoa budget, therefore the Council should look at Swain's history and help develop their fishery resources.

2) Potential Modifications of the American Samoa Limited Entry Program

Dalzell described the draft amendment looking at potential modifications to the limited entry permit program. Initial permits were issued in 2005. He described the permit upgrades applied

for and current amount of permits issued per class. The purpose and need of the draft amendment is to reduce programmatic barriers that could be hindering active participation in the small vessel fleet (class A and B), which is believed to provide socio-cultural and economic benefits to the communities of American Samoa and provide pathways for participation in the fishery by indigenous American Samoans. Other potential barriers include minimum landing requirements, and the complexity of limited entry program. The Council will be selecting preferred alternatives regarding vessel size class, permit eligibility, and minimum landing requirements.

There were no questions or comments.

Recommendations

1) Regarding climate change education and outreach, the REAC:

Recommends that the American Samoa coral reef advisory group introduce the recently developed climate change curriculum in American Samoa schools.

2) Regarding building community capacity related to climate change impacts, the REAC:

Recommends that NOAA, USFWS, and the American Samoa government's coral reef advisory group not solely focus on education and outreach, but also involve local community members to monitor areas, gather information, and help create ecosystem models based on the American Samoa environment.

3) Regarding monitoring foreign vessels that may travel through the US EEZ around American Samoa and close to areas with sensitive habitat such as Rose Atoll and Swains Island, the REAC:

Recommends that NOAA request VMS information from the Western and Central Pacific Fisheries Commission for all vessels that enter the US EEZ around American Samoa and monitor vessels that are transiting close to such areas.

4) Regarding impacts related to fishermen safety from no-take MPAs in American Samoa, the REAC:

Recommends that the Fagatele Bay National Marine Sanctuary, DMWR, USFWS, evaluate the potential safety issues of implementing a no-take MPAs in American Samoa.

5) Regarding coastal and marine spatial planning, the REAC:

Recommends the Council work with the Dept. of Marine and Wildlife Resources, Port Authority, Dept. of Commerce, Office of Samoan Affairs, Environmental Protection Agency and other partners to hold a workshop this year to assess the different uses and users of Pago Pago Harbor and to initiate a CSMP process to help address some of the existing conditions within the harbor.

6) Regarding the revitalization of the small vessel pelagic fleet, the REAC:

Recommends the Council Directs staff to work with Tri Marine, American Samoa Community College, and fishermen from Tutuila and Manua and Swains Islands to develop a fisheries training program that includes vessel financing, vessel safety, fishing techniques, and fish handling.

7) Regarding the high energy costs for American Samoa residents, businesses, and canning industry, the REAC:

Recommends that the American Samoa Power Authority work to reduce energy costs and improve energy production efficiency in American Samoa that will benefit American Samoa residents, businesses, and help assure the continuity of the canneries.

8) Regarding potential modifications to the large vessel prohibited, the REAC:

Does not support making any changing to the large vessel prohibited area around Tutuila and Manua Islands nor any change to the large vessel prohibited area and Swains Island.

9) Regarding disaster relief funding from impacts of September 29, 2009 tsunami, the REAC:

Recommends Council urge NMFS to expedite their information gathering process and to secure funding in 2011 given the current opportunities for fisheries development related to Tri Marine's plans for fresh fish export and the Council's funding support of MCP projects.