



## **Report of the Mariana Archipelago Fishery Ecosystem Advisory Panels and Pacific Pelagic Advisory Panels Meeting**

Saturday, January 22, 2011

Guam Hilton

9:00 a.m. – 5:00 p.m.

### **1. Welcome and Introductions**

AP members in attendance were: Ray Mafnas, Richard Seman, Dave Lewis, George Moses, Mike Fleming, John Castro, Arnold Palacios, Stan Taisacan, Pedro Itibus, Ambrose Ogumoro, Lino Olopai, Joe Itibus, Bill Bradford, John Gourley, Cliff Kyota, Vic Artero, Gary Sword, Ken Borja, James Borja, Stephen Meno, Pete Gervacio, Tom Camacho, Michael Duenas, Ian Sanchez, Dale Alvarez, Cecilio Raiukiulipiy (Co-Chair), Jesse Rosario (Co-Chair), and Felix Reyes.

Others in attendance: Richard Denson (UOG water institute), Daviana McGregor (University of Hawaii), Eric Cruz (JIMAR), Mike Tenorio (CNMI DFW), Clay Tam (PIFG), Marianne Teregeyo (CNMI DFW), John Taitano (Guam Fisherman), Justin Hospital (NMFS PIFSC), Jack Kittinger (Impact Assessment), Andrew Torres (NMFS PIRO), Kendall Wong (PIFG), and Selaina Taumavave (American Samoa DMWR).

Council staff in attendance included Mark Mitsuyasu, Charles Kaaiai, and Joshua DeMello.

### **2. Status of 2010 Meeting Recommendations**

Rosario reviewed the recommendations from the 2010 AP Meeting. There were no comments.

### **3. Coastal Marine Spatial Planning**

DeMello presented an overview of Coastal Marine Spatial Planning, its definitions, purpose, and where the Council is headed with this initiative. There were no comments.

#### **A. Shoreline access restrictions in relation to fishermen deaths**

Kaaiai presented a summary of the NIOSH report submitted to the Council regarding the relationship between shoreline access restrictions and fishermen's deaths.

Seman commented that traditional grounds have more fishermen than non-traditional grounds and wonders how many near deaths have ever been recorded.

Mafnas commented that MPAs don't include traditional values. He noted that the managers need to look into the process to ensure that tradition and culture is included and the safety of human life is considered in the development of MPAs

Duenas noted that Federal funding is going towards the development of MPAs. He suggested that to mitigate deaths due to the MPAs, Federal dollars should be put into fire/rescue to minimize deaths on the East side of Guam.

Rosario commented that the lack of enforcement and regulatory requirement on the use of jet ski operations has caused personal injury and in some cases near-death situations. The use of jet

skis on near-shore waters need to be regulated and enforcement of jet ski operations has to be funded to protect the other users, fishermen, beach-goers, swimmers, etc.

### **B. Military build-up impacts to Marianas fishing community**

Joint Guam Program Office declined the Council's invitation to present at the meeting.

### **C. Review of the Kahoolawe Transition**

Dr. Davianna Pomaikai McGregor presented on the transition of Kahoolawe from the military to the Hawaiians. It stemmed from challenging the military which coincided with the Hawaiians beginning to assert their rights (Hawaiian renaissance). She said that Hawaiians were not thriving under military rule so in 1976 they landed on Kahoolawe (utilizing the fishermen who were allowed to fish there twice a month). They looked at the different laws to challenge the military control of the islands and looked at EPA violations which got them a consent decree which allowed 10 days a month for Hawaiian cultural practices; the decree also called for clean-up of the island and reforestation (joint use during the 80s). Then President H.W. Bush announced the bombing of Kahoolawe would stop through EO on Oct 22, 1990. She also showed pictures with Ko'a marking fishing grounds in the ocean.

Rosario asked if there have been studies at Kahoolawe to determine if there is any toxicity to the fish there. McGregor said no, but that they should look at doing those types of study also.

McGregor also showed the Kahoolawe Island Reserve Commission access management plan and explained that there is a fishing registration policy. She noted that the 30 fathom contour out to 2 miles is open twice a month and that inside the 30 fathom contour is a no-take area. She said that indigenous rights would be recognized through this fishing registration policy but no one has applied for an indigenous permit.

Kaai'ai explained why the Council brought McGregor to Guam to present this information and described its relevance to military presence in the Marianas (e.g. FDM).

Seman asked what was the one greatest point from the Hawaiian people that got the attention of the Federal government to accept the plea? McGregor answered that it was all part of a larger renaissance happening and not a single Hawaiian's backyard, so it's a group of people from all over-Aloha 'Āina was there slogan- and people started to awaken to the point.

### **D. Report on REAC outcomes**

Rosario reviewed the 2011 Guam REAC meeting, its purpose, and its results. He also explained the recommendations from the meeting. There were no comments.

### **E. Discussion and Recommendations**

The AP Recommends the Council, in the development of marine spatial planning, ensure marine spatial planning considers the safety of human life.

The AP recommends the Council request the Federal government to mitigate the deaths of fishermen on Guam by providing funding for additional fire/rescue units on the East Side of Guam.

## **4. Ecosystem Monitoring and Community Issues**

### **A. Mariana Programs and Projects**

### **i. Pollution in Saipan Lagoon**

Gary Denton (Water and Environmental Research Institute of the Western Pacific, UOG) presented on the pollution and monitoring and assessment program in Saipan Lagoon: Arsenic, Mercury and PCBs in Popular Food Fish. He said that the study came about from concerns of pollution from Puerto Rico Dump. The CNMI DFW also helped out (Tenorio and Trianni) with the project in Tanapag Lagoon. This area was selected because it was the most impacted of the three portions of Saipan lagoon-heavy industry-port, fuel tank farm, scrap metal, garment factories, etc., would discharge unknown chemicals into natural drain disposal networks that end up in the immediate coastal environment. The findings of the research reported that the fish that they tested were safe to eat and that the values of arsenic, mercury and PCBs were too low to affect humans. However, the squirrelfishes that were tested may be right on the edge and should probably be looked at further. He also noted that a new article in Micronesian Fisheries he wrote explains why it safe to eat swordfish. His conclusion is that the majority of coastal fish in Saipan are low in mercury, PCBs, and arsenic and that the report is available on the web at [www.weriguam.org](http://www.weriguam.org) (report #130).

Duenas asked if the mercury tested was from the environment or methylmercury? Denton replied that the range of natural concentration in fish is usually two orders of magnitudes and most fell within those area, naturally get higher concentrations in longer living species. He also explained selenium's effect on mercury, in being able to counter the effects of mercury in the proper ratios.

Sanchez asked if there were any studies done on Guam? Denton said that in the late 90s early 2000 they did a study of the 4 harbor areas in Guam and the reports are on the website.

Camacho asked if there were any studies in Agana or Merizo? Denton said that there are studies going on for PCBs in Merizo and that the Agana boat basin concerns are probably more disease kind of stuff instead of PCBs. He noted that Caffeine is toxic at a particular level but we still drink coffee and soda and chocolate and that Mercury should be treated the same way.

Olopai asked if any studies were being done in areas on the Eastern side of Saipan where they were exploding bombs? Denton said that they have a grant proposal in to do that next year-look at defense sites and brown field sites and would coordinate with him to get exact sites. He also noted that there were bivalves on the beach there that may have 10x more lead than recommended. He also said that Micro beach had problems because of the contamination of the medical incineration plant, but levels have returned to normal since its closure.

### **ii. Saipan Lagoon Net Fishing Data Analysis**

Tenorio presented on the evaluation of the net use restrictions in Saipan Lagoon. He went over observed trends done by UOG and DFW in 79 and 96 which showed that they had more fish in 79, but also a smaller population. Those studies also noted other trends like fish caught in northern islands were larger than those in Saipan. He reviewed other threats to fishery resources-sewage, runoff, dredging, invasive species, recreational uses, new technologies (GPS, plastics, motors) that increase fishing efficiency/power, and the demand for reef fish. All of these issues affect the fishery in some way and that the net regulations were put in place due to the trends seen and those concerns. He noted that there is very little published literature pertaining to the effectiveness of net restrictions because it is rarely accomplished outside of no-take MPAs (assessing the effectiveness of gill net regulations). He noted that the net restrictions were put into place in 2003 and that the restrictions presented an opportunity to study the change (fishery

independent census) to collect baseline information and it was done at the implementation of the net ban in 2004 (using stratified belt and SPC surveys). The survey was replicated in 2007 to see if there was a change due to the net restrictions. In general they observed more fish in the 2007 survey, with nearly double the biomass. They also noted key habitat types contained distinctly different fish population in 07 than in 04. The recommendations made from this research from DFW was to maintain the current gear restriction regulation even though there was an increase for certain families of fish, but it is unknown how much more it can increase or if it will decrease. There were also recommendations to continue the research and assessments.

Moses said that it was a very positive survey, but recommended that DFW might want to put a size limit for the commercial fishery. Tenorio replied that once the fishery act is passed, DFW will be able to address the size issues and that outreach and education can also be used to tackle the issues.

Palacios noted that DFW can manage right now without fishery act. Tenorio noted that DFW does not have full authority to create rules for commercial fishery and enforcement for those rules.

Gervacio asked if the commercial fishery can use nets? Tenorio replied no, because the law is in place that nets use is permitted.

Seman said that there is a special exemption on nets only for chenchulu, and asked what about other nets? He also said that the Rota legislators say the law was misinterpreted so they allow chenchulu less than 1 inch? Tenorio replied that DFW does what it can, but the use of the recommendations from the Division and data by upper levels of government is up to them.

Reyes asked if the net exemption was for residents only and asked about resident workers? Tenorio said the issue hasn't been addressed because no requests yet, but the intent is for the local community.

Olopai asked about other community events like Chinese New Year, Filipino festival, etc? Tenorio said it hasn't been tested, so they'll review it if it comes across their desk in the future.

### **iii. CNMI Monument Activities and Status**

Teregeyo presented on the CNMI Monument update and noted that the DLNR received \$215,000 for the monument-\$190,000 for a visitors center and the rest to do sanctuary scoping. Currently, they are working on getting a contractor to do a study to use the lighthouse as the visitor's center, and the rest of the money will be used for traveling workshops on MPAs.

Gourley asked about the MPA workshops? Teregeyo replied that they are community meetings for fishermen and the government to see if the MPAs are working or not, and will be held in Rota, Tinian and Saipan and conducted by DLNR.

Olopai asked her what the timetable on visitor's center was? Teregeyo said that they didn't have the money for actual construction, only the plans so she doesn't know how long it will take before it is built and opened.

Moses asked if the Japanese lighthouse the final site for center? Teregeyo said yes.

Selaina commented that the Rose Atoll monument had low community input and asked if it was the same for the Marianas Trench monument. Teregeyo said that there are two factions of for and against the monument, but there was also little input before it was created.

Duenas asked if there were any updates on jobs and all the money it was supposed to bring in? Teregeyo said they haven't seen any of the alleged millions of dollars that the monument was supposed to bring in.

Olopai commented that he was against the monument and noted that it was probably for military use.

#### **iv. Update on CNMI Turtle Program**

Teregeyo presented on the CNMI sea turtle program which includes their three priority research areas: beach side monitoring, tagging, and nearshore. They have funding to tag 100 green sea turtles and 40 hawksbill turtles per year and have tagged many at Bird Island, Balisa, Wing Beach, and Obachen. They have also identified 12 nests and nine non-nesting sites on Saipan, 20 nests on Rota, and none on Tinian. She said that nest inventories show a 81.2% success rate with 69.5% emergence success. She also noted that they are monitoring to get a long-term data set to eventually apply for a cultural take of green sea turtles. She also said that they had recently arrested 3 poachers in the last 4 months which resulted in a jail term, monetary fine, probation, and/or community service. She said that the turtle program has a 64 hour work period due to budget cuts, but they are looking for exemptions for Federally funded programs. She also noted that they might not receive Section 6 funding and is looking for continuing funding and increases from NOAA PIRO.

Duenas asked about the funding problems? Teregeyo said they are continuing to look for ways to continue funding this program.

Reyes asked what the turtle nesting season is in Saipan? Teregeyo replied March through October.

#### **v. Discussion and Recommendations**

The AP recommends the Council request PIRO to provide increased funding to the CNMI Turtle Program in light of not receiving section 6 funding and budgetary cutbacks

#### **Guest Presenter: Selaina Vaitautolu – American Samoa Village MPA Program**

Selaina presented the American Samoa Community Fishery Management Plan program to the Advisory Panel and noted that the villages develop the regulations (with assistance from DMWR) and they are implemented through the DMWR.

Sanchez asked what is the population in American Samoa? Selaina replied 60,000.

### **B. Federal Programs and Projects**

#### **i. Guam and CNMI Bio-Sampling Programs**

Eric Cruz presented the PIFSC biosampling program in Guam. He said he had collected over 200 samples from 70 species which will be used for the “barcode of life” an inventory of the world’s DNA, and that 318 samples from 21 species were collected for life history information since the beginning of the program.

Duenas noted that some challenges of the program are that he's not available every day, even though there is fish all day every day, so they need more than one person to collect samples.

Bradford commented that he would like to see distribution and connectivity pattern studies developed as a result of the DNA samples collected.

Reyes asked if the sampling was random or for certain days? Cruz replied that he was currently only sampling weekdays and that he should be sampling on the weekends too because that is when there is a greater volume of fish, but his contract doesn't allow it.

Olopai asked what are the results so far? Cruz replied that the fish weights and sizes have been pretty consistent over the whole year, but they haven't gotten any data analysis from the samples provided to NMFS yet.

John Gourley presented the PIFSC biosampling program in CNMI. He said that he was contracted by NMFS PIFSC to be the CNMI counterpart to Eric Cruz, but that he is working with DFW to collect samples. He presented a status of the project, but said no data was available yet. The project's objectives are to collect length and weight data (plus effort data-#hours, location, area). They are currently in month 4 of a 14 month contract and working on building relationships with fish vendors, develop data sheets and a database, and developing a field ID notebook. So far, they have conducted 14 samples with the largest vendor, as they work out the bugs before expanding to the rest of the vendors. The immediate issues to resolve is to meet with NMFS to develop sample details, install software for data entry, and identify target species for further biological investigations. Then they need to expand the current sampling effort to other vendors and identify additional field samplers.

Castro asked if any fish vendors have asked for compensation? Gourley said no and that they have tried not to interfere with fish selling, so in "compensation" they bring their own ice to give to the vendor, built tables and provided them to the vendor, etc. This effort is to improve working conditions to in-turn improve relations with the vendor.

Moses asked if they are also collecting size information? Gourley said yes, size, weight and effort and noted that some vendors don't accept small sizes.

## **ii. Independent Bottomfish Observer Study**

PIFG presented the tagging and observer projects being conducted in Guam on bottomfish; Funding from NOAA; reviewed PIFG history and goals; Reviewed project using observers on Guam bottomfish trips and volunteer tagging project with 4-H. Using CRP funds-objectives included fishery-independent pilot survey of bottomfish in Hawaii/Maui and expanded it to Guam (contracted local fishermen to determine fishing effort and catch), then expand the BF tagging program to Guam (tag and release fish), and fishery-dependent sampling (collect data from fish provided to Co-op);

Gourley asked if PIFG was considering opening a chapter in the Marianas? Wong said yes, they have considered it but it would be difficult, so instead would like to work with a separate entity if it is available, like they have been working with GOSA in Guam.

McGregor asked how long PIFG has been doing the bottomfish tagging and how long till there is enough data to provide recommendations for changes in regulations, and why Kahoolawe was

not used as a study site? Tam said they are willing to get together with KIRC to include Kahoolawe, if the fishermen are allowed to fish there for research purposes. He also said that when the data are conclusive enough recommendations can be made, but they just started to get the data.

### **iii. Marianas Small Boat Economic Survey**

Hospital presented an economic survey that he is about to begin in Guam and CNMI for small boat fisheries in the Marianas. He solicited support for the survey from the fishermen and explained what research they plan to do as well as reviewed a similar survey that was conducted in Hawaii and the types of results from that survey.

Rosario asked if there can be a question on actual fishing time? Hospital replied that they can add a question clarifying actual fishing time instead of transit/trip time.

Moses asked if the study was going to be conducted in the CNMI as well? Hospital said that it will be conducted in Rota, Tinian, and Saipan as well.

### **iv. Federal Annual Catch Limit Scoping Meetings**

Seman presented the results of scoping mtgs held on Annual Catch Limits and Catch Shares in the Marianas. He reviewed the background of ACLS and noted that the Council contracted him to bring the issue to the attention of the community and gather comments for input at Council Meetings. He reported that he held a total of 16 meetings (5 on Guam, 2 for Rota, 2 for Tinian, and 7 in Saipan) with 148 total participants. The comments received included: ACLs are prematurely applicable to areas that shouldn't be included; there is not sufficient info to make a true ACL; not enough education to explain rationale of ACL; shouldn't have ACLs in Marianas; why have limits without large-scale fishery in Marianas; exclude territories until ACLs become fully implemented or stock assessments are done; ACL is a strict mandate without time for fishermen to provide protest or recourse action; Some recommendations were made on catch shares also: catch shares should be allocated through the community; there should be community-based co-management; ACLs should be set high enough so that the fishery can expand.

There were no comments or questions.

### **v. Discussion and Recommendations**

The AP recommends the Council request PIFSC expand the Guam Life History collection program to provide additional staff resources to collect samples.

The AP recommends the Council request PIFSC to utilize the life history samples/DNA collected in Guam to determine stock structure and distribution patterns for these species sampled.

## **5. Local Legislative Activities**

### **A. Guam Fisheries Act**

Borja presented the Guam fishermen's response to the indigenous fishing bill and regulations being developed by GovGuam. It incorporates a suite of regulations including a control date and permit for all ocean users, not just fishermen, and a local marine management council. He said that this act would change MPAs to CMAs and also create a Marine Development Fund with taxes and fees levied.

Sanchez asked if they held any meetings for input? Borja said that they had a scoping session at GFCA and with the Co-op Board, but public meetings to garner support was the next step.

## **B. Discussion and Recommendations**

### **6. Upcoming Meeting/Conferences/Workshops**

#### **A. Mariana Archipelago Lunar Calendar Workshop**

Kaai'ai reviewed the agenda for the lunar calendar workshop and its purpose.

#### **B. Offshore Aquaculture Workshop**

DeMello presented the aquaculture workshop purpose and dates as well as explained who was coming to the workshop.

#### **C. Mariana Islands Green Sea Turtle Workshop**

Kaai'ai explained that the workshop is being held to help the Marianas get a cultural take exemption without the need to go through the process of delisting. He then noted the dates of the workshop.

### **7. Fishery Development**

#### **A. Guam MCP**

DeMello reported that the Guam Marine Conservation Plan had not been sent to NMFS for approval. Some Guam AP members commented that they will work with the GuamGov to get it revised and sent to NMFS for approval.

#### **B. CNMI MCP**

DeMello reported that there is money available from incursions in the CNMI, and the funds were not yet allocated, but DLNR working on spending it through its MCP.

### **8. Other Fishery Issues**

The Co-chairs asked the AP members to provide other issues that they would like to talk about. The following issues were identified:

- Identify other funding for CNMI turtle program;
- Get the Council to assist CNMI in halting military exercise similar to the Kahoolawe experience
- Shark fin ban-stop taking of sharks means less fish will be available; Needs to be addressed before law is put into effect;
- Everyone is going overboard with shark fin ban, it's a waste of throwing back dead sharks; would like to have a shark fishery for markets instead;
- No shark fishery, so not a problem in Guam, more concerned with dredge materials dump site and its effects on spinner dolphin schools;
- There is a need for size limits for reef fish in CNMI;
- Would like to know if AP is meeting its mandated responsibilities;
- Would like to have additional engagement with each other and communication throughout the rest of the year.

### **9. Public Comment**

There was no public comment

## **10. Discussion and Recommendations**

- 1. The AP Recommends the Council, in the development of marine spatial planning, ensure marine spatial planning considers the safety of human life.**
- 2. The AP recommends the Council request the Federal government to mitigate the deaths of fishermen on Guam by providing funding for additional fire/rescue units on the East Side of Guam.**
- 3. The AP recommends the Council request PIRO to provide increased funding to the CNMI Turtle Program in light of its section 6 proposal not being funded and budgetary cutbacks and identify other funding for this program**
- 4. The AP recommends the Council request PIFSC expand the Guam Life History collection program to provide additional staff resources to collect samples.**
- 5. The AP recommends the Council provide assistance to the CNMI community to determine methods to work with the military to mitigate effects of firing range closures on the fishing community and to regain control of FDM.**
- 6. The AP recommends the Council request NMFS PIRO Protected Resources to assess the potential impacts caused by the dumping of dredge materials on spinner dolphin populations around Guam.**
- 7. The AP recommends the Council look into shark harvest regulations in Guam and CNMI to determine the appropriate course of action to both increase the protection of sharks from finning and to allow the harvest of sharks for a potential fishery and indigenous/cultural take.**
- 8. The AP recommends the Council provide reports on outcomes of fishery research in Guam and CNMI (i.e. biosampling data results, cooperative research, economic survey, etc) at future meetings as available.**
- 9. The AP recommends the Council hold an annual meeting of all its Advisory Panels to provide training, review the responsibilities of the AP and determine if the APs are meeting its mandate.**