



WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL

Report to the Council from the 88th Meeting of the Scientific and Statistical Committee

Council Office Conference Room
1164 Bishop Street, Suite 1400
Honolulu, HI 96813

February 22-24, 2005

Insular Fisheries

A. CNMI Bottomfish Management

Mark Mitsuyasu, Council staff, presented a revised alternative to manage CNMI Bottomfish resources based on meetings held in November 2004 in CNMI with fishery agency representatives, Council advisors, fishermen and the public. At the 124th Council meeting held in October 2004, CNMI Council members asked that additional meetings be held to in CNMI to solicit comment on the preferred alternative. The Council's preferred alternative would create an area closure from Rota to Alamagan for vessels over 30 feet targeting Bottomfish resources and require these large vessels to report their catch and effort through a federal permit and logbook program. The new alternative would establish:

1. Prohibit commercial vessels over 40 feet from targeting bottomfish species within 0-50 nm closure from Rota to Farallon de Medinilla (25 nm N) and 10 nm around Alamagan.
2. Require federal permits and logbooks for all commercial vessels targeting Bottomfish.
3. Require sales reporting of bottomfish sold in the CNMI from commercial vessels over 40 feet.
4. Require VMS on all commercial bottomfish vessels over 40 feet. "Grandfather in" existing vessels. And
5. Allow receiving vessel operations w/n 50 nm closure.

The SSC discussed the revised alternative and noted that the management regulations for Guam and the proposed regulations for CNMI are inconsistent with each other (e.g., vessel size limits and reporting regimes). **The SSC recommends that steps be taken to integrate management of archipelagic fishery resources. As a first step, the SSC recommends that catch reporting be required for all commercial bottomfish vessels in the Marianas Archipelago.**

The SSC recognizes an intermediate need for the data collections aspects of this management action given the sensitivity of bottomfish stocks to over-exploitation. **The SSC therefore supports the permitting and reporting requirements proposed under Alternative 2B.**

The SSC further recommends that research be conducted to estimate sustainable fishing effort for bottomfish within the Marianas Archipelago.

B. Update on Black Coral Research

Tony Montgomery, Hawaii Division of Aquatic Resources, presented a preliminary analysis of the State of Hawaii's current research on black corals. Montgomery provided an overview of the project and said that it was modeled after Rick Grigg's 1975 surveys. This project was to be done to corroborate research done by Grigg in 2001 that showed that black corals are being pressured, and recommended that the size limits for black coral be adjusted accordingly.

Montgomery's preliminary data and analysis showed that the black coral beds in the Auau Channel are losing their bigger colonies. The low number of young trees were also shown in both Grigg's and Montgomery's data. Montgomery said that they saw no evidence of black corals killed by *Carijoa riisei* and that the pressure on the colonies are most likely the effect of harvesting pressure, although he admitted that *Carijoa* could be the culprit for missing colonies.

C. Update on Crustaceans Research

Joshua DeMello, Council Staff, gave a brief update on the status of crustacean research. He mentioned that a Main Hawaiian Island Lobster Stock Assessment Project was underway looking at commercial and dealer data. He said that the project should be completed by the end of March and will be presented to the advisory bodies at its next meetings.

He also reported that the Northwestern Hawaiian Islands Spiny Lobster Population Model review was scheduled for May 18-20, 2005. The SSC will be meeting at that time and the Plan Team will not have reviewed it, so the SSC will get a report on it at its October meeting.

D. Public Comment

There was no public comment.

E. Discussion and Recommendations

The SSC notes that the management regulations for Guam and the proposed regulations for CNMI are inconsistent with each other (e.g., vessel size limits and reporting regimes). The SSC recommends that steps be taken to integrate management of archipelagic fishery resources.

As a first step, the SSC recommends that catch reporting be required for all commercial bottomfish vessels in the Marianas Archipelago.

The SSC recognizes an immediate need for the data collection aspects of this management action given the sensitivity of bottomfish stocks to over-exploitation. The SSC therefore supports the permitting and reporting requirements proposed under Alt 2B, as presented to the 88th SSC.

The SSC further recommends that research be conducted to estimate the level of fishing effort for sustaining bottomfish stocks within the Marianas Archipelago.



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Ecosystem and Habitat

A. NWHI Sanctuary Fishing Regulations

1. Process and Alternatives

Marcia Hamilton provided a overview of the role of the Council pursuant to the Section 304(a)(5) of the National Marine Sanctuaries Act (NMSA) and summarized the 9 purposes and policies of the NMSA as well as the seven goals and the associated objectives related to fishing for the proposed NWHI sanctuary. She noted that purpose # 2 of the NMSA is to provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities. She emphasizes the language regarding coordination with existing regulatory authorities such as the Council.

Hamilton stated that over the past several years, questions were raised regarding whether draft fishing regulations must be consistent with the Executive Orders which established the NWHI Coral Reef Ecosystem Reserve. She stated that the NWHI Reserve website provides insight on this issue. Specifically, the website states that *“NOAA can analyze and propose a sanctuary that has different management measures than the EOs, as long as the sanctuary proposal provides long-lasting protection consistent with the EO.”* Hamilton then summarized the alternatives the Council is considering for preparing draft fishing regulations.

Alternative 1A is the existing FMP regulations as presently published in the Code of the Federal Register. **Alternative 1B** is the NWHI Reserve management measures as described in Executive Orders 13178 and 13196. She noted that both the measures of the FMP and the Reserve are interpreted by NOAA as in effect, however only the FMPs have corresponding regulations published in the Federal Register.

Alternative 2 is the all of the existing FMP regulations plus all of the measures that the Council has recommended to date but not yet implemented by NOAA. These measures include (1) gear restrictions, special permits and reporting requirements, and no-take and low-use MPAs proposed in the Coral Reef Ecosystem FMP; (2) suspension of the use it or lose it requirement for retaining limited entry bottomfish permits; (3) new entry criteria for the Mau Zone limited entry permits including the two un-issued permits reserved for the Community Development Program; (4) precious coral mega refugia; and (5) prohibition of gold coral harvest. Hamilton noted that this alternative contains precautionary, science-based management already reviewed by the SSC at past meetings.

Alternative 3 is a modification of **Alternative 2** and contains all of the measures of Alternative 2 plus increases the no-take closed fishing areas surrounding French Frigate Shoals and the northern most portion of the NWHI around Midway and Kure Atolls.

Alternative 4 is also a modification of **Alternative 2** and contains all of the measures of **Alternative 2** and **Alternative 3** and also extends the no-take closed fishing area surrounding Midway and Kure Atolls to also encompass Pearl and Hermes Reef. She noted that the additional area closures proposed in Alternative 3 and 4 were developed with input with the fishermen. The closures were not based on science, but rather the fishermen's compromise to area closures proposed under the Sanctuary alternative which they stated would essentially close them down or make it economically unfeasible to fish.

Alternative 5 is the Sanctuary Alternative which includes large Ecological Preservation Areas where all commercial fishing is prohibited and Sanctuary Preservation Areas where all fishing is prohibited, except native Hawaiian uses. This alternative prohibits all commercial fishing except for limited bottomfish fishing and pelagic fishing subject to caps and closed areas.

Alternative 6 is similar to **Alternative 2** except that it prohibits bottomfishing in all federal waters around the entire Hawaiian Islands. The alternative takes into account the condition of main Hawaiian island bottomfish stocks should the NWHI be closed to bottomfishing.

2. Impact Analyses

Eric Kingma provided a preliminary analysis of the potential impacts to target and non-target stocks (i.e. bycatch), habitat, protected resources and the fisheries associated with each of the alternatives. He noted that implementation of **Alternative 1A** would result in the continued healthy state of the NWHI as these are these regulations already published in the code of federal register and enforced. He noted that **Alternative 1B** could provide increased protection to all resources by prohibiting all fishing except bottomfishing and pelagic fishing. Additionally, it would cap commercial bottomfishing and pelagic fishing and cap recreational fishing to the levels reported in the year(s) prior to December 4, 2000.

Kingma noted that the impacts of **Alternative 3 and 4** would be similar to **Alternative 2** and would allow fishing to levels at or near 1999 and 2000 levels with implementation larger no-take closures around French Frigate Shoals and the northern portion of the NWHI.

Kingma stated that **Alternative 5** may potentially provide additional protection to certain fish stocks, habitats and protected species through the establishment of large Ecological Preservation Areas and Sanctuary Preservation Areas. However, it may also have the unintended effect of localized depletion of certain fish stocks as fishers are forced to fish in smaller areas in order to maintain current levels of catch. In addition, **Alternative 5** also precludes sustainable fishing for all species except for pelagic and bottomfish, yet allows an undefined level of recreational, subsistence and native Hawaiian sustenance fishing in Ecological Preservation Areas and Sanctuary Preservation Areas.

3. Report on Public Hearings

Jarad Makaiau reported on the public hearing held by the Council on the draft fishing regulations for the proposed NWHI Sanctuary. He noted that hearings were held on Maui, Kauai, Oahu and in both Kona and Hilo on the Island of Hawaii in January 2005. He added that approximately 200 people attended the meetings based on the public sign-in records, but noted a number of people in attendance did not sign in for the record.

Makaiau stated that comments provided could be summarized into four major categories which are detailed in the briefing document. They were (1) general overall comments; (2) native Hawaiian issues; (3) comments on fishing; and (4) comments on the proposed alternatives.

Makaiau noted that that a number of commentors stressed the protection of native Hawaiian rights to access to the NWHI and use of its resources. Several also questioned the federal government's jurisdiction over the Hawaiian Islands or its authority to dictate what native Hawaiians can or cannot do. He added that there were a number of comments pertaining to fishing, some feeling the NWHI should be closed to everyone and everything while others felt not only commercial fishing should be prohibited. Many supported protection of the NWHI through continuing the existing Council management regime while others supported additional protection provided by the Executive Order, the Sanctuary alternative and a range of additional alternatives such as a prohibition on all access and use to the NWHI except for native Hawaiians. Following the presentations, the SSC engaged in a lengthy discussion on the difficulty in providing science-based recommendations on a largely political issue.

Paul Callahan noted that the SSC is an advisory body of the Council and makes recommendations guided by the provisions of the Magnuson-Stevens Act. He stated that the SSC should provide the Council with its best scientific and statistical based recommendations it can, in preference of the resource.

Based on the available science and past discussions on the sanctuary designation process, the SSC issued the following recommendations:

Whereas, the SSC believes that current levels of bottomfishing, which are well below MSY levels, pose little risk to the ecosystem integrity due to the small-scale nature of the fishery and its existing regulations, the SSC recommends that:

- a. Bottomfish fishing should continue to be managed under the Council management regime as recommended to date;**
- b. Pelagic trolling and pelagic handline fishing should also continue to be managed under the Council management regime as recommended to date and that Pelagic longline fishing continue to be prohibited within 50 nautical miles from the NWHI;**
- c. A moratorium be established for all other commercial, recreational, and sustenance fisheries, with the exception of native Hawaiian subsistence use, in the NWHI until a science-based, ecosystem management plan for the NWHI is developed;**
- d. An interagency research program for the NWHI be established by the Council, National Marine Sanctuary Program, and National Marine Fisheries Service, Pacific Island Fisheries Science Center to develop an operational definition of ecosystem integrity, and expand and coordinate studies to objectively evaluate ecosystem integrity of NWHI ecosystems; and**
- e. A Memorandum of Agreement be established between the Council and the National Marine Sanctuary Program to coordinate activities regarding the NWHI Sanctuary.**

The SSC is also concerned with the potential introduction of alien species into the ecosystems of the NWHI and therefore recommends that the Council assess the effectiveness and feasibility of requiring that the hulls of permitted fishing vessels be cleaned (as are NOAA vessels) before entering Sanctuary waters.

B. NWHI Science Symposium Report

A report of the NWHI Science Symposium was not provided.

C. Hawaiian Archipelago Research Program Update

Sam Pooley reported that NOAA Fisheries is working to develop a comprehensive research program for living marine resources throughout the Hawaiian Islands integrating and interfacing research initiatives from various agencies. He reported that the Pacific Islands Fisheries Science Center is taking the lead on

establishing this program along with an organizing committee and has held one meeting with potential partners including the Council, US Fish and Wildlife Service, University of Hawaii's Institute of Marine Biology, the Department of Land and Natural Resources and the National Marine Sanctuaries Program. He noted that a drafting committee was formed to begin discussion on developing a Hawaiian archipelago research plan and expects a draft to be completed by March 2005. He also mentioned working closer with other scientific agencies and organizations which are presently conducting marine research in Hawaii including the National Marine Fisheries Service's Southwest Fisheries Science Center.

D. Draft MPA Objectives and Criteria

Tony Beeching presented to the SSC a draft document "MPA Goals & Objectives, and Criteria for Establishing, Monitoring and Evaluating MPAs." He explained that the document will be a reference for Council Family, including a flowchart detailing Goals and Objectives, Council process to develop an MPA under MSA and NEPA, and checklist with brief explanatory text of criteria for establishing, monitoring and evaluating MPAs. **The SSC supports the MPA Working Group's approach to developing a document on criteria for establishing and evaluating MPAs.**

E. Ecosystem-Based Fishery Management

John Sibert provided a brief report on the Ecosystem Delineation Workshop held in South Carolina in August 2004. He stated that the purpose of the meeting was to define the boundary of ecosystems of the United States for the purpose of data collection and reported. Sibert noted that the Large Marine Ecosystems (LME) approach was heavily promoted at the workshop. However, this approach is primarily focused on the coastal ecosystems of the continental United States and may inevitably lead to the difficult task of including the entire continental watershed in LMEs.

Sibert also noted that there is one LME for the Pacific which encompasses the the coastal areas surrounding Hawaii however does not extend to the EEZ. Additionally, there are no LME which includes the other Pacific Islands of Guam, American Samoa, the Northern Mariana Islands or the US Pacific Remote Island Areas. He noted that discussion of the inclusion of EEZs into LMEs were discussed without resolution and perhaps, the Council's archipelagic-based ecosystem approach would be more appropriate for the Pacific Islands.

Paul Dalzell provided an update on the establishment of a NOAA Ecosystem Research Review Panel. He noted that on January 27, 2005, NOAA announce in the Federal Register, a notice of solicitation for members of a NOAA ecosystem research and science review panel. The Under Secretary of Commerce of Oceans and Atmosphere has requested that NOAA Science Advisory Board (SAB) to conduct an external review of NOAA's ecosystem research and science enterprise. To do this, the SAB is forming an external panel to review and draft recommendations on the appropriateness of the mix of scientific activities conducted and/or sponsored by NOAA. Nominations to the external

review are due on February 17, 2005 however an extension to allow more time for nominations has been suggested.

Dalzell then provided an update on the Council's Ecosystem Science and Management Workshop which is scheduled for April 18-22, 2005 in Honolulu. Dalzell stated that the objectives of the workshop will be to: (1) Determine the utility of existing data for assessing and monitoring ecosystem health and identify missing information needed to improve management decisions in both data rich and data poor situations; (2) Identify the best suite of ecosystem indicators and the most sensitive parameter to measure; (3) In the short term (within existing mandates i.e. MSA), identify the most effective ecosystem-based management approaches that can be implement based on current data; and (4) In the long term, develop new and/or restructure existing programs to implement decision-making frameworks to advance ecosystem-based management for western Pacific archipelagos. He also noted that an expert panel has been established comprised of leading national and international ecosystem scientist to assist the Council in meeting the objectives of the workshop. **The SSC looks forward to the results of the Ecosystem Science and Management Workshop which will be held in April 2005 which should provide direction for research for ecosystem management in the NWHI, and recommends that the Council sponsor a complementary workshop focused on the human dimension of marine ecosystems and the contributions of social science to ecosystem-based management.**

Paul Bartram provided an update on progress of the Mariana Archipelago FEP Pilot Project. He stated that the initial tasks of defining baseline conditions in terms of environmental cycles, resource rhythms, human use patterns over a long term period and the characterization of the communities, including their marine resource dependency, resiliency and values are continuing under a contract with the Micronesian Archeological Research Services.

Bartram then stated that two sets of community-based projects will be initiated in both Guam and the Northern Mariana Islands. He intends to start an offshore and inshore project for both areas. The proposed offshore projects are (1) Co-management of Guam's offshore banks with Guam's boating community; and (2) Co-management of the offshore areas of the Northern Islands with the Northern Islands mayor's office. The proposed inshore projects are (1) Co-management of Guam's leeward/south-central area: and (2) possibly Co-management of Rota in the Northern Mariana Islands.

Bartram noted that the intent of the projects is to begin involvement of Guam and the Northern Mariana Islands communities in the co-management of inshore and offshore marine resources. He intends on working with these communities to develop community ecosystem management strategies for these areas. He stated that he will have a draft report of a Mariana Archipelago Fishery Ecosystem Plan prepared by October 2005. The content of the FEP will be very similar to the existing FMPs and will contain a range of alternatives, including potential impacts, descriptions of Magnuson-Stevens Act requirements, and relationship to other applicable laws. However, the major difference is the FEP will also include Regional Standards for Ecosystem Strategies, a NEPA

compliant description of a baseline of biophysical and historical patterns and trends over a longer period of time and not just the present condition.

Eric Kingma provided the SSC with an update on development of the Programmatic EIS for FEPs. He said that public scoping was held. He added Council staff is currently reviewing the relevant literature on FEP and are planning on having the document available for public review by 2005. He also presented the preliminary range of alternatives that will be analyzed in the programmatic EIS which will be constructed from several categories and a number of options.

F. Coral Reef Plan Team Recommendations

Jeff Walters introduced himself as the new SSC designee for the State of Hawaii Department of Land and Natural Resources. He then discussed the plan teams discussions regarding the National Marine Sanctuary Program's Advice and Recommendations document and noted the team's concern with the proposal to substantially reduce bottom fishing area via Ecological and Sanctuary Preservation areas and the potential unintended effects of localized depletions it may cause to bottomfish stocks due to increased effort on the open areas. He also noted the plan team's concerned about inequitable closures and economic impacts between Mau and Hoomalu zone.

Walters clarified that the plan team's recommendation 5 entails a splitting of the brooks bank complex as a compromise to the Sanctuary alternative.

Members of the SSC noted that this presents opportunity for scientific investigation to evaluate the effectiveness of the closure if it is implemented and encourages funding for such investigation. Some members of the SSC felt that it would be difficult to assess ecosystem impacts due to the already low levels fishing effort in the NWHI and believed that in order to really monitor the ecosystem would requires substantial effort in the water. Walters then provided the plan team's recommendations as follows:

1. The Plan Team expressed concerned that implementation of the NOS Sanctuary Alternative 3 in the Advice and Recommendations document to substantially restrict bottomfish fishing through Ecological Preservation Areas and Sanctuary Preservation Areas in the Ho'omalulu Zone will concentrate fishing effort within a smaller area. This may result in adverse ecosystem impacts such as localized depletion of bottomfish stocks and other unwanted ecosystem effects within the area that remains open to fishing in that zone.
2. The Plan Team is also concerned that implementation of the NOS Sanctuary Alternative 3 would result in significant socioeconomic impacts to the Ho'omalulu Zone bottomfish fishery as nearly 50% of the Ho'omalulu Zone would be closed to commercial fishing. This may have the effect of making bottomfish fishing in the Ho'omalulu Zone economically infeasible.

3. The Plan Team noted that Table 12 of the NOS Sanctuary Document may be misinterpreted to mean that closing areas to bottomfishing would result in specific amount of habitat protection. It implies that there is a direct correlation between the reduction of bottomfish activity and protection of habitat. In fact, an existing study by Kelly *et al.* concludes that bottomfishing has had minimal impact on the benthic habitat. The Plan Team suggests that the column header, *Habitat Protection*, should be changed to *Area Closed*.
4. The Plan Team further noted that Table 12 of the Sanctuary Document is inaccurate as it combines both the Ho‘omalau Zone and the Mau Zone bottomfish data in assessing the impacts to the NWHI Commercial bottomfish fishery. The Ho‘omalau and Mau Zone are two distinct fisheries as fishers who are permitted in one zone may not fish in the other zone. Therefore, the Plan Team suggests that the analysis of the impacts of implementing new fisheries management measures in the NWHI be done separately for each fishery zone.
5. After reviewing the Sanctuary Alternative and the Council’s proposed alternatives, the Plan Team supports the Precautionary Modification 2 Alternative, with the following changes:
 - a. 15 fathoms be defined as the maximum depth of the area closed to all fishing, except for lobster fishing which should be prohibited from 0-10 fathoms and within 20 nautical miles of Laysan Island as presently restricted by the Crustacean FMP.
 - b. Expand the closed area around the FFS between 165 degrees W. Long and 167 degrees W. Long to the outer boundary of the CRE Reserve and prohibit all fishing within this area, including pelagic trolling; Expand the closed area in the northern portion of the CRE-Reserve eastward to 174 degrees 40 minutes W. long.
6. The Plan Team also stresses the need for further research on potential impact on habitat and monk seal foraging by the lobster trap fishery.
7. The Plan Team noted that the final rule as implemented was inconsistent with the team’s original intent of the special permit requirement as the rule prohibits fishermen from retaining even a single individual of a coral reef ecosystem management unit species designated as PHCRT without a Coral Reef Ecosystem Special Permit or a permit issued under another Western Pacific Fishery Management Plan.
8. The Plan Team recommends that Council staff begin the development of a framework adjustment to re-define all CHCRT and PHCRT simply as Coral Reef Ecosystem Management Unit Species. The Plan Team further recommended that Council staff also identify a subset of the Coral Reef Ecosystem Management Unit Species for which Special Permits will be required to harvest more than five individuals of any of these species per trip. The plan team recommended that this list include

species which are: (1) rarely harvested; (2) species of particular concern; (3) potential ornamental trade species; and (4) bioprospecting species or other species of ecological importance.

9. The Plan Team expresses serious concern that WPacFIN staff funding and resources are insufficient to meet the increasing demands for collection, synthesis and analysis of fisheries information for all island areas and for all FMP annual reports in a timely manner. The plan team notes that the CRE-FMP reporting requirements and the inshore creel survey program for CNMI and American Samoa will create additional burdens. The Plan Team recommends that the Council seek additional long term funding to support WPacFIN to meet Council needs.

10. The Plan Team re-emphasizes the need to strengthen fisheries data collection programs, particularly for non-commercial fishing sectors in all island areas by encouraging each area to re-establish and/or enhance inshore/offshore creel surveys with increased sampling frequency, area coverage and market sampling for size frequency data.

Regarding the Coral Reef Ecosystem Plan Team Recommendations, the SSC supports the Plan Team's recommendations except the recommendations pertaining to the proposed NWHI National Marine Sanctuary. (Recommendations #1-5 in the Plan Team report).

G. Public Comment

Stephanie Fried of Environmental Defense stated she analyzed the all of the Council's FMPs as they pertain to the NWHI. She then offered the following clarifications on public hearings and additional comments:

- Only 2 people spoke in favor of commercial fishing in the NWHI at the Oahu public hearing;
- The Council should ensure that all 13,000 public comments received by email are read.
- The Executive Order banned the harvest of precious coral. None of the Council alternatives provide total protection for precious corals.
- Mau Zone fishers spend only 20% of the year fishing. Hoomalu Zone fishers send approximately spend 6 months of the year fishing. If NWHI fishers do transfer effort to the main Hawaiian Islands, it will only have minimal impacts.
- Bottomfishing vessels are reporting losing of up to \$30,000.00 per year fishing
- Infactual information on the bottomfish fishery was presented by Council staff at the public hearings.
- New entry criteria for Mau zone would increase the number of fishermen
- SSC should make a recommendation that meet the goals and objectives.
- Evidence from larval genetic information suggests bottomfish larvae are transferred from healthy NWHI to more depleted main Hawaiian Islands.

Chris Dorsett of the Ocean Conservancy stated that the NWHI is held to a higher management standard than any other area under the jurisdiction of the Council. He said the intent of the sanctuary is to keep the area in its natural character. He advised the SSC to look at the Executive order for guidance and cap fisheries in landing and effort based on the criteria stated in the orders. He added that in times of uncertainty, management should err on the side of protection.

Dennis Hiemen of the Ocean Conservancy noted that the Goals and objectives of the sanctuary points to maintaining the ecological integrity, biological integrity, and natural character of the area. He noted that the scientific community has addressed the concept of ecological integrity and how it fits into a management regime.

Hiemen said that to maintain ecological integrity is to maintain all of the components and function of the ecosystem in a state that has not been significantly altered by man's activities. He added that ecosystem integrity has three parts:

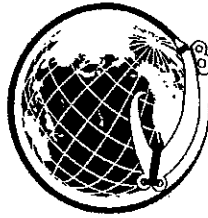
1. It's a system which has all of its communities, biodiversity, species, habitat diversity present and in an unimpacted state (abundance, density)
2. Function such as the food web remain intact
3. Ecosystem has resilience or has the ability to resist change (whether environmental or anthropogenic) and can recover from changes.

Hiemen said he does not believe that concentration of fishing effort in open areas as a result of the establishment of Ecological and Sanctuary Preservation Areas would result in potential negative ecological impacts as the displacement of bottomfishing effort will be small. However, he added that if there is a concentration of effort in the open areas, then other conservation measures need to be enacted in those areas.

Linda Paul noted that aquatic alien invasive species are of great concern. She stated that every vessel has some kind of organism growing on the hulls. She also said that the NOAA vessels clean their hulls prior to visiting the NWHI and suggested that all permitted vessels also clean their hulls before going to the NWHI.

Nefi Ohai introduced himself as an akule fisherman. He said that it is important to have areas open to fishing. The main Hawaiian islands are already heavily restricted not only to fishing, but to other activities. He noted that as an island community one would think that the government would like for people to make a living off the ocean and not be entirely dependent upon tourism.

Ohai noted concerns of the lobster trap mesh sizes. He expressed concern that the escape vents which are required on the traps are not large enough for all of the small lobsters to escape. He also added that as a fisherman, he has never seen a seals eat the lobsters, but noted that the fish do.



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Pelagic Fisheries

A. Bigeye Overfishing

1. Council Action Plan to address bigeye overfishing (ACTION ITEM)

Paul Dalzell and Keith Bigelow presented the SSC with the background to the recent letter to the Pacific and Western Pacific Council informing them of an overfishing determination for Pacific bigeye tuna. Dalzell explained that the deadline for action was June 14 2005, which was one year from the transmittal to Congress of the 2003 Status of the Stocks Report to Congress, which included the overfishing determination for Pacific bigeye. The SSC framed its recommendations through its comments on the Pelagic Plan Team recommendations which are given below.

2. ETPO BET quota

Russell Ito presented to the SSC to method used to generate the US longline fleet annual bigeye quota in the Eastern Tropical Pacific Ocean, i.e. to the east of 150 deg W. The current quota of 150 mt would be expected to be reached by August based on current fishing patterns. It was noted by members of the SSC that this showed the difficulties of real time quota management and that input controls were a better management strategy.

B Institutional arrangements for Pelagic Management in the WCPO

Kitty Simonds stated that the Council needs to be fully engaged in international pelagic fisheries management in the Pacific. Although a small fraction of the total Pacific pelagics catches, the USA will be required to do its share in sustainably harvesting tunas and tuna-like species. This includes providing good advice to the heads of delegations to international fisheries management

meetings. Consequently the SSC made the following recommendations regarding institutional arrangements for the management of Pacific tuna:

- 1) NOAA Pacific Island Regional Office, be the head of delegation to the WCPFC and ISC, and the Pacific Islands Fisheries Science Center be the lead for science issues concerning these international fishery fora.
- 2) The Regional Administrator for PIRO be included on the delegation to the IATTC because of the mobility of pelagic fishing fleets and highly migratory species.
- 3) Pacific Fishery Management Councils have membership in the WCPFC and IATTC delegations and SSC chairs or their designees be on all science committees
- 4) Councils should be responsible for establishing domestic implementation of all international management actions regarding catches and effort for tunas and tuna-like species.
- 5) Domestic fishing regulations resulting from international negotiations be implemented through the Magnuson-Act, with accompanying analyses and processes
- 6) A formal process be implemented for communication among US delegation members before and after meetings of international fishery arrangements, including review of draft position papers and other documents.

C. American Samoa & Hawaii Longline Fisheries

1. Quarterly reports

Paul Dalzell presented the American Samoa 3rd quarter 2004 longline fishery report. It was clear that in 2004, the fishery contracted markedly with continuing low catch rates of albacore tuna.

Russell Ito presented the 4th quarter report for the Hawaii longline fishery. It was noted that effort in numbers of hooks deployed continues to rise in this fishery, despite a limited entry program. **The SSC notes the continuing increase in number of hooks set by the Hawaii LL fishery, and therefore recommends the Pelagic Plan Team review the number of hooks that was projected to be deployed under the Hawaii longline limited entry program (capped at 164 vessels), and that this number be compared with numbers of hooks currently deployed.**

2. Longline Sociological Study

Amy Gough presented an update of the NMFS Longline Sociological Study, headed by Stewart Allen. The SSC was pleased to note considerable progress and looks forward to continued updates. In anticipation of continuance of these studies, **the SSC recommends that further analyses be conducted on industry perceptions of observers, and vice versa. This may also include perceptions of the effectiveness of the existing fisheries management regimes.**

3. PIFSC Economic Research Plan

Minling Pan outlined the NMFS/PIFSC Economic Research Plan Priorities for the period 2005 – 2010. **The SSC recommends that PIFSC prioritize the diverse range of research topics in the Economic Research Plan.**

4. JHSTSE Sea Turtle Mitigation Experiment

Chris Boggs explained the Japan-Hawaii Sea Turtle and Seabird Experiment (JHSTSE) project. The project is a collaborative effort between the Pacific Islands Fisheries Science Center and the National Research Institute of Far Seas Fisheries on experiments to mitigate interactions between sea turtle and seabirds with pelagic longlines. There was discussion on hook dimensions since there was no standard measure of hook dimensions, which was crucial to understanding mitigation properties with respect to turtle mitigation.

D. International Issues

1. Prepcon 7/WCFMC1

Bob Skillman summarized events at the recent 1st meeting of the new Western and Central Pacific Fisheries Commission. Most of the meeting was concerned with establishing the new Commission in Pohnpei. Various analyses concerning bigeye and yellowfin tuna were requested to be presented to the WCPFC Science Committee in August later this year.

2. FAO Technical Consultation on Turtles

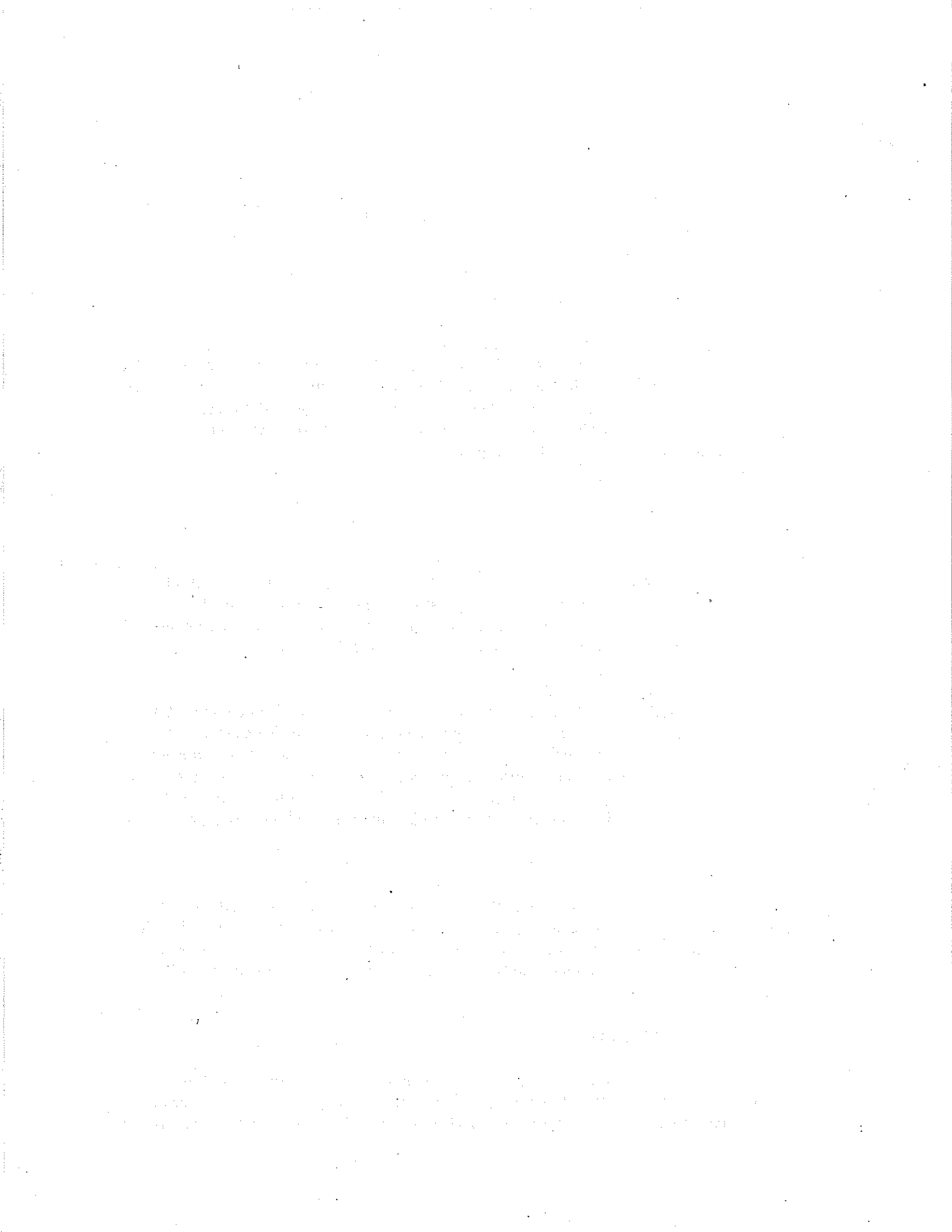
Chris Boggs made a brief presentation on the an FAO meeting which looked at the impact of fisheries on turtle populations. The US and Japan proposed substantive measures for longline fishing, however, there was strong resistance to adopting any specific technical measures for longlining. There was, however, desire to test bycatch reduction measures in each country before adopting them. Consequently, Boggs was convening a workshop at the Council offices with participation by several countries in the Asia-Pacific region, in the second week of April.

3. IFF3

Eric Gilman reported on progress convening the 3rd International Fishers Forum (IFF3). The meeting will be sponsored by Organization of for the Promotion of Responsible Tuna Fisheries (OPRT), Japan Tuna Association and Japan Fisheries Agency and Council. There will be a discussion group on marine mammal bycatch following IFF3. Unfortunately there was still no firm date for the meeting.

E. Pelagic Ecosystem Modeling

Chris Boggs presented a synopsis of pelagic ecosystem modeling that is conducted at the PIFSC with collaborators from other institutions. Boggs showed some examples of how the modeling work could be used to investigate ecosystem impacts of different harvesting regimes on different



trophic levels. Such work suggested that fishing intensively on apex predators such as sharks did not necessarily cause an ecosystem cascade effect. The work also showed that spatial fishery closures for pelagic fishes such as tuna were ineffective unless they enclose most of habitat.

F. Shark Tagging

Tony Beeching (Council Staff) briefly outlined a project proposal to conduct acoustic tagging of sharks associated with shark viewing tours run out of Haleiwa, Oahu. It was noted that this project as presented was not of sufficient detail to adequately evaluate, and that if funded, it could be co-funded through the NOS Whale Sanctuary program, which expressed some interest in this research. **The SSC recommends that the project supervisor be invited to submit a full and complete scientific proposal, detailing project design, complete statement of hypotheses to be tested, appropriate control protocols, time frame of tracking.**

G. Recreational Fisheries

- 1. HMRFS Workshop**
- 2. HMRFS Survey**

Stewart Allen and Nicole Bartlett presented a summary of an analysis of the Hawaii Marine Recreational Fisheries Survey (HMRFS). They explained the direct dialing phone survey to generate fishing estimates, and the intercept creel survey to estimate catches. Allen and Bartlett noted that they had convened a recent workshop to present the results of their analysis in detail. They then presented a synopsis of results to the SSC.

H. Plan Team Recommendations

Pelagic Plan Team chair, Keith Bigelow presented the Pelagic Plan Team recommendations as follows:

- 1. The Plan Team recommends that the Hawaii offshore tuna handline, private FAD, vertical longline and short-line (mainline < 1 nm) fisheries in the EEZ be federally permitted fisheries with log books, limited entry programs, and observers where applicable.**
- 2. The Plan Team recommends that a detailed description of the heterogeneity of Western and Central Pacific longline fleets be drafted for the Western & Central Pacific Fishery Commission (WCPFC), and that the descriptions should include number and size of vessels in longline fleets, depth of set, number of hooks set, hold size, target species and target markets, and refrigeration type.**
- 3. The Plan Team recommends the Stock Assessment Working Group of the Scientific Committee of the WCPFC should specifically examine input controls such as limits on the number of vessels, limits on fishing effort, time and/or area closures and prohibition of FAD sets to be presented to the Scientific Committee in August 2005.**

4. The Plan Team recommends that the Scientific Committee of the WCPFC should examine areas of high fishing mortality for BET and explore opportunities for input controls, for example time area closures.

5. The Plan Team recommends that the WCPFC should make every effort to register and mark with unique identifiers FADs, both anchored and drifting, as fishing gear.

J. Discussion and Recommendations

The SSC made the following comments on the Pelagic Plan Team recommendations

With respect to PPT 1, the SSC believes in principle that all fisheries, both commercial and recreational, within the EEZ be required to provide logbooks, to be subject to forms of fishing control, and also be required to carry observers on vessels where applicable. A phased approach is recommended with the first phase being the requirement to provide logbooks for all types of commercial fishing on pelagic fishes.

With respect to PPT2 the SSC recommends that a detailed description of the heterogeneity of Western and Central Pacific longline fleets be drafted, and that the descriptions would ideally include number and size of vessels in longline fleets, depth of set, number of hooks set, hold size, target species and target markets, and refrigeration type.

With respect to PPT3-5, the SSC recommends that the Council advise the US delegation to the Western and Central Pacific Fish Commission of the following items:

- that the Stock Assessment Working Group of the Scientific Committee of the WCPFC should give the highest priority to examining input controls such as limits on the number of vessels, limited entry programs including transferable quotas, limits on fishing effort, time and/or area closures and prohibition of FAD sets to be presented to the Scientific Committee in August 2005**
- that the Scientific Committee of the WCPFC should examine areas of high fishing mortality for BET and explore opportunities for input controls, for example time/area closures**
- that the WCPFC should make every effort to register both anchored and drifting FADs as fishing gear and mark them with unique identifiers**
- that research is urgently needed into modification of purse seine fishing around FADS that would reduce the catch of juvenile big eye tunas, and other sensitive bycatch species such as marlins, sharks and turtles**