Final draft May 25, 1999

Pelagics Plan Team meeting

12- 14th May 1999
Western Pacific Regional Fishery Council
1164 Bishop St. Suite 1400
Honolulu HI 96813

1. Introduction

Dr Chris Boggs, Chair of the Pelagics Plan Team opened the meeting and assigned the rapporteurs for the various agenda items.

2. 1998 Annual Report Recommendations

A. American Samoa

Status of Fishery

Fini Aitaoto summarized the main points about the American Samoa pelagic fishery, which is dominated now by longline catches. The Plan Team discussed the differences in catch data reported by the DFWR creel survey and the NMFS logbooks. The responsibility for the log books will be assumed later this year by DFWR and afford more integration of the log book and creel survey data. It was decided to include the standard deviation for the long-term averages computed for the figure tables in the American Samoa module. There was some discussion about the difficulty of putting error bars in the figures given the current software used ; therefore, it was decided that review by the Plan Team was sufficient for noting important trends in the data series.

Recommendations

i. Integrate creel survey and federal logbook data to provide a more complete picture of the domestic longline fishery, (to be included in next years report).

ii. Add CPUE comparison between creel survey and log book data (for Table 3) in future modules.

iii. Continue to work with WPacFIN to improve and implement algorithms that better represent all fisheries in American Samoa.

B. Guam

Status of Fishery

The pelagic fishery in 1998 did not exhibit any marked changes from the previous year. There was some discussion about the charter boat fishery in Guam and a subsequent recommendation to break this out of the trolling data for the annual report module. The long- term decline in the value of landings, based on prices adjusted by the consumer price index, continued to cause concern. It seems that profit is not the principle motive for most of the Guam fishery. There were also question concerning the high price for rainbow runner versus tunas. Some re-ordering of the figures in the Guam module were suggested to make the sequence more logical.

Recommendations

i. Breakdown the time series of landings to reflect charter and non charter pelagic fishery sectors

ii. Compare time series CPUE between charter and non-charter pelagic fishery sectors for consideration for inclusion in the annual report.

iii. Include CPI in the first table in the Guam module that includes revenues.

C. Hawaii

1. Status of Fishery

There were some comments on the structure of the Hawaii module, and the re-arrangement of the figures to improve the module=s presentation. This included adding a description like the American Samoa and Guam modules. Overall, 1998 was a good year for pelagic fishing in Hawaii, with total catches remaining at about the 1997 level. There was a continuation of the recent trend in the fishery towards targeting tunas. There was discussion about the impact of the longline fishery on the handline fishery, by depressing the price of mahimahi and ono, and Dr Pooley was asked to look into this. The

relatively large decline in blue marlin catch in the Hawaii longline fishery prompted a recommendation to look at this species in more detail for the next plan team meeting.

Recommendations

i. For the next plan team meeting, draft a focus report on Hawaii blue marlin catch rates and average sizes by various sectors and areas of the state. Also look at the dynamics of CPUE in relation to harvest totals.

ii. Draft a breakout sub-module on Hawaii pelagic charter boat sector.

iii. Make a comparison of troll and longline CPUEs for mahimahi and ono in the same manner as is now done for skipjack pole-and-line and troll CPUE data.

iv. Include Chair and additional member of the Pelagics AP to represent the longline and small vessel fisheries in Hawaii at the Plan Team meeting.

D. Northern Mariana Islands

Status of Fishery

The NMI module only documents data generated by pelagic fishing on Saipan. The data are collected from sales receipts and not a creel survey, as is the case in American Samoa and Guam. Due to the downturn in the NMI economy, more people were turning to fishing for income. The trend in skipjack CPUE was discussed given the flat trajectory between 1992 and 1998, preceded by a three year decline (1989-91) and a period of more variable CPUE in the 1980s . It was suggested that market forces may have been affecting how much skipjack was sold, or that targeting had changed, rather than that local skipjack abundance had declined and stabilized. This generated a recommendation to conduct a more in-depth analysis of skipjack CPUE, Dave Hamm later reported to the meeting that these trends in the CPUE were not seen in the creel survey data, but only with 1990s sales receipt data. A graph of the difference, suggesting a change in targeting by the commercial sector will be included in the annual report.

E. International Module

Status of Fisheries

Some data sources in this module were complete only through 1997, while others contained data up to 1998. The status of stocks is not yet drafted for the module and will be completed after the 12th Standing Committee on Tuna and Billfish, to be held in June in Papeete, Tahiti. It was announced that new Plan Team members, Keith Bigelow of the SPC Oceanic Fisheries Program will take over responsibility for the International Module. Information on bycatch from the US purse seine fishery from logbook and observer records will be incorporated in the International Module. There was some discussion on the formatting of the maps in the module.

Recommendation

i. **The tables in the module should include data from the whole Pacific. Maps should be extended to include important Pacific rim catches, and the legend should be placed so that it does not obscure areas of important catches.**

1997 Annual report region-wide recommendations

i. **The Council should request the Hawaii Division of Aquatic Resources (HDAR) to develop and implement a fish dealer permitting system, and should computerize and enforce its dealer reporting system. This will further document the total volume of fish sold in the state and will provide a crossBreference validation capability for fishermen's reports.**

Status: Progress has been made on the computer system.. Because of the large number of dealers, with a huge range in the scale of their operations, dealer identification and report management is a big problem. This was being phased in slowly to incorporate the biggest dealers first. The system should be on line soon. The Council has provided funds for this project which HDAR matched. HDAR has also made additional financial commitments to this system.

ii. **The Council and or other appropriate agency should seek funding to conduct a survey of Hawaii smallBscale fisheries. This survey is needed to evaluate the significance of nonBcommercial and part time components of these fisheries.**

Status: A request was made to NMFS to include Hawaii and the insular territories in the Marine Recreational Fisheries Statistical Survey (MRFSS) in 1999, but rejected for lack of

funds. Obtaining the funding to conduct a MRFSS survey in Hawaii may require support of the State=s political delegation in Washington. A PFRP proposal for studying recreational fisheries had to be rejected as this required matching funding which was not available.

iii. The HDAR should continue to improve the collection of Hawaii fisheries data so that the data provide useful information on fishing effort.

Status: The State has made great progress in incorporating useful measures of fishing effort in new catch report forms, is testing the first of these forms in the field, and continues to make improvements.

iv. The three fishery management councils with Pacific jurisdiction, along with member states and NMFS, should collaborate to ensure the collection of landing and logbook data from all domestic longline and driftnet vessels harvesting swordfish and other Pacific Pelagic Management Unit Species (PPMUS)

Status: The NMFS and California Department of Fish and Game has a cooperative data sharing agreement. Logbook data from longline vessels landing in California is received by the NMFS Honolulu laboratory from the CDFG on an intermittent basis. There are two types of longline logbook data received by the Lab from CDFG; the Western Pacific longline logbook and copies of CDFG offshore longline logbook. Data from both sources has been keypunched and archived for the years 1995 to 1997 at the NMFS HL. Entry and archiving of 1998 data is almost complete.

v. The Council should support an analysis of trends in mahimahi and ono landings and catch rates, and other incidental catches, throughout the western Pacific region, including data from EEZ and distantBwater fisheries.

Status: There has been no progress on this recommendation

vi. The Council should attempt to obtain data on discards from U.S. and other purse seine fisheries within the U.S. EEZ and on the high seas.

Status: The discard data were obtained from the NMFS Pacific Islands Area Office and will be included in the International Module of the Annual report.

vii. Because the Hawaii-based longline fishery is expanding in terms of ports of landing, the Council should authorize NMFS to use VMS information to monitor logbook compliance.

Status: Council rejected recommendation because it wanted to limit VMS to monitoring area closures.

1998 Annual report region-wide recommendations

1. The HDAR should continue to improve the collection of Hawaii fisheries data so that the data provide useful information on fishing effort.

ii. The Council should seek funding to conduct a survey of Hawaii smallBscale fisheries. This survey is needed to evaluate the significance of nonBcommercial components of these fisheries.

iii. The Council should support an analysis of trends in mahimahi and ono landings and catch rates, and other incidental catches (i.e. opah pomfret rainbow runner etc), throughout the western Pacific region, including data from EEZ and distantBwater fisheries.

iv. The Council should support an analysis of trends blue marlin landings and catch rates, throughout the western Pacific region, including data from EEZ and distantBwater fisheries. NMFS HL will conduct a stock assessment of blue marlin.

22. Because the Hawaii-based longline fishery is expanding in terms of ports of landing, the Council should authorize NMFS to use VMS information to monitor logbook compliance. The Plan Team believes this information to be vitally important for other fishery monitoring and assessment purposes.

vi. Plan team asks that when the Council rejects or modifies a Plan Team recommendation, that this be noted in the annual report without modifying the original recommendation wording.

4a. Hawaii and Am. Samoa longline fisheries

Russell Ito and Paul Dalzell reported on the report for the Hawaii and American Samoa longline fisheries during 1998. Paul Dalzell also presented additional information for American Samoa in the first quarter of 1999. Russell Ito showed the catches and catch rates for the Hawaii longline fishery. He also presented maps showing the spatial distribution of catches and fishing effort. He noted the large amount of fishing effort in the US EEZ waters to the south of Hawaii, particularly around Palmyra & Kingman Reef. Swordfish CPUEs rose in 1998 and returned to pre-1994 levels.

Paul Dalzell noted that 1998 marked the third year of logbook data for this emerging fishery. The fishery appeared to be in a period of stasis after rapid expansion in 1996 and 1997. The American Samoa longline fishery had significantly revived fishing activity in the territory, with landings rising from less than 100,000 lbs in 1995 to almost 1 million lbs in 1997, comprised mainly of albacore for the canneries in Pago Pago. The performance of the longline fishery in the first three months of 1998 was very poor, with fewer than average number of vessels fishing and lack of any interest from outside American Samoa to longline within the American Samoa EEZ.

4b. Status report on High Seas Fishing Compliance Act (HSCA) licensing of Hawaii-based longline vessels

Alvin Katekaru presented information on the implementation of the High Seas Compliance Act. This was initially handled by NMFS SWR in Long Beach, beginning in 1999, but was now the responsibility of the PIAO. A high seas permit cost $50.00 and was valid for five years. Plan Team discussion included whether foreign vessels operating from territories such as Guam and American Samoa would need a HSCA permit. These vessels are documented by the USCG but are exempted from the HSCA permit. The permit information is archived by NMFS headquarters. NMFS HQ will also have access to logbook data wherever it is archived. Logbooks reporting through NMFS and State/Territorial programs which meet HSCA logbook reporting requirements will mean that fishermen do not have to complete additional paperwork.

5. Akule & opelu study

Kevin Weng reported on the results of his MSc thesis study at UH on catch and fishing effort data for two coastal small pelagic fishes, akule and opelu. Mr Weng explained that his study suggested that Hawaii stocks of both species were only moderately exploited. His work also showed some correlation between akule CPUE and rainfall. The study also showed that akule had greater site fidelity and might be more susceptible to localized depletion from heavy fishing. The PT congratulated Mr Weng for his

presentation and the novel approach taken in analyzing the data. There was some discussion on the quality of the data and how this affected the results and the confidence in their interpretation.

6. Yellowfin tagging

Mr Itano did not make his presentation.

7. Sharks

a. Update on catch trends

Dr Mike Laurs from the Honolulu Laboratory reported on the statistics concerning the catches of sharks in the Hawaii longline fishery. Approximately 100,000 sharks were caught each year. In the past most were simply cut free, but an increasing amount were now retained for finning. In 1998 about 60 % of sharks were retained, nearly all were finned but a few such as makos and threshers were landed whole. Approximately 80% of sharks caught were alive at the time of the longline haul. Dr Laurs noted the various research projects, 8 in all, that were being conducted at the NMFS HL on the blue shark, which formed 90-95% of the longline shark catch. Dr Laurs also noted that there was no indication of a long term decline in the CPUE of blue sharks in the North Pacific.

Dr Laurs was asked if the average weight of blue sharks in the longline fishery had declined? It had not. Dr Laurs was asked about the timing of a blue shark stock assessment being conducted with the Japanese Far Seas Laboratory. Dr Laurs responded that this was contingent on staff availability and the successful recruitment of a stock assessment scientist.

b. New gear application for coastal shark fishery

Council staff Don Schug addressed an application by a Mr Edwin Cross to have his demersal longline gear used to catch coastal sharks included in the approved gear list for the Western Pacific Region. Dr Schug explained that this form of longline gear did not conform to the definition of a longline in the Council=s Pelagics FMP, nor were the species being targeted (coastal sharks) included under the PFMP. Legal opinion received from the NOAA general Counsel stated that this gear may, however, meet the definition of hook and line gear as defined in 50 CFR Part 600 and that Mr Cross did not need to go through the approval process.

This generated much discussion by the Plan Team on the definition of longline and hook and line gear, and whether coastal sharks were included in the PFMP as management unit species. The objections to this form of fishing in Hawaii by the Hawaii Pelagics Advisory Panel members were noted. The Plan

Team felt that the vulnerability of coastal shark populations to fishing pressure and the potential for interactions with protected species argued against this form of demersal longlining being used in Hawaii.

Recommendations

i. The Plan Team recommend to the Council that bottom longline gear not be permitted for taking PMUS in the US EEZ around the Hawaiian Islands.

ii. The Plan Team recommends that the Council re-evaluate which shark species it wants to be managed under the Pelagics FMP. The Plan Team thinks that PFMP should be clarified to include only pelagic sharks. Such sharks could be defined as follows: blue shark, dusky shark, silky shark, oceanic white-tip shark, two species of mako sharks, three species of thresher shark, salmon shark, crocodile shark, and whale shark). Other sharks are occasionally pelagic (such as hammerheads and sandbar sharks), but Plan Team does not believe these should be included in the PFMP.

8. Seabird interactions in the Hawaii longline fishery

a. Update on trends and numbers

Analysis of the NMFS observer data from 1994-1998 was presented. A statistical model was used to estimate total take and to identify potential opportunities for mitigation. A large number of independent variables were evaluated for their ability to Aexplain@ the variability in observed bird take. Most of these variables were of little use in predicting take. A measure of distance of longline set from nesting site and longitude are potentially useful predictors of Black-footed albatross take, and a similar distance measure and calendar year were useful predictors for Laysan albatross take.

b. Mitigation projects

Preliminary results from the Garcia and Associates field study of the effectiveness of potential mitigation techniques was presented. Towed buoys, dyed bait and *tori* poles were all effective in reducing attempts by albatross to take bait and possibly in reducing mortality. Use of weighted hooks is probably not a practical technique because fishers consider it dangerous. Towed buoys and *tori* poles require active intervention by the crew to be effective deterrents and their use might be difficult to enforce.

Results of NMFS experiments conducted on the *Townsend Cromwell* were presented. Dyed bait and weighted hooks were more effective than *tori* poles in reducing albatross contact with longline bait. Young birds (. 1 year old) appear to take bait more frequently than older birds.

c. Black-footed albatross population dynamics workshop

Kathy Cousin reviewed the 1998 Black-footed albatross population dynamics workshop and its outputs. The workshop was extremely useful in reviewing all sources of mortality and in placing longline-induced mortality in the context of albatross life history and population growth. The workshop participants recommended:

1. **Complete, develop and curate a relational database for banding records.**

2. **Encourage further analyses of existing data sets and conduct further modeling at a population dynamics modeling laboratory.**

3. **Design and implement a population-monitoring program at breeding sites to address the effects of long term mortality.**

4. **Obtain information and make best estimates of fishing effort and mortality from the Pacific Halibut and non-US longline fisheries in the Northern Pacific Ocean.**

5. Design, implement and develop a longline fishery-monitoring scheme to test mitigation measures and to gather mortality data.

6. Undertake comparative studies with Laysan (*Phoebastria immutabilis*) and Japanese Black-footed albatrosses.

7. Hold a workshop in Honolulu, Hawaii at the Second International Albatross Conference between 8 - 12 May 2000.

The Plan Team endorsed these recommendations

d. Section 7 consultation for Short-tailed albatross

One Short-tailed albatross was observed near the *Townsend Cromwell*. Individual birds have been observed repeatedly at Midway for several years, but no mortality or successful breeding has been observed. The NMFS biological opinion concludes that the activities of the Hawaii-based longline fleet will have no impact on the populations of the Short-tailed albatross. The USFWS dissents from the NMFS BO and a Section 7 consultation will occur.

e. Council regulatory action for mitigating longline-seabird interactions

A set of possible regulatory options will be presented to the 100th Council meeting in June 1999. These options will be based on results of the mitigation field studies and on the geographical distribution of takes. Several options for restricting longline activities in areas near the nesting sites were discussed. Information meetings for fishers will occur in May.

Recommendations

1. The Council should, as soon as possible, promulgate measures to reduce seabird takes in the Hawaii-based longline fishery using a combination of area restrictions and proven techniques (e.g. blue dyed bait, night setting, towed deterrents, etc) which deter hooking and mortality of albatrosses.

ii. The above measures should be based on defined zones of high interaction rates. Within these zones a phased approach should be taken beginning with mitigation measures and followed upon by complete closure should mitigation measures prove to be inadequate.

iii. The Council should ensure that all participants of the Hawaii-based longline fishery are informed that the future of the fishery is in serious jeopardy if the numbers of albatross interactions are not markedly reduced.

iv. In addition the Council shall aggressively pursue cooperative international efforts to reduce albatross interactions with longline fisheries.

9. Turtles longline fishery interactions

a. Update on trends and numbers

Pierre Kleiber presented estimates of turtle takes using a similar regression tree model as used for albatross takes. Dr Kleiber presented the take and kill data with respect to the new permissible take and kill levels generated by the recent biological opinion for loggerheads, olive Ridley, leatherback and green turtles.

b. Ecology of loggerhead turtles
c. Mitigation possibilities for longline-turtle interactions

Chris Boggs presented a summary of a study made by Dr Jeff Polovina that showed that the distribution of loggerhead turtles was strongly correlated with the 17 and 20 EC isotherms to the north of Hawaii. These isotherms mark two boundary regions or ocean frontal systems. The Plan Team discussed

whether this information could be used to mitigate longliner-turtle interactions. The use of isotherms to indicate area closures for migrating turtles in the Carolinas were cited as an example.

Recommendation

The Plan Team recommended that the NMFS Honolulu Laboratory should simulate the effectiveness and fishery impacts of using an isotherm-based area closure as a means of reducing turtle bycatch.

10. Marine debris

Rusty Brainard from the Honolulu Laboratory gave a presentation to the Pelagics on the impact of marine debris on coral reefs and protected animal species in the Hawaiian Islands. Mr Brainard showed a video concerning the accumulation of net fragments from gill net and trawl fisheries to the north of Hawaii. He also outlined concerns with plastic smaller marine debris and its impacts on seabirds and turtles. He showed how oceanographic conditions create seasonal patterns in the volumes of marine debris arriving at the Hawaiian islands. Mr Brainard outlined NMFS HL response to the problems associated with net fragments and coral reefs. This included net removal, damage prevention, public awareness, identifying marine debris sources, tracking net fragments and high resolution satellite imaging to expedite at-sea interception and removal.

Kathy Cousins of the NMFS PIAO reported on Council concerns over small plastic marine debris, which had a detrimental effect on protected wildlife such as seabirds and turtles when ingested. One of the main items ingested by albatrosses were light sticks, used in large quantities by the Hawaii longline fishery but also by the military, recreational boaters and cruise ships. Ms Cousins updated the Plan Team on recent discussions with US light stick manufacturers about having source and lot codes on the sticks so that they could be traced to users.

Recommendation

The Plan Team recommended that a deposit on light sticks be investigated to encourage longline vessels to return light sticks rather than discard them at sea.

11. American Samoa

Paul Dalzell reported on the background to the American Samoa longline closure and the history of this management measure. American Samoan fishermen had originally asked the Council to implement a 100 nm longline closed area around the islands of Am. Samoa. Facing opposition to this from NMFS, Am.

Samoan Council members had agreed to a 50 nm closure around the southern islands of American Samoa and 30 nm around Swains Island in the north of the EEZ.

This framework measure had been rejected by the NMFS SWR Administrator, who had suggested that a smaller 30 nm closure around the southern islands and no closure around Swains Island may be acceptable. Mr Dalzell also noted comments from Drs Gary Matlock and Andy Rosenberg from NFS HQ who stated that the administrative record did not support the area closure. This was due to the framework document not addressing National Standards 4 and 7 sufficiently and not addressing National Standard 5 at all. Their advice was that Council staff should have used National Standard 8 as the main argument for the closure and defined objectives under this National Standard.

12. International meetings

a. MHLC4

Paul Dalzell outlined for the Pelagics AP the progress on the Multi-lateral High Level Conference (MHLC) process to implement a management convention for tunas in the Central-West Pacific. This process will ultimately implement a management commission for tunas etc in the CW Pacific. The process had begun in 1994, with second and third meetings in 1997 and 1998 respectively. The fourth conference was convened in Hawaii in February 1999, with the fifth meeting also scheduled for Hawaii in August-September 1999.

Paul Dalzell noted that the area to be managed under the new commission contained all of the Western Pacific Region. He also outlined what the new management commission would do once implemented. The most important impact with respect to the Council would be the development of total allowable catch for the four principal tunas, skipjack, yellowfin, bigeye and South Pacific Albacore.

b, ISC2 [??? b, 2]

Dr Mike Laurs of the Honolulu Laboratory summarized the recent second meeting of the Interim Scientific Committee on Tunas and Tuna-like Species in the North Pacific (ISC). Dr Laurs noted the outputs of two working groups on statistics and swordfish, the latter of which included a preliminary stock assessment for North Pacific swordfish, and the formation of a third working group on marlins. The future of ISC was discussed in relation to the division of the Pacific between the MHLC and IATTC. There is provision in MHLC for a sub-committee on northern stocks and the ISC may eventually evolve into this body.

13. HDAR catch forms

Alan Rabacal and Reggie Kokubun from HDAR presented the revisions being planned to the present C3 catch data reporting form. This single form would be replaced with a suite of individually designed forms for the range of fishing activities in Hawaii. It was noted that as the dealer reporting system comes on-line, then the fish sales data presently required from fishermen can be discontinued, and the catch forms used purely for biological purposes. The Plan Team did not make a specific recommendation on this issue but were pleased to see the progress being made to improve catch and effort data reporting by HDAR and suggested that those Plan Team members most closely associated with fishery data should continue to work with Alan and Reggie to develop the data forms.

14. Recreational data task force

Paul Dalzell explained the development of a Recreational Fisheries Data Task Force to advise the Council on the way to improve the reporting of recreational fishing data. He explained the terms of reference and the suggested composition of the task force.

The Task Force will be comprised of active and retired small boat-fishermen (recreational, part-time commercial, and subsistence) spokespersons for the recreational and sports fishing sector and fisheries management and data specialists.

The objective of the Task Force will be to provide advice to the Council on the best ways to collect information on recreational, part-time commercial and subsistence fishing activities in Hawaii, including levels of participation, catch and fishing effort. Mr Dalzell noted that the next Council meeting will discuss the appointment of a chairman for the Task force.

Recommendation

The Plan Team endorsed the Recreational Data Task Force planning meeting recommendations.

15. Comprehensive Data Amendment

Mr Mark Minton explained the development of the comprehensive data amendment and the need to close loopholes for data reporting by presently un-permitted fishing activities in the remote island territories of the Western Pacific Region. This would be achieved through a federal permit and logbook system. He added that this amendment would also require Hawaii limited entry longline permit holders to report their catches wherever they land them.

Mr Minton suggested that the HDAR Tuna Handline Trip Report would serve as an adequate federal logbook proxy for trolling and pelagic handline fishing in the remote island territories. The Plan Team concurred with this proposal.

Recommendation

The Plan Team recommended using the prototype HDAR Tuna Handline Trip Report as a log book for non-longline pelagic fishing within the US remote insular territory EEZs. This form has provisions for reporting a variety of fishing gears.

16. Comprehensive SFA amendment

Given the time constraints Mr Dalzell briefly recapped the recent meeting with NMFS HQ staff and the resulting discussions on how to fix the Comprehensive SFA amendment sections dealing with pelagic fisheries bycatch, pelagics overfishing definition, and fishing communities.

17. Pelagic AP recommendations

The Plan Team reviewed the Pelagics Advisory Panel recommendations arising from the AP meeting convened between 14-15 April 1999

The Pelagics AP recommendations were as follows:

1. **Improve fisheries enforcement activities in all areas of the Western Pacific Region in response to declines in pelagic fisheries catch rates.**

2. **Recommend all fishing vessels over 50 ft in length entering the US EEZ in the Western Pacific to be required to carry Vessel Monitoring Systems.**

3. **Urge Council to make every effort to convince NMFS to revoke its decision on the American Samoa closed area, and to return to the original 100 n.mi. closed area and this would include Swains Island.** ***(Unconditional support for this recommendation by the entire Pelagics AP)***

4. **Urge participating members of the Council to write to their federal representatives to defend, protect and preserve fisheries resources as they are the only major resources in the small islands of the Western Pacific.**

5. Ask the Council to make a recommendation to the Federal Government to approve the MHLC convention, especially Part VIII article 31 (Recognition of the special requirements of developing States).

6. Ask the Council to require all US purse seiners to honor the terms of the Tuna Treaty and implement VMS and to share the information with the Council members and its scientific committees.

7. Require observers on longline vessels to tally the number of billfish that are alive at the time of landing.

8. Recommend to the Council to identify funding to provide technical assistance for management of shark fisheries, and the marketing of shark products from the NMI, Guam and American Samoa.

9. Recommend to the Council that it investigates the impact of large-scale pelagic fisheries on small scale near-shore pelagic fisheries in the WP Region.

10. The Council request MHLC5 strongly encourage reduction of purse seine fishing that concentrates on undersized tunas and/or has a high non-tuna bycatch component.

11. Request the Council to establish 30 longline permits for a Native Hawaiian community-based economic development program, without exceeding the existing number of permits in the limited entry program.

12. Request that the Council to include a study of circle hooks in ongoing mitigation efforts to minimize interactions with protected species.

13. Request that the Council immediately undertakes an in-depth economic impact analysis by area of recreational fisheries in the Western Pacific Region, and that this analysis include a thorough review of similar studies undertaken in Texas, Florida, California, Costa Rica, Puerto Rico, Mexico and Panama, and their management implications.

14. Recommend that the Council inform the State Department that in all fisheries management decisions, including the negotiations of US treaties, the interests of local fishermen within the jurisdiction of the Council be given equal consideration.

15. Request that the Council undertake a review of the current state-of-the-art in high-technology tagging, and consider the opportunities these technologies provide for

improving our understanding of highly migratory PMUS, particularly blue marlin, bigeye and yellowfin tuna and with regard to management options.

16. Recommend that in studying the effects of blue dyed bait on CPUE, the experimental methods include alternating on a one to one ratio dyed and undyed bait on longlines. Continue to evaluate mitigation methods.

17. Recommend that the Council make an effort to have fishermen, including indigenous fishermen, represented at MHLC negotiations.

Other recommendations made by the AP were as follows:

1. Promote fisheries development programs for the Mariana Islands to improve efficiency of small vessel fisheries.

2. For any seafood product to be labeled as Hawaii seafood they must be caught and landed by a Hawaii State registered or US documented vessel holding a valid State of Hawaii commercial fishing license. ***(Hawaiian Pelagics AP members voted 8-5 in favor)***

3. Recommend to the Council to identify funding to investigate the potential of longline fishing and ika-shibi fishing within the NMI and Guam EEZ.

4. Request that the Council evaluate what are the potential affects to fisheries of the CO_2 sequestration in the Pacific Ocean with immediate concern for Keahole Point, Hawaii. Experiments are scheduled for summer months in the year 2000.

5. Request that the Council recommend to DLNR to explore a minimum size of aku for commercial sale because of fishermen's concern about the exploitation of juvenile fish.

6. Recommend that the Council requests NMFS to maintain a database and historical record on the overall vessel characteristics of federally permitted vessels.

The Plan Team endorsed recommendations 8, 9, 12, 13, 14, 15, 16, arising from the agenda, and recommendation 6 which was not generated by an agenda item but was recommended by the Advisory Panel.

18. PT recommendations

The Plan Team reviewed the recommendations made during the course of the meeting.

The Plan Team also commented on the lengthy agenda for this meeting stating that it was difficult to deal with so many issues as well as the annual report modules in one meeting. The Plan Team suggested holding one two-day meeting confined mainly to reviewing the annual report modules, with another meeting later in the year to deal with other pelagic fishery issues.

(The meeting finished at 3.00 pm)