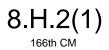


WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL



# Fishery Data Collection and Research Committee – Technical Committee

April 14-15, 2016 8:30 a.m. – 5:00 p.m. Ilima Room, Ala Moana Hotel Honolulu, Hawaii

# **DRAFT REPORT**

# 1. Welcome and introductions

Mike Tenorio, Acting Chair, opened the meeting at 8:40 am. Present at the meeting are: Erik Franklin, Terry Donaldson, Thomas Ogawa, Brent Tibbatts, Celestino Aguon, Flinn Curren, Scott Bloom, Kimberly Lowe, Hongguang Ma, David Benavente, Yvonne Mika, Domingo Ochavillo, Reginald Kokubun, Justin Hospital, Samuel Kahng.

# 2. Approval of draft agenda, 2015 report & assignment of rapporteurs

The agenda was approved without revision. Agenda items were moved around to accommodate the conference call with the WPacFIN contractor that is developing the WPacFIN website.

# 3. Report on previous FDCRC-TC recommendations and Council actions

Marlowe Sabater, Council staff, reported on the status of the previous FDCRC-TC recommendation. The first recommendation pertains to the prioritization of the spear fishery data collection for improvements. The Council developed a proposal to MRIP that addresses this priority. This project will be implemented in June 2016. The second recommendation was in regards to the use of a statistical model to evaluate sampling level to improve surveys and reports. A project is underway to establish a database analytics system in DFW that has this functionality. A workshop was held to determine other needs. American Samoa and Guam signed up for a similar system. The last recommendation was the endorsement of the omnibus proposal.

# 4. Status of the data collection improvement efforts

# A. American Samoa

Domingo Ochavillo and Yvonne Mika reported on the activities DMWR engaged in improving the fishery data collection in American Samoa. The highlights are as follows:

- Expanding the creel surveys over time. Enhanced the fish ID training. Hired staff in Ofu. Training the staff on species identification. Implementing it on the other island. Covered 24 hours. Trying to capture spearfishing. Will check for more interviews.
- How many interviews are you able to capture with the expanded time? BB-three to four more interviews per month with the expanded time shift. Improving the relationship with the fisherman, participated in the coop and fisherman's meeting.
- Ethnic breakdown participating in the fisheries are mostly Samoan and small percentage Tongans

- Small number of boats in AS high coverage for boats but is missing the spear fishery. Need to find the best time of day that the spear fishers leave and come in to streamline the sampling.
- In analyzing the data one has to consider the potential effect the change in sampling effort;
- Its not really the length of time you increase in the sampling but the ability to capture the fisherman
- Council contractor improved the commercial invoice data collection; increased vendor participation from 30 to 56

# B. Guam

Brent Tibbatts reported that they've been targeting commercial dealer reporting. They now have 8 stores reporting, and the word is getting out through the community and they are less hesitant to provide data than in the past. Pelagic data have been very forthcoming, but the spearfishers seem to be avoiding the shore-based surveyors. The commercial sales data is not species level, which is desired. Pelagic fishermen are very willing to give information when there is a raffle prize incentive, which may work for the reef fishers. Tibbatts has learned that the Micronesian reef fishermen crews rotate off island every six months.

Meeting participants discussed an annual brochure summarizing the creel survey data for distribution. This would need to be developed in about six different languages for Guam and be distributed to the Guam Fisherman's Coop as well as the Micronesian community

# C. CNMI

David Benavente reported they have been exploring different avenues to increase participation in the creel surveys. Staff turnover and training are the biggest challenge. They have implemented a mandatory species identification training, and they are adding it into the grants to allow overtime. Dave has friends in the spearfish community who are forthcoming with their catch data. They will have an RFP out within a few months to develop a program to have electronic reporting for commercial dealer, technician, and fishermen data. The annual brochure would be great for CNMI, as the fishermen are very proud of their catch.

#### D. Hawaii

Tom Ogawa reported on Hawaii's data collection programs. The three pilot surveys focused on the shoreline effort, conducted on Oahu only. The first was an aerial survey taking continuous orthographic imagery. Tom analyzed them for gear counts, which took 25 or 30 hours per day of imagery. The analyst must be a person with a fishing background. The second survey was a mail survey. The third survey is a roving survey for surveying fishermen within a certain boundary, as opposed to an access point survey. This was conducted for catch and effort. The gear count seems to work better for Hawaii. Hongguang Ma and Ogawa are still in the process of analyzing these datasets. DAR is trying to minimize sources of error in the recreation data from these different pilot studies.

When asked if the fishermen are receptive to surveyors, Tom explained that the boatbased fishermen generally are in a rush and are less responsive to interviewers. Shorebased refusals are generally due to a language barrier.

Preliminary results will be presented in early August and the report should be available by the end of the year. The new data, when the data collection system is revised, will likely need to be treated as a separate dataset. When asked which if the methods was the best, Ogawa responded that the roving survey is the best for catch. The mail survey for effort was most complete, because it covers nighttime and the whole island. The aerial survey was the most limited because there is a lot of air traffic and weather dependency, as well as data analysis time constraints and cost.

Ma wondered if the surveyor could get in the water to get interviews. Liability is an issue, and the spearfishers would not like to be approached by the surveyor as this would affect fishing success. Ogawa opined that getting data from spearfishers participating in a tournament might be a good avenue for self-reporting in the future.

# E. MRIP and TSI Projects

Sabater gave a brief update. The non-commercial spearfishing project in the Marianas is still pending with regard to funding. The TSI projects looking at seasonal run fisheries just wrapped up in the three jurisdictions; Sunny Bak is finalizing the report. The commercial receipt book data reporting projects under TSI are underway and the reporting vendors have increased in all areas. The year 3 and 4 proposals have been submitted to PIFSC but there is no update on the funding.

Kim Lowe asked if the format for the invoice has been revised, what system will the data collected go into? Benavente and Sabater responded that the forms have changed but the format has not. There is a change in the header data, and Quach reported that the change will be applied in the MySQL database. Sabater reported that there is agreement between Micronesian Environmental Services (MES) and DFW and the additional header data are for MES.

# F. WPacFIN Database Transition and Online Interface

Kim Lowe updated the FDCRC-TC on the progress of transporting the database to an online interface. The design objectives were to make all primary data accessible to the user, reduce the number of data requests that WPacFIN staff must respond to, and make canned graphs available on the website. WPacFIN is the only FIN that is not a contractor, so they have the least flexibility in the nation. The website will host the non-confidential: "best estimated" total commercial landings, commercial dealer data, commercial fisher reporting system, and boat-based and shore based creel survey data. The underlying data structure is now table-driven, which allows for easier updates. Species tables include the MUS, ACL groupings, taxonomic groups, and others, e.g. by habitat, can easily be added. Cameron Roberts, of Tukuh.com, is the lead developer. The application will be live after the NOAA IT group and change review board approve it.

Kim Lowe gave a demonstration of the interface. While dynamic input is not possible due to NOAA IT constraints, the developers are working to reduce number of species shown based on the selected region. The application is in its user input phase, where users can provide feedback on the design and available queries. The demo can be accessed at wpacfin.tukuh.com, username wpacfin and password "f1sheries!". WPacFIN is interested in users letting them know what canned queries the users are interested in, what problems they run into, and what users thing of the interface.

# G. Discussions

Tibbatts mentioned that the week before this meeting, the Guam legislature passed a bill establishing the Guam Ocean Fisheries Management Council who will be advising and assisting the Guam Department of Agriculture in how they will spend natural resource money. The Council is made up of 2 indigenous rights groups and 7 are various fishing groups plus one university seat. They will have fishing licensing fees, and money from it will be issued in fishery enhancement projects on Guam. It's unclear if it's a fishing license for everyone, but there are different pricing mechanisms for different nationalities and licenses for MPAs.

Eric Franklin clarified that the WPacFIN databases are being migrated from Visual FoxPro to MySQL.

# H. Public Comment

There were no public comments

5. 2015 Annual/Stock Assessment and Fishery Evaluation (SAFE) Report Recommendations

# A. Overall Annual/SAFE Report Framework

#### i. Linkages with the on-the-ground data collection

Sabater reported on the work items from the plan team meeting. The annual report has implications for on-the-ground data collection. The Council does not yet have the final list of missing elements, but one example is the BMUS time series, which is absent in the American Samoa module. There is only bottomfish catch in general, but there is a specific set of 17 species that are included in the stock assessment but are not in the report module. The reported catches are all bottomfish species, not the BMUS. These are identified data gaps, and the FDCRC must determine how to address them.

#### ii. Timelines for data submission for Annual/SAFE Report

Stefanie Dukes reported that next year the plan team will be better prepared with data submission. To achieve this end, draft modules will be prepared by the end of February. The new website will make the data more accessible and the canned queries will be in the website. The grant requirement is now monthly for reporting so that should help with everything being up to date. Late data will affect billing.

Dukes said that if we can collectively agree on a font and a font size for each of these tables, that would be helpful. Sabater responded that a technical writer will format the reports and produce a style guide and standard operating procedure for assembling the report.

Lowe pointed out that quality control is an issue with the agency. Tino Aguon said that he sees will every day and this works well. He says that capturing the new string

of graduates to serve as data collection technicians is helpful as they appreciate the needs to stick to the methodology and as locals know how to approach the fishermen.

Ogawa asked if people sell fish via Facebook in Saipan. Benavente and Tibbatts said it does happen. Fishers post a fish, and someone comments that they want to buy it. This is a data collection problem for all areas. There is a website called Fresher that is a broker and it's private, but there is some public Facebook posting. The fishermen in Hawaii get better money for their fish. Pelagics and reef fish are sold this way in Hawaii, but more pelagic. Tibbatts said there is more reef fish sold in Guam and it's a private fishing family website. If we require a dealer license, would it be an individual dealer license? Proportionally, how much is this activity.

Justin Hospital has someone scraping that Fresher.io page since it started, and there have been 162 posts since last year. The spatial distribution is all over the islands, and mahimahi is the most common. Over 200 individual mahimahi have been sold through that site. Hospital will be monitoring the site this year, and will have a report. Hospital can give the SSC an update at its June meeting. The protected species program has a Facebook trawler for monk seals, etc.. Public Facebook posts can be trawled, so there is some application for fishery reporting.

# B. Discussion on Addressing Recommendations from the Fishery section

#### i. Insular fisheries modules

# a. American Samoa

Table 4 table title needs to be changed. Either don't fill in shore-based and just put in boat-based estimates and commercial landing - separate catch by bottomfish and troll. Shore-based, put species identified by bottomfishing gear in the boat-based survey. Coral reef is pretty straightforward.

Table 15: Bycatch is on the form, but there is no place in the database for the bycatch. There is never any bycatch anyway, because they use it all in American Samoa. In the future, the American Samoa creel survey technicians can ask if the fishermen release anything or threw anything back. The new database can be designed to hold the bycatch information. In the end, this table was removed from the report for American Samoa, and Sabater will add a narrative describing the no bycatch characteristic of the American Samoa fishery.

#### b. Guam

Guam was complete.

#### c. CNMI

There was no estimate of creel total for bottomfish. Change to the same language as in American Samoa.

#### d. Hawaii

Sabater and Kokubun are finalizing the Hawaii module. The spatial requests will be filled next year.

#### ii. Ecosystem Considerations

#### a. Climate, ecosystems and biological section

There were no major Plan Team recommendations coming out of the plan team.

#### b. Human dimension section

Chris Hawkins addressed the FDCRC on the human dimensions section of the report. The potential data gaps are imports and exports, local fish consumption rates, connections to local economies and employment. PIFSC's small boat reports have coverage, frequency, and methodology issues.

Next year Guam will have some fish imports tracked, as DAWR has been working with customs on tracking fish separately from agricultural products. There are no fish exports. CNMI has collected fish import information on and off and has not been as consistent in recent years. It is reported as fresh or frozen fish. Herman did a household survey in 2001 or 2002 on the economic valuation of the coral reefs. In Guam, the Navy did a survey for risk assessment associated with a PCB spill. Food stamps have a requirement to report what they sell, so that may be another potential data source. Ariel Levine did household surveys. DMWR has import data from customs.

#### C. Discussions

There was no additional discussion.

#### **D.** Public Comment

There was no public comment.

#### 6. Strategic Plan Monitoring

# A. 2009 Data Workshop Recommendations and Status

Sabater presented a status line document of the 2009 Data Workshop Recommendations. Most of the recommendations were addressed except for a few ones that are either no longer relevant or would entail a large source of funding. The Technical Committee agreed to update the matrix and add their institution's contribution to the recommendations.

#### B. Status of tasks for the FDCRC Strategic Plan

Sabater went over the strategic plan. Lowe commented that the literature database may be too ambitious. Eric Franklin commented that Bishop Museum may be difficult to depend on in the future. Tino suggested making the plan jurisdiction-specific. An action item for the committee is to update the status lines after Sabater subdivides it by jurisdiction.

#### C. Grants and Funding Opportunity Matrix

Sabater presented the matrix that John Wiley developed. The matrix helps jurisdictions decide which grant programs apply to which tasks that are described in the strategic plan. It's a resource for FDCRC-TC members to use. The Committee thanked Sabater's intern for putting the information together. When asked the main problem is to get grant funding, they responded that completing the grant is the problem, not writing proposals or acquiring funding. The staff don't have enough time to finish the job. Franklin

encouraged the agency folks to look for academic partners especially if it's on a finite scale. He would like a laundry list of projects for studnets to choose from for a win-win situation.

DMWR approves permits for many university research projects, and that is not captured in the FDCRC. For aquaculture, they have some technical assistance that SPC provides for free. Franklin also said WPacFIN might be surprised the leap forward an agency can make in a year with a qualified student with strong programming skills.

# **D.** Group discussion on status monitoring procedure

Sabater said we touched on this in the previous discussion. He brought up to the Committee members that their bosses will be meeting in June. A report on status in data improvement is on the agenda for the meeting, so each Committee member should provide their agency head with a write up of this meeting. The Chair clarified that the write up should be sent to their boss with Sabater copied. Sabater said he will send a reminder e-mail with a deadline in May.

# E. Discussions

Sabater apologized to the research branch of the Committee and that next year would be more research oriented. Tenorio said that Committee members are still trying to get a feel for the FDCRC itself, but in the future it will be able to come up with proposals and projects that benefit all parties to address ongoing issues. Sabater informed the Saltonstall-Kennedy applicants that the funding results will be released in a month. The review committee for the Pacific Islands Fisheries Research Program will meet next week, and the cooperative research proposals are due Sunday, April 17<sup>th</sup>

**F.** Public Comment

There was no public comment.

# 7. Improving the on-the-ground data collection

# A. How much more do we need to collect: SHINY Database Analytics

Sunny Bak Hospital, Council contractor, presented on the database analytics project. The goal of this project is to provide the local fishery management agencies with real time access to the raw data and provide guidance on how much more information are needed to make the expanded data more reliable. It also provides an info-graphic interface to easily visualize the existing data and also a download function to summarize and download the data from the server. Some of the discussion points are as follows:

- Quach clarified the security protocol for the installation of the SHINY server app;
- Sunny clarified that the server sits within the DFW office and ensures the security protocol;
- Quach also explained that when the MySql from WPacFIN is up and running it would be easy combine the 2 system;
- The system is limited within the intranet;
- If the capacity of the agencies is limited, there are alternative ways to securely access the server remotely (e.g. VPN) to provide remote support;

# **B.** BioSampling Program Review

Beth Lumsden, PIFSC staff, presented on the results and outcome of the PIFSC BioSampling Program Review held in Saipan in February 2016. The review covered the science and implementation of the program. The review covered the collection programs in American Samoa, Guam, and CNMI, the Life History component, and the market sampling component. Some of the highlights and discussion points were:

- Should have a program manager PIFSC conducted a biosampling team (Taylor, Nadon, Matthews)
- Address the backlog need to address backlog on priority species; increase training for the local entities ; statistical analysis to provide advice on the level and frequency of the off-site analysis; opportunities to engage students from UH, UOG and CNMI and ASCC
- Revise future sampling strategy BioSampling team will work with each programs to provide advice on how to refine their sampling strategy; the prioritization of the species list for the region will contribute to this
- Enhance relationship with other vendors in Guam will provide assistance in building these relationships as the opportunities arise; the TSI project can help bridge the BioS folks to the vendors;
- Conduct fishery independent sampling the operational MOUSS can be replicated in the other territories; create a sampling design for the territories;

# C. Establishing Import-Export Database System

Marlowe Sabater, Council staff, provided an update on the status of the project submitted for Saltonstall-Kennedy funding that would establish a fishery import-export database. The Principal Investigator for this project is the Guam Bureau of Statistics and Plans in collaboration with the Council and numerous other agencies from CNMI and small island countries in Micronesia. Due to the confidential status of the review process, Sabater could no longer provide any additional information.

#### **D.** Discussions

There were no additional discussions

#### E. Public Comment

There were no public comments

#### 8. General Discussions

There were no non-agenda item discussions

#### 9. FDCRC-TC Recommendations

Regarding review of the priorities, the Fishery Data Collection and Research Committee – Technical Committee recommends the Council to direct staff to establish a process for monitoring progress of activities addressing the strategic plan and incorporate that process in the FDCRC-SOPP

There were also several work items for the FDCRC-Tech Comm members need to do:

- Technical committee members will update the data workshop recommendation matrix to include progress from each agency/institutions
- Technical committee members will provide comments to the WPacFIN website

• Technical committee members will provide progress on their respective each agency/institution progress in addressing the tasks described in the FDCRC Regional Strategic Plan

# **10. Other Business**

There were no other businesses to discuss