



SUMMARY RECORD

Marine Fisheries Administrative Committee

Public Meeting

April 25-27, 2016
Portland, Oregon

OVERVIEW

The spring 2016 Marine Fisheries Advisory Committee (MAFAC) meeting took place in Portland, Oregon over the three day period from April 25-27. NOAA Fisheries was represented by Paul Doremus, the Deputy Assistant Administrator for Operations, Heidi Lovett, NOAA's Policy Analyst, Jennifer Lukens, the Director of the Office of Policy, Alesia Read from the Office of Communication, Eileen Sobeck, the Assistant Administrator for Fisheries, Kristina Trotta, NOAA Program Analyst, Barry Thom, an Administrator of NOAA Fisheries West Coast Region, and Bob Turner, the Assistant Regional Administrator for Sustainable Fisheries of the West Coast Region of NOAA Fisheries.

Julie Morris served as Chair of MAFAC. The meeting opened by welcoming five new members to MAFAC, Erika Feller, Peter Moore, Harlon Pearce and Kim Parsons as well as Raimundo Espinoza. There were also 19 returning members: Ted Ames, Terri Beidman, Julie Bonney, Dick Brame, Heather Brandon, Columbus Brown, John Corbin, David Donaldson, Randy Fisher, Liz Hamilton, Rob Jones, Micah McCarty, Julie Morris, Mike Okoniewski, Bob Rheault, Robert Muscott, Henry Seseapasara, Peter Shelley, John Stein and Pam Yochem.

Over the course of the meeting, the following priorities and activities pertinent to NOAA Fisheries were discussed in detail:

- Perspectives from the Northwest Coast.
- The proposal of a new task force, the Columbia Basin Partnership Task Force.
- National bycatch reduction strategy and other bycatch efforts.
- Hatchery genetic management plans.
- A general overview of protected resources and relevant strategies.
- Resilience as it pertains to fishing communities, forecasts, targeted communications strategies, and ad hoc working groups.
- Strategic planning, budget and program management of the committee.
- Advances and uses of electronic monitoring.

This is the order in which they were discussed but there was significant overlap.

This report summarizes the major action items, recommendations and meeting discussion for the three day long meeting.

DAY 1 (April 25, 2016)

Welcome, Introductions and Agenda Review - Julie Morris, Jennifer Lukens, and Eileen Sobeck:

Ms. Morris does general greetings and introductions and Ms. Sobeck does general introductions, introducing Erika Feller, Peter Moore, Harlon Pearce and Kim Parsons, all of whom are new

members appointed last fall. Lastly, Raimundo Espinoza is introduced. He was appointed two weeks prior to the meeting.

All the participants introduce each other and explain their title and role. There are two guests, Bob Turner and Robert Muscott. Ms. Sobeck gives a brief overview of the issues that are being worked on at NOAA Fisheries.

Report from the Assistant Administrator - Eileen Sobeck:

Ms. Sobeck speaks to the fact that though the institution works on a large scale, it thrives on the aggregation of multiple territorial entities to reach its goals.

Ms. Sobeck starts out with recreational fishing and explains that the one year anniversary of the National Saltwater Recreational Fishing policy was in March and that it has been 10 months since the release of the National Implementation Plan. She reemphasizes that the plan is composed of regional action plans. The plans will be made public in the next few weeks since they have recently been completed. Ms. Sobeck concludes this statement with talks of hope that recreational fishing should be second nature and part of fisheries culture to the point where a recreational fishing coordinator would not be needed.

Next, Ms. Sobeck talks about species in the spotlight. She puts over the importance of this element and mentions the Endangered Species Act as the standard of preservation of species with the goal being to keep different species, in this case aquatic wildlife, off of the list. She explains that this can be best achieved by a combined effort from a variety of regional partners and stakeholders to identify which species are on the list, why they are on the list and how recovery can be achieved. The federal government alone cannot be expected to effectively keep track of all the species.

She begins to highlight eight specific species that are at risk but where identifiable actions can be taken to prevent their endangerment. The first two she mentions are the Hawaiian monk seal and the white abalone native to the coasts of California.

With regard to the Hawaiian Monk Seal, the first species mentioned, she begins by explaining that the Marine Mammal Center, which is a private partner has established a Monk Seal Hospital on the Big Island in Hawaii which Ms. Sobeck explains is appreciated and impressive, considering NOAA could not afford to do this by themselves. At least 7 or 8 seal pups that were on the verge of death were rehabilitated by this hospital. Though the number might seem small, Ms. Sobeck explains that it is significant since the Monk Seal population is somewhere between 1,100 to 1,200. She explains that NOAA is necessary to this effort since they are the ones generally responsible for transporting the seal pups to and from places like the hospital on Big Island. Ms. Sobeck explains that a recent report was distributed to the Assistant Regional Administrators for Protected Resources from all regions which meet periodically and post key findings and conclusions integral to the well being of endangered species.

Next, Ms. Sobeck moves on to IUU fishing and seafood fraud. She explains that the Seafood Traceability Program and the public comment period closed a couple of weeks before and the final rule is to be published sometime this coming fall. She explains that there are no new recording requirements for domestic landings of wild caught seafood. She thanks everyone for their comments about the Fish Watch and puts over how important of a tool it is. She also explains that the Fish Watch website has recently been designed and that it is the first mobile friendly website they have made. She references the 40th year anniversary of the Magnuson-Stevens Act and the 20 year

anniversary of the essential fish habitat and the events that took place to commemorate these milestones.

Ms. Sobeck explains and emphasizes that because of human activity and climate change, fishing is dynamic and that the management of stocks is integral in dealing with this non-static issue. She also alludes to various legal issues and their resolution, opening up room for the already constrained budget. She talks about the Gulf oil spill and explains that the restoration process is ongoing but already effective, though the major efforts are still to come. She concludes this section by saying that direct communication with the state is important and that the Commissions and the Fisher Management Councils cannot always be involved in all the issues.

Ms. Sobeck moves on to the CCC meeting explaining that they will try to focus on some regional issues. The next meeting is the next month so not much time is spent talking about this since it has yet to happen.

Ms. Sobeck explains that Paul Doremus, her Deputy, will arrive later tonight to give a budget briefing. She announces that they have gotten a Senate mark the week prior. She does not know how to gauge this but concludes that at the very least, it provides an initial reaction from at least one House. Mr. Doremus will explain this in detail during his briefing.

Ms. Sobeck says that Richard Merrick was not able to make it but John Stein will give the presentation Mr. Merrick would have given about the planet science strategy, priority, plan and the regional action plan. Mr. Stein will explain more on this. Ms. Sobeck concludes her update with this and Ms. Morris advances to questions about what Ms. Sobeck had just covered.

Mr. Donaldson explains the need for continued revenue in addressing the issues of the Gulf and the relatively recent BP oil spill which still might have enduring consequences. Mr. Donaldson explains that the money often has caveats on what it can and cannot be used on so more money is always important. This sentiment is echoed by various members with Mr. Pearce explaining that five percent of that money is for research.

Mr. Espinoza voices his concerns about the impact the Seafood Traceability Program will have on the imported seafood to the U.S., specifically on the U.S. Caribbean where 98 percent of the seafood is imported. He believes that this might pressure local fisheries to fill the demand that will be created by the Seafood Traceability Program. Ms. Sobeck explains that 90 percent of seafood to the U.S. is imported and that the requirements should not have an impact since they only require the documentation of important seafood. Naturally, U.S. codfish will not be impacted at all. The red snapper that is often imported from Indonesia and Brazil will be impacted. Mr. Pearce uses this as an example and Ms. Sobeck confirms that the requirements will apply. The regulations attempt to document imported seafood both to regulate commerce and to make sure that seafood fraud is not taking place. This is common in interstate and foreign commerce and this point is echoed by various members.

Since the U.S. is a big importer of seafood and therefore a large market, Ms. Sobeck believes that other countries should be required to provide documentation and be held to the same standards as the United States.

Perspectives from the Northwest Coast - Liz Hamilton, Micah McCarty, Mike Okoniewski, and Jim Parsons:

Next, Ms. Hamilton, based in Portland, 100 miles from the ocean, explains the impact that climate change and fish traveling patterns have on commercial as well as sports and recreational fishing. She explains that most of what she wants to talk about will be brought up later. She voices her appreciation to the staff and finishes with saying that the biggest issue in regards to the Northwest will be addressed later, the Biological Opinion in the Columbia. She also briefly mentions the sturgeons are being overfished.

Next, Mr. McCarty begins by talking about the fact that steelheads are being eaten by predators at an alarming rate, to the point where their migrations are being severely affected in the Nisqually River. He mentions that a lot of assessments are being made on seal and sea lion cull outs as well. The Nisqually River is highly regulated which is having an effect on the tribal fishing to the point where the Nisqually Tribe has attempted to take legal action.

Mr. McCarty introduces the concept of OPS or optimum sustainable population in regard to the seals and sea lions and explains that they are past this. He also mentions that herring, rockfish and orcas are also being protected but that he believes a crisis is unfolding. He briefly touches on the efforts of Billy Frank Jr. who worked very diligently before his passing on protecting the Nisqually River. He also explains that 100 percent of the California sea lions are male and are starving while also being unable to procreate.

Mr. McCarty segues into the opportunity cost that Native tribes had to deal with in exchange for the protection of their way of life. The United States has rights over the river but they are supposed to protect Native interests as well. A judicial finding determined that co-management of this area between the United States and Native tribes are the way to go. He explains that NOAA should take the interests of Native tribes into account while also taking into account the interests of sports fishermen. He finishes by explaining that the Treaty Tree Ceremony will take place in Olympia, Washington where Natives from different tribes will celebrate and pass through each others' territories.

Mr. Okoniewski speaks next and begins by reading from the Amendment 20 the purpose of which is to create an ample amount of capacity realization plans, increase economic benefits, create individual economic stability and provide for full utilization of trawl sector allocation. In addition, it considers environmental impacts and achieves individual accountability of catch and bycatch. Other objectives of Amendment 20 include providing for a viable groundfish fishery, increasing operational flexibility, minimizing adverse impact effects, finding fishing communities and promoting measurable economic and climate benefits through select catching, processing, distribution elements and supported sectors of the industry. He mentions all this to make the point that the non-whiting side of the IFQ fishery has been, in his view, a failure as costs for the program have gone up significantly while the market supply is cutting them off.

649 million pounds of swai and tilapia have been imported to the country last year alone. Meanwhile, the attainment levels have gone down to an all time low of 20.2 percent for non-whiting fishery, concentrated primarily on sablefish and petrale. Species like the dover are also significantly underutilized with only 13.75 million pounds caught in comparison to the 102 million pound quota. He concludes this segment by a call to action to save the fishery which supplies multiple grocery stores that rely on it for their supply of the aforementioned fish.

Next, he speaks on the embargo Russia has placed on the United States' imported fisheries and products. With the Ukraine's troubling economy, two big importers have been removed from the

loop. Shrimp fishing is also in peril with the effects of El Nino expected to lower supply from 90 to 100 million pounds per season to 20 to 30 million pounds per season.

Mr. Parsons speaks next and begins with talking about issues involving regional shellfish which are an important part of West Coast economic operations. He explains that starting a shellfish farm is difficult in terms of getting a permit.

Mr. Parsons begins to talk about the issues with the Pacific oyster mortality syndrome which affects the gigas species. It is a herpes virus that is threatening growers in many places and could be a large obstacle to the industry as a whole. In addition, climate change is also affecting shellfish and the shellfish industry. This has had an impact so great that a decision must be made as to how to regulate fisheries, specifically salmon fisheries in Puget Sound because of the low expected return of the coho population. Alternate species for marine culture are being explored.

Mr. McCarty adds that the malnourishment of some fish species is making hook and release fishing a peril and that the well being of the fish and the ecosystem must be balanced with the sports fishing industry considerations as well. A 15 minute recess is taken.

State Directors Meeting and Fisheries Commission Report - David Donaldson and Randy Fisher:

When the meeting resumes, Mr. Donaldson begins with addressing issues in the Gulf of Mexico, beginning with the red snapper crisis and explains the newly implemented Lock Reel Survey which actually surveys anglers and estimates efforts needed to control not only the red snapper crisis but also similar crises affecting other species. Alabama and Mississippi are in the process of implementing a specific survey about the red snapper. The red snapper also has some disparate effects on the Dungeness crab population.

Mr. Donaldson explains that data is important in dealing with any sort of problem including the ones involving aquaculture and the fisheries.

Mr. Fisher explains that the Dungeness crab fishery is the most profitable in the west coast. It is seasonal and valued at 150 million a year. A bill has gone out to the Senate and the House regarding Dungeness crab legislation because Gulf fishermen want the same managerial authorities as people in the West Coast. Technically, no bar exists preventing people from tampering with the crab population and this, along with drought, is a major problem. He also reiterates the problem of seals overeating the already dwindling steelhead population. Mr. Fisher also explains that he will go down to speak with the West Coast Fisheries regarding the removal of the Klamath dams. There is also a move to remove observers in place of camera technology. He concludes by talking about disaster relief in Alaska. He explains that 2.3 million dollars are being spent on research alone in this regard with an additional 20 million to pass to fisherman to regulate, among other things, the Chinook population on the Yukon.

Columbia Basin Partnership Task Force Proposal - Barry Thom:

Next, Mr. Thom begins by introducing himself since he was not present earlier. He then starts talking about the Caribbean Basin Partnerships that he has been working on since around 2009. He mentions the Columbia Basin and hydropower system that has been under a continuous litigation since 2000. He mentions the hurdles in achieving broader partnerships with the sovereigns, the states, tribes and federal agencies as well as the stakeholders. He broadly explains the detail of the

goals and the different interests that overlap. The process is very complicated with multiple goals for multiple fish species and fishery problems. The process also is very large scale, also affecting and being affected by the ocean and the stock of sea life going through it. As a result, climate change has severe consequences at all levels. Mr. Thom also emphasizes tribal treaty rights and the challenges of different jurisdictions of sorts ranging from basins, rivers and interstate and sometimes international waters.

Ms. Morris explains that this process should emulate the model used in Aquaculture Task Force rather than the Recreational Task Force. She echoes some of what Mr. Thom said in terms of the commenting process and the other several steps of setting goals and passing laws.

Mr. Thom explains that the goal of the next two years is to come up with a set of integrated goals, kind of like a docket regarding the Columbia Basin to sort of create a hierarchy of the goals based on their urgency and rate of solution.

Mr. Okoniewski emphasizes the need to effectively report back to the MAFAC Committee and achieve this.

Mr. Thom and others talk about the scope of work and the risks that any action would result in. Ms. Yochem also mentions the reputational risk for MAFAC. She also explains the need to develop goals and conversations. Mr. Thom starts talking about how the process is daunting but some success has already been achieved. He brings up the thriving salmon runs in the Colombia which are doing well in comparison to the rest of the coast. He attributes this to the efforts that have been taken.

There is skepticism among the participants but the general idea is that the program is working well. The key talking point is to ensure communication and cooperation between different actors and interested parties, something that is happening well but that could still be improved upon. It is especially difficult because of the sheer number of interested parties. Another frequent talking point, which goes hand in hand with cooperation and communication is the creation of a task force that represents the various interests and interest groups.

Ms. Feller brings up that NOAA Fisheries might be the most apt to get all these people together since there is no federal agency with similar responsibilities.

Ms. Bonney explains that the Committee would have 25 to 30 individuals with one year appointments. Mr. Thom emphasizes a thorough matter of fact overview, comment period, and input to NOAA Fishers as important goals of the Committee.

A motion is made to adopt the terms of the reference document, creating the Columbia Basin Partnership Task Force that has been talked about for a two year period. It is passed with no opposition and with three members as absentees.

Before the next topic can be started, Ms. Beidman asks for clarification on which subcommittee will oversee the commission. No vote was taken but there are no objections so it goes to the Ecosystem subcommittee.

The next issue at hand is the National bycatch reduction strategy and other bycatch efforts.

National Bycatch Reduction Strategy and Other Bycatch Efforts:

Ms. Sobeck explains that the Draft National Bycatch Reduction Strategy is out for public comment until around June 12th. It is a draft so changes are expected and this discussion could result in some changes. The session is mostly for information.

First, Ms. Sobeck explains what bycatch means and explains it's all the marine wildlife, including sea birds and sea turtles that no one wants to catch. The definition is important in different contexts since there is so much variety among fishers and interest groups. Data collection and research is also important and Ms. Sobeck says that NOAA is open to new data collection techniques. She constantly emphasizes that they are very open to any suggestions and ideas.

Since bycatch results in the mortality of many species, it is important to use these metrics to see what species need the most help recovering and allowing fisheries to rebuilt so that they can continue to thrive. Management measures as well as bycatch mortality can have significant impact on wildlife. One interesting thing that is brought up is how to fishermen and fishing communities can be incentivized to lower bycatch and increase the catch utilization. This is described by Ms. Sobeck as a win win situation. She emphasizes communication between law enforcement and managers and scientists.

Additionally, the bycatch reduction efforts will exist on a large spectrum of scales, from the local to the national. A rulemaking, the Standardized Bycatch Reporting Methodology Rulemaking, exists right now and the comment period closed the day of the meeting. A variety of other rulemaking possibilities are explained.

Next, 15 minutes are taken for questions. First, they begin by talking about questions about strategy. It is mentioned that the data being used is often outdated and this is talked about with no real understand of how recent data needs to be and how recent data can in fact be. The current data is from 2013. Ms. Bonney talks about what a mandate might look like, perhaps national objectives broken down to regions that are then held accountable for their individual delinquencies. She also asks about priorities of grant programs that deal with bycatch issues.

Mr. Okoniewski points out that some bycatch, if it is not the intended catch can still be used but considered bycatch which seems to be somewhat oxymoronic. Emily explains that the Bycatch Reduction Engineering Program is a grant of about 2.5 million dollars. Mr. Okoniewski proposes that a distinction be made between discard which is bycatch and utilized bycatch so that people understand the difference, which practically, is important.

He also suggests a distinction be made between marine resources as it applies to the Pacific versus how it applies to the Caribbean. Ms. Hamilton makes a distinction between discard and dead wildlife and talks about the liabilities being large. Ms. Sobeck explains that more research would be needed. Mr. Ames suggests that it is not impossible to fish commercially without encountering bycatch.

The question segment ends and they take a one hour and 15 minute break for lunch. This marks the end of the morning session.

Next, they move on to a presentation by Rob Jones on Hatchery Genetic Management Planning.

Hatchery Genetic Management Plans - Rob Jones

Mr. Jones begins with a little bit of background and explains that the hatcheries are different from one another because they obviously deal with different species but also have different goals. He

explains that some fisheries exist in order to breed fish for mass production while some might be focused on creating fish that are able to survive in the wild. Some such fisheries have been instrumental in the prevention of extinction for some species of fish. He segues into talking about some of the problems facing fisheries.

He begins by talking about the injury or mortality at hatchery intakes. Water intake quality and quantity are two discernible problems. The hatchery fish sometimes prey on natural populations while also competing for food space with other natural fish. Another interesting aspect is the interbreeding of hatchery fish with natural fish, which lowers the genetic diversity of the population as a whole, presumably because the hatchery fish are less diverse. The number of hatchery fish that are released is extremely high so the impacts can be quite severe. A plan, called the Hatchery Genetic Management Plan has been laid out in 2000 to deal with this. Mr. Jones will go over how the plan is doing in detail.

He divides this evaluation into two timeframes. The first is before 2012. After 2012, litigation became something of a problem. The requirement of NMFS to support litigation and the Hatchery Genetic Management Plans being constantly updated are two reasons that lowered the capacity to review these Hatchery Genetic Management Plans. The plans are seldom perfectly crafted and must go through multiple revisions. Most commonly, this is due to shortcomings and errors in the analysis of hatcheries on listed species and the inadequacy or absence of hatchery reforms which are meant to reduce risks. Currently, there are 331 hatchery programs across the west coast in the four states that either have provided or are expected to provide hatchery plans. These are not 331 hatcheries but hatchery programs. A hatchery can have multiple of these programs within its scope.

Mr. Jones briefly goes over the vast amount of litigation and explains that hatchery reform is needed. Mr. Jones also explains that the plans generally are indefinite and that the hatchery programs can continue as long as they operate in conformity to their proposals, if they have been approved. He also explains that it is harder to get funding for these reforms.

NEPA is the court that has been the most problematic, with 75 percent of the HGMPs triggering a requirement to also do NEPA, which takes time. Just going to court and hoping to win takes time and resources. Several strides have been made to improve hatcheries and HGMPs. More staff has been hired, the efficiency of coming up with templates has also been heightened to help various parties hopefully draft better plans that will be approved quicker. Also, a schedule has been negotiated to move through all of these plans in a consistent and efficient manner. Currently, 134 of these plans are being worked on while 56 are finished out of the aforementioned 331 plans.

Ms. Sobeck addresses a question on where the money for the lawsuits comes from. She explains that if someone wins a lawsuit, their attorney's fees are paid by the government, depending on what statute it is under. For NEPA cases, just the judgment is paid. The money comes from the appropriated funds. This serves as an incentive for the government to do the right thing and for other parties to bring suits and hold the government accountable. Ms. Hamilton emphasizes the importance of handling the litigation more efficiently, by litigating only the claims that are winnable and perhaps settling some of the other ones if it makes more sense financially.

More talks take place about finances and various strategies. Various members echo the idea of handling litigations better. Some suggest that this would free up funds to do other things, since funding is already limited and harder than ever to come by.

Mr. Okoniewski explains that the role under the Endangered Species Act (ESA) is to react to what others are asking to do. Mr. Turner explains that the government can help by supporting the notion that the reviews are science driven.

As this discussion is preliminary and will be addressed further in the upcoming days, most of what is said is going to also be addressed in the upcoming dates. The date of June 3rd is chosen for a conference call to adopt before the June 6th deadline.

Draft National Bycatch Reduction Strategy - Mike Okoniewski

The conversation moves towards bycatch which was addressed earlier and will be addressed in the coming days as well. One important aspect that is not mentioned in the later days is the ability to monitor the amount of bycatch that is being saved through the monitoring of the ships within an area simply through a numerical process, before talks of electronic monitoring happen at later meetings.

Various discussion takes place on different species and the problems they face, from the tailed fish that migrate around and face different problems in different areas to shellfish that stay in the same place and face their own risks including the aforementioned over predation by other species, including those of hatcheries. This all occurs in the context of what bycatch means, the definition of which is a point of contention throughout these proceedings.

Mr. Okoniewski defines bycatch as the fish that shouldn't be caught if there is now quota for it and therefore is thrown away. This is distinguishable from regular bycatch which is just the fish that you are not aiming to catch.

Climate change, another commonly addressed topic in these proceedings is mentioned as a problem that should be addressed, mostly by changing solutions that cannot remain static because fishing is not static. Stock assessments are also mentioned to be critical to monitor the number of fish, which species are being overfished and which species might be under fished.

Another issue is the detrimental impact that poor bycatch policies might have on law abiding fisherman who throw away otherwise usable fish to comply with the policies.

Ms. Morris talks about strengthening monitoring and data collection programs as being an objective in the context of bycatch. Secondly, she says that supporting research programs to meet those needs is also an important objective. The third objective she highlights is to improve discard and take estimates for use in the commercial and recreational management. With this last objective, Ms. Beidman explains that she has some concerns with the estimates of post-release mortality since this data is hard to come by.

Using trawl as an example, Mr. Okoniewski explains how logbooks from fisherman and terrain geography has been used to change the fishing patterns when it comes to trawl. Next, Ms. Morris talks about the improving management measures designed to reduce bycatch while strengthening understanding of the economic and social factors contributing to bycatch and the effectiveness of bycatch methods. Strengthening the effectiveness of management measures through regular review is also an important objective. Finally, Ms. Morris highlights the last objective, improving communication within the NOAA fisheries and increasing partner and shareholder awareness.

After some pleasantries and a call to addressing any burning issues, the proceedings for day one are adjourned at 5:08 p.m.

DAY 2 (April 26, 2016)

Introductions - Julie Morris:

Ms. Morris begins with a quick agenda overview for the day. The proceedings are a bit shorter than the first day and will start with a budget overview and then a science update from Mr. Stein who will touch on climate strategy and regional action plans, as well as ecosystem based fisheries management.

Mr. Freise and Ms. Towne will begin with a presentation on fishing community resilience and after a break, Mr. Stein will present on harmful algal blooms. After lunch, the afternoon session will commence with Ms. Cheney talking about targeted communications strategies. After introductions, the NOAA fisheries budget outlook begins.

NOAA Fisheries Budget Outlook - Paul Doremus:

The budget is a three year plan. Mr. Doremus explains that after the nearly 13 percent drop off from fiscal year 2010 to fiscal year 2013, NOAA is still recovering though 8.1 percent has been recovered in the last three years, including 2016.

A lot of work has been done in tandem with the current administration to diversify the protected resources recovery efforts. Salmon, in particular, has been heavily invested in. There has been an increase of 5 million dollars that was not requested. Some people are suggesting that there be new censuses done with this extra money. An additional 3 million dollars have been funded to combat illegal unreported and unregulated fishing and seafood fraud.

19 million dollars were requested for permit processing but it did not come through. This is problematic because of the backlogs that have resulted due to inadequacies of manpower.

15 percent of the budget goes towards grants. Another area, aside from states, go to EM/ER. The total NOAA budget is 6 billion dollars. 17 percent of said budget is still left. This is a large budget but they are still underfunded. Mr. Doremus talks about various underfunded ventures including a building that was build on a dangerous cliff.

Mr. Shelley brings up the Saltonstall-Kennedy funds and asks how much comes from that program and how the funds are allocated.

Mr. Doremus explains that 130 million of those tax receipts basically offsets the operations research facilities funding on the order of 130 million dollars. Every year, Congress decides how much money is given, this year it's 10 million dollars, sometimes it's zero. By law, 60 percent of these funds are to be put out into the regions and 40 percent can be used for internal purposes. Mr. Doremus explains that the funding process is also a public process and urges the committee members to participate and help others participate as well.

General Science Updates - John Stein:

Next, they move into discussions about science updates. Dr. Stein, standing in for Richard Merrick gives two updates on the national climate science strategy and the ecosystem based fisheries management. Dr. Stein emphasizes the idea of climate informed reference points where it is important to know where populations are going to be like in the future. With this comes the idea of being able to manage the changes brought upon by climate change with respect to different species.

The change has been a warming of six degrees Fahrenheit of the “warm blob.” The warm blob will be addressed later.

Questions are asked about the hake MSE that has been put out. Dr. Stein explains that it is a model of how the system works. Issues regarding lack of information are brought up. Dr. Stein also explains the importance of treating different ecosystems accordingly and conducting what he refers to as good science.

Mr. Fisher asks whether the current council process can react fast enough to the changes that may be happening. Mr. Stein explains that they work with projections and the best data that they have. He then moves on to the second part of his presentation on ecosystem based fisheries management.

The first draft of the relevant document is expected to be ready for informal public comments in the spring. It will speak to the guiding principles that are in the policy in relation to the roadmap. It will give context and caveats for the implementation plan, which serves as the roadmap. The planning process will deal with things like what is going to be done about specific habitats. The ecosystem model is based on Atlantis, which is habitat based. Mr. Stein also explains that it is important to look at what fisheries have done in the past and for NOAA and the fisheries to communicate effectively. Money for research and the implementation of the Atlantis Box to other places like the California current.

Resilience, Fishing Communities - Steve Freese and Sarah Towne

Next, Ms. Towne and Mr. Freese will present on resilience and the fishing communities. Ms. Towne begins by saying that NOAA’s annual guidance memo promotes the core mission of healthy ecosystems, communities, and economies that are resilient. She explains that the first step is to define what fishing communities and fishing community resilience means. In identifying the meaning, she expresses the need to also identify issues, gaps and recommendations to better meet the fishing community resilience goals.

She mentions that there are three types of fishing communities that NOAA Fisheries might consider, the first, identified under the Magnusson-Stevens Act as substantially dependent or substantially engaged in the harvest or processing of fishery resources. An example of this type of community might be Dutch Harbor in Alaska or Cape Maine.

First, “fishing communities” needed to be defined. The definition included communities of interest, something other than location, target species or industry sector. Areas within communities for fishing and fishing related industries was also included.

Next “resilience” needed to be defined. It was defined as “the ability of a fishing community to withstand, recover costs, and successfully adapt to change.” As far as changes go, the types of changes that were discussed many changes like natural and manmade disasters like hurricanes, storms, oil spills, and ocean and weather conditions like the warm blob. Algal blooms, El Nino, regulatory changes like catch reduction, limited entry programs and catcher programs that limit the number of people.

Equipment standards, observing and monitoring costs, building costs. Consumer and market trends impact fishing communities like domestic and international trends on boycotts, sustainable seafood labeling and price competition. Also, gradual changes were mentioned, including climate change and

other environmental issues like drought, competition for space and waterfront, zoning and high operation costs.

Ms. Towne further explains that some fishing communities constantly have to adapt to many factors. She explains that the definitions spoken of before are working definitions and that a goal is to solidify them to help with strategic priorities.

Various members make suggestions and observations on what resilience. Mr. Shelley asks whether there was any consideration in creating a vulnerability index. He also brings the focus specifically to communities that are most likely to be affected by climate change as well as on the accuracy of the data. He also stresses the importance of training and retraining programs.

Mr. Freise begins talking about the vulnerability index which he experimented with as part of the west coast planning.

Mr. Moore explains that with species distributions changing, there are potential opportunities opening up as others leave. He brings up the example of black sea bass coming into the Gulf of Maine. The black sea bass is a predator of lobsters but also provides a great opportunity for fishermen.

Ms. Morris proposes a break and Ms. Bonney explains that she is going to begin after the break by talking about socioeconomic data and how that informs community resiliency. A 15 minute break takes place.

Resilience, Forecasts - John Stein:

Once the break is over, Dr. Stein resumes his presentation and moves on to talk about the harmful algal blooms in the context of resilience. He talks about the toxicity of environments and the harmful effects they can have ranging from nausea to death. If the frequency of the bloom exceeds 20 parts per million, it is not deemed safe. In 2005, there was a bloom but it just reached the 20 parts per million threshold so it was considered safe. 2005 was a "typical" year for the most part. Ten years later, 2015 shows the domoic acid levels have reached 100 parts per million or 5 times the limit. There is a correlation between this and the bloom. Dr. Stein has explained that the projections are somewhat loose because data is not perfect but being that 2016 is an El Nino year, he projects another bloom.

Dr. Stein talks about the chemistry behind this and explains the various methods of gauging the levels of the bloom and the accompanying toxicity. It can be gauged with samples under microscopes as well as tests by sending samples, like clams, in. This information is very important in the context of making informed decisions on when to harvest and when not to harvest. Several examples used show that even a matter of days could make a difference on a harvest.

Dr. Stein also explains that the algal blooms affect not only the shellfish and fish in terms of safety of consumption but also consequentially affect the market. Dr. Stein also explains about the problem of false positives which could also affect the market for the worse. As such, it is important that coordination and information exchange be prioritized accordingly.

Ms. Morris opens the floor for a public comment period. There is no response and as a result, a one hour and 30 minute break is taken for lunch. This concludes the morning session.

Resilience, Targeted Communication Strategies - Katherine Cheney:

The afternoon session begins with Ms. Cheney continuing to talk about resilience in the context of targeted communications strategies beginning with the outreach campaign. Specifically, she talks about three campaigns. First she begins with talking about the dynamic oceans campaign which essentially was an attempt to inform the entire west coast on what was happening on the coastal Pacific Ocean. This involved many interviews, reviews, et cetera. The second campaign was to address toxicity facing the salmon. This campaign involved a more artistic approach that apparently went viral. The third project dealt with the technology used to monitor fish and fish passage. Ms. Cheney explained that every situation had its own geographic and biological variations. Social media has also been used effectively in various aspects.

Ms. Morris goes over the charge for the communications ad hoc working group. The first task that will be talked about is Task 6, evaluate and strengthen tools and strategies for fishery managers, NOAA, fishery management councils and other management processes.

Resilience, Ad Hoc Working Groups - Harlon Pearce and Erika Feller:

Mr. Pearce begins this discussion with talking about the what challenges hinder managers responding in a timely manner to a change in a fish stock. He mentions the need to manage proactively, not reactively, the need for real time data processing and the need for cooperative research.

Ms. Morris' top challenge is exempted fishing permits while Mr. Brown's main challenges are the need to manage proactively, not reactively, move to ecosystem based fisheries management and real time data processing.

Mr. Ames goes with the need to move to ecosystem based fisheries management and the NMFS approval process. Mr. Moore goes with stock assessments but would like to incorporate not just climate but real time information. Mr. Rheault echoes the idea that the NMFS process makes it hard for them to be nimble. Ms. Feller's top three challenges are stock assessments, lack of science on protected resources and climate change.

Mr. Espinoza's top three challenges are collaborative research, the ecosystem based fisheries management and real time data processing. Ms. Beidman thinks the biggest challenge is the uncertainty in the ability to correct changes while Mr. Shelley explains that the need to manage proactively and the tools for doing that and moving to ecosystem based fisheries management and adaptive management.

The need for more cooperative research is highlighted by Mr. Pearce as the most commonly mentioned challenged followed by stock assessments using ecosystems along with lack of science on protected resources and climate change.

Mr. Pearce moves on to the second question which is what prevents fishermen from responding to a change in a timely manner. Mr. Ames' first problem is management has locked into certain approaches and fishermen have invested in certain types of fleets, making it harder to adjust and them having access to only a limited number of species under the current system. Another problem, according to Mr. Ames, is lack of trust, issues with science and issues with compliance. He also explains that better outreach to fisherman about possible future changes vis-à-vis what species might move in or out of an area is another potential problem.

Ultimately, Mr. Pearce identifies management locked into certain approaches, fishermen being invested into certain types as one of the top challenges based on the popular opinion of the attendees. The first challenge was lack of trust.

To save time, Mr. Pearce simply identifies the third question as can you identify examples or approaches that have allowed managers to respond to a change quickly.

The results are that real time data was on top, sharing of data, bycatch rates followed. Beyond that, emergency actions, migratory birds, in season management and sharing data also got votes.

Mr. Pearce moves to question four which is are there management approaches that have allowed fishermen to adapt quickly?

The need to allow flexibility came in first while real time data was second. Catch share and collaborative management were the other two categories that got vote, smaller management units was the fourth most common answer.

Next, Task 5, communications will be addressed by Ms. Feller. She explains that the communications group is charged with finding ways to increase access, delivery, and use of information about climate and fisheries.

This means finding ways to assess the climate related information needs of stakeholders, how to communicate with said stakeholders and which methods are the most useful. Secondly, is identifying the best communications tools to provide information to your local communities, tribes, NGOs and businesses. They will send out a survey of sorts to the committee members for feedback.

The proceedings adjourn for day 2.

DAY 3 (April 27, 2016)

Introductions - Julie Morris:

After a few pleasantries are exchanged, Ms. Morris begins by laying out the agenda for the day. First on the agenda is addressing some Congress appointed business including some remarks by Mr. Doremus about what the Aquaculture Task Force has been doing and their accompanying report. Next on the agenda is Erika Feller who will speak about the strategic planning budget and program management subcommittee.

Ms. Morris explains that Ms. Feller would like everyone present to brainstorm on the important things that the subcommittee should be working on for the next year or so.

Ms. Morris continues with the introduction and an exploration of the agenda and explains that the charter allows for the establishment of subcommittees or working groups of its members as necessary.

Commerce Subcommittee - Julie Morris and John Corbin:

She uses this to segue into a discussion on whether new subcommittees should be established. This is discussed with members generally preferring the committee stay the way it is, emphasizing discussion among the different members. Various members make different points that will be explored later as to why they believe the committee should stay the way it is. This segues into Mr.

Ames and Mr. Pearce agreeing that the resistance for aquaculture is deeply rooted in the fishing communities because they feel as though they are losing access to their fishing rights. Mr. Ames explains that NOAA should be part of the process to understand and implement policies that help both aquaculture as well as the fishing communities.

Ms. Morris concludes that the committee will not be split in two since the members that spoke voiced their opinion against this. Ms. Feller also agrees and adds that funding for fish productivity and electronic monitoring for the data collection also is a priority for the agency.

Next, Mr. Corbin begins with talking about the two tasks assigned to the Aquaculture Task Force, the review and progress in the 10 year plan for Marine Aquaculture and the preparation of the new five year strategic plan that will have efforts going forward. The first of these tasks will require three reviews.

Mr. Corbin moves on to explain the comments on the progress report, focusing on the ones producing the greatest concerns. The first one mentioned is that members have questioned NOAA's commitment to marine aquaculture development due to the lack of significant progress. After the recommendations of ATF and MAFAC, goals were changed and sections were rewritten.

Action items were added and changed with more emphasis being placed on fixing the regulatory climate in regulatory waters as well as regulating climate generally, both of which are concerns for the members.

In addition, pre-application checklists were issued to guide applicants in gathering information and providing initial project and site descriptions for the regulatory agencies. This was reviewed and commented on by the ATF and ultimately this process was tested out, in mock form, through a conference call that did not seem to work well.

Mr. Corbin references a paper by Knapp and Rubino, a fishery and aquaculture economist and the head of the Office of Aquaculture respectively. The paper describes the current status of the industry and what's currently going on. He suggests this paper could be used by MAFAC for many things including to compare the status of the industry to the 2016 status to see how far the industry has come.

Mr. Pearce then begins talking about how without the inclusion of other stakeholders, not only in the Gulf but in the entire country, He talks about the market and how the prices are going up for no apparent reason. He echoes what was said on day one in regards to this because the prices will drive major retailers like Costco out since the demand and supply do not correspond. He explains that distribution should be included and brings up China as a comparison point as an effective producer or manufacturer but not very good at marketing.

There is no reason that the United States should be like that when work can be done to make sure that they are well rounded. The key point he makes, which echoes a point made earlier by Ms. Bonney to be proactive and not reactive.

Mr. Pearce's commentary was technically a long question and comment so Ms. Morris reverts back to the points made earlier by Mr. Corbin and further discussions on those points.

The next speaker is Mr. Okoniewski who echoes the points just made by Mr. Pearce, emphasizing timing and the market. He says that per capita consumption is between 14.5 and 16.5 percent in the

U.S. and distinguishes fresh fish from frozen fish. He finishes with hopes of growing per capita consumption.

Ms. Yochem asks if anyone has reached out to NAA to see if they are poised to move in in the context of risk evaluation.

Mr. Corbin explains that there is interest but that the application process can take up to 2 years and so the investors need to be sure that NOAA is on board generally before they become willing to invest. Basically investors will obviously only invest if the risk is worth it though there is general interest. Mr. Parsons reiterates that investments are in fact taking place, just in more open markets and not much in the United States. Mr. Rheault makes the good point that the investment is going to be small and gradual to begin with to manage and minimize the risk associated with such investment. Mr. Corbin concludes this segment by pointing out that the phase in to 12 million pounds was estimated to take eight years, further emphasizing the gradual nature of such investments.

Strategic Planning, Budget, and Program Management Subcommittee - Erika Feller:

Next, Ms. Lukens will talk about the strategic planning budget and program management. She mentions the two drafts of Vision 2020, an educational document touching on the different components of NOAA fisheries. She explains the various development of Vision 2020. She briefly describes the priorities that are to be addressed, first those of the largest parent agency, the Department of Commerce which NOAA fits under.

NOAA has four share priorities, all underneath the priorities of the Department of Commerce, looking at operational excellence, observing systems, evolving national weather services and the resilient communities, the latter of which is where NOAA more narrowly fits in.

She segues into NOAA's annual priorities document which has the aforementioned three core priorities. This process also includes public engagement and stakeholder input, an administrative law standard.

Ms. Feller express a concern that every four to eight years, a new administration comes along and wants to figure out ways to effectively communicate with the incoming administration to make the transition as smooth as possible.

Mr. Shelley talks about the importance of having current and comparable data especially in the context of climate change where the accuracy of the data is paramount in the context of permits.

Mr. Pearce points out that it is not just having data that's important but how this data is used as well as taking advantage of citizen data which is just as valuable and can be used to fill in any gaps. He also talks about some pitfalls of the lack of data.

There is a general consensus that data needs to be as recent as possible, ideally real time. Mr. Okoniewski fears that the resources are being spread too thin, to the point where the goals are becoming too numerous and therefore all unachievable, at least optimally. He wants the committee and its members to be more reactive so that national standards are more efficiently met. Mr. Brame suggests a sort of standardization of stock assessments to get accurate data. Mr. Ames is concerned with how fisheries, despite their natural diversity, are being lumped together. He prefers a one at a time approach with focus on one fish industry, solution, and moving forward to another problematic area.

Mr. Brown is more accepting of change and suggests that capabilities be increased in addressing fishing populations and habitats. He also believes a good way to achieve some of the goals is to incentivizing new ideas and technologies to target species and lower bycatch as well as collaboration across agency lines since there are many agencies working towards the same goals that can potentially help each other in achieving said goals, thereby saving time and funds.

Ms. Bonney suggests a list of topics and successes to help with the transition to a new administration. Ms. Lukens agrees and briefly suggests tiering as a potential solution. Mr. Espinoza explains that accountability is important on every level and suggests a large scale effort that will “trickle down” to various regional entities. Mr. Moore talks about integration and echoes the points made by others. Ms. Beidman reiterates the importance of preparing for the transition. Ms. Feller essentially suggests a draft of this and Ms. Morris agrees and explains that one can be produced by next meeting, which takes place in November.

Mr. Rheault talks strategy in the context of the expected 50 million metric ton shortfall of seafood production in the next 20 years and the 70 percent increase in seafood prices that will accompany the shortfall. After he makes this point, a 10 minute break is taken at 10:43 a.m. and the discussion resumes at 10:53 a.m.

Advances in Electronic Monitoring - Randy Fisher and Dave Coplo:

Mr. Fisher introduces Dave Coplo who handles commercial activities for the commission. Mr. Coplo will discuss the potential for electronic monitoring along with Mr. Fisher.

Mr. Coplo begins with talking about the history of electronic monitoring and the current project and its development. He encourages electronic log books since now they have paper log books which are cumbersome. The electronic monitoring can measure. He explains that on the west coast, they are monitoring quotas and compliance through discard. Alaska tries to monitor more than that including retention. There is also a fish tickets database. The logbooks serve as formal records since they are accounts from the fishermen. The fishing vessels get feedback if they did not report correctly and to the standards. The vessels are required to send their logbooks 24 hours after making their landing.

Mr. Coplo talks about the technology that does the electronic monitoring and can even be used to help identify the fish. The program is open source but it is probably the best, if not the only program of its kind.

The vessels get several attempts to get it right and enjoy a 10 percent margin of error. Mr. Coplo goes on to talk at length about different species of fish and shows the attendees pictures and presumably video for identification purposes and to showcase the technology of Archipelago.

There are 60 boats in the EFP and Mr. Coplo explains that they are on 10 percent of the haulers and on 40 percent of the boats. By “they” he is probably referring to the aforementioned technology of electronic monitoring but this is somewhat unclear.

He then talks about fish tickets which are landing receipts regarding the west coast. Out of a total of 651 fish tickets, the electronic monitoring captured 481 or 74 percent. The bottom trawls reporting is not doing well but the whiting is doing quite well.

The review of the catch took fishermen 132 minutes on average in 2013 and Mr. Coplo's staff 160 to review, a 21 percent increase but still quite impressive. The results match up well with the goals with only a short difference between the two in the graph that Mr. Coplo showed the attendees.

Mr. Coplo briefly talks about the video and says that 84 percent of the video laid down is from whiting boats because they are the most active. He also explains some of the changes in the videoing technology which now allows for more precise recordings by lowering the amount of total footage and capturing only the relevant things.

Next, Mr. Coplo breaks down the time and cost of the whole electronic monitoring review process. He uses the bottom trawls as an example, explaining that a trip takes an average of about 3.6 days and produces 5.5 hauls per trip. In addition, there is also the sort time where the fish are being sorted and moved. That takes 176 minutes on average and two hours to review that. The average review of hours is about 11.75 hours.

The review cost is about 50 dollars an hour. For sea days, this means \$163 dollars per trip. To cross all 3.5 days, the cost would be \$582. The video cost is about 31 dollars a day to just store the video. Alaska is apparently buying one of the video services so the cost is actually half of that realistically.

Using the actual figures, 31 dollars a day means 112 dollars per trip. The amount of data last year was 120 terabytes but it is expected to go down this year because of the aforementioned cutbacks on whiting monitoring. By comparison, the Library of Congress laid down about 75 terabytes.

The total cost for the bottom trawl per sea day is about 305. To put that in perspective, if they have a human observer, the cost is 500 dollars a day. A camera system costs about \$10,000 to \$12,000. The cost is about the same for an observer.

Electronic monitoring helps smaller ports by saving them money since many of them do not have observers available and an observer must be flown in. Alaska plans to have regulations by 2019 but Mr. Coplo is skeptical of this.

After Mr. Coplo is done, the attendees move into a questions and comment section. Mr. Coplo talks about the installation of cameras being relatively easy and how electronic monitoring will address the void created with removing a human observer as it relates to offload monitoring. Mr. Coplo addressed both of these points during his speech and essentially reiterates what he said previously. He is asked about the sizes of the boats and explains that the smaller pot boats range between 30 and 40 feet while the larger boats, like the whiting boats are in the 100 foot class.

Ms. Beidman talks briefly about the pros and cons of having the electronic monitoring. The cost might be better in the long term but there is some resistance because continuous monitoring is not something the fishermen want.

A speaker named Peter (possible Peter Moore) points out that the electronic monitoring essentially exists to check the data that is provided by the logbooks. He wonders how a non-complete review would help catch violators. Mr. Coplo explains that the monitoring will be used on people already suspected. He likens it to a policeman waiting outside a bar at night knowing that's where the drunk drivers will probably be.

Mr. Coplo, explains that review and software is more important than the cameras because it can save significant time by zeroing in on the actual event instead of requiring review of the entire video log to find and then review the event in question which could have occurred at any given moment.

Mr. Moore asks what the plan is when better and cheaper technology comes around. Once the money is spent to install the current system, who will bear the cost of switching to a newer, more effective and perhaps cheaper system. Mr. Coplo explains that the changes will likely happen in the software used to analyze the video and not on the videoing techniques. As such, the video will be better analyzed in the future but the same video will probably be produced for a long time, until technology get's to the point of analyzing the fish through the cameras by itself.

Further, Mr. Coplo explains that since technology will always move forward, there will never be an optimum time to implement new technology. Some members express the opinion that this can also just be done by paper logbooks as it has been done in the past.

Mr. Coplo addresses the resistance of fishermen to this new technology. He explains that the more that one has to change, the more resistant they are. He explains that the success of the implementation on the Pacific can be attributed, in part, to the Pacific's lack of management bodies and their role as reviewers. The implementation in the Pacific also has not required the establishment of anything new since they had programs in place already.

Ms. Beidman asks how long the data is kept and Mr. Coplo explains that thus far they have 100 percent of the data and that the rule is to keep three years of data.

Protected Resources Subcommittee - Heather Brandon:

The next item on the agenda is a report from the Protected Resources Subcommittee that will be discussed by Heather Brandon. She will focus on two species specifically, the light abalone of Southern California and the Hawaiian monk seal. Ms. Brandon believes that better communication between partners is important and overall inclusion of everyone, including industry, as a partner so that goals can be better reached.

Ms. Yochem agrees and explains how donors and partners should be acknowledged for their efforts.

Hatchery Genetic Management Plans -Dick Brame and Julie Morris:

Next on the agenda is the Hatchery Genetic Management Plans. Mr. Brame wants to delegate the authority to Ms. Morris since he is from the east coast and the letter addresses a Northwest issue. Mr. Brame feels that Ms. Morris is better equipped.

Mr. Okoniewski makes a motion to delegate the final editorial privileges to Mr. Brame and Ms. Morris after they receive additional comments from other members. The motion passes unanimously and Ms. Norris moves into the next report from the Resilience Working Group.

Mr. Rheault reiterates some of the main problems facing the fishing industry. He explains that sea level changes, climate change and many other problems cannot currently be predicted with the science available. He does not feel comfortable making recommendations on changing fishermen's behavior at this point beyond telling them that there will be an increase in CO2 rates in the future.

Ms. Bonney, whose task is to deal with the socioeconomic data looks forward to a task workshop the following week to get more data and understand how to move forward.

Ms. Morris offers the option of either a lunch break or continuation. Ultimately a lunch break is taken.

Draft National Bycatch Reduction Strategy - Mike Okoniewski:

After the lunch break, Ms. Morris and Mr. Okoniewski introduce a document they have prepared that has been emailed to everyone. They begin discussing the document by reading the bullet points that were written down. Ms. Morris mentions recognizing that it's impossible to fish without bycatch, that the economic impacts of not having enough allocation for bycatch are important to support the target fishery, address whether the national bycatch strategy is consistent with the standardized bycatch methodology guidance and that there should be some conversation about that here. Ms. Morris explains that the document is there to set priorities and not to become a new mandate for bycatch.

Ms. Yochem mentions that besides recognizing past innovation and successes, that non-NOAA partners should be acknowledged. Mr. Shelley suggests that study fleets be listed along with electronic technologies. Ms. Bonney suggests that the pressure not be exclusively placed on fisherman to reduce bycatch, regulations should also be built around this to prevent discard of dead fish. One suggestion is trip limits by either time or capacity.

Improving quality and timeliness is important and Ms. Morris and Mr. Okoniewski want to add this to the data bullet point. Ms. Bonney suggests addressing the access to data through sharing between different regions. Ms. Feller asks for clarification between textbook bycatch and mortality bycatch and Ms. Morris says it will be added and makes note of this. Mr. Shelley suggests looking at factors that transcend individual fisheries. Ms. Morris also mentions the importance of incentivizing proven innovations as well as geography, timing and technologies.

Ms. Feller explains the need to create space for continual improvement, noting that there is a tendency to not even start if perfection seems out of reach. She also stresses the importance of mitigating risk for fishermen since a lot of being asked of them in terms of data reporting. Mr. Shelley wants to distinguish private from public funded research to encourage innovation. He seeks cooperation between the two.

Mr. Moore explains that the more profitable fisheries are doing better with bycatch reduction. Research set aides are also to be added. Ms. Bonney also mentioned exempted fishing permits which allow for the allocation of fish to certain kinds of projects. She claims this will reach the same outcome.

Ms. Bonney asks about the difference between managed and unmanaged bycatch. The difference, as explained by Mr. Moore is basically that the unregulated species are unmanaged. Ms. Bonney also reemphasizes the difference between bycatch and utilized fish that is accidentally caught. She explains the latter is not bycatch and that bycatch should only refer to fish that is not used since utilization is an important goal.

After some discussion on the distinction between bycatch and bycatch utilization, Ms. Morris adds a bullet point illustrating this. Finally, Mr. Okoniewski wants to make the distinction between currency and value, suggesting the latter is more appropriate since currency usually refers to money.

The meeting is coming to an end and Ms. Morris and another attendee set up the time of the next conference call which will happen in less than 18 days. The next meeting will happen in the three day block of October 31st, November 1st, and November 2nd in Silver Spring.

Next, before the meeting is closed, Ms. Morris begins talking about the agenda and what was accomplished in this meeting.

The Columbia Basin partnership team will focus on the next steps in terms of assembling the working group or the planning group. The next step will be on the bycatch reduction strategy will be a meeting for everyone to review and approve the comment letter that will be drafted.

The letter on the hatchery genetic management plans is almost done. Ms. Morris explains that this will work to enrich partnerships while also acknowledging them more. Meanwhile, the Strategic Planning and budget Committee will focus on the three things that the new leadership will need to know.

Close Out and Organization of Subcommittees - Julie Morris, Everyone:

Next, a brief discussion on the subcommittees and where everyone stands takes place. Mr. Ames removes himself from the commerce subcommittee. Ms. Beidman wants to stay with both commerce and protected resources while also doing the resilience.

Ms. Bonney was not aware that she was in the ecosystem approach committee and wants to be removed from that. Mr. Brame joins the ecosystem approach subcommittee. Ms. Brandon makes no changes to her status.

Mr. Espinoza who is new will be joining protected resources and ecosystems approach as well as commerce, if time permits. Ms. Feller makes no changes either.

Mr. Rheault will co-chair next time. Mr. Moore wants to take on more but remains unchanged for the time being until he can get some more information. He joins ecosystems if time permits. Mr. Okoniewski stays in the two groups he already is in.

Mr. Parsons joins the recreational fishing subcommittee. Mr. Pearce goes on commerce. Mr. Shelley adds himself, if time permits to strategic planning. Ms. Yochem also makes no changes.

The meeting moves to evaluation comments. Ms. Bonney explains the value of working in smaller groups while Mr. Rheault wants to see how previous products are being used. If they are not used, he wants to know why not. Ms. Morris also stresses the importance of reviewing the recovery reports.

After some pleasantries and a bid farewell to Mr. Corbin, who will not be returning, the day three meeting is adjourned.