SUMMARY RECORD
Marine Fisheries Administrative Committee
Public Meeting
October 13-15, 2015
Silver Spring, Maryland

Tuesday, October 13, 2015

Introduction

On the call of the National Oceanic and Atmospheric Administration (NOAA), the Marine Fisheries Administrative Committee (MAFAC) was convened on October 13, 2015 at the Sheraton Silver Spring Hotel, 8777 Georgia Avenue, Silver Spring, Maryland.

The following report summarizes the deliberations of this meeting. Presentations and documents are available for public inspection via the web at
http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/index.htm

Call to Order

Mr. Keith Rizzardi, Chairman, MAFAC called the meeting to order on Tuesday, October 13, 2015, at 8:44 a.m. He congratulated the committee on their progress during the course of his tenure, reviewed the day's agenda, and handed the meeting over to Eileen Sobeck for opening comments.

Opening Comments

Eileen Sobeck, Assistant Administrator, NOAA Fisheries, echoed Chairman Rizzardi's commendation, reminded those present of the farewell dinner for the MAFAC members who would be stepping down after this meeting, and introduced Holly Bamfort before allowing MAFAC members to introduce themselves. An attendee list can be found at end of the Summary Record.

Coastal Resiliency – a NOAA Priority

Ms. Holly Bamford, Assistant Administrator for NOAA's National Ocean Service, appeared on behalf of the Assistant Secretary for Conservation and Management to present NOAA's strategy to help coastal and ocean communities build resiliency. She fleshed out the challenges and threats these communities face, as well as potential food security solutions such as aquaculture, placing importance on the interplay of social, economic, and ecological analysis to build the best solution for each community. She also addressed the nexus between energy, food, and water security; and the dangers Illegal, Unreported, and Unregulated (IUU) fishing poses to community resiliency, placing focus the leadership role NOAA has taken to eliminate IUU fishing and fish fraud through a seafood traceability program, Sea Scout, and analysis of the species most at-risk of being mislabeled or illegally caught.

In individual communities, Ms. Bamford addressed the importance of looking at demographic and housing market issues to analyze the variables that contribute to a community's vulnerability, and asked those present to name contributing factors that she had not included in her presentation.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/hbamford_10-13-15-mafacppt_final.pdf

- Mr. Donaldson asked for clarification as to the structure of the traceability program compared to that employed by the Gulf Commission following the BP spill.

- Ms. Sobeck elaborated that the traceability program would focus on importation and domestic landings, with a draft scheme scheduled to be available for robust discussion at the end of the month.
- Ms. Sobeck asked how Resiliency proposals are resonating with Congress, as the demand for resiliency programs vastly exceeds the current available funding. She also noted that Ocean Resiliency seems more difficult to build than Coastal Resiliency.
- Mr. Clampitt described the challenges posed by highly specific grants, in the context of eelgrass and wetland restoration grants that do not allow for renourishment activities.
- Ms. Bamford agreed that the process of grant drafting led to overly specific or even conflicting language in grant specifications. She noted that resiliency discussions can be challenging because of their association with climate change, but that progress could be made by showing Congress members the grant requests made by their constituents. She moved on to address the challenges NOAA faces in terms of building the authority to implement strategies in the communities that are most vulnerable.
- Ms. Sobeck and Ms. Bamford discussed the importance of collaboration and cooperation to build priorities and better engage the user end of resilience programs to develop tools.
- Mr. Shelley queried as to how tools could be used to shape resource allocation by region. Mr. Doremus pointed out that the work being done was strategic, with benefits seen in the long-term.
- Ms. Sobeck agreed, saying that ecological forecasting akin to the Weather Service is a goal. This would create a tool to allow communities to make longer-term decisions regarding infrastructure investment.
- Mr. Sesepasara queried as to resiliency projects addressing coral bleaching in the Pacific Islands.
- Ms. Bamford named the Pacific Islands Science Center in Honolulu, and the extensive coral program in both NOAA Fisheries and National Ocean Service (NOS).
- Ms. Hamilton asked how NOAA is working to integrate the efforts of the Corps of Engineers with the Water Resources Development Act (WRDA), as well as the Greater Green, to change water management strategies.
- Ms. Bamford replied that the Greater Green, WRDA, and the Corps of Engineers hope to change their method of cost analysis, which at present does not score green projects well. She also commented that NOAA is working to create a better forecast prediction to help the Corps of Engineers plan their water management. She clarified that this will absolutely be involved with Green to Gray.
- Ms. Hamilton and Ms. Bamford discussed the importance of providing confidence in research to encourage more effective environmentally-friendly solutions, such as using sea grass to prevent flood risk rather than a wall.

Coastal Resiliency – Background and Action

Mr. Keith Rizzardi, Chair of MAFAC*,* presented slides provided by the Climate Reality Project to demonstrate the impact of climate change on the conditions under which agriculture and fishing in the United States will be carried out, focusing in on the tuna larvae in the Gulf of Mexico. He pressured the Committee to view their work in the context of the causes of climate change, as well as its impact on the seafood supply.

Ms. Eileen Sobeck, Assistant Administrator, NOAA Fisheries, addressed the challenges of creating Resiliency Projects in a budget environment where "flat is the new up," and new projects would likely be formed at the expense of existing ones. She encouraged MAFAC members to contextualize resiliency in terms of the issues faced in their communities.

Ms. Sobeck also cited priorities moving forward: the sustainability and productivity of fisheries and fishing communities; the strategic plans that all regional offices and science centers are developing; and optimizing economic benefits for communities; as through the Saltonstall-Kennedy grant program. She said these priorities would focus on aquaculture, fisheries data collection, and techniques for reducing bycatch; as wells as adapting to climate change and other long-term ecosystem change. She cited the Fisheries Innovation Fund underway at the National Fish and Wildlife Foundation (NFWF), and stated that

NOAA Fisheries is planning workshops with partners such as the Office of Atmospheric Research (OAR) to identify key information and tool needs to help fishing communities in sectors understand risk and increase resilience to climate change. She invited the committee members to use their break to review the discussion paper on the resilience Charge to MAFAC.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/mafac_oct2015resiliency_091115.pdf

Coastal Resiliency – Presentations

1. A Review of Potential Approaches Available for Managing Marine Fisheries in a Changing Climate

Dr. Wendy Morrison, PhD, Fisheries Ecologist, ERT Inc. Contractor in support of Domestic Fisheries Division, began by explaining the four key changes fisheries face through climate change: stock productivity, distribution, species interaction, and species habits. She then moved into management solutions, framing them as either reactive or proactive, and identified proactive solutions as resilience of individual stocks, ecosystem resilience, and the resilience of fishing businesses. She discussed several case studies, with productivity adjustments for yellowtail flounder in the Northeast serving as an example of a reactive management solution.

Dr. Morrison posited that fisheries management needs to become more nimble, and used the Bering Sea and Aleutian Islands non-pollock fishery's recently implemented catch-share program as an example of effective nimble management. Ms. Bonney clarified that the fishery was able to be nimble largely because of its multi-species pool of target catches, as well as the ability to process at sea rather than being tethered to shoreline processors.

Dr. Morrison discussed management solutions for individual stock management: incorporating environmental parameters into stock assessment, as with the Pacific sardine; managing for uncertainty through the use of scenarios; protecting age structures and old females; decreasing existing stressors, as with the lionfish in the Southeast; and enhancing or translocating stocks; and promoting adaptive capacity of fish stocks such as the American eel. She presented the question of what impact stock migration can have on genetic diversity, citing a study on terrestrial animals by Pauls, et. al., 2013 to demonstrate that the territory a species is leaving has greater genetic diversity because of access to historical alleles, while those on the leading edge are more adapted to their new region, if less diverse. Dr. Morrison suggested that research may show incentives to protect the stock with the higher genetic diversity.

Dr. Morrison moved on to ecosystem-based approaches: designing appropriate marine reserves, as with Australia's flexible tuna fishery; modifying gears to increase habitat health; recovering or enhancing degraded habitats; protecting key functional groups; and increasing the use of Eco-system Based Fisheries Management (EBFM), commenting that NMFS recently released an EBFM policy. She discussed management strategies for the increase of resilience in fishing business: expanding flexibility in fisheries permits; improving flexibility in the supply chain; providing insurance for fisherman, similar to crop insurance; and considering the advantages of grounding quotas and permit systems in the community, to give fishing communities more power and flexibility in the supply chain. The lobster glut in the Gulf of Maine in 2012 was brought forth as a situation that could have been avoided with superior supply-chain flexibility; followed by a Southern Australian fishery that analyzed its supply chain to eliminate points of vulnerability in the event of a natural disaster.

Dr. Morrison concluded by placing importance on creating clear management goals, so that each community can use tools appropriate to its own circumstances and priorities, rather than creating an ineffectual one-size-fits all approach. Some discussion followed.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/1._updated_morrison_review_sept_2015__mafac.pdf

- Mr. Okoniewski spoke to his experience with bycatch, where he finds that cooperative approaches are most effective.
- Mr. Ames clarified that the 2012 lobster debacle occurred because of a lack of lobster processors in Maine and New England, which has since been solved. He further noted that since the collapse of groundfish, a substantial amount of the lobster fishery is coming from outside state waters.
- Ms. Bonney added that reactive and proactive strategies should be used together, as reactive strategies solve problems that would-be proactive strategists may not predict because of uncertainties in science; and that processors should also be viewed as potential users of insurance.
- Ms. Brandon asked for clarification on the parameters of ecosystem resilience goals.
- Dr. Morrison clarified that fishery resilience could be viewed not in terms of individual species, but of functional output; these priorities would be set case-by-case.
- Mr. Rizzardi asked what tools were in place and could be implemented to avoid a repeat of the 2012 lobster debacle by predicting stock and avoiding overfishing and crashes.
- Mr. Ames clarified that Maine currently has age structure protections in place, and has trap method regulations to protect habitat.
- Mr. Franke raised the issue of the lag between data, analysis, and action; and the question these issues raise as to when to 'pull the trigger' on changing catch limits and closing fisheries.
- Mr. Okoniewski raised fluctuating demand as the counterpoint to an inflexible supply chain. He and Dr. Morrison discussed the challenges of balancing a supply chain with demand in fisheries as contrasted with agriculture.
- Ms. Beideman cited her background in migratory species, suggesting that maintaining genetic diversity was not a concern. She also noted the dangers of inflexible permit processes. She cited the close of the dolphin fish fishery in the South Atlantic Council, where commercial fisheries have closed because of an inability to change the proportion of commercial and recreational catch limits.

2. Methodology for Assessing the Vulnerability of Marine Fish and Shellfish Species to a Changing Climate

Dr. Morrison pointed out that this similar vulnerability assessment was created for fish and invertebrates, although the Office of Science and Technology is creating a similar assessment for protected resources such as sea turtles. The goal of the assessment is to produce a practical and efficient tool for assessing the vulnerabilities, or risk of change in abundance, of fish stocks; placing them on a scale of low to very high vulnerability. The vulnerability to a changing climate is found by comparing a stock's exposure with its sensitivity to those risks. Gaps in quantitative data were filled with qualitative data. Although exposure variables change by region, sensitivity variables are kept constant. Experts are given five (5) tallies to vote as to whether they consider a species low, moderate, high, or very high vulnerability. She explained the way that the system allows for the resolution of disagreement among experts. The assessment has been completed using NMFS researchers in the Northeast to examine 82 species, and is underway in the Bering Sea and California ecosystems.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/2._upated_morrison_methodology_sept_2015__mafac.pdf

- Ms. Hamilton pressed for vulnerability reports to move quickly for salmon and asked how salmon factor into the West Coast assessment.
- Dr. Morrison replied that salmon analysis is complicated but underway.
- Ms. Morris asked what the project would be doing to line up stock assessments and create uncertainty thresholds.
- Dr. Morrison replied that the project does not yet have enough data to perform that level of 'lining up.'

3. Social Indicators of Coastal Community Vulnerability and Fishery Dependence

Dr. Lisa Colburn, PhD, Social Scientist, Northeast Fisheries Science Center, explained that her analysis takes the indicators Dr. Morrison discussed and applies them at the community level. She stated that while social vulnerability is often quantified on a large scale, social resilience is more local in scale.

https://www.st.nmfs.noaa.gov/humandimensions/social-indicators/index

Although commercial fishery data collection is consistent across all fisheries, recreational fishery data collection varies by region. The assessment found that the community vulnerability, across the board, was higher in communities with an intensely involved commercial fishing presence. She also raised climate change impact risks on communities, such as moving fish populations, and their impact on management decisionmaking. Once more, emphasis was placed on finding personalized, nimble solutions.

- Mr. Shelley asked for clarification as to the difference between the Maine lobster, where some communities were ranked moderate vulnerability; and New Bedford scallops, which were ranked as having a high vulnerability.
- Dr. Colburn clarified that the significant difference was that New Bedford had a lower labor diversity, which made them more vulnerable to shifting stock.
- Mr. Okoniewski clarified that the analysis works with social vulnerability factors to create a baseline prior to climate change impacts.
- Mr. Ames asked whether the data factored in limited access to permits.
- Dr. Colburn answered that the data looks primarily at landings volume, and suggested that it might look different if it could incorporate permit access.

4. Habitat Conservation in Support of Coastal and Community Resiliency

Ms. Pat Montanio, Director, Office of Habitat Conservation, presented the economic, social, and ecological benefits of place-based habitat conservation to coastal communities. She compared habitat conservation strategies with their traditional counterparts in terms of cost and benefits, such as coral reefs and bulkheads for wave impact; as well as demonstrating how habitat and traditional strategies may be combined, such as wetlands and levies for sea level rise. She explained the NOAA habitat policy established in August in terms of its cooperation with the Department of Interior and other organizations.

Ms. Montanio contended that because habitat conservation is more cost-effective than rebuilding what has been lost, target areas are being examined to minimize loss in habitat restoration. She explained the structure of the habitat restoration grant program under the NOS, established last year; and that the projects selected were chosen for their clear, measurable, short-term achievable objectives. She discussed collaboration with the Weather Service on frost in vineyards, and with OAR to examine localized flooding, and the grant NFWF is using in collaboration with the Corps of Engineers to examine resilience hubs for migratory fish in Cape Fear. These partnerships demonstrate the importance of collaboration to affect change and fund research, particularly given the scarcity of funding. She also pointed out that grants that cover different parts of a project can be used in conjunction through multifaceted funding. Discussion followed.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/4._ohc_mafac_coastal_resilience_presentation_final_w_o_tp.pdf

- Mr. Rizzardi asked whether funding under this program could be used to enhance reservoirs.
- Ms. Montanio clarified while NOAA has science and forecasting for reservoir management in its toolbox, work with reservoirs would probably be collaborative.
- Ms. Brandon asked for further detail on watershed resilience.
- Ms. Montanio clarified that NFWF is working with NOAA to examine projects that can contribute to watershed resilience. The study will available in January.
- Mr. Okoniewski asked for clarification as to what organizations would qualify as partners

- Ms. Montanio clarified that partners would range from government agencies, such as the Department of Transportation, to non-governmental organizations (NGOs) and fishing groups; anyone with matching goals.

12:00 p.m. – 1:00 p.m. Lunch Recess

Mr. Rizzardi reconvened the meeting and introduced Dr. Nikola Garber, who oversees the National Sea Grant College Program and previously managed the Sea Grant Knauss program.

Coastal Resiliency – Presentations, cont.

5. Sea Grant Efforts in Support of Resilient Communities and Economies

Dr. Nikola Garber, PhD., Acting Director, National Sea Grant College Program began by introducing Sarah Bowman, Jim Berkson, and Elizabeth Rohring; Sea Grant employees and fellows present at the meeting. She reviewed the history of Sea Grant; and the program's role in resiliency as a source of applied research technology transfer, as well as education and outreach. She described use of the VCAPS or Vulnerability, Consequences, Adaptation Planning Scenarios toolkit, in such communities as the South Carolina blue crab fisheries, climate change research underway through the Virginia Sea Grant, and the coastal community resiliency tool in place in the Gulf of Mexico. Outside of research, she described the work Sea Grant does to help community-supported fisheries with marketing and rebranding, multitrophic aquaculture in New Hampshire, and the rebranding of the sunray Venus clam as a gourmet species. She described Sea Grant's work in workforce training with the Hazard Analysis Critical Control Point (HACCP) model, aquaculture, safety-at-sea, and sustainability. She discussed the ways Sea Grant is working to expand their knowledge base by listening to communities and enhancing lingual accessibility; as well as asking fishing communities how they see and enact resilience methods. Finally, she mentioned the upcoming Working Waterfronts conference in Florida, and reaffirmed Sea Grant's objective as a partner of NMFS to be honest brokers of information without the burden of regulatory authority.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/5._sg_fisheries_mafac_meeting_oct2015.pdf

- Mr. Okoniewski asked what efforts were being exercised to speed up the lengthy, complicated aquaculture permitting process.
- Dr. Garber replied that with aquaculture and streamlining being a priority, streamlining the aquaculture process was a goal of NMFS and Sea Grant, and Ms. Rohring elaborated by describing a North Carolina Sea Grant project on aquaculture permit mapping.

6. Investigating Climate Change Impacts on Atlantic Fish Stock distributions and Potential Harvest Re-Allocations

Patrick Campfield, Science Director, Atlantic States Marine Fisheries Commission (ASMFC) described the work ASMFC has done in partnership with NMFS to understand the impact of climate change on stock distributions in the Atlantic. He reviewed the methods and approaches ASMFC uses in cooperation with NMFS and the Fish and Wildlife Service to detect and assess climate-induced changes in stock distributions, and productivity; examining summer and winter flounder, black sea bass, and scup through Summer and Fall trawl surveys; as well as Lobster in the Gulf of Maine. He then detailed the process of reaching out to local fisheries managers for feedback on potential solutions for permitting problems; where it was found that fisheries managers favor landing and annual catch limit (ACL) options that use historical and current data together to provide stability while still making room for change, and prefer to make their allocation decisions on a 3-5 year timeline. He then contrasted New England and the Mid-Atlantic with the South Atlantic, where relatively fewer climate change impacts appear to be arising.

He concluded by asking committee members to consider the problem of reallocation winners and losers, as well as potential weaknesses of the proposed reallocation methods; and encouraging those present to bring forth the particular problems of the region they represent.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/6._mafac_oct2015_asmfc_climate___fisheries.pdf

- Ms. Bonney and Mr. Campfield discussed the structure of stock allocation by region and by state using state and federal permits.
- Mr. Rizzardi asked what staffing and funding were involved in the research presented.
- Mr. Campfield replied by describing the analysis as the work of 12-15 people over 18 months in addition to their day-to-day duties, qualifying that John Harris's group was more involved. He also pointed out that the NMFS stock survey is available online, and would be updated annually through the Ocean Adapt Partnership with Rutgers.
- Mr. Merrick added that this analysis is planned to be expanded across the coast.
- Mr. Ames asked what information was available on the Gulf of Maine's disappearing haddock and cod stocks.
- Mr. Campfield replied that Roger's and John Harris's groups may have more insights on those species.
- Mr. Okoniewski asked for clarification as to permitting structures.
- Mr. Beal clarified that permitting varies by species, with some being state-based one some being more regional.
- Ms. Hamilton and Mr. Campfield discussed the importance of examining incoming migratory fish stocks, as well as those on the way out, when examining allocations.

7. Climate Change and implications for the Management and Resilience of Fisheries

Rick Robins, Chair, Mid-Atlantic Fishery Management Council described the visioning project in 2011 to examine the future of Mid-Atlantic fisheries and fisheries management desired by their constituents. He elaborated on the challenges of the current permit system, whose ACLs are often based on inflexible historical stock data and vary widely by species, and is managed on the East Coast on a state-by-state basis. He described the efforts in partnership with the Mid-Atlantic Council to make a comprehensive system for an amendment to the allocation of summer flounder, and the challenges of working with communities to find solutions that work best for each case. He emphasized the importance of not only predicting climate events, but creating a capacity to respond and change in response. He described the highly resilient squid boat, the *Jason and Danielle,* which benefits from a varied target catch across a broad range of area; contrasting it with more static fishing communities and boats that cannot afford to follow the migration of fish. He concluded by citing Mana Loa Observatory atmospheric carbon dioxide content as demonstrative of climate change that must be integrated into fisheries policies moving forward. http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/7._robins_mafac_1015.pdf

- Mr. Clampitt and Mr. Robins discussed the Individual Fishing Quota (IFQ) permitting process of the golden tilefish, whose quotas are landings-based but allow fishing anywhere in Federal waters.
- Ms. Bonney asked how reallocation on a 3-5 year cycle would allow managers to prioritize systems and conflicts.
- Mr. Robins replied that the MAFMC has not yet made a reallocation. He expressed concerned about the exhaustive resources required for analysis, and the financial burden posed by a mandatory frequency for reallocation; but qualified that with highly sensitive species it is important to have a provision for periodic review.
- Mr. Shelley and Mr. Merrick discussed how month-to-month changes within one season in cod catch would, or rather, would not appear in distribution analysis.
- Ms. Morris and Mr. Robins discussed the challenges of adapting the currently static fisheries management system to the changing face of fisheries, focusing on the summer flounder amendment and its importance to continuing efforts at reallocation, as well as improvements to be made to the modeling system.

Mr. Keith Rizzardi thanked the presenters and brought forth the seven discussion questions listed in the annotated agenda, asking committee members to comment by going around the table.

- Mr. Ames contended that while many stocks may benefit from managing by quota in federal waters, such a system may exhaust the fisheries in Maine entirely.
- Mr. Rheault commented that the age structure regulations that benefit lobster in Maine have not prevented the loss of lobster when implemented in Southern New England, and expressed concern at the inability of Southern New England fishermen to benefit from the unprecedented availability of black sea bass because of inflexible regulations.
- Mr. Shelley expressed concern at the breakdown in confidence between the science and fishing community, and the management process; particularly in a shifting ecosystem while facing a static or declining NOAA budget.
- Mr. Morris, Ms. Beideman, and Ms. Hamilton emphasized the importance of nimble management, while highlighting the challenge of initiating change and forcing managers to acknowledge climate change.
- Ms. Brandon emphasized the importance of the insight rapid assessments such as the World Wildlife Fund Canada's recent rapid resilience assessment in the Beaufort and Chukchi Sea, and her desire to conduct a similar study in the Bering Sea.
- Ms. Bonney emphasized the importance of setting effective priorities and creating effectual budget, management, and policy frameworks.
- Mr. Brown emphasized the overlap of ecosystems and resiliency orientations of policy. He and Mr. Brame echoed concerns for effective budget prioritization.
- Mr. Dyskow expressed concern that while regional councils are often left to hold the reins with management decisions, the pressures of climate change may require too great a research burden for regional councils to handle alone; particularly given the NMFS priority of a robust aquaculture industry.
- Mr. Franke agreed, noting that the process of brokering aquaculture permits is highly complex and may require a more nationalized effort. Mr. Donaldson also agreed, citing the Gulf Council.
- Mr. Fisher pointed out that with the low likelihood of the Magnuson-Stevens Act being reauthorized, NMFS authority may be very limited. Further, he pointed out that state and local governments may bear the responsibility of implementing these actions, because NOAA authority can be traced to the Marine Mammal Act and the Threatened and Endangered Species Act, and little else. He expressed concern at the lack of prioritization in the strategic plan for the West Coast.
- Mr. Beal raised the issue of stocks whose migration results in a loss in productivity or, as in the case of the black sea bass eating young lobsters, an adverse effect on pre-existing species; as examples of situations where a full bounce-back may not be possible.
- Mr. Sesepasara contrasted the challenges of managing the stocks of the continental shelf with the navigation of international tuna agreements in the South Pacific.
- Mr. Okoniewski emphasized the importance of cooperation between NMFS, councils, and industry to create truly resilient communities and fisheries, which are dependent on strong, effective fleets and business models. He cited ConAgra and Tyson as examples of large companies that failed to meet their ROI; and stated that while industry does need regulators validating catch limits, work with industry needs to become less oriented towards restriction and more towards partnership.
- Ms. Sobeck reiterated the importance of flexibility and the challenges of selling aquaculture to states, and encouraged the committee to rise to the challenge posed by fisheries whose chief threats are much larger than overfishing.

Species Recovery

Species in the Spotlight

Ms. Donna Weiting, Director, Office of Protected Resources, Headquarters, presented the Survive to Thrive program, whose chief focus is stabilizing the decline of endangered species' populations; and the Recovery Ready program which, in time, will work towards making these species candidates for

downlisting or delisting. She explained the selection of eight focus species for Species in the Spotlight in the context of budget prioritization and clear, achievable objectives; and clarified that these objectives were distilled down to the top five or six actionable steps toward progress. She emphasized the importance of partnership through in-reach and outreach, with NGOs as well as other NOAA programs, to meet these goals; and used the right whale case as a model for the structure of the five-year action plans in place for Species in the Spotlight.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/mafac_species_spotlight_presentation_oct_2015.pdf

- Ms. Sobeck added that she felt the Endangered Species Act's successes must be better publicized, and that the program necessitates more research to fully understand the challenges of each species, and hold itself accountable for the progress of its efforts. Citing the challenges of fattening up baby monk seals while investigating their inability to do feed themselves, she stressed the importance of protecting species in the short-term while finding the root of long-term problems.
- Mr. Fisher raised the Coho as an example of a species that may not be recoverable, and asked what steps would be taken to decide what species are beyond the reaches of recovery efforts.
- Ms. Sobeck countered by citing the case of the recovery of the condor from near extinction through the Fish and Wildlife Service 30 years ago; but acknowledged that species outside of jurisdiction such as the vaquita in Mexico are not going to be a top priority. With the Coho and other Species in the Spotlight list, she described the program as an effort to see what a big five-year push can do to stabilize a species, as with the right whale.
- Mr. Rizzardi looked back on his past concerns that the Endangered Species Act's work five years ago was too reactive, making efforts in response to lawsuits rather than planning strategically, and lauded the Species in the Spotlight as a move toward effective priorities that will lead to improvements that can then be pointed to as major successes. He asked what efforts would be made going forward to publicize the Act's successes.
- Ms. Weiting and Ms. Sobeck elaborated on the efforts of the communications team to create an accessible, inviting Species in the Spotlight website, as well as work through Twitter and Facebook. The site has pages for each species' threats and includes information for individuals and classes to find ways to contribute to the endangered species protection through activities like beach cleanup.

Ms. Weiting reiterated the importance of cooperation, and turned the meeting over to Ms. Morris.

MAFAC Species Recovery Project

Ms. Julie Morris, Protected Resources Subcommittee Chair, MAFAC, explained that the subcommittee had selected seven recovery plans to examine, and had collaborated with some members outside of the subcommittee to interview the recovery coordinators for each program to see what progress had been made. She presented the draft report as a compilation of cross-cutting themes across the projects whose conclusion is still underway, and asked for comment on the current draft following presentations of interview findings.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/annotated_agenda_species_in_the_spotlight.pdf

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/oct_2015_draft_recovery_actions_reportv4.pdf

Right Whale - Mr. Ted Ames presented the case of the right whale, whose recovery had struggled when the end of whaling had not stabilized the population. Through extensive collaboration with industry, efforts were made to change the gear on ships to minimize human interaction and prevent vessel strikes. Although the program still faces challenges in identifying whelping locations, the right whale's population is recovering.

Small-Tooth Sawfish - Mr. Columbus Brown presented the case of the small-tooth sawfish, whose original recovery plan was written with only old records and anecdotal data available. Due to recent technological developments and better data, NMFS has committed to updating the plan to identify more realistic and measurable outcomes. There is opportunity to reach out through the State Department to work with the recovery plans in Cuba, the Bahamas, and Mexico.

Steller Sea Lion, Western Distinct Population - Ms. Heather Brandon reported on the steller sea lion's Western distinct population, whose recovery actions have historically benefitted from very good funding and cooperation between state and federal government with academic and private researchers, and co-management with native groups. Poor weather in the Aleutian Islands limit monitoring and research actions, the State of Alaska's lack of a habitat conservation plan, minimal NMFS staffing, and unpredictable long-term resources nonetheless pose serious challenges to the recovery plan, which has no implementation plan or tools for tracking trends at a landscape scale.

Sperm Whale - Mr. Paul Clampitt reported on the case of the sperm whale, whose populations are doing very well everywhere but the Mediterranean, but would require an extensive population study to be verified for de-listing. Because of the high cost of the study, the sperm whale is unlikely to be delisted soon, as the protective resource would rather commit their time and funds to species that need help.

White Abalone - Ms. Terri Lei Beideman reported on the white abalone, which are difficult to monitor because of their habitat in Mexico, outside of U.S. jurisdiction. Researchers have chosen to increase the population through captive propagation, raising the abalones for four years before outplanting them into the wild. Data exchange is slowed by public and private entities' view of research data as intellectual property, and the program's dependence upon cooperation with government entities and foreign governments can cause delays when disagreements occur.

Middle Columbia Gorge Steelhead Trout - Ms. Julie Morris reported on the case of the Middle Columbia Gorge steelhead trout. Though the trout benefits from a strong team with lots of support and local buy-in, many of the sub-basin unit plans designed initially to draw funding from the Bonneville Power Administration don't have a strong connection to the species' recovery. Sequenced actions sometimes suffer from poor follow-through, and monitoring actions don't attract as much funding because they are less exciting and enticing. Collecting necessary data on behavior, distribution, and limited factors is difficult because of the involvement with a foreign government, but it has been shown that the recovery actions that have not been started are those that were not connected to recovery criteria.

- Mr. Shelley asked what political positives and negatives interviewers had noticed.
- Mr. Brown replied that the friction between the State of Florida and NMFS had been very political, in terms of what Florida was and was not willing to do; Ms. Beideman replied that there were political challenges at work in getting permits to cull the sharks that are eating baby monk seals in a particular area.
- Ms. Brandon pointed out that the structure of the interviews was oriented more towards understanding the progress of recovery actions, and that understanding of political challenges involved reading between the lines.
- Mr. Shelley asked for more lessons learned in terms of navigating politically, and Ms. Sobeck discussed the advantages of working with fishermen directly to make ship gear changes while preserving ship's rights. She highlighted the importance of setting priorities and crafting appropriate policy in the states and communities where they are most necessary.
- Mr. Merrick expressed deep appreciation of the Agency's and Congressman Redenbaucher's support for the right whale ESA discussions in the White House, and spoke to the way that political support can benefit species best when science exists to back up recovery plans.

NOAA Fisheries Climate Science Strategy

Mr. Roger Griffis, Climate Change Coordinator, NOAA Fisheries, began by thanking the committee for their rich conversation on resilience of the resources NOAA is charged with protecting and the people

who depend on them. He addressed the impacts of climate change on changing productivity, shifting distributions, changing abundance, and changing fisheries; all of which are expected to increase with the projected change in climate. He stressed the importance of addressing the causes of climate change in order to make long-term management plans, rather than comparing stock assessments that may no longer apply in ten years. He discussed the launch of a three-year project in the Bering Sea examining different emission scenarios to better predict what climate change impacts fisheries will face and play out possible management strategies. He discussed the early warning measures that had come out of the Gulf of Maine warming event, which should have been predictable. He also discussed the effort to develop customized regional action plans by next October addressing each region's weaknesses and priorities, in partnership with NASA, DoD, academia, and others. He asked the committee for its help to pursue partnerships and engage scientists and management to refine the plans and make the best possible roadmaps for regional effective decisionmaking.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/annotated_agenda_ncss.pdf

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/mafac_presentation.2_-_griffis.pdf

- Mr. Shelley asked what level of jurisdiction and power the regional councils will have in this framework.
- Mr. Griffis replied that a large part of the focus was to strengthen regional management to better handle problems, and emphasized the importance of working with the larger scientific community to identify real key issues at work to get the information where it needs to go. Dr. Merrick added that the goal was to collaborate with regional councils to create an effective plan that can be implemented at a regional level, rather than a top-down approach.
- Dr. Merrick, Mr. Shelley, and Ms. Sobeck discussed specifics of regional cooperation and partnership, and the differences in progress and collaborative abilities between regions.
- Ms. Bonney expressed concern at the magnitude of overlap and the need to clearly define priorities and strategies to avoid garbage in/garbage out analysis, particularly with the limited resources and need to allocate existing staff to new assignments while still maintaining standing priorities.
- Ms. Sobeck discussed the challenge of pulling in science centers that don't yet have a climate change strategy, and the importance of giving regional councils autonomy and flexibility while still developing a stable partnership. She asked what pushback the topic of climate change was receiving in Congress.
- Dr. Merrick replied that as long as the focus was on the impacts of climate change on local ecologies, rather than emissions restrictions, climate change policy is being well-received. He added that his larger concern is fostering true partnership with centers, regional offices, and councils; without overtasking the centers, who often feel excluded from drafting discussions.
- Ms. Brandon and Dr. Merrick discussed the successes of the North Pacific Council and state of Alaska, adding that these successes are poorly received as a model by other councils.

Mr. Rizzardi invited Dr. Merrick and Mr. Griffis to participate in the ad hoc working group discussion the following day to foster input and collaboration of staff. Mr. Griffis agreed to attend.

Meeting Adjourned

Mr. Rizzardi adjourned the meeting at 5:14 p.m.

SUMMARY RECORD
Marine Fisheries Administrative Committee
Public Meeting
October 13-15, 2015
Silver Spring, Maryland

Wednesday, October 14, 2015

Call to Order

Mr. Keith Rizzardi, Chair, MAFAC, called the meeting to order at 9:07 a.m.

Report from the Assistant Administrator

Ms. Eileen Sobeck, Assistant Administrator, NOAA Fisheries, welcomed MAFAC's new chair, Julie Morris; and vice chair, Terri Beideman. She thanked MAFAC members, as opinion leaders of partners and stakeholder groups, for their input to calibrate NOAA Fisheries policy; and expressed a commitment to widening NOAA Fisheries' circle of partnerships with the help of the committee. She identified fishery management councils and commissions as the fundamental bedrock of Fisheries partnerships under the Magnuson-Stevens Act; but expressed optimism toward a new chapter of policy that focuses less on outright litigation and regulation and more on collaboration and partnership. She called attention to the closer relationship with NFWF and their upcoming memorandum of understanding(MOU) to reduce procedural barriers and facilitate work on such issues as estuary restoration. She discussed greater involvement with existing partners, such as the Association of Fish and Wildlife Agencies(AFWA) and the Fish and Wildlife Service, and discussed ways that NOAA Fisheries can align with AFWA on threatened and endangered species recovery and other fronts. She discussed the draft ecosystems-based fishery management policy, with a focus on drawing attention to successes rather than failures while striving to accomplish more.

https://www.st.nmfs.noaa.gov/Assets/ecosystems/ebfm/Draft_EBFM_Policy_9.9.2015_for_release.pdf

Ms. Sobeck moved on to discuss NOAA Fisheries' Climate Science Strategy, which permeates much of the work NOAA Fisheries will do moving forward. Although climate change is a field with great uncertainty, she stated that the identification of the problem was being wrapped up, and the heartland of implementation had been entered.

http://www.st.nmfs.noaa.gov/ecosystems/climate/national-climate-strategy

Ms. Sobeck expressed optimism regarding the progress of recreational fishing policy; referring to the two summits, policy, national implementation plan, and forthcoming regional implementation plans. She highlighted the importance of maintaining liaisons at every step of policymaking and implementation to keep in touch with the voice of those effected by new policy, and took time to thank the recreational fishing-oriented members present.

- Ms. Sobeck answered clarifying questions from Ms. Morris and others regarding the timeline of comment on the Presidential Task Force on Combating IUU Fishing and Seafood Fraud's Action Plan, co-chaired by Commerce and the Department of State.
  http://www.nmfs.noaa.gov/ia/iuu/taskforce.html
  Ms. Sobeck reviewed the program's core recommendations and upcoming deadlines, (final species at risk and final set of criteria to determine species at risk in the end of October, and the

traceability proposed rule in December 2015, with comment periods of 60 to 90 days)and MAFAC's role as a source of insight and analysis, asking members to comment individually. The idea of a group comment was floated, but found non-feasible within the Action Plan's narrow comment period. The Action Plan holds tight deadlines to ensure Administration ownership of the traceability program, and steps that are highly sequential in nature.

- Ms. Hamilton and Ms. Sobeck discussed areas of intersecting interest with AFWA, suggesting that NOAA facilities incorporate milkweed into their landscaping designs to benefit the Monarch butterfly.
- Mr. Dunn suggested that NOAA Fisheries' efforts with AFWA would be well-placed in their coastal and oceans committee, which at present has scant engagement by states, and falls largely within NMFS authority. He mentioned existing with through AFWA with the ASA to boost the effectiveness of the forum.
- Ms. Sobeck agreed that many state directors in AFWA are interested in that nation's fish, and noted a fair amount of overlap between NMFS and AFWA coastal habitat interests, as well as the strong recreational community input within AFWA.
- Ms. Sobeck stated that NOAA Fisheries plans to have a state directors' meeting in early 2016, though the date has not yet been set.
- Mr. Rizzardi expressed his appreciation of the role MAFAC has been able to play in shaping coherent NMFS policy, and thanked her for attending the meeting.

NOAA Fisheries Budget Outlook

Dr. Paul Doremus, PhD, Deputy Assistant Administrator, Operations presented the outlook of the NOAA budget, with the understanding that budget increases are unlikely, and NMFS will have to fund its new projects at the expense of existing ones. He discussed the timeframes in which the coming year's funding could be spent, and addressed the challenges associated with creating emergency plans to prepare for potential government shutdown. He explained that while the BP settlement would send a lot of money to the Gulf Commission, that money will be tied to specific projects and not NMFS's core goals in that area. He highlighted budget wins, such as Saltonstall-Kennedy(SK) grants that are reviving previously underfunded research, and complementary grants on ocean and coastal resilience with the National Ocean Service. He emphasized the OMB's focus on improving operational excellence and integrity. Although the President's FY16 budget for NOAA shows an increase in NMFS's core functionality, the uncertainty in the budget climate is expected to incentivize more use of partnership to get more projects funded in a world of increasing costs and budget uncertainty.

Ms. Sobeck added that EM/ER and IUU pose a great demand for a robust regulatory structure without an increase in funding. Mr. Doremus agreed, citing this as a source of core mission capability erosion that develops when demand rises as core consultation capacity remains stagnant. He moved on to address the aging oceangoing data collection infrastructure, in research ships as well as labs, citing the La Jolla lab's recovery through ARRA funding and Senator Inouye's contribution to the new laboratory in the Pacific. He expressed concern at the risks of allowing these resources to degrade beyond their predicted lifespans and be forced to implement crisis models. He related infrastructure aging to the decreased funding for staff, ineffective workforce machinery, and backlog of 242 hires facing NOAA. Increasing productivity alone cannot accommodate the scale of increasing mission requirements bumping against a small staff. He concluded by emphasizing the challenges of prioritization ahead, and placing focus on the use of partnership to accomplish more with flat dollars. Ms. Sobeck added that in the face of these prioritizations, it is important to establish which programs are most essential, and which can be allowed to fall off the table.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/mafac_oct_2015__v6.pdf

- Mr. Brown asked what impact contractor employment had on workforce challenges, and whether contractors were concentrated in specific programs or spread across the board.
- Mr. Doremus replied that contractor employment has not been concentrated in any one programmatic area, and does not compensate for the government positions that have been

dropped. He added that analysis is in process to examine FMC labor composition over the past year to develop a five-year plan.

- Mr. Dyskow clarified the cost of research vessels, and suggested that at such a cost it may be more effective to phase out research ships in the face of superior technology such as satellites and airplanes, and charter ships from contractors when necessary.
- Mr. Doremus explained that because of distinctive data collection that only NOAA vessels are capable of doing; reliance on chartering is implausible without risk of a loss in research quality, particularly in areas with limited fleets.
- Ms. Sobeck emphasized the importance of not only determining priorities within NOAA, but making it clear to those dependent on NOAA what programs would need to be dropped in the face of budget uncertainty. She and Mr. Dyskow discussed the importance of expressing these cuts to shareholders in a way that encourages investment.
- Mr. Okoniewski asked what a new business model or stronger partnership would look like.
- Mr. Doremus replied with two strategies: cost leveraging, such as that underway with the national Fish and Wildlife Service; and using Magnuson-Stevens for cost-sharing and cost recovery, which is highly contentious, citing the cost of observers in the Northeast that could be offset to industry.
- Mr. Rizzardi spoke to the significance of MAFAC's ability to speak out on cost sharing, cost recovery, private pay, user pay, and partnerships; as stakeholders, that may be too contentious for NOAA to bring forward on their own.
- Mr. Franke agreed, and cited a recent partnership between the Sportfishing Association of California and NMFS to compare strategic planning and funding processes to identify overlap and merge efforts to optimize funding on both sides.

BREAK

Reports from the State Directors Meeting and Fisheries Commissions

Mr. David Donaldson, Executive Director, Gulf States Marine Fisheries Commission, began by discussing the upcoming state director's meeting in the Gulf of Mexico this February. He detailed the impact of the BP spill and recent hurricanes in the Gulf on oyster productivity, and the local efforts to restore historical landings; he compared this situation with that of the Chesapeake Bay five years ago, noting how the roles of the two oyster fisheries have flipped. He discussed the risks of increasing research costs under a flat budget, and the increase in statistical uncertainty when stock assessments lose their research pools. He discussed the efforts of Texas, Louisiana, Alabama, Mississippi, and Florida to collect survey information on the red snapper in a timely manner; and the lack of preferred alternatives for Amendment 39.

- Mr. Dyskow asked for Mr. Donaldson's opinion on the viability a plan to return management of all Gulf species to the states.
- Mr. Donaldson cited the Gray's Bill, and replied that, yes, his member states are interested in such a strategy. He cited red drum and spotted sea trout as species that states had done well managing independently. He contrasted those cases with that of the red snapper, which has historically been a federal species; ceding the red snapper to the states is contentious because would set a new precedent for fisheries management.
- Mr. Dyskow and Mr. Donaldson discussed the recreational shore species that had been successfully managed by states; and the comparative challenges of the red snapper and grouper, which are offshore and more commercially valuable. Although these are a larger task, Mr. Donaldson contended that offshore species are still within the capabilities of the Gulf states.
- Mr. Brame raised the challenge of collecting data by intercept on offshore species like the red snapper and grouper; citing the case of codfish in the South Atlantic, whose research had found only one intercept boat with three fishermen. He expressed concern that this could lead to limits on state research capabilities. Some discussion followed of the importance of devising effective research strategies to avoid such risks to research integrity. Mr. Donaldson cited the efforts of LA Creel, other state programs, and MRIP to customize analytical tools to a given species, particularly those with very short seasons. He clarified that red snapper solutions were being developed more state-by-state, and should not be viewed as one-size-fits-all.

Mr. Robert Beal, Executive Director, Atlantic States Marine Fisheries Commission, addressed five key topics.

1. With regard to conduct of the MRIP site data intercept survey, Mr. Beal reported that the Atlantic states are essentially catching up to the other two commissions. In previous years, the angler intercept survey was carried out by a contractor, but the survey is in the process of being handed over to ASMFC and the states, from Maine to Georgia. He expects that states will be ready to go by the start of next year, and emphasized the partnership with NMFS to create overall estimate.
2. ASFMC is developing new ecological reference points for the Atlantic menhaden, departing from the previous single-species management approach, in analytical partnership with Beaufort Lab and NMFS and state biological researchers. He discussed plans to use those reference points to better understand the ecological services provided by the menhaden and work on allocation between the reductions in bait fisheries in Virginia and bait fisheries along the coast.
3. He discussed surveying the East Coast states' fisheries budgets to identify funding sources and determine what surveys and data collection programs, fishery dependent and independent, are being scaled back or cut due to lack of funding. This analysis will be used to communicate to Congress the impact of limited funding on federal programs.
4. Delaware was recently found to be in violation of ASMFC American Eel, and after failed negotiations on the regional level the Secretary of Commerce and NOAA Fisheries stepped in to partner with ASMFC to set a moratorium date for the middle of March. Mr. Beal expressed appreciation for NOAA's support, although requesting federal help had been a last resort. The U.S. Fish and Wildlife Service's petition to place American Eel on the endangered or threatened species list ended in a non-listing, although the species is depleted. In this context, Mr. Beal discussed the responsibility of fisheries management to rebuild depleted species.
5. Horseshoe crab surveys have been brought back online after a three-year lapse using SK grants. This year's survey will be conducted by Virginia Polytechnic Institute and State University. Mr. Beal expressed appreciation toward NMFS for making the SK grants available.

Ms. Sobeck added that NOAA Fisheries is highly dependent on state-run research efforts, and expressed messaging concerns as to how to properly express that relationship to those outside of NOAA Fisheries. Mr. Beal agreed.

Mr. Randy Fisher, Executive Director, Pacific States Marine Fisheries Commission, gave his 'Top Ten for MAFAC' list.

1. Get West Coast Dungeness crab legislation. The West Coast Dungeness crab fishery is the West Coast's largest fishery, but its management authority will end on September 2016. The legislation passed in the House of Representatives in October, and is on its way to the Senate.
2. Sell Mr. Fisher's house, up from Number 10 last year. The house has been sold.
3. The Pacific Council set regulations for cameras on the Whiting fleet, which should allow research to be performed without live observers.
4. Have NMFS separate compliance and monitoring to the regions from the science centers, because of the difference between biological and compliance monitoring.
5. Have Alaska disaster relief program process completed. Mr. Fisher discussed plans for research in the Cook Inlet following a 2012 shutdown of a commercial fishery there and in the Yukon.
6. Complete RedFIN database on the West Coast. The platform is to be moved to a SQL server database through a contractor starting in late October.
7. Do something about the 3,000 sea lions in Astoria eating threatened or endangered salmon species, as well as those eating steelhead. Existing efforts to trap sea lions are insufficient in scale; PSMFC requests assistance from NMFS to identify a solution.
8. Meaningful process for the Klamath River, which is essential to salmon fisheries on the West Coast. PSMFC has a $1 million grant from the Fish and Wildlife Service to set a process to research the Klamath River. Potential impacts of removing dams on local farmers play into the analysis.

9. Continuing collaboration with the other regional fisheries commissions to communicate the importance of collaboration with NMFS to Appropriations staff in Congress.
10. Complete map of coded wire tag and PIT tag, so that researchers can use GIS mapping of the coded wire tag programs for the U.S. and Canada, as well as the PIT tag program for Columbia system out of Bonneville.

Further Administrative Business

Ms. Sobeck clarified details of IUU deadlines, which are being carried out on a highly compressed schedule. While her clarifications have been incorporated into these notes where appropriate, it is advisable to verify them on the IUU site listed below, as they seem to be subject to change.

http://www.nmfs.noaa.gov/ia/iuu/taskforce.html

Recreational Fishing

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/annotated_agenda_rec_fisheries.pdf

Mr. Russ Dunn, Senior Advisor, Recreational Fisheries, worked directly with MAFAC, leadership, the public, and partners to develop a policy and implementation plan.

http://www.nmfs.noaa.gov/sfa/management/recreational/policy/implementation_plan_2015-2018.html

Because he discussed the implementation plan at MAFAC's April 2015 meeting, Mr. Dunn summarized the plan as aiming to "foster, support, and enhance a diverse array of saltwater recreational fisheries' opportunities, for the benefit of the nation;" and moved on to focus on work since April. Mr. Dunn reviewed the Recreational Fisheries' and establishment of three core goals. He then explained the program's six guiding principles, under which 60-64 commitments for the four-year period fall. Of these, he updated the committee on twelve commitments in terms of their progress. Of these, only one had not been initiated: the establishment of joint state-federal recreational angler education projects to improve understanding of fishery regulations. Mr. Dunn's team has found that many violations occur when fishers do not understand the regulations, but thus far has found creating the necessary collaboration to complete this project challenging. Nonetheless, Mr. Dunn brought to the table ways in which recreational fisheries interests have been promoted through partnership and exchange with the CCC, NFHP, state and regional fisheries management commissions and councils, the Office of marine Sanctuaries within NOAA, the U.S. Fish and Wildlife Service, the National Research Council, OST, and others. He further detailed progress on the review of the Marine Recreational Information Program (MRIP), a fishing trip expenditure survey, a plan of action on discard and release mortality and its relationship to stock assessments, and the creation of a Bio-economic Length Structured Angler Simulation Tool (BLAST model) to review angler participation in West Coast recreational fisheries; projects whose targets are very specific but can be applied to national policy in stock analysis and policy development. In the future, he explained that these commitments are expected to be stepped down to regional and state management, with implementation plans forthcoming in early 2016 and another status update in 2017 to ensure the effective enforcement and advancement of these commitments.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/1._recfish_mafac_update_2015_v2.pdf

- Ms. Morris asked for details on the nature of the BLAST model. Mr. Fisher illustrated the process through an the concept of pursuing liberalization of regulations of stocks showing improvement, examining potential consequences of such measures as raising bag limits.
- Ms. Hamilton asked whether freshwater interests would be involved in this saltwater action plan. Mr. Dunn replied that no, the focus was on oceans, although the interplay on the economics of freshwater is being duly incorporated.
- Ms. Sobeck expressed her appreciation for Mr. Dunn's work, and described efforts to incorporate recreational fisheries into NMFS discussion to create an inclusive dialogue so that eventually a dedicated outreach position is no longer necessary.

Dr. Cliff Hutt, PhD, Research Associate, Office of Science and Technology Economics and Social Analysis Division, presented the 2013 Recreational Bait and Tackle Economic Survey completed this July. The project was identified as a need by industrial groups such as the American Sportfishing Association, Big Rock Sports, Sportfishing Association of California, because bait and tackle retailers are often lumped in with general sporting goods stores in other expenditure surveys. The project targeted independent stores and small local chains by identifying vendors of fishing licenses, concentrating on coastal communities across all 23 coastal states. The survey's goal was to assess the impact that fisheries management would have on the bottom line of these stores. The survey contacted small independent stores, and filled in gaps with customer lists from Big Rock Sports and another wholesaler; using these details to conduct cost earnings and economic impact assessments. Dr. Hutt discussed the survey's findings in terms of income, average total gross sales in saltwater as opposed to freshwater, age, number of employees; and the impacts on local retailers. Overall, the survey found that these businesses are often iconic fixtures in their communities with solid cash flow.

https://www.st.nmfs.noaa.gov/economics/fisheries/recreational/Bait-and-Tackle/bt-survey-2014

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/2._cliff_hutt_-_mafac_bait___tackle_presentation_10.14.15.pdf

- Mr. Rheault asked if rod and reel fisheries could be teased out of the survey's results.
- Dr. Hutt replied by elaborating on ways in which the current data could be re-assessed to find that information.
- Mr. Dunn described the project as a good model to use for successful efforts with the recreational community.

Dr. Sabrina Lowell, PhD, Economist, Office of Science and Technology Economics and Social Analysis Division, presented the 2014 durable goods survey, the 2016/2017 trip expenditure survey, and a trip expenditure survey in California on charter anglers. She described the surveys concurrently, explaining that the end goal is to create an understanding of annual spending by conducting surveys every five years. The cost per trip is broken down into types of trips, in terms of duration, private or for-hire trips, and trips by residents or non-residents. The survey is created through in-person surveys, MRIP intercept surveys, and mail surveys, and a web-based survey in 2011. The durables survey ranged from rods to such large expenses as second homes, trucks and trailers to haul boats over land, and boat insurance; and the surveys covered additional information outside of expenditures, such as days spent fishing in the past 12 months and demographic data, to maximize nonresponse follow-up. She described the data collection limitations of conducting a cold license survey without pre-screening, particularly in areas where freshwater and saltwater licenses are not differentiated. Dr. Lowell presented the results of the survey, and explained the use of IMPLAN to make estimates.

She discussed the challenges of using varying survey methods for data collection in the trip expenditure survey, which will be incorporated into intercept surveys in Florida, Alabama, and Mississippi in 2016. She explained the two-year timeline for the survey data collection across the coastal states. She further explained James Hilger's San Diego study on overnight non-US charter party trips, oriented at identifying an appropriate means of collecting data on these trips by finding response rates of three methods.

- Mr. Franke expressed his appreciation for the study on those 16-day fishing trips by anglers from Central America and French Polynesia, whose investments and demographics differ vastly from those California residents participating in recreational fishing.
- Ms. Morris and Dr. Lowell discussed the use of data, prospects for breaking the state-wide data into more species-specific information. Dr. Hutt qualified that although this information was available by species at the regional level, it is less robust state by state because of sample size.
- Ms. Hamilton and Dr. Lowell discussed the possibility of articulating trip and durable expenditures together to create an effective snapshot of economic horsepower. Dr. Hutt and Dr. Lowell clarified the ways the survey had attempted to differentiate saltwater from freshwater fishing when finding data; using the Northwest, Florida, the Hudson River Valley, and the Chesapeake Bay as examples.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/3._mafac_lovell_2015.pdf

Recreational Fisheries Working Group (RFWG)

Mr. Ken Franke, Chair, Recreational Fisheries Subcommittee, reviewed the history and progress of the RFWG within MAFAC, emphasizing the value of the surveys preformed by Mr. Dunn, Dr. Hutt, and Dr. Lowell for NMFS as statistical research completed by an unbiased third party. He explained the way that RFWG had focused on breaking down its goals into actionable objectives outlined in their Terms of Reference, all of which have been completed. He congratulated and thanked working group members for their work ensuring that recreational fisheries had a voice in MAFAC. Mr. Franke proposed that the work of the RFWG could now be transitioned to regional and state management, and discussed sunsetting the working group.

- Ms. Sobeck expressed her appreciation for the work of the RFWG since 2010 to meet its five-year goals; and asserted her ongoing commitment to reducing friction between regional and federal fisheries management.
- Ms. Morris asked whether the action item of deciding whether to sunset the working group would occur today or tomorrow.
- Mr. Franke replied that the RFWG would meet to discuss the action item and return with a recommendation.

12:02 p.m. – 1:20 p.m. Lunch Recess

Draft Marine Aquaculture Strategy plan, FY 2016-2020

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/annotated_agenda_aquaculture_2015.10.01.pdf

Dr. Michael Rubino, Director, Office of Aquaculture, gave background and context on the aquaculture program, inviting comment from committee members on their regional needs and their impacts on the role and responsibility of the Agency. He described the value of aquaculture as a landed fishery and its spread in recent years; citing salmon in Maine and Puget Sound, shellfish along the Atlantic, particularly oysters in the Chesapeake Bay,Pollock in Alaska, steelhead on the Columbia River, abalone in Hawai'i, and others. He cited conversations at the Seafood Summit about China's increasing market share and the rising costs of seafood imports with the rise of the middle class in China, emphasizing aquaculture as a solution to these market risks. He thanked Mr. Corbin and Mr. Rheault for their work on the Gulf rule, and their recommendations for the strategic plan, which is currently out for public review. He emphasized the importance of aquaculture to maintain federal and coastal fisheries; and its viability as a means of recovering endangered species as well as seafood, citing the abalone on the West Coast and coral hatchery techniques in Florida. He described the progress of the aquaculture ten-year plan established in 2007; citing the establishment of the Office of Aquaculture at NOAA as well as the the partnership with the Corps of Engineers, Sea World, and the EPA to create a standardized approach for southern California aquaculture similar to that of the one for federal waters in the Gulf of Mexico. He emphasized the importance of the Saltonstall-Kennedy grants to the progress of the Small Business Innovation Research (SBIR) program, and the development of seaweed farming in Maine. On the science side, he addressed 'tools for rules,' ensuring the necessary science and management tools are in place to fulfill regulatory responsibilities; through both finfish and shellfish.

http://www.nmfs.noaa.gov/aquaculture/docs/draft_noaa_marine_aquaculture_strategic_plan.pdf

He presented the marine aquaculture implementation plan, its goals, and the way that salmon and shellfish farming has grown as catfish has declined in recent years. He emphasized the importance of maintaining regulatory authority while making the permitting process more straightforward for aquaculturists, citing the draft rule and MOU in place in the Gulf of Mexico to simplify permitting while still

ensuring that all three permits are met. He emphasized the importance of regulation and monitoring in partnership with a science program focusing on smart design and sustainable production; to create good managers and regulators. Further, Dr. Rubino presented the story map developed during aquaculture week to show the research projects at work under NOAA, including project reports. Dr. Rubino emphasized the importance of cross-cutting strategies in the strategic action plan, and its various deliverables. He concluded by stating that the only goal of the ten-year plan that had not been met was an increase in aquaculture funding. Discussion followed.

http://noaa.maps.arcgis.com/home/webmap/viewer.html?webmap=9e19ce7aed5e414e9e1a58a44308d00f

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/rubino_presentation_for_mafac_10_13_2015.pdf

- Dr. Rubino and Ms. Bonney discussed the way that aquaculture value in the U.S. has remained fairly flat overall because of drops in catfish share, although salmon and shellfish continue to rise. Dr. Rubino cited the succession of salmon aquaculture in Maine over the last fifteen years; as well as the rise of oyster aquaculture in Alabama, as a process of great learning and technological development. He also contrasted the permitting processes and aquaculturist demographics of New York, the Chesapeake Bay, and the West Coast.
- Mr. Okoniewski asked what efforts are being made to push awareness of the science surrounding aquaculture and cut down on local push-back.
- Dr. Rubino replied that this is a concern for Aquaculture, and described partnerships with the National Shellfish Initiative and the State of Washington to address permitting questions, issues like ocean acidification; as well as the shellfish research hatchery at the Manchester lab developed through partnership with the commercial sector and the Puget Sound Restoration Fund. Further, he explained Pacific Seafood and potential alternatives to the present permitting process in Humbolt Bay.
- Mr. Franke asked if the coastal commission in California was involved in the aquaculture dialogue.
- Dr. Rubino replied that yes, they are involved in both the finfish and shellfish dialogue. He cited the Rose Canyon fishery project off San Diego in partnership with Christy Walton and Hubbs-Sea World.
- Mr. Franke clarified that his question was more targeted at cooperating with Aquaculture in particular.
- Dr. Rubino said yes, they are, particularly as environmental tools improve and the view of competition in finfish and shellfish production shifts from one of wild-caught versus aquaculture to one of domestic as opposed to imported.
- Ms. Morris and Dr. Rubino discussed the development of off-bottom shellfish aquaculture in the Gulf, particularly the partnership at Sea Grant labs at Dauphin Island and Grand Isle with colleagues in the Northeast and Northwest.
- Dr. Rubino and Mr. Micah McCarty discussed aquaponics and multitrophic aquaculture in Maine and Washington State.
- Ms. Sobeck thanked Dr. Rubino for his work to help move along the advancement of aquaculture as fisheries in the U.S. evolve.
- Mr. Dyskow asked clarifying questions about the importance of Congressional support for NOAA's budget requests. The committee discussed the winners and losers of the budgetary process, and the importance of inter-agency partnership to accomplish concurrent goals.
- Mr. Okoniewski and Ms. Sobeck discussed concerns regarding the hazards that red tape poses to productivity in interagency negotiations.
- Mr. Corbin and Dr. Rubino discussed the history and implementation of the strategic plan.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/rubino_presentation_for_mafac_10_13_2015.pdf

Mr. John Corbin, Chair, Aquaculture Subcommittee, presented the findings of the Commerce Subcommittee based on the input of the Aquaculture Task Force (ATF) via telephone. The ATF had 21 concerns, which boiled down to the 11 priority concerns outlined in the pdf below. Common themes included quantifiable, ambitious growth targets, establishment of NOAA authority, advancing a marine finfish initiative to complement the successful Shellfish initiative. He explained that Attachment B contains five additional ATF concerns deemed significant but not priority; Attachment C elaborates on ATF's priorities in a world of increased funding, and Attachment D provides an annotated outline of ideas for essential components for a marine finfish aquaculture initiative. Mr. Corbin and Mr. Rheault contended that many of their recommendations, such as creating a consolidated permit process, would require action without additional expenditure. Discussion followed.

- Ms. Morris asked which of the recommendations would cost the most money. Mr. Rheault and Mr. Beal claimed that changes in leadership, attitudes, and messaging would be functionally free, and that the Finfish Initiative was the only big-ticket item on their list.
- Mr. Rizzardi pointed out that staffing would still require expenditure, and that regulatory and planning work would require the dedication of NOAA resources.
- Dr. Rubino agreed, citing the Gulf rule's timeline when explaining the challenges of becoming a priority among a pool of urgent issues. He pointed out that adding this workload to existing staff will either chip away at NOAA's regulatory efficiency, or require new hires. He discussed NEPA and IES.
- Ms. Sobeck discussed the success of the Shellfish Initiative and the challenges of working on aquaculture, where NOAA's authority is less clear and partnerships are more critical.
- Discussion of budget priorities followed. Mr. Clampitt asked clarifying questions about the budget demands of the recommendations. Mr. Rizzardi stated that the document may be revisited later to establish more stringent priorities.
- Mr. Franke and Ms. Sobeck discussed methods of leveraging partnerships.
- Mr. Okoniewski commented that he felt identifying a source of funding for the finfish initiative would be somewhat incumbent upon MAFAC.

The motion to take in the Aquaculture Strategic Plan recommendations passed unanimously.
http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/final_atf_plan_comments_oct._2015_v2commercesubcom.pdf

During a period of technical interference, the Committee discussed MAFAC's past recommendations and input to NMFS regarding aquaculture, revisiting the matter of budget prioritization.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/commerce_subcome__notes_2015.10.07.pdf

Mr. John Corbin, Chair, Aquaculture Subcommittee, presented the progress of the Aquaculture Task Force's Mock Permit Project for the Gulf of Mexico. The representative project is currently being finalized through a subgroup with commercial partners. Jess Beck, regional coordinator for the Gulf, and the National Ocean Service, have offered assistance to find a suitable site for the project, which is proposed to be a 12 million pound a year red fish permit over 900 surface acres. ***Dr. Bob Rheault, Aquaculture Subcommittee,*** acknowledged the tremendous help of the Cape's office in North Carolina to inform the site selection process and identifying competing uses in the Gulf through mapping and GIS. ***Ms. Susan Bunsick, Staff, Office of Aquaculture,*** thanked the task force for their work.

- Mr. Shelley asked whether rents, stumpage fees, or administrative costs in the EEZ had been taken into account.
- Ms. Bunsick required that recovering administrative fees is allowed under the Magnuson-Stevens Act, and that the rule lists a dollar amount.

Mr. Rizzardi thanked Mr. Corbin for taking the time to connect via telephone from Hawaii.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/annotated_agenda_aq_mock_permit.2.pdf

Public Comment Period

Mr. Rizzardi opened the floor for public comment. There was none.

Break

Subcommittee meetings

The Protected Resources Subcommittee met in the Linden Boardroom to discuss next steps for the recovery project.

The Recreational Fisheries Subcommittee met in the Chestnut Boardroom to discuss RFWG completion of tasks.

An ad hoc Working Group under the Strategic Planning, Budget and Program management Subcommittee met to discuss the formation of a Coastal Resiliency working group. This meeting was recorded and is summarized below.

The Ad Hoc Working Group within the Strategic Planning, Budget, and Program Management Subcommittee

Mr. Keith Rizzardi, Chair of MAFAC*,* began the subcommittee meeting by addressing the major themes from the meeting's formal presentations relevant to discussion: defining resiliency and commenting on the draft habitat enterprise strategic plan, addressing the role of aquaculture in resilience, determining the quality and quantity of scientific data and information available to NOAA and MAFAC, and discussing how policies may be more reactive to the needs of a world dealing with climate change. Mr. Rizzardi asked that the subcommittee and working group create questions to distribute to task forces within the MAFAC subcommittees, specifically, the Aquaculture and Climate Change task forces. He proposed submitting focused questions to each task force, so that they may present their findings at the next MAFAC meeting.

Mr. Rizzardi also brought up recurring questions posed to presenters, particularly those targeting the relationship between resiliency and climate change. Although he had thought of some of the themes and items that he wanted the working group to discuss, he welcomed the feedback of other members in refining the questions and topics proposed. Discussion followed.

- Mr. Okoniewski brought to attention the role of the habitat in resiliency, and whether or not that would be the best focus for the group's discussions. He questioned if habitat resiliency was a starting point for the conversations, which would eventually become more focused on different aspects of a fishing community.
- Mr. Rizzardi clarified that he, as a representative of NOAA and MAFAC, believed that resiliency should span across all areas, beginning with resilient stocks, then moving to resilient ecosystems, followed by resilient communities.
- Ms. Lukens noted limitations in the Climate Change Task Force's efforts to address socioeconomic impacts of change in communities, and the potential for overlapping conversations and efforts to make sure that all aspects of climate change and community resiliency are addressed. She suggested having a few members of the Climate Change Task Force attend discussions with the Planning, Budget, and Program Management Working Group in order to 'cross-fertilize' efforts.
- Mr. Shelley expressed concerns for the scale of resiliency compared to the power o the subcommittees, and its impact on the way NOAA examines issues facing fishing communities. He contended that small committees and local or regional standards were not enough to facilitate

large enough efforts, and suggested national standards and fishery management plans as a way to bring all of the efforts and movements together.

- Mr. Rizzardi and Mr. Okoniewski emphasized the need for vulnerability assessments in addressing resiliency needs. Mr. Rizzardi suggested posing a focused question on vulnerability to the Aquaculture Task Force, so that they may research and present the different vulnerabilities of fishing communities, and the ways in which policies may combat those vulnerabilities in order to create more stable fishing communities. Mr. Okoniewski specified the need for predictive vulnerability assessments, which would anticipate what factors would make a community vulnerable, so that they may fix those factors and build a stronger community.
- Ms. Lukens articulated the importance of fisheries in the discussion on resilience, specifically, the voice and input of fisheries in the dialogue on resiliency in fishing communities. She cautioned the working group against losing sight of the voices and needs of the fisheries.
- Mr. Okoniewski pointed out the need for vulnerability and risk assessments in all aspects of the community, not just the fishing side. He particularly wanted the working group to consider resilient economies, and how to best support fishing communities in such a way to address their economic needs and the roles of 'viable business engines' in sustaining a community. He cited the example of Seattle and its dependence on Boeing, stating that the government cannot be the only force behind maintaining a community, as an 'economic engine' must sustain the economy in order for that community to thrive.
- Mr. Roger Griffis, Climate Change Coordinator for NOAA Fisheries, weighed in on the discussion by bringing up the actions and conversations of SeaGrant and NMFS in resiliency, climate change, and aquaculture. He suggested that the working group help SeaGrant and NMFS narrow down approaches that already existed, and give feedback and advice on the data gaps that exist in their scientific research. He specifically requested regionally-based needs, in order to better help communities to anticipate changing climates, so that they may make more informed decisions. Mr. Griffis also updates the working group on NMFS and SeaGrant activities, noting a workshop in February or March that will address the data gaps and pilot projects.
- Ms. Bonney recommended that the Climate Change Task Force examine climate strategies from different regions in the United States to facilitate a guideline or formula of how climate strategies should look. She mused that this would allow for an examination of the ways in which climate strategies were already being done, and could, perhaps, improve upon the ones the task force had studied.
- Mr. McCarty agreed with Ms. Bonney, and offered an example of the Northwest's conservatory efforts. He postulated that creativity would be key for regions to be able to comply with intergovernmental and interagency policies.
- Ms. Bonney, Mr. Okoniewski, and Mr. Rheault expressed concerns over the amount of different topics the working group had been discussing. Each member wanted to focus in on a specific topic to address, so that the working group did not take on too much. Ms. Bonney and Mr. Rheault advocated for a focus on climate change and the community, while Mr. Okoniewski supported a focus on aquaculture. Ms. Bonney recommended beginning with the stock responses to climate change, and following up with policy responses.
- Mr. Rizzardi advocated narrowing down questions to government responses and how NOAA and NMFS may be quicker and more flexible in addressing policy concerns due to climate change, and in the gaps in scientific data, and how the scientific community can attend to those gaps.
- Mr. Ames recommended that the only way to fix the lag in government response times would be to establish a new system that solves the structural and organic problems of the current system. He utilized the example of Maine and how limited the fishermen are in their scope of catch and bycatch. He proposed the ability for fishermen to catch other species in order to facilitate long-term resiliency.

- Mr. Okoniewski also promoted government flexibility in order to allow for rapid responses in policies and procedures. He postulated that the current system delays policies to the effect that once one is already in place, the situation has changed again. He recommended a co-op system, whereby the industry has a hand in the policies, and therefore shares the responsibility with the government.
- Guest Mr. Griffis admitted that he shared Mr. Okoniewski's concerns, but also had reservations about the ways in which the research has focused upon the physical aspects of climate change, rather than the social aspects of climate change. He questioned what tools were currently in existence that measured the social vulnerabilities of a fishing community, and what other tools and data could be provided. He also questioned what NMFS could do to help breach the gaps in tools and data.
- Ms. Bonney called attention to the subcommittee's definition of fishing community, and how that would affect policies. She specifically noted that place-based studies would not be helpful with moving stocks, and posed to the working group that the definition of fishing community be crafted in such a way to facilitate more research.
- Ms. Beideman echoed the ideas of the group, stressing the need for government and policy flexibility, and the need for predictive vulnerability assessments.
- Mr. Morrison requested from the subcommittee examples of positive efforts, and policies currently in existence that worked in a positive way towards flexibility, so that the working group may have examples of what they should be working towards.
- Mr. Rizzardi furnished the example of recovery efforts as the type of positive actions that Mr. Morrison was looking for.

Mr. Rizzardi then led the working group to furnish questions to send to the Aquaculture and Climate Change task forces. Working group members suggested changes in wording and added clauses that would allow the questions to have more focus. Three questions were created and sent around to each member of the Ad Hoc Working Group via email.

Ms. Jennifer Lukens, Director, Office of Policy, addressed the matter of the Costal Resiliency Working Group within the Strategic Planning, Budget, and Program Management subcommittee.

- Ms. Beideman elucidated the membership of the working group, and posed to the subcommittee that membership be available to all MAFAC members.
- Ms. Lukens set up a schedule for the following morning, whereupon the questions developed during the subcommittee meeting would be posed to MAFAC for workshopping, which would be followed by addressing the staff, composition, and charge needs of the Coastal Resiliency Working Group.

Ms. Lukens then clarified the next meeting for MAFAC, which she speculated was between April and June of 2016. She confirmed the next steps for both the subcommittee and the Ad Hoc Working Group, with Mr. Rizzardi sending out the formulated questions to each member of MAFAC in order to facilitate a vote the next day of the meeting.

Meeting Adjourned

Proceedings adjourned at 4:42 p.m.

SUMMARY RECORD
Marine Fisheries Administrative Committee
Public Meeting
October 13-15, 2015
Silver Spring, Maryland

Thursday, October 15, 2015

Call to Order

Mr. Keith Rizzardi, Chair, MAFAC, called the meeting to order at 9:03 a.m.

Strategic Planning, Budget & Program Management Subcommittee – MAFAC Discussion and Brainstorming on Coastal Resilience

Ms. Terri Beideman, opened the discussion on the Coastal Resilience Subcommittee, introduce the draft Habitat Enterprise Strategic Plan, stating that the first project for the ad hoc group would be providing specific suggestions on priorities. Ms. Lukens clarified that the comment period will end on October 27th but could be extended; and she, Mr. Rizzardi, and Ms. Beideman reviewed the process of formal MAFAC comment. The committee decided to meet on November 9th at 4:00 p.m. to discuss the Habitat Enterprise Strategic Plan (HESP), at which Ms. Lukens offered to make a staff member from the habitat office available for comment. Discussion of the HESP and the ad hoc committee followed.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/draft_noaa_habitat_enterprise_strategic_plan_10.6.pdf

Ms. Beideman moved on to discuss the Climate and Marine Resources Task Force. She emphasized the Task Force's goal of bringing forward recommendations to fill gaps in existing data and expedite new data, as well as identifying international examples.

Ms. Lukens suggested a wordsmithing session to bring the language further into line with the committee's intent and highlight the places where there are flexibilities and workings in play.

- Ms. Morris suggested dividing the task into two tasks: one focusing on science, which would be within the Climate and Marine Research Task Force; and the other focusing on nimble management structures, suggesting that this could be done in partnership with the Recreational Fisheries Committee and the Commerce Committee of MAFAC.
- Discussion followed clarifying the credentials of the members of the task force and working group, encouraging modification of the document and participation in working group meetings, a focus on nimble management; as well as how the task force builds upon past efforts rather than repeating them.
- Mr. Ames placed a focus on building data accessibility to inform communities using the information that NMFS has available, contextualizing the larger data in terms of regional and local trends that will help determine where to seed stock. He identified a second critical task of making the counsel process more nimble and flexible.
- Ms. Sobeck and others emphasized the tools for examining progression in long-term climate change and their impact on short- and long-term planning and investments, as well as matrices to create a framework for nimble management. Ms. Sobeck raised the example of the El Nino predictive management structure in California; as well as the ESA work in the Central Valley with the Fish and Wildlife Service, which was used to build powerful drought management. With the complexity and regulatory pace of federal management, she focused on creating dynamic management tools, rather than micromanaging.

- Mr. Brown discussed this in the context of seeding stocks outside of the current rate of succession with new species in line with projected stock changes.
- Ms. Hamilton discussed management matrixes for the Coho, suggesting that these nimble management structures are not unprecedented and should not be as challenging as previously expected.
- Mr. Okoniewski placed emphasis on the importance of finding firm evidence for all decision, with regard to harvest or otherwise, to ensure effective and timely decisions; citing recent beliefs that stock depletion was the result of overfishing.
- Ms. Sobeck emphasized the challenges and risks of emergency circumstances, which generally lead to poor decisionmaking, and the advantages of creating matrixes to articulate a system ahead of time and minimize these mistakes.
- Ms. Morris raised the importance of utilizing outside experts to create fresh ideas beyond matrices for nimble management, and suggested reaching out to SSCs and Sustainable Fisheries.
- Discussion followed of the means of effectively identifying that evidence, the definition of truly flexible and dynamic management structures, and identification of what communities want and how to best accumulate and deliver that information. Concern was raised as to how to ensure information is used properly.
- Mr. Shelley and Ms. Sobeck discussed lack of information in the public as to the level of forecasting ability available, and ways to deliver information; as with Long Island's lobsters and El Nino in California; to its consumers.
- Mr. Ames pointed out that fishermen are not aquaculturists, and that posing aquaculture as a solution to wild-caught fisheries and fishermen fails to take into account the large investments fishermen make and the cost of shifting skill sets to focus on aquaculture, whereas identifying different target stocks allows fishermen to redirect their investments.
- Ms. Bonney raised the issue of identifying authority over fisheries and implementing change with highly fragmentary management, as in the pot fishery in the Kodiak, as opposed to more organized fisheries, such as the large AFA cooperatives in the North Pacific.

Subcommittee Reports

Protected Resources – Recovery Project

Ms. Julie Morris, Chair, Protected Resources Subcommittee, updated the committee on the progress that the Protected Resources subcommittee made yesterday, which focused on two things: the direct report on recovery actions, and the remaining task on partnerships.

She clarified that the study was limited to the interviews with recovery coordinators; and will not include recovery action from other entities, interested parties, the states, NGOs, or fishermen. She noted the smaller interagency political challenges, and larger political factors, in the progress of the recovery actions. She brought forward adaptive management, the challenges involved with large whales who were listed before the ESA was created, the varying scales of recovery action, the bottlenecks that form in the research permitting process. She discussed regular status updates for recovery actions, the processes for revising and updating recovery plans, and the value of implementation plans, as well as the importance of cooperative agreements and the internal process of prioritizing species, and concluded by showing the committee the timeline, which plans to circulate the final full plan to MAFAC by Thanksgiving.

- Ms. Bonney asked whether the goal was to formalize the direct report or to get it approved.
- Ms. Morris clarified that the goal was approval, as well as ensuring that the report would be prepared in time for an April external review of the whole protected resources enterprise.

Ms. Morris continued by presenting the partnership piece of the meeting, as well as the upcoming review or not-started recovery actions, emphasizing actions related to fisheries impacts, which will enable the subcommittee to suggest potential strategies to aid in implementation of not-started projects. This review will use forthcoming 5-yeear plans in development with the two species that overlap with Species in the

Spotlight, the white abalone and Hawaiian monk seal. She described the partnership part of the project as a lighter, easier task in the report to brainstorm ideas and hand them on to Protected Resources staff.

Ms. Sobeck expressed her appreciation for the efforts of the subcommittee.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/oct_2015_draft_recovery_actions_reportv4.pdf

Recreational Fisheries and the Recreational Fisheires Working Group

Mr. Ken Franke, Chair, Recreational Fisheries Subcommittee., presented the progress of the Recreational Fisheries Working Group, noting that it had completed tasks identified under its terms of reference and other goals, and was ready to sunset. Ongoing outreach to the recreational fishing community was now being handled by regional staff and local representives. Mr. Dyskow commended the Recreational Fisheries Working Group, citing the difference in organization between the two Recreational Fisheries summits he attended as evidence of the progress the group had made. The motion to sunset the group passed unanimously.

Next, Mr. Franke discussed the request for further information on the delay and approval process for hatchery genetic management plans, given the perceived lack of action by government agencies to complete the consultation process in the eyes of recreational fishing communities, particularly in the Northwest. He stated that this information was necessary to make appropriate decisions, and its continued absence could lead to a national policy issue.

- Ms. Sobeck stated that although there are some potential litigation issues, the request seemed reasonable. Once more, she brought forward the resource issues of having so many high priority issues in a constrained resource environment. She stated that this work would need to be done in conjunction with the Fish and Wildlife Service.
- Mr. McCarty raised the topic of partnership with local tribes.
- Further discussion about budget tradeoffs followed, with a focus on the importance of prevention as opposed to reactive lawsuit settlements. Ms. Sobeck discussed the international consequences of delayed studies, such as a delay in undersea cables and pipelines that would otherwise power energy costs for islands, and expressed concern that these challenges may be shifted from NOAA onto the Fish and Wildlife Service. Ms. Hamilton cited a similar budgeting problem recently in the Forest Service.
- Ms. Morris and Ms. Sobeck discussed the bottleneck of research in the ESA.
- Mr. Rizzardi reminded the subcommittee of their position to shape the agenda for the next meeting, through their conference calls with the Executive Committee.

Commerce – Aquaculture Strategic Plan

Though the Aquaculture Strategic Plan was presented yesterday, Mr. Rizzardi presented two updates on behalf of John Corbin. He requested that MAFAC ask that NOAA send a copy of the report to the Secretary of Commerce, and to ask the Office of Aquaculture to start a process of periodically reporting progress on the implementation of the strategic plan to MAFAC.

NOAA Fisheries Communications and Outreach Updates

Ms. Rebecca Ferro, Acting Deputy Director, NOAA Fisheries Communications Office, and ***Ms. Laurel Bryant, Chief, External Affairs, Office of Communications***, presented the progress of the NOAA Fisheries Office of Communications, established formally in 2011 to help bring NOAA further into the national dialogue on sustainable fisheries. They explained how the office works together with headquarters and regional offices to select priorities, advising NOAA on outreach and selecting key 'drumbeat' messages to integrate into multipurpose platforms of communication. They identified science as the background of NOAA's operations over the past 40 years, and framed NOAA communications as a way of taking that science and making it more accessible. They described the 13.5% increase in visitors

over the past year, explaining their efforts to engage the public through social media campaigns across Facebook, Twitter, LinkedIn, Reddit, and Instagram and other platforms. They discussed the way that visitors arrive at the NOAA site, and their efforts to present science at strategic points of higher interest, such as Shark Week and National Seafood Month, repackaging existing information in a way that is more accessible and interesting, and bringing in new visitors. They discussed the progress of the Species in the Spotlight site, as well as increased communication processes with the regulated and academic communities; the result of their work at increasing stakeholders and stakeholder interest, including popularity in Congress and on the international stage. Much of the Office of Communications' goal is to establish NOAA Fisheries as the authority on fish, so that NMFS is contacted at the same times as Greenpeace or the National Fisheries Institute.

They discussed the Office's efforts regarding the Magnusson-Stevens Act's 40th anniversary, which the office plans to present through a splash page, and a hashtag that allows people to offer up their stories, as the office doesn't have a staff of writers, and instead uses their staff to identify and use the good writing already available. They moved on to discuss Fishwatch.gov, a site launching Friday that allows consumers to access information on 100 fish species, with basic information at the top and text-heavy content linked below that gives an idea of the position of fish stocks and their status in relation to depletion and IUU fishing.

- Discussion followed as to the 'red, yellow, green' approach to fisheries sustainability that consumers often want in order to decide what fish are sustainable choices for consumption. Although PEW, EDF, and others serve to amplify the sorts of messages in Fishwatch, the site is designed to create a more thorough understanding of sustainability as dynamic over time in the case of wild-caught fisheries. Committee members often discussed what information consumers need most, and the development of thoughtful top line messaging.

Ms. Ferro and Ms. Bryant moved on to discuss the NOAA Fishery site, for which a web council has been formed to discuss data on where visitors come from and what they do. They discussed the web transformation in development to collapse the 20-plus core fishery sites to make the pages more efficient and accessible. She described the data on visits, which included a surprisingly large contingency of educators and students; and the upcoming project to create species profiles that take into account news, permits, and publication for each one. Discussion followed.

- Ms. Sobeck expressed her appreciation, speaking to the challenges of communicating and disseminating information across multiple platforms. She discussed the challenges of working with the Northwest Science Centers, and others, who disseminate their research via bibliography. She cited a recent study on the impact of stormwater on salmon and its mitigation through green infrastructure, to emphasize the importance of making research on causes and solutions more accessible to non-scientists. She discussed the friction between the new NOAA Fisheries focus on communicating the narrative of research, as opposed to press releases on end results elsewhere in the agency. She also discussed Status of Stocks in the context of taking technical information and developing high line releases oriented more toward the public. She emphasized the importance of messaging to communicate the value of investment in research. She emphasized the importance of MSA40 as a way of emphasizing accomplishments without diminishing the work underway and progress to be made.
- Mr. Ames discussed the progress of a touch profile comparable to the one the office of communications is developing at the Stonington Resource Center, which has been very effective.
- Ms. Bryant discussed the efforts of linking up data from the Gulf, Pacific, and Atlantic to create Fish watch.
- Mr. Okoniewski applauded the work presented on overfished species.
- Ms. Hamilton spoke to the evolution off NOAA Fisheries communications, and expressed enthusiasm toward MSA40 and Fish Habitat 20, and asked whether the office was working with Russ Dunn's office to increase connection with the recreational and sport fishing communities.
- Ms. Bryant responded that yes, the office features recreational stories quite frequently.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/communications_outreach_mafac.pdf

MAFAC Discussion and Brainstorming on Coastal Resilience

Mr. Rizzardi thanked Ms. Bryant and Ms. Ferro, and the committee returned to their brainstorming and wordsmithing session.

- The committee discussed wordsmithing oriented at better communicating their goals.
- Ms. Bonney and Ms. Morris asked clarifying questions about the process through which Climate and Marine Resources Task Force work will flow through the ad hoc Resilience Committee, working to streamline the process of finding gaps in existing information.
- It was clarified that there are four members on the Climate and Marine Resources Task Force.
- The committee reviewed the statement of purpose point by point, passing the document unanimously.

The final result of the day's wordsmithing session is located on Attachment A below.

http://www.nmfs.noaa.gov/ocs/mafac/meetings/2015_10/Docs/xmital_mafac_findings_oct2015_final_signed.pdf

Close Out: Review of Decisions, Action Items, Next steps.

Senior Policy Advisor to the NOAA Undersecretary, discussed plans to hold the next MAFAC meeting in April in D.C., and the following meeting in the field somewhere, suggesting that they target the end of April to take advantage of overlap with the work of the Science Advisory Board (SAB). She conveyed plans to announce the four new members, and to fill subcommittee chair holes. Discussion followed.

- Mr. Rheault asked that the action table detailing past MAFAC function be updated to include information after 2013, to help new members get apprised as to past MAFAC work and encourage engagement.
- Ms. Lukens replied that she was not previously aware of that table, but would work to bring it up to date.

Mr. Keith Rizzardi, Chair, MAFAC, made his final closing statements before passing the gavel on to Ms. Julie Morris.

Meeting Adjourned

Ms. Morris thanked Mr. Rizzardi for his work on the committee throughout the years, and adjourned the meeting at 11:56 a.m.

Meeting Participants

MAFAC Members:

Mr. Keith Rizzardi, Chairman	Assistant Professor, St. Thomas University School of Law
Ms. Julie Morris, Vice Chair	Assistant Vice President for Academic Affairs, New College of Florida
Mr. Edward P. Ames	Senior Advisor, Penobscot East Resource
Mr. Robert Beal	Executive Director, Atlantic States
Ms. Terri Lei Beideman	CEO, Vast Array Corporation
Ms. Julie Bonney	Executive Director, Alaska Groundfish Data Bank, Inc.
Mr. Richard M. Brame	Atlantic States Fisheries Director Coastal Conservation Association

Ms. Heather Brandon	Ocean Policy Coordinator
Mr. Columbus H. Brown, Sr.	U.S. Fish and Wildlife Service, Retired
Mr. Paul Clampitt	Owner, F/V Augustine
Mr. John Corbin (via telephone)	President, Aquaculture Planning and Advocacy
Mr. David Donaldson	Executive Director, Gulf States
Mr. Phil Dyskow	Yamaha Marine Group, Retired
Mr. Randy Fisher	Executive Director, Pacific States Marine Fisheries Commission
Mr. Ken Franke	Chair, Recreational Fisheries Subcommittee
Ms. Liz Hamilton	Executive Director of the Northwest Sportfishing Industry Association
Mr. Micah McCarty	Executive Officer Nisqually Tribal Council
Mr. Mike Okoniewski	Pacific Coast Seafood
MDr. Robert Rheault	Executive Director, East Coast Shellfish Growers Association
Mr. Va'amua Henry Sesepasara	Retired, House of Representatives, American Samoa Legislature
Mr. Peter Shelley	Conservation Law Foundation

NOAA Staff and Speakers:

Dr. Holly Bamford	Assistant Administrator for NOAA's National Ocean Service
Ms. Laurel Bryant	Chief, External Affairs, Office of Communications
Ms. Susan Bunsick	Policy Analyst, Office of Aquaculture
Dr. Lisa Colburn	Social Scientist, Northeast Fisheries Science Center
Dr. Paul Doremus	Deputy Assistant Administrator for Operations
Mr. Russell Dunn	Senior Advisor on Recreational Fisheries
Ms. Rebecca Ferro	Acting Deputy Director, NOAA Fisheries Communications Office
Dr. Nikola Garber	Acting Director, National Sea Grant College Program
Mr. Roger Griffis	Climate Change Coordinator, NOAA Fisheries
Dr. Clifford Hutt	Research Associate, Economics & Social Analysis Division, Office of Science and Technology
Dr. Sabrina Lowell	Economist, Economics & Social Analysis Division, Office of Science and Technology
Ms. Jennifer Lukens	Director, Office of Policy, NOAA Fisheries Service
Dr. Richard Merrick	Director and Chief Science Advisor for NOAA Fisheries
Ms. Pat Montanio	Director, Office of Habitat Conservation
Dr. Wendy Morrison	Fisheries Ecologist, ERT Inc. Contractor, in support of Domestic Fisheries Division
Mr. Sam Rauch	Acting Assistant Administrator for Fisheries
Dr. Michael Rubino	Director, Office of Aquaculture, NOAA Fisheries
Ms. Eileen Sobeck	Assistant Administrator for Fisheries
Ms. Donna Weiting	Director, Office of Protected Resources, Headquarters

External Speakers:

Mr. Patrick Campfield	Director of Fisheries Science, Atlantic States Marine Fisheries Commission
Mr. Rick Robbins	Chair, Mid-Atlantic Fishery Management Council