

FLORIDA KEYS NATIONAL MARINE SANCTUARY ADVISORY COUNCIL

City of Marathon Council Chambers
9805 Overseas Highway
Marathon, FL 33050
Tuesday, February 21, 2017

DRAFT NOTES

SANCTUARY ADVISORY COUNCIL MISSION STATEMENT
(adopted unanimously, December 6, 2005)

Council Members

Conservation and Environment: Ken Nedimyer (Chair)
Conservation and Environment: Chris Bergh (Vice Chair)
Boating Industry: Bruce Popham (absent)
Citizen at Large – Lower Keys: Mimi Stafford
Citizen at Large – Middle Keys: George Garrett
Citizen at Large – Upper Keys: David Makepeace
Diving – Lower Keys: Don Kincaid
Diving – Upper Keys: Elena Rodriguez
Education and Outreach: Martin Moe
Elected County Official: George R. Neugent (absent)
Fishing – Charter Fishing Flats Guide: Tad Burke (absent)
Fishing – Charter Sports Fishing: Steven Leopold
Fishing – Commercial – Marine/Tropical: Ben Daughtry (absent)
Fishing – Commercial – Shell/Scale: Justin Bruland
Fishing – Recreational: Ken Reda
Research and Monitoring: David Vaughan
South Florida Ecosystem Restoration: Pete Frezza
Submerged Cultural Resources: Corey Malcom
Tourism – Lower Keys: Clinton Barras (absent)
Tourism – Upper Keys: Andy Newman (absent)

Council alternates (present)

Boating Industry: Karen Thurman
Citizen at Large – Upper Keys: Suzy Roebing
Citizen at Large – Middle Keys: George Garrett
Conservation and Environment: Caroline McLaughlin
Fishing – Charter Fishing Flats Guide: Will Benson
Fishing – Charter Sports Fishing: Richard Gomez
Fishing – Recreational: Bruce Frerer
Research and Monitoring: Shelly Krueger
Tourism – Lower Keys: Joe Weatherby
Tourism – Upper Keys: Lisa Mongelia

Local Elected Officials

City of Key Colony Beach – Mayor Jerry Ellis
Village of Islamorada –Mayor Deb Gillis

Agency Representatives

Florida Department of Environmental Protection: Karen Bohnsack
FWC Division of Law Enforcement: Capt. Dave Dipre
FWC Fish and Wildlife Research Institute: John Hunt
NOAA National Marine Fisheries Service: Heather Blough
NOAA Office of General Counsel: Karen Raine (absent)
NOAA Office of Law Enforcement: Kenneth Blackburn
Dry Tortugas and Everglades National Park: Meaghan Johnson
U.S. Coast Guard (USCG): Petty Officer Mark King, Phil Goodman (Auxiliary)
U.S. Fish and Wildlife Service (USFWS), National Wildlife Refuges Florida Keys: Daniel Clark/Christine Ogura
U.S. Navy: Ed Barham

I. CALL TO ORDER, ROLL CALL, AND MEETING MINUTES APPROVAL OF 10/18/16 DRAFT MEETING NOTES

**Pledge of Allegiance
Roll Call**

MOTION (passed)

Mayor Jerry Ellis made a motion to approve the minutes. It was seconded by Mimi Stafford. The minutes were approved with no opposition.

Council member Karen Thurman made a motion to approve the agenda. The motion was seconded by Mayor Jerry Ellis. The motion passed with no changes or objections.

Opening Remarks

Chairperson Nedimyer announced that the National Marine Sanctuary Foundation has a new director, Kristen Sarri. Ms. Sarri visited the Florida Keys in December and met with Chairperson Nedimyer. Chairperson Nedimyer expressed his support for Ms. Sarri and the foundation. He added that the local group, Sanctuary Friends Foundation of the Florida Keys, also plays an important role in supporting the sanctuary.

Chairperson Nedimyer announced new and renewing council members. The following people will be serving another council term: Bruce Popham, Bruce Frerer, David Makepeace, Suzy Roebling, Dave Vaughn, Joe Weatherby, Shelly Krueger and Clinton Barras. Elena Rodriguez is now the member for the Upper Keys dive community; Ken Reda is now the member for the recreational fishing seat. Chairperson Nedimyer welcomed three new council members: Michael Yasky as the Upper Keys diving alternate, Karen Thurman as the Boating Industry alternate, and Richie Gomez as the Fishing – Charter Sport alternate.

Chairperson Nedimyer announced that he and Vice Chair Bergh have served two terms each on the council and will be stepping down from these roles. At the next meeting, the process to nominate and select a new chair and vice chair will take place.

II. ONMS Director Remarks

Chairperson Nedimyer introduced John Armor, who is the new director of the Office of National Marine Sanctuaries. Director Armor thanked Ken and Chris for their dedicated service on the advisory council. He recognized their leadership and phenomenal job in managing the advisory council, noting that Ken has represented the advisory council very well at the national level. Director Armor expressed his sincere appreciation and called for a round of applause.

Director Armor recognized the dedication and willingness of all advisory council members to help with management; this is the way advisory councils are supposed to work. In Washington, he lets people know the importance of sanctuaries, including the importance of advisory councils. These bodies are critical to the community. They make it possible to find solutions that work for the individual communities and for the resources. He is particularly interested in this meeting because two topics that are important to him – enforcement and recreational fishing – will be discussed.

Director Armor provided a one pager on the ONMS strategic plan. The plan will be released soon for public comment and he feels it is different from most strategic plans from government agencies. This new draft strategic plan focuses on communities and how engaging communities is important to the mission of protecting sanctuary resources. The plan outlines core values such as creativity, teamwork, community, and describes five goals, with related objectives. A good plan needs to be based on input from many; the process used to develop this plan involved a team of sanctuary superintendents and others working together. The process is still ongoing and will involve council member input and public comment when it is released for public review. The sanctuary program is turning 45; this plan will structure and point the direction for the future.

For the first time in 15 years, new marine sanctuaries are being designated—in Mallows Bay, Maryland and Lake Michigan in Wisconsin. These sanctuaries were selected through the new sanctuary nomination process put in place in 2014 and are supported by each state's governor. He welcomes the opportunity to introduce the concept of national marine sanctuaries to the new administration through these new designations.

New administrations typically bring transitional periods in government. ONMS is evaluating what it means to have a federal hiring freeze, which has impacted hiring for the program. ONMS staff are working through the changes. Restrictions on new regulations are in place; the impacts to the program from this change, if any, have yet to be determined.

The Secretary of Commerce, Wilbur Ross, should be confirmed very soon. He has an investment background; the transcripts of his hearing are available. Director Armor is very hopeful for the future. For sanctuaries, the Secretary of Commerce is generally not involved in the everyday matters of the sanctuary program. The NOAA administrator, who has not been named yet, plays a larger role.

Director Armor provided an update on the DEIS (Draft Environmental Impact Statement) process. The DEIS will be of interest to the new administration coming in; hopefully, a representative will be able to attend the council meeting in the future. It is unlikely that a new NOAA administrator and team will be in place until later this year; which will mean the next step of the DEIS process will be delayed.

Director Armor addressed the management issue and recognized the fantastic job that Lisa Symons and Ed Lindelof have done over the past few months. He recognizes that both Ed and Lisa have taken time out of their personal lives to serve in these leadership roles. Unfortunately, Director Armor

doesn't have anything to report on next steps. The process has taken time; he apologizes for not having something concrete to announce.

Discussion

In response to a comment about the critical nature of two sanctuary positions that are currently vacant, communications coordinator and science coordinator, Acting Superintendent Lindelof explained that these are key senior staff positions that are needed in order to move forward with the regulatory review. One is a scientist with excellent science communication skills and the other is a media/communications position. The research position was advertised, a candidate was identified and then the position was caught up in the hiring freeze. He will be reaching out to partner scientists to determine how to handle that gap. Concerning the media/communications coordinator, he is happy to announce that the National Marine Sanctuary Foundation will be hiring this position. It will be advertised later this week and will be based in Key West. This is a key position and he is thankful to the foundation for making this possible.

III. STATUS AND TRENDS IN THE FLORIDA KEYS – FISH COMMUNITIES

Dr. Jim Bohnsack, NOAA National Marine Fisheries Service, gave a presentation on the status and trends of coral reef fish in the Florida Keys. This presentation is available by visiting: <http://floridakeys.noaa.gov/sac/othermaterials/20170221fish.pdf>. Dr. Bohnsack explained the concept of shifting baselines. People don't have knowledge of the baseline conditions of the reef and don't recognize that it has changed over time, specifically that fish and invertebrate populations have declined. NOAA's reef fish monitoring data helps identify the long-term trends in fish populations and provides facts about reef fish populations in contrast to the perceptions that people may have. The 110 species of reef fish are an important part of the Florida Keys identity and economy. Reef fish contribute about 6 billion dollars annually to the South Florida economy and account for 70,000 jobs and other ecosystem services.

The presentation included a history of spatial (no-take) management and emphasized the importance of marine zones, which are a tool used to separate incompatible activities. Marine Protected Areas, MPAs, are zones that may regulate access and usually allow for compatible uses. A marine reserve is a more protected category; reserves are generally closed to take. The Florida Keys National Marine Sanctuary is a marine protected area managed in conjunction with other agencies. Overfishing of some species of reef fish is occurring in South Florida. Overfishing means that catching is taking place too fast and the resources are being depleted over time. Reef fish are vulnerable to fishing pressures for a variety reasons, including the fact that they have long lives, delayed reproduction and a high economic value. The concept for marine reserves (which are no take areas) is simple: "If protected from human interference, nature will take care of itself". Marine reserves tend to be controversial, even though they provide services. A marine reserve is beneficial because it protects depleted species, protects the area from habitat damage from fishing gear and protects by-catch.

Dr. Bohnsack described the MPA theory. Fished areas tend to become depleted over time because fish are caught and removed from the system. Closed areas are beneficial because fish in the zone grow larger and more numerous and then spillover into the nearby fished areas, which benefits the fishery, may occur. More importantly, marine reserves allow for growth and reproduction. Larger fish and more fish increase fish reproduction and dispersal. In addition to fisheries benefits, marine reserves protect ecosystem structure and function, enhance the non-extractive economic benefits and increase scientific understanding of marine ecosystems and public awareness. People tend to take "ownership" of protected areas and that helps with enforcement.

Many agencies and academic institutions have made contributions related to reef fish populations and ecology over the past 35 years. Partnerships have been extremely important to the success of this long-term program. These institutions collaborated to produce a protocol for monitoring reef fish that is used by all programs. *A Cooperative Multi-agency Reef Fish Monitoring Protocol for the Florida Keys Coral Reef Ecosystem* was published in 2009.

This protocol allows scientists to link fish abundance with the type of habitat and its degree of patchiness and vertical relief. Scientists can view data using the following variables: habitat types, relief and patchiness, depth, geographical sub-region and special management zones (no-take reserves). Sampling takes place across the reef tract in three domains: the Florida Keys, Southeast Florida and Dry Tortugas. For each fish species, the relative abundance across the geographic range can be determined. This protocol requires precise habitat maps (provided by FWC and National Ocean Service NOS).

Species abundance in the protected zone (such as Western Sambo Ecological Reserve) show significant increases over time for reef fish that are targeted by fisheries. Yellowtail snapper, black grouper, mutton snapper and red grouper all showed marked increases inside the protected zones as compared with populations found in fished areas. For fish species that have no significant fisheries (e.g., parrotfish), population levels are similar both inside and outside of protected areas. For the Tortugas region, the abundance of legal sized black grouper increased significantly inside the reserve as compared with the abundance measured before reserve establishment (1999-2000). The abundance increases were intermediate for Dry Tortugas National Park where recreational, but not commercial fishing, is allowed.

The Florida Keys Tortugas Ecological Reserve is a good example of a successful MPA. Attributes that make an MPA successful include the establishment of a no-take rule that is well-enforced, large size, length of time established, isolation from other areas. A management plan should be in place and the fishermen should be engaged and have representation. Sustainable fishing should be promoted.

Discussion

- In response to a question about the impacts of lionfish on native fish populations, Dr. Bohnsack stated that it is a little too soon to know the full impact. Exotic populations often reach a peak and then crash. These fish have no known predators, are toxic, are found at all depths and are here to stay. Some high value reefs can be protected from them to a degree. No-take areas can serve as a control when other areas are changing.
- In response to a question about estimating legal sized fish populations, Dr. Bohnsack explained that this method allows the scientist to extrapolate the abundance and size data with confidence intervals across the larger Florida Keys area.

IV. STATUS AND TRENDS IN THE FLORIDA KEYS – BENTHIC COMMUNITIES

Mr. Mark Chiappone, Nova Southeastern University, gave a presentation describing the status and trends of coral reef and hard-bottom communities in the Florida Keys. This presentation is available by visiting <http://floridakeys.noaa.gov/sac/othermaterials/20170221benthic.pdf>.

Mr. Chiappone has been working in the field of reef ecology in South Florida for many years. Many factors affect Florida's coral reefs, both natural and human-induced. Some impacts are local and can

be addressed; others are regional or global and are more difficult to manage. Mr. Chiappone is based at the northern end of the reef tract and sees quite a bit of impacts from marine debris and boats.

The Florida Keys ecosystem is open and connected to the rest of the Wider Caribbean region. This connectivity is evident in the composition and diversity of the area's flora and fauna. The presentation focused on invertebrates in reef and hard-bottom areas and changes that have taken place in recent years. Today, disease outbreaks are observed much more frequently than they were in the recent past. It is difficult to determine what changes/factors are linked to these outbreaks.

US Geological Survey constructed a bedrock surface map that shows what the reef tract area looked like in the geological past (120,000 years ago in the Pleistocene). This surface rock patterns influenced the nature of present day reef and is the foundation for the present-day reef. The "hills" were colonized by corals that formed reefs; the depressions were filled with sand and were eventually colonized by seagrasses. Maps showing the different benthic habitats throughout the Keys have been produced over the years and show that the distribution of different habitats is not evenly distributed throughout the region. In terms of areal coverage, the iconic bank reefs marked by the lighthouses cover a relatively small area compared with hard-bottom habitat, which is much more common.

Coral declines have been documented since the mid-1970s throughout the Wider Caribbean. These declines have been associated with disease events, *Diadema antillarum* die-off and bleaching events. Regional changes in coral reefs are described in an interagency publication, *Status and Trends of Caribbean Coral Reefs: 1970-2012*. This publication synthesized historical information and the current status of the reefs. Carysfort Reef is an example of a reef that has changed dramatically, having lost almost all of its elkhorn coral stands. Whether this area will ever return to its previous state is not known, but recruitment of new corals is not evident, which makes it less likely.

Around the time that significant declines were noted, diseases were also being observed. The first event of blackband disease was noted in the mid-1970s. Since then, a number of other diseases affecting key coral species, along with repeated major bleaching events, have been documented. The origin of these pathogens are unknown and they could be invasive from the Pacific, similar to the lionfish.

The first monitoring program in the Florida Keys was Coral Reef Evaluation and Monitoring Program (CREMP), which documented declines in stony corals and *Diadema antillarum*. Most *Acropora* dominated reefs have lost most of the *Acropora* colonies. Many coral colonies still exist; some in patch reefs and some in deeper areas. Concerns exist that some species may have been locally extirpated. On average on the bankreef tops live coral cover is 5 to 10%. Most of the rest of the area is covered in algae. Corals that do not build reefs such as sea fans have increased in areas where stony corals have declined. It doesn't appear likely that these reefs will return to their previous stony coral dominated state any time soon and the gorgonian dominated state will remain. Recruitment of stony corals is low as is post-settlement survivorship. Additionally, microbiomes may also be altered in a way that prohibits re-transformation back to stony corals. Gorgonians and sponges may alter the chemical environment surrounding them and that can inhibit the recovery of stony corals. To reset the process would require three things: a catastrophic event to reset the landscape; a major recruitment of new young coral and the environment has to support coral growth.

In some cases, the reef framework may be collapsing. This is taking place at Ajax Reef in the northern portion of the reef tract. Ocean acidification is a concern and may play a role. Sea level rise

will also impact corals in the next 50 to 60 years. Shallow water reefs may not be able to keep up with sea level rise.

Things can be done to support corals. A great deal of marine debris covers reef areas and that needs to be cleaned up. Boaters need to reduce boat anchor damage and other physical impacts to the resources. Better signage and boater education could help reduce these impacts. Regional and global scale impacts are more difficult to affect. Deep reefs may be a refugia for reef species.

Discussion

- David Vaughn pointed out that in the last five years he sees reason for real hope. People can and are doing something proactively. TNC and Coral Restoration Foundation have made progress in coral restoration over the years. Today, 26 species of hard corals can be produced in large numbers. In the past two years, *Orbicella* (boulder) and elkhorn coral have successfully sexually reproduced in aquaria and created more genetic diversity. The potential in the future for restoration is very high. He hopes that the sanctuary uses the restoration tool because it is one of the best tools available.
- In response to the nature of the event that might reset the reef, Mr. Chiappone explained that a hurricane or storm and the associated wave action and scouring takes what is covering the surface away. Something catastrophic is needed when sponges and algae have moved into the area. The corals that built the reef structure, the calcifiers, are no longer here in high numbers and without living coral covering the reef surface, it is likely to degrade over time.
- In response to the importance of the hard-bottom community, Mr. Chiappone stated that hard-bottom is number one in terms of acreage. In terms of zoning and hard-bottom habitat, early zoning was geared toward separating users at the reef. Hard-bottom habitat is important for reef fish and other marine life and can play a role in marine zoning. It was taken into consideration in the design of Western Sambo Ecological Reserve.
- Dr. Billy Causey pointed out that the Caribbean is at a disadvantage in terms of recovery because Caribbean reefs have only 2.5 *Acropora* species compared Pacific reefs, which have many coral species.

Break

V. FLORIDA KEYS SHALLOW WATER BOATING IMPACT ANALYSIS AND TRENDS ASSESSMENT

Mr. Pete Frezza, Audubon Florida and South Florida Ecosystem Restoration FKNMS Advisory Council Member, gave a presentation on behalf of Curtis Kruer, Conservation Consultant. The presentation, which described the results of the shallow water boating impact analysis, is available by visiting <http://floridakeys.noaa.gov/sac/othermaterials/20170221boatingimpacts.pdf>.

Mr. Frezza gave a follow-up presentation to Mr. Kruer's initial presentation to the Council in April 2016. This is the third time the Council has heard about this ongoing project, sponsored by the Florida Keys Environmental Fund and Monroe County.

The project is a Florida Keys wide mapping project of prop scars and vessel impacts within the boundaries of FKNMS to be used as a comparison to a similar project completed in 1995, replicating those methods. Using ArcGis, the maps can be digitized and photo interpreted to be compared over time as light (<5%), moderate (5-20%), or severe (>20%) intensity of damage. From this data, resource managers can analyze trends to identify areas that are recovering or areas that are degrading.

In 1995, Monroe County was identified as the county with the most impacts from boats, with 30,000 acres of seagrass damaged. While water quality is the main driver of seagrass health, damage by boats has the second greatest impacts.

In the current project, Mr. Kruer identifying five specific ways in which boats impact shallow habitats: vessels under power, boats at dock, groundings, liveboards, and wake/wave erosion. In his project, Mr. Kruer denoted light intensity damages in green, moderate in orange, and severe in red. Though he has not completed the entire analysis to date, he plans to finish in the next few months.

Preliminary data suggests that there has been an increase in total damage, from 30,000 acres in 1995 to 43,000 acres in this study. Mr. Kruer estimates after the analysis is complete, the data will suggest closer to 50,000 acres in total damage.

Comparisons of impacts from 1995 to 2015 show intense increases in amount of boat damages in areas such as Boca Chica and Cow Key Channels, Marathon, and Islamorada. There are also areas that have shown improvements, such as the Tavernier Key Wildlife Management Area, which is zoned as a non-combustion and idle speed zone. While the recovery is apparent in the aerial photos, it is important to note the amount of damaged remains similar over time, however the intensity of damage has decreased.

In areas such as Plantation Key, the presence of un-enforceable slow speed buoys has not managed to mitigate the impacts of boaters. Over time, the channel has become wide enough for boats to go around the buoys. In Whale Harbor, mangrove has been able to fill in, however, channels continue to widen from increased boater impacts. These areas could benefit from marine zoning including slow speed zones.

Upon completion of the project, data will be presented to resource managers to be utilized in regulatory review processes, to ensure protection is placed in the correct locations.

Discussion:

- A question was raised about the number of boats and the increased size of those boats over the last 20 years. Mr. Frezza noted that while they are currently examining boater registrations in Monroe County, we know that in the state of Florida boat registrations have increased 800% over the last 50 years, and indeed the average size has increased.
- A discussion about the impacts of jet skis on grass flats followed. It was noted that jet skis have not been specifically factored into this analysis, as this project is examining aerial photographs, and that jet skis have an internal prop, which scares the wildlife more so than it disturbs the benthic habitat, especially when compared to an outboard motor.
- It was noted that boats have historically been used to get offshore, in more recent times shallow water boating has become more popular, especially on the bayside of the Florida Keys.
- Thanks are in order for the funding source and to the initial 1995 study team. It is also important to note that the current report is not complete, and the amount of damage may increase.
- A question was raised about the impacted locations in the past experiencing increased impacts now, and if there are examples of areas with light or no impacts that have shown that

same rate of increased damage. Mr. Frezza noted that Mr. Kruer will need to answer that question.

- A member expressed interest in the liveaboard problem, they leave anchor damage and a signature near the anchorage.
- It is encouraging to see that conditions are improving in zoned areas. Most of the seagrass damage is located within the county vs. the municipalities; the council needs to make sure the county is an important partner going forward. Perhaps they can see this presentation at their next meeting.
- It would be helpful if we could overlay this information to inform decision makers about the placement of marinas and other facilities.

Lunch

VI. JOINT ENFORCEMENT IN THE FLORIDA KEYS NATIONAL MARINE SANCTUARY

Supervisory Enforcement Officer in NOAA Office of Law Enforcement Southeast Division, Mr. O'Shaughnessy, gave a presentation on joint enforcement in the FKNMS. To view this presentation, visit <http://floridakeys.noaa.gov/sac/othermaterials/20170221enforcementnoaaole.pdf>. Captain David Dipre, Florida Fish and Wildlife Conservation Commission (FWC), also presented on this topic from the state's law enforcement perspective.

Mr. O'Shaughnessy reviewed information provided to the advisory council in April of 2016. This included background information on the history of enforcement between FKNMS and FWC, which until 2014 did not involve the NOAA Office of Law Enforcement.

Prior to 2014, the FKNMS Joint Enforcement Agreement (JEA) was between FKNMS and FWC, and provided salaries for dedicated personnel and enforcement platforms, i.e. vessels and vehicles. In FY2016, the FKNMS JEA was folded into the existing Florida JEA, which is a reimbursable agreement between NOAA OLE and FWC. This agreement aligns more closely to other coastal states, where NOAA OLE and the state wildlife agencies have had agreements since 2006. This JEA differs slightly from the previous FKNMS JEA in that the program pays for hours of service compared to dedicated officers. One benefit in this situation, is that instead of having five dedicated officers, there are now more than twenty officers available to enforce sanctuary regulations. Funding sources include NOAA OLE, as well as FKNMS for a total of more than 5,000 dedicated hours enforcing sanctuary regulations, which can be taken at any time during an officer's patrol.

Additionally, FY2017 has funding for a dedicated NOAA Enforcement Officer assigned to Marathon, FL who will work with FWC officers to patrol FKNMS. Officer Mitchell Rob, a former FWC officer in the Florida Keys, was hired for this position, and will be fully functioning in August after completing the remainder of his training. The Southeast Division of NOAA OLE has additionally hired six new enforcement officers, five of which will be stationed in Florida. These officers will be able to assist FWC and Officer Rob periodically in the Florida Keys.

Captain Dipre then explained that FWC officers are continuing patrols through a contract situation with NOAA where the hours they patrol for sanctuary violations are reimbursed through the JEA. This has allowed the officers more freedom, and ability to respond more quickly. Captain Dipre then discussed increased enforcement in the Tortugas region, which is the area of biggest concern due to commercial fishing. By utilizing FWC's faster vessels and taking advantage of housing units through

partnership with the National Park, officers can patrol that area more frequently. Currently, officers are taking one 3-day trip every month, and the goal is to increase that effort to two 3-day trips every month. Captain Dipre also noted the option for day trips to the Tortugas, if necessary. There is also an element of surprise inherent in this new approach, as the officers have an option of three FWC vessels, whereas utilizing the Peter Gladding may have been too conspicuous. Because these three FWC vessels are stationed at different harbors along the Florida Keys, the officers also have the option to patrol offshore when not utilizing those vessels for Tortugas patrol.

Captain Dipre noted that their job at the enforcement level is common sense, operational duties. Funding comes from a higher level, which he appreciates. The officers are paid hourly, when they come across a violation, they essentially punch a time card and go to work for the sanctuary. He noted that every fishery violation in the Florida Keys is somehow connected to the sanctuary; however, they are only charging the JEA for the hours the officers are doing targeted sanctuary patrols. Whenever the officers are doing sanctuary patrols, they are receiving overtime pay. The officers are required to do 40 hours for the state, through patrols or leave time, and can choose to work overtime for sanctuary patrols. This provides an incentive for the officers to work sanctuary patrols. He also reminded the council that the number to call when there is a violation, of any kind, call FWC dispatch.

Discussion

- A question was raised about the regular time vs overtime pay. Captain Dipre explained that hours spent on sanctuary violations are paid at overtime pay, but that the officers are required to spend 40 hours patrolling for the state. For example, if an officer spends 8 hours working a sanctuary violation, that is overtime. He still needs to put in 40 hours for the state, which can be a combination of patrol or taking personal leave time for the total of 48 hours. Mr. O'Shaughnessy clarified that other states have a similar system of allocating hours, which incentivizes the officers to take those hours.
- A question was raised about the rates of normal vs overtime hours. Captain Dipre clarified that the overtime pay is consistently time and a half of the officer's normal salary.
- Captain Dipre expressed that he thinks this system is an improvement over the previous JEA. Using FWC vessels provides additional patrols, faster response time, etc. He feels they are getting better cases with this new agreement, and he likes the incentive for his officers to work those hours.
- A discussion centered on utilizing drone technology in law enforcement activities. Captain Dipre explained that drones are illegal for law enforcement due to personal privacy issues, with exceptions. He is appealing to the State of Florida to allow FWC to use drones at sea. He believes drone technology would be effective in increasing the number of successful cases. Ed Lindelof, Acting FKNMS Superintendent, clarified that the federal government has similar restrictions, but he believes these restrictions will ease in the next few years.
- Ed Lindelof commented that there will likely not be any avenues to go back to the system under the previous FKNMS JEA, where there were dedicated officers using sanctuary vessels and vehicles. However, we are adapting the current JEA to be sure there is sufficient and effective enforcement in FKNMS under this new agreement.
- A question was raised about the funding sources for the officers and if there was more funding could there be more officers. Captain Dipre clarified that the legislature in Tallahassee sets the funding. The current model limits his work force due to consistent vacancies in law enforcement positions in the Keys being used as a justification for not creating additional positions.

- A question was raised about retention of officers. Captain Dipre explained that there will always be a retention problem because Monroe County provides a \$10,000 bonus to start, but does not increase that over time. Eventually, people move away to avoid the high cost of living. A comment was made that retention is an issue in all of Monroe County, not just FWC. A question was asked about having a required time for officers to dedicate to Monroe County, Captain Dipre explained that the union and the legislature dictates that is not possible.

VII. ADVISORY COUNCIL CHAIR ENFORCEMENT LETTER

Chairperson Ken Nedimyer presented a letter to the advisory council as an action item. The letter was drafted by a committee of advisory council members across the sanctuary system, to acknowledge the need for enhanced enforcement in all sanctuaries. Mr. Nedimyer asked members to agree to sign the letter as written. The letter will be posted when final following discussion by other Advisory Councils.

Cory Malcom made a motion to accept the motion as written, seconded by Elena Rodriguez.

Discussion:

- Chairperson Nedimyer explained that this letter serves as a tool that NOAA OLE can utilize once the new NOAA Administrator is in place to clarify law enforcement in sanctuaries is a priority.
- Chairperson Nedimyer explained that each council gave verbal agreement to the letter as written and each council is now reviewing and discussing the letter just as this council is. To date, seven councils have approved the letter, none have rejected. The remaining councils will review and discuss the letter at their upcoming meetings.

Prior to a vote on the motion, a request for public comment was made. There was no public comment.

Motion passed unanimously.

VIII. NATIONAL MARINE SANCTUARY ADVISORY COUNCIL RECREATIONAL FISHING SUMMIT

Captain Will Benson, advisory council fishing flats guide alternate, summarized the activities he has been conducting on behalf of the Sanctuary Advisory Council in recent months. He attended a summit held in Ft. Lauderdale that brought together the fishing seats on all sanctuary advisory councils to work on the relationship the national marine sanctuaries have with the recreational fishing community. The goal of the two-day meeting was bridging the gap between the sanctuary and the constituency group of recreational fishing community. The recreational community can be more involved and helpful in working on sanctuary management including regulations.

The draft summary for discussion stated the following:

- sanctuary management with regards to fishing should be specific for each sanctuary;
- fishing access and opportunities are priorities for the recreational fishermen whether in a marine sanctuary or elsewhere in US EEZ;
- a common, but not universal, perception among recreational fishermen is that protected areas, including marine sanctuaries, take away more, i.e. have more restrictions, than they provide in benefits;

- NOAA needs to improve the dissemination of information, communication and the receipt of input from recreational fishermen throughout specific processes including management plans, research and regulatory activities.
- NOAA and recreational fishermen should explore opportunities to collaborate on science and education projects throughout the national marine sanctuary system.
- There is broad interest in working together to enhance the recreational fishing experience in the national marine sanctuaries.

Captain Benson stated that while a gap developed between this constituency and marine sanctuaries, there is strong desire to work much more closely now. He and other fishermen want to see the area managed properly, but he does have concerns about being shut out of the regulatory process. Some of the other themes that prevailed at the meeting revolved around adaptive management and transparency, sunset deadlines and reporting and getting something back for setting aside certain areas. Fishermen are a huge sanctuary constituency. More science and more community outreach are needed to bridge the gap better and ways in which collaboration can occur. For example, through citizen science (tagging data, lionfish).

IX. WORKING GROUP UPDATE: RECREATIONAL CHARTER FISHING

Captain Benson is also serving as Chair of the Advisory Council's Recreational Charter Fishing working group that was created to develop a framework of a program that is currently being called the Blue Angler. They have had one working group meeting, which was well attended and several public workshops, which were not so well-attended. The working group is made of people with broad experiences. He is encouraged by the energy and willingness in the community to embrace this program. They will be meeting tomorrow to work on goals for the program and finalize their recommendations for Advisory Council consideration. He believes that a program such as this one, if developed properly, will be successful. The idea is that a program like this fosters dialogue on issues related to fishing closures, regulations, etc. before mistrust develops.

Discussion (on both topics presented by Captain Benson).

- A question related to whether or not individuals will be part of this program. Many anglers who are not professional guides could benefit from such a program. Captain Benson explained that, at this time, the program is geared toward the professional operator and is patterned after the Blue Star Diver program. People who are certified are going to provide education to their customers and the sanctuary will provide recognition to these operators.
- To some extent, the fishing community feels as if their wealth of knowledge in the field is underappreciated and underutilized. They would like to be considered as expert witnesses in some instances and want to be involved in the dialogue.
- Director Armor attended the recreational fishing summit. He noted that many different facets of recreational fishing were represented and that diversity needs to be considered as part of the communication strategy.
- It would be beneficial for the scientists and fishermen to communicate better and listen to one another. Support was expressed for this idea. When fishermen's concerns are addressed, trust builds over time.
- Recreational fishermen have felt strongly that their voices haven't been heard even though they are first hand witnesses. Scientists and fishermen should work together more often to protect the environment. This will help pass more reasonable regulations that are adhered to by people.

- Director Armor added that another key point made at the recreational fishing summit is that the National Marine Fisheries Service has a data collection program that they use with commercial fishermen. A similar idea is being considered for recreational fishermen.
- In response to a question about marine reserves, protected areas and how they were received at the recreational fishing summit, Captain Benson explained that there were some people who were very opposed to them and generally, there was strong skepticism for marine protected areas. Director Armor added that the term marine protected areas was being used in many different ways and this was creating confusion and not furthering the discussion. He called attention to the fact that not all marine protected areas are the same. Captain Benson noted that many people thought that all marine protected areas were closed to fishing and this issue needs to be addressed. This is why messaging is so important. He noted that the term marine reserves is used in several ways, too.
- Captain Benson would like to have the working group be the conduit for better communication between scientists, fishermen and agencies. He would like to report to the SAC about progress made with this effort.
- Southeast Regional Director Billy Causey explained that marine reserves and such places are beneficial for protecting the habitat as a whole. Sometimes, this fact is not communicated properly and fishermen feel targeted by closures. It is not about targeting anyone; it is really about protecting habitat and allowing for ecosystem function.
- Other management actions can also explain the trends in fish populations (other than the establishment of reserves). For example, the rise in black grouper corresponded with seasonal closures. This is true for other fish as well. Sometimes, fishermen are skeptical because they see the other factors that come into play. Having better communication will be beneficial for all.

X. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

Bill Kelly, Florida Keys Commercial Fishermen's Association

Captain Bill Kelly stated he was here today to address two issues-- law enforcement and lionfish. They have made the case for law enforcement since the inception of the sanctuary. Six years ago they contacted the law enforcement agencies and state attorney's office in Monroe County to put into place an industry wide program to address these issues. They were losing about 4 million dollars in lobsters and about 3 million in stone crabs. More importantly than the financial losses, they were stealing egg-bearing females and undersized lobsters. They were not only causing financial distress, but injury to the resource as well. They purchased specialized equipment such as night-viewing goggles, long-range lenses and other devices, which law enforcement has stealthily used to make significant cases over the years. As recently as last Thursday, he and Captain Dipre hosted a law enforcement meeting at Key Colony Inn. Thirty-seven people were there, including the state attorney's office and all law enforcement agencies in Monroe and the State of Florida. They made significant progress in increasing penalties for trap robbing, wrung tails on the water, out of season possession. This is working. They made the case for getting more manpower on the water and pressed for more funding. It's vital and mandatory. Representatives from Carlos Curbelo's office and Holly Rachein's office were at the meeting. The program continues and flourishes. Every legitimate fisherman has the cell phone number of his "go-to" law enforcement officers and law enforcement receives lots of calls. Captain Kelly thanked the law enforcement officers, including Captain Dipre, for what they do. He recognized Kenny Blackburn. The final law enforcement issue concerns drones, which can not be used by Florida statute. They are working with Holly Rachein's office to see if we can't introduce legislation that will allow their use by law enforcement. On the other hand,

fishermen can use drones, which can provide a wealth of sophisticated information. They are considering purchasing a high-end drone. They have about a half dozen licensed pilots in the association that could pilot them. They also have some teenagers that could operate them. There are several guys in Key Largo that are flying them instead of chasing boats and getting into a confrontation with trap robbers. They are experimenting with drones now and will keep everyone informed.

In regards to lionfish, he has spoken to the group about this before. South Florida and the Florida Keys are the epicenter of the invasion with its strategic location near the Loop Current and the Gulfstream Current. It didn't take long, 25 years or less, and now we have established lionfish populations throughout the Gulf and eastern seaboard. One 3.5-4 inch adult lionfish can produce two million eggs per year. How severe is the problem here? The lionfish derbies do a great job harvesting from shallow water. They are harvesting about 10,000 pounds per year statewide. Two commercial fishermen here catch more than that a year as by-catch in the spiny lobster traps. Some of them catch about 500 pounds in a day on a single pull. It is incredible. Gary Nichols, Conch Key, reported that in 2009 he had 49,000 lionfish in traps as by-catch in his traps. In 2013 he over 10,000 pounds of lionfish and is now harvesting over 7,000 pounds per year. At a state lionfish summit in 2013, the consensus of the participants and scientific community was that a viable commercial fishery was needed. They were not advocating a new trap fishery, but a new trap method or lionfish detainment device. The project to test the traps was submitted to the Gulf and Atlantic councils about six months ago. They both signed off on it; they are waiting for Dr. Roy Crabtree to approve. The traps will be tested in four locations, including the marine sanctuary. Four different designs of traps; 25 traps of each design with a hundred traps per area using modified traps. Any trap device will catch lionfish if you modify the funnel and know where to put the trap our fishermen know where to put that gear to harvest lionfish. Experienced fishermen know exactly where to put those traps to catch lionfish. They are absolutely not advocating for a new fishery. Any sale of the fish would go back into the program. Their goal is to prove the concept and then go to state mitigation funds for invasive species. Every state has one. They could help them train teams who would then go to known population densities at optimal times of year and trap them. Those teams could then go back to their respective operations. Proceeds from the sale of the fish would go back into the mitigation fund. Another unique thing that has been done is the design of a battery powered trap device with an optical camera and a trap door. This device can distinguish between a lionfish and pinfish. These will be tested, too, and can be made for about \$30 a piece. They have applied for permit for testing that device in the marine sanctuary for 12 months from Sombrero Reef Light up to Alligator Reef Light in 100 to 300 feet of water. It is a rectangular area with white sand bottom. If anyone has the opportunity to examine that request and lend his or her support for this project, it would be very much appreciated.

Ms. Michelle Robinson, Marine Zoning Works for Me

Ms. Robinson introduced Marine Zoning Works for Me, a new local campaign. The purpose is to educate the public on the benefits of marine zoning and to promote support for enhanced marine zoning through the Florida Keys National Marine Sanctuary and US Fish and Wildlife regulatory review process. Several members from six local nonprofit organizations came together with individuals to form Marine Zoning Works for Me. The six organizations include The Nature Conservancy, National Parks Conservation Association, Audubon of Florida, Last Stand and Isaac Walton League and Florida Keys Environmental Fund. The members of Marine Zoning Works for Me all believe that a healthy environment is the foundation of not only our economy, but also the quality of life here in the Florida Keys. They also realize that it can be difficult to maintain this balance between protecting this unique ecosystem and allow the public use to enjoy all of the

wonderful aspects the Keys have to offer. This is why we launched a communications campaign to bring more awareness to the community and to engage the community in the sanctuary marine zoning and regulatory review process. We believe that user-friendly marine zoning can have long-lasting positive benefits to the Keys and our ecosystem. The members of Marine Zoning Works for Me will be giving presentations throughout the Keys throughout the total review process and invite people to attend and learn how to get involved. There will be a presentation this evening in the Marathon Public Library. Everyone from the advisory council and public are invited to join them tonight in learn more about the process as well as marine zoning. They are trying to unite the entire community to achieve the end goal of balancing natural resource protection and sustainable public use for the future Florida Keys. Please visit the website, Marinezoingworksforme.org. Please feel free to speak to her or other members if you are interested in learning more about how to get involved individually or as an organization.

Mr. Charles Causey, Florida Keys Environmental Fund

Mr. Causey stated that it has been quite a day. They heard some very good reports today and still are. He is very impressed with what he has heard today. This body has been going on since 1992 and has done a lot of wonderful things. But, still, our resources, habitats, fisheries have been as was shown earlier today have been pretty much going straight down hill with a few bumps along the way. It's been a downhill struggle for a long, long time. Mother Nature has a lot to do with that and we know we can't do much about that. But, what can we do? There are couple of comments that he gathered. Mark referred to "minimize the damage, reduce the local impacts". Ken Nedimyer said "We need to act now". If you think about this, we do need to act now. We have needed to act for a long time. What can we do now that will have the immediate effect and doesn't take from Mother Nature, which doesn't really get us anywhere? What can we do infrastructure-wise, or with the sanctuary plan that everyone is involved in right now? Consider things that can be done reasonably cheaply and will have huge impacts on the fisheries, habitat, the very core of the sanctuary. Pete Frezza earlier with Curtis' report and the other gentleman who presented today, too, talked about protecting shallow-water habitat with a poll and troll zone, idle speed. This is what is protecting the habitat and its sponges, seagrass, fisheries, too. If you look at the short term, boater education is huge. He's been here thirty five years and has spent two thousand days on the water. He can promise you that boater's education is the real plum in all of this and you are not going to teach people the backcountry or any country in the time it takes to take an exam or a course, but you will make them aware. At least half of the people out there now are not aware. They don't mean harm to the habitat; they are just not aware. This is what boater's education will do. How do we get the funding for this? We know how to get the money. We know how to form partnerships. We know how to get NOAA and EPA, Monroe County and the non-profits together at the table to talk about funding boater education. We can fund boater education very easily. Boater education and the funding should be in place before the management plan is released. He is happy to help with that. He suggests that the council appoint a subcommittee to discuss very specifically where the funding will come from. Start with a boater's education program on a voluntary basis. If that doesn't work, then go to the management plan. The park is the process of implementing their plan now. They have heard from law enforcement; Captain Dipre has told us about that and we learned a lot. They should work closely with law enforcement to find out how to fund more officers on the water. At the same time, we need to be sure to look at the data on shallow-water habitat. Pick some very specific areas and have them incorporated into the EIS. Incorporate these areas into an alternative in the plan. Right now, let's get a boater education course and strengthen law enforcement.

Gary Jennings, American Sportfishing Association

Mr. Jennings is from the American Sportfishing Association and is a member of the Blue Angler working group. He would like to echo Will's comments on recreational anglers. They do want to be part of the solution. Diving, snorkeling and fishing are the lifeblood of Florida and are the reasons why most of us moved here in the first place. The numbers taken from the 2001 report on South Florida reef economic report heard about earlier was a combination of snorkeling, diving and fishing. He looked up some more recent information from a 2011 report from the US Fish and Wildlife Service that focused just on angling and found out that recreational fishing in Florida has over a 2 billion dollar economic impact on just Southeast Florida. Florida is the fishing capital of the world and the Florida Keys are the epicenter. Last year, 3 million Floridians and visitors enjoyed fishing in the state and supported 128,000 jobs and over 9.6 billion dollars in economic activity. These anglers also contributed 53.3 million dollars toward fisheries conservation through license fees and taxes on equipment and motor boat fuel. Anglers want to protect the reefs of the Florida Keys and the southeast Florida reef tract. But, they also want to make sure that anglers are not being looked at as low-hanging fruit that victimize Florida's reefs. Florida's reefs are under pressure from a number of very diverse areas. Coral disease, acidification, sedimentation, water temperature, salinity, hurricane impacts, invasive species, and other water quality issues like phosphates and nitrates have all taken a tremendous toll on the state's fisheries. One could argue that lionfish have made a huge impact on the numbers of small tropical fish just as an abundance of black grouper have made an impact on medium sized fish. We have also heard that boaters have an impact. Let's just be careful and remember that most anglers are conservationists who want to be part of the solution rather than be part of the problem. It is anglers who help pay for law enforcement for conservation efforts to the tune of 53.3 million dollars in just Florida last year. Anglers feeling not welcome to enjoy fishing means a loss of funding helping to pay for conservation enforcement efforts. Education truly is the key to a healthy Florida Keys. Let's make sure we are doing a good job educating and using less restrictive fisheries management measures before moving toward closures. It's in everyone's best interest to make sure we have clean waters, abundant fisheries, and access to both. He is proud to be part of this group working with Will to make sure that we are using best practices on the angler side. Thank you.

Discussion

Chairperson Nedimyer asked if anyone had any questions or comments related to public comments.

Council member Mimi Stafford brought up the issue of floating billboards and wondered if the sanctuary was or could get involved. People are finding workarounds to skirt the rules. Someone else who was here earlier today, but couldn't stay wanted to bring up concerns about the floating billboard issues. Captain Dipre stated that he is attending a meeting tomorrow on this topic. FWC has spoken to Monroe County asked them to address an ordinance about the signs. It is really a county issue just like billboards on the highway—how many are wanted and where. This kind of activity is normally regulated under the city ordinances for incorporated areas and the county for unincorporated areas. He thinks the county will likely address this issue first if they believe there should be no signs on the water and then the cities will draft legislation as well. The meeting tomorrow will also address floating structures. Everything else is vessel related, so we will continue doing what we are doing with vessels.

In response to a question about the altitude that helicopters or planes can fly in the refuge, Refuge Manager Dan Clark stated that there are currently no such regulations. Don Kincaid added that he believes that some limitations from the FAA are in place regarding flights over mangrove islands below 500 feet (because of wildlife considerations).

Joe Weatherby asked Bill Kelly whether the trap designs were already been done for the different test areas. Bill Kelly explained that four trap type gears have been approved for use in the South Atlantic and Gulf areas. Trap proponents thought this would alleviate concerns about developing a new trap program. These designs are modified lobster, modified pinfish, modified black sea bass. These are approved by the state and federal entities for deployment. In this upcoming effort, they will be experimenting with baiting techniques.

Vice Chair Bergh commented about Everglades National Park's boater education program and the regulatory process. Considering that any regulatory process is time consuming, he would like to consider implementing steps in conjunction with the sanctuary that move boater education forward in a more immediate way. He would like to discuss/consider what can be done to improve boater education. Acting Deputy Superintendent Lindelof stated it was his understanding that in October the sanctuary agreed to add boater education as part of development of the management plan. Developing boater education will not require the sanctuary to release the DEIS, but the activity will need to fit into the queue of everything that is being done and funding is a consideration. It might be that the sanctuary will have to wrap up the Blue Guide/Angler program before moving on to this topic. If the council thinks this is a high priority, an action plan for the program will be needed to identify staff, funding, etc. Regional Director Billy Causey mentioned that incentives will be very important in creating a successful program.

Chairperson Nedimyer stated that he is going to inquire at the next meeting what has been accomplished on this topic. Everyone should do his/her part.

XI. AGENCY REPORTS: SUPERINTENDENT'S REPORT, REGIONAL DIRECTOR'S REPORT AND AGENCY REPORT HIGHLIGHTS: DEP, FWC-FWRI, FWC-LE, NOAA NMFS Southeast Region, NOAA OGCES, NOAA OLE, EPA, NPS, USCG, USEPA, USFWS, and U.S. Navy

Florida Keys National Marine Sanctuary, Ed Lindelof

- The sanctuary is moving forward with the communications/outreach/media position. This is a critical position that will be with the National Marine Sanctuary Foundation.
- On December 27, a significant grounding occurred near Key West. The catamaran from Fort Myers to Key West ran aground, causing damage to the seafloor. Sanctuary staff have been there to assess the damage; FWC has been heavily involved. They are now assessing next steps with the attorneys.
- The sanctuary is interested in working with agency partners to increase the outreach messaging for managed areas in the Florida Keys, whether it is for the refuge, parks, sanctuary, etc. Several efforts are underway. The sanctuary is placing a new display in the John Pennekamp Coral Reef State Park visitor center. The park is also updating the visitor center. The sanctuary and park will be working together to plan this update.
- Acting Deputy Superintendent Lisa Symons explained that the National Park Service, Florida International University, the sanctuary and other government entities in the area have been involved in planning for a new research facility located on Everglades National Park property (specifically the Key Largo Ranger Station/Florida Bay Interagency Science Center). This facility is envisioned as part of a greater system of opportunities for the visitor to learn and as a place where valuable research will take place. Education and outreach will be on behalf of partner resource agencies, including the US Fish and Wildlife Service, etc.

NOAA Southeast Atlantic, Gulf of Mexico and Caribbean Region, Billy Causey

- Flower Garden Banks National Marine Sanctuary is working on their final Environmental Impact Statement. The proposed alternatives include boundary expansion.
- Gray's Reef National Marine Sanctuary staff are working closely with the National Marine Sanctuary Foundation chapter on hosting an environmental film festival and other events such as a lionfish cook-off, etc.
- An Office of National Marine Sanctuaries director's council meeting will be held in March in Washington, D.C.

Florida Department of Environmental Protection, Joanna Walczak

- U.S. Coral Reef Task Force (USCRTF):
 - Joanna Walczak is at the 37th U. S. Coral Reef Task Force meeting in Washington, D.C. The USCRTF was established in 1998 by Presidential Executive Order to lead U.S. efforts to preserve and protect coral reef ecosystems. The USCRTF includes leaders of 12 Federal agencies, seven U.S. States, Territories, Commonwealths, and three Freely Associated States.
 - One of the top coral reef management priorities for Florida is the ongoing coral disease outbreak. The multi-year coral disease outbreak in Florida is occurring at an unprecedented scale and is estimated to have resulted in the mortality of millions of corals over 125 miles and 32,000 acres of coral reefs in southeast Florida, Biscayne National Park and the Florida Keys National Marine Sanctuary. Major reef building corals, species listed under the Endangered Species Act, and species thought to be the most resilient have all been severely impacted.
 - The State of Florida requested assistance from US Geological Survey's National Wildlife Health Center for response to the ongoing coral disease outbreak. Data and capacity gap discussions are underway.
 - The Florida Fish and Wildlife Research Institute is working with partners to sample and analyze tissue of diseased corals. Results may help narrow down the cause of the disease outbreak.
 - Greater capacity is needed to support more comprehensive emergency response.
 - Florida will be hosting the next USCRTF meeting. in Ft. Lauderdale between August 7 – 11th. More information will follow.
- Coral Reef Locator App
 - FDEP's Coral Reef Conservation Program (CRCP) has a free coral reef locator smart phone application, which has the benthic habitats across the Florida Reef Tract (using the Unified Reef Map from FWRI). The app also includes the commercial anchoring areas and mooring buoys; the various management areas and zone boundaries will also be added.
 - This app has been incredibly effective for education and outreach as well as enforcement efforts.
 - For more information on how to download the app, visit:
http://www.dep.state.fl.us/coastal/programs/coral/pub/ripr/esri-app-instructions_eng_no-logo-080916.pdf

Florida Fish and Wildlife Conservation Commission/Florida Wildlife Research Institute, John Hunt

- During the Commission meeting (Feb 8-9, 2017), two items of direct interest were on the agenda. They were new commercial bully net regulations and a discussion on goliath grouper.

Bully Net

- Bully net changes will be effective May 1, 2017. See news release: <http://myfwc.com/news/news-releases/2017/february/08/bully-net/>.

Goliath Grouper

- In a discussion on goliath grouper, FWC staff reviewed the species' management history, biology, and stock assessments. Stakeholder input on the management of goliath grouper has varied from interest in opening a harvest to continuing with the current harvest prohibition.
- FWC staff is interested in hearing more from the public on the management of this species, including the possibility of a limited harvest.
- To submit your comments, visit MyFWC.com/SaltwaterComments. Details about any future in-person meetings will be provided when available at MyFWC.com/Fishing (click on "Saltwater Fishing," "Rulemaking" and "Workshops.")
- The link to the staff presentation on goliath grouper from the meeting is: <http://myfwc.com/media/4142532/3b-goliath-presentation.pdf>

Commission Meeting Full Agenda

- The link to the full agenda where other items regarding marine fisheries were discussed is <http://myfwc.com/about/commission/commission-meetings/2017/february/08/agenda/>

Florida Fish and Wildlife Conservation Commission, Captain David Dipre

- A regional FWC patrol report goes out weekly that describes FWC activities. He is going to send the link because he would like everyone to receive the weekly reports to see how resources are being used and what is going on.
- In December, the *Interceptor* patrolling in the Tortugas. Near the Marquesas, they intercepted a commercial shrimping vessel that had a bag full of wrung spiny lobster tails that appeared to be undersized. They discovered a total of 75 lobster tails, 50 of the 75 were undersized, and the vessel did not have a federal tailing permit. The captain and two mates were charged accordingly.
- Officers pulled several lines of traps and found 150 untagged traps belonging to one individual. Each untagged trap is one 2nd degree misdemeanor count (which made for a 136 counts). This individual was ordered off the water by the Monroe county courts.
- On Long Key Bridge an angler was caught with a cooler with 18 undersized mutton snapper and one additional hog snapper. Another case was made for 14 undersized mutton snapper and hog snapper. Other officers also made a spearfishing case.
- FWC also has responsibilities pertaining to traffic issues. Recently, a driver was arrested for reckless driving.
- FWC officers checked a diver and his equipment after he exited the water. The diver began to argue with parties on the boat and was charged with criminal mischief and resisting arrest without violence. This person may have been robbing traps, but it couldn't be proved.
- Cases were made for undersized black grouper, undersized mangrove snapper, over the bag limit of hogfish, snapper (mangroves).
- Another case was made for possession of illegal fish, marijuana and cocaine on Long Key Bridge.

- Search and rescue was conducted for three teens whose boat capsized. FWC and sheriff deputies made the rescue. They were rescued successfully, having remained with their boat.
- FWC officers responded to the Ferry Cat grounding mentioned earlier in Northwest Channel. Officers were sent to the captain's house with a citation. Another grounding was reported off West Washerwoman Shoal, which has been hit over and over again. The scar was approximately 173 feet in length. FWC notified the marine sanctuary so that damage could be assessed/fined. Another grounding on a flat was also reported to the sanctuary.
- Several officers assisted with the Keys Annual "Wounded Warrior Soldier Ride" where recovering veterans ride their specially manufactured and/or modified bikes through the Keys. The officers aided the Monroe County Sheriff's Office with traffic control as they escorted the riders along the route to Marathon.
- FWC officers attended a turtle release at Sombrero Beach in Marathon on Christmas Eve. More than 200 hundred people attended. Officers Carroll and Martino spoke with the public and passed out goodies for the children while educating them about FWC's mission.
- Fisheries is the agency's primary mission, but they also do other things, including outreach.

NOAA National Marine Fisheries Service, Heather Blough

- Since the SAC last met in October 2016, NOAA Fisheries approved and implemented the Gulf Council proposal to change the start date of the yellowtail snapper fishing seasons to August 1 consistent with those in the South Atlantic and eliminate the circle hook requirement for commercial vessels fishing for yellowtail snapper using natural bait south of Cape Sable. Those changes will become effective March 13.
- Through March 6, NOAA Fisheries is requesting comments on the South Atlantic Council proposal to prohibit fishing for snapper grouper species within five new spawning special management zones, including Warsaw Hole.
- Both of the Councils' proposed hogfish measures are still with NOAA Fisheries for implementation; they would increase the minimum size limit of hogfish in the Gulf and establish a 10-year rebuilding plan for the Florida Keys stock. The comment periods on those actions have closed, and we're reviewing the feedback we received from the public.
- In the coming months, NOAA Fisheries will be requesting comments on new electronic reporting requirements approved by the Gulf and South Atlantic Councils for the for-hire fisheries and new regulations for mutton snapper in the South Atlantic, which are consistent with those Florida adopted for state waters.
- The South Atlantic Council will discuss a number of issues when they meet next month in Jekyll Island, including
 - New or modified aggregate bag limits and trip limits for snapper grouper species;
 - Changes to the shallow-water grouper closed season;
 - Options to avoid in-season closures of the yellowtail snapper and dolphin fisheries;
 - Limited entry for the snapper grouper for-hire fleet;
 - New measures to end overfishing of golden tilefish; and
 - An exempted fishing permit application we received from a group of commercial fishermen in the South Atlantic to test the use of a catch share system for several snapper-grouper species.
- Tonight, the Gulf Council is holding a public meeting at the Key West Marriott on new measures they are considering to manage shrimp effort and to protect deep-water coral areas in the Gulf, including expanding the Pulley Ridge Habitat Area of Particular Concern; the Council will also holding webinars on those issues in March

- Through March 24, NOAA Fisheries Southeast Fisheries Science Center is requesting comments on a draft plan for climate science in the South Atlantic
- The Gulf of Maine Research Institute is soliciting applications to participate in two 3-day workshops conducted through the Marine Resources Education Program on fisheries science and management in the Southeast.

Dry Tortugas and Everglades National Parks, Meaghan Johnson

- The Dry Tortugas National Park Foundation Document is being finalized. This document will describe the park's purpose, significance, important resources and values, as well as interpretative themes. It will also identify key challenges, as well as future data and planning needs.
- Discussions are advancing on converting one of the National Park Service housing units in Key West to be utilized as a joint agency law enforcement unit. Various sources of funding are currently being discussed to support this.
- As a follow-up to the Florida Bay algae bloom, which started in September 2016, measurements at the end of January showed the bloom had receded throughout all central and western basins of the bay. Some remnant green water was located from Terrapin Bay to Lignumvitae Basin and passing oceanside through Indian Key Channel and below Lower Matecumbe Key in early February 2017.
- The Everglades National Park General Management Plan (GMP) Implementation Team continues to make progress on implementing high priority projects. The status and timing of GMP implementation efforts will be provided to park staff and the public through park website updates, social media, news releases and e-mails. To view GMP documents go to: <http://parkplanning.nps.gov/documentsList.cfm?projectID=11170>

US Navy, Ed Barham

- Sept 2016 Integrated Natural Resource Management Plan (INRMP) implementation review meeting was held with partnering agencies (FWS, NOAA, FWC). During this meeting, INRMP implementation and installation natural resource issues were discussed. Conclusions, INRMP continues to contribute to the conservation and rehabilitation of Naval Air Station Key West natural resources.
- December/January completed annual Lower Keys marsh rabbit (LKMR) population survey and completed a project to enhance approximately 3 acres of rabbit habitat by removal of woody vegetation (exotic and native trees) within habitat areas. The intent is to expand the amount of preferred high-value LKMR habitat (grasses and forbs) in support of the installation's Integrated Natural Resources Management Plan and current USFWS BOs.
- January, NAS Key West supported training conducted by the Navy's Marine Mammal Program. 3 "Navy" sea lions were brought in from California to participate in training to detect unmanned underwater vehicles.
- February, the Navy did not select NAS Key West to be the East Coast Forward Operating Base for the MQ-4C Triton Unmanned Aircraft System (UAS). Triton is going to NS Mayport.

US Fish and Wildlife Service, Florida Keys National Wildlife Refuge Complex, Dan Clark

- Christine Ogura is the new deputy refuge manager for the refuge complex. She is highly qualified and will be the alternate on advisory council.
- The screwworm outbreak appears to be declining. The last infested deer was January 7th. The incident management team is still at the refuge office and will remain there for now. The interagency agricultural team will release sterile flies at least 90 days after the last fertile fly

or infested animal is detected. Additional releases will take place until an international team will determine that the area is free of screwworm. They expect to continue this work into the summer. A total of 135 deer have been lost to screwworm. During this same time period, 111 have been lost to vehicle accidents.

- Since 2008 they have been working to expand their outreach to the community. They will be opening a new nature center at mm 30. The doors just were installed this past Sunday and now they are finishing the interior, including interpretation projects. In 2018, they expect to vacate the visitor center in the Winn Dixie shopping center on Big Pine Key. When the facility opens, the refuge complex will issue a press release and hold an event.
- The refuge complex is hosting a weeklong Outdoor Fest (March 11-18). Events will be held at Crocodile Lake NWR and in the Lower Keys.
- The Backcountry Management Plan has been delayed somewhat because of the screwworm outbreak. US Fish and Wildlife is a cooperating agency in the sanctuary's regulatory review. Revisions to the management plan are being incorporated into the DEIS as part of the National Environmental Policy Act (NEPA) process. The advisory council's shallow water habitat working group input is being used in the document and is very much appreciated.
- A team of people from different agencies is still carrying out chug removal in the Marquesas. Monroe County will be hiring a contractor to remove additional chugs; they expect to remove about 30 during the month of March. He commends the agencies working on this project, especially the county and FWC.

NOAA Office of Law Enforcement, Kenny Blackburn

- A new NOAA enforcement officer will be starting in the Keys. His supervisor will be Pat O'Shaughnessy.
- Three criminal cases have had activity since October. One case was a JEA initiated case involving a commercial spearfisherman in the Key Largo Existing Management Area. He dropped his spearfishing gear and a case could not be made for spearfishing at the time. He was charged with anchoring in a SPA and interfering with an officer. The case went to Department of Justice. Later, an investigation took place and pictures surfaced of him spearfishing in a SPA using spearguns that were seized at the time. A criminal case was made; he received two years of probation and \$2,500 in fines. The judge made him issue an apology on the forums of Florida Sportsman.com.
- Another case involved fraud committed to obtain BP oil spill funds. Two men were sentenced to 48 months and 12 months, respectively. At the restitution hearing one man was forced to pay \$600,000 and the other paid \$144,000 in restitution to the fund.
- Ammon Covino was sentenced for buying illegally harvested animals for his aquarium. While on probation, he began opening up more aquariums. NOAA was able to prove that he was still operating and selling, which was against the terms of his parole. He received an additional 6 months of incarceration. He then opened two aquariums in Texas, which resulted in him receiving an additional 8 months incarceration for this second parole violation.

US Coast Guard, Chief Petty Officer Mark King

- Since the last advisory council meeting, USCG has responded to 41 pollution incident reports. Seven of those resulted in enforcement actions and seven incidents were federalized cleanups with two chugs being addressed.

XII. UPCOMING MEETING AND CLOSING REMARKS

Vice Chair Bergh reminded everyone about the Marine Zoning Works For Me meeting being held in Marathon this evening and the other meetings planned for the Keys. He added that Shelly Krueger, Florida Sea Grant, is organizing a public sponge restoration forum on March 9 in Marathon.

Chairperson Nedimyer thanked George Garrett for arranging for use of the meeting room. All presentations will be posted on the sanctuary's website, floridakeys.noaa.gov.

Chairperson Nedimyer announced that nominations and voting for Vice Chair and Chair for the council will take place at the next council meeting.

The recreational charter fishing (Blue Angler) working group of the council will be holding a meeting in this same room tomorrow. This meeting is open to the public.

Adjourn