FLORIDA KEYS NATIONAL MARINE SANCTUARY ADVISORY COUNCIL

Marathon Garden Club, Marathon
Tuesday, February 15, 2011

DRAFT MINUTES

Members Present

Jason Bennis
Chris Bergh
Jack Curlett
Dolly Garlo
Richard Grathwohl
David Hawtof
Don Kincaid
Jerry Lorenz
David Makepeace
Corey Malcom
Martin Moe
Ken Nedimyer
George Neugent
Bruce Popham
David Vaughan

Alternates Present

Clinton Barras
Bill Chalfant
Scott Fowler
Bruce Frerer
Peter Frezza
Susan Ford Hammaker
Art Itkin
Jessica Pulfer
Brad Simonds
Bob Smith

Call to Order/Pledge of Allegiance/Roll Call/ Approve Minutes from December 14, 2010 Meeting/ Adopt Agenda for this Meeting/Chairperson's Comments/Introductions

-Chairman Bruce Popham called the meeting to order at 9:02 A.M. He welcomed the group and thanked Lilli Ferguson and the staff for the work they did to prepare for the meeting. He also thanked the Sanctuary Friends Foundation of the Florida Keys (SFFFK) for the food and drinks.

- Jack Curlett then led the group in the Pledge of Allegiance.

- After review of the draft minutes of the December 14, 2010 Sanctuary Advisory Council (SAC) meeting, Commissioner George Neugent moved that they be approved, and Mr. Curlett seconded the motion. Art Itkin said the meeting was in Key West, not Key Largo. With this change, Chair Popham deemed the minutes approved.

- Chair Popham asked if there were any additions or changes to the agenda. Sanctuary Superintendent Sean Morton said that he would like to have Steve Thur, the Acting Director of the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (CRCP), address the SAC for about ten minutes in the afternoon. Chair Popham said he would fit him in. Chair Popham said he would like to move the SAC Education and Outreach Working Group Report to after the discussion on SAC Working Groups. Commissioner Neugent moved the agenda be approved with those changes, seconded by Mr. Curlett. As there was no objection, Chair Popham deemed the agenda approved.

- Chair Popham commented about a protected island area in the Pacific, which he saw mentioned in a National Geographic article. The area is getting significant coral regrowth from the coral bleaching event, and people think it was because of the protected fish populations there, which they think made the reefs more resilient, he said.

- Billy Causey said Jeremy Jackson and a number of scientists had been studying that area. He explained some more about this work, noting they were dealing with over 150 species of *Acropora* coral and the Florida Keys National Marine Sanctuary (FKNMS) has just two – so what looks like recovery is somewhat obscured by the number of species, he felt, though he acknowledged recovery was occurring.

- Martin Moe said in the aquarium world, fish are over coral during the day and some of their fecal matter served as food for corals. He speculated that may be a factor that would improve corals if fish were allowed to congregate naturally there.

Sanctuary Superintendent's Report – Mr. Morton, FKNMS

- Mr. Morton said the President's budget for 2012 was released the day before the SAC meeting, and NOAA put up its 2012 budget on its website; he said FKNMS was under the National Ocean Service (NOS). The President's request was the same as over the last 5-6 years. He noted there was no budget yet for FY 2011, which made things interesting. He said he did not think Congress would take action on the budget until the first week of April, but that FKNMS was getting dribs and drabs of money under a continuing resolution.
- Mr. Morton discussed the movies Robert Keeley has shown every Sunday at the Eco-Discovery Center. The movie series is sponsored by SFFFK and is free and open to the public, he said, and has been a big success this winter. He thought that, in the future, maybe with the help of the National Park Service (NPS), the Center might be open seven days a week.
- Mr. Morton welcomed Phil Goodman as the alternate for the U.S. Coast Guard (USCG) [nonvoting agency seat on the SAC]. Mr. Goodman is based in Cudjoe, and is with the USCG Auxiliary.
- Mr. Morton said the Thursday after the SAC meeting there would be a seminar from 9:00- 4:00 at the Marathon Emergency Operations Center, in place of the annual oil spill drill, in light of what happened with Deepwater Horizon and confusion among the public and the media about who does what. The seminar will be about who does what and how decisionmaking works. Mr. Morton said he, Anne Morkill and other agency representatives would speak about their agency roles. The seminar will also talk about how people may volunteer during an [oil spill] event and how to prepare ahead of time by taking training, he reported.
- March is Seagrass Awareness Month, Mr. Morton stated, and if any SAC members wanted to help with radio shows, they should talk to Mary Tagliareni, he said. *ACTION ITEM*: SAC members who want to help with radio shows for Seagrass Awareness Month should contact Mrs. Tagliareni.

- Commissioner Neugent said that SFFFK was taking an aggressive approach to membership, and encouraged people to become members. He also noted the movie "Cuba, the Accidental Eden," was hosted in Marathon. Finally, he let people know that that Mr. Goodman had thrown hat his into the ring for Mosquito Control.
- Chris Bergh asked what SFFFK does when a person's membership lapsed.
- Dolly Garlo said SFFFK sends reminders infrequently, but they will do it.
- Dr. Causey commented Mr. Keeley paid for the movies from his own pocket.

NOAA Office of National Marine Sanctuaries (ONMS) Southeast Region Report – Dr. Causey, ONMS

- Dr. Causey said the draft Flower Garden Banks National Marine Sanctuary revised Management Plan comment period closed January 20. Their SAC supported the proposal in that plan to expand to six additional sites in their region. Following the Deepwater Horizon event, additional comments are being taken, he said. He added there was a proposed research area in the draft plan. Currently, divers are not allowed to take anything there or to touch the bottom, but recreational fisherman can still fish there, he said. There was also a proposal to set up one of the banks as a no-fishing area, which went through. This sanctuary is one hundred miles offshore, he added.
- He reported the Gray's Reef National Marine Sanctuary just finished its federal review for a research only area. He said the U.S. Environmental Protection Agency (USEPA) wanted to see a no access zone, which would be precedent-setting, but it was not laid out in the run-up to the plan.
- The Water Quality Protection Program (WQPP) Steering Committee met in early February, Dr. Causey said. The agencies are looking at possible cuts in their monitoring programs. The USEPA has spent over $18 million since 1995 on monitoring in the sanctuary, he said. The group has been focusing and working

on wastewater issues. There are other problems affecting water quality in the Keys, he noted, including canal water quality. He commented that Bill Kruczynski put together a field trip for the first day of the meeting, and mentioned the sites they visited.

- Commissioner Neugent said before the City of Marathon incorporated, Monroe County bought that property.
- Dr. Causey said the group went to an eastern facing canal, where it was one foot deep at one end due to being filled with soft sediment; they are usually twelve feet deep. Engineers can sometimes fix these things, he said.

- May 11-13 in Sarasota, Dr. Causey said Mote would hold a forum regarding the potential for a network of special areas throughout the Gulf. He said there would be a $50 registration fee and space for 250 people, and that Mote would be doing more outreach on it.

Agency Report Highlights

Florida Department of Environmental Protection (DEP) Report – Kent Edwards, DEP
- Mr. Edwards said several emails had come out from the Governor's office and the Secretary [of DEP].
- In December, he said there was an announcement that the state of Florida had a $3.5 billion hole in anticipated tax collection, and with the Constitutional amendment on the balanced budget, they are moving forward. Governor Scott's proposed budget has $5 billion in proposed spending cuts and additional tax cuts are also proposed, Mr. Edwards said. He said additional cuts in state spending in future years are also proposed.
- The Governor appointed a new Secretary to replace Mimi Drew; Herschel Vinyard, Mr. Edwards said. He said Mr. Vinyard is an environmental attorney and was an environmental officer for a major corporation, so he dealt with many types of environmental regulation, and is likely familiar with the types of activities DEP does.
- One of the previous Secretaries, Jennifer Fitzwater, was named Chief of Staff, which Mr. Edwards saw as a good sign. He expected to hear more in coming months, he said.
- Mr. Edwards said that the new House Speaker announced they created a select committee on government reorganization, which is looking at operations of the state and what regulations are in place and the cost of each.
- Between this year and next year, a proposed $148 million would be taken from the DEP budget, per the Governor's budget, and 120 positions would be cut. The Office of Coastal and Aquatic Managed Areas is slated for eight position cuts, based on the number of vacant positions back in November, Mr. Edwards announced.
- The Governor may sign the budget or may veto it. The legislative session starts in a few weeks, Mr. Edwards said.

USCG Report – Phil Goodman, U.S. Coast Guard Auxiliary
- Mr. Goodman said he was happy to be on the SAC and was looking forward to working with the group.
- He said Mr. Morton had already provided a good summary of the upcoming USCG event.

Florida Fish and Wildlife Conservation Commission (FWC) Report – Capt. Christian Rodriguez and John Hunt, FWC
- Capt. Rodriguez said that 62 FWC law enforcement positions were slated to be eliminated per the Governor's proposed budget.
- He said December and January tend to be slower months for enforcement and they focus a lot on water quality and derelict vessel issues.
- As far as FKNMS-specific citations, there 27 citations, 10 warnings and 40 reported groundings in December and January, he reported.

- In one derelict vessel case with six boats tied together at Newfound Harbor (many of which sank), the person pled guilty to four of the charges, and was given a fine of $6,000 and 120 days in jail.
- As the weather gets better, they will target more offshore violations and federal fisheries violations.

- Related to Florida politics, Mr. Hunt said a bill had been filed to abolish the fresh and salt water fishing licenses. He encouraged people to look at an article from last Sunday's paper on this. He felt this was unlikely [to go through].

- Mr. Bergh said he heard a move was afoot for a referendum to ban drilling for oil in state waters permanently; he thought this body could make its feelings heard again on that.
- Dr. Causey said he was on the Florida Wildlife Federation board, and they are distributing petitions. He said he would have some sent down and distributed. *ACTION ITEM*: Dr. Causey to request to have oil drilling ban petitions distributed.

NPS Report – Tracy Ziegler, NPS
- The General Management plan is open for public comment, and there will be at least one public meeting in the Keys, Dr. Ziegler reported.
- Pete Frezza asked if they were out yet.
- She said if people had filled out a card to get one, they should have received a CD. People can also go to the NPS website to sign up for one, she stated.

NOAA Office of Law Enforcement (OLE) – Ken Blackburn, OLE
- Special Agent Blackurn said they did two Magnuson cases with the Department of Justice. Two cases were submitted by the Gladding crew. They did a stop in the north reserve, on a boat harvesting fish in a closed area, which did not have a vessel monitoring system. The people on the boat also had a historic artifact, an anchor which is now being dated, and they are trying to figure out what to do with it.

- Bill Chalfant said they now have it in the Florida Keys Community College lagoon.

- Special Agent Blackburn said there was a case that went through the day before the SAC meeting with a plea agreement from a person transporting materials on state waters possibly for constructing artificial habitats. This could result in dismissal or an acquittal to result a $5,000 fine and a hearing for revocation of suspension of his saltwater products license, he said.

U.S. Fish and Wildlife Service (USFWS) Report – Ms. Morkill, USFWS
- Ms. Morkill also acknowledged Mr. Keeley also, saying he is on the board of Friends and Volunteers of Refuges (FAV OR) and shows movies on Wednesdays at the Refuge on Big Pine Key.
- She said in the afternoon, Karen Hillier and a FAVOR board member would be giving a Refuges outreach presentation.
- The USFWS released a draft plan and Environmental Assessment for controlling exotic predators, Ms. Morkill reported, and the comment period closed February 3. She said they were in the process of reviewing the comments and improving the plan. She said they would come out with response to comments.
- There are two USFWS law enforcement officers, Ms. Morkill said. One had one deployed to Afghanistan, and would be coming back but was taking a new job. She said they will try to fill the vacancy, but filling it may not be approved.
- Two interns re-located and mapped freshwater holes, work originally done by Curtis Kruer a number of years ago, Ms. Morkill remarked. This adds to work done by The Nature Conservancy (TNC) on freshwater lenses, and will help the USFW design a long term plan for freshwater resources.
- Ms. Morkill announced the USFWS was about to launch a Facebook page.

- Mr. Bergh and TNC Service Center and the USFWS are hosting a sea level rise workshop at the Gulf special areas meeting May 10-12 and they sent out a save the date notice, Ms. Morkill said. They want to come up with a research and monitoring agenda and adaptation strategies for vulnerable species.

- Mr. Bergh said it would be limited to 90 people. They will invite scientists, agency representatives, etc. and may have to get people to describe who are and why they want to come. This may be the first in a series, and they may want to do a marine habitat workshop in the future, he said.

- Ms. Morkill said there would be an evening session for the public summing up the discussions, and it would include a poster session. She said they would publish a report, to include some of the posters and longer papers. They are trying to focus on the Florida Keys island chain and Florida Bay. She said registration is free, and a few travel scholarships would be offered for nongovernmental representatives, academics, and state agency folks (in that order).

South Florida Water Management District (SFWMD) Report -- Thomas Genovese, SFWMD
- Mr. Genovese said there is a worsening drought, and that water restrictions are expected in March. Lake Okeechobee and the aquifers are receding, he said.
- On the proposed Governor's budget, 25% in annual revenues, or a $100 billion cut, was proposed for SFWMD. They are looking at how to still maintain their core missions, but that would result in staff reductions and project delays. The C-111 canal project appears to be safe and still on track for completion in July, he said. The component to dredge phosphorus from a portion of the canal was not in the original project, so if they have to do a separate project for it, that component will be delayed, he said.
- There are still two vacancies on their governing board, and two terms are coming to an end, Mr. Genovese reviewed. The chairman has indicated he is not continuing on, and the other person is seeking reappointment.

- Jerry Lorenz asked about cuts to core services.
- Mr. Genovese said they have to do flood control on the mainland, and that they are looking at their core mission, and how to keep performing it. He said there would be strategy sessions with the governing board. There was a staff webcast on the proposed budget cut the day before the SAC meeting, he said. He said the agency was not part of the $5 billion hole, because their money comes from trust funds, federal money and revenues--the SFWMD was not part of the state budget.
- Dr. Lorenz asked about flood control and water supply being part of the core missions.
- Mr. Genovese affirmed they were, plus water quality, and there was an emphasis on protection. He said the federal government still had money for Everglades restoration and the Governor's budget still had $17 million for the Everglades, but everyone was going to have to respond [to whatever the final budget is].
- Dr. Lorenz said his impression was that Everglades restoration would be the first to go.
- Mr. Genovese said nothing could be assumed right now, and that was part of the natural systems portion of their mission. He said things would depend on how much the District got from federal funds and state trust funds.

U.S. Navy (USN) – Edward Barham, USN
- Mr. Barham said the USEPA came and did a multimedia inspection of all of their environmental programs at the Naval Air Station Key West last month. They have not gotten a report yet but he thought they did pretty well. They just concluded a silver rice rat habitat survey on Saddlebunch Key. He said they do ongoing surveys for Lower Keys habitats for marsh rabbits and silver rice rats on Boca Chica and Saddlebunch. They will soon be doing their first survey for small tooth sawfish in their mangrove shorelines, as per an agreement with NOAA from a couple of years ago. None of these surveys have been funded for next year, he said.
- Mr. Barham said the USN periodically had crocodiles on their property, and recently had one on the base. They had to remove a section of fence to get it to go back into the mangroves.

- The USEPA folks, who were consultants, came from Atlanta, Mr. Barham said, in response to a question from Dr. Causey. They did not know about it in advance.
- Mr. Bergh pointed out the USEPA in Atlanta funded water quality monitoring here. He wondered if the USEPA took money off the top before it came to the Keys, and if so, if this work was part of it. He asked if Mr. Barham could look into if the Department of Defense (DOD), the Navy or any layers of his organization had grant programs that had not been tapped yet.
- Mr. Barham said Mr. Bergh knew about the Legacy program, and said he would look into if there were other programs and would report back. *ACTION ITEM*: Mr. Barham to check for DOD (or subunits of DOD) grant programs beyond the Legacy program and to report back what he learns to the SAC.
- Mr. Bergh commented he heard the barrier by Boca Chica beach was being rebuilt.
- Mr. Barham said he heard the County had to rebuild a portion of the road, and he said the USN would prefer it be removed. He noted the USN has property on both sides of the County road.
- Mr. Bergh said the road was washed out by [hurricane] Wilma in 2005 and it was well on way to become a natural shoreline again.
- Mr. Barham said the USN was looking into this and trying to find out more; they heard riprapping was proposed.
- Ms. Morkill said she thought a bridge was associated with that road.
- Commissioner Neugent asked if the USN coordinated with the USFWS on the silver rice rat surveys, and Mr. Barham affirmed they did. The Lower Keys marsh rabbit surveys were the result of a USFWS biological opinion, he said, and they were involved in all the surveys.
- Ms. Morkill said that the surveys were done under Section 7 of the Endangered Species Act, in terms of consulting with the USFWS.
- Commissioner Neugent asked if there was private property or residents there by the Monroe County road, and Mr. Barham replied there were not.
- Mr. Bergh said there was a nude beach there.
- Commissioner Neugent said he did not recall any discussion at the Commission level about rebuilding that road. He said he would look into it. *ACTION ITEM*: Commissioner Neugent to look into if the County is proposing to rebuild a road by Boca Chica Beach and to report any findings back to the SAC.
- Mr. Edwards said funding for the WQPP was not related to the multimedia inspection, which is regulatory and is a completely different program area in the USEPA. He said they were not related.

Public Comment
There was none. Several SAC members then made some announcements during this time.

Dave Vaughan said there would be Science Saturday on March 19 at the NOAA National Weather Service (NWS) office, and Todd Hitchins was coordinating it. Separately, Mote is helping host an Ocean Festival March 26 event at the Eco-Discovery Center.

Dr. Causey said Mote and others of the Florida Ocean Alliance, would be in Tallahassee March 21-22, hosting the annual Ocean Day. A lot of groups will charge Tallassee to do lobbying that week. He said he would be there then and would go back a couple more days to work with the Florida Wildlife Federal on the state side to carry some messages forward.

Susan Hammaker brought to the SAC's attention a resolution from the Texas Water Resources Division to the USEPA, and said it was related to the Florida water nutrient standards. She brought a copy, which she passed around, and asked it be made part of the records. She said costs to Florida were used in making the report.

- Mr. Edwards said on the USEPA nutrient criteria, a lawsuit had been filed, and he explained that the Florida criteria is narrative, rather than numerical, which has created problems for many years. The state of Florida is required to develop numerical criteria, but there are diff kinds of waters with different types of limitations around the state, which makes it difficult.
- Mr. Bergh said the Governor had said the state would get out of business the federal government was already doing, and this type of thing made him nervous. He said the message was it was important to get the numerical criteria right.
- Mr. Edwards agreed.

Ms. Hammaker said that within the district there were 10-12 cases of individuals who did or may have contracted ciguatera fish poisoning from amberjack. One person almost died, she reported. She said if there was interest, she would like to have an international expert in the field speak to the SAC in June about this. *ACTION ITEM*: Chair Popham and Mr. Morton to consider the request from Ms. Hammaker to have an expert on ciguatera address the SAC at the June 2011 meeting. She said over 400 reef fishes were affected, and the advice now was to eat no fish larger than a person's hand. She said some Keys medical personnel may diagnose patients with enteritis instead of ciguatera poisoning. The toxins live forever in a person's system, she said, and she added that a study showed there were certain new drugs and preventatives and perhaps a long term cure for this, which affects the electrolytes in every cell of the body. She said ciguatera poisoning was increasing due to bleaching. She also mentioned some of the other species affected.

- Mr. Bergh said he thought there would be interest in learning more about ciguatera.

Goal Setting for the FKNMS SAC 2011 – Chair Popham and SAC
At the December meeting, Chair Popham said that he tried to gather some goals from the SAC, and he and Ms. Ferguson tried to capture that and the messages people were trying to give, on large sheets posted on the meeting room wall for this meeting. He reviewed that the goals of the SAC are driven by the charter and the Management Plan. The SAC really has two roles, he said, to advise FKNMS management and to be liaisons with the community. On the first page of the charter, it says the National Marine Sanctuary Program is committed to the full support, utilization and enhancement of Councils at all Sanctuaries within the limits of available resources, and he commented that it kind of put things in perspective. On the sheets, they tried to put the suggestions into the two main roles of the SAC, and had two suggestions that didn't really fit into those, and so put them on the side. He went through the sheets to describe what was there and to see if people wanted to add more suggestions, and said the SAC would do a prioritizing exercise with dots, to include the agency folks (but not the Office of National Marine Sanctuaries people).

- Dr. Causey provided some additional remarks about the status of the WQPP.
- Mr. Hunt mentioned a report on the Research Natural Area was due in 2012.

Chair Popham said he also wanted to know what management staff wanted to see from the SAC, from an advice perspective, and that he, Mr. Morton and Ms. Ferguson had a chance to talk about this. He said there were significant financial issues to deal with, and in other agencies too, as Mr. Genovese had reported for the SFWQMD. Chair Popham said that affects the SAC, including every time there was a SAC meeting or Working Group meeting, there was an effect on staff time. He said there were fewer FKNMS staff members than there used to be, and those that were left were wearing multiple hats. He said this happens in business, too, and mentioned changes in the marine industry and his own business.

Chair Popham reported that Mr. Morton came up with three main bullet points: economic impact, enforcement, and management planning, with zones. On economic impacts, Chair Popham mentioned the need to qualify and quantify economic impacts within FKNMS to Keys businesses, such as charter

fishing, the boatyards, etc. For example, clean water is needed for diving and fishing. He said Mr. Morton suggested to him a workshop be held within a SAC meeting or a Working Group so the SAC could, with public input, create a cohesive document linking those pieces together. Chair Popham thought this was a good idea and felt it would be good to have a grass roots document with messages to take up [to higher levels]. He commented the sanctuary program was under pressure at national, regional and local levels. Regarding an enforcement plan on the local level, Chair Popham said it was important to get priorities from the SAC public process. Management planning and zones will be a difficult one as it requires a lot of resources, and Chair Popham was not sure it could happen unless extra money could be found. He thought there are some things that could be done, however, and the SAC could brainstorm on this.

Chair Popham asked if there were other things the SAC thought of, to put on the table. A number of people made suggestions.

- Clinton Barras asked if oil on the sea floor of the Gulf was covered under the WQPP or another topic.
- Commissioner Neugent asked that would be covered under the additional testing that was done.
-Mr. Morton said it was still ongoing in the areas that were oiled, but oil was not here. He said the monitoring that was done here was all baseline.
- Dr. Vaughan said the monitoring Mote was doing stopped in October but they still had concerns, including about dispersants, even if dispersants were not used here.
- Mr. Bergh said the SAC would grapple with this if there was another event, but the SAC would not be able to do anything about it. He said other things on the list would happen whether or not the SAC addressed them, but they may not be the big kernels that may provide opportunities for FKNMS. He suggested the group might want to think about things that were Working Group material versus topics of interest.
- Chair Popham remarked they would deal with Working Groups after the SAC figured out priorities.
- Mr. Barras asked if Mote saw oil. He was concerned about oil that might remain on the seafloor coming to the Keys.
- Dr. Vaughan replied they did not see it here in the Keys, but impacts were seen in the Gulf.
- Mr. Barras asked that monitoring for impacts [in the Keys] be kept as a suggestion on the list.
- Dr. Vaughan agreed that was important, but he would like to look at lessons learned for next time, as people were very lucky in the Keys. He said there was the technology now for better monitoring, but funding for what has been developed just for the Keys has already been cut, and they have heard about potentially bigger and deeper cuts.
- Chair Popham talked about the concepts of the circle of concern and the circle of influence. He showed a drawing of a circle of influence inside a larger circle of concern. He said there were a lot of things the SAC was concerned about, including oil spills and climate change, but if the SAC spent all its time on what it was concerned about, it would not spend time on what it could influence. He asked people to think about what the SAC could influence, and mentioned the two main jobs of the SAC again. Several people affirmed this made sense.
- Dr. Causey said the SAC had not had a Deepwater Horizon briefing since June, and a lot of rumors were going around. He said there were still a lot of unknowns, but oil did not get within 300 miles of the Keys. He said NOAA had the best technology it could put out there on the water, and had more information to put into models than some other groups who were creating oil spill models. He agreed they know there is still a lot of oil unaccounted for, and that some deep water corals within ten miles of the well site had been affected, but said there were still a lot of unknowns. He felt it would be good for the SAC to line up with succinct recommendations to bring forward, to line up with mitigation, following the review period for the national ocean policy.
- Mr. Moe said, in terms of what the SAC could influence, to look at what might happen with Cuba if there were a spill.
- Chair Popham commented that was an example of what they were concerned about, and asked how the SAC could influence it.

- Mr. Moe agreed [it was an issue of concern].
- Mr. Makepeace said it was important to focus on how to influence the response the next time. He asked where one could stand in line for when more funds come out, and soften the blow of losing funds in other places. He added the SAC did not have international influence with a Cuba event, but could possibly get in the chain of where the influence is.
- Mr. Bergh commented it was important to document the economic importance of the resources, and how to close the gap, including user fees. He said some things were outside the scope of FKNMS, so the private sector would have to be involved. He added some of his colleagues will not even think of starting a project without first thinking of sustainable financing.
- Bob Smith asked if the SAC could influence communications, and the misinformation Dr. Causey mentioned.
- Chair Popham replied that all SAC members fill that role on a day to day basis, and that he corrected people when he heard of inaccuracies.
- Commissioner Neugent said there was a need to emphasize over and over what the charter identifies as the focus, and said each member had ties and a constituency that went beyond the discipline of the SAC, which has no jurisdiction whatsoever, and advises management. He said Mr. Morton can take the advice as he sees fit. He agreed that many issues were emotionally driven, but had nothing to do with the SAC.
- Chair Popham expressed his opinion of the need for the USEPA long term monitoring money to stay, and not to seek additional monitoring money [instead].
- Mr. Goodman mentioned the upcoming Coast Guard event, and said it would show attendees what was planned and would answer a lot of questions about what is next. He added he spent thirty days in the Gulf region during the Deepwater Horizon spill, and said a lot of what was reported by the media was not true.
- Dr. Vaughan agreed he liked the current monitoring, but wanted good science for restoration. He said he would like to see a goal related to restoration in the Keys, including influencing getting more restoration technology.
- Mr. Moe said ciguatera started with algae, and felt stepping up *Diadema* research could help control algal coverage of reefs.
- Chair Popham said one of the big issues with bringing science to management staff was finding the funding to do that.
- Mr. Nedimyer said a publication on reefs at risk in the Caribbean listed a number of issues the SAC should also address, and he felt there was also a need to work on creating the desire to change. He felt the money would then follow.
- Bill Chalfant said people around the table might be able to reach into communities and provide resources to fill some of the gaps on concerns NOAA might have, whether it was monitoring or restoration projects or other concerns. He said there was talent here that wanted to take action and perhaps the FKNMS could coordinate the actions of others.
- Chair Popham asked if this was related to the SAC liaison function; Mr. Chalfant agreed it was.
- Richard Grathwohl said he thought Tennessee Reef, a Research Natural Area, was being overlooked. He said there was no research going on in it, and it could be used for lionfish research or other research.
- Chair Popham commented it went back to priorities and money.
- Mr. Grathwohl felt outreach could be done to a university or other organization that would want to study the reef.
- Bruce Frerer said the Keys got the same amount of tourism as the continent of Australia, and there was no way to contact and influence the four million people who come here every year.
- Chair Popham mentioned there were ways FKNMS did reach them, including education programs such as Dolphin SMART and Blue Star, and acknowledged it was an ongoing process.
- Ms. Hammaker mentioned a “visit Florida” presentation, and thought that might be an avenue of influence.
- Mr. Bergh suggested figuring out a way to make the user contribute to the use of the resource.

- Mr. Frerer talked about the distinction between economic impact and monies available to protect environmental resources. He mentioned there was little money for protection, though the Mote license plates provide a small amount.
- Mr. Morton said his vision would be for the SAC to come together to discuss what marine conservation meant to them and their stakeholders. He said Bob Leeworthy could come down and give a talk, but the SAC needed to be armed with information to go out to communities, elected officials, etc. to talk about what it means to them as well as to the communities they represent.
- Ms. Hammaker mentioned she forwarded things she got from the SAC to her Washington people.
- Mr. Bergh agreed this was just what the SAC needed to do, but this did not capture sustainable financing and the inclusion of the private sector.
- Commissioner Neugent mentioned he worked on advocacy every day, working for state and federal money, and that they hired lobbyists to help do that. He also said groups like SFFFK, Mote, and others could raise private sector money.
- There was continued discussion about economics and protection of the local environment.
- Brad Simonds asked if the SAC could go on record as advocating for tolls and getting more proactive about cruise ship charges.
- Chair Popham said that would be an action item under a goal.
- Mr. Bergh turned the discussion to zoning. He confirmed it was hard to do a zoning process, and mentioned there were roadblocks in 2008, when the SAC marine zoning workshop took place, and said that there were still roadblocks. He wanted to find out what things were done and what were not, and costs associated with the process. He said a Working Group could then work on helping, including looking into the zones that are working or not, etc.
- Jason Bennis said there was no indication there about which of the suggestions were more expensive than another. He asked if the SAC was supposed to vote purely on the issues, and then see what could be done, given the resources.
- Chair Popham replied the costs could not be quantified during the meeting, and that people should give their preferences based on the roles the SAC has. He said people would have three votes, and that it would be the consensus of the group what the SAC would focus on. He thought the most important thing was SAC advice to FKNMS management.
- Mr. Morton pointed out there would be a difference between what the SAC would be working on and what the FKNMS staff would be working on. He said there was only so much the SAC could do on zoning before the matter would need to enter a regulatory process, which would have a cost.
- Mr. Grathwohl wanted to add enforcement to the list of suggestions, and Chair Popham replied it was already there.
- Ms. Garlo asked for a distinction between two of the SAC outreach suggestions, as she thought they were very similar.
- Chair Popham said that the suggestions listed came from trying to capture what SAC members had said. He thought if there were several things close together, it might be possible to group them to see if they made the final cut.
- Ms. Morkill asked about long term monitoring, and Chair Popham replied that was part of the WQPP.

Chair Popham then passed out three dots to everyone around the table with the exception of Dr. Causey, Mr. Morton, Mr. Edwards and Ms. Ferguson, and those with dots then expressed their preferences for goals the SAC should work on in 2011 by placing their dots on the sheets posted on the wall. Chair Popham reviewed the results late in the meeting.

SAC Working Groups Discussion – Chair Popham and SAC

Chair Popham referenced the charter for the FKNMS SAC, which says the SAC can have Working Groups or [Sub]committees. A Working Group is established by the SAC for a specific topic, and is limited to that discrete issue/functional area and to that individual sanctuary. When that issue has been addressed by the Working Group, the Working Group is then disbanded, Chair Popham reviewed. He said

the SAC had standing working groups for about four or five years, with the SAC Education and Outreach Working Group and the SAC Ecosystem Restoration Working Group, and the SAC needed to do things differently now. He said Mr. Morton offered to him, why not do things as a body, as a SAC, and Chair Popham suggested the SAC support that. He said the SAC could be focused if it worked on just three things, and could make decisions. He said this could be done within the cost of running SAC meetings. The SAC could take a subject and maybe spend a half day on it. He felt the SAC could cut down on presentation times and people wanting to talk to the SAC, and focus on what the SAC could accomplish. Chair Popham suggested resting the current SAC Working Groups. He said they had been meeting since 2004 or 2005, and as he mentioned before, they were supposed to retire after they had done their mission. He said input that would have stemmed from those groups could now be done as part of the whole [during full SAC meetings].

Discussion ensued.
- Mr. Curlett asked if the SAC Working Groups were being rested or retired.
- Chair Popham said rest, retire, reconstitute. He said they could come back later [if the SAC wanted to re-form a Working Group to address a specific topic]. One exception would be the SAC Ballyhoo Working Group, which would continue to meet once a year as needed. He felt it was incumbent upon the SAC to make its work as simple and cost free as possible.
- Dr. Lorenz said he really liked this idea. With the economic times, south Florida ecosystem restoration had come to a lull, if not a complete stop, he remarked. South Florida was the original focus of the SAC Ecosystem Working Group, then, as time went on, they looked at coral restoration, etc.
- Chair Popham thanked him, and said the Working Group had done a phenomenal job, and he mentioned some of the issues it had worked to address for the SAC.
- Dr. Causey said most of the momentum and success of the SAC was from issue-driven Working Groups. He mentioned a few, such Tortugas 2000 and the sponging group.
- Mr. Bergh said the SAC Ecosystem Restoration Working Group was tackling more discrete topical areas, then bringing them to the forefront, and a lot of the representation was from the science and conservation groups, and so it was skewed to that. He felt it was a great opportunity to retire the old groups, start again with the new priorities, and let people self select onto new groups.
- Mr. Moe said he had mixed feelings about this. He said it was difficult to keep the SAC Education and Outreach Working Group going, as people were volunteering and it was hard to put together something significant. On other hand, he said a major reason for the existence of the SAC was education and outreach, and he tried to do education and outreach things that were meaningful within the context of SAC Education and Outreach Working Group and SAC. He said the group had done some good things, but it was not an easy thing to do. He has looked at this Working Group as not project-oriented, but as an arm of SAC which was ongoing. But, he said he had no problem with the SAC thinking wanting to continue [in new directions], and to pick from what was working from this Working Group and letting go what was not. He said he wanted education and outreach to remain an important part of what the SAC did.
- Chair Popham said that did not go away just because the SAC Education and Outreach Working Group went away. He said education and outreach was a subset of whatever the SAC priorities ended up being. He clarified he was just suggesting going about it in a different fashion, instead of having standing working groups. This could be more efficient and cost effective, he felt.
- Mr. Moe said he had worked closely with the FKNMS education and outreach staff. He asked if Mrs. Tagliareni (in the audience) had a comment.
- Mrs. Tagliareni said she would like to see where the dots fell, and that components could be more focused based on the goals being set.
- Dr. Lorenz said the ERWG was useful for having discussions before SAC meetings.
- Chair Popham said he was concerned about streamlining. He remarked that people could break off into groups once the SAC had priorities set.

- Ms. Garlo said it would be good to have smaller groups bring education and outreach stuff back to the SAC, and that it was good to have liaisons with other organizations in Keys. She said the presentations by organizations doing education and outreach in the Keys had been good.
- Chair Popham said the SAC could still have liaisons with other groups, but the priorities would be whatever the dots showed. He said the SAC could not do everything.
- Mr. Goodman said the Coast Guard Auxiliary, the DEP Clean Marina Program and other organizations could be a force multiplier to the SAC.
- Chair Popham stated the SAC needed to be externally focused.
- Mr. Bennis asked about the cost to FKNMS for SAC Working Groups, and if it was staff time.
- Mr. Morton said people could go meet on their own as ad hoc groups, but if they want to have an official working group sanctioned by the SAC, they did need to have note taking.
- Chair Popham agreed, and said a distinction needed to make between informal and formal. A formal SAC Working Group must be chaired by a SAC member and must have notes taken.
- Mr. Bennis commented people might want to tackle issues on own and then bring them to the SAC.
- Chair Popham thanked everyone for the discussion.

Goal Setting for the FKNMS SAC 2011 cont. – Chair Popham and SAC
- After the lunch break, Chair Popham reviewed the outcome of the SAC goals for 2011, as shown by the dots placed by SAC members by the suggestions. The dot tally by suggestion, with the number of dots indicated in parentheses, follows.

<u>Advice to FKNMS Management Suggestions</u>
(7) More involvement in fisheries management
- Focused work shops – ½ SAC meetings
- Invite Roy Crabtree
- Permit issues

(2) Web site update ideas - content
(11) Management Plan update process
- Marine Zoning
- Condition Report
- "Linking Science to Management" conference information

(9) Water Quality Protection Program Steering Committee joint meeting with SAC
(1) Monitoring for oil spill
(7) Restoration projects
(8) Sustainable finance

<u>SAC Outreach Suggestions</u>
(2) Outreach to youth
(5) Establish public conservation concept
(5) Increase SAC member education and outreach efforts
(5) More public attendance/participation at meetings
(0) Outreach to tour operators – Dolphin Smart and Blue Star
(9) Define SAC public presence – communication with public
(0) Marine debris/plastics in the water
(3) Education on the Research Natural Area at the Dry Tortugas for FWC, Governor and Cabinet
(1) Education of the recently elected current state administration

<u>Miscellaneous Suggestions</u>
(4) State mandated recycle fee for bottles – write letter
(1) Clean renewable energy

Sanctuary Superintendent Priorities for SAC Advice
(6) Economic impact
(9) Enforcement
(1, included in the Management Plan update process item above) Management Planning - zoning

Chair Popham summed up the top priorities. He said the Management Plan update, including marine zoning, came in as a priority, and that there were three others. These were enforcement, the WQPP Steering Committee joint meeting with the SAC, and defining the SAC's public presence - communication with the public. He said SAC outreach would be added into these priorities.

- Mr. Morton said he held the Superintendent trump card. He then mentioned a "straight talk" message from Dan Basta, and what Mr. Basta wanted staff members and their constituents to work on. He thought it had been sent to the SAC, and Chair Popham said it had. Mr. Morton read an excerpt, in which Mr. Basta said, "We seem unable to persuade the very constituents we seek to serve as to how National Marine Sanctuaries can help solve many of the problems facing them. So, why, we often wonder, is that so and what can be done?" He said Mr. Basta wanted the Superintendents and others to think about this.
- Chair Popham commented, of all the priorities, he felt the economic impact piece was the most important, and if linked with sustainable finance, that by far would be the number one choice. He asked for a show of hands if the SAC wanted to put them together, and most SAC members raised their hands.
- Scott Fowler said that it did not make sense to him that some of the education and outreach items were not being combined to make a priority.
- Mr. Bergh said it seemed the SAC Education and Outreach Working Group had tried, but this was a diffuse thing that could be folded into all the other things the SAC and FKNMS could do. He said this was an opportunity to figure out what the new things were the SAC could delve into and take the energy of those from members who had been involved in Working Groups and use in it for the new priorities.
- Chair Popham noted there were forty votes for suggestions grouped under SAC advice to management, and 29 for suggestions grouped under SAC outreach. He agreed there was a need to focus on that, but said it needed to be in everything the SAC did. He said he would summarize the goals discussion in a one-page document, and in April the SAC could work on developing action plans, like spending a half day on economic impact. *ACTION ITEM*: Chair Popham create a one page summary of the SAC 2011 goals discussion. Chair Popham said he wanted the SAC to focus on action results and two to three things this year, to make sure they do something for the resources.
- Jessica Pulfer said while there may be one dot on clean renewable energy, everyone's [hypothetical] fourth dot may have been on economic impact. She mentioned there were different methods of voting that could be used.
- Chair Popham expressed his appreciation of everyone's participation in the goals discussions.

SAC Education and Outreach Working Group Report – Mr. Moe, SAC
Mr. Moe said the Working group met January 11 in Key West and Key Largo via a videoconference, and he thought that worked well. He said Mrs. Tagliareni gave an update at that meeting on FKNMS education and outreach activities, reporting that: FKNMS had a Facebook page, the FKNMS web site was being updated, the FKCC Sanctuary seminar series began in January, and other things. She also reported there was no federal budget yet and FKNMS was on a continuing resolution, with no big projects being planned now.

On youth involvement in the SAC, Mr. Moe said the Working Group had been working on it. They put out the letter [previously discussed] to encourage youth involvement in the SAC, and did not [yet] get a response from it. He noted Brad Simonds had someone from a high school coming to this meeting to give a presentation.

On the SAC PowerPoint presentations, these were intended to give SAC members something of substance to use when going out to their constituents, Mr. Moe reviewed. He said people would be able to continue doing that, and he was going to try to get together with Mr. Nedimyer to put one together on coral restoration.

Mr. Moe finished his report by noting the Working Group had planned a next meeting, but would not hold it now [due to the outcome of the earlier discussion on SAC Working Groups].

Biofuels and Other Sources of Green Energy – Josh Clearman, Key West High School
Mr. Simonds said he met Mr. Clearman around Thanksgiving, and Mr. Clearman mentioned he was a high school teacher. Mr. Simonds was struck by Mr. Clearman's enthusiasm for green energy and his confidence in it. Mr. Simonds said he thought of the SAC for hearing about this topical issue, which is happening locally, and he hoped the SAC could give Mr. Clearman support.

Mr. Clearman talked a little bit about his background and how he became concerned about oil. He said he learned biodiesel could be made with two-liter bottles and chemicals he could get from the chemistry teacher. The students were excited to do this, and someone donated a car for using the biodiesel they made. The rationale for the class was that when high school students were interested in a subject, they would learn, and would take responsibility for environmental issues, Mr. Clearman said. Also, they have propelled him into a new direction, he said, and there was now a focus on an Alternative Energy Center, to have enough fuel to transport students to school, provide electric power for a full day of classes, etc. They also put in a grid-type turbine on their softball field. He also talked about how the alternative energy class students learned physics via involvement with these projects, and how their test results compare to those of students in a college-level physics class he taught.

Mr. Clearman then provided more details about the biodiesel projects at the school. The oil is donated, and the students have built a place to keep it contained, and they are also building a tank, he said. One student is studying a potential solar array for the school, and they are wondering about the heat it would absorb vs. electricity it would generate. Use of biodiesel reduces emissions, Mr. Clearman said. He said the students also built a biodiesel plant, and solved a number of physics problems along the way. The plant is highly sophisticated and needs a lot of work, he said.

Mr. Clearman concluded by saying he was interested in exploring a partnership with the SAC and exploring the connections the group had. He personally wants to move the biodiesel plant somewhere where the students play an active role, the plant is fully utilized, and opportunities are offered beyond the high school. He also said he wanted people who live and work to here to do more than tourism, real estate, and services.

People had questions and comments about this work.
- Dr. Causey asked if plant matter was used as a biodiesel base, such as sargassum or seagrass.
- Mr. Clearman replied they were using grease from around town.
- Mr. Morton wondered if Mr. Clearman had talked to Keys Energy.
- Mr. Clearman replied he had. He said they would get a 10 kilowatt solar array this spring at the high school.
- Mr. Morton said FKNMS did peel and stick solar technology at the Eco-Discovery Center, and there were studies with thermal sensors which barely moved the needle. He said he could get those studies to Mr. Clearman. *ACTION ITEM*: Mr. Morton to send Mr. Clearman thermal studies of the solar technology used at the Eco-Discovery Center.
- Chair Popham asked how, specifically, the SAC could help.
- Mr. Clearman said he thought the plant could maybe go somewhere else. He said he had not talked to anyone else at the district about it yet.

- Someone noted that fishermen used a lot of diesel.
- Mr. Hunt said FWC had a diesel boat.
- Chair Popham said commercial fishermen were likely the largest user group, plus truckers.
- Another person remarked dive operators use diesel.
- Mr. Clearman speculated the plant could maybe go on Stock Island and students could perhaps work there. He noted that when they converted the car, there were some issues, but it now used 100 % biodiesel.
- David Makepeace suggested a partnership with the Florida Keys Community College, which might include assisting users with converting systems.
- Mr. Chalfant said he would like to follow up on that.
- Mr. Simonds said he would like to use the product.
- Mr. Itkin said the problem was more complex than just reducing emissions. He said people have to worry about how to use ethanol, and about price of corn. He said other factors needed to be considered besides reducing emissions.
- Mr. Clearman agreed. He said algae was the future of biodiesel, and it was hard to do biodiesel with foods sustainably.
- Mr. Grathwohl asked about major engine manufacturers and their warrantees.
- Mr. Clearman said, for trucks, if a person used 20 % or less biodiesel, it did not void the warrantees. He said it remained a question to be explored. He observed gas prices would increase.
- Mr. Fowler commented on the warranty issue. He said he ran the marine operations program at Gray's Reef National Marine Sanctuary, and they may an effort to switch over to biofuel. The issue was not the warranties, it was getting enough biofuel in Savannah, he said. He thought people would want to use it, if the product was available.

Mr. Clearman wrapped up his time by thanking the Monroe County School District for its support.

Education/Outreach Joint Presentation – USFWS and FAVOR – Ms. Hillier, USFWS and Kristie Killam, FAVOR

Ms. Hillier said wanted to let the SAC know what the USFWS and FAVOR do and how they interconnect with FKNMS. For the USFWS, they just celebrated 100 years on the American continent; and she said the first National Wildlife Refuge was started in Florida. Now there are Refuges all over the U.S. They were first created for protection of migratory birds, so many refuges are along the major U.S. flyways. In 1997, the Refuge Improvement Act came into law, and it said habitat and wildlife management was their number one responsibility. She said that Refuges must maintain their biological integrity, have Comprehensive Conservation Plans, and allow for six priority public uses – hunting, fishing, photography, wildlife and wildlands observation, interpretation and environmental education.

To depict the interplay with the FKNMS, Ms. Hillier showed a map of the National Wildlife Refuges and FKNMS and their overlapping boundaries. She said a lot of the backcountry refuges have wilderness designation and the islands are managed for their pristine nature. She then reviewed the history and purposed of the Refuges in the Keys (Key West National Wildlife Refuge, Great White Heron National Wildlife Refuge, National Key Deer Refuge, and Crocodile Lake National Wildlife Refuge). Hunting birds, animals and reptiles were factors for establishing the Refuges. Other management issues include erosion, sea level rise, impacts of climate change, competing uses of space, invasive species, and poaching. They have programs on public education, controlled burns, exotic plant removal, closures of areas, habitat restoration, and research.

Ms. Killam said education and outreach were prominent components of many organizations' missions. They provide an opportunity to partner with other groups. She said education of youth would help with some of the SAC goals. FAVOR works on education, outreach, non-adversarial advocacy, and fundraising, she explained. She said FAVOR's education and outreach supported the USFWS's big six

priority public uses. In October 2010, she said FAVOR held a "Big Sit" event with other organizations at the Blue Hole to get people involved in birding and wildlife observation.

Ms. Killam then provided an overview of a number of FAVOR activities: the "Keys Kids in Nature" school field trip program, which is tied to a central curriculum now; and partnering with other organizations on things like Sanctuary cleanups, wildlife rescue, and invasive species removal. She said Mr. Keeley of the FKNMS staff was also a member of the FAVOR board. In addition, she said FAVOR shows free movies on Wednesday nights on Big Pine Key every other week during the tourist season, and FKNMS and SFFFK provide some of the equipment. FAVOR also participates in the Walk on Winn Dixie events, she noted. FAVOR volunteers like to participate in science, Ms. Killam said, and she described a wood rat reintroduction project, for which volunteers built nesting boxes. Ms. Killam said FAVOR was promoting the idea of one animal family, with local involvement and responsibility. She wondered if the SAC was interested in helping spread the messages, such as "keep wildlife wild", and "protect your pets". FAVOR also helps support the Florida Keys Birding and Wildlife Festival, along with the Tourist Development Council and others.

To do all that it does, Ms. Killam said FAVOR had community support and conducted fundraising. They also participate in regional and national friends of Refuges groups, and can go to DC and lobby for more funding for the Refuge, she said. FAVOR provides supplemental funding to the Lower Keys Refuges Complex, including for studies on the reddish egret, the Miami blue butterfly, and construction and maintenance projects. To raise funds, she said FAVOR runs a bookstore, gets donations and grants, and sometimes gets mitigation money. They also sometimes get the proceeds from full moon kayak events.

In regards to what FAVOR and FKNMS can do to mutually support the Sanctuary and Refuges, Ms. Killam said they can have combined cleanups, partner on fun nights, work together on education and outreach, and work on the One Animal Family program.

- Mr. Curlett asked from where the mitigation funding came.
- Ms. Morkill said Ohio Key resulted in mitigation funds long ago, and they were provided to FAVOR to fund USFWS restoration projects in the Refuge.
- Ms. Killam said DEP may also provide funds from dock mitigation and other projects for things like education and outreach.
- Mr. Bergh said asked how the backcountry island usage issue would interact with the FKNMS zoning update.
- Ms. Morkill said the 1998 backcountry management plan protects nesting birds and sea turtles, and bans jet skis. She said it needed to be reviewed, updated, and expanded to include the third partner of FKNMS. She said the closed areas were also designated as Wildlife Management Areas in FKNMS. She noted she had been waiting for the FKNMS zoning process so the backcountry work could be done at the same time.
- Dr. Causey said John Andrews brought backcountry areas to interagency core groups and wanted them worked into the FKNMS zoning. He said the FKNMS staff did that and added nineteen, plus eight more, and called them Wildlife Management Areas. He said some were closed due to being bald eagle nesting sites, but were not now.
- Ms. Morkill agreed, and said there were other areas that needed reviewing/changing.
- Mr. Bergh proposed the USFWS and FKNMS combine money to do the backcountry management plan and the zoning.
- Ms. Morkill said they would try, but the management plan was funded with base funds.
- Dr. Causey commented Ms. Morkill had done a good job with the Refuges.

Public Comment
Mr. Morton introduced Dr. Thur of the NOAA CRCP, and mentioned that CRCP had funded water quality, coral and Dry Tortugas work. Much of that was grant work, he said, and he mentioned funds were also given to other sanctuaries. Mr. Morton said most people were familiar with Kacky Andrews, who had left and was now with The Nature Conservancy again. He said Dr. Thor had taken over as Acting Director, and Mr. Morton encouraged him to come to the SAC meeting to see how things operate here.

Dr. Thur thanked the SAC for giving him a few minutes of time. He said he had talked to Mr. Morton in December about tightening the relationship they had, and Mr. Morton suggested he come to a SAC meeting. Dr. Thur said the CRCP collaborated throughout NOAA and with external partners for the purpose of coral reef conservation. They get a single appropriation from Congress, then have a shared decisionmaking process across NOAA to figure out how to allocate those resources. He said the CRCP began in 2000 and existed to implement the Coral Reef Conservation Act. He mentioned the core duties of the program and commented they had tremendous latitude to do other things.

Dr. Thur reviewed the direct CRCP investment in FKNMS, in monitoring, mapping, climate and *Acropora*. The total in FY 09 was nearly $2 million; the total in FY 10 was nearly $1.5 million, and the President's request for FY11, was over $1.6 million. He pointed out the dramatic increase in climate research funding over that time period, and mentioned that FKNMS and the Southeast Regional office had collaborated on an *Acropora* recovery plan with CRCP support. He showed a graphic of the increasing number of reef visual census sites, from 13 to almost 1550 between 1979 and 2008. He said the CRCP also provided $2.9 million between FY 04 and FY 10 for benthic habitat mapping in the FKNMS.

He mentioned other work that the CRCP funds, including coral disease and bleaching work, Coral Reef Watch, and national and international initiatives. To leverage CRCP funding, they also use staff from other offices in NOAA and partner with external organizations, he said.

Dr. Thur concluded by introducing Dana Wusinich-Mendez; one of her CRCP roles is to liaise with resource managers in Florida.

There were some comments and questions.
- Dr. Causey said money came into NOAA and four line offices were involved. He asked Dr. Thur to describe those.
- Dr. Thur said the CRCP received between $27 and $29 million from Congress, which comes into the Office of Ocean and Coastal Resource Management, within NOS, the parent organization of both the CRCP and the Sanctuary Program. He reviewed that CRCP works formally with all the other line offices to determine how to work on coral reef conservation each year, except that they do not formally work much with the NWS (though they do work with the Climate office).
- Mr. Morton noted that they share ten years since the National Marine Sanctuaries Act and the Coral Reef Conservation Act have been reauthorized.
- Mr. Frerer asked why the FKNMS did not get more, since it was the only site with corals.
- Dr. Thur said FKNMS was not the only one with coral. He explained that the CRCP funds seven states and territories, works with Micronesia, and does national and international work. Among the sanctuaries, by far FKNMS receives the lion's share, he said.
- Mr. Bergh said the Florida Reef Resilience Program, with The Nature Conservancy coordinating it and with many others participating, was a direct recipient of those grant funds, at a one to one match.
- Mr. Hunt said the CRCP was the source of funds for all the research FWC had done in the Western Sambo and Tortugas areas, and it was a direct partnership with the state of Florida. Regarding the work with Jim Bohnsack and others, he said the success was partly due to sampling work done by the state of Florida. With these large programs, he commented it took these types of partnerships to make it work.
- Dr. Thur thanked him for mentioning this.

- Ms. Morkill said a third of the WQPP monitoring was on coral reefs, and wondered if CRCP funded any of that.
- Mr. Morton confirmed it did.
- Chair Popham said a strategy was being devised to show the other sources of funding for the WQPP, beyond the USEPA.

Draft NOAA Aquaculture Policy – Mr. Morton, FKNMS
Chair Popham noted Mr. Morton had sent out the two policies on aquaculture to the SAC. There is a very limited window for comment he said; individual action may be required.

Mr. Morton said a national aquaculture policy had been in the works in NOAA for a long time. This happened because of the Gulf of Mexico Fishery Management Council adopting a plan in 2007 that included aquaculture. Instead of NOAA adopting the regulations put forward under the Gulf Fishery Management Council, NOAA said it would have a national policy. Mr. Morton sent the draft NOAA policy to the SAC prior to the SAC meeting. He said there was also a draft Department of Commerce (DOC) policy, and NOAA is inside the DOC, but the policies were different. He said the DOC policy got a little more into the trade imbalance issues on seafood in the U.S. while the NOAA policy looked a bit more at resource management issues. On the NOAA policy, public comment is being taken until April 11, 2011, which Mr. Morton noted is before the April SAC meeting. He said he sent this quickly as he could to the SAC.

Mr. Morton said his personal opinion was that it was a broad policy, on what would be considered if there were aquaculture in federal waters. He reviewed some of the components of the policy, including having sustainable aquaculture, having aquaculture provide jobs, protecting wild species and ecosystems, making decisions with the best scientific information available, working with federal partners, etc. He felt it was fairly good, and encouraged folks to go through the draft policy. He said the sanctuary program was specifically asked to seek comment from the SACs on the draft policy. He observed there was not the kind of time to consider it between meetings and bring forward a draft resolution, as the SAC might normally do, but the SAC could go back to the June 17, 2008 resolution it passed regarding the Gulf of Mexico Fishery Management Council and aquaculture. He read part of that resolution for the SAC, and said he thought the SAC may still have almost the same concerns now. He stated FKNMS already had regulations in place to regulate aquaculture in FKNMS, but the concern was upstream impacts from the Gulf of Mexico. He suggested the SAC could reiterate its concerns up to NOAA, or could decide, since the SAC made the recommendation before, that people could go make individual comments about this online. He acknowledged the SAC had not been given much time to consider this.

- Chair Popham asked if SAC preferred sending the resolution from before. About half the SAC members and alternates raised their hands to indicate this as a preference.
- Mr. Bergh said the Gulf of Mexico Fishery Management Council aquaculture policy, which the former resolution was about, was a weak policy. He felt the new NOAA draft was much more comforting and was going in the right direction. He said there was no harm in suggesting the Superintendent remind NOAA of the SAC's feeling on aquaculture as being still valid and saying the SAC still had the same concerns. Mr. Bergh said shellfish was called out in the draft NOAA policy, but coral restoration was not called out explicitly. He suggested that, in addition to forwarding the resolution, that NOAA also consider adding coral aquaculture to the policy.
- Mr. Moe suggested adding *Diadema*.
- Mr. Hunt said he also wanted to make the point that coral restoration needed coral aquaculture, but he said it could be something else in the future.
- Ms. Garlo felt it was more effective for the SAC to act as a body than for people to act individually.
- Mr. Moe read a statement from the draft NOAA policy, which he said seemed to cover a lot of the concerns the SAC had in 2008. He said if that was adhered to, it would go a long way.

- Dr. Vaughan agreed the policy addressed a lot of sustainable marine aquaculture issues. He felt if the old resolution was sent, it would look like the SAC was against the current policy, and he said he would like to support this one.
- Mr. Frerer asked Mr. Morton about land-based aquaculture, which he said had no impact on water-based aquaculture.
- Mr. Morton said the policy addressed aquaculture in federal waters, and that it would apply in interaction with the Magnuson-Stevens Fishery Conservation [and Management] Act, which is where NOAA would be regulating aquaculture. He said this was spurred by previous talk of open ocean aquaculture.
- Mr. Bennis said the 2008 SAC resolution had a key term, "…prior to approving offshore aquaculture in the Gulf of Mexico…" and he still wanted that stuff to happen and said those concerns were still valid.
- Mr. Bergh suggested having a resolution that the SAC liked the new policy but the group had concerns in the past, and the concerns from 2008 should be addressed as part of policy item number two, "Ensure agency aquaculture decisions protect wild species and healthy, productive, and resilient coastal and ocean ecosystems, including the protecting of sensitive marine areas."
- Mr. Popham asked Mr. Bergh if he would draft a resolution, and said the SAC would come back to this topic after the WQPP discussion.

WQPP Steering Committee and Technical Advisory Committee Report – Scott Donahue, FKNMS and Mr. Hunt, FWC

Mr. Morton said reforming the WQPP Technical Advisory Committee had been discussed at one of the recent SAC meetings, covering budget constraint discussions at WQPP meetings and the concern of the USEPA about their ability to fund a portion of the water quality monitoring projects. He said this led to tasks being put out to the Technical Advisory Committee as well as to the WQPP Management Committee, which both feed into the WQPP Steering Committee, and that is what drives the program. He said there was a recent meeting that led to more tasks, and Mr. Donahue would provide an overview.

Mr. Donahue then showed a list of the WQPP Management Committee members and the newly formed WQPP Technical Advisory Committee. Some people on both WQPP committees are also on the SAC. He said the WQPP Management and Technical Advisory Committees got together to review recommendations from a 2007 Battelle Memorial Institute report regarding the monitoring programs and the Sanctuary's comprehensive science monitoring plan. The WQPP is trying to figure out how to do more with less, and had been told to expect level funding or less. The meeting was to plan for making changes and streamlining and integrating the three WQPP monitoring programs and to see how they could be altered to still function in the roles they currently serve, especially with the benefit of centralized sewage, he said.

There will be more seagrass monitoring stations closer to shore, he said. There is a need for a post-doc to review the fifteen years of monitoring data to help provide recommendations for integration, he stated. More nearshore water quality monitoring stations will be added and the others will be evaluated. Another recommendation was all the funding programs for coral monitoring in the region should collaborate. The FKNMS comprehensive science plan will be updated. Also, it is important to bring a positive message to the USEPA of the world class program here, and to show the successes to all the funders, Mr. Donahue said. He said special studies had not been talked much about over the last few years, but the need was still there.

The Technical Advisory Committee is the scientific advisory board to the WQPP's Management Committee and Steering Committee, Mr. Donahue stated. It was felt that the next step in the process would be to conduct a canal restoration demonstration project, which would "turn dirt". He said the Technical Advisory Committee also came up with the need to evaluate revised monitoring programs and fund a synthesis so more people had that information.

Discussion ensued.
- Chair Popham said, in the long checklist originally developed by the WQPP, about 70-80 got checked off. He asked what was left.
- Mr. Hunt said he would try to get a copy to Chair Popham. *ACTION ITEM*: Mr. Hunt to provide a list of what was left to do from the original WQPP list to Chair Popham.
- Chair Popham said they would need all the pieces of the puzzle, to get back to SAC priority from the morning.
- Mr. Frezza asked who would do the special topic studies.
- Mr. Donahue said it would go out in a Request for Proposals, and the Technical Advisory Committee would then review the proposals and provide advice back to the USEPA.
- Mr. Frezza asked if there was money; Mr. Donahue replied there was not.
- Dr. Causey said the special studies used to be linked closely to items on the list of action items, and about 75% of the items in the Florida Keys action plan were complete.

Mr. Hunt said an overarching issue, as a Management Committee member, was to get the right information on the nature of the monitoring programs to those who fund the work and challenge them to demonstrate what it takes to meet the management needs. That is where the SAC relationship could come in, he said. Impacts on the WQPP monitoring programs could hurt the overall long term effectiveness of sanctuary management. Some of the programs are already pretty lean and mean, he felt. His challenge back to the SAC and to all involved agencies was, if a canal demonstration program was a high priority, should the monitoring program be gutted to do that, and if not, where to go to find other sources of funding? He said the Army Corps of Engineers had done a lot of "turning dirt" projects, and there was a need to work on a decisionmaking process for the next generation.

- Mr. Bergh said he had been a member of the WQPP Steering Committee for the last two or three years, and he felt the group was at best inefficient, and that it was opaque. He thought having a joint WQPP Steering Committee and SAC meeting would help with this.
- Chair Popham did not know if there could be a joint meeting with all the members, but maybe the WQPP management from the Steering Committee could come to a SAC meeting.
- Dr. Causey referred to the past, when [former SAC Chair] George Barley had one or two joint meetings a year to hear a specific issue, with panels.
- Chair Popham asked if a July WQPP meeting was scheduled, and Mr. Hunt replied it generally did not meet in July.
- Chair Popham said perhaps they could get some of the USEPA folks to come to part of a SAC meeting in June or August, and Mr. Morton agreed.
- Dr. Causey mentioned some people he might talk to, to facilitate this.
- Mr. Hunt talked about the need to acknowledge various components of the program, and stated a concern about not "throwing out the baby with parts of the bathwater" in the future.
- Mr. Morton suggested the request be made that the relevant USEPA contact come to the SAC meetings. *ACTION ITEM*: Chair Popham and Mr. Morton to work on getting the USEPA WQPP contact to a SAC meeting.

Draft NOAA Aquaculture Policy cont. – Mr. Morton, FKNMS
Mr. Bergh read and moved a resolution on the draft NOAA aquaculture policy, which was seconded by Mr. Nedimyer. There was no discussion.

The motion passed unanimously upon roll call vote. The wording of the resolution follows.

Be it resolved, the Florida Keys National Marine Sanctuary Advisory Council (SAC) commends NOAA for developing a sound Draft Aquaculture Policy which is responsive to the SAC's historic concerns

about aquaculture in the Gulf of Mexico. The SAC requests that the Superintendent of the Florida Keys National Marine Sanctuary forward a copy of this resolution along with a copy of the SAC resolution on aquaculture from June 17, 2008 to the administrator of the NOAA Aquaculture Program with our recommendation that items 1-4 in the June 2008 resolution are the kinds of actions that would partially satisfy Item #2 in the current Draft Aquaculture Policy.

Furthermore, the SAC recommends that aquaculture for coral reef restoration should be explicitly mentioned in the final policy in much the same way that shellfish restoration is mentioned in the draft policy.

Passed on this date: February 15, 2011

The Council is an advisory body to the sanctuary superintendent. The opinions and findings of this publication do not necessarily reflect the position of the Florida Keys National Marine Sanctuary, the National Oceanic and Atmospheric Administration, the Florida Department of Environmental Protection, or the Florida Fish and Wildlife Conservation Commission.

Mr. Morton commented that this was good work. *ACTION ITEM*: Mr. Morton to consider/follow up on the recommendation of the SAC regarding the NOAA draft aquaculture policy.

Recovery of Seagrass Beds Following Removal of Donor Material in Card Sound – Chair Popham, SAC

Chair Popham said this seagrass project was discussed by the SAC in 2010. He said the site was in Broad Creek, which is part of the FKNMS, and it was a DEP-mandated project. As there was some correspondence recently asking about the status of that project, Chair Popham wanted to get this on the agenda to see if there were unanswered questions that could be clarified. He said Mr. Curlett had told him he flew over the site and that there was significant scarring. He also said there was confusion over when the stakes were coming out. He noted Anne McCarthy, with the company that put the stakes in [CSA International, Inc.], was present.

- Mr. Curlett thanked Ms. McCarthy for coming, and asked how many stakes were put in.
- She replied there were two different phases. About 1200 – 1400 stakes went in about two and a half years ago, and then a few hundred more were put in last year, some off Key Biscayne.
- Mr. Curlett said there was no mention in the SAC minutes when this was discussed before that the project was started in 2008. He felt the SAC should have been able to provide input, and he wondered how FKNMS approved this and how FKNMS did not know how many stakes went in. He said there would also be holes when the stakes were pulled out. He noted there was no federal funding involved, but the project was on federal submerged land. He said he had suffered a lot of flak as a recreational angler.
- Mr. Morton said this was a DEP project, mitigation for activity that occurred in Biscayne. He said it happened every day that FKNMS authorized other agencies' permits, and this was done under the seagrass programmatic Environmental Impact Statement that was created for seagrass restoration, and that went through a public process under the National Environmental Policy Act. [This restoration project] was subject to comment under the state process, he said. He said if desired, he could ask DEP to come before the SAC and describe that process.
- Mr. Curlett was not happy the SAC was not informed when this restoration project was up for approval and that the SAC was not given an opportunity to comment. He said people could get stuck in that area and could not fish there [where the stakes are].
- Mr. Morton confirmed he had seen the pictures and there were a lot of stakes, and a lot of scarring there.

- Mr. Edwards said during the previous SAC discussion, he had not known which part of DEP was responsible for the permit, but he did now. He said he would like to get Mr. Curlett directly in touch with the office that issued the permit, so he could voice concerns directly to the people responsible for overseeing this. He also suggested Mr. Curlett could ask them to modify the permit. He said he expected there was a formula guiding how many stakes would go in the mitigation area, and if that was not the best way to go in practice, the relevant DEP office in Miami-Dade County could potentially change that.
- Dr. Causey said he had been part of an email exchange over the previous weekend on this, including an email from Tom Davidson. He went on to say that NOAA scientists at Beaufort had looked at bird stake success and the distance between stakes. He said stakes at one or three or five feet apart or more would foul a fish and form a picket fence. He was impressed by the 1400 stakes at this site, which was scarred from orphan groundings. While he was sympathetic to the concerns raised, he was less sympathetic when he thought of the number of years the scars [from boats] would be there. He hoped Mr. Curlett would bring forward input about what he would like to see in a public process in the future. He also said he hoped the message could be gotten to flats guide to stop taking shortcuts.
- Mr. Curlett said the Ocean Reef Rod and Gun Club had spent $20,000 for flats markers in 1999-2000, including on these same flats, but Sea Tow and Blackbeard pulled them out over a period of years. He added he knew bird stakes were necessary and worked, but he said having five times as many stakes as were necessary did not necessarily speed up the seagrass restoration.
- Dr. Causey said he would like to ensure communication was involved in something of this magnitude in the future, and he said there was also an opportunity to get out there and talk about preventing scarring.
- Mr. Bergh said the Situation Reports might be a place to inform the SAC about big projects, or they could be brought before the SAC during the agency reports. He said he thought restoration in general had been in its infancy, and now people were getting pretty good at it, the projects were getting bigger. He felt this would need to be kept in mind with future staghorn projects so as to not run afoul of people.
- Chair Popham felt something of this magnitude should come before the SAC. He found it interesting that it might be possible to modify the permit now. He added there was some misunderstanding about the review process and when the stakes were going to coming out – he thought he heard this fall.
- Mr. Morton acknowledged there was some hyperbole and leaps in communication in the recent emails, and said just because he had not been out there, that did not mean the FKNMS science staff had not been out there. He stated FKNMS gave its permit and so would have known about the stakes. He agreed FKNMS could improve making the SAC more aware of projects, in terms of restoration projects FKNMS directly oversees. He said if the SAC wanted to learn more about FKNMS authorizing other agencies to do work, FKNMS could go down that road, but it was significant. He said 150-200 FKNMS research permits were issued a year, and in the past year and a half, FKNMS issued 250 more on lionfish removal in Sanctuary Preservation Areas. He said there was probably some threshold of what the SAC wanted to see and what it did not. He understood the SAC wanting to see this type of project with the number of stakes and public access issues. He was not sure how he would build a threshold in, but he could probably talk to Permit Coordinator, Joanne Delaney, to flag him when something had significant public access or restoration issues. He said there were significant access issues in the backcountry and things on the reef people would want to know about. Some of these things are not FKNMS decisions or projects, but FKNMS might have authorizing oversight, he said.
- Chair Popham commented that the stakes were on state bay bottom, within the FKNMS.
- Mr. Curlett asked about the stakes being temporary and about some being removed.
- Mr. Morton said they could be if they met the criteria for removal, and that would be DEP's decision.
- Mr. Bennis said he would like to hear conservation information such as number of stakes, acres restored, where plugs came from, etc.
- Mr. Popham said there was an assessment report out; Mr. Morton added that it came out in October and another one would come out in April.
- From the audience, Ms. McCarthy said it was a very complex project, with stringent requirements, noting that Miami-Dade County said it must be done within the County, and Biscayne said it could not be done within their back yard. This led to a lot of stakes in a concentrated area, she said.

- Someone asked who paid for the work, and Mr. Curlett said the Village of Key Biscayne did.
- For this project, no restoration was done in Biscayne National Park, but Ms. McCarthy said the Village just signed an MOU with Biscayne National Park, so there would be more bird stakes going. She empathized with Mr. Curlett's concerns, she said, and said she had spoken with DEP. They said they would not reopen the plan, and she clarified it was a special plan, not a permit, which is different in terms of public process. She provided the names of a couple of people she felt were good sources of information. She suggested looking at the thirty-month data, and if FKNMS had continued concerns about wanting to remove some of the stakes, to talk to DEP then. She said they would go out in March, depending on the weather, and it would take thirty days to do the report. In response to a question by Chair Popham, Ms. McCarthy said she could do a report to the SAC in June. *ACTION ITEM*: Chair Popham and Mr. Morton to schedule Ms. McCarthy to give an update to the SAC on the seagrass bed recovery project by the June 2011 SAC meeting.
- Chair Popham encouraged Mr. Edwards to bring any more information he may from the DEP on this.
- Dr. Causey asked about Mr. Davidson's concern was about aesthetics or potential hang-ups.
- Mr. Curlett said this created limited access to a good fishery in the upper Keys. He added the stakes were put in with a crane, and no money was set aside for removal.
- Ms. McCarthy said the Village of Key Biscayne would have to figure that out. She stated her company was no longer under contract with the Village.
- Mr. Edwards said removal was part of the project, and if the project criteria not met, DEP could do some enforcement. He said the responsibility was that of the permittee, not the consultant.
- Mr. Nedimyer said people could look at this as getting the damaged seagrass restored for free.
- Chair Popham thanked Mr. Curlett for bringing this to the SAC's attention.

Upcoming Meeting and Closing Remarks – Chair Popham
April 19 is the next SAC meeting, at the Marathon Garden Club, Chair Popham reminded the SAC. He said there were are few [suggested] things on the calendar for that meeting, including a Management Plan Review update, a report by Dr. Leeworthy, and an education and outreach presentation. He also said he wanted to revisit the goals the SAC discussed at this meeting.

- Mr. Bergh asked about the next steps on the SAC goals.
- Chair Popham said would summarize the priorities, and that he envisioned the SAC taking bites out of them at future meetings, but he said he would talk to Mr. Morton about this. He said he wanted to devise action plans on the goals. *ACTION ITEM*: Chair Popham to discuss summarize the SAC's priorities for 2011 and to discuss next steps with Mr. Morton.

Mr. Morton reminded the SAC of the three alternate vacancies on the SAC, and of the deadline of February 23 for receipt of applications.

Dr. Causey asked if the SAC wanted to hear a fifteen minute briefing on the status of the Sargasso High Seas Marine Protected Area he was working on, which he had wanted to discuss at this meeting, but pulled as another item was scheduled instead.

- Chair Popham said this could be scheduled for a future meeting. *ACTION ITEM*: Chair Popham and Mr. Morton to consider when to schedule Dr. Causey to address the SAC about the Sargasso Sea.

Adjourned, 4:17 PM.

Submitted by Lilli Ferguson