

FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY
Sanctuary Advisory Council
Meeting Minutes
November 19, 2014

Meeting Attendance Roster:

Jimi Mack	Recreational Diving	Present
Jesse Cancelmo	Recreational Diving	Present
Vacant	Diving Operations	-----
Vacant	Diving Operations	-----
James Wiseman	Oil and Gas Industry	Absent
Clint Moore	Oil and Gas Industry	Present
Scott Hickman	Fishing - Recreational	Present
Keith Love	Fishing - Recreational	Webinar
Shane Cantrell	Fishing - Commercial	Present
Mike Jennings	Fishing - Commercial	Absent
Will Heyman	Research	Present
Larry McKinney	Research	Present
Karla Klay	Education	Absent
Jacqui Stanley	Education	Present
Ellis Pickett	Conservation	Present
Jorge Brenner	Conservation	Present
James Sinclair	BSEE (non-voting)	Present
Matthew Johnson	BOEM (non-voting)	Present
Brandon Fisher	U.S. Coast Guard (non-voting)	Absent
Rusty Swafford	NOAA Fisheries (non-voting)	Present
Charles Tyer	NOAA OLE (non-voting)	Present
Ben Scaggs	EPA (non-voting)	Absent
G.P. Schmahl	Sanctuary Superintendent (non-voting)	Present

Total voting member attendance: 10 of 14

Others in Attendance:

Karen Raines-webinar (NOAA Counsel), Steve Daigle (Apache), Natalie Hall (SAC Applicant), Rod Stanley (Oceanworks), Cheryl Powell (Fieldwood), Randy Clark (NCCOS), Frank Burek, Patsy Kott, James Henderson.

Administrative Business & Announcements

9:15 AM Meeting called to order by Council Chair Jesse Cancelmo

G.P. Schmahl welcomed everyone.

Meeting Agenda: motion to adopt, Jacqui Stanley; second, Will Heyman; discussion – Will requested that we move the Visitor Use discussion earlier in the day since he had to leave early, Clint requested 25 minutes for Manta Conservation report; motion carried with changes.

September 24 Meeting Minutes: motion, Scott Hickman; second, Jacqui Stanley; no discussion; all in favor; the September 24 minutes were adopted.

Sanctuary Update – G.P. Schmahl

- Advisory council nominating committee reviewed applications for available council positions. GP will make his decision and forward to headquarters soon. Clearance/background checks must be obtained for each candidate before final approvals can be made.
- A new sanctuary system video is now available on the web.
- “Earth is Blue” is a new public outreach campaign from headquarters that started October 23, 2014 (42nd anniversary of National Marine Sanctuaries Act). Campaign includes a new Instagram site and a new website that will feature a new image from the sanctuary system each day. FGBNMS has already been featured several times.
- A letter of thanks and acknowledgement was sent to Jennifer Morgan per council request at September 2014 meeting.
- ROV Cruise with CIOERT/FAU, October 2014 – principle investigator Josh Voss/Harbor Branch/FAU
 - DJI Phantom Quadcopter utilized to film vessel operations and a mosaic from 900 feet showing all buoys, boat at mooring, corals and sand channels
 - North reef at East Flower Garden Bank has an area dominated by *Agaricia* species corals
 - McGrail bank showed a lot of sargassum on the bottom – possible evidence of nutrient load in the area
 - McGrail has mesophotic reefs with antipatharians and gorgonians.
 - GP is on a working group of the Gulf Council that will meet in December to make recommendations for areas of concern for mesophotic and deep coral communities
 - Lionfish were seen at all locations this trip
- Water Quality Cruise, November 2014 – quarterly sampling and instrument checks
- Excellent crew of R/V MANTA make our work possible
- Window in the Waves aired in Houston in October and showed at Blue Ocean Film Festival, St. Petersburg, FL in November. The documentary was a finalist in Emerging Filmmaker category.
- Sanctuary Nomination has already received several nominations including one from East Florida and one from Mallow's Bay shipwreck location off Chesapeake Bay
- Environmental Law Reporter article by Jason Patlis of NMSF and others: The National Marine Sanctuary System: Once and Future Promise of Comprehensive Ocean Science
- Update on status of HIA 389A – BSEE must issue permit for actual removal. Currently looking at partial removal at 72-ft crossbar. Top to be removed to another location or taken to shore for disposal.

- Remaining structure will be donated to TPWD for Rigs to Reefs program. Negotiating with TPWD regarding management of this artificial reef within sanctuary boundary.
- Liability issue is still being worked out. What happens when this structure begins to fall apart?
- Reef structure itself must receive a permit from Army Corps of Engineers.
- Goal to remove the upper structure next summer.
- Operational issues associated with removal – placement of anchor arrays inside/outside no activity zone; use of explosives (will not be permitted)
- Sanctuary Expansion – Notice of Intent (NOI) signals start of official process and development of draft Environmental Impact Statement (EIS). Have not yet received go ahead from NOAA.
 - NOI is drafted and in the appropriate hands. Once approved, it will be published.
 - Support at the congressional level would be very helpful.
 - It would be most appropriate to address the directional drilling issue, regulations, etc. in the public process.
 - Still resolving expansion vs. new site question with BOEM. Department of Commerce considers this a sanctuary expansion.
- 38th Voyage of the Charles W. Morgan, summer 2014 – Built in 1841, and the only U.S. whaling ship still sailing. Being used for outreach on whale conservation. Some of the wood used in restoration is Hurricane Ike wood from Galveston.
- German U-boat 576 found off coast of North Carolina – Joint effort by Monitor National Marine Sanctuary and BOEM. Last shipwreck from WWII that hadn't been found. MNMS has been involved in Graveyard of the Atlantic investigations.

Cabled Ocean Observing System – Rod Stanley, Oceanworks

- Experience worldwide with monitoring operations
- Monitoring Infrastructure for the Gulf of Mexico
 - Environmental monitoring – still cameras, video, acoustics
 - Monitor changes such as algae blooms
- Venus system has cables to depths of 5000 feet - using cables is very flexible
- Standard telecom cables are used to reduce costs
- Network can be continually expanded
- Wetmate connectors allow UW exchange of equipment by ROV or divers
- Up to 10 instruments can be connected to 1 node
- Nodes can handle real time video
- Nodes supply power and network distribution
- Nodes can be camouflaged
- Internodal distances are up to 80 km apart
- ROVs can be operated from cables, crawlers and flyers
- Connections can be rented out to different entities
- Cabled Observatory systems are already installed along the northwest coast and northeast coast
- Trawling a concern for these systems

- Council interested in how this would work with an underwater web cam.
- Ocean observing systems in general are big goal of Restore Act Funding. Hoping this could be part of a bigger Gulf of Mexico ocean observing system and tie in to existing observation systems.

Short Break

Fish & Benthic Communities of the Flower Garden Banks National Marine Sanctuary: Science to Support Sanctuary Management – Randy Clark, NCCOS, Biogeography Branch

- Study started because of SAC goal to look at fishery impacts
- Gulf of Mexico Fishery Management Council recommended a 3-year baseline assessment (2010-2012)
- Funding provided thorough NOAA Coral Reef Conservation Program
- Surveys stratified across 3 depth zones for fish community and habitat assessments; shallow coral reef 60-110 feet, upper mesophotic reef 110-150 feet, lower mesophotic region 150-330 feet
- Broad depth strata required a multi-prong survey approach
- 25x4 meter transects conducted for visual fish census, with quadrat surveys of benthic cover at 4 points along each transect (shallow and upper mesophotic regions)
- Benthic ROV photos substituted for quadrats in lower mesophotic region; 300x6ft video transects used for fish surveys
- Splitbeam Fishery Acoustics used to measure fish densities at night (60-350 feet)
- Identified fish in size groups (<5 in., 5-12 in., >12 in.)
- Biomass significantly greater in deeper coral habitats, especially for commercial groupers and snappers
- Consistently larger fish at deep sites compared to shallow
- Fish biomass “hotspots” located on coral reefs.
- Grouper biomass mostly black, tiger, yellowmouth, and yellowfin
- Snapper biomass mostly dog and gray
- Scamp and red snappers dominant in deeper areas
- Large fish densities higher at East Flower Garden Bank
- High fish densities over deep reef habitats
- Fish densities 3-10 times other coral reef ecosystems
- Arrival of lionfish coincided with study (0, 11,19 sightings from 2010-2012)
- Improved benthic habitat maps resulted in an increase in documented hard-bottom habitat on both East and West Flower Garden Banks
- 75 stations evaluated each year in shallow region; 28-38 stations evaluated 2011-2012 in upper mesophotic region (Deepwater Horizon incident prevented surveys in 2010); 55-78 transects evaluated in deep region; 125-155 miles of acoustic surveys completed
- Depth and reef complexity is important!
- Ciguatera species were found at all stations sampled, including deepest record for species at 46 meters

- Ecologically the Flower Garden Banks are doing what they're supposed to (like remote Hawaiian islands)
- Recommendations
 - Continue monitoring, especially in deeper coral cap habitats (>33m)
 - Quantify fishing in the sanctuary
 - Develop deep monitoring plan, participate in biennial Coral Reef Monitoring Program (2013, 2015, 2017...), continue fixed site Long-term Monitoring
- These data are integral to establish a research area and may serve as a foundation for expansion
- NCCOS has experience establishing a research area at Gray's Reef - could use similar approach at the Flower Garden Banks
- Results were not conclusive in identifying any difference between north and south reefs at East Flower Garden Bank or between mooring and non-mooring areas
- This study complements the existing Long-term Monitoring (LTM) program. LTM does some different things in a fixed study site. This study provides a supplement over broader range. If changes are observed in the study site, the NCCOS study looks outside that to see if this is consistent over a range.
- NCCOS did not participate in investigations related to Deepwater Horizon incident. Sanctuary staff collected data using SPMDs and sediment samples. They also did fish and benthic surveys at Sonnier. There was no direct sampling of fish tissue. No clear pattern of hydrocarbons from Deepwater Horizon was identified.
- Some of this data can be incorporated into the The Nature Conservancy's interactive map.
- Investigators think most of the groupers and snappers display high site fidelity. This survey method likely misses most of the pelagics. Can probably use some additional research.
- Council expressed concerns about sharing information about fish hotspots.
- Frank Burek commented that the sanctuary is top on coral and top on fish density compared to all other coral reefs, so whatever we are doing for fishing we are doing right. GP suggested we keep in mind shifting baselines. Being better than completely devastated areas isn't saying much.
- This information will be used to help decide if a fishing/diving closure is needed. It feeds into possible future sanctuary actions. We can make this an agenda item at our next SAC meeting.

Visitor Use Discussion – G.P. Schmahl

- Visitor Use is part of the 2012 Management Plan
 - Activity 1.1 – Develop and implement a voluntary vessel registration system
 - Activity 1.2 – Develop and implement a visitor use monitoring program using the best available technology
- We have implemented the voluntary vessel registration, but only received a handful of submissions
 - Suggestion to make a form to submit directly through the website
 - Suggestion to develop a phone app that we receive data directly into a spreadsheet

- Suggestion to revisit amount of information being requested. Needs to be concise.
- General consensus that if there's no penalty or regulation involved, people aren't going to do it. Six years of data shows voluntary reporting is ineffective.
- Suggestion to issue a nominal permit fee to fish in sanctuary
- The National Marine Sanctuaries Act gives sanctuaries the ability to charge user fees
- Requiring a log-in to go to this special place once or twice a year makes sense when compared to fishing platforms where nothing is required
- Visitor Frank Burek stated that marine sanctuary system is similar to National/State Parks and you pay fees to use those places. You are providing a service to the public.
- Could not find ways to capture the economic information in the studies conducted through Will Heyman and Bob Leeworthy
- We need to consider the potential for our decisions/changes to affect all other sanctuaries.
 - Florida Keys NMS (FKNMS) does vessel registration now.
 - Papahānaumokuākea (PMNM) requires vessel registration.
 - Would permit be for entering sanctuary or for specific activities?
 - Unintended consequences could be boundary expansion issues. Fishing pressure will increase on the natural banks to the east.
- Since we're dealing with a remote location, we need to consider the massive outreach and education effort that will be required and the associated cost
 - Comment that unfamiliar people are not likely to visit sanctuary. Regulations would spread through social media. Outreach wouldn't be that difficult.
 - Someone from the sanctuary needs to be in charge of getting this information on social media
- MOTION by Will Heyman – Sanctuary staff time should be used to figure this out. Staff should be supported by SAC.
 - Comments that this is not an actionable item in this agenda. We need to continue the process of how we handle the agenda. It allows the public to have input.
 - Request to set this as an actionable item at next meeting
 - Motion rescinded and changed to recommendation.
 - GP will follow up on the recommendation from the council and get information for the next meeting
- Vessel Monitoring System (VMS) information is being used in the ongoing economic analysis, but the specific information is hard to obtain and we do not have direct access to it.
- Visitor Use policies also affect diving at FGBNMS, but will have different approaches

GP acknowledged the NMSF for providing lunch to participants

During lunch, Jacqui Stanley shared a Powerpoint of *Painting Our National Marine Sanctuaries*, a project she is doing as an after school program at her elementary school.

Public Comment Period

No public comments

Agency Reports:

GP for Brandon Fisher (USCG) – On a patrol out near the sanctuary. Jamie Park will be joining them on a patrol later this month.

James Sinclair (BSEE) – Working on a couple of interagency agreements with FGBNMS. One for monitoring of HIA-389A. One for monitoring at Stetson Bank.

Matt Johnson (BOEM) – Working on updating footprints for topographic features. Directional drilling question is being addressed by legal department.

Rusty Swafford (NMFS) – Participated in first “No Surprises” meeting between Sanctuaries and Fisheries yesterday.

Charles Tyer (NOAA OLE) – Working with TPWD who has been funded to do patrols at FGBNMS. OLE is training them regarding federal regulations, etc. OLE has hired two additional uniform officers: one in Galveston and one in Lafayette, LA.

Question regarding use of remote technologies for monitoring.

- There is satellite information that can be accessed through the Department of Defense and the sanctuary program has been cleared for this. Florida Keys and Monterey Bay have found this very valuable. FGBNMS images were not helpful—the level of use is very low compared to other areas.
- There has been talk about putting cameras on platforms for a long time. Issues with cost, access and connection. Never got any funding for it and felt it was logistically difficult to pursue.
- There is a group within NOAA investigating unmanned aerial technology. Drones have been tested in some sanctuaries on east and west coasts. Tentative plans to bring a drone to FGBNMS next summer.

Manta Ray Conservation in Yap – Clint Moore

- Two species of mantas as of 2009 – Pelagic (*Manta birostris*) and Reef (*Manta alfredi*); possible 3rd species
- Pelagic species is larger, up to 23 feet; Reef species up to 11 feet
- Females typically larger
- Lifespan of 29 years verified from known animal, possibly up to 80 years
- Cleaning, feeding, and mating are main manta behaviors
- Mantas target fish spawning aggregations to feed. Some bottom feeding seen. Mostly feed up in the water column.
- Targeted by commercial fishing in Asia. Indonesia has banned fishing of mantas. Sri Lanka still has heavy fishing
- IUCN Red List, CITES Appendix II

- From tourism perspective, one manta worth \$1.4 million compared to \$150 for gill rakers
- Yap Manta Project www.mantaray.com, answering a variety of research questions about habitat, food preference, movement, etc.

FGBNMS Mantas

- We don't know a whole lot about mantas in the Gulf of Mexico.
- We've tracked some between banks, but where else are they going?
- Working with researcher to get tissue samples to verify a possible 3rd species in the Gulf.
- There doesn't seem to be a season for mantas in sanctuary.
- Manta catalog information is on our website and on the *Fling*.
- Manta Mysteries lesson available on website and conducted as an activity at CAST (science teachers conference).

New Business

- 2015 meeting dates selected by those present:
 - February 20 (Friday) – some people already in town for oil spill conference February 16-19
 - May 20 (Wednesday)
 - September 23 (Wednesday)
 - November 18 (Wednesday)
- 2015 Meeting Schedule to be sent out via email after the meeting so people who were not present may comment.
- Scott Hickman – Has R/V MANTA Captain radioed to other vessels to encourage voluntary trip report form? Yes, but not consistently. Will add that to protocol.
- Jorge Brenner – Sister Sanctuary Network meeting in Miami did not happen. Has been postponed until next year.

2:10 PM Meeting Adjourned

Next SAC Meeting scheduled for February 20, 2015.