

**GRAY'S REEF NATIONAL MARINE SANCTUARY
SANCTUARY ADVISORY COUNCIL MEETING
OCTOBER 5, 2009
SOUTH CAROLINA AQUARIUM
CHARLESTON, SC**

Members Present

(Chair) Dr. Clark Alexander, Non-living Resources Res.
(Vice-Chair) Will Berson, Georgia Conservation
(Secretary) Venetia Butler, K-12 Education
Mary Conley, Regional Conservation
Dr. Daniel Gleason, Living Resource Research
LTJG Nathan Downend, U.S. Coast Guard
Dr. Scott Harris, University Education
Sgt. Doug Lewis, GADNR LE
Jack McGovern, NOAA Fisheries SERO
Dr. George Sedberry, GRNMS Superintendent

Members Absent

Tim Tarver, Sport Fishing
Spud Woodward, GADNR CRD
Dorset Hurley, Sapelo NERR
SA Al Samuels, NOAA OLE
Sport Diving (seat vacant)
Capt. Wendell Harper,
Charter/commercial Fishing

Gray's Reef staff present

Greg McFall, Research Coordinator
Becky Shortland, Resource Protection Coordinator
Jody Patterson, Administrative/Volunteer Coordinator

Public in Attendance

LT Michael Gris, U.S. Coast Guard

Welcome and Introductions

Sanctuary Advisory Council Chair Clark Alexander welcomed everyone and reviewed the agenda with no changes made. Sanctuary Superintendent George Sedberry announced that Greg McFall has been selected as the Assistant Sanctuary Superintendent. He will be functioning as both deputy and research coordinator until the latter position can be filled as funding is available. Dr. Alexander suggested that more emphasis be put on research and offered SAC support in speaking with the Office of National Marine Sanctuaries concerning the fulfillment of the research post.

Advisory Council Business

Meeting summary – Dr. Alexander asked for a motion to approve the July 2009 meeting summary. The motion was made, seconded and passed unanimously.

Law enforcement working group – Sgt. Doug Lewis reported on law enforcement activities by GA DNR within the sanctuary. Vessel operations have declined due to fleet and personnel reduction. One warning was issued for anchoring, which is being disputed. He also reported that there is ongoing discussion of summary settlements for sanctuaries that may include offenses like coral removal and marine debris; anchoring is not being considered in the summary settlement schedule. Becky Shortland noted that the next management plan review may include needed clarification in some existing regulations. Becky went on to discuss the long

term strategy for law enforcement that is being developed at ONMS. There is a need to look at long term needs from a site and regional perspective as well. Discussion followed on the ongoing need for identification cards for GADNR rangers. Some means to remotely detect vessels is also needed along with satellite phones. The concept of moving one of the to-be-decommissioned Navy towers near the sanctuary boundary for use as a research and education platform was also noted, but that may be more of an expense than benefit.

LT Gris introduced LTJG Downend who will be replacing him on the Sanctuary Advisory Council. LTJG Downend reported on 16 hours of patrol by Station Brunswick which included joint patrols with GADNR rangers and some vessel boardings. He further reported that 15 flights were performed by Air Station Savannah over the sanctuary along with patrol boats. Helicopter over-flights with GRNMS staffers may be possible; LT Gris will inquire.

Research area and spearfishing update – George Sedberry advised that the proposed research area designation is moving forward with development of a draft environmental impact statement and proposed rule. The preferred alternative boundary is the southern option boundary. The final rule on spearfishing gear in the sanctuary is almost complete with release expected before the end of the year. Final approval of a research area is a minimum of a year off. Ms. Shortland detailed the process.

Lionfish revisited – Assistant Superintendent and Research Coordinator Greg McFall addressed the need to go back out and survey for lionfish particularly in the areas that were harvested in July. A new pole spear has been developed allowing collection of lionfish without needing to handle them. He hopes to test the new equipment as spearing seems to be the most efficient way to remove lionfish. In July, during a 14-minute dive at the R2 tower, 17 lionfish were speared. No lionfish have been seen at Gray's Reef since 2007. Greg went on to explain that if spearing is used to remove lionfish from the sanctuary in the future, it would have to be done under a permit. A suggestion was offered to allow lionfish spearing by local divers or as needed inside the sanctuary. Mr. McFall addressed this need by stating that they are building up a cadre of volunteer divers to assist NOAA in such efforts. There is a live lionfish specimen exhibit on display at the GA Aquarium in Atlanta as well as at the UGA Marine Extension Aquarium on Skidaway Island.

2010 ONMS Advisory Council Summit – Chairs, SAC coordinators and Superintendents are invited to an annual meeting, attended last year by SAC Secretary Venetia Butler, which will be attended by Chairman Clark Alexander, George Sedberry and Becky Shortland this coming May. Olympic Coast NMS will be hosting the FY10 event. All sites and/or regions can submit brief abstracts by the end of January for case studies to be presented during the May summit. Three case studies will be chosen. Dr. Alexander noted that we are poised on the edge of the lionfish dilemma so maybe something in that realm would be relevant. Invasive species as a problem hasn't yet been addressed as policy by the sanctuaries, including the Asian green mussels, titan barnacles, or invasive corals. Discussion followed on the topic of sanctuaries as sentinel sites. Gray's Reef has been monitoring CO₂ and as such is functioning as a sentinel site for climate change. But budget issues are limiting the extent to which sites can function as sentinel sites.

Program report – Recapping the past quarters’ activities by Gray’s Reef staff, there were no questions or comments. http://graysreef.noaa.gov/pdfs/gr_pgm_rpt_10_2009.pdf

Next meeting – Quarterly SAC meeting dates for FY10 were discussed, as well as an orientation/retreat planned for January. The SAC agreed that preplanning these dates in advance was helpful. January, April, July, and October are the tentative months during which the meetings will take place; firm dates will be established at a later time. The first couple weeks of April and July as well as Tuesdays or Thursdays were ruled out. Geographic locations to meet were discussed. All agreed that January’s retreat should be held on the Skidaway campus. April will be planned for the Jacksonville, Brunswick/St. Mary’s area; July is planned for Statesboro; October is planned for South Carolina.

Available Council Seat – SAC member Bob Bunkley has resigned his seat as the sport diving representative. Applications for this position are being accepted through November 30. Interested individuals should contact Becky Shortland for application information.

<http://regulations.justia.com/view/157307/>

<http://www.thefederalregister.com/d.p/2009-10-26-E9-25436>

New Council Business

Ocean Acidification – A draft resolution has been proposed for the Gray’s Reef Sanctuary Advisory Council to address concerns of ocean acidification. The council members have already received sample resolutions passed by other councils for their review. Studies indicate that uptake of anthropogenic carbon has led to the ocean becoming more acidic, and that increasing atmospheric CO₂ concentrations are likely to lead to further acidification. Resilience of many ecosystems is likely to be exceeded in this century with severe localized impacts because of global warming, ocean acidification and other human disturbances. Impacts are expected to be greater in the polar region as opposed to the tropical regions when carbonate is transformed to bicarbonate, which organisms cannot use. Mr. Harris asked about direct implications for Gray’s Reef. The direct issues relating to Gray’s Reef are significant because of bryozoans, forams and other organisms that use carbonates for their structure, otolith in fish and dissolution of limestone shelf structures. Also of concern is the carbonic acid in organisms affecting physiology. These are all global concerns. Several sanctuary advisory councils have already passed resolutions expressing these concerns and others are considering resolutions. The purpose of the resolutions is to coordinate and propel the issue to another level in NOAA. Clark Alexander pointed out the climate change and issues like ocean acidification were not included in the 2008 Gray’s Reef NMS condition report. There is a ground swell of public interest in climate change and we need to establish the variety of issues associated with this that are affecting the National Marine Sanctuary System, acknowledged Ms. Conley. Another proposed resolution on ocean acidification will be developed by Gray’s Reef staff and will be proposed to the council for review. A motion was made by Mr. Berson for staff to draft a new resolution for consideration by the advisory council.

2010 ONMS Strategic Drivers – George Sedberry reported on the Office of National Marine Sanctuaries (ONMS) 2010 strategic priorities, which are 1) reauthorization of the

National Marine Sanctuaries Act, 2) ONMS budget, 3) climate change, and 4) marine spatial planning.

- National Marine Sanctuaries Act and FY10 Budget: The act is in its 5th year of expiration and is operating under Continuing Resolution. The push for offshore energy exploration in sanctuaries is prohibited within the act and there is some concern of exploitation without reauthorization. With the President's current ocean policy initiatives, awareness of national marine sanctuaries is heightened so there is a push to move this through. Changes cannot be made to the act without reauthorization and there are restrictions in the NMSA on establishing new sites. Discussion followed about council support for reauthorization. Sanctuary Advisory Council members are not prohibited from contacting Congress as private citizens on their concerns as private citizens. NOAA may not request or authorize councils or their members to conduct any activity that would lead to grassroots lobbying. The budget, as addressed by Greg McFall, is based on historic funding. In the management plan, our budget for research this year should be \$300,000 but as of last year we received \$25,000. Looking ahead, the annual budget associated with investigations with a research area should be \$400,000-\$500,000 per year. Clark Alexander asked if there are strategic initiatives or grants that may be applicable and if a case can be made to support a proposal to Sanctuaries or higher levels of NOAA. Mr. McFall replied that public support for increased funding to ONMS is key.
- Marine Spatial Planning and Climate Change: George Sedberry introduced the concept of Marine Spatial Planning (MSP). Mapping of the habitats and geographic structures are key elements in marine spatial planning. Mary Conley pointed out that increasing marine development pressure and management by multiple agencies has created the need for spatial planning. As defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), MSP is a tool or process of analyzing and allocating the spatial or temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process. <http://www.unesco-loc-marinesp.be/> Many jurisdictions and designations (essential fish habitat, artificial reefs and shipping routes) are already overlapping in the Southeast region. With marine spatial planning an integrated approach to the multiple uses is possible in a proactive and balanced manner. Members asked what role the Sanctuary Advisory Council may have in marine spatial planning within and around Gray's Reef National Marine Sanctuary. A discussion began on activities that need to be considered that could affect the sanctuary.

Offshore Renewable Energy Initiatives – Scott Harris gave a presentation on the feasibility and progress of alternative energies off the coast of South Carolina. Relating to the issue of marine spatial planning, areas of development are being proposed for wind energy. Students in Dr. Harris' masters program developed an evaluation of the wind fields off the southern North Carolina and northern South Carolina coasts. The findings of the evaluation show that wind power could account for about 2000 trillion BTUs, which equates to 67 gigawatts. Another conclusion is that with many jurisdictions overseeing the process of

renewable energy development offshore believe the regulatory process should be streamlined. Fisheries impact issues are the most critical to the promotion of this energy option. Pounding of tower structures is not being considered due to the hard rock base, drilling would be the more likely option. The fish would tend to move away during this process but would be expected to return to the drilling area later. The towers may provide artificial habitat after completion. Marine mammal and sea bird migrations are also of concern. Studies, however, by the Audubon Society don't show a significant impact to geese. The birds flying from Cape to Cape could be the most affected. Natural hazards are one of the biggest deterrents to offshore renewable energy projects from an insurance perspective. Hurricane impacts, due to the probability, are similar to towers located in the Midwest being affected by tornados. Earthquakes, lightning and excess wind speed from hurricanes are the biggest risks factors. Power line subterranean cables could minimize impact to wetlands. General Electric Corp. manufactures the turbines in South Carolina and Fluor Corp. is one of the largest construction companies worldwide; both would bring jobs to the region should this energy initiative move forward. Public perception is a huge factor in being able to establish offshore wind power. The towers are visible at 3 miles out, ranging 400 - 600 feet in height and are separated about ¼ mile apart. South Carolina imports 98% of its fuel with nuclear energy supplying their power. Should wind fields be built offshore South Carolina, however, the energy might be sent to North Carolina instead of decreasing the nuclear supply need. Public support is key and with negative ad campaigns, realistic and accurate education is needed. Collection of gas hydrates are maybe 15-30 years out on a commercial level. There is a concern that once gas hydrates are disturbed the pressure in the water column will cause the collapse of the continental shelf. Solar panel installation on homes may not be a reasonable energy alternative; a solar array would be space consuming and the cost of the individual installation is more challenging than these large companies funding the installation of wind towers. A solar initiative could increase jobs as well as wind, but it still falls to the individual home owner or business to front the cost of installation. There is a greater political push for wind power and biofuels for large scale use to meet increased energy needs and offset some of the other energy sources.

Marine Protected Areas – What are they? – George Sedberry gave a presentation on Marine Protected Areas (MPAs) and what there really are. The International Union for Conservation of Nature (IUCN <http://www.iucn.org/>) defines a MPA as any area of a marine environment that has been reserved for federal, state, territorial tribal, or local law regulations to provide lasting protection for part or all of the natural and cultural resources within. Less than 1% of the ocean is within a MPA. The same type regulations apply to national marine sanctuaries as wildlife refuges, research reserves, ecological reserves, fisheries, and parks. There are different levels of protection. In the US, there are several primary classifications which are temporally and spatially designated. Using the NOAA classification, Gray's Reef is a natural heritage, uniform multiple-use, permanent and year-round MPA focused on the entire ecosystem and not specific species. A national system of MPAs has been established to define what an MPA is and what the regulations are (<http://mpa.gov/>).

Visitors Center Working Group – Dr. Sedberry explained that Gray's Reef is working on developing a concept for a center in downtown Savannah where the vast majority of tourists are focused. The site has some funds to conduct a marketing and feasibility study with an outside consultant, but he would like to establish a working group for direct local input.

Sanctuary Advisory Council Secretary Venetia Butler has been approached to chair this group, as this is an education and outreach effort. Clark Alexander revisited suggestions in the previous meeting to consider alternatives to “brick and mortar” development; however a destination center for local and tourist traffic is the idea behind this initiative. Public awareness is needed to help protect Gray’s Reef and tapping into the tourism industry within the Savannah area would help boost perception and knowledge. Stimulus money would ideally be the source of funding for the center, which would not be part of the federal base budget for the sanctuary. Dr. Alexander emphasized that outreach and education efforts done by existing staff should have more of an impact suggesting that some “outside of the box” thinking needs to be done as opposed to outsourcing this need to a working group. Ms. Butler pointed out that the SAC agreed at the last meeting to form a working group to help Gray’s Reef translate a vision for this center. Some concern was expressed by council members that a visitor center will simply represent an inaccessible area to the general public. The public may be less supportive of maintaining Gray’s Reef rather than more supportive if they cannot get there. Perhaps this visitor center could address multiple marine protected areas in the region to educate the public as to the benefit of the research and conservation, including places that *are* accessible to the public. George Sedberry pointed out that these are the kinds of issues that a working group could address and help formulate. He believes that, pooling additional expertise outside of the SAC and staff would be beneficial. Possible alliances and partnerships should also be considered (eg: Florida Keys Eco Discovery Center).

A motion was made to adjourn at 5:30 p.m., seconded and passed.