

**FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY**  
**Sanctuary Advisory Council Boundary Expansion Working Group**  
**Meeting Minutes**  
**March 8, 2018**

**Meeting Attendance Roster:**

Clint Moore	Oil and Gas Industry	Present
Shane Cantrell	Fishing – Commercial	Present
Natalie [Hall] Davis	Diving Operations	Present (webinar)
Jesse Cancelmo	Recreational Diving	Present (webinar)
Scott Hickman	Fishing - Recreational	Not Present
Buddy Guindon	Fishing - Commercial	Not Present
Adrienne Correa	Research	Not Present
Charles Tyer	NOAA OLE	Not Present
Randy Widaman	Diving Operations	Not Present
Jake Emmert	Conservation	Not Present

**Total member attendance:** 4 of 10 members (4 of 9 voting members)

**Others in attendance:**

Leslie Clift (Flower Garden Banks National Marine Sanctuary (FGBNMS)), G.P. Schmahl (FGBNMS), Emma Hickerson (FGBNMS), Bill Kiene (FGBNMS), Dan Dorfman (National Centers for Coastal Ocean Science (NCCOS); webinar), Randy Clark (NCCOS; webinar), Tom Bright (webinar), Anne Rutledge (webinar); Steve Gittings (NOAA; webinar)

**5:13 PM** – Meeting called to order by Clint Moore

Adoption of Agenda – No discussion, all in favor, motion approved.

Adoption of Minutes – Minutes were not completed due to the short duration between meetings, and will be approved at the next meeting.

**5:15 PM – Public comment**

No public comment.

### **5:16 PM NCCOS Presentation (Dan Dorfman)**

Dan Dorfman began by explaining to the Boundary Expansion Working Group (BEWG) the different parameters/filters. The initial study area was defined as all NAZ (no activity zones), buffered with 10 km (kilometer) circles around each NAZ. Horseshoe Bank was included in the study area, but has no NAZ.

Biological/ecological research included are over 500 ROV (remotely operated vehicle) dives and ~20,000 in-situ biological and ecological observations such as coral annotations, transect analyses, photo analyses, anomalous annotations, and grouper observations. Biological/ecological observations were set with the following thresholds:

Core Sensitivity Zones - 80%

ROV coral annotations - 90%

Annotations with high coral abundance - 100%

Photo analysis records with corals - 90%

Photo analysis with high abundance of corals - 100%

Transect analysis with corals - 90%

Transect analysis observations with high abundance - 100%

Ecological observations filtered for coral ecosystems - 100%

For human use: AIS (Automatic Identification System) was used for number of transits of vessels across the areas. Initially, time in location was used rather than number of transits. VMS (vessel monitoring system) was used to represent commercial fishing effort. Oil and gas (O&G) infrastructure included are known reserves, pipelines, and platforms. All three human uses (AIS, VMS, and O&G) were combined to create one human use distribution surface layer.

For the Optimized Solution – 90% of the observations (100% of the high abundance or annotations re: coral ecosystems were included) were included that met ecological goals (e.g., where certain species were observed), but avoid conflict, and minimize area. Clint asked how Dan defined high abundance.

For the Cumulative Significance – MARXAN ran the test 100 times, and the cumulative significance is how many times an individual area pops up in the optimized solution, and is then summarized. Dan reported he did not see much variability because the areas of interest are primarily located on the tops and sides of the banks. Ten percent of the study area came up in the cumulative significance, half of which was in the NAZ and the existing Sanctuary.

A map of known oil fields (not projected) around the banks in the study area was shown and discussed. Clint countered this map's known fields are currently 60% depleted.

Dan showed Sonnier Bank and Clint Moore questioned the hexagons on the western edge that contain a ridge with an area smaller than the non-ridge areas, both of which are encompassed in the 10-hectare hexagons. Clint asked about reducing the size of hexagons, possibly to 1 hectare. Dan replied it would be too many analysis units for the entire study area if the hexagons were reduced in area, and suggested it could be

conducted bank per bank. Clint said for Sonnier Bank on the western edge, the hexagons appear to contain more area than the biologically important areas.

Dan went through bank by bank to show the efficient solutions created by the MARXAN analysis. Steve Gittings commented the boundaries produced by MARXAN seem to run along the bank features, and verify biological data.

Sonnier Bank - The group gave Dan guidance to cut some of the corners off so that the boundary lines are more within the 150-250 m (meters) distance from the NAZ.

Alderdice Bank – Clint voiced concerns regarding the eastern side. The group decided to skip discussing the boundaries as NCCOS needs to use the NAZ shapefiles instead of the depth contours.

Parker Bank – a lot of Core Sensitivity Zone area is outside of the Alternative 3 and Clint Moore’s suggested “NAZ Plan Plus” (NPP) boundary lines. Tom Bright detailed his studies of Parker Bank in the 1970s and 1980s, and said he found consistent relationships between depth and community type. Clint referred to the side salt plays potentially around the NAZ area

Geyer Bank - Clint talked about the ironshore at 85 m that circles Geyer Bank which he observed during an FGBNMS ROV cruise. Below the 85m contour line, he remembers a significant drop in density of benthic marine life. Tom said the relationship could be because of stillstands (aka drowned reefs). Clint referred to the “updip extent of potential reservoirs” and how they abut the salt flank for optimal trapping. Clint was asked how deep the projected resources are that will be targeted in the region, and he replied 15,000-35,000 feet.

Bill Kiene asked Tom if he knew today the information available to us, would he have drawn the NAZ differently. Tom said he would have attempted to include some of the mesophotic communities. Tom’s charge was to identify the resources on the reefs and banks on the Outer Continental Shelf (OCS) so that they could make a determination to protect the resources from O&G development. They were asked to prioritize banks and prioritize communities. They identified the 85 m contour as a convenient marker for potential reef building communities (i.e., coral, algal nodules, rhodophytes).

The BEWG discussed oil and gas reserves around Parker Bank. Parker Bank is currently under lease and was not included in Alternative 2. Clint drew his NPP boundary lines to include the “embayment” outlined by the NAZ. Clint added Sonnier and Alderdice Banks are on top of salt domes, but he wants O&G access to be as close as possible to the NAZ at Parker. Clint noted he included non-NAZ area for Sonnier and Alderdice Banks, and asked for “give” at Parker. Emma asked if Clint wants to draw lines from the 1970s perspective and ignore all data collected by FGBNMS in the last decade. Clint said ecological significance is different than national significance, and questioned the one million PSBF (potentially sensitive biological features) as stated by James Sinclair, and that they cannot all be nationally significant.

Clint stated when banks from Alternative 3 are added, then the boundaries need to be as close to the NAZ as possible, and not the large rectangles in the DEIS maps.

Bill explained the colonization of the area in the potential compromise zone (near the NAZ) could be much slower than what we think. Instead of protecting just where the biology is now, a different approach would be to protect the habitat and the long term dynamics of the ecosystem.

Geyer Bank – Clint discussed redrawing “NAZ Plus Plan” to include no more than 150 m buffered boundary lines of the NAZ boundary, to meet BOEM NTL stand-off requirements from the NAZs. The group discussed the conflict of the shipping fairway currently located in the middle of this bank.

Elvers Bank – This bank also is located in the middle of a shipping fairway. Emma mentioned one of the unique things about Elvers Bank is that a new species of black coral was identified here, and the southern border has high densities of glass sponges. Clint responded he thinks there are likely new species everywhere as long as we keep looking in these areas.

The next BEWG meeting was scheduled for March 21, 2018.

**8:05 PM** Shane motioned to adjourn, Natalie seconded. Meeting adjourned.