Meeting Attendance Roster:

<table>
<thead>
<tr>
<th>Name</th>
<th>Industry/Role</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clint Moore</td>
<td>Oil and Gas Industry</td>
<td>Present</td>
</tr>
<tr>
<td>Shane Cantrell</td>
<td>Fishing – Commercial</td>
<td>Present</td>
</tr>
<tr>
<td>Natalie [Hall] Davis</td>
<td>Diving Operations</td>
<td>Present (webinar)</td>
</tr>
<tr>
<td>Jesse Cancelmo</td>
<td>Recreational Diving</td>
<td>Present</td>
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<tr>
<td>Scott Hickman</td>
<td>Fishing - Recreational</td>
<td>Present</td>
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<tr>
<td>Buddy Guindon</td>
<td>Fishing - Commercial</td>
<td>Present</td>
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<tr>
<td>Adrienne Correa</td>
<td>Research</td>
<td>Present (webinar)</td>
</tr>
<tr>
<td>Charles Tyer</td>
<td>NOAA OLE</td>
<td>Not Present</td>
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<tr>
<td>Randy Widaman</td>
<td>Diving Operations</td>
<td>Not Present</td>
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<tr>
<td>Jake Emmert</td>
<td>Conservation</td>
<td>Present</td>
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Total member attendance: 8 of 10 members (8 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), Morgan Kilgour (Gulf of Mexico Fishery Management Council (GMFMC); webinar), Matthew Roache (NOAA OLE), Heather Coleman (NOAA), James Henderson, Travis Bubenik (National Public Radio; webinar), Steve Gittings (NOAA; webinar)

5:20 PM – Meeting called to order by Clint Moore
Adoption of Agenda – No discussion, all in favor, motion approved.

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

5:23 PM – Public comment
James Henderson – Galveston resident, supports GMFMC’s recommendations regarding expansion to NAZ boundaries and fishing regulations.

5:20 PM NCCOs Presentation (Dan Dorfman)
Dan Dorfman summarized the most recent BEWG meetings with regards to the NCCOS analysis:
- BEWG chose to exclude 29 Fathom Bank, Claypile, Coffee Lump, and Applebaum from the study area.
- The NCCOS method for representing biological information was changed to reflect the actual number of coral colonies for each observation.
- NCCOS set representation goals for biological observations at 90%. Certain biological observations had high abundance, and NCCOS set representation goals for these high abundance observations at 100%.
- NCCOS set Core Sensitivity Zone at 80%.
- NCCOS changed the methods for AIS (Automatic Identification System) data from using the time spent in an area by a vessel to instead, using trip report identifications.
- Using biological/ecological representation goals and desire to avoid conflict with human use and minimize space, MARXAN came up with Version 4 of an Efficient Solution.
- Approximately 90 polygons, of which 18 significant areas (i.e., polygons), arose from the analysis.
- A GIS (Geographic Information Systems) GIS tool was used to smooth the edges (i.e., reduce vertices), using a 500 meter (m) tolerance, for the boundaries of the 18 polygons that resulted from the MARXAN model of the FGBNMS Decision Support System. In a second scenario, Dan also manually drew squared-off edges around the 18 polygons.

Clint Moore visited the FGBNMS office and with Marissa Nuttall’s assistance, developed NAZ (no activity zone) Plan Plus (NPP) maps for Elvers and Parker Banks, now that high resolution baythmetry was obtained and processed recently by FGBNMS. Clint explained the difference between BOEM’s (Bureau of Ocean Energy Management) NAZ and the NAZ as it will be used in the future when BOEM updates their maps with newer bathymetry. Although shapefiles are created by BOEM for the NAZ, BOEM’s NTL (Notice to Lessees) does not reference a shapefile, but rather a depth contour line (typically 85m).

Adrienne Correa verified the versions of maps currently being considered by the BEWG (Boundary Expansion Working Group): 1) Alternatives in the DEIS (Draft Environmental Impact Statement); 2) maps being created by NCCOS analysis; and 3) maps created by Clint. Clint referenced the FGBNMS invitation for any Council member to come into the FGBNMS office and create his/her stakeholder’s map recommendation. Clint detailed his efforts of when he visited the FGBNMS office to create maps to offer as a layer in the NCCOS process.
NCCOS simplified the hexagons by reducing the vertices and smoothing the polygon boundaries (layer titled simple_3_500m). Ran the test 100 times and set threshold so that kept areas that were in 85% of the test times (layer titled sum_85_dis). Version 4 does not include a 500 ft (150 m) buffer from the NAZ (BOEM regulation).

The group discussed Sonnier Bank as an example of a bank that has multiple, “patchy” NAZ areas, and the need to draw a single polygon around them. Regulations allow for oil and gas development within Sanctuary boundaries, but outside of NAZ. Clint proposed it would be near impossible to drill within Sanctuary boundaries because it would be impossible to lease due to the Executive Order (renewed in 2008) that bans all leasing in national marine sanctuaries, and the odds of it being updated and extended in a future presidency is close to 100% that it would not happen. G.P. countered the Executive Order updated in 2017 reaffirmed the previous executive orders where lease withdrawals only apply to sanctuaries that were in existence as of July 2008. Therefore, any new or expanded sanctuary would not be subject to lease withdrawal at this time. Scott asked about leases in Alternative 3, and Clint replied leases change rapidly.

Buddy Guindon verified with G.P. the Sanctuary’s proposal to maintain current fishing regulations for any expanded areas. G.P. added FGBNMS will continue consultation with GMFMC, which recommended allowing anchoring inside the Sanctuary, but outside the NAZ. Morgan Kilgour referenced the GMFMC letter regarding working with the Sanctuary to establish fishing regulations once the boundaries have been established. Shane Cantrell commented not being able to anchor would essentially strip fishers of all access. Buddy added that not having access to these banks would crush the commercial fishers, except for the red snapper catch.

Adrienne asked if all other stakeholders, besides fishing and oil gas industries, are satisfied with the boundaries presented in Alternative 3. Shane replied all other stakeholders in a sanctuary expansion would gain access, have unlimited access, and/or remain status quo. Scott Hickman mentioned the free diving spear fishers who want to maintain access to fishing at Geyer Bank.

Clint commented that outside of the coral caps (i.e., East and West Flower Garden Banks and Stetson Bank), current fishing regulations are an overkill. The proposed banks are not coral caps, and should have entirely different fishing regulations. G.P. gave the example of Sonnier Bank that is similar to Stetson Bank. Clint replied his original goal was to have only Geyer, Bright, and Sonnier Banks protected, as these banks have diving depths. All others are below diving depths. Clint reiterated fishers may want different fishing regulations for all expanded banks, except Sonnier with its coral cap peaks.

Jake Emmert said with the improvement of dive technology, and with the technical diving community growing, diving effort could shift dramatically in the coming years, and cautions against thinking the deeper banks will not be used by the diving communities.
Scott raised the issue of spearfishing, and suggested spear fishing is much “cleaner” type of fishing, with no by-catch or fish suffering barotrauma with catch and release. G.P. stated that spearfishing is a very effective way to eliminate specific targeted species in a short period of time.

Clint asked G.P. about changes in fishing regulations in FGBNMS since designation. G.P. responded the only addition to sanctuary regulations has been the prohibition on all anchoring. Original regulations allowed anchoring, even on the reef cap, but not on coral. In 2001, a new regulation prohibited anchoring in the Sanctuary. Steve Gittings, previous FGBNMS Superintendent, said the original preferred NOAA alternative during the Sanctuary’s designation had no prohibition on spearfishing. However, because of public comment and at the request of many people, the ban on spearfishing was added, based on the selectivity of choosing larger fish while spearfishing. He added it is really easy to deplete targeted species quickly and it delays the recovery of this species. Shane asked if there was any discussion on spearfishing using scuba versus non-scuba during designation. Steve did not recall any discussion on this topic. Jesse added in the 1990s, spearfishing was conducted almost solely on scuba. Jesse stated the Sanctuary should continue to not allow spearfishing on scuba, but he considers free diving spearfishing on the deeper banks for pelagic fish as not a threat. Emma Hickerson mentioned when reef fish aggregate to spawn, the fish will move off from the bottom to near the surface, which could then be targeted by non-SCUBA spearfishers. Buddy stated that he, Scott, and Shane are working with Dr. Will Heyman to find fish spawning aggregations, and support regulations to prevent all fishing at aggregation sites.

Natalie Davis commented if a resource is taken away from people, then it will add pressure to another area. She would like to see balanced and regulated activities on sanctuary expansion areas. She does not want to eliminate access for spearfishers to any new expanded areas. Shane questioned if free diving spearfishing could be allowed for only pelagic fish harvest. G.P. cautioned enforcement based on species would be difficult, but a potential solution would be to have gear restrictions (no scuba equipment on boat) and a seasonal closure for any spawning aggregations.

Geyer, Bright, and McGrail Banks are the 3 areas identified as currently being used for free diving spearfishing. Shane stated these banks support an annual abundance of wahoo and some tuna. Steve questioned if the banks are an important resource for these species and if so, then these banks may deserve protection. Buddy said the pelagic aggregations are feeding aggregations, not spawning.

Adrienne said every stakeholder group, in order to protect new areas, may have to concede a little. Clint said education/conservation/research won’t have any restrictions, but Adrienne and G.P. disagreed. Adrienne said the relative proportion of where access is being reduced is small. Shane and Clint disagreed. Shane said if fishing regulations were overly restrictive, he would have to oppose expansion. Shane added all other stakeholders except fishing and oil and gas would be gaining access if the sanctuary expanded. G.P. restated the Sanctuary is required to consult with GMFMC on fishing
regulations, and give GMFMC the opportunity to promulgate fishery regulations for the Sanctuary.

Clint clarified the oil and gas industry wants to be as close as possible to the NAZ, within a 5,000 ft band, in order to drill and drain oil and gas accumulations.

Clint suggested an exercise for Sonnier Bank, and asked who could not live with the proposed boundary under Alternative 3 (Clint, Shane, Scott), or Alternative 2 (Clint, Shane, Scott). Clint could not accept these boundaries because of new interpretation of the prospect of oil and gas on the banks’ flanks. Scott said there is a problem from a recreational standpoint, unless mooring buoys are provided on the banks. However, if no mooring buoys are installed, then the recreational fishery would want smaller areas.

G.P. stated he is concerned about the fact that no buffer zone is included in Clint’s proposal. Clint said two aspects why a 500 m buffer, as proposed by the 2007 SAC recommendation, is not acceptable now: 1) the oil and gas industry now sees the potential for problems with carrying out directional drilling in the deeper depths (where his industry purports the resources to be located); and 2) the GOOMEX study. Clint stated that relating to residue from cuttings and drilling fluids, the GOOMEX study found residue impacts from the drilling site out to 500 m, but now that technology has improved with regards to cuttings, the impact of residues has decreased. GOOMEX is based on the use of water based drilling fluids, but those fluids are not commonly used today. Therefore, he does not expect residues to be present 500 m away from the drilling site, and would only expect cuttings out to 50-100 m. In addition, BOEM already stipulates a 150 m buffer from a NAZ.

G.P. questioned the common use of synthetic drilling fluids, and as an example, said the Sanctuary received a development plan to review from W&T Offshore for HIA379, that is using water based drilling muds. Clint countered this site is drilling very shallow from an existing platform, but that most companies use synthetic muds, and anything deeper than 10,000 ft would be synthetic. G.P. believes the information in the GOOMEX study is still applicable in that strong residue signatures and materials (sand) are present in significant quantities beyond 100 m, and tapers off by 500 m, suggesting that areas within this range could be directly buried by drilling effluents. On the other hand, high toxicity of the residue was shown to be present only to 50 or 100 m away from the drilling site.

Clint said the oil and gas industry will not support a buffer zone width of 500 m. Instead, Clint suggested 150 m, because BOEM already stipulates this distance away from NAZ.

Bill asked about EPA and when/how its regulations would be involved. Clint responded BOEM is the superior regulator for the general permit. Tom Bright asked about zero discharge (barging). Clint responded barging is prohibitively expensive.

Scott said he will side with Clint’s recommendations on the boundary lines and buffer width, even though he does not always agree with Clint, so that some corals be
protected and an expansion of some sort will pass through the Trump administration. G.P. questioned how the BEWG recommendation will be presented to the full SAC, and said that it could be bank by bank, separated by boundary package and then regulatory package, or offer several alternatives for their consideration.

Shane asked the group to consider adopting the boundaries from the NCCOS output with the GIS tool buffered boundary lines. G.P. pointed out that if done so on Sonnier, the NAZ on the southwest side would be left out of the sanctuary boundaries. The group discussed the patchiness of NAZ on Sonnier Bank and how this would affect fishing industry due to regulations on anchoring. Buddy stated if current fishing regulations are adopted for Sanctuary expansion, none of the options for boundaries discussed thus far would be acceptable. G.P. said FGBNMS will continue consultation with GMFMC, and if their recommendations are adopted, anchoring by fishing boats would be prohibited only in the NAZs. He added the regulations will most likely not be able to be developed using only depth contours (as used to define NAZ boundaries).

Steve asked if Clint’s NPP maps have a 150 m buffer built in around each bank. Jake added he would like Clint’s NPP maps to include a buffer. Clint responded most banks do, but he wants to adjust a few of the maps to include BOEM’s 150 m buffer. He added because of vertices and the desire to produce straight boundary lines (instead of curved), some banks might have buffer widths narrower than 150 m, and some might have buffer widths greater than 150 m. Clint asked if 50-200 m would meet stakeholders’ needs. Buddy said he deferred to oil and gas industry. Jake stated he prefers 250 m. Clint replied he would adjust the boundaries on his NPP maps to include a buffer of 100-200 m away from NAZ.

The group discussed the next step in this process is for NCCOS to create Version 5 for all banks and include a buffer zone of 100-200 m away from NAZ, in an effort to create boundaries as close as possible to 150 m (BOEM’s regulation on oil and gas activities). The BEWG will review these next set of maps for embayments or too large areas of mud bottom. Clint added the products the BEWG will move forward will likely be: 1 map for each bank, regulations, and potential subsets of unique regulations where applicable.

The group discussed the scenario of accepting Clint’s NPP maps’ boundary lines for one bank and accepting NCCOS maps’ boundary lines for another bank, and how this scenario would not be as strong legally. Scott and Adrienne noted all stakeholders will need to compromise. Clint countered his maps are what his industry will support, and his industry has already compromised from their “no expansion” stance after the DEIS release. Buddy added continued compromise is still needed to move the expansion forward.

A doodle poll will be sent out for the next meeting date in March.

8:06 PM Shane motioned to adjourn, Buddy seconded. Meeting adjourned.