FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY Sanctuary Advisory Council Boundary Expansion Working Group Meeting Minutes April 27, 2017

Meeting Attendance Roster:

Clint Moore	Oil and Gas Industry	Present
Shane Cantrell	Fishing – Commercial	Present
Natalie Hall	Diving Operations	Not Present
Jesse Cancelmo	Recreational Diving	Present
Scott Hickman	Fishing - Recreational	Present
Buddy Guindon	Fishing - Commercial	Present
Adrienne Simoes-Correa	Research	Not Present
Jacqui Stanley	Education	Not Present
Charles Tyer	NOAA OLE	Not Present
Randy Widaman	Diving Operations	Present
Jake Emmert	Conservation	Not Present

Total member attendance: 6 of 11 members (6 of 10 voting members)

Others in attendance:

G.P. Schmahl, Leslie Clift, Bill Kiene, Emma Hickerson, Dr. Frank Schwing (NOAA Galveston Lab Director)

5:20 PM – Meeting called to order by Clint Moore.

Adoption of Agenda – motion from Jesse Cancelmo, second from Randy Widaman, no discussion, all in favor, motion approved.

Adoption of Minutes – Buddy Guindon moved to adopt minutes, second from Jesse Cancelmo, no discussion, all in favor, motion approved.

5:22 PM – Public Comment

No public comment.

5:27PM – Regulatory Framework Review

Clint Moore reviewed the GOOMEX study (Gulf of Mexico Offshore Operations Monitoring Experiment, Final Report 1995) and briefed the group on the synthetic muds (i.e. drilling fluids) now being used which are different than the water-based muds being produced during the GOOMEX study. The synthetic muds are more of a "closed system" without a lot of loss overboard. In the GOOMEX study, muds were lost overboard and it was the resulting plume that was studied. The assumption was the plume, based on the muds used during the study, would extend 1,000 meters (m).

G.P. shared the brief history of the 2007 BEWG that looked at the core biological zones, reviewed different buffer widths, and chose the compromised width of 500 m (meters). Emma added her research on sea turtles, showing the movement of these animals, was also a driver in the discussion of boundary zones during the 2007 BEWG.

Clint informed the group about his discussion with Mark Belter at BOEM (Bureau of Ocean Energy Management), who said BOEM's revision of the NAZs (no activity zones) would take at least two years to complete. Emma added BOEM is waiting on multibeam bathymetry in order to perform their revision.

Clint continued the review of GOOMEX study and the subject of residues. From the study: "In general, results from the GOOMEX study indicate that effects were limited to 100 m from platforms," but residues were observed out to 1,000 m. Clint asked if Paul Montagna could be asked to the May SAC (Sanctuary Advisory Council) meeting and present this information to the Council. G.P. noted Paul's research focused on benthic organisms, and other researchers studied other parameters including fish and water quality. G.P. verified that 100 m is where the biggest impacts are seen, but other data in the report include effects out to 3,000 m.

Jesse asked if the oil and gas industry is now challenging the buffer width. Clint responded yes, because more and more wells are using synthetic muds, which are more of a "closed system". Not as much cuttings come out because they are baked (not a silty clay mixture). This results in a narrower plume width.

Clint shared his industry's request is for tighter boundaries for all banks in the DEIS (Draft Environmental Impact Statement), wanting a reduction in the buffer width from 500 m to 100 m. Emma asked if zero discharge of baked cuttings could occur and Clint responded affirmatively, it is technically possible but will also have an increased financial burden, which he will research more on those exact costs.

G.P. added the study found no transference of toxic materials from the drilling operation up the food chain to fish. However, the impact to benthic community was significant. Samples from the sediments beneath HI389 had 100% mortality on sea urchin egg assay tests, exhibiting toxicity primarily from heavy metals (lead, mercury, and cadmium) from the drilling operation. Scott asked if BOEM will be reviewing plume widths. Clint said the NAZ revision is higher priority. Emma mentioned NOAA's preferred alternative, Alternative 3, sometimes drew in the boundaries around proposed banks tighter than 500 m. Jesse asked if the "extra" 500 m of the proposed 1,000 m boundary buffers is really going to be that much of an impact to the oil and gas industry. Clint said with deeper drills, the financial cost rises exponentially when having to drill directionally/laterally. Clint said in the future, there will be a depth limit where the drilling cannot be moved mechanically, and the extra 1,200 feet is critical. The oil and gas industry wants the buffers as close as possible.

Jesse asked if there is a study that found the synthetic muds have a narrower plume width. Clint responded he did not know of a study, and relies on the experience and information from managers in the oil and gas industry.

The buffer is measured from the edge of the "core biological zone".

The group clarified Alternative 2 is the exact recommendation, including boundaries, from the 2007 BEWG. Alternative 3 has the boundaries that are more rectangular. Buddy said industry has reacted to a government recommendation that had morphed into a much larger product from what it had been originally in 2007.

G.P. requested an action from the BEWG.

Clint referred to his hand-out titled, NPDES (National Pollutant Discharge Elimination System) Discharge Restrictions. Reading from this guidance from EPA (Environmental Protection Agency), Clint reviewed where and how the oil and gas industry can discharge "produced" water (salt water), which is typically higher in salt content than the surrounding ocean waters. Salt water is processed on the rig to remove hydrocarbon content.

Clint pointed out his industry's real concern is the current regulatory regime is too severe to be transferred to the proposed banks. NPDES discharge restrictions specifically mentions FGBNMS and no discharge is allowed in national marine sanctuaries (NMS) unless exception applies. Exceptions to no discharges are granted if all of the following are met:

- Platform was installed prior to NMS designation
- Platform is located outside the BOEM-defined NAZ
- All materials are discharged through a shunt pipe that terminates within 10 m of the sea floor
- Sanitary waste is treated with an approved Marine Sanitation Device that complies with the Clean Water Act
- The materials discharged are associated with and incidental to oil and gas exploration, development, or production and originate from wells located within the boundaries of the NMS and outside the NAZ

Jesse asked which specific metrics are too severe. Clint responded the oil and gas industry wants to be able discharge in national marine sanctuaries. Shane asked if the existing platforms will be grandfathered in (3-4 platforms in Alternative 3). Clint added his industry is more worried about future exploration and drilling operations.

Scott asked if Clint's industry would be concerned with regulations if Alternative 2 was adopted. Shane said the BEWG (Boundary Expansion Working Group) must work through these regulatory issues, but also the boundary issues. Scott asked Clint if he was looking for a recommendation from the BEWG on NPDES discharge restrictions, and Clint responded yes. G.P. noted the 2012 Management Plan referred to applying existing regulations to any proposed new sanctuary areas, but could include a site by site review, as needed.

G.P. said FGBNMS is in consultation with EPA and has discussed the following options:

- 1. The wording of the NPDES general permit could be revised to eliminate or modify the restrictions applying to FGBNMS
- 2. Oil and gas companies could apply for an individual permit

G.P. also added produced water is not just salt, but also contains very low concentrations of highly toxic materials such as heavy metals. Scott asked if a study had been conducted on produced waters and how it effects the ecosystem. G.P. said the GOOMEX study includes a discussion on produced water, and its authors hypothesized the assays that showed toxic results were emanating from the produced waters and not the drilling fluids.

Clint summarized his industry's concerns:

- 1. Allow the lease of lands the oil and gas industry has historically leased.
- 2. Discharges: drilling fluids and produced water
- 3. Geophysical. Streamers are currently allowed. Clint said the industry is moving away from streamers to nodal technology, in which materials are placed on the bottom floor in a grid numbering 4,000, for a period of 24-48 hours. Emma asked how the nodes are deployed and recovered. Clint said the nodes are connected by electronic cable, and he is researching how large the nodes are and the diameter of the cable. G.P. said there is an exemption for the oil and gas industry to place materials on the sea floor within the NMS, but not in areas where corals or other biologically important species are located.

G.P. asked when and how the BEWG would arrive at an action item.

Jesse gave an example outline of how the BEWG could break down the action items for consideration:

- number of banks
- boundaries
- width of buffers
- regulations
- discharges

- spearfishing
- fishing concerns

G.P. mentioned NOAA is considering adopting the NAZ as no anchor/bottom tending gear zones, as recommended by GMFMC (Gulf of Mexico Fishery Management Council), but the current configuations are not enforceable because they are based on depth contours. Shane said NCCOS (National Centers for Coastal Ocean Science) can help BEWG draw boundaries. However, the fishing industry still will have concerns.

Jesse noted concerns from oil and gas industry, fishing industry, and the spear fishing community have been receiving focus, yet other stakeholders (diving, etc.) have an interest too. Scott said some messages are sensationalized. G.P. countered some messages were crafted with careful consideration.

G.P. reminded the group of the request from NMFS for an exemption for pelagic longliners. Jesse remarked on that pelagic long lines are held up by floats, the differences between pelagic long lines vs. bottom long lines, and what happens when a pelagic fish gets caught/hooked on a pelagic longline, swims down, and becomes entangled on the reef. Buddy added sharks or storms can cause lines to become torn.

Section 5.3.4.4.1 from the DEIS addressing Commercial Fishing

Scott discussed the impact of commercial fishing in the Gulf of Mexico, and more specifically around the banks in the preferred alternative, and asked Buddy to share his perspective. Buddy explained when an oil and gas platform is removed or left in place, then fishers lose more areas to fish the multi-species complexes. He said more people will be fishing in the future, but with less habitat to do so. More than 1,000 boats began fishing in the Gulf in the 1980s and 1990s. Due to overcapitalization, the fishery shrank. The fishery has recently been growing exponentially in the last 15 years. Thirty percent of the Gulf of Mexico's annual limit for the grouper/tilefish industry is harvested by 3 boats, landing in the western Gulf of Mexico. Clint asked if there are any banks in Alternative 3 that are not used by the fishing industry. Buddy responded only one bank is not fished, which is McGrail Bank which has a coral HAPC with regulations against bottom-tending gear.

Shane added the NCCOS exercise will easily flush out historical fishing grounds and how they relate to boundaries. Clint asked if there are alternatives for fishing areas other than the banks, such as the Rigs to Reefs platforms. Buddy and Shane responded fishers look for a place to anchor. Clint asked if anchor areas would make sense, outside the NAZ. The fishing seats responded yes, and discussion ensued regarding the GMFMC recommendations. The Rigs to Reefs program is not robust, with enough rigs to provide enough habitat for fishers to fish.

Clint mentioned the level of regulation the sanctuary would impose will impact the fishing industry.

Shane and Scott noted a permit program is definitely needed for the proposed banks. Clint asked if a visitation permit program is integral to any banks included in the expansion. Buddy responded yes and that it is important for management to know which user groups are accessing the sanctuary.

Buddy said although the DEIS does not look as though it would be affecting that much of the Gulf of Mexico, it will. He gave the example that if the interstate highways in the U.S. were closed, the closed areas would look small compared to the total land area, but the impact would be significant.

Scott mentioned the pelagic spear fishing community is a new sport, and continues to grow. Part of the education program would inform fishers on the regulations, including the illegal practice of using CDs to attract pelagic sportfish. G.P. cautioned against fishers targeting the harvest from an aggregation of any fish, including wahoo, which does not have any bag or size limits.

Clint shared Brent Greenfield's information on the economic impact to the oil and gas industry. From the report, XX, Clint shared two tables titled "Estimated historical and projected employment associated with the Gulf of Mexico oil and natural gas industry operations summary table" and from the Quest study, XX, "Estimated historical and projected capital and operational spending, GDP impacts, and employment supported by the offshore Gulf of Mexico oil and natural gas industry". Jesse pointed out that these numbers were for the entire Gulf of Mexico and asked if Clint had metrics on the impacts to the oil and gas industry from the proposed sanctuary expansion.

Section 4.5.5 from the DEIS addressing Passive Economic Use

Clint read the second paragraph in this DEIS section. Clint questioned the last sentence in this paragraph, "This was compared to the \$15 million estimated for the costs of implementing the boundary expansion for the same five-year period in the 2012 FGBNMS management plan." G.P. said he would need to research the information used for the data included in this sentence. Clint shared his industry colleague's criticism of this "willingness to pay" study which said the data was "basically 'cherry picked'". G.P. added there is broad support in the U.S. for conservation, and that if you try to put a value on it, it is high. G.P. said he believes it is a valid, peer-reviewed study. Jesse mentioned the author should have a recourse, and Clint's colleague's findings should be supplied to the study's author, Stephanie Semanski.

Next date for BEWG is May 11th.

8:02 Jesse motioned to adjourn, Randy seconded. Meeting adjourned.