



July 2nd, 2020

George P. Schmahl, Sanctuary Superintendent
Flower Garden Banks NMS
4700 Avenue U, Building 216
Galveston, TX 77551

Re: Comments on Proposed Rule for Expansion of Flower Garden Banks National Marine Sanctuary (NOAA-NOS-2019-033)

Dear Superintendent Schmahl,

Thank you for your work to protect the beautiful Flower Garden Banks National Marine Sanctuary, home to some of the healthiest corals in the world¹. We represent Texans across the state in saying these 10,000-year-old salt domes, 21 species of coral, and 300 species of fish deserve our protection². This is a special place, and as it lies off our coast, we would like to submit official comments calling for the largest possible expansion to the sanctuary.

Proposed Boundaries in the Revised Preferred Alternative

Facing the threats of climate change and ocean acidification, the Flower Garden Banks National Marine Sanctuary needs to be as large as possible. The revised preferred alternative, at 160 square miles, significantly shrinks the size and scope of the expansion from the previous proposals. Of the 8,491 Americans who submitted comments on the 2016 draft EIS, 6,096 supported expansion, with 75% advocating for the 935 square mile Alternative 5.³ The staff's preferred alternative, which took into account other interests in the Gulf region, was the 383 square mile Alternative 3.⁴ At a time when coral around the globe is increasingly at risk, we must choose the largest expansion possible. With larger alternatives available, the revised boundaries are not acceptable.

¹ Jean-Michel Cousteau: Ocean Adventures. Flower Garden Banks National Marine Sanctuary," PBS, 13 September 2006, available at: <https://www.pbs.org/kqed/oceanadventures/episodes/treasures/guide/flower-garden.html>

² "Proposed Rule For Sanctuary Expansion," National Ocean Service, NOAA, and Department of Commerce, Video at 1:08, 23 April 2018, available at: <https://flowergarden.noaa.gov/management/expansionnpr.html>

³ Reich, Chris and Don Hickey, "Coral Coring in Flower Garden Banks National Marine Sanctuary-- a Collaborative Effort," *Sound Waves: Coastal and Marine Research News from Across the USGS*, USGS, July 2005, available at: <https://archive.usgs.gov/archive/sites/soundwaves.usgs.gov/2005/07/index.html>

⁴ "Flower Garden Banks," *Bureau of Energy Management*, Department of the Interior, n.d., available at: <https://www.boem.gov/environmental-studies/flower-garden-banks>

⁵ "Proposed Sanctuary Expansion" National Ocean Service, NOAA, and Department of Commerce, available at: <https://flowergarden.noaa.gov/management/expansiondeis.html>

⁶ "Proposed Sanctuary Expansion" National Ocean Service, NOAA, and Department of Commerce, available at: <https://flowergarden.noaa.gov/management/expansiondeis.html>

The difference between the proposals is not just the number of square miles protected. The revised boundaries also exclude sections of habitat vital to the health of the ecosystem. Alternative 3 carefully covered regions around the banks with high coral density and created regions of connectivity critical for maintaining the vibrancy of the ecosystem.⁵ In the revised boundaries these areas are no longer protected. Coral reefs rely on interconnectivity between disjointed parts in order to facilitate migration and the flow of materials, and without these channels and valleys, coral are vulnerable.⁶ This is especially concerning because NOAA has noted the ecological importance of protecting this network in order to enhance the overall health of the Gulf.⁷ The revised alternative ignores this science, leaving the ecosystem vulnerable to the threats of climate chaos.

Pelagic Longline and Spearfishing Exemption Requests

To fully ensure that the sanctuary provides relief to these ecosystems under the threat of climate change, the ban on pelagic longline and spearfishing that exists in the current sanctuary needs to be applied to all future expansions. The prohibition of fishing increases the resilience of the ecosystem, helps support a healthy fishery outside the sanctuaries boundaries, and maintains consistent regulation across the area. NOAA's research has shown that targeted fishing techniques "have detrimental impacts on snapper, grouper, mackerel, and jack populations;" arguing against allowing fishing in the sanctuary expansion because it would negatively impact such a sensitive ecosystem⁸.

In addition, these two forms of fishing have specific negative impacts. Pelagic longline fishing, meant to target species like swordfish and yellowfin tuna, can accidentally catch or injure non-targeted species including endangered fish, Loggerhead, and Leatherback sea turtles⁹. In the case of spearfishing, a study done by NOAA in the Flower Garden Banks, shows that spearfishing can target larger and more virile fish, leading to overfishing and a loss of reproductive capacity in fish populations. Fishers also target predatory fish, which are critical in maintaining a balanced and healthy ecosystem.¹⁰

As a final note, it is also stated in the National Marine Sanctuary Act that "alterations to the terms of designation require the sanctuary to go through the same procedures as site designation, including the preparation of an EIS, regardless of the significance of the impacts of

⁵ "Flower Garden Banks NMS Map" National Centers for Environmental Information, National Oceanic and Atmospheric Administration, available at: <https://www.ncei.noaa.gov/maps/fgb/mapsFGB.htm>

⁶ Paris-Limouzy, Claire B., "Reef Connectivity/Larval Dispersal" *Encyclopedia of modern coral reefs: structure, form and process* (2011), 881-889.

⁷ Office of National Marine Sanctuaries and National Oceanic and Atmospheric Administration, "Draft Environmental Impact Statement: Sanctuary Expansion" vol 1 (2016), page 1-5, available at: <https://nmsflowergarden.blob.core.windows.net/flowergarden-prod/media/archive/doc/fgbnmsexpansiondeis.pdfhttps://nmsflowergarden.blob.core.windows.net/flowergarden-prod/media/archive/doc/fgbnmsexpansiondeis.pdf>

⁸ Fishing Impacts: Flower Garden Banks," National Ocean Service, NOAA, and Department of Commerce, n.d., available at: <https://sanctuaries.noaa.gov/science/sentinel-site-program/flower-garden-banks/fishing-impacts.html>

⁹ "Pelagic Longline Bycatch Reduction" *Deepwater Horizon Oil Spill Natural Resource Damage Assessment*. NOAA, Spring 2015, available at: https://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/FACTSHEET_project_pll.pdf

¹⁰ "Fishing Gear: Pelagic Longlines." National Ocean Service, NOAA, and Department of Commerce, n.d., 9 May 2019, available at: <https://www.fisheries.noaa.gov/national/bycatch/fishing-gear-pelagic-longlines>.

¹⁰ "Biological Considerations of the Effects of Spearfishing." *Flower Garden Banks National Marine Sanctuary*, Office of National Marine Sanctuaries, National Oceanic and Atmospheric Administration, available at: https://nmsflowergarden.blob.core.windows.net/flowergarden-prod/media/archive/document_library/mgmtdocs/spearfishingresearch.pdf.

the alteration". Since exempting pelagic longline fishing and spearfishing was not considered in the original EIS, a new one must be made before this proposal can be considered.¹¹

Summary

This expansion comes at a critical time. As the world continues to pump pollution into the atmosphere, heating and acidifying our oceans, coral ecosystems are under attack.¹² Without action, we will continue to see these vibrant ecosystems decimated and destroyed.¹³ Just four years following a severe international coral bleaching event with approximately 36% of the coral on earth being affected,¹⁴ we need to act now to create safe spaces where coral can thrive. Scientists recommend eliminating or minimizing stressors outside of climate change to mitigate the harmful effects of increased carbon in the atmosphere, which means creating protected zones like National Marine Sanctuaries.

We are lucky here in Texas because the coral ecosystems in our Gulf are thriving with 80% coral cover¹⁵. It is apparent that these banks are a treasure and should be afforded all possible protection. Let's take this opportunity and protect these banks; future generations of Texans, marveling at the beauty and intelligence of the manta ray, will thank us for protecting these spaces, and thank the ecosystems themselves, for helping to protect us from climate change.

Sincerely,

Anna Farrell-Sherman, Clean Water Associate
Maya Clausen, Clean Water Intern
Environment Texas Research and Policy Center

Kelsey Lamp, Oceans Advocate
Maya Sze, Oceans Intern
Environment America
Environment America Research and Policy Center

¹¹ "Flower Garden Banks National Marine Sanctuary Expansion Draft Environmental Impact Statement." *Office of National Marine Sanctuaries*, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, 2016, pg 36.

¹²Welle, Paul D., et al. "Estimating the Effect of Multiple Environmental Stressors on Coral Bleaching and Mortality." *PLoS ONE*, vol. 12, no. 5, May 2017, available at: *EBSCOhost*, doi:10.1371/journal.pone.0175018.

¹³Magris, Rafael A., et al. "Conservation Planning for Coral Reefs Accounting for Climate Warming Disturbances." *PLoS ONE*, vol. 10, no. 10, November 2015, available at: *EBSCOhost*, doi:10.1371/journal.pone.0140828.

¹⁴Raj, K.Diraviya, et al. "Climate Change-Induced Coral Bleaching in Malvan Marine Sanctuary, Maharashtra, India." *Current Science (00113891)*, vol. 114, no. 2, January 2018, available at: *EBSCOhost*, doi:10.18520/cs/v114/i02/384-387.

¹⁵Reich, Chris and Don Hickey, "Coral Coring in Flower Garden Banks National Marine Sanctuary-- a Collaborative Effort," *Sound Waves: Coastal and Marine Research News from Across the USGS*, USGS, July 2005, available at: <https://archive.usgs.gov/archive/sites/soundwaves.usgs.gov/2005/07/index.html>