Protecting Fish Habitat in the Gulf of Mexico

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Introduction

Oil spills, antiquated fishing methods, and unregulated anchorage of large ships have damaged the Gulf of Mexico's aquatic ecosystem. The United States, through the National Oceanic and Atmospheric Administration (NOAA), has implemented various methods of protecting and preserving the Gulf's marine life. Two of these methods came to the public spotlight in 2020: Habitat Areas of Particular Concern (HAPCs) and Flower Garden Banks National Marine Sanctuary. Both are managed and regulated by NOAA, and both serve similar conservation purposes. However, they are designated under different legislation. HAPCs are created under the authority vested in NOAA by the Magnuson-Stevens Fishery Conservation Act (Magnuson-Stevens Act), whereas Flower Garden Banks was created under the National Marine Sanctuaries Act.

Habitat Areas of Particular Concern

The Magnuson-Stevens Act established eight regional fishery management councils tasked with creating a fishery management plan (FMP) for each fishery within their region. Part of an FMP must consider essential fish habitats, defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."¹ Further, councils must identify areas of essential fish habitats, called HAPCs, they found provided an important ecological function, were sensitive to human-induced environmental degradation, were at risk due to development activities, or were a rare habitat type. HAPCs have their own set of protective rules consisting of fishing equipment restrictions, time/area closures (closing an area to all fishing or specific types of fishing either permanently or for a set period), and harvest (catch) limits.²

On November 16, 2020, the Gulf of Mexico Fishery Management Council (the Council) amended its Coral and Coral Reefs of the Gulf of Mexico FMP to include 13 new HAPCs.³ In the amendment, the Council listed several restrictions applicable to all HAPCs in the fishery. Deployment of bottom longlines, bottom trawls, buoy gear, dredge, pot, or traps within the HAPCs was prohibited. Anchoring of fishing vessels within the HAPCs was also prohibited. These year-round restrictions were implemented to protect the corals within the HAPCs from pollution and damage.



The new fishing regulations for the proposed HAPCs include exceptions to mitigate their economic impact. The amendment allowed for vessels with Gulf Royal Red Shrimp endorsements to continue fishing operations within an HAPC off the southernmost tip of Louisiana. Royal red shrimp fishermen have historically used a method of dragging large nets through the water as they travel, while keeping the nets off the bottom, in order to harvest shrimp. Recognizing that this method of harvesting shrimp is impossible if shrimpers were required to keep the nets out of the water, the Council made an exception for this fishing practice in order to preserve the shrimp industry.⁴ This is significant because the revenue produced in the Gulf by royal red shrimp sales was \$348 million in 2015 alone.⁵

The fishing regulations also included an exception that allowed for bottom longline fishing in a HAPC off the western coast of central Florida. This is due to the fact that, according to NOAA, this type of fishing has been used for over a decade in the area without causing any significant harm to the now protected environment. Notably, fishing restrictions were lifted from eight HAPCs by the new rule. The restrictions were deemed unnecessary in those areas due to a lack of known fishing activity there, as well as the fact that the areas are located in exceptionally deep water (greater than 984 feet in depth).⁶

Opposition to HAPCs

Despite the important role HAPCs play in protecting marine ecosystems, NOAA has faced significant resistance in implementing them. During the public comment phase of the Gulf of Mexico Fishery Management Council's amendment to the Coral and Coral Reefs of the Gulf of Mexico FMP, commenters expressed concern regarding the ecological and economic impact the new HAPCs would have on the now protected areas. One concerned commenter wrote that restrictions on bottom longline gear would, "cause great economic harm to small family grouper fishing businesses, local fish house producers, and the local fishing communities."7 Two other commenters expressed concern about the impact restrictions would have on fishing for species such as tilefish and deep-water grouper, which occurs over sand and mud bottoms. However, of the 12,055 comments submitted regarding the amendment, 12,035 supported it without recommendations. Only five comments opposed the amendment. Eight comments were in support of the amendment but stated that it did not do enough to protect deep-sea coral.

Opposition and concerns regarding HAPCs do not always stop at the conclusion of the public comment phase, however. NOAA and regional councils have faced legal challenges in other regions regarding the designation of HAPCs. In the 2003 case *Hadaja, Inc. v. Evans*, a fisher brought suit alleging that newly enacted regulations under the Tilefish Fishery Management Plan violated the Magnuson-Stevens Act.⁸ The plan, drafted by the Mid-Atlantic Fishery Management Council, sought to protect the local Tilefish HAPC by establishing a permit-based limited access scheme to the area and prohibiting trawling within the HAPC. The fisher claimed that the permitting rule violated the Magnuson-Stevens Act requirement that optimum yield be met and that the best scientific information be used. The court considered whether the plan prevented overfishing while achieving a sustainable population of fish and found that it did. The court next considered whether the best scientific information available was used in designating the HAPC and held that it did not. The court ruled in favor of the fisher's complaint regarding the trawling restrictions and set aside the permitting rule.

In a different district court that same year a coalition of nonprofit environmental organizations asserted that restrictions imposed on the local tilefish HAPC were inadequate. They argued that the use of bottom-tending mobile gear (trawl fishing) should be limited in the HAPC.⁹ NOAA defended its lack of trawling restrictions based on an expert witness's testimony that "trawling does not impact the local environment or food chain to the detriment of the Tilefish lifecycle." The coalition conceded that "there is no information, besides inferences, based on the kind of evidence that the Council considered and that is in the record." The court found that it was reasonable for NOAA to decline to impose further trawling restrictions given the lack of evidence that the gear had an identifiable adverse effect on the HAPC's tilefish population.

As evidenced in those cases, NOAA's creation of HAPCs and imposition of restrictions are met with opposition for a variety of reasons. Some argue that the rules limit their ability to earn a living from fishing in the area, while others claim that the rules will permit too much harm to the environment. Faced with a variety of conflicting opinions, NOAA has the dual task of establishing HAPCs while also persuading the public that the new regulations are necessary and not harmful to the economy. This balance of conservation, public opinion, and economic stability make HAPCs a point of contention for coastal communities.

Flower Garden Banks

Flower Garden Banks is a National Marine Sanctuary located 70 to 115 nautical miles off the coasts of Texas and Louisiana, containing approximately 56 square miles of protected areas. The final rule creating Flower Garden Banks was published by NOAA on December 5, 1991.¹¹ The sanctuary was established to protect a series of underwater salt embankments that provide habitat for a variety of distinct biological communities, including the northernmost coral reefs in the continental United States.



Flower Gardens National Marine Sanctuary

The salt embankments were formed primarily as the result of underwater currents moving and shifting salt deposits (which are also known as salt diapirs or salt domes) along the ocean floor. The banks are home to a variety of marine habitats, including coral reefs, coralline algal reefs, algal nodule beds, mesophotic and deep-water reefs, and soft bottom communities. The sanctuary also includes many distinct geological features, such as brine seeps, exposed basalt, methane seeps, and even mud volcanoes. The most popular features of the sanctuary, according to NOAA, are the coral reefs found on East and West Flower Garden Banks, which are considered the healthiest in the Western Atlantic, and the deep-water coral reefs found at McGrail Bank.

The National Marine Sanctuaries Act (NMSA) authorizes the U.S. Secretary of Commerce to designate marine areas in need of protection as national marine sanctuaries (NMS); the Secretary delegated the authority to the Administrator of NOAA. Since then, NOAA has overseen the management, protection, upkeep, and research pertaining to America's National Marine Sanctuary System. The goal of NMSA was to establish a National Marine Sanctuary System that protected areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or esthetic qualities.¹²

Before designating an area as a NMS, NOAA has to consider the area's natural resources, ecological qualities, and historical significance. NOAA also has to consider the area's present and potential uses, the activities presently being performed in the area, current federal regulation in the area, the area's manageability, and if the public would benefit from the sanctuary designation. NOAA is required to provide the appropriate regional fishery management councils with the opportunity to determine whether fishing regulations are necessary in the new sanctuary and, if so, what the scope and extent of the regulations should be.

Expansion of Flower Garden Banks

On January 19, 2021, NOAA issued a final rule expanding the boundaries of Flower Garden Banks from 56 sq. miles to 160 sq. miles. The newly expanded sanctuary consists of 19 distinct polygons, each with its own set of restrictions and guidelines, and will become final after Congress is in session for 45 days.

NOAA initially introduced the idea of expanding Flower Garden Banks on February 3, 2015. NOAA received roughly 200 public comments on the proposed rule.¹³ Most were in support of the expansion, while some raised concern regarding the impact of the expansion on Gulf industries such as fishing and offshore oil/gas. Others suggested that the expanded sanctuary was not large enough, and they recommended that NOAA increase the scale of the expansion.

Another hurdle to overcome for the expansion of Flower Garden Banks was President Trump's Executive Order 13,795 entitled "Implementing an America-First Offshore Energy Strategy."14 This order required the Secretary of Commerce to refrain from designating or expanding any NMS unless the proposal included a full accounting from the Department of the Interior (DOI) for all energy or mineral resource potential within the proposed area. The report also had to assess the impact the expansion of the sanctuary would have on the area's energy or mineral potential. The DOI Bureau of Ocean Energy Management (BOEM) provided NOAA with a review of the expanded areas' offshore energy and mineral resource potential, finding that the expansion would restrict oil and gas development in the area by affecting an additional 65 outer continental shelf lease blocks.15

Much of the newly expanded Flower Garden Banks is designated as a "no-activity zone" for oil and gas activities.¹⁶ The restrictions on oil and gas activity are not applicable to these areas: Stetson Bank and East and West Flower Garden Banks.

In general, NOAA applied its existing sanctuary regulations and regulatory prohibitions to all 19 polygons.¹⁷ It did this in order to provide a more comprehensive and uniform management plan for the expanded sanctuary. Thus, anchoring/mooring is banned within the sanctuary, as well as discharging or depositing materials from outside of the sanctuary into sanctuary waters. Removal, attempted removal, and destruction of any resource within the sanctuary is prohibited. The possession of air guns and explosives is prohibited within the sanctuary. The deployment or possession of any fishing gear/apparatus within the sanctuary is also prohibited.

Conclusion

The United States government, through NOAA, uses HAPCs and national marine sanctuaries to protect the nation's marine ecosystems. Recent successful expansion of Flower Garden Banks, coupled with the designation of 13 new HAPCs in the Gulf of Mexico, will help protect marine life and underwater geological formations that are threatened by industrial activity in the Gulf. The protective measures have been objects of concern for some who feared that restrictions would stymie economic success in coastal communities, as well as those who felt that the measures being taken were not expansive enough to adequately fill conservation needs. Following its statutory directive, NOAA balanced these issues to protect areas, noting in the Flower Gardens final rule that protecting habitat could improve commercial fishing in the Gulf. 🏹

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Endnotes

- 1. 50 C.F.R. § 600.10. See also 16 U.S.C. § 1855(b).
- 2. 50 C.F.R. § 600.815(a)(8).
- 3. 85 Fed. Reg. 65740 (Oct. 16, 2020).
- 4. 85 Fed. Reg. 65740 (Oct. 16, 2020).
- Ed Lallo, NOAA Releases Fisheries Economics Report; 253,000 Jobs Good For Gulf, Gulf Seafood News (2020).
- 6. 50 C.F.R. § 622.74.
- 7. 85 Fed. Reg. 65740 (Oct. 16, 2020).
- 8. Hadaja, Inc. v. Evans, 263 F. Supp. 2d 346, 349-51 (D.R.I. 2003).
- 9. Natural Resources Defense Council v. Evans, 254 F. Supp. 2d 434 (S.D.N.Y. 2003).
- 10. 56 Fed. Reg. 63634 (Dec. 5, 1991).
- 11. 16 U.S.C. § 1433. See gen. 39 Fed. Reg. 10255 (Mar. 19, 1974).
- 12.16 U.S.C. § 1431.
- 13. Comments, Docket (NOAA-NOS-2014-0154).
- 14. Exec. Order No. 13795 (Apr. 28, 2017).
- BOEM, BOEM Review of Offsbore Energy and Mineral Resources: Potential Expansion of Flower Gardens National Marine Sanctuary (Feb. 21, 2019).
- 16. 86 Fed. Reg. 4937, 4948-49 (Jan. 19, 2021).
- 17. Id. at 4940.