April 22, 2025

Mr. Stan Rogers
Superintendent
Gray's Reef National Marine Sanctuary
10 Ocean Science Circle
Savannah, GA 31411

Dear Superintendent Rogers,

As you begin drafting an updated management plan for the Gray's Reef National Marine Sanctuary, we urge you and your colleagues to expand the sanctuary's boundaries to encompass—and conserve—key areas of the region's remarkable Blake Plateau.

As you know, only last year the Blake Plateau was identified as host to extensive deep-sea coral habitats. Towering hundreds of feet above the seafloor, roughly 80,000 coral mounds—some forming the longest deep-sea coral reef on earth, stretching from Georgia to Florida—produce a globally unique biodiversity hotspot. This unparalleled, though vulnerable, coral community nourishes and shelters a wide variety of marine life from sponges and octopuses to a hundred fish species. Above the corals, the Gulf Stream current and *Sargassum* meadows support sea turtles, billfish, sea-faring sea birds, and whales.

Crafting an updated non-contiguous sanctuary that highlights not only live-bottom shelf habitat but also folds in the plateau's offshore communities would provide a more holistic accounting of the Southeast's special ocean habitats, encouraging improved public understanding of the region's waters and all they provide. Deep-sea coral habitats rarely receive the attention they deserve as cradles of biodiversity—but without the Blake Plateau's corals we simply would not enjoy the robust marine life our Southeast waters are blessed with. This sensitive ecosystem fuels marine productivity along the entire east coast and deserves permanent protection from harmful commercial extraction activities.

We have attached a recent letter signed by more than 60 scientists in support of further, durable, protections for the Blake Plateau, and welcome the chance to help elevate and protect critical portions of this Southeast habitat through your upcoming management plan process. Adding components of the Blake Plateau into the Gray's Reef National Marine Sanctuary designation would help protect our coral habitats, both now and into the future.

Thank you for considering this recommendation, and please do not hesitate to reach out with any questions.

Sincerely,

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COLLEGE of CHARLESTON
DEPARTMENT OF BIOLOGY

May 31, 2024

President Joseph Biden
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Dear President Biden,

As academic scientists specializing in marine and environmental sciences, we collectively recognize the need to conserve and protect biologically diverse and vulnerable natural habitats. For this reason, we ask that you consider robust long-term protections for the Blake Plateau off the Southeast coast of the United States, an area that contains the largest deep-sea coral reef province in the world, supports a rich diversity of marine life and helps fuel marine productivity along the east coast. We want to voice our support for durable long-term protection for this unique, ecologically-rich and highly-sensitive area.

The Blake Plateau lies roughly 50 to 200 miles off the coasts of North Carolina, South Carolina, Georgia, and Florida. It is a broad region of the U.S. Atlantic continental margin located between the shallow continental shelf and the continental slope. Highly influenced by the powerful Gulf Stream current, the Blake Plateau is a dynamic and diverse ocean ecosystem from the surface to the seabed, containing a variety of complex habitats.

Recent science expeditions have mapped and explored the vast majority of the plateau, revealing a breathtaking seascape of over 80,000 ancient deep-sea coral mounds, some towering hundreds of feet above the seafloor. Some coral mounds are as high as the Washington Monument, rising 600 feet. A 160-mile-long dense coral highway known as the “Million Mounds” stretches from Florida to Georgia and is the world’s largest known continuous deep-sea coral reef. Several other key coral areas on the plateau, like the Stetson/Richardson complex and the Central Blake Knolls, are ecologically valuable features that lie in deeper and colder water. As ocean temperatures rise in a warming world, these deep-sea areas of varying depths will provide crucial refuge for deep-sea reef-building corals and associated communities.

The kaleidoscope of life on the Blake Plateau depends on the Gulf Stream, a swift, powerful ocean current that ferries warm water from the Gulf of Mexico over the plateau, up the eastern seaboard and across the Atlantic Ocean. Over millennia, the Gulf Stream’s path along the southeastern U.S. coast has set the ideal stage for coral growth on the plateau, providing a reliable food supply to large regions of the seafloor where deep-sea corals could settle and build dense coral platforms tens of thousands of years old. Some individual black corals in this region are over 2,000 years old, making them among the oldest organisms on Earth.

As the Gulf Stream churns the waters over the Blake Plateau, it funnels plankton from the surface to the deep waters, feeding the corals and sponges below. The deep-sea coral reefs, in turn, efficiently process the organic matter from the ocean’s surface into essential nutrients and also capture carbon as they grow. Eddies and meanders of the Gulf Stream create upwellings that

push these nutrients back up to the surface, forming a “nutrient pump” to the continental shelf and slope, sustaining the region’s productivity and ocean wildlife.

Like shallow-water coral reefs, the plateau’s deep-sea corals support a hotbed of biodiversity. They serve as “ecosystem engineers,” altering the surrounding seascape, and as foundation species, creating habitat niches for many other species. The forest of corals provides food and shelter from predators for fishes and shellfish, such as wreckfish and golden crab. In all, nearly 100 deep-sea fish species have been identified among the Blake Plateau reefs, along with numerous invertebrates.

In addition to corals, the waters of the Blake Plateau are rich in other marine life. Chemosynthetic communities amass around cold methane seeps. The Gulf Stream carries floating *Sargassum* seaweed that can accumulate into dense mats on the water’s surface, providing food and shelter for an array of marine species including mahi-mahi, jacks, and tunas. Sea turtles in particular benefit from the floating *Sargassum*: Leatherback, loggerhead, green, Kemp’s ridley, hawksbill, and olive ridley sea turtles—all endangered or threatened—can be found in the waters of the Blake Plateau. Post-hatchling and juvenile sea turtles travel the ocean currents and gyres, with some sea turtles spending a decade or more drifting among *Sargassum* rafts seeking refuge and food. For this reason, major portions of the plateau have been designated as critical habitat for loggerhead turtles.

Dozens of seabird species—including shearwaters, terns, skuas, jaegers, and the highly endangered black-capped petrel, some of our planet’s truest seafaring birds-- are drawn to the Blake Plateau. These species spend almost their entire lives offshore and rely on the Blake Plateau for foraging and migratory habitat.

Acoustic recordings provide proof that the plateau is also home to colossal sperm whales, at least three different types of beaked whale—Cuvier’s beaked whales, Blainville’s beaked whales, and Gervais’ beaked whales—as well as dwarf and pygmy sperm whales. These species migrate seasonally through the region, descending to depths of 2,600 feet or more to feed on energy-rich squid.

Despite its vast array of marine life and complex habitats, the Southeast is among the regions of the United States with the fewest marine protections, with less than 1 percent of its waters strongly protected. Scientists worldwide have called for protecting at least 30 percent of the world’s ocean to preserve biodiversity.

We have a unique opportunity to protect the rich, yet vulnerable, resources of the Blake Plateau. By safeguarding this largely intact ecosystem from harmful commercial extraction activities, we can ensure the health of this amazing place for generations. Considering the array of ecosystem services (such as seafood delivery, carbon capture, nutrient cycling) provided to humans by the geology, oceanography, and biology of the Blake Plateau, protecting this region also protects vital functions that the ocean provides to humans.

For all these reasons, we support and recommend efforts to protect important ecological areas on the Blake Plateau permanently from harmful commercial extractive activities.

We would be happy to discuss this issue with you and aid in this effort any way that we can. Thank you, in advance, for your consideration.

Sincerely,

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