National
Marine Sanctuary
Foundation

Sarah Fangman
Sanctuary Superintendent
Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, FL 33040

Re: Docket Number NOAA-NOS-2019-0094

Dear Ms. Fangman,

Florida Keys National Marine Sanctuary is a national treasure, protecting extraordinary species and the places they call home. The Florida Keys' marine ecosystem protects more than 6,000 species of marine life; 800 underwater historic sites; 1,800 miles of mangrove-fringed islands; 1.4 million acres of extensive seagrass beds; and the only coral barrier reef in the continental U.S.

The threats to the Florida Keys' marine environment are greater than ever. Climate change, sea level rise and ocean acidification are large-scale issues impacting the ecosystem. Local impacts include increased vessel traffic, boat groundings and derelict and abandoned vessels, improper anchoring, marine debris, commercial and recreational fishing pressures, and wildlife disturbances. The sanctuary protects a complex, interconnected ecosystem with different habitats and wildlife. A comprehensive, science-based approach and strong management plan are needed to protect and conserve the marine environment. The Florida Keys Restoration Blueprint offers an opportunity to address the threats to the sanctuary, restore habitats and protect marine wildlife. I write to urge the National Oceanic and Atmospheric Administration to take the most protective measures possible to protect Florida Keys National Marine Sanctuary.

Following are specific actions we encourage the National Oceanic and Atmospheric Administration to take in the final Restoration Blueprint.

Fully protected, no-take areas protect habitats and biodiversity. The Restoration Blueprint should expand the number and size of these areas. In the Florida Keys, large, no-take areas, like the Dry Tortugas Ecological Reserves, have shown increased biomass and wildlife diversity. These benefits spill over to adjacent waters aiding in habitat recovery, fisheries productivity, and sustaining hot spots of biodiversity and wildlife richness. To realize the greater benefits of fully protected areas, no-take protected areas should be expanded and levels of protection should be strengthened, such as in the proposed Conservation Areas, to scale up these benefits.

The Restoration Blueprint should strengthen protection of high biodiversity areas and wildlife corridors. Certain areas — spawning aggregation sites for multiple species, nursery and key foraging grounds, critical habitat for endangered and threatened species, and areas that species use during sensitive life stages — need stronger protections. *Pulley Ridge*, the deepest known photosynthetic coral reef off the continental United States, and *Western Dry Rocks*, an important multiple species spawning ground, are hotspots of biodiversity that should be fully protected. We need to protect areas like *Marquesas Keys Turtle area*, an internationally important foraging ground

for a unique aggregation of endangered green sea turtles and the only known population in southeast US. Similarly, mangroves and backcountry islands, like *Pigeon Key*, should be fully protected as important, highly sensitive bird nesting and rookeries.

From fish to sea birds to sea turtles to marine mammals, many species call the Florida Keys home at all different stages in life. It is important to recognize that in addition to these hot spots of biodiversity, we need to understand connectivity and the need for wildlife corridors to protect species that utilize different parts of the marine environment across the Florida Keys ecosystem. The *Tortugas Corridor* can protect resident corals as well as fish transiting from the nearshore waters and shallow banks of Dry Tortugas National Park, which are essential juvenile fish nurseries, to the deeper adult fish spawning habitat in the Tortugas South Ecological Reserve.

We need to protect a diversity of habitats. Certain habitat types — like backcountry hard bottom areas and seagrass beds, mangrove forests, sand bars, offshore patch reefs and deep reefs — have been studied more recently and their importance and interconnectedness in the larger Keys ecosystem is better understood now. Mangroves and seagrasses capture sediment and nutrients from land before it washes offshore, smothering the coral reefs. Mangroves and seagrasses also serve as important nursery habitats, sheltering sensitive life stages of commercially and recreationally important reef fish species. Patch reefs and deep reefs offshore are often more resilient, showing less impact from higher sea surface temperatures, ocean acidification, and water quality degradation, making them critical for restoration of the Florida Keys reef tract. All of these habitats protect our coastal communities during storms by attenuating waves and storm surges. And all of these habitats are intertwined and connected. It is important to look more holistically at protecting a diversity of habitats for more effective ecosystem conservation.

We need to protect larger areas from shoreline to reef zones. Creating large, contiguous areas containing diverse habitat types offers the highest protections for multiple species and sustaining ecosystem functions in the face of the changing climate and water quality challenges. They also contribute to juvenile and adult fish that spill over into areas of the sanctuary to replenish fish stocks. Protecting specific habitats and zones will only protect wildlife during certain life phases. *Western Sambo Sanctuary Preservation Area* is an interconnected network of nearshore and mid-shelf patch reefs and bank reef with a prominent spur-and-groove habitat along with associated seagrass and hard bottom communities. This zone provides a corridor for the migration of juvenile and adult fish and invertebrate populations, including lobster, that spawn in deeper reefs and then shelter and feed at offshore and mid-shelf reefs throughout the larger area. Similarly, connecting large areas, like *Long Key and Tennessee Reef* and *Carysfort Reef Sanctuary Preservation Area*, into a more comprehensive protected area from seagrass, shallow hard bottom, patch reef, and deep reefs with slower growing corals provides a corridor for migration of different life stages of fish from Florida Bay into the offshore reefs and spawning locations for fish and lobster.

We need stronger, more robust protections to build resilient ecosystems and foster successful restoration. Stronger protections that safeguard and bolster greater biodiversity and cover a network of interconnected habitats enhance the ability of ecosystems to respond to global, regional, and local stresses by both buffering the impacts and supporting recovery afterwards. Supporting adaptive, flexible emergency response to threats can aid in more effective management, safety, and resource recovery. Likewise, a strong management plan that focuses on key priorities, promotes sustainable use, and enhances collaboration with key partners is needed

to protect and conserve the marine environment. Ultimately, increasing the protections throughout the Florida Keys is needed to facilitate success of innovative restoration efforts on a far greater scale. Partners and managers are looking to scale up active restoration of coral reefs and other habitats to help the Florida Keys thrive. Now is a critical time to look at higher levels of protection and balancing activities that impact marine resources in order to create conditions that can lead to successful restoration of the Florida Keys' marine environment.

Our national marine sanctuaries conserve areas of national significance in our oceans and Great Lakes for future generations, advance critical scientific research and citizen science, and promote public access to world-class outdoor recreation and enjoyment. Sanctuaries are our nation's living laboratories and outdoor classrooms supporting public education and engagement to allow more students and children to learn about America's rich natural and cultural history. We urge NOAA to support strong, comprehensive, science-based protections that protect and restore Florida Keys National Marine Sanctuary.

cc: The Honorable Ron DeSantis, Governor
Florida Fish and Wildlife Conservation Commission