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October 26, 2022

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

RE: Docket # NOAA-NOS-2019-0094-1012, Florida Keys National Marine Sanctuary Restoration Blueprint

Dear Superintendent Fangman,

On behalf of the undersigned and our millions of members and supporters around the country, we write to express our support for the advancement of conservation strategies included in the Florida Keys National Marine Sanctuary (“sanctuary”) Restoration Blueprint. We are deeply concerned about the current health and status of many sanctuary resources and believe that strong action must be taken to protect these resources for current and future generations. In the interest of protecting one of America’s most treasured marine areas, the health and sustainability of the broader ecosystem, and the economic viability of the Florida Keys, we strongly support the implementation of science-based conservation measures.

Established in 1990, the sanctuary protects 3,800 square miles of unique and nationally significant marine resources, extending south of Miami westward to the Dry Tortugas and bordering Biscayne, Everglades, and Dry Tortugas National Parks as well as four national wildlife refuges. It protects most of one of the world’s largest barrier reef ecosystems (also the only living coral barrier reef in the continental United States), 1.4 million acres of seagrass beds (amongst the greatest acreage in the world), 1,800 miles of mangrove-fringed shoreline, and more than 6,000 species of marine life. The sanctuary also protects approximately 800 underwater cultural and historical sites, such as shipwrecks and other archeological sites. Of these, 14 sites are on the National Register of Historic Places.

In addition to its ecological and historical importance, the sanctuary is also hugely important economically. World-class diving, swimming, fishing, boating, and other recreational opportunities draw millions of people to the sanctuary each year. With approximately 60% of the Florida Keys economy directly tied to marine-related activities, the importance of maintaining the long-term health and sustainability of the sanctuary cannot be understated. The sanctuary supports approximately 43,000 jobs in a county containing about 75,000 residents and contributes an estimated \$4.4 billion annually to the state’s economy. The sanctuary is a major driver of tourism and recreation dollars, with a total of 5.3 million visitors in 2019 and around 4.5 million boaters, 1.86 million divers and snorkelers, and 2.7 million anglers enjoying its resources annually. Beyond its recreational riches, the sanctuary offers innovative

education programs, volunteer activities, and high-tech research and conservation opportunities. More than 72,000 people visit its Eco-Discovery Center in Key West annually, which offers interactive learning experiences for all ages.

Unfortunately, the sanctuary's natural resources and the people who depend on them are facing a range of threats, including impacts from increased use (e.g., boat groundings, anchor damage, fishing gear and diver damage to corals), marine debris, pollution, intensifying storms, disease outbreaks, rising ocean temperatures, acidification and the historic reduction of freshwater flow from the Everglades to the bordering estuarine areas of the sanctuary.

In 2011, the sanctuary's condition report concluded that this national treasure's resources were in fair/poor or poor condition, and were generally in decline. Other impacts have occurred and additional declines documented, including:

- Nearly 90% of live coral cover has been lost.
- More than 56,000 acres of seagrass beds have been damaged by propeller scarring; nearly double the amount scarred just 20 years ago.
- Recurring sponge die offs linked to seagrass death and algal blooms plague Florida Bay and frequently expand over the reef tract.
- Vast areas of mangrove were killed by Hurricane Irma in 2017.

We recognize that impacts from local activities – boating, diving, fishing, bird watching, and more - may be reduced by enhancing education and outreach efforts, increasing law enforcement capabilities, and improving the existing system of marine zoning in the sanctuary, zoning which has not been updated since its creation in the 1990's and in the case of the Dry Tortugas region, the early 2000's. We support many proposals within the Restoration Blueprint as necessary to address the mounting stressors that continue to threaten sanctuary resources. Proposals in the Restoration Blueprint will help protect critical natural areas, improve zoning and marine management, and build ecological resilience that will help maintain environmental health and economic sustainability over the long-term.

The Restoration Blueprint encompasses more than 20 years of cutting-edge science, technical expertise, and local community involvement. Public input was provided on the Draft Environmental Impact Statement in 2019-2020 at more than 70 meetings and over 200 recommendations were made by the Sanctuary Advisory Council, a group of stakeholders that represent diverse local interests and advise sanctuary managers. The 2022 Proposed Rule for the Restoration Blueprint has likewise received a significant number of public comments and community engagement across both virtual platforms and in-person forums as of October 26, 2022.

Improving the system of marine zoning in the sanctuary will better protect threatened wildlife and sensitive habitat and will help restore degraded areas. Sanctuary managers must focus on reducing stressors on natural resources, while also strengthening investments in activities that will improve the long-term health of the sanctuary.

Many of the actions proposed in the Restoration Blueprint closely align with the Administration's America the Beautiful plan to conserve 30% of America's lands and waters by 2030 through expanding sanctuary boundaries; increasing the climate resilience of the region through enhanced protections for corals; sequestering additional carbon by protecting seagrasses meadows and mangroves; and fostering biodiversity and healthier populations of fish and wildlife.

To that end, the undersigned respectfully submit the following comments and recommendations on specific aspects of the Restoration Blueprint, including proposed boundary expansions, sanctuary-wide regulations, marine zoning proposals – including contiguous shoreline to reef zones and Wildlife Management Areas, and the sanctuary Management Plan.

## Sanctuary Boundary Expansions

The Restoration Blueprint proposes to expand sanctuary boundaries and increase the total protected area from 3,800 square miles to 4,800 square miles within the Florida Keys National Marine Sanctuary. This approximately 27% increase in the sanctuary's protected area is directly aligned with the goals of the Administration's America the Beautiful initiative to conserve 30% of America's lands and waters by 2030.

**Pulley Ridge:** The undersigned strongly support the proposed expansion of the sanctuary boundary to include Pulley Ridge, a unique area that shelters the northernmost mesophotic (shallow water corals living at the extreme depth range of available light) coral gardens in United States waters. In addition, we support the proposal to make Pulley Ridge a no anchoring zone, in order to better protect this critically important coral habitat. By adding Pulley Ridge and further protecting it from anchor damage, oil drilling, and other threats, the sanctuary can protect upstream coral populations with demonstrated resilience to climate extremes as well as fish populations that seed the Dry Tortugas, the Florida Keys and beyond via the Loop Current.

### ***Tortugas South Conservation Area (currently known as Tortugas South Ecological Reserve) and Vicinity:***

The undersigned strongly support the proposed expansion of the western boundary in this region to enhance connectivity and protect a highly biodiverse area for both habitat and species, as an identified multi-species fish spawning aggregation site, and unique benthic formations, including Riley's Hump.

**Align Boundary with Area to be Avoided:** The undersigned support the proposed expansion to align the sanctuary boundary with the Area to be Avoided (ATBA) to provide navigational consistency and clarity and enhance ecosystem protection.

## Sanctuary-wide Regulations

Overall, the undersigned support the sanctuary-wide regulations proposed in the Restoration Blueprint and each proposal is discussed in more detail below. We also strongly recommend the adoption of two additional sanctuary-wide regulations in the final rule: expanding the existing idle speed/no wake zone to 100 yards of all shorelines throughout the sanctuary, and implementing a mandatory boater education program consistent with Everglades National Park's program.

**New Zoning Classification System:** The Restoration Blueprint proposes an updated zoning classification system that includes new zoning types - Habitat Restoration Areas and Nursery Restoration areas - and combines and renames Ecological Reserves and Special Use Areas as Conservation Areas (CAs), while retaining the current terminology for Sanctuary Preservation Areas (SPAs) and Wildlife Management Areas (WMAs). The new Restoration Area zones will promote better protection of discrete restoration sites by applying the zoning regulations of CAs to nursery areas and the zoning regulations of SPAs to habitat restoration areas, while also providing for the issuance of permits for restoration activities. The CA zoning classification definition acknowledges the importance of fully protecting areas of contiguous,

diverse habitats and a variety of sanctuary resources. We support the Restoration Blueprint's proposal for an updated zoning classification system in the sanctuary to promote restoration activities and protection of resources.

***No anchoring in SPAs, RAs, CAs and in some WMAs:*** The proposed rule includes no anchoring restrictions in Sanctuary Preservation Areas, Restoration Areas, Conservation Areas (with one exception), and some Wildlife Management Areas. We are supportive of this proposed change to the regulations to allow for better protections of benthic resources, with specific examples denoted in the zone by zone analysis below. Benthic resources including coral reefs, sponges, seagrasses, macro and micro-invertebrates, and other assemblages and bottom dwelling species have been adversely impacted from anchor damage across the footprint of the sanctuary.

These impacts are amplified by a significant increase in the number of registered watercraft in Monroe County. In 2015, there were more than 28,000 watercraft registered in Monroe County with thousands of other vessels using the sanctuary every year that are registered in other counties. As of 2015, according to the most recent report (Kruer 2017), nearly 31,000 acres of the sanctuary showed moderate to severe damage to seagrasses from a combination of propeller gouging and anchoring. Not only does this damage seagrass area biodiversity and productivity but it also reduces the uptake and storage of Blue Carbon which is vital to moderating climate change.

The proposed prohibitions on anchoring in these discrete areas, coupled with a more robust mooring buoy program, would ensure that the most vulnerable resources would receive protection from anchor damage.

***Cruise Ship Discharges:*** According to the 2011 Florida Keys National Marine Sanctuary Condition Report, water quality in the sanctuary is fair to poor with myriad stressors to sanctuary waters and connected watersheds. The scientific community has long expressed concerns regarding the environmental impacts of cruise ships in sanctuary waters, including water quality impacts resulting from discharges. We strongly support the proposed cruise ship discharge prohibition to prevent known pollutants from entering and impairing sanctuary waters. In addition, we support measures to increase enforcement of this discharge prohibition to ensure compliance with the new requirements.

***Temporary Regulation for Emergency & Adaptive Management:*** The sanctuary faces innumerable stressors including pollution, disease, and mounting user pressures, all of which are exacerbated by climate change. Given the gravity of these threats and the uncertainty of future climatic conditions in the sanctuary, it is crucial that the NOAA employ adaptive management as outlined in the draft rule. Additionally, the breadth of proposed changes within the draft rule (and ancillary impacts upon implementation) require managers to respond accordingly to urgent threats within the sanctuary. Adaptive management will also allow the sanctuary to respond to resource needs and area use. For example, if a nesting bird colony were to move to a new and un-zoned island, it may be necessary to employ adaptive management to account for zone protections to reduce nest flushing and disturbance. We support the temporary regulation for emergency and adaptive management as a key regulatory tool in the wake of climate change and best practice for sanctuary management.

***Historical Resources Permitting:*** We support the proposed updates for historical resource permitting in the sanctuary which will simplify the current complicated process and align sanctuary historical resource permitting with Florida state permitting regulations. Eliminating the permit category allowing for the deaccession/transfer of historical resources and creating the proposed archaeological research permit

category will increase the protection of historical resources throughout the sanctuary. Requiring a professional archaeologist with field experience for any excavation or artifact recovery will increase research quality. The reforms will not make it easier to damage resources, as research that results in adverse effects to historic properties would not qualify for this simplified permitting process.

**Fish Feeding:** Feeding marine life results in a variety of negative impacts. Fish conditioned to receive food can stop normal foraging patterns and are vulnerable to predators. Competition for handouts interferes with natural instincts and behaviors and can increase harmful interactions. The Keys have experienced four attacks on humans by sharks this year, with one resulting in the amputation of the lower part of a child's leg. Apart from the safety concerns this presents to sanctuary visitors, fish feeding also runs counter to the sanctuary's efforts to improve biodiversity and habitats.

Prohibition of fish attraction and feeding should not only include divers but land-based operations. No exception should be made for eco-tour operators. We support the proposed rule to prohibit fish feeding and attraction, making sanctuary regulations consistent with the current state restrictions on these activities.

**Grounded & Deserted Vessels, Harmful Matter, & Vessel Salvage:** The problem of derelict, grounded, or adrift vessels has and continues to be a serious threat to sanctuary resources and nearshore waters. We support the proposed rule that would prohibit anchoring, mooring, or occupying a vessel at risk of becoming derelict, or deserting a vessel aground, at anchor, or adrift in the sanctuary, in alignment with existing state regulations.

We recommend the sanctuary work with Monroe County's Marine Resources Office to implement the proposed rules regarding derelict vessels. Currently this office coordinates response alongside Florida Fish and Wildlife Conservation Commission (FWC) officers, the County Sheriff's office, or other law enforcement agencies when they have failed to locate and hold boat owners responsible for derelict vessels. The County has been removing an average of 60-80 derelict vessels a year and relies on pre-qualified marine contractors that competitively bid for each removal. We support the rule proposal and the sanctuary's efforts to address this ongoing issue.

**Mooring Buoys:** We support the Restoration Blueprint proposals to delineate large and small mooring buoys and expand the requirement to use buoys in all CAs, SPAs, and RAs, providing no anchor zones in resource sensitive areas. The resulting use of the appropriate buoys will extend the lifespan of the buoys, as well as manage the number of boats in fragile habitats.

The Keys experience a high number of vessel use, especially in colder months, where there are both transient and long-term recreational vessels. Encouraging boaters to use the buoys rather than anchors is the best way to minimize benthic damage. Monroe County is also working to develop and manage a system of public mooring fields with the intent to eliminate abandoned and derelict vessels. In addition, state legislation requires the City of Key West to increase its mooring buoys by 100 sites. The Mooring Ball Working Group should include representatives from the County and municipalities to facilitate coordination on these concurrent mooring buoy efforts. This Working Group should be expanded to address issues of signage, markers, and boater education within the sanctuary to develop a more comprehensive approach to building awareness and safe boating practices while in sanctuary waters.

## The Final Rule Should Include Additional Sanctuary-Wide Regulations

**Idle Speed/No Wake Zone Expansion:** We support expanding the existing idle speed/no wake zone along all residential shorelines to include 100 yards of all shorelines sanctuary-wide, except in marked and traditional channels and routes that do not conflict with natural resource and public safety protection. This is a commonsense approach to minimize negative impacts on bottom and shoreline habitat, fish and bird populations, vessels, and people's safety. It may also eliminate the need for boundary signs at WMAs where idle-speed is the prescribed regulation. This proposal was included in the DEIS and should be adopted in the final rule.

**Mandatory Boater Education:** In recent years, the sanctuary has released a voluntary boater education program intended to educate boaters about relevant regulations that provide the framework for boater safety and resource protection in the sanctuary. Participation in the voluntary program has been very limited despite efforts to encourage it. Given demonstrated damage to sensitive natural resources caused by uneducated boaters, we support making the boater education program mandatory for all those boating in sanctuary waters. This mandatory program should be modeled after the program that exists in Everglades National Park. NOAA should work with NPS and other federal and state agencies to develop a multi-jurisdictional program that will reduce boater confusion, streamline enforcement, and provide regulatory consistency across jurisdictions.

## Zone Specific Recommendations

### Tortugas Region

**Tortugas Corridor:** The proposed rule does not include the critically important Tortugas Corridor that was contemplated in the DEIS. In order to better meet the goals of the America the Beautiful initiative, the undersigned strongly recommend the Tortugas Corridor transit-only zone be reinstated in the final adopted rule. The Dry Tortugas region is essential to support fish populations along both of Florida's coasts. Existing no-fishing marine reserves, including the Tortugas Ecological Reserves (now Tortugas North and Tortugas South Conservation Areas) established in the sanctuary in 2001 and the Research Natural Area established in Dry Tortugas National Park in 2007, have had tremendous benefits for the Dry Tortugas region and beyond. Designed to conserve near-pristine coral reef ecosystems and valuable spawning aggregations, the protections afforded by these marine reserves have resulted in the recovery of mutton snapper spawning aggregations and an increase in the size and abundance of many economically important reef fish species.

The creation of the Tortugas Corridor in this incredibly important area would amplify the impacts of existing conservation efforts and contribute to the protection of fish populations and habitat at a time when ecological threats are increasing. The Tortugas Corridor would protect 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 (Tortugas South Conservation Area). Protecting marine life in the Tortugas helps ensure that the entire Florida Keys marine ecosystem continues to receive abundant supply of coral and fish larvae.

***Tortugas North and South Conservation Areas (currently known as Tortugas North Ecological Reserve and Tortugas South Ecological Reserve):*** Closing the boundary “gap” between Dry Tortugas National Park, Tortugas Ecological Reserve North and Tortugas Ecological Reserve South and extending Tortugas Ecological Reserve South one mile west will help preserve the benefits of connectivity between the protected nursery and adult fish habitat on Tortugas Bank and the multi-species fish spawning aggregation site in and near the existing Tortugas South Ecological Reserve. We support this proposed change.

## **Marquesas Region**

***Sand Key, Rock Key, and Eastern Dry Rocks sanctuary Preservation Areas, and Sand Key Nursery Restoration Area:*** The proposed rule would eliminate the existing Rock Key sanctuary Preservation Area and add a Sand Key Nursery Restoration area to protect coral nurseries in the area. We are supportive of these two changes and the continued protection at Sand Key and Eastern Dry Rocks sanctuary Preservation Areas.

***Western Dry Rocks Wildlife Management Area:*** In 2021, FWC established a seasonal closure at Western Dry Rocks that prohibits fishing between April 1 and July 31 annually to protect an area of reef that supports spawning aggregations of multiple fish species. The sanctuary proposes to include this as a Wildlife Management Area which would prohibit any activity other than transiting during the season closed to fishing. We are supportive of this effort as the continued health of more than one fishery depends on the ability of the fish to successfully spawn.

***Archer Key Wildlife Management Area:*** The proposed rule would establish a new no anchor zone around Archer Key to prevent impacts to benthic habitats and to protect nesting and roosting birds on the island from boat-related disturbance. We are supportive of this measure as it will reduce boater pressure near the island which is a known nesting and roosting site for wading and seabirds.

***Big Mullet Key, Little Mullet Key, and Cottrell Key Wildlife Management Areas:*** The proposed rule would designate Little Mullet Key and Cottrell Key as new no entry zones in order to decrease disturbance to nesting, roosting, and foraging birds which rely on the islands. We are supportive of this measure because these areas are important for a variety of bird species and are a known location of mangrove terrapins. We would also be supportive of a 50 ft. from the shoreline no entry designation extending into a 300 ft. no motor designation for this area in order to accommodate pole/troll fishing that is not likely to cause undue disturbance to the birds that rely on these islands for nesting, roosting, and foraging.

***Ballast and Man Key Flats Wildlife Management Area:*** The proposed rule would establish a new idle speed zone through the Ballast and Man Key Flats area. We support this measure in order to reduce impacts to benthic habitats and reduce the likelihood of prop scarring. Idle speed in this area would also reduce impacts to ESA-listed sea turtles. We would also be supportive of the proposed expansion of this idle speed zone as recommended by the Lower Keys Guides Association (LKGA).

***Boca Grande Key and Woman Key Wildlife Management Areas:*** The proposed rule would increase the total area of a pre-existing no entry zone designation for Boca Grande Key and Woman Key. This measure would increase the size of the closed area on these islands which has been designated to decrease wildlife disturbance to the ESA-listed Miami blue butterfly, sea turtle nesting, and nesting and roosting bird species. We are supportive of this expansion, but would also support a 50 ft. no entry zone with a

300 ft. idle speed designation for the extended area in order to accommodate low-impact fishing activities which are unlikely to disturb bird species that rely on these areas.

**Marquesas Keys Wildlife Management Area:** The proposed rule would establish new no entry areas throughout the Marquesas Keys area in order to decrease disturbance to wildlife including a variety of bird and ESA-listed sea turtle species. We are supportive of this measure because it would reduce the likelihood of disturbance to nesting, roosting, and foraging bird species. We strongly recommend that the south island and the elongated central island be designated as no entry. For the other areas within this WMA, we would also support a no entry designation out to 50 ft. and a 300 ft. no motor zone extending from there to accommodate low-impact pole/troll fishing activities which are unlikely to substantially disturb the bird species that rely on these islands. We are supportive of extending the idle speed zone throughout the WMA to reduce benthic impacts as well.

**Marquesas Keys Turtle WMA:** The Marquesas Region of the sanctuary is a well-documented and internationally-recognized habitat for ESA-listed loggerhead and green sea turtles. The region's extensive seagrass beds and mixed hardbottomed and sponge communities provide critical foraging habitats for sea turtles throughout their life cycles. The area composing the proposed zone, in particular, is known to host high density of sub-adult to adult turtles. We appreciate that the sanctuary has closely considered the impacts and potential user conflicts raised by agencies and sanctuary users during the 2019 DEIS and acknowledge that the currently proposed zone seeks to balance user safety while providing the greatest level of protection possible for sea turtles and the benthic communities they rely on to survive. We support the Marquesas Turtle WMA and idle zone in the proposed rule and conservation measures that protect ESA-listed sea turtles and known foraging habitats within the sanctuary boundary.

## Lower Keys Region

**Looe Key Management Area, Looe Key sanctuary Preservation Area, and Looe Key East and West Nursery Restoration Areas:** The proposed rule would make no changes to the existing Looe Key sanctuary Preservation Area but would add two nursery restoration areas that protect existing coral nurseries in place of a Special Use Area that was previously set aside to compare the effects of high versus low human use. We support this change that offers additional protection to the coral nurseries while maintaining the existing protection to the spur and groove habitat at Looe Key.

**Pelican Shoal WMA:** The proposed rule would establish a no entry area around Pelican Shoal, an area that could be the last active ground-breeding location for Roseate Terns, an ESA-listed species, in Florida. We are supportive of this designation as one of the primary threats to this species is disturbance during nesting.

**Eastern Sambo and Western Sambo Conservation Areas:** The proposed rule includes a number of changes that could impact internal ecosystem connectivity within sanctuary boundaries. Protecting large, contiguous habitat areas and species populations within marine reserves is the most effective way to preserve biodiversity and build climate change resilience within the sanctuary. The existing Western Sambo Ecological Reserve (WSER) exemplifies this approach by encompassing shoreline mangroves, nearshore seagrass, sandbar, and hard bottom habitat, inshore patch reefs, mid-channel patch reefs, and the spur and groove reef out to 60 feet of depth, along with associated fish and shellfish populations that are demonstrably enhanced by the reserve's protections. The draft rule's proposal to add the 60-90' depth contour to the existing protected area would further enhance coral population resilience and fished species populations leading to benefits both within and beyond the reserve. Benefits to



populations beyond the reserve are magnified by the location of WSER on the northern edge of the Pourtales Gyre which spreads marine larvae spawned in the proposed larger zone throughout the Lower Keys and beyond.

**Marker 32 Nursery Restoration Area:** The proposed rule would add a Nursery Restoration Area in the vicinity of Marker 32. We are supportive of this change to protect an existing coral nursery from possible damage related to human uses.

**East Bahia Honda Key WMA:** The proposed rule would establish a no motor zone around East Bahia Honda Key in order to decrease disturbance to birds including White-Crowned Pigeons and Great White Herons. We are supportive of this measure because a variety of bird species rely on this island for nesting and foraging, including threatened and endangered species such as Reddish Egrets.

**West Bahia Honda Key WMA:** The proposed rule would establish a no motor zone around West Bahia Honda Key in order to decrease disturbance to listed bird species such as White-Crowned Pigeons and Reddish Egrets. This island is also used for nesting and foraging for a variety of species, including Bald Eagles, and we are supportive of this new no motor designation.

**Horseshoe Keys WMA:** The proposed rule would establish a no entry zone around Horseshoe Keys to decrease disturbance to nesting and roosting birds such as Herons and Osprey. This site is used by diverse species including Willet and White-Crowned Pigeons that could be susceptible to disturbance from boat traffic. We are supportive of the measure to establish a no entry zone and would also be supportive of establishing a no motor zone out to 300 feet and a no entry zone 50 ft. from the islands in this area to accommodate pole/troll fishing activities in this area.

**Little Pine Key Mangrove WMA:** The proposed rule would establish a no entry area around Little Pine Key to reduce disturbance to nesting and roosting birds that rely on this island. This island is commonly used by Magnificent Frigate birds and a variety of Heron species, as well as listed species like Reddish Egrets. We are supportive of the measure to establish a no entry zone around this island to reduce the risk of flushing the birds from their nests and roosting sites. However, we would also support a no motor zone out to 300 feet from the island so long as a 50 ft. no entry zone is maintained.

**Water Key Mangroves WMA:** The proposed rule would establish a new no entry area around the Water Key Mangroves to reduce disturbance risks to a variety of species. This area is commonly utilized by wading and shorebird species for nesting and foraging, including Reddish Egrets. We support the establishment of this new no entry area because we believe it will reduce nesting and feeding disturbance for a variety of bird species. We would support a no motor designation for this area out to 300 feet which would permit low impact pole/troll fishing activities so long as a 50 ft. no entry area is maintained around the islands.

**East Content Keys and Upper Harbor Key Flats, West Content Key, and Howe Key Mangrove WMA:** The proposed rule would establish new no entry zones as well as idle speed zones throughout this area. We are supportive of establishing the idle speed zones across the shallow water flats of this area in order to protect the benthic resources. We are also supportive of the measures to create no entry zones around Howe Key Mangrove, Upper Harbor Key, and West Content Key. These no entry zones will reduce disturbance to a variety of bird species that rely on these areas for nesting, roosting, and foraging. East Content and Upper Harbor Keys support nesting and roosting for Double Crested Cormorants, White Ibis, Osprey, Magnificent Frigatebirds, Little Blue Herons, and Osprey. West Content Key provides habitat for

shorebird species such as Willets, Royal Terns, and Least Terns. Howe Key supports nesting for Great White Herons and Great Blue Herons as well as the Reddish Egrets and should be no entry. While we are supportive of the no entry zones, we would also be amenable to creating a no motor zone in the Howe Key Mangrove and West Content Key areas to allow pole/troll fishing activities that would not be likely to disturb nesting, roosting, or foraging bird species. We are also in support of the expansion of the idle speed zones as proposed by the Lower Keys Guides Association and are amenable to their suggested change that the area be a no motor with a 50 ft. buffer around the shoreline as being no entry.



Map shows the LKGA drawn zone (yellow polygon) and an alternative boundary that is modified in a box shape (green). Bottom right image shows the alternative boxed zone compared to the FKNMS zone.

Figure 1 Top: East Content Keys and Upper Harbor Key Flats, West Content Key, and Howe Key Mangrove WMA\_Blueprint  
bottom Guides Recommendation (Green box is idle speed and part of option 2 LKGA recommendation)

**Torch Key Mangroves WMA:** The proposed rule would establish a new no entry area around the Torch Key Mangroves. This area provides important nesting and roosting habitat for a variety of bird species including listed species such as White-Crowned Pigeons and Reddish Egrets. It also supports foraging activities for many species of wading and shorebirds including Great White and Tricolored Herons, and Magnificent Frigatebirds. We are supportive of this designation and would also support a split closed area based on Frigatebird use with the northern end being closed and the southern island being closed to 50 ft. and a no motor zone out to 300 feet. We also recommend adding Torch Keys East as a 50 ft. no entry/300 ft. no motor zone in this area (dashed red circle in Figure 2).



Figure 2: Torch Key East in blue oval - closed for nesting Reddish Egrets and White Crowned Pigeons

**Northeast Tarpon Belly Keys WMA:** The proposed rule would establish a new no entry area around the Northeast Tarpon Belly Keys. This area supports nesting and roosting for a variety of wading bird species, including a high density of Reddish Egrets and Great White Herons. We are supportive of the no entry designation in this area and believe it will reduce bird disturbance and nest flushing. We are also supportive of a 50 ft. no entry zone along the shoreline followed by a 300 ft. no motor zone in this area.

**Little Crane Key and Crane Key WMA:** The proposed rule would establish a new no entry area around Crane Key in order to reduce disturbance to birds that use the island for nesting and roosting. We are supportive of this designation, in particular, because this island supports the highest count of nesting Great White Herons since Hurricane Irma in the backcountry. A number of other bird species, such as Magnificent Frigatebirds, also use this island for nesting, roosting, and foraging. While we are supportive of the no entry designation to prevent disturbance and flushing from nests, we would also support a no entry designation 50 ft. from the shoreline and a follow that a 300 ft. no motor designation in this area in order to accommodate pole/troll fishing activities which are not likely to seriously disturb these bird species and impact nesting outcomes.

**Happy Jack Key WMA:** The proposed rule would establish a new no entry area around Happy Jack Key to prevent nesting, roosting, and foraging disturbance to birds. This island supports robust numbers of nests for the listed Reddish Egret and other species like Great White Herons. This is also a known area for Magnificent Frigatebird roosting. We are supportive of this no entry designation as it will decrease disturbance and nest flushing of these species. This island should remain no-entry due to the large Reddish Egret colony that uses the area.

**Barracuda Keys WMA:** The proposed rule would establish an idle speed zone around the Barracuda Keys flats in order to decrease disturbance to shallow water habitats that shorebirds rely on. We are supportive of establishing a 50 ft. no entry zone and a 300 ft. no motor zone in this area which would be effective in protecting both the shallow water benthic habitat of the area and decreasing disturbance for shorebirds. Additionally, we support further expansion of the idle speed zone to encompass the entirety of the Barracuda Keys flats area as proposed by LKGA.

**Snipe Keys WMA:** The proposed rule would establish a new no entry area around the islands south of Snipe Keys which are known roosting areas for Magnificent Frigatebirds. We are supportive of this designation because these species are easily disturbed by motorized boat traffic. However, we would also support establishment of a 50 ft. no entry/300 ft. no motor zone in this area to accommodate pole/troll fishing activities which are less likely to disturb roosting birds.

**Mud Keys WMA:** The proposed rule would remove the existing no entry area in the Mud Keys area and instead establish an idle speed zone. We are supportive of this change because we feel that an idle speed zone in this area would reduce boat traffic-related disturbance to nesting and roosting birds such as Herons, Osprey, and Magnificent Frigatebirds.

**East Harbor Key and Lower Harbor Keys WMA:** The proposed rule would create a no entry area around East Harbor Key and would extend the existing idle speed zones throughout the Lower Harbor Keys. We are supportive of these measures because they will reduce disturbance threats to species that rely on this area for nesting and roosting, including a variety of heron and wading bird species, cormorants, and ospreys. We would also support a no entry zone 50 ft. from the shoreline followed by a 300 ft. no motor designation in lieu of a no entry designation to support low impact pole/troll fishing activities which are unlikely to disturb nesting or roosting birds.

**Bay Keys WMA:** The proposed rule would establish a new no motor area and would extend the existing idle speed zone in the Bay Keys area. Southwest and Southeast Bay Keys are known nesting and roosting sites for several Heron species, Ospreys, Magnificent Frigatebirds, Double Crested Cormorants, and other species. We are supportive of these new designations and would also recommend establishment of a 50 ft. no entry zone from the shoreline. Together, these provisions would reduce boat-related disturbances to birds as well as nest flushing.

**Hurricane Key:** Hurricane Key, located east of Tarpon Belly, is not included in the proposed rule, but should be considered for a zoning designation. This area supports roosting Magnificent Frigatebirds, nesting Reddish Egrets, Great White Herons, and White Crowned Pigeons. It also provides important foraging habitat for numerous other wading birds. We recommend establishing a 50 ft. no entry zone around the shoreline of the island with a 300 ft. no motor zone extending outward in order to prevent disturbance to the bird species and to balance access to resources for pole/troll fishing activities.

**Don Quixote Key:** Don Quixote Key, located east of Big Pine Key, is not listed in the proposed rule, but should be considered for zoning protections. This island supports nesting for Reddish Egrets and Brown Pelicans. Brown Pelican nesting locations are rare in the Florida Keys and should receive protections. We recommend establishing a no entry zone around this island in order to adequately protect this rare nesting population of Brown Pelicans.

**Howell Key:** Howell Key, located west of Middle Torch Key, is not listed in the proposed rule and should be considered for zoning protections. This area supports the second highest nesting population of Reddish Egrets in the Lower Keys. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce disturbance to bird species.

**South Picnic Island:** South Picnic Island, located just south of Little Torch Key and the southernmost of the Picnic Islands, is not listed in the proposed rule and should be considered for zoning protections. This island supports nesting for Reddish Egrets and Great White Herons. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce disturbance to bird species.

**Pine Channel Island:** Pine Channel Island, located near Big Pine Key, is not listed in the proposed rule and should be considered for zoning protections. This island supports nesting for Little Blue Herons and most recently cataloged nearly 40 nests for this species on site. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce disturbance to bird species.

**Upper Sugarloaf Sound:** Upper Sugarloaf Sound is not included in the proposed rule, but should be considered for zoning protections to reduce disturbance to bird species. In particular, this area supports a large nesting colony of Reddish Egrets - a listed species. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce bird disturbance.

**Little Saddlebunch:** Little Saddlebunch is not included in the proposed rule, but should be considered for zoning designation. This area experienced significant impacts during Hurricane Irma, but still provides important nesting habitat for Reddish Egrets. Prior to Hurricane Irma, this area supported around 20 nests for Reddish Egrets and today that number has dropped to around two nests. However, it is important to provide protections for this area in order to allow these nesting numbers to recover. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce bird disturbance and increase the likelihood of renesting in this area.

**Cocoanut Key:** Cocoanut Key, located near east Bahia Honda Key, is not considered in the proposed rule, but should be considered for zoning protections. This area supports a variety of bird species and provides important habitat for roosting and foraging. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone to reduce disturbance to these species.

**Bill Finds Key:** Bill Finds Key, located north of Lower Sugarloaf, is not considered in the proposed rule, but should be considered for zoning protections. This area supports nesting for Great White Herons and may support nesting for Reddish Egrets. We recommend establishing a 50 ft. no entry zone from the shoreline of the island which should extend into a 300 ft. no motor zone in order to reduce potential nest flushing and disturbance to these species.

### **Middle Keys Region**

**Cheeca Rocks SPA, Cheeca Rocks East, Cheeca Rocks South Habitat Restoration Areas:** The proposed rule would expand and protect the patch reef habitats of Cheeca Rocks which contain one of the largest known populations of Endangered Species Act (ESA) listed star coral within the sanctuary. These populations remain susceptible to Stony Coral Tissue Loss Disease (SCTLD) and continued monitoring and protection of this site is essential. We support expanding the zoning in this area to include Restoration Areas. However, we feel that the proposed zones do not encompass the entirety of the vulnerable corals in this area. Notably, the patch reef zone northwest of the SPA should be included due to the occurrence of boulder corals in this area.

Additionally, the Cheeca Rocks SPA and Restoration Areas are segmented in the proposed rule rather than contiguous. In order to promote habitat continuity for species, to support coral spawning, and to prevent damage to this sensitive area from consumptive uses, we propose connecting these areas through one larger zone, as proposed alternatives in the 2019 DEIS. A notable example and potential model of a zone of contiguous connectivity between SPAs proposed within this rule is Key Largo Dry Rocks-Grecian Rocks. Again, this larger zone should include the northwestern expanse which contains ESA listed corals. Contiguous habitats will increase the viability and success of coral restoration efforts in the area and will ensure that these highly-resilient habitats receive adequate protection when many other coral areas in the sanctuary are experiencing precipitous decline.

**Alligator Reef SPA:** The proposed rule would expand the Alligator Reef SPA to include the deeper water spur-and-groove bank reef system. We support this expansion and are encouraged to see additional protections extended to the deeper habitats in this area which support bleaching and disease-resistant coral species. By protecting these areas, we are protecting biodiversity of coral species and ensuring their future viability. This area of Alligator Reef also supports large aggregations of queen conch, a species that is currently undergoing a NOAA rulemaking for listing as a threatened species under the Endangered Species Act. Alligator Reef is also an important coral restoration site and is home to an iconic cultural resource - the Alligator Reef lighthouse. We feel strongly that this zone was originally designed to limit consumptive activities, such as catch and release and bait fishing, and this expansion should reflect the original intent of the zone establishment.

**Tennessee Reef Conservation Area:** The proposed rule creates expanded zoning for Tennessee Reef into the deep spur-and-groove reef which contains disease and bleaching resistant deep water corals as well as deep water barrel sponges. While we are encouraged to see these additional protections and are supportive of extending the Conservation Area into the deeper waters, the proposed rule is not strong enough to protect this area. In many cases, deeper reefs have been less degraded than their shallow water counterparts and may help reseed shallower, more degraded reefs. The corals of these deeper reefs are more resistant to coral bleaching and diseases, making them critical reservoirs of biodiversity and supporting spawning for fish and lobster.

We strongly support the shoreline to reef zone that was initially proposed in Alternative 4 of the DEIS for this area and urge NOAA to include this in the final rule. A shoreline to reef zone in this area would provide invaluable habitat connectivity from upland hardwood hammocks and mangroves forests of Long Key State Park, to seagrass meadows, to patch reefs, to the reef tract, and out to the deep reef area. Such shoreline to reef connectivity existed historically throughout the sanctuary and supported species spawning and transit between and among zones.

**Turtle Shoal SPA:** The proposed rule creates a new SPA in the Turtle Shoal area to protect mid-channel patch reefs to support coral and fish biodiversity. We support the establishment of this SPA because environmental conditions in this area support disease and bleaching resistant corals. In addition, the corals in this area appear to be more resilient than other areas and therefore protecting this area as a SPA is important to ensure species protection and to support the recovery of historic populations of ESA-listed species such as staghorn and pillar corals. Mid-channel aggregate and individual patch reefs like the ones in this SPA are essential to protect because of the connectivity they provide to shoreline environments, outer, and deep reefs.

**Sombrero Key SPA:** The proposed rule would expand the Sombrero Key SPA to include the spatial extent of spur-and-groove and deep reef habitats in the area. We are supportive of this measure which would protect robust populations of ESA-listed star corals, remnant elkhorn coral thickets, boulder corals, and barrel sponges. The Sombrero Key SPA is also home to an important cultural resource - the Sombrero Key lighthouse. As with Alligator Reef, the original SPA was created with the intent to limit consumptive activities due to resource sensitivity and this zone expansion should reflect the original intent of the zone establishment.

**Snake Creek WMA:** The proposed rule expands the existing Snake Creek WMA and we are supportive of this expansion. This area experiences increasing user impacts to shallow water and benthic habitats from vessel groundings and prop scarring due to boat activity exacerbated by nearby "sandbar" usage. By expanding the WMA in this area, we can ensure decreased disturbance of wildlife which use the area for



nesting, roosting, foraging, spawning, and sheltering. The establishment of this WMA also supports habitat connectivity to Windley Key Fossil Reef Geological State Park and nearby mangrove fringe habitats. We are supportive of the proposed zoning designation by the FKFGA as illustrated in Figure 3 below.

**Cotton Key WMA:** The proposed rule expands the existing WMA around Cotton Key in order to protect shallow seagrass flats which have been impacted by vessel groundings and prop-scarring. We support the expansion of this WMA because it will protect Cotton Key, a bay-side island which supports nesting habitat for a variety of wading and seabird species. The no motor expansion will permit ample access to the sensitive seagrass habitats by pole and troll users, while limiting disturbance to species that rely on the area such as Brown Pelicans, Herons, Double Crested Cormorants, Magnificent Frigatebirds, bonefish, permit, tarpon, and other species. We are supportive of the proposed zoning designation by the FKFGA as illustrated in Figure 3 below.

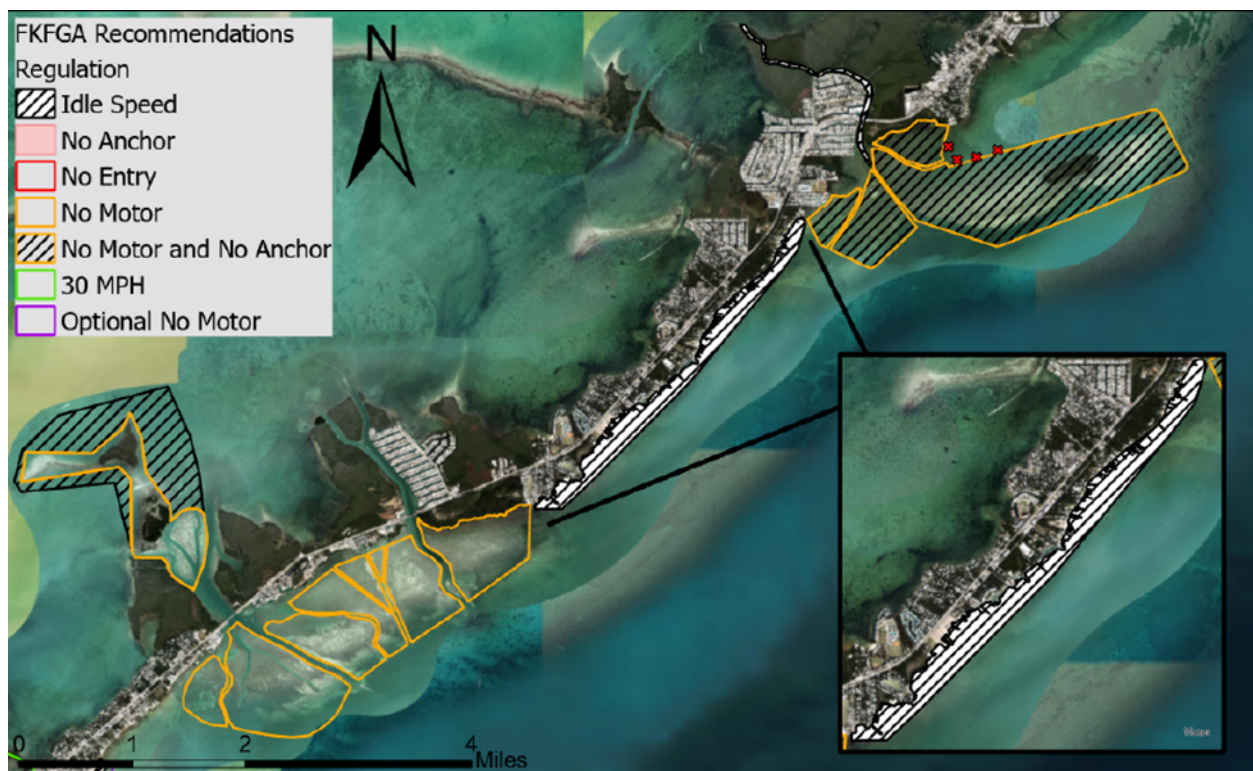


Figure 3: FKFGA recommendation for Tavernier Key, Snake Creek and Cotton Key WMA's. Crosshatch is no motor and no Anchor

**Ashbey-Horseshoe Key WMA:** The proposed rule establishes a WMA and a no entry area around Ashbey-Horseshoe Key in Florida Bay. We are supportive of the establishment of the WMA and the creation of the no entry area. This island is located within Lignumvitae Key Aquatic Preserve and Lignumvitae Key Botanical State Park, an area that has been designated due to the habitats of significance within its boundaries. Ashbey-Horseshoe Key in particular provides important habitat for a variety of species including Brown Pelicans and Magnificent Frigatebirds. The area and the surrounding seagrass flats have been adversely impacted from fishing, boating, and personal watercraft pressure, causing wildlife entanglement and prop scarring. The no entry area will limit access to this small island and will ensure that the species that rely on it receive protection and are free from disturbance. We would be supportive of a no entry area around the interior portion of the key or a 300 ft no motor/50 ft

closed zone around the exterior of the island in order to protect Snowy Egret nesting that occurs on the island. We are otherwise supportive of the recommendations for this zone made by the FKFGA.

**Channel Key Banks WMA:** The proposed rule would establish a WMA around the Channel Key Banks which would require idle speed only when boating in this area. We are supportive of this WMA establishment and the idle speed zone, but would recommend that the final rule include a no entry area around Channel Key itself. Throughout the WMA, the idle speed zone would protect benthic habitats that support corals, sponges, and seagrasses from vessel impacts such as prop scarring and groundings. Channel Key itself is an important refugia for numerous bird species, supporting rookeries and foraging habitat for Reddish Egrets, Great White Herons, Roseate Spoonbills, White Crowned Pigeons, Clapper Rails, Great Blue Herons, Black Necked Stilts, Magnificent Frigatebirds, Greater Black Backed Gulls, Yellow Crowned Night Herons, Brown Pelicans, Snowy Egrets, Osprey, Green Herons, Cattle Egrets, Tri-Colored Herons, Turkey Vultures, Spotted Sandpipers, White Ibis, and Laughing Gulls. As recently as June 2022, more than 1,000 Double-crested cormorants with 400 nests were cataloged on this island. These large colonies are susceptible to disturbance and for this reason we recommend that a no entry area be established around the island.

**Marathon Oceanside Shoreline WMA:** The proposed rule would establish a new Marathon Oceanside Shoreline WMA along Vaca Key Bight. This is a shallow water area that has experienced adverse impacts to the benthos from vessel groundings and prop scarring. We are supportive of the establishment of the WMA and the associated idle speed zone to reduce impacts to seagrass and hardbottom habitats in this area. Protection of this habitat and recovery of nearshore seagrass would support increased habitat connectivity between the Vaca Key Bight mangrove shoreline, the seagrass beds, and the reef tract - particularly the Marathon and Middle Keys Restoration Areas and nurseries.

**Red Bay Bank WMA:** The proposed rule would establish a new WMA in the Red Bay Bank area and an associated idle speed zone. We are supportive of this measure because this area sustains diverse assemblages of corals, sponges, seagrasses, and other benthic species. Due to the shallow water environment in this area, an idle speed zone throughout the WMA would protect against prop scarring, grounding, and other vessel impacts to submerged resources.

**South Islamorada Coral Gardens:** The proposed rule does not contain any zoning designations for the South Islamorada Coral Gardens, located off of Upper Matecumbe just offshore of Caloosa Cove Marina and Channel 2 (24.836708, -80.728162). We recommend that the sanctuary include zone protections for this area which supports coral colonies of similar size, diversity, and quality to those at Cheeca Rocks. The corals in this area also appear to be resilient and disease-resistant. We feel strongly that any healthy, resilient, disease-resistant, and contiguous coral cover - including nearshore patch reefs such as this - should receive robust protections under this rule and we encourage the sanctuary to reconsider this area as worthy of SPA designation.

## Upper Keys Region

**Turtle Rocks SPA:** The proposed rule would create a new SPA in the Turtle Rocks area of the Upper Keys. We are supportive of the establishment of this SPA as it would protect mid-channel patch reefs which contain environmental conditions that support disease and bleaching resistance and resilience in diverse coral species. In particular, this area contains remnant populations of ESA-listed staghorn corals and one of the only known fused staghorn coral colonies. Establishment of this SPA would protect those



vulnerable resources and would also safeguard historical resources found in the area. Mid-channel reefs, such as those protected in the Turtle Rocks SPA, provide important interconnected habitats between mangrove shorelines, seagrasses, patch reefs, the reef tract and deep reefs. Specifically, this SPA would be situated across from the robust mangrove habitat at Angelfish Key, Palo Alto Key and Dagny Johnson Key Largo Hammock Botanical State Park. This SPA is also located within the boundaries of John Pennekamp Coral Reef State Park, and is adjacent to Biscayne National Park, thus providing additional connectivity benefits to these already protected areas.

***Carysfort Reef SPA and Carysfort Reef Nursery Restoration Area:*** The proposed rule would expand the existing SPA at Carysfort Reef and would include an additional transit only area in the Carysfort Reef Nursery Restoration Area. We support both of these measures. The expansion of this SPA would protect the best spur-and-groove reef system in the Upper Keys and would provide more expansive habitat protections to deeper reefs in the area where corals are more resilient and disease resistant. This expansion will increase habitat connectivity for the Carysfort Reef area which is an important spawning aggregation site for numerous fish species and is one of the sanctuary's seven Mission Iconic Reef sites. This site also contains an iconic cultural resource within its footprint - the Carysfort lighthouse.

While we are supportive of this measure, we more strongly support the shoreline to reef zone that was initially proposed in Alternative 4 of the DEIS for this area. Alternative 4 was modeled on the Western Sambo Ecological Reserve's demonstrated success. A shoreline to reef zone in this area would provide invaluable habitat connectivity from hardwood hammocks to mangroves forests, to seagrass meadows, to patch reefs, to the reef tract, and out to the deep reef area. In particular, because of the way that the Florida Current interfaces with the reef in this area, a connected shoreline to reef zone could be hugely influential in improving biodiversity, genetic diversity, and connectivity in the region. A large contiguous protected area in the Upper Keys would essentially connect the reefs to the southern portion of Everglades National Park through Crocodile Lake National Wildlife Refuge, Dagny Johnson Key Largo Hammock Botanical State Park, and John Pennekamp Coral Reef State Park. Additionally, it could help to protect and amplify the restoration efforts in Mission Iconic Reefs.

***The Elbow SPA and the Elbow Nursery Restoration Area:*** The proposed rule creates a new designation for existing, permitted coral nurseries as "restoration areas." We are supportive of this designation and the additional protections the zone classification provides to coral nurseries throughout the sanctuary footprint. The Elbow Nursery Restoration Area's designation as a transit only zone will ensure that the coral nursery in this area is not subject to impacts from vessel anchoring. The RA's location immediately adjacent to the SPA also improves connectivity and interaction between nursery corals and naturally occurring reef corals and hard bottom assemblages within the Elbow SPA itself.

***Horseshoe Reef Habitat Restoration Area:*** The proposed rule would establish a SPA at Horseshoe Reef - the only Mission Iconic Reefs site in the sanctuary not already included within a SPA. We support this designation for this active restoration site to provide additional protections to reef restoration areas. In addition, this SPA is located immediately across from John Pennekamp State Park and the robust mangrove shoreline along park boundaries. Creation of this SPA would support connectivity between mangrove and reef habitats in this area.

***Key Largo Dry Rocks, Grecian Rocks, and Key Largo Dry Rocks-Grecian Rocks SPAs:*** The proposed rule would connect the preexisting Grecian Rocks and Key Largo Dry Rocks SPAs. As noted in our comments on Cheeca Rocks, we strongly support this measure as an example of connecting similar habitats to create contiguous areas for fish, corals, and other species to thrive. This area has diverse reef types and

supports a large, healthy population of ESA-listed star coral. It is an active reef restoration location and also contains submerged cultural resources including the Christ of the Deep statue. By connecting these two preexisting SPAs, the sanctuary has demonstrated the value in providing contiguous and diverse habitat types to a variety of species such as reef fish, lobster, and corals. We recommend that this approach be employed in other areas, such as Cheeca Rocks, which could benefit from increased spatial extent of connectivity.

***Molasses Reef and French Reef SPAs:*** The proposed rule intends to keep Molasses Reef as a SPA, but remove French Reef's SPA designation. We support this measure only if the sanctuary relies on the scientific basis that Andy Bruckner provided in his verbal explanation of this change to the sanctuary Advisory Council, as opposed to the written justification in the rule. Thus, we recommend that the text of the rule be changed to reflect the scientific basis for this decision – that French Reef SPA be eliminated to improve scientific understanding of the effects of resource protection, marine zoning, and restoration. We do not support the justification of removing SPA designation because coral cover has reduced over time. That justification sets a troubling precedent and we are opposed to its inclusion in the final rule.

We support Molasses Reef's continued designation as a SPA due to the presence of listed coral species, submerged cultural resources, reef restoration activities, scientific monitoring activities, and the location of the iconic Molasses Reef lighthouse.

***Pickles Reef Habitat Restoration Area and Tavernier Nursery Restoration Area:*** The proposed rule would establish a new Pickles Reef SPA and associated RA. We are in support of both of these measures. The Pickles Reef RA and Tavernier RA are restoration and nursery sites for this area. This designation would protect these areas from anchor damage as this reef is a known location for recreational snorkelers and lobstering.

***Crocodile Lake WMA:*** The proposed rule would create a no entry area along the border of the Crocodile Lake National Wildlife Refuge. We are supportive of this designation as an effort to decrease disturbance to ESA-listed American crocodiles, West Indian manatees, wading birds, and seabirds that rely on this area for foraging, nesting, and sheltering. This area has increasingly been impacted by vessel groundings and prop scarring due to increased boating use and a no entry designation would protect this shallow water area and submerged aquatic vegetation from those impacts. Additionally, this area is proximal to Everglades National Park and Biscayne National Park, making it all the more essential that the shoreline is protected so as to provide adequate refugia to the species that are in transit between these pre-existing protected areas.

***Barnes-Card Sound WMA:*** The proposed rule establishes a WMA in the Barnes Sound area. We support this measure. This area of the sanctuary is hydrologically linked to the greater Everglades ecosystem, Everglades National Park, and Biscayne National Park. This area of Barnes Sound has long been a field laboratory location for studies of Biscayne and Florida bays hydrology and critical nearshore habitats such as mangroves and seagrass. The data collected in this area inform water management decisions and provide insight as to the efficacy of Everglades restoration - the largest ecosystem restoration project in the world. The proposed no motor zone in this area will decrease benthic impacts and decrease disturbance to nesting and wading birds, as well as shallow water gamefish like snook, redfish, bonefish, or tarpon. In addition, a no motor zone would reduce impacts from heavier and deeper draft vessels that target the area for blue crab and sponges. We are supportive of a no motor zone in this area.

**Eastern Lake Surprise WMA:** The proposed rule would establish a no entry area along the eastern shoreline of Lake Surprise. We are supportive of this measure. This designation would decrease disturbance to ESA-listed species such as the American crocodile, West Indian manatee, and various species of wading and seabirds. With Lake Surprise being used more regularly as an unofficial vessel anchorage location, this designation is important to ensure that resources in this area are adequately protected.

**Whitmore Bight WMA:** The proposed rule would establish a WMA and associated no motor zone in the Whitmore Bight area within John Pennekamp State Park. We are supportive of this measure because it will decrease disturbance to the benthic community and hardbottom habitat in the area. However, we encourage the sanctuary to extend the designation to the flat just south of South Sound Creek, known as the “airport flats.” The flat in this area is just as, if not more, shallow than the Whitmore Bight area and contains the same habitat. This area in particular is popular for flats fishing and to preserve the habitat upon which that fishery relies, it would be good practice to permit pole/troll on this flat only. The justification for not extending the WMA is that there are overlapping jurisdictions and that this would be a duplicate regulation. We feel that rather than duplicative, this is a consistent regulation. And, should the Park Service change their regulation the sanctuary regulation would still be in place providing protection for this area. We encourage the sanctuary to extend the WMA across the extent of the flat in the Whitmore Bight area and to not exclude the southernmost component.

**Pelican Key WMA:** The proposed rule would establish a no entry area around Pelican Key. We support this measure as this area experiences significant personal watercraft, boating, and paddle craft pressure which can disturb roosting and wading birds as well as harm benthic communities. The proposed no entry area would extend 300 ft. around the entire island to decrease wildlife disturbance. Water-based recreation can occur near the island simply outside of the no entry area. Due to the popularity of this area, we encourage the sanctuary to review the viability of additional mooring buoys, signage and markers around Pelican Key. In addition, community members have reported increased occurrences of seaplane takeoff and landing in this area. We encourage the sanctuary to review these activities and determine whether or not they are disturbing sensitive species, and if so, to utilize the sanctuary’s rulemaking authority to limit this practice in this area.

**Dove and Rodriguez Keys WMAs:** The proposed rule would establish a no motor zone around Dove Key and Rodriguez Key. We do not support this change and feel that Dove Key should remain a no entry zone. We are supportive of the no motor zone continuing around Rodriguez Key and feel that this will continue to decrease disturbance to fish, wildlife, and the benthic community. We recognize that the sanctuary would like to improve compliance by establishing the same zones around these two islands, however, we feel that Dove Key requires additional protection due to the sensitive resources on site. Because this area has recently grown in popularity and has experienced increased boating pressure, it is all the more imperative to continue the existing protections for Dove Key. We would also be supportive of a no motor and no anchor zone in this area as recommended by the FKFGA to meet conservation goals of these keys.

**Pigeon Key WMA:** The proposed rule would establish a no entry zone around Pigeon Key. We support this measure because Pigeon Key provides an important habitat for nesting wading birds, including Roseate Spoonbills, Great White Herons, Tricolored Herons and Reddish Egrets as well as roosting for Magnificent Frigatebirds. This highly sensitive bird rookery is in close proximity to the Intracoastal Waterway, which increases the likelihood of nest disturbance absent a no entry zone. However, we

would also support establishment of a 50 ft. no entry/300 ft. no motor zone in this area to accommodate pole/troll fishing activities which are less likely to disturb roosting birds.

**Tavernier Key WMA:** The proposed rule would adjust the regulations within the existing Tavernier Key WMA to include a no anchor and no motor zone. We are supportive of this measure because the shallow seagrass flats in this area have been adversely impacted by increased boating pressure, including vessel groundings and prop scarring. The no motor and no anchor zone would balance access to the resource, while protecting the resource at the same time. Additionally, this change would decrease disturbance to the diverse species that rely on Tavernier Key and the surrounding flats for foraging, roosting, sheltering, and nesting. We would also be supportive of a no motor designation in the Tavernier Key WMA to accommodate low impact pole/troll fishing activities in the shallow water areas as proposed by the FKFGA in Figure 3.

## Management Plan

We believe a robust, fully implemented management plan is as important for the sanctuary achieving its congressionally mandated purpose as improved marine zoning and other regulatory changes found in the proposed rule. By coupling the management plan with the adaptive management protocols proposed in the draft rule, the sanctuary will be well-positioned to respond to resource threats and changing conditions in real time.

**Prioritizing and Defining Management Goals:** The draft management plan's mission statement falls short by failing to emphasize natural and cultural resource protection in favor of science and public engagement, both of which are vital, yet insufficient without effective protections. The five goals should be written in an order that more accurately reflects this priority. We suggest changing the order of the goals to the following: 3, 2, 5, 1, 4 to prioritize reducing threats, improving conditions, and implementing effective management. And while the management activities identified under each objective are relatively comprehensive in scope, we recommend making them more specific, time-bound and measurable so progress may be assessed and adaptive management may be successfully implemented.

**Climate Change Impacts:** While the effects of climate change are identified as a threat to the Florida Keys National Marine sanctuary in the background information included in the management plan, understanding those effects and building considerations for climate change into planning efforts should be more explicitly stated. A statement could be added to Activity 1.1.4 (Develop a comprehensive science plan) and/or Activity 2.2.8 (Develop a sanctuary habitat restoration plan), but even in management-related activities there should always be a consideration of how climate change is influencing the context in which management is happening.

**Ecological Connectivity Considerations:** The Florida Keys are hydrologically linked to and influenced by waters from the West Florida Shelf, Florida Bay, Biscayne Bay, and the greater Everglades ecosystem. Everglades restoration activities should be more strongly considered in the Management Plan. Objective 2.2 (Develop habitat restoration or mitigation plans/activities where needed) has defined 9 activities, all of which are for actions taken within sanctuary boundaries. Activity 2.1.2 (strengthen engagement with South Florida Ecosystem Restoration Task Force) appears to be the only place in the Management Plan that mentions Everglades restoration activities. Given the degree of ecological connectivity between the sanctuary and the greater Everglades, we encourage the sanctuary to focus on these elements throughout the Management Plan.

**Cross-Jurisdiction Collaboration:** We recommend increasing sanctuary involvement in decision-making forums such as the South Florida Ecosystem Restoration Task Force (SFER TF). Given the connectivity importance between the sanctuary and Everglades restoration activities, collaboration could be bolstered through an additional sanctuary representative to round out representation of the interests of the sanctuary on the SFER TF. This would strengthen the sanctuary's ability to achieve water quality and other habitat restoration goals in both sanctuary waters and waters that border the sanctuary.

**Comprehensive Everglades Restoration Planning Involvement:** We also recommend that the sanctuary become more active partners in Comprehensive Everglades Restoration Plan (CERP) activities. Currently, the Corps of Engineers is leading the planning, development, evaluation, and implementation of the Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER) project. A major focus of this project is restoration of historic freshwater flow directly into sanctuary waters in Card Sound and Barnes Sound. We recommend active participation in Project Delivery Team (PDT) meetings by sanctuary staff as the PDT evaluates possible alternative plans for the project and proposes performance measures to evaluate success of the project. We feel strongly that the sanctuary should be an active partner in these management decisions and that such involvement is critical to achieving Everglades and sanctuary restoration goals. Equally important is the sanctuary's active participation in the upcoming Southern Everglades Study which will aid in restoring historic freshwater flows to Florida Bay and the sanctuary. This involvement should be captured in the Management Plan.

**Natural Resource Recovery Science:** In the current Goal 1, we encourage greater emphasis on all facets of human dimensions sciences, including, but beyond, economics. We also encourage greater emphasis on the science of natural resource recovery, in addition to the existing emphasis on causes of decline. The need to understand the biological and social ramifications of existing and potential future artificial structures in sanctuary waters is underemphasized in the draft management plan. Potential future artificial habitat creation, not just artificial substrata for restoration as contemplated in Activity 3.3.7, needs to be carefully planned, designed, deployed, and monitored in order to improve contributions toward specific, measurable objectives for nature and people (Paxton et al., 2020). For example, monitoring should encompass not only areas containing artificial substrata but also surrounding ecosystems to evaluate effects from a system-wide lens.

Specific water quality monitoring should be established and maintained in and around Key West Harbor to quantify the occurrence and impacts of water quality degradation associated with large vessel traffic.

These and other applied science advancements should be shared during recurring science symposia, held predictably every 5 years. And the results of the individual studies and their synthesis should inform a regularly released update of the sanctuary's Current Conditions Report; also released at 5 year intervals.

**Enhanced Outreach Efforts:** Outreach efforts described in Goal 4 should expand to target Floridians from the South Florida mainland, as many utilize sanctuary resources. Additionally, activity 4.1.3 discusses promoting best practices for diving, snorkeling and fishing but leaves out boating and anchoring, activities which can have significant impacts on the substrate.

The plan should place greater emphasis on engagement with local county and municipal governments whose leaders and their constituents have the capacity to augment sanctuary and other federal and state-led efforts.

***Improved Channel Marking and Signage:*** Finally, we urge the sanctuary to include in management plan activities direction to install a system of channel marking and signage for recommended shallow water boating thoroughfares similar to Everglades National Park's successful efforts in Florida Bay. Continued degradation of seagrass and other vulnerable habitats adjacent to these existing thoroughfares requires action that only adequate marking can accomplish. This could be developed in tandem with the plan for mooring balls in Objective 3 and with guidance from the SAC's recently established Mooring Ball Working Group.

## Conclusion

Thank you for your consideration of our comments in support of a strong Restoration Blueprint. We deeply appreciate NOAA's commitment to the future of the incredible natural resources protected by the Florida Keys National Marine Sanctuary.

Sincerely,

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Audubon Everglades

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