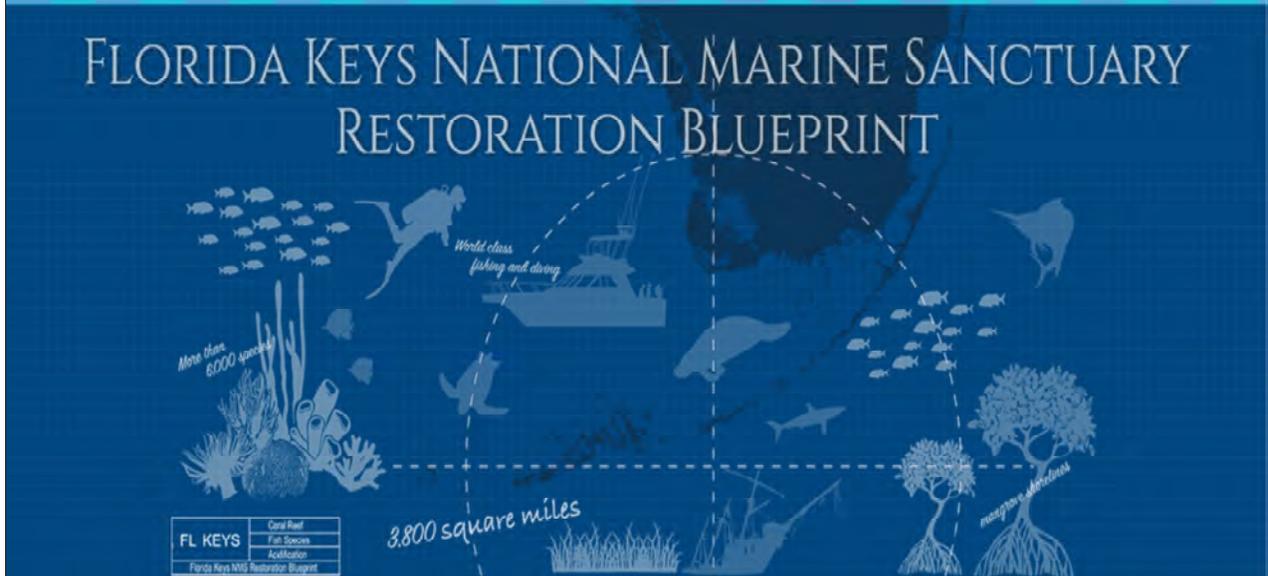




NATIONAL MARINE
SANCTUARIES



FLORIDA KEYS NATIONAL MARINE SANCTUARY RESTORATION BLUEPRINT



Introduction slide.

This presentation provides a summary of NOAA's proposed rule to update the Florida Keys National Marine Sanctuary boundary, sanctuary-wide regulations, and marine zones and associated regulations (15 CFR Part 922). The release of this notice of proposed rulemaking initiates a 100-day public comment period..

Florida Keys National Marine Sanctuary
Sarah Fangman, Beth Dieveney, Joanne Delaney, and Andy Bruckner
Date: July 12, 2022

Unless otherwise noted, images throughout the presentation are by NOAA.



FLORIDA KEYS
NATIONAL MARINE
SANCTUARY

Presentation Outline

- Why Create a Restoration Blueprint
- Restoration Blueprint timeline and status
- Proposed Rule highlights
 - Sanctuary boundary
 - Sanctuary-wide regulations
 - Marine zones & associated regulations
- Public outreach products and tools
- Next steps and how to stay engaged



Photo Credit: Catlin Seaview Survey

Presentation Outline slide.

This presentation provides an update on the overall Restoration Blueprint process and timeline, highlights of the proposed rule and give a tour of the Restoration Blueprint webpage where the public can access all of the documents and associated resources, find a link for public comment (direct access to the specific [regulations.gov](https://www.regulations.gov/docket/NOAA-NOS-2019-0094) docket #NOAA-NOS-2019-0094), and find information for upcoming public Q&A and public comment opportunities.



Economic Value and Impact of Visitors slide.

The Florida Keys have more than 77,000 residents and up to 5.5 million annual visitors, and a local economy of nearly \$5.0 billion. In 2018, tourism spending in Monroe County accounted for \$2.4 billion, supporting 44% of jobs/employment in the county. Tourism activity and spending is heavily dependent on the maintenance of a healthy marine environment. Approximately 60 percent of the economy is tied directly to marine-related activities, including commercial and recreational fishing, boating, diving, wildlife viewing, and other various tourist-related activities. A declining marine environment puts the Florida Keys economy and jobs at risk.

Blue Economy of the Keys



Tourism

5.3 million visitors in 2019

Boating

4.5 million boaters per annum

Diving and Snorkeling

1.86 million divers and snorkelers per annum

Commercial Fishing

79% of the catch from the sanctuary is processed in Monroe County

Recreational Fishing

2.7 million people fish in FKNMS each year



Blue Economic of the Florida Keys slide.

This slide provides more detail for each of the economic contributors and levels of participation in the recreational sectors of Tourism, Boating, Diving/Snorkeling, fishing and of the commercial fishing sector.

Why Blueprint?



HEALTHY FLORIDA KEYS

The sanctuary focuses efforts to protect fragile ocean resources that drive the economy and local way of life. A healthy Florida Keys marine ecosystem is the foundation for a strong economy.

NATURAL RESOURCES

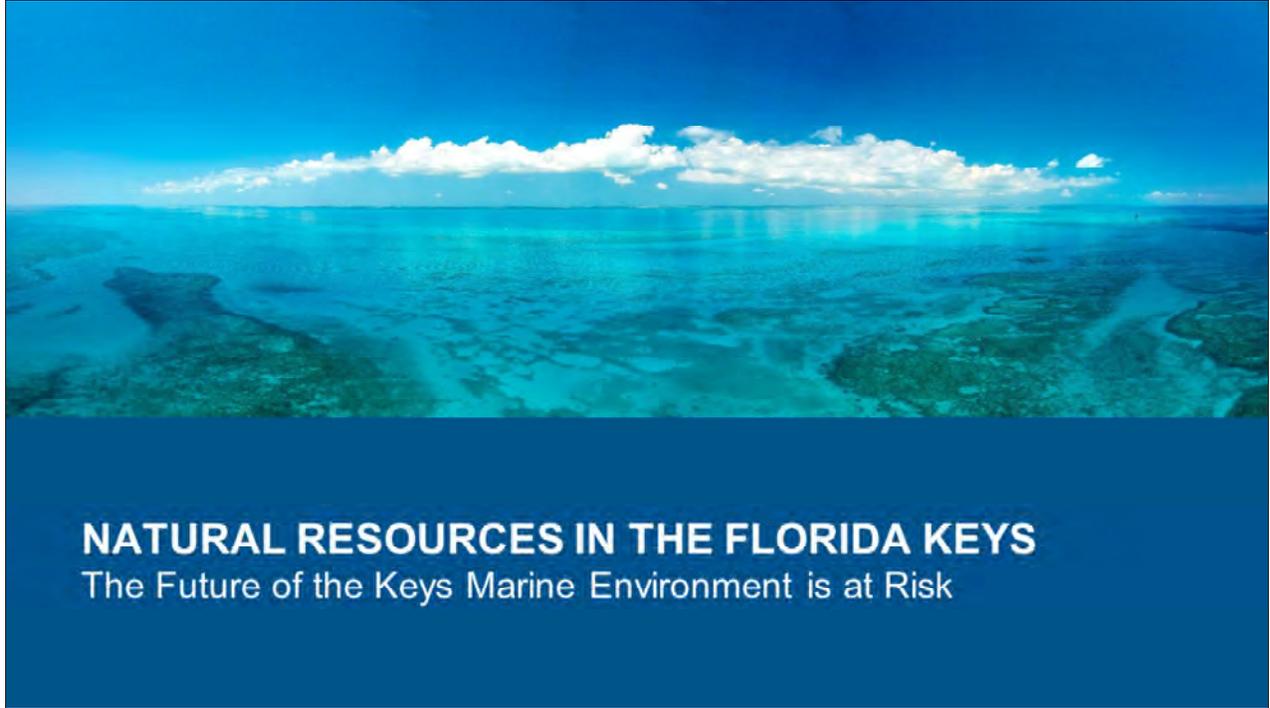
Dying corals, habitat destruction and increasing human use are putting the future of the Florida Keys marine environment at risk.

PLANNING FOR THE FUTURE

The sanctuary is proposing a Restoration Blueprint that embodies what we have learned after 40 years of cutting edge science, technical experience, and local community involvement

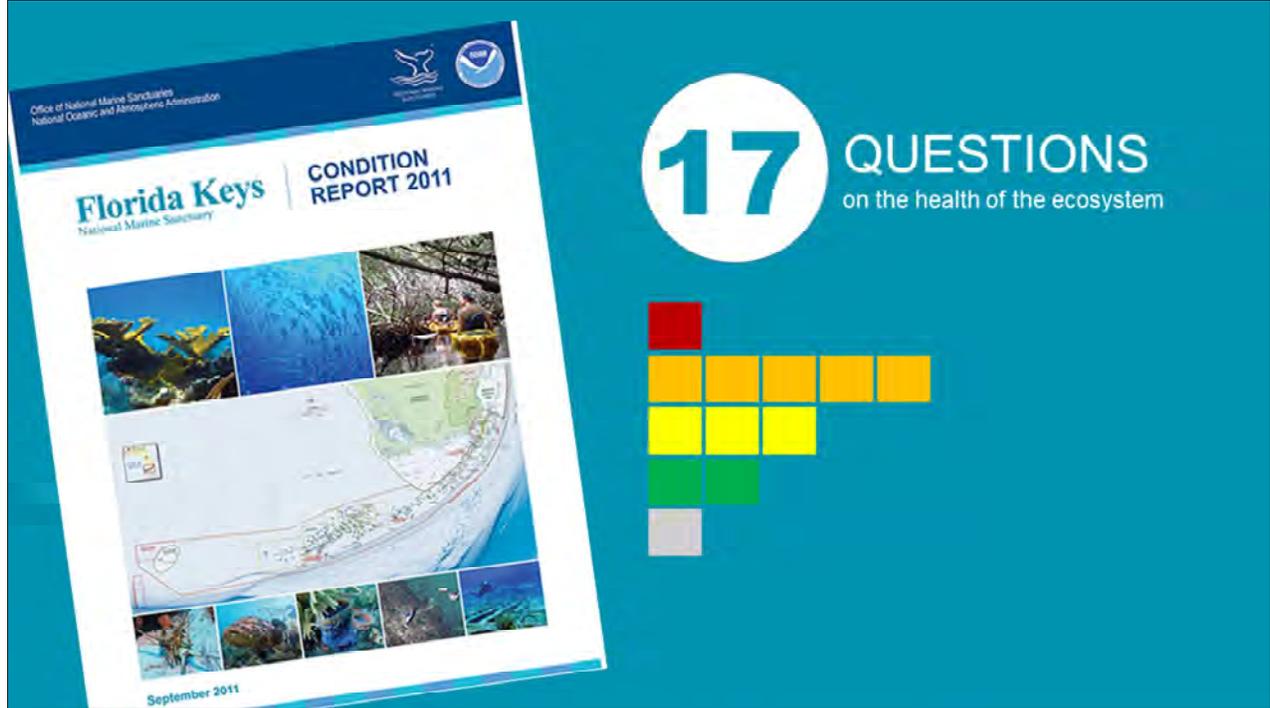
Why Create a Restoration Blueprint slide.

The need for this proposed rule is to respond to threats to marine resources of the Florida Keys, consistent with the purposes and policies of both the NMSA and the FKNMSPA. FKNMS is currently operating under the original regulations, including marine zones, that became effective in 1997, and a 2007 revised management plan, which directs the sanctuary's non-regulatory management activities. In order to ensure long-term resource viability and ecosystem function, this management framework needs to be updated to address current and foreseeable future threats. Generally, the marine resources within the sanctuary face increased risk from local, regional, and global threats; and changes in visitor numbers, use patterns, types, and shifting recreational interests. Specifically, these threats include diminished water quality originating from both within and outside the sanctuary, significant decrease in coral cover, and habitat degradation from vessel impacts including anchor damage, propeller-scarring, and groundings. Each of these threats has major implications for FKNMS.



NATURAL RESOURCES IN THE FLORIDA KEYS
The Future of the Keys Marine Environment is at Risk

Natural Resources in the Florida Keys introduction slide.

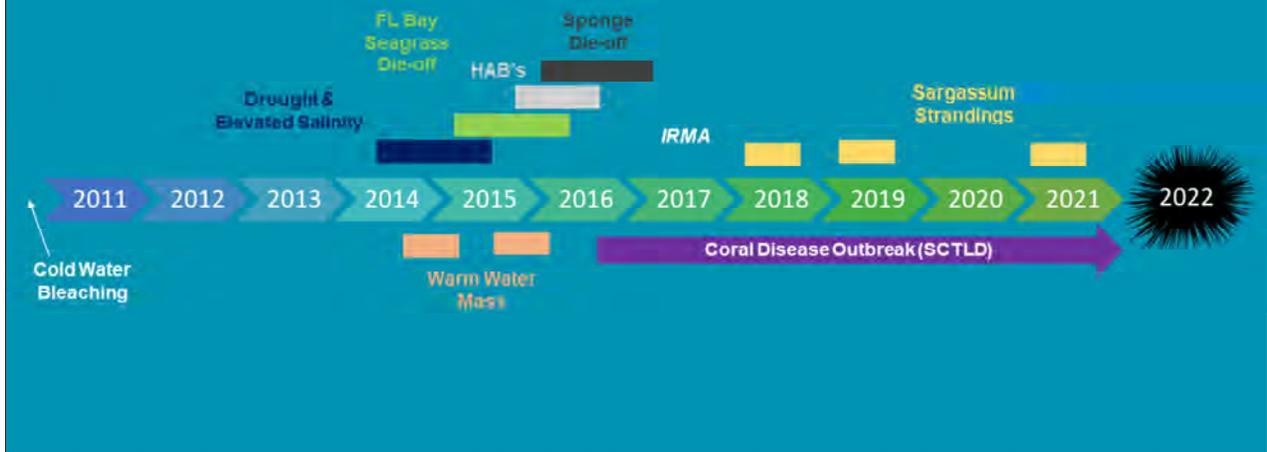


Florida Keys National Marine Sanctuary Condition Report slide.

The 2011 Florida Keys National Marine Sanctuary Condition Report asked 17 discrete questions about the health of the sanctuary related to water quality, living marine resources, habitats, and historical resources.

The condition report concluded that resources in the Florida Keys appear to be in fair to fair/poor condition, are generally either stable or in decline, and that emerging threats to sanctuary resources include invasive species, climate change, increasing coastal and visitor populations, and recreational use of the sanctuary.

Since 2011...



Timeline slide showing major events since 2011.

Since the release of the 2011 condition report, sanctuary resources have been further degraded by Hurricane Irma (2017), a serious and widespread coral disease outbreak, and a seagrass die-off, among other threats.

Declines in Coral



Florida's Coral Reefs Are Under Pressure

Threats to coral reefs include:

- Coral disease and bleaching
- Poor water quality
- Changing ocean conditions
- Marine debris
- Habitat destruction: groundings, weather, human behavior

Coral Reef Ecosystem Impact slide.

This slide includes information about some of the threats to coral reef ecosystems of the Florida Keys including coral disease and bleaching, water quality, marine debris, and habitat destruction.

Damage to Seagrass



Seagrass covers 50+% of the Sanctuary

What happens when seagrass is injured?

- Injury to the habitat
- Loss of fisheries
- Damage to the vessel
- Costly fines and repairs
- Damage assessment and restoration

More than 56,000 acres of seagrass have scarring damage



Seagrass Ecosystem Impact slide.

This slide includes information about seagrass habitats and the lost ecological value when seagrass is injured including loss of habitat, impact to species including fish and invertebrates. Seagrass habitat covers approximately 50% of the sanctuary and yet more than 56,000 acres of seagrass have scarring damage (for reference 1 acre is the size of a football field).

Other Stressors

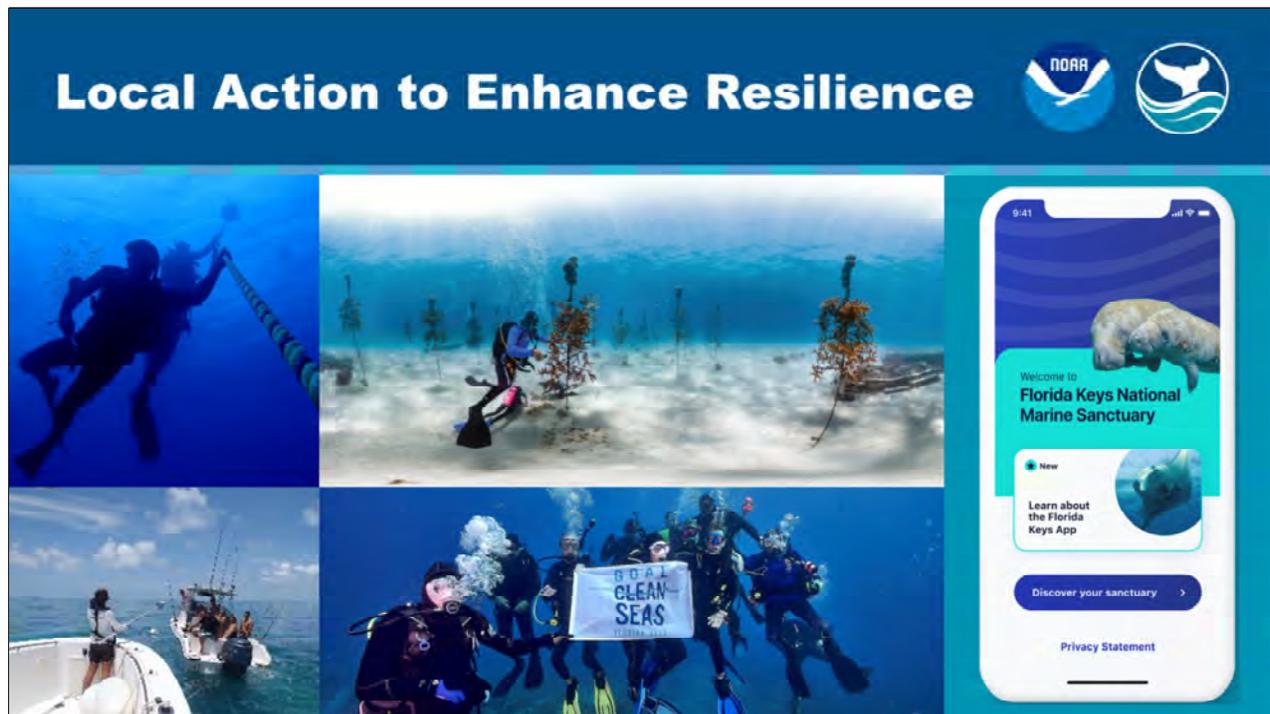


- Population growth
- Increased use of resources
- Hurricanes
- Invasive species (e.g., lionfish)
- Fishing pressure
- Coastal development
- Marine debris
- Climate change/ocean acidification



Other Stressors slide.

This slide includes a list of other stressors that are impacting the ecosystems in the Florida Keys including population growth, hurricanes, invasive species, and coastal development among others.



Local Action to Enhance Resilience slide.

This slide includes photographs of local actions that the Florida Keys National Marine Sanctuary is taking, supports, and that the Florida Keys community is engaged in including the use of mooring buoys, active coral reef ecosystem restoration, education, and marine debris clean up programs. These actions contribute to the protection of sanctuary resources and through local and targeted action and promote and enhance resilience in the face of regional and global impacts such as from hurricanes and climate change.

Community-Led Effort

50 Advisory Council Members +
35 Community Members

70 Public Meetings

200 Recommendations
to Superintendent

Agency Collaboration

Draft Environmental Impact Statement
4 Alternatives

8 Public Meetings

Over 35,000 Public comments

Community-Led Effort slide.

This slide shows the breadth of sanctuary advisory council, community, and partner agency engagement throughout the entire process.

FKNMS Sanctuary Advisory Council played a significant role throughout this review and the alternatives development process. Informed by their *2012 Regulatory and Marine Zone Alternatives Development Work Plan* and input from four community working groups, the Sanctuary Advisory Council provided over 200 recommendations for the sanctuary superintendent as well as the USFWS Florida Keys National Wildlife Refuges Complex manager to consider when developing alternatives related to regulations and marine zones within the sanctuary.

These recommendations were used by NOAA to draft the Draft Environmental Impact Statement (DEIS), also referred to as the Restoration Blueprint. The DEIS evaluated the environmental consequences of four specific alternatives and provided an in-depth resource assessment.

NOAA hosted informational and public comment meetings specifically focused on the proposals presented in the DEIS.

NOAA received 1,213 separate comments during the public comment period, and several letter campaigns and petitions each with multiple signatories for a total of well over 35,000 comments. The types of organizations that commented include the

following: state and federal agencies, local municipalities, homeowners' associations, fishing organizations, diving organizations, non-governmental organizations, trade organizations, scientists, permit holders, and school groups.

Agency Coordination

NOAA Fisheries

Fishery Management Councils

- South Atlantic FMC
- Gulf of Mexico FMC

Agency Partners

- DOI (USFWS, BOEM, NPS)
- DOD-Navy
- EPA
- USCG

Florida State Agencies

- DEP
- FWC Commissioners
- SHPO
- Governor and Cabinet



Agency Coordination slide.

This slide provides a high level summary of some of the many partner agencies that NOAA engaged with throughout this process. These include other NOAA partner offices, Fishery Management Councils, other federal agency partners, and state of Florida agency partners.



FLORIDA KEYS
NATIONAL MARINE
SANCTUARY

Restoration Blueprint Timeline and Status



Public Comment

- 100 days
- Virtual Q&A (1), virtual public comment (1), in-person public comment (3)
- October 18 SAC meeting public comment opportunity
- Comments accepted: oral, written, submitted to regulations.gov
- For more information visit: floridakeys.noaa.gov/blueprint/

Restoration Blueprint Timeline and Status slide.

This slide shows the overall Restoration Blueprint timeline, which was initiated with the release of the 2011 FKNMS Condition Report.

Following release of the 2011 FKNMS Condition Report, the Sanctuary Advisory Council (SAC) initiated a process to review the sanctuary boundary, sanctuary-wide regulations, and marine zones (“regulatory review process”). To inform this review they developed a FKNMS SAC Regulatory and Zoning Alternatives Workplan. The goals and objectives outlined in this workplan were included in the 2012 Notice of Intent to develop a Draft Environmental Impact Statement. Public comment on this Notice of Intent, taken from April to June 2012, informed the final FKNMS SAC workplan. Guided by this workplan, the SAC, with four community working groups, developed a suite of recommendations for the sanctuary superintendent as well as the USFWS Florida Keys National Wildlife Refuges Complex manager to consider when developing alternatives related to sanctuary boundary, regulations, and marine zones within the sanctuary.

The Draft Environmental Impact Statement (DEIS), also referred to as the Florida Keys National Marine Sanctuary Restoration Blueprint, contained four different

alternatives for the sanctuary boundary, marine zones, regulatory modifications, and a draft management plan. The DEIS was released on August 19, 2019 for a 5-month (August through December 2019) public and agency comment period. We received over 1,200 unique comments including oral and written comments at in-person public comment and sanctuary advisory council meetings and through formal submission at regulations.gov. Well over 40,000 individuals provided comment, which are representative of several sign-on and letter campaigns. These comments formed the foundation for many of the changes NOAA considered and made between the 2019 DEIS Alternatives and this proposed rule.

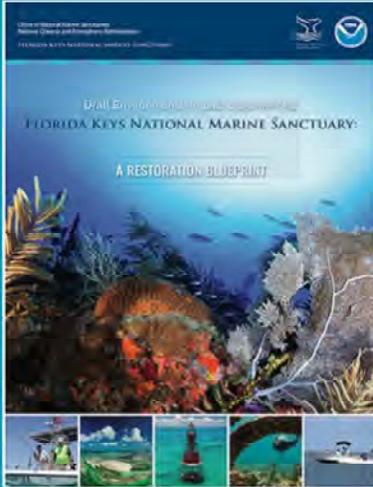
Public comment on this proposed rule is open for 100 days from date of publication (estimated sometime between Friday, July 15 to Monday, July 18). NOAA will host a virtual Q&A on August 16, 2022, virtual public comment on August 30, 2022, and three in-person public comment opportunities on September 20, 21, and 22, 2022, in Key Largo, Marathon, and Key West, respectively. A final public comment opportunity will be provided at the regularly scheduled October 18, 2022 SAC meeting, location TBD. At any point during the open public comment period, comments can be submitted at the specific regulations.gov docket #NOAA-NOS-2019-0094 (a direct link is provided on the floridakeys.noaa.gov/blueprint webpage).

Following and informed by this public comment opportunity, NOAA will release a Final Environmental Impact Statement and Final Rule. The Governor and the Florida Board of Trustees of the Internal Improvement Fund and the U.S. Congress have a 45 day review period prior to the Final Rule going into effect.

This management plan review process has spanned several years. This is due to factors including that this is the first comprehensive review of the sanctuary management plan, regulations, and marine zones since they were implemented in 1997; the interdependence of the environment, economy, and community and the desire to engage as many different stakeholders and stakeholder perspectives into the process through the sanctuary advisory council and community working groups; and the complexity of protecting natural resources while also allowing sustainable and compatible uses. Due to broad public interest and the comprehensive nature of the review of FKNMS regulations and management plan, NOAA separated the DEIS and rulemaking processes to allow increased opportunity for public and agency input to inform this proposed rule.



Notice of Proposed Rulemaking



Proposed regulations for:

- Sanctuary boundary
- Sanctuary-wide regulations
- Marine zones & zone-specific regulations

Proposed Rule is informed by:

- Public and agency comment
- Updated socio-economic and environmental data

Pulls from all four alternatives included in the Draft Environmental Impact Statement

*Management Plan is a separate document

Notice of Proposed Rulemaking summary slide.

This proposed rule combines individual aspects of each of the four alternatives presented in the 2019 Restoration Blueprint DEIS. This proposed rule is directly informed by public and agency comments received on the DEIS as well as updated socio-economic and environmental data.

Specifically, the proposed rule includes (1) sanctuary boundary expansion to protect ecologically connected and nationally significant habitats, (2) proposed new or modified sanctuary-wide regulations, and, (3) proposed new and modified existing marine zones to protect additional sensitive and threatened coral reef, seagrass, and hardbottom habitats and the species dependent on these habitats.

The proposed rule includes several sections: (1) a preamble that includes background information about the Restoration Blueprint process to date, context for the proposed rule including how public and agency comment informed the proposed rule, and a summary of the socioeconomic analysis; (2) the regulatory text that includes definitions, sanctuary-wide regulations, marine zone and associated regulations, and permitting regulations; and (3) appendices that include the boundary and marine zone coordinates and the revised sanctuary designation

document.

The proposed rule is available for public comment at <https://www.regulations.gov/docket/NOAA-NOS-2019-0094>.

The Draft Management Plan is a separate document. The draft management plan and an updated socio-economic analysis report are also available at <https://www.regulations.gov/docket/NOAA-NOS-2019-0094> and at floridakeys.noaa.gov/blueprint in the Documents Section.

Sanctuary Boundary



**Slide left intentionally blank to introduce the next presentation topic:
Proposed Sanctuary Boundary.**



Sanctuary Boundary: Proposed Expansion

Nationally Significant - Pulley Ridge

Connect & Preserve Special Habitats

Connectivity - Tortugas Region



Consistent regulation - Expand boundary to include areas already closed to large vessel traffic

Existing: 3,800 sq miles
Proposed: 4,800 sq miles

Sanctuary Boundary: Proposed Expansion of the Florida Keys National Marine Sanctuary slide.

This slide shows the existing Florida Keys National Marine Sanctuary boundary outlined in red and the proposed rule expanded sanctuary boundary in green. Sanctuary-wide regulations would apply in this expanded area. In the Pulley Ridge proposed expansion area, an additional no anchor regulation for all vessels is proposed. All three of these proposed boundary expansions were included in the 2019 Restoration Blueprint DEIS.

The proposed rule expands the sanctuary boundary in three places:

- 1) Align the sanctuary's seaward boundary with the northernmost Area to Be Avoided (ATBA) seaward boundary, which by doing so will also encompass two areas of the existing ATBA that currently fall outside the sanctuary boundary (two small areas of the ATBA along the Key West shipping channel).
 - o This modification is intended to provide clarity for mariners and additional ecosystem protections. The ATBA areas within the sanctuary were established through the Florida Keys National Marine Sanctuary and Protection Act in 1990, and prohibit operating any tank

- vessel or vessel over 50 meters length within these specified areas to protect coral reef habitat from vessel impacts, including groundings.
- The ATBA was originally established in response to several large ship groundings in the 1980s. This proposed expansion is intended to provide additional protection for these sensitive coral reef habitats.
- 1) Encompass the proposed modified Tortugas South Conservation Area (which is currently referred to as the Tortugas South Ecological Reserve).
 - This modification provides additional protections for the range of interconnected habitats in the western region of the sanctuary. It takes into account recently collected and compiled mapping data and remotely operated vehicle imagery from the southern portion of the existing Tortugas South Ecological Reserve, which show unique and sensitive habitat features.
 - 2) Include a non-contiguous sanctuary area at Pulley Ridge.
 - This modification protects the deepest known photosynthetic coral reef system off the coast of the continental United States. In addition to sanctuary-wide regulations, NOAA is proposing a no anchor regulation in Pulley Ridge that would apply to all vessels to reduce the risk of damage to this fragile coral marine environment.
 - This area is already protected as a Habitat Area of Particular Concern (HAPC) by the Gulf of Mexico Fishery Management Council. The HAPC prohibits anchoring by fishing vessels only and prohibits certain bottom-tending fishing gear.
 - Public comments on the proposed sanctuary boundary expansion at Pulley Ridge included support for protecting this sensitive ecosystem. Other commenters recommended that NOAA not take any action but explore other ways to protect Pulley Ridge from all vessel anchors. While NOAA is including this proposed expansion in the proposed rule for public comment, NOAA is also pursuing International Maritime Organization adoption of a no anchoring area designation for Pulley Ridge.

Sanctuary-wide Regulations

- Discharge
- Temporary Regulation for Emergency & Adaptive Management
- Historical Resources Permitting
- Fish Feeding
- Deserted Vessels, Harmful Matter, & Vessel Salvage
- Mooring Buoys



Proposed Sanctuary-wide Regulations introduction slide.

This slide includes the list of proposed updated or new sanctuary-wide regulations that will be discussed on the next seven slides including:

- Discharge
- Temporary Regulation for Emergency & Adaptive Management
- Historical Resources Permitting
- Fish Feeding
- Deserted Vessels, Harmful Matter, & Vessel Salvage
- Mooring Buoys



Protect Water Quality



Proposed regulation:

Prohibit all discharges except cooling water from cruise ships

Sanctuary-wide Regulations: Discharge slide.

Improving water quality is a priority of FKNMS, our partners and the community. This has been a recognized need and priority since the establishment of the sanctuary in 1990, as articulated in the Florida Keys National Marine Sanctuary and Protection Act, which called for the establishment of a Water Quality Protection Program (WQPP) to be administered by Florida Department of Environmental Protection and U.S. Environmental Protection Agency. While much has been accomplished through the WQPP, including long-term monitoring programs for seagrass, coral, and water quality; incentives to transition from septic to centralized sewage; canal restoration projects; and a suite of special studies to further evaluate and address specific water quality issues - water quality remains a high priority management issue.

Throughout the public comment period on the DEIS, water quality was a common theme.

- Comments called for additional action to address water quality issues within the Florida Keys and those related to South Florida and the Everglades.
- As a result, the revised draft management plan includes water quality as one of six priority management themes and includes a suite of activities related

to demonstrating greater leadership in engaging with local and regional partners (WQPP, South Florida Ecosystem Restoration Task Force) to collectively identify and address issues related to water quality (Goal 2, Objective 2.1).

- Comments also supported NOAA taking action to address discharges from cruise ships.

Current discharge regulations:

- NOAA has a long history of regulating various discharges under the National Marine Sanctuaries Act (NMSA) to ensure that the discharges do not degrade water quality within the sanctuary. When the original FKNMS regulations were implemented in 1997, NOAA established prohibitions against discharging most items into the sanctuary, with exceptions for bait or chum while fishing, biodegradable effluent from approved marine sanitation devices, graywater and deck washdown during routine vessel operations, and vessel cooling water and engine exhaust.
- In 2010, NOAA removed the exception for discharges from marine sanitation devices in the entire sanctuary, thereby making all sanctuary waters a no discharge zone under the NMSA. At that time, comments received on that rulemaking supported banning harmful vessel graywater discharges from large cruise ships and cargo vessels.

Proposed updated discharge regulations:

- NOAA proposes to prohibit discharges “of any material or other matter from a cruise ship, except cooling water.” This change would result in prohibiting the discharges of graywater and deck washdown from cruise ships, which are currently exempt from the prohibitions. It would also protect against future, unknown discharges from cruise ships entering the sanctuary, such as spa or pool water and exhaust gas cleaning system washwater.
- In addition, NOAA is proposing to make technical corrections to the discharge exceptions to simplify and clarify that cooling water, deck washdown, and graywater are allowable discharges from vessels other than cruise ships, but oily wastes from bilge pumping are not.
- The proposed regulation would not affect the existing exception that allows the discharge of “Fish, fish parts, chumming materials, or bait used or generated incidental to and while conducting traditional fishing in the sanctuary.”



TEMPORARY REGULATION EMERGENCY & ADAPTIVE MANAGEMENT

Act Quickly to Respond & Protect

Proposed regulation:

180-day action + optional 186-day extension

3 Categories:

Minimize
resources
impacts

Initiate
restoration

Facilitate
timely
research



Sets process for implementation

Sanctuary-wide Regulations: Temporary Regulation for Emergency & Adaptive Management slide.

Throughout this regulatory review process, the Sanctuary Advisory Council and public have been calling for more rapid management responses to address emerging threats and action to support resilience and/or recovery of sanctuary resources in the face of numerous stressors, including invasive species, diseases, the effects of climate change, new and more intense or concentrated human uses that may impact habitats or species, and shifts in species (e.g., a shift or new important bird nesting or roosting site).

In response, NOAA is proposing to update the existing Emergency Regulation, which currently allows for a temporary regulation to be in effect for 60 days with one 60-day extension.

The proposed rule includes an updated Temporary Regulation for Emergency and Adaptive Management which:

- Expands the time frame during which any temporary regulation could remain in place from 60 days to 180 days (six months), with the option for one additional extension of 186 days (six months) for a total of one year. This

aligns with NOAA National Marine Fisheries Service emergency regulations under the Magnuson Stevens Conservation Act;

- Outlines three purposes for which NOAA would issue temporary regulations:
 - Prevent or minimize destruction of, loss of, or injury to sanctuary resources from any human-made or natural circumstances, including a concentration of human use, change in migratory or habitat use patterns, vessel impacts, natural disaster or similar emergency, disease, or bleaching;
 - Initiate restoration, recovery, or other activities to improve or repair living habitats or species where a delay would impair the success of the activity; or
 - Initiate research where an unforeseen event produces an opportunity for scientific research that may be lost if it is not initiated immediately; and,
- Sets out the procedure by which a temporary regulation would be promulgated, including complying with the Administrative Procedure Act, addressing notice and comment requirements, and requiring state approval for any temporary regulations proposed in state waters.

This proposed regulation is directly informed by public comment received on the 2019 Restoration Blueprint DEIS.

- While there was general support for emergency and adaptive management, commenters also raised specific questions and concerns that NOAA has attempted to address through this updated proposal:
 - Comments included concern that expanding the time that a temporary regulation could be in place would subvert the public comment process required for rulemaking. NOAA is addressing this concern in this proposed rule by identifying categories for which temporary regulations may be implemented and has incorporated the existing requirements from the Administrative Procedure Act to demonstrate good cause.
 - Comments also voiced concerns that “emergency” was not clearly defined. In this proposed rule, NOAA has determined it would be clearer and more efficient to establish well-defined categories, criteria, and processes for temporary regulations to respond to time-sensitive needs to manage sanctuary resources, rather than attempt to define “emergency.”
 - State agency comments emphasized the need for Governor approval for all proposed temporary regulations in state waters and recommended that a process be developed and codified in co-trustee management agreements. NOAA proposes to maintain the requirement for Governor approval of temporary regulations in state waters and proposes to work with the state to develop a streamlined process.

Ensure Consistency to Protect Non-Renewable Resources



Proposed regulation:



Aligns sanctuary & state regulations



Creates one archaeological
research permit category

Sanctuary-wide Regulations: Historical Resources Permitting slide.

The Florida Keys has a rich maritime past evidenced by hundreds of documented shipwreck sites and artifacts, cultural remains of indigenous peoples' activities, Overseas Railroad remnants, and historic offshore structures. These sanctuary historical resources are unique and non-renewable and thus have been protected and managed through a historical resources permitting program and a programmatic agreement with the state of Florida.

Management of historical resources is done in partnership with the state of Florida where NOAA and the state of Florida serve as co-trustees for historical resources located within state waters.

In the 2019 Restoration Blueprint DEIS, NOAA presented a draft Programmatic Agreement under Section 106 of the National Historic Preservation Act that outlined how NOAA and the Florida Division of Historical Resources would cooperate in management and protection of historical resources in the sanctuary. NOAA received public comment on the draft programmatic agreement and continues to refine it with the agreements' signatories - NOAA, Florida Department of State, and the Advisory Council on Historic Preservation.

In the proposed rule, NOAA would align sanctuary historical resource permitting with state archaeological research permitting and optimize compliance with the Federal archeology program.

- More specifically, NOAA proposes to:
 - Update historical resource permitting by replacing the current survey/inventory, research/recovery, and deaccession/transfer permit categories with a new, single archaeological research permit category;
 - Define the term “archaeological research;”
 - Explain criteria that must be met in order for NOAA to issue an archaeological research permit (including applicant qualifications); and,
 - Prescribe certain conditions that would apply to these permits.

These proposed changes are intended to:

- Simplify permitting research focused on historical resources in the sanctuary, including the state waters portion of the sanctuary;
- Improve the articulation of project goals and research plans for historical resources, which will result in higher quality research and reporting; and,
- Increase the protection of historical resources throughout the sanctuary.

In addition, the draft management plan includes a suite of activities to better understand, document, protect, and interpret the historical resources in the Florida Keys and to work with Florida Division of Historical Resources to implement a new National Historic Preservation Act Section 106 programmatic agreement.

The proposed rule is the same as the alternatives presented in the 2019 Restoration Blueprint DEIS, on which NOAA received a range of public comments:

- Many comments, including from the state of Florida, supported these proposed updates to sanctuary historical resource permitting.
- Other comments supported no change to the status quo; however, NOAA determined that the benefit of updating the FKNMS historical resource permitting program to align with the state permitting regulations and to enhance the quality of research and reporting outweighed public comment supporting the status quo.
- NOAA intends to continue engaging directly with current sanctuary historical resource permit holders and entities with pre-existing, valid rights of access to clarify how updated historical resource permitting regulations would or would not affect potential future activities.

Safeguard Natural Behavior & Increase Safety**Proposed regulation:**

- Prohibit feeding/attracting of fish, sharks & marine species from vessels or while diving
- Aligns with state rules
- Allows discharge of bait & chum while fishing

**Sanctuary-wide Regulations: Fish Feeding slide.**

Fish feeding is a common practice in the Florida Keys and is conducted at various locations including from shore, from boats, and by divers and snorkelers. Fish feeding is generally conducted in order to attract fish. However, this practice has resulted in human safety issues and has been shown to alter fish behavior.

Through the regulatory review process, the Sanctuary Advisory Council specifically asked NOAA to consider prohibiting this activity - both from vessels/divers and from shore.

Current regulations:

- NOAA does not have existing regulations explicitly related to the practice of fish feeding.
- Existing discharge prohibitions provide some protection, for example, nothing is allowed to be discharged within Sanctuary Preservation Areas except engine cooling water and exhaust.
- Existing Florida rules prohibit: (1) divers from engaging in the practice of fish feeding, and (2) anyone from operating any vessel for hire for the purpose of carrying passengers to any site in the salt waters of the state to engage in

- fish feeding or to allow such passengers to observe fish feeding.
- This state regulation does not currently extend into the federal waters of the sanctuary.

Comments received on 2019 Restoration Blueprint DEIS proposal:

- Public comments generally supported additional prohibitions on fish feeding in the sanctuary both while on the water and from shore-based operations.
- Other comments received opposed additional regulation because of the potential loss of eco-tour and educational opportunities, and questioned the impacts of fish feeding on the environment, human safety, and fish and shark behavior.
- Agency comments indicated support for regulating fish feeding throughout the sanctuary and, specifically, FWC noted it would consider modifying its existing fish feeding regulation in state waters to be consistent with a sanctuary regulation, if implemented.

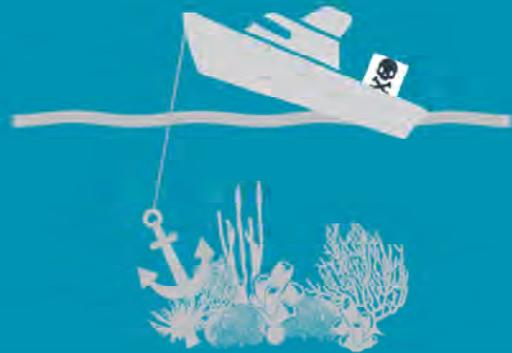
Based on public comment, additional consultation with agency partners, and input from fisheries experts, the proposed regulation would:

- Prohibit the feeding and attracting of fish, including sharks, or other marine species, from any vessel or while diving, and define “attracting,” “diving,” and “feeding.”
 - This proposed update was developed with additional input and expertise from National Marine Fisheries Service staff related to impacts to sharks and shark depredation, human safety concerns, and compliance and enforcement.
 - NOAA has not provided an express “grandfather” clause for current fish feeding operations (i.e., an exemption for pre-existing operators) but rather will consider issuing a permit to pre-existing eco-tour operators who can meet application requirements.
 - To specifically assist NOAA in identifying appropriate terms and conditions for such permits, NOAA seeks comments on the numbers, scale, and types of activities related to feeding and attracting fish, including sharks, or other marine species that currently occur within the sanctuary.
 - This proposed regulation would not affect the existing regulatory exception that allows discharge of fish, fish parts, chumming materials, or bait that is used or generated while conducting traditional fishing in the sanctuary.
- NOAA carefully considered public comments regarding extending this prohibition to shore-based operations (i.e., dock-side fish feeding); however, NOAA is not proposing to regulate shore-based activity at this time because additional information is needed about its scope, scale, and economic impact to develop appropriate regulations.

Protect Seafloor Habitats & Water Quality

Proposed regulation:

- Prohibit anchoring, mooring, or occupying vessels at risk of becoming derelict, or deserting vessels aground, at anchor, or adrift
- Prohibit leaving harmful matter aboard a grounded or deserted vessel



Sanctuary-wide Regulations: Deserted Vessels & Harmful Matter slide.

Derelict and deserted vessels are an ongoing and persistent threat to the marine environment of the Florida Keys. NOAA received comments throughout the regulatory review process from Sanctuary Advisory Council members, the community, and agency, county, and municipality partners regarding the potential threats to the marine environment from derelict or deserted vessels and the need to require vessel owners to take care of deserted vessels before they become grounded and cause damage. NOAA's proposed rule is directly in response to these comments.

Current regulations:

- NOAA does not currently have regulations that explicitly prohibit or manage vessels at risk of becoming derelict or deserting vessels or harmful matter.

Proposed regulations:

- NOAA proposes new regulations prohibiting anchoring, mooring, or occupying a vessel at risk of becoming derelict, or deserting a vessel aground, at anchor, or adrift in the sanctuary.
- The proposed rule also prohibits leaving harmful matter aboard a grounded

or deserted vessel.

- The terms “at risk of becoming derelict,” “deserting,” and “harmful matter” are also defined.
- This proposed regulation is consistent with state regulations, enforcement authorities, and definitions, particularly related to the term “at risk vessel.”



VESSEL GROUNDING & SALVAGE

Coordinated Response

Proposed regulation:

- Requires notice of grounding within 24 hours & salvage plan within 72 hours
- Timeframes consistent with state rules



Sanctuary-wide Regulations: Vessel Grounding & Salvage slide.

In addition to the prohibitions outlined in the previous slide, NOAA proposes additional requirements for notice of a vessel grounding (within 24-hours of such grounding) and development and notice of a salvage plan (within 72-hours of the grounding). These specific timeframes are consistent with the Florida Coral Reef Protection Act (Florida Statutes 403.93345).

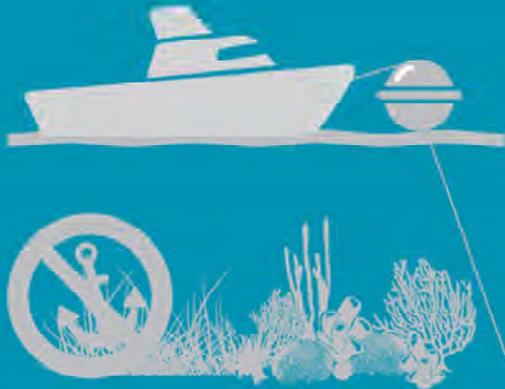
It is important to note that these notification requirements would apply anytime a vessel operator strikes the seabed regardless of whether or not sanctuary resources are injured.

The revised draft management plan includes associated activities including:

- Addressing the threat of derelict vessels by working with agency and local municipal partners to support ongoing efforts and contribute additional expertise, such as the Florida Marine Debris Reduction Guidance Plan, Monroe County derelict vessel removal and pilot vessel turn-in program, and others.
- Working with the towing and salvage industry to develop a suite of best practices to ensure vessel towing and salvage do not result in additional

impacts to sanctuary resources, and assessing and defining which towing and salvage operations may require a sanctuary general permit and communicating that to the industry.

Maintain Buoys & Protect Habitat



Proposed regulation:

- Require use of mooring buoys in all SPAs, Restoration Areas & Conservation Areas
- Require vessels over 65' to use large vessel mooring buoys

Sanctuary-wide and Marine Zone Associated Regulations: Mooring Buoys slide.

Mooring buoys serve as an important management tool in FKNMS, providing boaters the ability to moor their vessel safely and avoid damaging coral reefs and other important ecosystems.

Throughout this regulatory review process, NOAA has heard from the public how important and valuable the sanctuary's buoy program is. Most comments were in support of providing additional mooring buoys and enhancing efforts to maintain the buoy system. Comments also supported having additional, targeted requirements for use of mooring buoys to protect sensitive habitats. NOAA's proposed rule reflects these comments.

Current regulations:

- Existing regulations related to the use of mooring buoys require that buoys be used in Tortugas North Ecological Reserve, with a maximum vessel length or combined length of 100'.
- Existing regulations also require that mooring buoys be used in all Sanctuary Preservation Areas and the Western Sambo Ecological Reserve when one is available.

- Damage to markers and buoys is prohibited.

Proposed regulation:

- NOAA proposes to expand the requirement for mooring buoy use in all Sanctuary Preservation Areas, Restoration Areas, and Conservation Areas (currently called Ecological Reserves), thus making these marine zones No Anchor. There will be an exception to allow anchoring inshore of the reef line in the Western Samo Conservation Area.
- In addition, NOAA proposes to include a new regulation that requires large vessels to use designated large vessel mooring buoys and small vessels to use regular mooring buoys.
- An associated new definition for “large vessel” (vessels greater than 65’ length) would also be added.
 - This proposal is specifically targeted at addressing damage to mooring buoy anchoring hardware and in some cases the substrate to which the hardware is secured due to the continued use by large vessels.

The revised draft management plan also includes activities related to the sanctuary buoy program including:

- Evaluate the effectiveness of and, as needed, update the placement and number of marker, mooring, channel, and information buoys, including large vessel mooring buoys;
- Explore innovative partnerships and funding streams to install and maintain the marker and mooring buoy system; and,
- Identify additional technological options instead of marker buoys (e.g., electronic charts integrated into GPS, virtual aids to navigation, and smart buoys) for alerting the public to marine zone locations and regulations.

To solicit additional community and user group input for these management plan activities, the Sanctuary Advisory Council has established a Buoy Working Group, which will convene after the close of comments on this draft rule (tentative start: January 2023).

Marine Zones & Associated Regulations

- Sanctuary Preservation Areas
- Conservation Areas
- Restoration Areas
- Wildlife Management Areas
- Management Areas & National Wildlife Refuges



Marine Zones and Associated Regulations introduction slide.

This slide includes the list of sanctuary marine zone types that will be discussed on the next several slides including:

Sanctuary Preservation Areas

Conservation Areas

Restoration Areas

Wildlife Management Areas

Management Areas & National Wildlife Refuges

Marine Zones & Associated Regulations: Proposal Goals

- Protect sensitive habitats and ecological functions
- Facilitate ecosystem restoration
- Simplify and create consistent regulations



Photo Credit: Shawn Verne



Marine Zones and Associated Regulations introduction slide.

This slide provides a high level summary of the overarching goals of the marine zone proposals including:

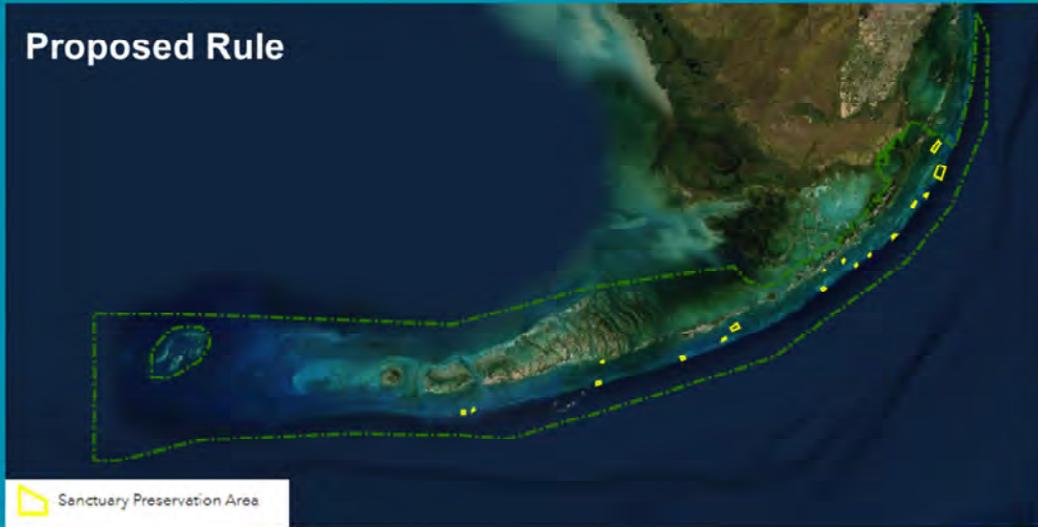
- Protect sensitive habitats and ecological function, including:
 - Pulley Ridge, the deepest known photosynthetic coral reef off the coast of the continental United States;
 - Productive patch reefs at two new proposed sanctuary preservation areas: Turtle Rocks and Turtle Shoal;
 - Deep reef habitat at Carysfort Sanctuary Preservation Area, Alligator Reef Sanctuary Preservation Area, Tennessee Reef Conservation Area, and Western Sambo Conservation Area, where these existing zones would be slightly expanded;
 - Fish spawning aggregation sites at Carysfort Reef Sanctuary Preservation Area, Western Dry Rocks Wildlife Management Area, and Tortugas South Conservation Area;
 - Seagrass habitats that are foraging grounds of international importance for threatened sea turtle species;
 - Shallow seagrass, hardbottom, and mangrove fringed areas that support myriad species of invertebrates, fish, birds, and serve as

nursery areas for all of these animals.

- Facilitate ecosystem restoration, including:
 - Creating a new Restoration Area zone type to facilitate restoration and protect in-water nurseries and restored habitat sites:
 - Nursery Restoration Areas protect 9 existing coral reef nursery sites
 - Habitat Restoration Areas protect 4 active coral reef outplanting sites that are not currently included within an existing marine zone.
- Simplify and create consistent regulations within marine zone types, where possible, including:
 - Making all sanctuary preservation areas “no take” by eliminating current exceptions for catch and release fishing by trolling in 4 existing sanctuary preservation areas and eliminating the practice of issuing bait fishing permits in all sanctuary preservation areas;
 - Establishing a new No Anchor regulation in all sanctuary preservation areas; and,
 - Combining two existing zone types - Ecological Reserves and Special Use Areas - into one zone type called Conservation Areas.



Proposed Rule



Marine Zones: Sanctuary Preservation Areas map summary slide.

This slide shows the proposed boundary for the sanctuary (in green) with the proposed sanctuary preservation area (SPA) boundaries (in yellow).

- Specifically, the proposed rule:
 - expands two existing SPAs (Carysfort Reef and Alligator Reef) to protect deep reef habitat,
 - connects and combines the existing Key Largo Dry Rocks and Grecian Rocks SPAs,
 - slightly expands Sombrero Key SPA to protect additional coral reef habitat, clarify marking, and improve compliance
 - eliminates the existing French Reef and Rock Key SPAs,
 - creates two new SPAs at Turtle Rocks and Turtle Shoal, and,
 - makes no spatial changes to eleven existing SPAs: The Elbow, Molasses Reef, Conch Reef, Davis Reef, Hen and Chickens, Cheeca Rocks, Coffins Patch, Newfound Harbor Key, Looe Key, Eastern Dry Rocks, and Sand Key SPAs.

Proposed zone regulations and some of these specific spatial changes will be highlighted on the next few slides.



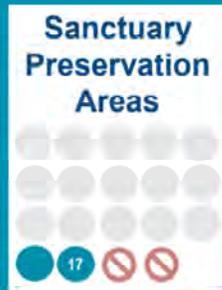
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SANCTUARY PRESERVATION AREAS

Separate Conflicting Uses, Protect Habitats, Create Consistency

17 SPAs:

- 2 new
- Combine 2 existing
- Eliminate 2 existing



Prohibit:

- Discharge
- Fishing or taking marine life
- Anchoring



Marine Zones: Sanctuary Preservation Areas proposed regulation summary slide.

Zone purpose and intent:

- Sanctuary Preservation Areas were originally designated to limit consumptive activities and separate users engaged in different, potentially conflicting, activities.
- At this time, proposed updated regulations would provide additional protections within SPAs for sensitive bottom habitats, and enhance users' safety, experience, and compliance.

Proposed spatial and regulatory changes:

- The proposed rule would establish 17 SPAs as compared to the current zoning scheme with 18 SPAs. Two new would be added, two existing would be combined into one, and two would be eliminated.
- SPA regulations in the proposed rule would:
 - Maintain the existing no discharge regulation (except for engine cooling water) in all SPAs
 - Maintain the existing "no take" regulation in all SPAs but remove the current exceptions for catch and release fishing by trolling in four existing

- SPAs (Conch Reef, Alligator Reef, Sombrero Key, and Sand Key) and stop the practice of issuing baitfish permits
- Revise regulations so anchoring is not allowed at any time; whereas currently anchoring is allowed if a mooring buoy isn't available and vessels do not anchor on coral.
 - new definition for "anchoring," which would mean securing a vessel to the seabed by any means.

Public comments:

- In general, comments supported greater protections to coral and other sensitive habitats from anchor damage.
- Comments also addressed the need for additional, well placed and maintained mooring buoys, particularly if additional no anchor restrictions would be applied.
- Comments were both for and against the proposals to eliminate the practice of issuing bait fishing permits and eliminating catch and release fishing in the four existing SPAS where this activity is currently allowed.
- NOAA determined that consistent regulations throughout SPAs will make it clearer to the public what is and is not allowed in these areas, and will promote understanding and compliance to facilitate enforcement and management.



Marine Zones: Proposed New Sanctuary Preservation Areas - Turtle Rocks and Turtle Shoal slide.

This slide shows two proposed new sanctuary preservation areas, Turtle Rocks in the Upper Keys and Turtle Shoal in the Middle Keys. Both of these proposed SPAs were included in the 2019 Restoration Blueprint DEIS for public comment.

Proposed regulation:

- These proposed new SPAs contain extensive and healthy midchannel patch reef habitats, which is a habitat type that is currently underrepresented in the sanctuary zoning network.
- Both sites have been shown to be highly resilient to both disease and bleaching and contain a high abundance of important frame building corals, including threatened staghorn corals and star corals.
- The additional protections as new SPAs will reduce localized human impacts and help maintain the health of the corals, protecting resilient reproductive populations of important reef building corals that can provide offspring to reseed surrounding degraded reefs

Public comments:

- Public and agency comments supported additional protections in these important patch reef areas, including no fishing and no anchoring.
- Public comments also supported establishing these areas as Conservation Areas to provide the greatest level of protection for sensitive habitats.
- However, at this time NOAA is including these areas as SPAs to maintain some level of public access.
- Informed by public and agency comment, Turtle Rocks is expanded slightly from the area included in the 2019 DEIS alternatives to fully align with the John Pennekamp Coral Reef State Park Lobster Exclusion Zones and to protect additional historical resources.
- For Turtle Shoal, the SPA shown in this proposed rule is the same as the SPA that was in the 2019 Restoration Blueprint DEIS preferred alternative.



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SANCTUARY PRESERVATION AREAS

Turtle Rocks SPA (2.32 sq miles)

Protect Resilient Mid-channel Sites



Marine Zones: Sanctuary Preservation Areas - Turtle Rocks SPA highlight slide.

This slide provides a more in depth look at one of the proposed new SPAs, Turtle Rocks, in the Upper Florida Keys region.

Key features of this area and the purpose and intent of proposing a sanctuary marine zone at this site include:

- Turtle Rocks is a unique midchannel site within John Pennekamp Coral Reef State Park that supports multiple habitat types including aggregate patch reefs, seagrass beds and shallow hardbottom communities.
- The high relief coral reef habitats in this area currently contain one of the largest remaining wild populations of threatened staghorn coral in the Upper Keys and one of the only known fused staghorn colonies remaining in the Florida Keys.
- The site is also believed to be an inshore stepping stone to allow species to move between nearshore areas and Carysfort Reef, which is further offshore.

- In addition to lush natural resources, historical resources in this area that are also susceptible to anchor damage would be protected.
- This area is an existing John Pennekamp Coral Reef State Park Lobster Exclusion Zones, which prohibits harvest of spiny lobster and deployment of traps.
- NOAA's proposed SPA at this site would align with the state's marine zone and would provide additional protections for the sensitive natural and historical resources found here.

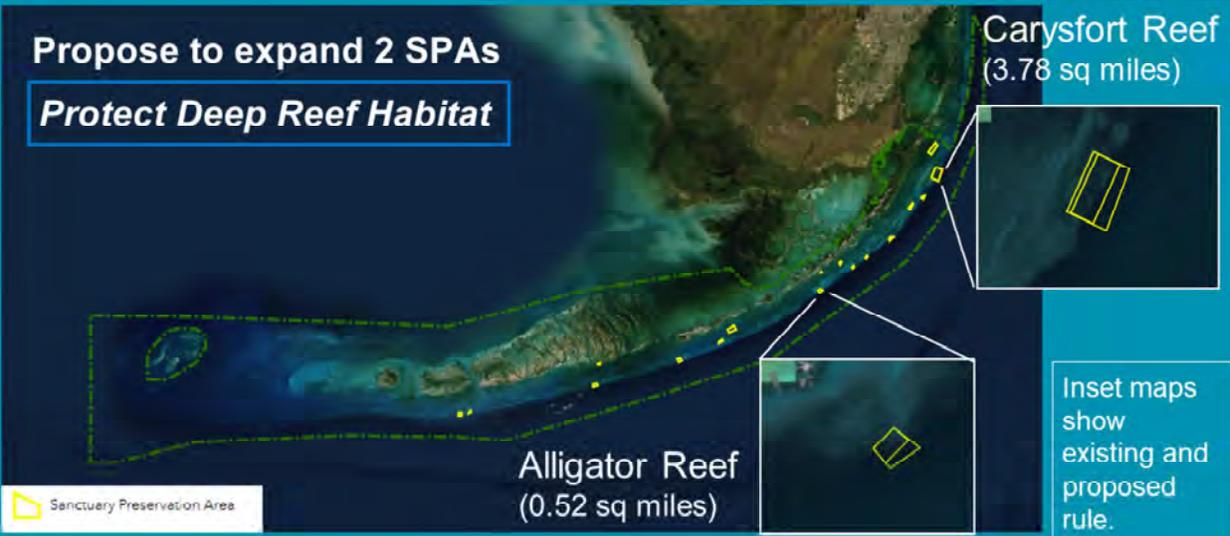


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SANCTUARY PRESERVATION AREAS

Propose to expand 2 SPAs

Protect Deep Reef Habitat



Marine Zones: Sanctuary Preservation Areas - proposal to expand two zones to protect deep reef habitat slide.

This slide shows the proposal to expand two existing sanctuary preservation areas (SPA), Carysfort Reef SPA and Alligator Reef SPA, to protect adjacent deep coral reef habitats. Coral reef habitats below 60 feet depth are not currently represented in the existing sanctuary marine zones in the Upper Keys.

The existing Carysfort Reef SPA is proposed to be expanded from 2.2 square miles to 3.78 square miles.

- The deep reef at Carysfort supports a unique assemblage of deep-water corals, including some of the same shallow water species such as star coral as well as deep-water lettuce corals. The dominant corals here tend to have a more fragile plating morphology while the same species in shallow water and are more susceptible to breakage from anchoring.
- This habitat is thought to serve as a refugia for these important reef building coral species, as they have been less affected by Stony Coral Tissue Loss Disease and shallow-water bleaching. These populations may provide larvae

that can reseed shallow reefs.

- In addition, Carysfort Reef contains the only known black grouper spawning area in Florida. Its located between 18-28 m depth in a transitional zone between a ledge and a sandflat. Currently, this area is about 100 m outside the existing Carysfort Reef SPA boundaries but it would be included in the proposed expansion.

The existing Alligator Reef SPA is proposed to be expanded from 0.32 square miles to 0.52 square miles.

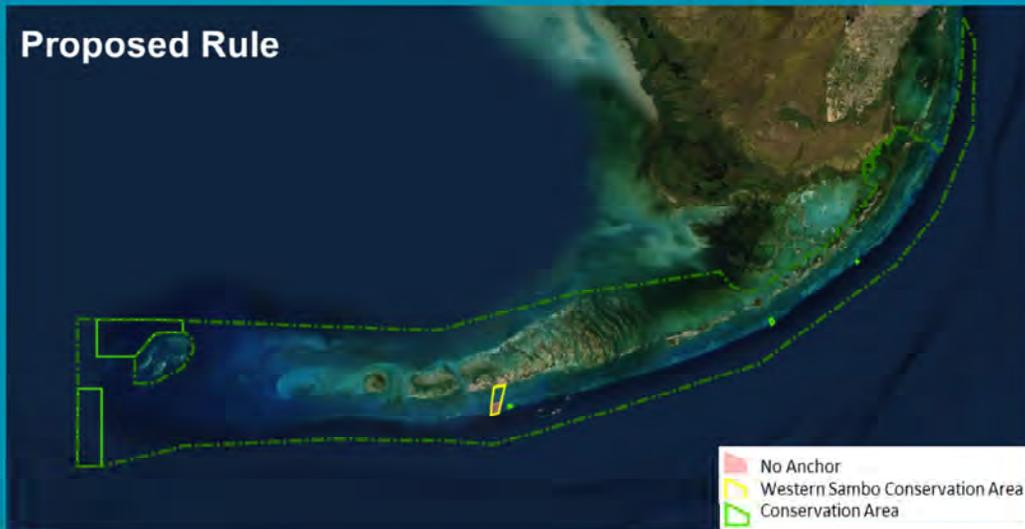
- Alligator reef is a very unusual reef system as it marks a geological transition between the shallower Upper Keys reefs and the deeper bank reef system found in the Middle and Lower Keys.
- It is located offshore from four main tidal channels that connect Florida Bay to the Atlantic Ocean. These channels provide an important pathway for the migration of juvenile lobsters from backcountry, shallow hardbottom areas to the outer reef system.
- The ledge, slope, and rocky outcrops also provide critical habitat for a number of large coral species, including threatened star corals and cactus coral, as well as large, plating lettuce corals, brain corals, and other boulder and branching corals. The area has numerous barrel and tube sponges, and gorgonians or soft corals.
- The adjacent, deeper sandy habitat is one where queen conch historically aggregated.
- This area also supports an unusually high biodiversity with 618 species of reef fish identified – which is more than any comparably sized area within Florida.

These proposed expanded marine zones were included in the 2019 Restoration Blueprint DEIS for public comment.

- Public comments both supported and opposed these proposals for a variety of reasons.
- Supporters noted such expansions would provide additional protections to deep reef habitats that show potential resilience to Stony Coral Tissue Loss Disease, could serve as a source for coral reef seed stock, and would provide greater ecosystem-level protection.
- Public comments that opposed these proposals did so largely due to general opposition to limiting any access for fishing.
- Specifically, comments requested that in areas deeper than 60 feet, hook and line trolling or drift fishing be allowed, noting that this could continue to allow some access while still protecting coral reef habitat from physical damage.
- NOAA determined that consistent regulations would better facilitate public

understanding and compliance, and therefore, NOAA is not including exceptions for fishing in a portion of these zones.

Proposed Rule



Marine Zones: Conservation Areas map summary slide.

This slide shows the proposed boundary for the sanctuary (green dotted line) with the proposed Conservation Areas (in solid green and Western Sambo in yellow).

- NOAA's proposed rule includes six Conservation Areas, all of which are existing sanctuary marine zones. The existing zones are currently called either Ecological Reserves (Western Sambo Ecological Reserve, Tortugas North Ecological Reserve, and Tortugas South Ecological Reserve) or Special Use Areas (Conch Reef Special Use Area (SUA), Tennessee Reef SUA, Looe Key SUA, and Eastern Sambo SUA).
- Specifically the proposed rule would:
 - expand two existing zones (Tennessee Reef and Western Sambo) to protect deep reef habitat;
 - expand one existing zone (Tortugas South) to the west to protect additional habitat area shown to support fish spawning aggregations;
 - eliminate one zone (the existing Looe Key SUA); and,
 - make no changes to the existing Conch Reef SUA, Eastern Sambo SUA, or Tortugas North Ecological Reserve, with the exception of the zone name change to Conservation Area.

Protect Contiguous, Diverse Habitats & Facilitate Research

6 Conservation Areas:

- All existing
- Eliminate Looe Key Special Use Area



Prohibit:

- Discharge
- Fishing or taking marine life
- Anchoring, *except* in Western Sambo shoreward of reef line
- Entering *except* for continuous transit; stopping in Western Sambo is *allowed*



Marine Zones: Conservation Area proposed regulation summary slide.

As explained on the previous slide, two existing zone types - Ecological Reserves and Special Use Areas - are proposed to be combined into one new zone type called Conservation Areas. The existing Special Use Area regulations are proposed to be maintained for all Conservation Areas except Western Sambo as further explained below. These marine zones are the most protective of all the zone types due to their purpose and intent.

Zone purpose and intent:

- Conservation Areas are designated to protect large, contiguous, diverse habitats and provide natural spawning, nursery, and residence areas for marine life.
- This zone type is also intended to facilitate research, restoration, and monitoring on sanctuary resources and biological processes.

Proposed regulations:

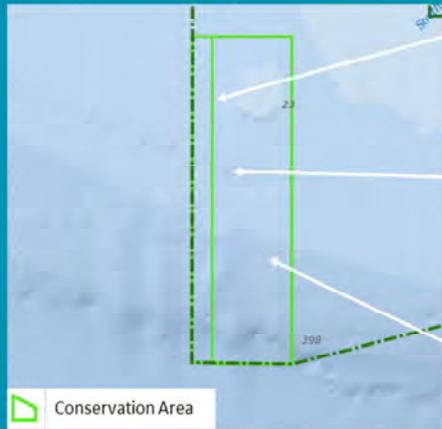
- These areas have regulations that are intended to provide the greatest level of protection to these interconnected habitats and important research areas:
 - NOAA proposes to maintain and apply the existing Special Use Area

(SUA) regulations prohibiting discharge and taking of marine life/fishing, and requiring continuous transit without interruption with fishing gear stowed.

- In Western Sambo, the existing regulations prohibiting discharge and taking of marine life/fishing would be maintained. However, this Conservation Area would allow access for snorkeling and diving but no-anchor restrictions would be included for the southern portion of the zone in the area of most prominent coral reef development.



Modified:
Tortugas South (90.38 sq miles)



*Protect Additional
Fish Spawning
Habitat*



Marine Zones: Conservation Areas - Tortugas South highlight slide.

This slide shows the proposed modified Tortugas South Conservation Area.

- This zone would be extended to the west by one mile along its entire length (expanding from approximately 72 square miles to 90 square miles).
- The area was originally designated to protect and promote recovery of a mutton snapper spawning aggregation located near Riley's Hump and safeguard plentiful deep-water reef fish species. This expansion proposed at this time would protect additional habitat west of Riley's Hump that is known to support three additional fish spawning aggregations for cubera snapper, black grouper and scamp.
- The southern portion of this existing marine zone would continue to be included, providing protection for important deep reef habitats and the species that rely on them.

This proposed expansion was included in the 2019 Restoration Blueprint DEIS.

- Public and agency comments generally supported this proposal.
- Comments also recommended that NOAA remove 34 square miles from the southern portion of this zone to allow for fishing opportunities.
 - NOAA's proposed rule retains protection in the southern portion of

this marine zone.

- Recently collected and compiled mapping coverage data and remotely operated vehicle imagery show unique habitat features in this area, including rock escarpment formations, a well-defined ledge, and deep coral habitat.
- These data also showed the presence of a diversity of fish species.



Proposed Rule



Marine Zones: Restoration Area map summary slide.

This slide shows the proposed boundary for the sanctuary (green dotted line) with the proposed new habitat restoration areas zones (in yellow) and the proposed new nursery restoration areas (in solid green).

- Habitat Restoration Areas:
 - The proposed rule includes four habitat restoration areas to protect existing, permitted, active coral reef restoration sites.
 - Regulations in habitat restoration areas would be the same as for sanctuary preservation areas: no discharge, no take, and no anchoring.
 - Proposed habitat restoration areas are small, ranging from 5 to 218 acres (<0.01 to 0.34 square miles), with an average size of 85 acres (0.13 square miles), and are designed to protect sites supporting active coral restoration with a 200-yard buffer.
- Nursery Restoration Areas:
 - The proposed rule includes nine nursery restoration areas, with regulations that prohibit discharge, fishing, and anchoring, and requiring that vessels remain in transit through the area.
 - Proposed nursery restoration areas are very small (individual zones

range from 0.04 to 0.19 square miles, in total 0.91 square miles) and are designed to protect the underwater nursery structures and associated corals growing on them with a 200-yard buffer.

Protect Nurseries & Facilitate Restoration

Proposed new zone type

Create a restoration permit category



4 Habitat Restoration Areas

- Same as SPAs - no discharge, no take, no anchor



9 Nursery Restoration Areas

- Same as SPAs + transit only



Marine Zones: Restoration Area proposed regulation summary slide.

- Given the increase in important habitat restoration activities in the sanctuary over the past two decades, NOAA's proposed rule includes a new Restoration Area zone type.
- The 2019 Restoration Blueprint DEIS included three of the proposed Nursery Restoration Areas (Pickles Reef, Marathon, and Sand Key) as individual SPA zones. These were included as representative coral nursery sites in the Upper, Middle and Lower Keys.
 - Public and agency comment supported providing additional protections for coral nursery sites.
 - Public and agency comments also supported protecting coral outplanting sites.
 - Agency comments also specifically recommended that a specific zone type be created to further advance habitat restoration efforts and for the purpose of facilitating and educating the public about habitat restoration.
- Given these public comments, NOAA is proposing a new Restoration Area zone type.
- This new Restoration Area zone would include two distinct designations:

- Nursery Restoration Areas would encompass existing nursery areas and would be regulated similar to Conservation Areas to provide the highest level of protection to sensitive corals and other organisms while they are being propagated. These regulations would prohibit discharge, fishing, and anchoring, and would require that vessels remain in transit through the area.
- Habitat Restoration Areas would protect sites where active transplanting and restoration activities are ongoing. These areas would be managed with the same regulations that apply to SPAs to provide for access and educational opportunities while prohibiting discharge, fishing, and anchoring.

In this proposed rule, all Habitat Restoration Areas would protect active coral reef restoration; however, NOAA does not intend to limit application of this proposed new zone type to coral restoration activities only. Conceivably, the Habitat Restoration Areas zone type could be applied in the future in any area to support and facilitate restoration of other degraded habitats or species (e.g., seagrass, hardbottom, etc.).

NOAA also proposes to create a restoration permit category to facilitate restoration and associated requirements (e.g., monitoring and reporting) to further sanctuary management goals. This restoration permit could apply to restoration of any habitat type and associated species (e.g., seagrass, sponge, etc.).

Finally, the revised draft management plan includes activities to further support and facilitate restoration efforts and partnerships.



Tavernier Nursery Restoration Area: proposed new (0.19 sq miles)

Pickles Reef Habitat Restoration Area: proposed new (0.11 sq miles)



Photo Credit: Coral Restoration Foundation

Two-year old elkhorn coral outplants before and after anchor damage (Sept. 2019).

Marine Zones: Restoration Areas Pickles Reef highlight slide.

This slide shows the location of the proposed new Pickles Reef Habitat Restoration Area and the adjacent Tavernier Nursery Restoration Area which represents the largest coral nursery in the Florida Keys.

- Pickles Reef has been a long-term active coral restoration site that now supports extensive areas of Endangered Species Act listed elkhorn coral and staghorn coral.
- Both the nursery and the restoration site have been particularly vulnerable to anchor damage and derelict fishing gear as depicted in the above two photos:
 - The center photo shows healthy two-year old coral outplants.
 - The right photo shows the same site two weeks later with breakage from anchor damage.
- The proposed Habitat Restoration Area and associated regulations would provide additional protections to these sensitive corals



Proposed Rule



Marine Zones: Wildlife Management Area summary map slide.

This slide shows the proposed boundary for the sanctuary (green dotted line) with the proposed modified and new wildlife management areas (various colors, see key).

Wildlife management areas are designed to protect and minimize disturbances to wildlife and habitats on which species depend. Given that each location needs are unique, access and use restrictions vary depending on location and are designed to address location-specific resource goals. These could access and use restrictions include no anchor, idle speed no wake, no motor, and no entry.

The proposed rule includes 47 wildlife management areas, specifically:

- 2 existing wildlife management areas are proposed to be eliminated;
- 2 existing wildlife management areas are proposed to be combined into one (Existing East Content Keys and Upper Harbor Key are combined into one marine zone in the proposed rule as Content and Upper Harbor Key Flats);
- 9 existing wildlife management areas have no spatial or regulatory changes or only minor technical changes updating terminology to align with similar state of Florida regulations (e.g., changing closed to no entry);

- 15 existing wildlife management areas have spatial, regulatory or both spatial and regulatory changes; and,
- 23 are proposed as new wildlife management areas.

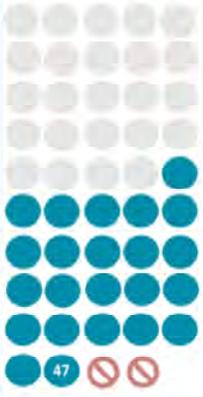
In the proposed rule, the existing Tortugas Bank No Anchor Area (shown in dark red) would be classified as a wildlife management area. Similarly, the proposed sanctuary boundary expansion at Pulley Ridge, where no anchor regulations would be applied (shown in lighter red), would also be included as a wildlife management area.



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WILDLIFE MANAGEMENT AREAS

Wildlife Management Areas



47 Wildlife Management Areas

- 23 proposed new
- 2 existing combined into one
- 2 existing proposed eliminated

Protect & Minimize Wildlife Disturbance

Regulations vary:

- Access and use restrictions address location-specific resource goals
 - Idle speed no wake
 - No motor
 - No anchor
 - No entry



Marine Zones: Wildlife Management Area proposed regulation summary slide.

NOAA's proposed rule includes 47 wildlife management areas.

Wildlife management areas (WMAs) are marine zones in which various access and use restrictions are applied to manage, protect, preserve, and minimize disturbance to sanctuary wildlife resources, including but not limited to endangered or threatened species, or the habitats, special places, or conditions on which they rely. The access and use restrictions applied in each area are specific to the management goals of that area.

Current WMAs and regulations:

- The current sanctuary zoning scheme includes 27 WMAs and the Tortugas Bank No Anchor Area. Twenty (20) of the existing wildlife management areas are within the U.S. Fish and Wildlife Service's Florida Keys National Wildlife Refuge Complex and may have additional regulations applied on upland portions (e.g., several islands are closed due to Wilderness designation).
- Access and use restrictions include idle speed no wake, no motor, no access, or closed.

Proposed WMAs and regulations:

- NOAA's proposed rule includes 47 wildlife management areas of which 23 are proposed new; this total number includes the existing Tortugas Bank No Anchor area and the proposed sanctuary boundary expansion at Pulley Ridge that would have no anchor regulations.
- Thirty one of these existing and proposed new wildlife management areas are within the U.S. Fish and Wildlife Service's Florida Keys National Wildlife Refuge Complex and may have additional regulations applied on upland portions (e.g., several islands are closed due to Wilderness designation).
- Access and use restrictions include no anchor, idle speed no wake, no motor, and no entry. Changes to the types of access restrictions are minor and are proposed to align better with state rules and terminology.

All access and use restrictions are currently defined in sanctuary regulations and these updated terms would also be defined in the proposed rule:

- *No anchor* means securing a vessel to the seabed by any means is prohibited.
- *Idle speed no wake* means that a vessel must proceed at a speed no greater than that which will maintain steerageway and headway and which does not cause a visible wake. At no time is any vessel required to proceed so slowly that the operator is unable to maintain control over the vessel or any other vessel or object that it has under tow.
- *No motor* means the use of internal combustion motors is prohibited. A vessel with an internal combustion motor may access a no motor zone only through the use of a push pole, paddle, sail, electric motor, or similar means of operation, but is prohibited from using its internal combustion motor.
- *No entry* means all vessels and all persons are prohibited from entering the area.



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WILDLIFE MANAGEMENT AREAS

Cotton Key & Snake Creek: Modified

Cotton Key: 0.34 sq miles; Snake Creek: 1.07 sq miles

*Protect Shallow
Water Habitat*



Marine Zones: Wildlife Management Areas - Cotton Key & Snake Creek highlight slide.

This slide shows the proposed modifications at the existing Cotton Key and Snake Creek Wildlife Management Areas.

Cotton Key is an existing 0.19 square mile no motor wildlife management area that is proposed to be expanded to 0.34 square miles:

- This proposed expansion would include an area west of Cotton Key that exhibits prop scarring.
- The 2019 Restoration Blueprint DEIS preferred alternative (Alternative 3) included expanding the WMA to include additional area to the south east of the existing zone; however, that expansion is not included in this proposed rule due to public and agency concerns related to proximity to and the potential to interfere with access to Whale Harbor Channel.
- In addition to protecting shallow seagrass habitats, this WMA is intended to decrease disturbance to nesting and roosting birds.

Snake Creek is an existing 0.42 square mile no motor wildlife management area that is proposed to be expanded to 1.07 square miles:

- This proposed expansion would extend this WMA to the west along the shoreline up to, but not including, the existing Monroe County no motor zone.
- An exception to the no motor regulations would be made for Snake Creek itself and the three channels providing access to Windley Key.
- This WMA is intended to decrease disturbance to a variety of birds that use the area for nesting, roosting, and foraging, and protect shallow water habitat used by various fish species.
- The shallow seagrass flats have been impacted by vessel groundings and exhibit prop scarring.



Proposed New: Marquesas Keys Turtle (6.37 sq miles)



*Protect Internationally
Important Sea Turtle
Foraging Habitat*



Marine Zones: Wildlife Management Areas - Marquesas Keys Turtle highlight slide.

This slide shows a proposed new Marquesas Keys Turtle Wildlife Management Area west of the Marquesas Keys.

The Marquesas Keys Turtle Wildlife Management Area (WMA) is a proposed 6.37 square mile idle speed no wake zone.

- The proposed WMA would decrease disturbance to threatened green sea turtles on a rare, internationally-important foraging ground.
- This zone is located within Eastern quicksands, west of Marquesas Keys and Mooney Harbor, outside of Key West National Wildlife Refuge.
- This area is 3-5 m deep and contains mixed seagrass assemblages with rocky/rubble habitats that provide key feeding grounds for threatened green turtles.

Site characterization:

- Using satellite telemetry data, nesting turtles tagged off the west coast and central Atlantic coast of Florida and tagged turtles from the Caribbean have been shown to migrate to Marquesas Keys as foraging grounds, where they

form large feeding aggregations.

- Although green turtles have shown some increases in abundance, they are still listed as threatened and well below historic numbers.
- The creation of this idle speed no wake zone will both protect the seagrass habitat these turtles depend upon and provide additional protections from vessel interactions for these long-lived species as they transit across these shallow seagrass beds.

Proposed rule and public comment:

- NOAA is proposing a smaller WMA than the zone that was proposed in the 2019 Restoration Blueprint DEIS.
- The WMA boundary included in this proposed rule removes the southern portion of the area that was included in the DEIS proposal. This change is due to public and agency comment stating this area is needed for safe transit to the Marquesas Keys.
- The WMA as shown in this proposed rule also captures the area of greatest habitat variability and highest numbers of turtle sightings.

Proposed New:
Western Dry Rocks (0.98 sq miles)



*Protect Fish Spawning
Aggregations & Deep
Reef Habitat*

→ | ← Aligns sanctuary & state
regulations

Marine Zones: Wildlife Management Areas - Western Dry Rocks highlight slide.

This slide shows the proposed new Western Dry Rocks Wildlife Management Area (green rectangle).

Proposed regulations:

- The proposed new Western Dry Rocks Wildlife Management Area (WMA) would mirror recently established Florida Fish and Wildlife Conservation Commission regulations (February 2021) with a seasonal no fishing prohibition from April 1 to July 31, and include a no anchor regulation during this same seasonal time period.
- The proposed rule would create clear regulations that are consistent with state rules and include no anchoring regulations at the same time that will additionally protect important deeper water coral habitat.

Site characterization:

- This site supports a well-developed, continuous reef system that contains a high diversity, abundance, and cover of important reef building corals.
- The high structural complexity of the site has ecological significance for commercially and ecologically important reef fishes and is known to be one of the most diverse multi-species fish spawning aggregations in Florida.

- Grey snapper, mahogany snapper, permit, goatfish and spadefish are known to aggregate to spawn at this site in summer and grouper form spawning aggregations in winter.

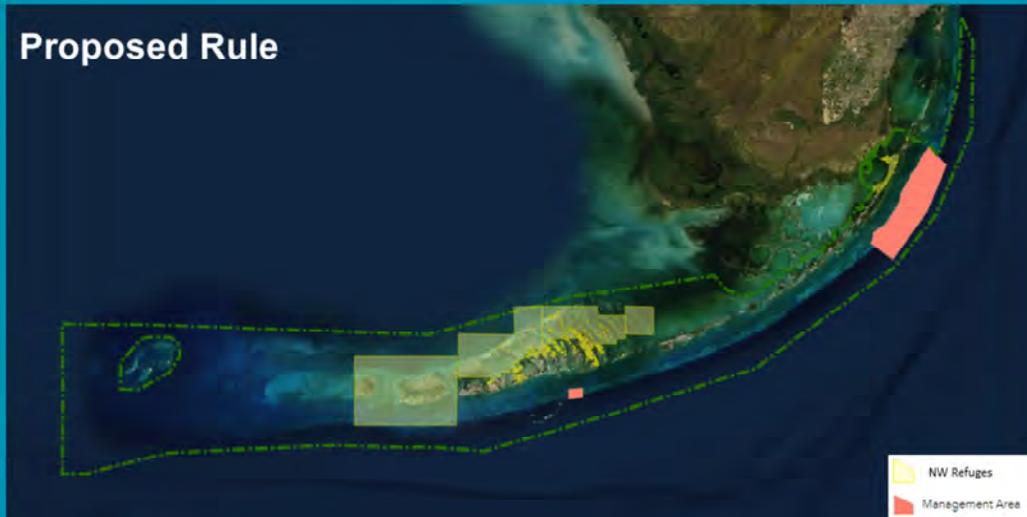
Public comments:

- A marine zone at Western Dry Rocks was included in the 2019 Restoration Blueprint DEIS. Specific to this proposed zone, NOAA received hundreds of public comments:
 - Comments in support of this proposal noted the need to protect this site due to its importance as a multi-fish spawning aggregation site; comments included support for both a year-round closure and seasonal closure during the peak spawning time, particularly for permit species, which are not managed through an existing fishery management plan.
 - Public comments in opposition noted the importance of this site for charter fishing activity, questioned the definition of trolling, and noted that any action at Western Dry Rocks should be taken through traditional fishery management plan action and referenced recent action taken to modify bag and size limits for mutton snapper, one of several fish that spawn at this site.



MANAGEMENT AREAS & NATIONAL WILDLIFE REFUGES

Proposed Rule



Marine Zones: Management Area & National Wildlife Refuge map summary slide.

This slide shows the proposed boundary for the sanctuary (green dotted line) with the Key Largo and Looe Key Management Areas (in pale red) and the Florida Key National Wildlife Refuge Complex (Crocodile Lake, Key Deer, Great White Heron, and Key West National Wildlife Refuges) in pale yellow.

These are all existing management zones within the sanctuary boundary.

- NOAA proposes maintaining Key Largo and Looe Key Existing Management Areas but would rename them the “Key Largo Management Area” and the “Looe Key Management Area.”
 - These two areas were designated as national marine sanctuaries in 1975 and 1981, respectively, which preceded designation of FKNMS. They were enveloped into the FKNMS boundary when it was established in 1990 and termed “Existing Management Areas” when the original zoning network was established in 1997.
- The Key West and Great White Heron National Wildlife Refuges, which are currently referred to as Existing Management Areas, would simply be referred to by their full National Wildlife Refuge names.



NATIONAL WILDLIFE REFUGES

Promote Cooperative Management

Proposed regulation

Great White Heron & Key West National Wildlife Refuges –
Prohibited activities:

- Water skiing, landing aircraft, or operating an airboat
- Operating personal watercraft (PWC) -
 - Clarify township exceptions
 - New exception for PWC around Marker G13



Marine Zones: Management Areas & National Wildlife Refuges regulation summary slide.

Key Largo and Looe Key Management Areas:

NOAA's proposed rule maintains and makes no modifications to the existing regulations within Key Largo Management Area and Looe Key Management Area.

Current regulations in these management areas prohibit:

- Removing, taking, spearing, or otherwise damaging any coral, marine invertebrate, plant, soil, rock, or other material. However, commercial taking of spiny lobster and stone crab by trap and recreational taking of spiny lobster by hand or hand gear consistent with applicable state and federal fishery regulations are allowed;
- Collecting tropical fish;
- Fishing with wire fish traps and certain bottom-fishing gear; and,
- Fishing with or possessing spearfishing equipment, except while passing through without interruption.

The 2019 Restoration Blueprint DEIS included a proposal to apply no anchor restrictions in both of these management areas. However, in response to public comments, NOAA is not proposing to apply no anchor regulations in either of these management areas.

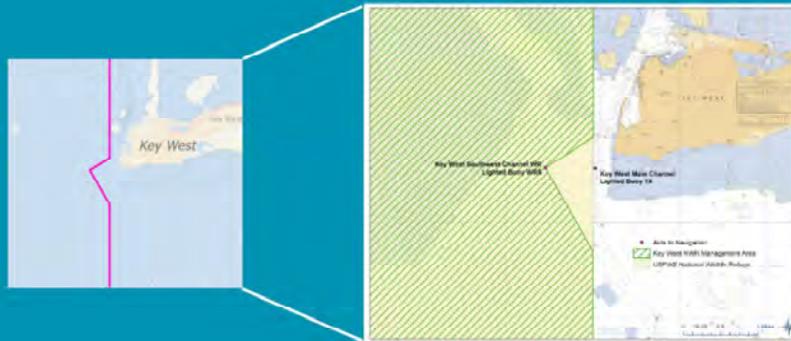
Key West and Great White Heron National Wildlife Refuges:

- Existing regulations in the Key West and Great White Heron National Wildlife Refuges would be maintained with the exception of a minor change to the area where personal watercraft are allowed.
- Existing regulations prohibit airboat operation, water skiing, and personal watercraft throughout these National Wildlife Refuges.
- The proposed rule would create a new exception that allows personal watercraft operation in a small portion of the Key West National Wildlife Refuge, west of the Key West main ship channel around marker G13 (a map is included on the next slide for reference).
- These two National Wildlife Refuges have always prohibited landing recreational aircraft, NOAA's proposed rule would update sanctuary regulations to be consistent with these existing rules.



MOTORIZED PERSONAL WATERCRAFT

Separate Conflicting Uses & Ensure Safety



Marine Zones: Key West National Wildlife Refuge Additional Marine Zone Associated Regulations slide.

This slide shows a map representing the proposed area where personal watercraft would now be allowed in the Key West National Wildlife Refuge.

- The proposed rule would create a new exception that allows PWC operation in a small portion of the Key West National Wildlife Refuge, west of the Key West main ship channel around marker G13.
- This proposed modification does not change the boundary of the Key West National Wildlife Refuge, only the area where personal watercraft operation may be allowed.
- In addition, airboat operation and water skiing have always been and would still be prohibited throughout these National Wildlife Refuges.

Marine Zones and Associated Regulations: Resources

- Story & Interactive Mapping Tool
- Static Maps comparing existing and proposed rule marine zone
- Marine Zone Summary Table



Marine Zones and Associated Regulations Resources introduction slide.

This slide includes a list of the marine zone related resources available for reference at floridakeys.noaa.gov/blueprint

Story & Interactive Mapping Tool



Marine Zones and Associated Regulations Resources: Story & Interactive Map highlight slide.

This slide includes a link and visual for the Restoration Blueprint Notice of Proposed Rulemaking Story & Interactive Map resource.

The Story & Interactive Map can be accessed at floridakeys.noaa.gov/blueprint

Regional Maps



- Comparative Static Maps
 - Upper Keys Region
 - Middle Keys Region
 - Lower Keys Region
 - Marquesas Region
 - Tortugas Region

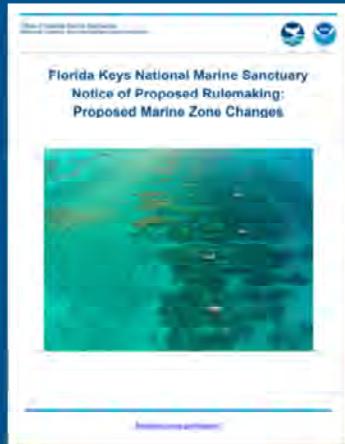


Marine Zones and Associated Regulations Resources: Regional Static Map highlight slide.

This slide includes a link and visual for the Restoration Blueprint Notice of Proposed Rulemaking Regional Static Map resource.

The Regional Static Map documents can be accessed at floridakeys.noaa.gov/blueprint

Marine Zone Summary Table



Sanctuary Preservation Areas	Proposed spatial and/or regulatory changes			Purpose of proposed spatial and/or regulatory change
	New zone	Spatial change	Regulatory change	
Turtle Rocks (Upper Keys)	Yes	Yes	Yes	<ul style="list-style-type: none"> Proposed new zone overlaps with the John Pennekamp Coral Reef State Park No Lobster Trap Zone, and expand slightly to include additional historical resources Addition of no anchor regulation to reduce potential anchor damage to sensitive habitats All other existing SPA regulations apply
Caysfort Reef (Upper Keys)	No	Yes	Yes	<ul style="list-style-type: none"> Extend zone slightly shoreward and seaward to the 90-foot depth contour to capture Endangered Species Act listed corals and important deep reef habitats Addition of no anchor regulation to reduce potential anchor damage to sensitive habitats including areas of active coral restoration (this SPA is a Mission: Iconic Reef site) All other existing SPA regulations apply



Marine Zones and Associated Regulations Resources: Marine Zone summary table highlight slide.

This slide includes a link and visual for the Restoration Blueprint Notice of Proposed Rulemaking Marine Zone summary table resource.

- The marine zone summary table includes the marine zones included in this proposed rule, indicating the following: if the marine zone is existing, modified, or proposed new; and if modified, a description of how (spatial or regulation change); and the rationale for the proposed change.
- The marine zone summary table can be accessed at floridakeys.noaa.gov/blueprint



Closing slide.

As you are all aware, coral reefs and associated habitats in the Florida Keys have experienced major changes, primarily due to regional and global stressors, catastrophic events, and climate change, and their impacts are being worsened as a result of local pressures associated with increased population growth and visitation.

Without action, Florida's coral reefs and their critical services to humankind - including food production, shoreline protection, tourism, economic resources, and cultural values - are at a tipping point and these reefs could be one of the first major US ecosystems in this century to collapse.

Fortunately, we have decades of experience and detailed scientific studies that have both documented the changes and identified local actions that can protect and preserve these special habitats and species for future generations. In the Restoration Blueprint we have proposed some bold steps to halt the decline and begin rebuilding these ecosystems - these key measures can help protect biodiversity, enhance reef fish populations, reduce physical impacts to habitats, protect and recover threatened coral species, and enhance the resilience of our

marine environments to global stressors. Our success requires solid science, adoption of key measures to increase protection for locally managed marine areas, reduce threats to reefs, and most importantly, a commitment by the entire community to protect and restore our reefs. This can be achieved through collaboration and establishment of diverse partnerships across governments, local communities, NGOs, researchers, businesses, and involvement of younger generations. The Restoration Blueprint provides initial steps to halt the accelerating degradation of these precious ecosystems and begin rebuilding vibrant, thriving marine communities, but it requires your support and commitment.

Please provide your comments on this proposed rule. Find more information and how to comment at: floridakeys.noaa.gov/blueprint.



FLORIDA KEYS
NATIONAL MARINE SANCTUARY

FloridaKeys.noaa.gov/blueprint

Final slide.

Sanctuary logos and Restoration Blueprint proposed rule specific website slide.