

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****15 CFR Part 922**

[Docket No. 000510129-1004-02]

RIN 0648-A018

Florida Keys National Marine Sanctuary Regulations

AGENCY: National Marine Sanctuary Program (NMSP), National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC).

ACTION: Final rule; notice of boundary expansion; supplemental management plan.

SUMMARY: By this document, NOAA expands the boundary of the Florida Keys National Marine Sanctuary (FKNMS or Sanctuary) in the remote westernmost portion of the Sanctuary by 96 square nautical miles (nm²) and establishes the Tortugas Ecological Reserve (Ecological Reserve or Reserve) (a 151 nm² no-take zone) in the expanded area and in 55 nm² of the existing Sanctuary, to protect important coral reef resources. This document publishes the boundary coordinates for the expansion area and for the Reserve, announces the availability of the Supplemental Management Plan (SMP) for the Reserve, and publishes the text of the Revised Designation Document for the Sanctuary. The SMP details the goals and objectives, management responsibilities, research activities, interpretive and educational programs, and enforcement, including surveillance activities, for the Reserve. By this document, NOAA also issues regulations to implement the boundary expansion and the establishment of the Reserve and to regulate activities in the Reserve consistent with the purposes of its establishment and to make minor revisions to the existing Sanctuary boundary and to the boundaries of various zoned areas within that boundary to correct errors, provide clarification, and reflect more accurate data. This action is necessary to comprehensively protect some of the healthiest and most diverse coral reefs in the Florida Keys. The intended effect of this rule is to protect the deep water coral reef community in this area from being degraded by human activities.

DATE: Pursuant to Section 304(b) of the National Marine Sanctuaries Act (NMSA) 16 U.S.C. 1434(b), the Revised Designation and regulations shall take effect and become final after the close of

a review period of 45 days of continuous session of Congress, beginning on the day on which this document is published in the **Federal Register**, unless the Governor of the State of Florida certifies to the Secretary of Commerce that the Revised Designation or any of its terms is unacceptable, in which case the Revised Designation or any unacceptable term shall not take effect. Announcement of the effective date of the Final Regulations will be published in the **Federal Register**.

ADDRESSES: Copies of the Final Supplemental Environmental Impact Statement/Supplemental Management Plan (FSEIS/SMP) and the Record of Decision for the Tortugas Ecological Reserve are available upon request to the Office of National Marine Sanctuaries, National Ocean Service, National Oceanic and Atmospheric Administration, 1305 East-West Highway, 11th Floor, Silver Spring, MD, 20910, (301) 713-3125. The FSEIS/SMP is also available on the Internet at: <http://www.fknms.nos.noaa.gov>. Comments regarding the collection-of-information requirements contained in this rule should be sent to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC, 20503 (Attention: Desk Officer for NOAA) and to Richard Roberts, NOAA, Work Station 8118, 1305 East-West Highway, 8th Floor, Silver Spring, MD, 20910.

FOR FURTHER INFORMATION CONTACT: Billy Causey, Sanctuary Superintendent, (305) 743-2437.

SUPPLEMENTARY INFORMATION:**I. Introduction**

NOAA establishes the Tortugas Ecological Reserve (a no-take zone) in the Tortugas region (Tortugas or region) of the Florida Keys to protect nationally significant coral reef resources and to protect an area that serves as a source of biodiversity for the Sanctuary as well as for the southwest shelf of Florida. Establishment of the Reserve includes expansion of the Sanctuary boundary to ensure that the Reserve protects sensitive coral habitats lying outside the existing boundary of the Sanctuary.

With this expansion, the FKNMS, which was designated by the Florida Keys National Marine Sanctuary and Protection Act (FKNMSPA, Pub. L. 101-605) on November 16, 1990, consists of approximately 2900 nm² (9660 square kilometers) of coastal and oceanic waters, and the submerged lands thereunder, surrounding the Florida Keys and the Dry Tortugas.

NOAA expands the boundary of the FKNMS and establishes the Tortugas Ecological Reserve to protect the nationally significant coral reef resources of the Tortugas region. This action furthers the objectives of the National Marine Sanctuaries Act (NMSA, 16 U.S.C. 1431 *et seq.*) and the FKNMSPA and meets the objectives of E.O. 13089, Coral Reef Protection. With the addition of the Tortugas Ecological Reserve, the network of no-take zones in the FKNMS is increased to 24, two of which are ecological reserves (Western Sambo and Tortugas Ecological Reserves).

II. Background

The Tortugas region is located in the westernmost portion of the FKNMS approximately 70 miles west of Key West, a very strategic position oceanographically that makes it an ideal location for an ecological reserve. It contains the healthiest coral reefs found in the Sanctuary. Coral pinnacles as high as forty feet with the highest coral cover (>30%) found in the Keys jut up from the ocean floor. These coral formations are bathed by some of the clearest and cleanest waters found in the Florida Keys. This occurs where the tropical waters of the Caribbean mingle with the more temperate waters of the Gulf of Mexico.

Recent studies reveal that the Tortugas region is unique in its location and the extent to which oceanographic processes impact the area. The Tortugas plays a dynamic role in supporting marine ecosystems throughout south Florida and the Florida Keys. Larvae that are spawned from adult populations in the Tortugas are spread throughout the Keys and south and southwest Florida by a persistent system of currents and eddies that provide the retention and current pathways necessary for successful recruitment of both local and foreign spawned juveniles with larval stages remaining from hours for some coral species up to one year for spiny lobster. In addition, the upwellings and convergences of the current systems provide the necessary food supplies in concentrated frontal regions to support larval growth stages.

The Tortugas is located at the transition between the Gulf of Mexico and the Atlantic and is strongly impacted by two major current systems, the Loop Current in the eastern Gulf of Mexico and the Florida Current in the Straits of Florida, as well as by the system of eddies that form and travel along the boundary of these currents. Of particular importance to the marine communities of the Tortugas and Florida Keys is the formation of a large

counterclockwise rotating gyre (large eddy) that forms just south of the Tortugas where the Loop Current turns abruptly into the Straits of Florida. This gyre can persist for several months before it is forced downstream along the Keys decreasing in size and increasing in forward speed until its demise in the middle Keys. This gyre serves as a retention mechanism for local recruits and as a pathway to inshore habitats for foreign recruits. It may also serve as a potential food provider through plankton production and concentration.

The Tortugas is also located adjacent to two coastal current systems, including the wind-driven currents of both the Florida Keys coastal zone and the west Florida Shelf.

Persistent westward winds over the Keys create a downwelling system that drives a westward coastal countercurrent along the lower Keys to the Tortugas. The countercurrent provides a return route to the Tortugas and its gyre-dominated circulation, and onshore surface Ekman transport (a process whereby wind-driven upwelling bottom water is transported 45 degrees to the left of the actual wind direction in the northern hemisphere) provide a mechanism for larval entry into coastal habitats. Circulation on the west Florida shelf is strongly influenced by wind forcing, but there also appears to be a significant southward mean flow, possibly due to the Loop Current. The effect of these currents on the Tortugas is to provide a larval return mechanism to the Florida Bay nursery grounds during periods of southeast winds, as well as the transport mechanism for low-salinity shelf waters from the north when the mean southward flow is strong.

The combination of downstream transport in the Florida Current, onshore Ekman transport along the downwelling coast, upstream flow in the coastal countercurrent and recirculation in the Tortugas gyre forms a recirculating recruitment pathway stretching from the Dry Tortugas to the middle Keys that enhances larval retention and recruitment into the Keys coastal waters of larvae spawned locally or foreign larvae from remote upstream areas of the Gulf of Mexico and Caribbean Sea. Convergences between the Florida Current front and coastal gyres provide a mechanism to concentrate foreign and local larvae, as well as their planktonic food supply. Onshore Ekman transport and horizontal mixing from frontal instabilities enhance export from the oceanic waters into the coastal zone. A wind- and gyre-driven countercurrent provides a return leg to aid larval

retention in local waters. Seasonal cycles of the winds, countercurrent and Florida Current favor recruitment to the coastal waters during the fall when the countercurrent can extend the length of the Keys from the Dry Tortugas to Key Largo, onshore Ekman transport is maximum and downstream flow in the Florida Current is minimum. The mix and variability of the different processes forming the recruitment conveyor provide ample opportunity for local recruitment of species with larval stages ranging from days to several months. For species with longer larval stages, such as the spiny lobster, which has a six to 12-month larval period, a local recruitment pathway exists that utilizes retention in the Tortugas gyre and southwest Florida shelf and return via the Loop Current and the Keys conveyor system. Return from the southwest Florida shelf could also occur through western Florida Bay and the Keys coastal countercurrent, due to a net southeastward flow recently observed connecting the Gulf of Mexico to the Atlantic through the Keys.

The Tortugas North portion of the Tortugas Ecological Reserve consists of coral reef communities that are unparalleled in the Florida Keys in their diversity and composition. Several carbonate banks of varying size and depth (30 feet to 75 feet) and low relief hardbottom habitats with patches of sand and rubble characterize Tortugas North. The most prominent features in the Tortugas North portion of the Reserve are Tortugas Bank and Sherwood Forest. Tortugas Bank crests at 66 feet and supports abundant attached reef organisms such as sponges, corals, and soft corals. North of Tortugas Bank, in an area previously believed to be composed only of sand, are several pinnacles covered with hard and soft corals and reef fish.

Sherwood Forest is an ancient stony coral forest exhibiting 30% or more bottom cover located along the western flank of Tortugas Bank (compared to 10% for the rest of the Florida Keys). The area's name was inspired by the bizarre mushroom-shaped coral heads that are an adaptation to the low light conditions. There seem to be indications that the mushroom shape is the result of a composite of two coral species. The coral reef is so well developed, that it forms a veneer over the true bottom approximately three feet below the reef. It is an area of low relief but high coral cover that rises to a depth of about 65 feet and covers an area of many acres. The area exhibits a complex habitat with various rock ledges, holes, and caves, providing hiding places for marine life. Unusual coral formations

and previously unidentified coral species associations have been observed in this location. Gorgonians and black corals (*Antipathies* sp.), which are not common elsewhere in the Florida Keys, are also prolific. An abundance of groupers has been documented in Sherwood Forest as have sightings of uncommon and rare fish species such as jewfish, white-eyed goby, and orangeback bass.

The Tortugas South portion of the Reserve includes a wide range of deep water coral reef habitats that will protect and conserve many rare and unusual reef species, and incorporates sufficient area to provide a buffer to the critical coral reef community. The upper portion of Tortugas South includes the relatively shallow Riley's Hump area in less than 100 feet of water. Riley's Hump consists of attached algae, scattered small coral colonies, sand, and hardbottom habitats. It is also a known fish aggregating and spawning site for several snapper-grouper species.

Deep reef habitats with numerous soft corals but few stony corals are found in Tortugas South in depths from 200 to 400 feet. A series of small pinnacles that surround a larger seamount have been identified as part of an east-west running ledge that begins around 250 feet and drops to close to 400 feet in a nearly vertical profile. This is unlike any other coral reef habitat discovered within Sanctuary waters. These complex habitats support numerous fish species including streamer bass, yellowmouth grouper, snowy grouper, scamp, speckled hind, creole fish, bank butterflyfish, amberjack, and almaco.

The deepest portions (1,600 to 1,800 feet) of Tortugas South encompass limestone ledges where unusual deep-dwelling sea life such as lantern fish (myctophids), tilefish, golden crabs, and giant isopods have been observed. The sand bottom habitat has been observed to be teeming with unique deep sea species of shrimp, fish, sea cucumbers, anemones, and crabs.

These critical deep water communities of Tortugas South are vulnerable to a wide range of impacts from fishing gear including deep water trawls and traps, and impacts from anchoring. Fishing gear impacts have been observed on sand and limestone substrates in some deep water areas.

In order for the Reserve to be biologically effective and to ensure protection and conservation of the full range of coral reef habitats and species in the Tortugas region, it is critical that all of the various benthic habitats and their associated marine communities, from the shallowest to the greatest

depths, be included within the boundary of the Reserve.

Despite its beauty and productivity, the Tortugas has been exploited for decades, greatly diminishing its potential as a source of larval recruits to the downstream portion of the Florida Keys and to itself. Fish and lobster populations have been significantly depleted thus threatening the integrity and natural dynamics of the ecosystem. Large freighters have been using Riley's Hump as a secure place to anchor between port visits. The several-ton anchors and chains of these ships have devastated large areas of fragile coral reef habitat that provide the foundation for economically important fisheries.

Visitation to the Tortugas region has increased dramatically over the past 10 years. Visitation in the DRTO increased 300% from 1984 through 1998. The population of South Florida is projected to increase from the current 6.3 million people to more than 12 million by 2050. With continued technological innovations such as global positioning systems (GPS), electronic fish finders, better and faster vessels, this increase in population will translate to more pressure on the resources in the Tortugas. By designating this area an ecological reserve, NOAA hopes to create a seascape of promise—a place where the ecosystem's full potential can be realized and a place that humans can experience, learn from and respect. This goal is consistent with E.O. 13089, Coral Reef Protection, and the U.S. Coral Reef Task Force's recommendations.

The FSEIS/SMP supplements the Final Environmental Impact Statement/Final Management Plan (FEIS/MP) for the Sanctuary and fulfills the requirements of the National Environmental Policy Act of 1969 (NEPA) for the Sanctuary boundary expansion, the establishment of the Reserve, and the issuance of the regulations implementing the boundary expansion and the Reserve. Because establishment of the Tortugas Ecological Reserve includes a Sanctuary boundary

expansion NOAA has followed the procedures and has complied with the requirements of section 304(a) of the NMSA, 16 U.S.C. 1434(a).

Other actions by various other jurisdictions are underway to ensure comprehensive protection of the unique resources of the Tortugas region:

- The National Park Service (NPS) is revising the General Management Plan for the Dry Tortugas National Park (DRTO) that will include as the preferred alternative a proposal to create a Research/Natural Area (RNA) within the Park. The proposed boundary and regulations for the RNA will be compatible with the establishment of the Tortugas Ecological Reserve.

- Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the Gulf of Mexico Fishery Management Council (GMFMC) has primary federal responsibility and expertise for the development of fishery management plans (FMPs) throughout the Gulf of Mexico. The GMFMC has developed an amendment for addressing Essential Fish Habitat requirements for the various Gulf of Mexico Fishery Management Plans (GMFMPs) which cover the area of the Tortugas Ecological Reserve. The GMFMPs are implemented by regulations promulgated by the National Marine Fisheries Service (NMFS) (50 CFR part 622). At the GMFMC's meeting on November 9, 1999, the NOS and NMFS requested that the GMFMC take steps to prohibit fishing, consistent with the purpose of the Tortugas Ecological Reserve. The GMFMC accepted this request and at its July 10–13, 2000 meeting, adopted the Generic Amendment for Addressing Essential Fish Habitat Requirements for Fishery Management Plans of the Gulf of Mexico. That amendment to the GMFMPs is consistent with the Tortugas Ecological Reserve and the regulations governing ecological reserves within the FKNMS, at 15 CFR 922.164(d).

- NMFS intends to issue regulations consistent with the no-take status of the

Tortugas Ecological Reserve for the species covered by the GMFMPs and for Atlantic tunas, Swordfish, sharks, and Atlantic billfishes.

- The State of Florida is drafting regulations to prohibit fishing in those portions of Tortugas North that lie within State waters.

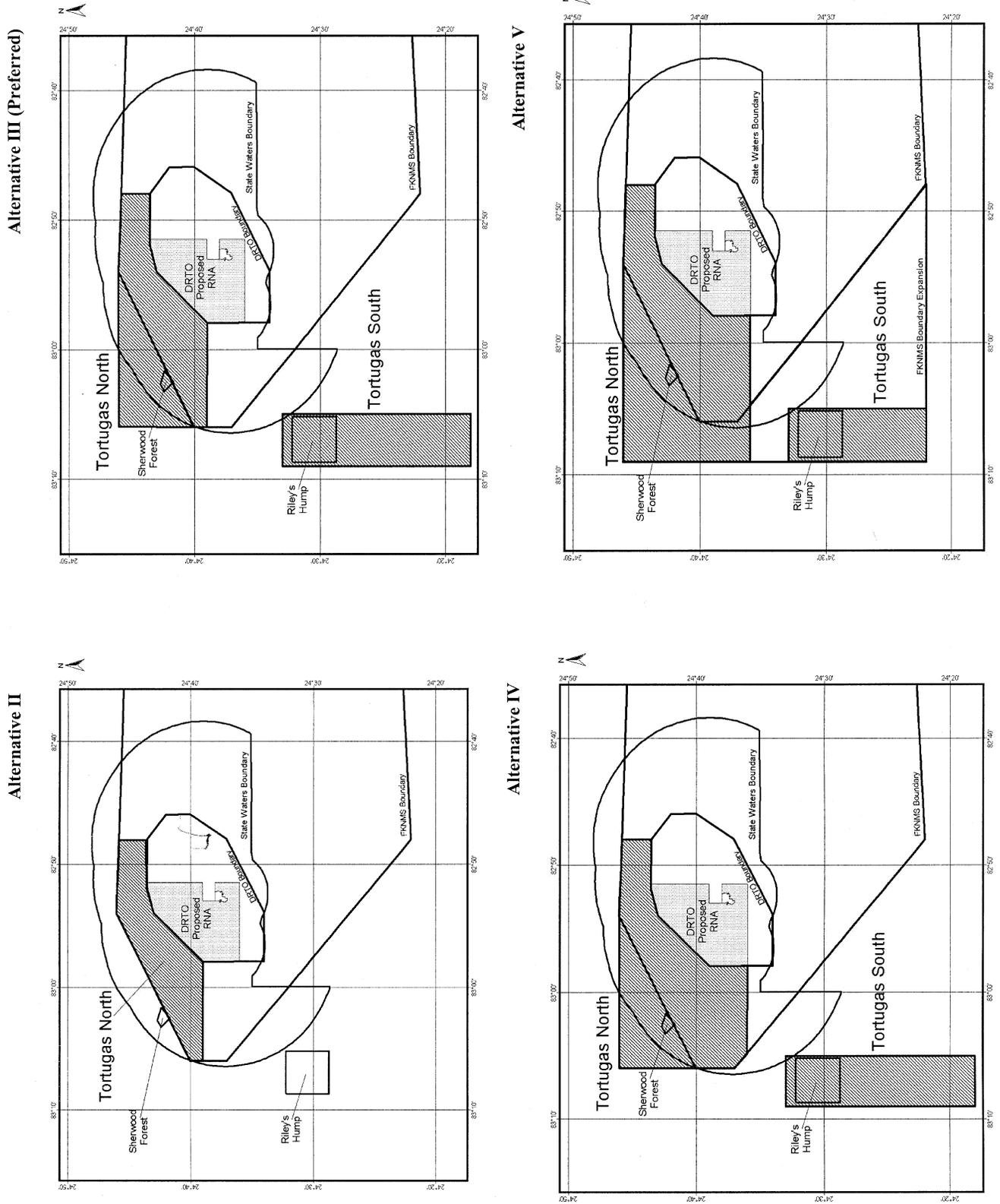
Combined with the establishment of the Tortugas Ecological Reserve, these actions would result in comprehensive protection for the nationally significant coral reef habitats from shallow to deep water extending from the DRTO into Sanctuary and GMFMC waters.

The process by which NOAA arrived at its proposal to establish the Tortugas Ecological Reserve is described in the preamble to the Proposed Rule published on May 18, 2000 (65 FR 31634). The five boundary alternatives and the four regulatory alternatives considered by NOAA are also set forth and described in the preamble to the Proposed Rule and in the FSEIS.

Consistent with the proposal, NOAA has selected Boundary Alternative III (the Preferred Boundary Alternative) (Figure 1) and expands the boundary of the Sanctuary by approximately 96 nm² to include two significant coral reef areas known as Sherwood Forest and Riley's Hump. The boundary of the Sanctuary in its northwesternmost corner is expanded by approximately 36 nm² to include Sherwood Forest and in its southwesternmost corner is expanded by adding a noncontiguous area of approximately 60 nm² to include Riley's Hump. By the final regulations issued with this document, NOAA establishes a Tortugas Ecological Reserve of approximately 151 nm². The Tortugas Ecological Reserve incorporates the expanded area and approximately 55 nm² of the existing Sanctuary in its northwest corner. The area of the Reserve surrounding Sherwood Forest encompasses approximately 91 nm² and is called Tortugas North; the area surrounding Riley's Hump is called Tortugas South.

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Figure 1. Boundary Alternatives II - V.



While NOAA proposed Regulatory Alternative C as its Preferred Regulatory

Alternative, NOAA has selected Regulatory Alternative D and

implements it by the final regulations issued with this document. The

difference between Regulatory Alternatives C and D is that Regulatory Alternative D prohibits access in Tortugas South except for continuous transit, law enforcement, or for scientific research or educational activities pursuant to a sanctuary permit. Under Alternative C, which is less restrictive, access to Tortugas South would have been allowed and, except for continuous transit and law enforcement purposes, would have required a simple, no-cost permit and call-in for entering and leaving.

The GMFMC, at its July 10–13, 2000, meeting, took final action on its Generic Amendment Addressing the Establishment of Tortugas Marine Reserves, which would create the Council's own 60 nm² marine reserve in the same location as Tortugas South and in the 13 nm² portion of Tortugas North that is within the Council's jurisdiction. The GMFMC has proposed a prohibition on any fishing (consumptive activity) or anchoring by fishing vessels. The Council also requested that NOAA prohibit anchoring by all vessels in the reserve and that NOAA prohibit all diving in the areas of Tortugas North and Tortugas South that are subject to Council jurisdiction.

The GMFMC expressed concern that non-consumptive diving would make the no-take prohibitions difficult to enforce, particularly with regard to diving for lobsters and spearfishing. The Council believes that eliminating all diving activities would greatly simplify enforcement. In addition, the GMFMC stated that non-consumptive diving can impact and damage bottom habitat through the inadvertent contact with coral or by stirring up sand and silt on the bottom. The Council also expressed concern about the biological impact of diving on the behavior of reef fish populations. Tortugas South is a known spawning area for many fish including red snapper, yellow tail snapper, mutton snapper, mangrove snapper, snowy grouper, black grouper, red grouper, red hind, and rock hind. The Council believes that the potential for diver impact on fish spawning would be eliminated by the closure. In addition, other commentors expressed concern over the effects of non-consumptive diving on sensitive coral reef resources.

Based on the comments received, NOAA revised the Preferred Alternative in the FSEIS from the Preferred Alternative in the DSEIS to prohibit all diving in Tortugas South except for research or educational activities pursuant to a Sanctuary permit. Non-consumptive diving will still be allowed in Tortugas North. The resources of Tortugas North are not as sensitive to

diver impacts as those in Tortugas South and permitting non-consumptive diving in Tortugas North with careful monitoring of the impacts of such diving will provide exceptional resource appreciation and public education benefits. Also, prohibiting diving in Tortugas South will provide a reference for assessing the impact of diving activities in Tortugas North.

Socio-economic impacts, determined by analyzing the costs and benefits of no-take regulations on various industries, indicate moderate impacts on fishermen, mostly lobster and handline fishermen, and some recreational charter operators, and minimal or small impacts on recreational fishermen, commercial shippers, and treasure salvors. The potential for benefits to non-consumptive users and the scientific community is high due to the educational and research value of a no-take ecological reserve. Positive effects to surrounding areas through long-term fisheries replenishment are also likely.

The action taken today adequately protects the nationally significant coral reef resources of the Tortugas region and fulfills the objectives of the FKNMSPA and the National Marine Sanctuaries Act (NMSA). The Tortugas Ecological Reserve established by this action is of sufficient size and the regulations impose adequate protective measures to achieve the goals and objectives of the FKNMSPA and the NMSA while not unduly impacting user groups.

III. Revised Designation Document

The Designation Document for the Sanctuary is revised to incorporate the coordinates for the expanded boundary of the Sanctuary, to authorize the regulation of entering or leaving specified areas of the Sanctuary, and to make necessary technical and editorial corrections of the Designation Document. The text of the Revised Designation Document follows:

REVISED DESIGNATION DOCUMENT FOR THE FLORIDA KEYS NATIONAL MARINE SANCTUARY

Article I. Designation and Effect

On November 16, 1990, the Florida Keys National Marine Sanctuary and Protection Act, Pub. L. 101–605 (16 U.S.C. 1433 note), became law. That Act designated an area of waters and submerged lands, including the living and nonliving resources within those waters, as described therein, as the Florida Keys National Marine Sanctuary (Sanctuary). By this revised Designation Document, the boundary of the Sanctuary is expanded to include important coral reef resources and resources in two areas known as Sherwood Forest and Riley's Hump, just beyond the westernmost portion of the statutory Sanctuary boundary.

Section 304 of the National Marine Sanctuaries Act (NMSA), 16 U.S.C. 1431 *et seq.*, authorizes the Secretary of Commerce to issue such regulations as are necessary and reasonable to implement the designation, including managing and protecting the conservation, recreational, ecological, historical, scientific, educational, cultural, archaeological or aesthetic resources and qualities of a national marine sanctuary. Section 1 of Article IV of this Designation Document lists activities of the type that are presently being regulated or may have to be regulated in the future, in order to protect Sanctuary resources and qualities. Listing in section 1 does not mean that a type of activity will be regulated in the future, however, if a type of activity is not listed, it may not be regulated, except on an emergency basis, unless section 1 is amended, following the procedures for designation of a sanctuary set forth in paragraphs (a) and (b) of section 304 of the NMSA, to include the type of activity.

Nothing in this Designation Document is intended to restrict activities that do not cause an adverse effect on the resources or qualities of the Sanctuary or on Sanctuary property or that do not pose a threat of harm to users of the Sanctuary.

Article II. Description of the Area

The Florida Keys National Marine Sanctuary boundary encompasses approximately 2900 nm² (9,800 square kilometers) of coastal and ocean waters, and the submerged lands thereunder, surrounding the Florida Keys in Florida. The easternmost point of the Sanctuary is the northeasternmost point of Biscayne National Park and the westernmost point is approximately 15 kilometers to the west of the western boundary of Dry Tortugas National Park, a linear distance of approximately 335 kilometers. The contiguous area boundary on the Atlantic Ocean side of the Florida Keys runs south from Biscayne National Park generally following the 300-foot isobath, curving in a southwesterly direction along the Florida Keys archipelago until south of the Dry Tortugas. The contiguous area boundary on the Gulf of Mexico side of the Florida Keys runs from this southern point in a straight line to the northwest and then when directly west of the Dry Tortugas in a straight line to the north. The boundary then turns to the east and slightly south and follows a straight line to just west of Key West and then turns to the northeast and follows a straight line parallel to the Florida Keys approximately five miles to the south, and then follows the Everglades National Park boundary until Division Point where the boundary then follows the western shore of Manatee Bay, Barnes Sound, and Card Sound. The boundary then follows the southern boundary of Biscayne National Park and up its eastern boundary until its northeasternmost point. Starting just to the east of the most western boundary line of the contiguous portion of the Sanctuary there is a vertical rectangular shape area of 60 nm² just to the south.

The shoreward boundary of the Sanctuary is the mean high-water mark except around

the Dry Tortugas where it is the boundary of the Dry Tortugas National Park. The Sanctuary boundary encompasses the entire Florida coral reef tract, all of the mangrove islands of the Florida Keys, and some of the sea grass meadows of the Florida Keys. The precise boundary of the Sanctuary is set forth at the end of this Designation Document.

Article III. Characteristics of the Area That Give it Particular Value

The Florida Keys extend approximately 223 miles southwest from the southern tip of the Florida peninsula. Adjacent to the Florida Keys land mass are located spectacular unique, nationally significant marine environments, including sea grass meadows, mangrove islands, and extensive living coral reefs. These marine environments support rich biological communities possessing extensive conservation, recreational, commercial, ecological, historical, research, educational, and aesthetic values which give this area special national significance. These environments are the marine equivalent of tropical rain forests in that they support high levels of biodiversity, are fragile and easily susceptible to damage from human activities, and possess high value to humans if properly conserved. These marine environments are subject to damage and loss of their ecological integrity from a variety of sources of disturbance.

The Florida Keys are a limestone island archipelago. The Keys are located at the southern edge of the Florida Plateau, a large carbonate platform made of a depth of up to 7000 meters of marine sediments, which have been accumulating for 150 million years and which have been structurally modified by subsidence and sea level fluctuation. The Keys region is generally divided into five distinct areas: the Florida reef tract, one of the world's largest coral reef tracts and the only barrier reef in the United States; Florida Bay, described as an active lime-mud factory because of the high carbonate content of its silts and muds; the Southwest Continental Shelf; the Straits of Florida; and the Keys themselves.

The 2.5 million-acre Sanctuary contains one of North America's most diverse assemblages of terrestrial, estuarine, and marine fauna and flora, including, in addition to the Florida reef tract, thousands of patch reefs, one of the world's largest sea grass communities covering 1.4 million acres, mangrove fringed shorelines, mangrove islands, and various hardbottom habitats. These diverse habitats provide shelter and food for thousands of species of marine plants and animals, including more than 50 species of animals identified under Federal or State law, as endangered or threatened. The Keys were at one time a major seafaring center for European and American trade routes to the Caribbean, and the submerged cultural and historic resources (*i.e.*, shipwrecks) abound in the surrounding waters. In addition, the Sanctuary may contain substantial archaeological resources of pre-European cultures.

The uniqueness of the marine environment draws multitudes of visitors to the Keys. The major industry in the Florida Keys is tourism,

including activities related to the Keys' marine resources, such as dive shops, charter fishing and dive boats and marinas, as well as hotels and restaurants. The abundance of the resources also supports a large commercial fishing employment sector.

The number of visitors to the Keys grows each year, with a concomitant increase in the number of residents, homes, jobs, and businesses. As population grows and the Keys accommodate ever-increasing resource-use pressures, the quality and quantity of Sanctuary resources are increasingly threatened. These pressures require coordinated and comprehensive monitoring and researching of the Florida Keys' region.

Article IV. Scope of Regulations

Section 1. Activities Subject to Regulation

The following activities are subject to regulation under the NMSA, either throughout the entire Sanctuary or within identified portions of it or, as indicated, in areas beyond the boundary of the Sanctuary, to the extent necessary and reasonable. Such regulation may include prohibitions to ensure the protection and management of the conservation, recreational, ecological, historical, scientific, educational, cultural, archaeological or aesthetic resources and qualities of the area. Because an activity is listed here does not mean that such activity is being or will be regulated. All listing means is that the activity can be regulated, after compliance with all applicable regulatory laws, without going through the designation procedures required by paragraphs (a) and (b) of section 304 of the NMSA, 16 U.S.C. 1434(a) and (b). Further, no regulation issued under the authority of the NMSA except an emergency regulation issued with the approval of the Governor of the State of Florida may take effect in the area of the Sanctuary lying within the seaward boundary of the State of Florida if the Governor of the State of Florida certifies to the Secretary of Commerce that such regulation is unacceptable within the forty-five-day review period specified in NMSA. Detailed definitions and explanations of the following "activities subject to regulation" appear in the Sanctuary Management Plan:

1. Exploring for, developing, or producing oil, gas, and/or minerals (*e.g.*, clay, stone, sand, gravel, metalliferous ores, nonmetalliferous ores) in the Sanctuary;
2. Touching, climbing on, taking, removing, moving, collecting, harvesting, injuring, destroying or causing the loss of, or attempting to take, remove, move, collect, harvest, injure, destroy or cause the loss of, coral in the Sanctuary;
3. Drilling into, dredging or otherwise altering the seabed of the Sanctuary, except incidental to allowed fishing and boating practices or construction activities permitted by county, state or federal regulatory agencies; or constructing, placing or abandoning any structure, material or other matter on the seabed of the Sanctuary, except as authorized by appropriate permits or incidental to allowed fishing practices;
4. Discharging or depositing, within or beyond the boundary of the Sanctuary, any material that subsequently enters the Sanctuary and injures a Sanctuary resource or quality;

5. Operating water craft in the Sanctuary (a) in a manner that could injure coral, hardbottoms, seagrass, mangroves, or any other immobile organism attached to the seabed,

(b) in a manner that could injure or endanger the life of divers, fishermen, boaters or other users of the Sanctuary,

(c) in a manner that could disturb marine mammals, marine reptiles, or bird rookeries;

6. Diving or boating activities in the Sanctuary including anchoring that could harm Sanctuary resources, Sanctuary property, or other users of the Sanctuary;

7. Stocking within the Sanctuary or releasing within the Sanctuary or from beyond the boundary of the Sanctuary, native or exotic species of plant, invertebrate, fish, amphibian or mammals;

8. Defacing, marking, or damaging in any way or displacing, removing, or tampering with any markers, signs, notices, placards, navigational aids, monuments, stakes, posts, mooring buoys, boundary buoys, trap buoys, or scientific equipment in the Sanctuary;

9. Removing, injuring, preserving, curating, and managing historic resources within the Sanctuary without all required state and/or federal permits;

10. Taking, removing, moving, catching, collecting, harvesting, feeding, injuring, destroying, or causing the loss of, or attempting to take, remove, move, catch, collect, harvest, feed, injure, destroy or cause the loss of any marine mammal, marine reptile, or bird within the Sanctuary, without all required state and/or federal permits;

11. Possessing, moving, harvesting, removing, taking, damaging, disturbing, breaking, cutting, spearing, or otherwise injuring any marine invertebrate, fish, bottom formation, algae, seagrass or other living or dead organism, including shells, or attempting any of these activities in any area of the Sanctuary designated as an Existing Management Area, Wildlife Management Area, Ecological Reserve, Sanctuary Preservation Area, or Special-Use Area;

12. Carrying or possessing specified fishing gear in any area of the Sanctuary designated as an Existing Management Area, Wildlife Management Area, Ecological Reserve, Sanctuary Preservation Area, or Special-Use Area except for passage through without interruption;

13. Entering and leaving any Wildlife Management Area, Ecological Reserve, Sanctuary Preservation Area, or Special-Use Area except for passage through without interruption or for law enforcement purposes;

14. Harvesting marine life as defined and regulated by the State of Florida under its marine life rule;

15. Mariculture;

16. Possessing or using explosives or releasing electrical charges or substances poisonous or toxic to fish and other living marine resources within the Sanctuary or beyond the boundary of the Sanctuary (possession of ammunition shall not be considered possession of explosives);

17. Removing and disposing of lost, out-of-season, or illegal gear discovered within the Sanctuary; removing of vessels grounded, lodged, stuck or otherwise perched on coral

reefs, hardbottom, or seagrasses within the Sanctuary; and removing and disposing of derelict or abandoned vessels or other vessels within the Sanctuary for which ownership cannot be determined or for which the owner takes no action for removal or disposal; and salvaging and towing of vessels abandoned or disabled within the Sanctuary vessels or of vessels within the Sanctuary otherwise needing salvaging or towing; and

18. Interfering with, obstructing, delaying or preventing an investigation, search, seizure or deposition of seized property in connection with enforcement of the NMSA or any regulation or permit issued under the NMSA.

Section 2. Emergency Regulation

Where necessary to prevent or minimize the destruction of, loss of, or injury to a Sanctuary resource or quality; or to minimize the imminent risk of such destruction, loss or injury, any activity, including any not listed in Section 1 of this article, is subject to immediate temporary regulation, including prohibition. However, no such regulation may take effect in any area of the Sanctuary lying within the seaward boundary of the State of Florida without the approval of the Governor of the State of Florida.

Article V. Effect on Leases, Permits, Licenses, and Rights

Pursuant to paragraph (c)(1) of section 304 of the NMSA, 16 U.S.C. 1434(c)(1), no valid lease, permit, license, approval or other authorization issued by any federal, State, or local authority of competent jurisdiction, or any right of subsistence use or access, may be terminated by the Secretary of Commerce, or his or her designee, as a result of a designation, or as a result of any sanctuary regulation, if such authorization or right was in effect on the effective date of the designation (November 16, 1990 with respect to the statutory Sanctuary boundary; _____, 2001 with respect to the revision to the Sanctuary boundary expansion made by this Revised Designation Document).

In no event may the Secretary of Commerce or his or her designee issue a permit authorizing, or otherwise approving: (1) the exploration for, development of, or production of oil, gas, or minerals within the Sanctuary; or (2) the disposal of dredged materials within the Sanctuary (except by certification in accordance with applicable National Marine Sanctuary Program regulations of valid authorizations in existence on the effective date of Sanctuary designation). Any purported authorizations issued by other authorities after the effective date of Sanctuary designation for any of these activities within the Sanctuary shall be invalid.

Article VI. Alteration of this Designation

The terms of designation, as defined in paragraph (a) of section 304 of the NMSA, 16 U.S.C. 1434(a), may be modified only by the procedures outlined in paragraphs (a) and (b) of section 304 of the NMSA, 16 U.S.C. 1434(a) and (b), including public hearings, consultation with interested federal, state, and local government agencies, review by the appropriate Congressional committees, review by the Governor of the State of

Florida, and approval by the Secretary of Commerce, or his or her designee. No designation, term of designation, or implementing regulation may take effect in the area of the Sanctuary lying within the seaward boundary of the State of Florida if the Governor of the State of Florida certifies to the Secretary of Commerce that such designation or term of designation regulation is unacceptable within the forty-five-day review period specified in NMSA.

Florida Keys National Marine Sanctuary Boundary Coordinates (based on North American datum of 1983)

The boundary of the Florida Keys National Marine Sanctuary—

(a) begins at the northeasternmost point of Biscayne National Park located at a point approximately 25 degrees 39 minutes north latitude, 80 degrees 05 minutes west longitude, then runs eastward to the point located at 25 degrees 39 minutes north latitude, 80 degrees 04 minutes west longitude; and

(b) then runs southward and connects in succession the points at the following coordinates:

(i) 25 degrees 34 minutes north latitude, 80 degrees 04 minutes west longitude,

(ii) 25 degrees 28 minutes north latitude, 80 degrees 05 minutes west longitude,

(iii) 25 degrees 21 minutes north latitude, 80 degrees 07 minutes west longitude, and

(iv) 25 degrees 16 minutes north latitude, 80 degrees 08 minutes west longitude;

(c) then runs southwesterly and connects in succession the points at the following coordinates:

(i) 25 degrees 07 minutes north latitude, 80 degrees 13 minutes west longitude,

(ii) 24 degrees 57 minutes north latitude, 80 degrees 21 minutes west longitude,

(iii) 24 degrees 39 minutes north latitude, 80 degrees 52 minutes west longitude,

(iv) 24 degrees 30 minutes north latitude, 81 degrees 23 minutes west longitude,

(v) 24 degrees 25 minutes north latitude, 81 degrees 50 minutes west longitude,

(vi) 24 degrees 22 minutes north latitude, 82 degrees 48 minutes west longitude,

(vii) 24 degrees 37 minutes north latitude, 83 degrees 06 minutes west longitude,

(viii) 24 degrees 46 minutes north latitude, 83 degrees 06 minutes west longitude,

(ix) 24 degrees 46 minutes north latitude, 82 degrees 54 minutes west longitude,

(x) 24 degrees 44 minutes north latitude, 81 degrees 55 minutes west longitude,

(xi) 24 degrees 51 minutes north latitude, 81 degrees 26 minutes west longitude, and

(xii) 24 degrees 55 minutes north latitude, 80 degrees 56 minutes west longitude;

(d) then follows the boundary of Everglades National Park in a southerly then northeasterly direction through Florida Bay, Buttonwood Sound, Tarpon Basin, and Blackwater Sound;

(e) after Division Point, then departs from the boundary of Everglades National Park and follows the western shoreline of Manatee Bay, Barnes Sound, and Card Sound;

(f) then follows the southern boundary of Biscayne National Park to the southeasternmost point of Biscayne National Park; and

(g) then follows the eastern boundary of Biscayne National Park to the beginning point specified in paragraph (a).

The shoreward boundary of the Florida Keys National Marine Sanctuary is the mean high-water mark except around the Dry Tortugas where the boundary is conterminous with that of the Dry Tortugas National Park, formed by connecting in succession the points at the following coordinates:

(i) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude;

(ii) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 58 minutes 0 seconds west longitude;

(iii) 24 degrees 39 minutes 0 seconds north latitude, 82 degrees 58 minutes 0 seconds west longitude;

(iv) 24 degrees 43 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude;

(v) 24 degrees 43 minutes 32 seconds north latitude, 82 degrees 52 minutes 0 seconds west longitude;

(vi) 24 degrees 43 minutes 32 seconds north latitude, 82 degrees 48 minutes 0 seconds west longitude;

(vii) 24 degrees 42 minutes 0 seconds north latitude, 82 degrees 46 minutes 0 seconds west longitude;

(viii) 24 degrees 40 minutes 0 seconds north latitude, 82 degrees 46 minutes 0 seconds west longitude;

(ix) 24 degrees 37 minutes 0 seconds north latitude, 82 degrees 48 minutes 0 seconds west longitude; and

(x) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude.

The Florida Keys National Marine Sanctuary also includes the area located within the boundary formed by connecting in succession the points at the following coordinates:

(i) 24 degrees 33 minutes north latitude, 83 degrees 09 minutes west longitude,

(ii) 24 degrees 33 minutes north latitude, 83 degrees 05 minutes west longitude,

(iii) 24 degrees 18 minutes north latitude, 83 degrees 05 minutes west longitude,

(iv) 24 degrees 18 minutes north latitude, 83 degrees 09 minutes west longitude, and

(v) 24 degrees 33 minutes north latitude, 83 degrees 09 minute west longitude.

(End of Revised Designation Document.)

IV. Supplemental Management Plan

The Supplemental Management Plan (SMP) complements the existing Sanctuary Management Plan (MP) in several respects. Many of the strategies described in the MP that are now being implemented in the Sanctuary will be applied to the Tortugas Ecological Reserve. However, due to the unique characteristics of the Tortugas region (remoteness, deep water) some new strategies have been developed and will be implemented. Some of these strategies are described below. The SMP adds strategies to the Education and Outreach Action Plan, Enforcement

explanation concerning the table of benthic habitats in the DSEIS. It was not clear to the County whether the 59% of unmaped acreage is a less significant area within the overall total and, if so, that it should be noted. If it is not, the County believed that this area needs significant additional exploration.

The benthic habitats categorized in Table 1 of the FSEIS represent those identified as the result of one mapping project based on aerial photographs and limited groundtruthing in the Tortugas region. Extensive characterization of the benthic communities within Dry Tortugas National Park has been completed (Agassiz 1883, Davis 1982, and Jaap 1998). Also, scientific exploration of benthic habitats within the Tortugas Ecological Reserve area has occurred since the completion of the DSEIS (Miller, unpubl. data). However, NOAA agrees that additional mapping and exploration are needed to accurately assess the full extent of marine resources throughout the Tortugas region.

Monroe County commented that the FSEIS should include a table summarizing the regulatory alternatives. A table summarizing the regulatory alternatives has been added to the FSEIS.

Unfunded Mandates Reform Act of 1995

This rule contains no Federal mandates (under the regulatory provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA)) for State, local, and tribal governments or the private sector. Thus, this rule is not subject to the requirements of sections 202 and 205 of the UMRA.

List of Subjects in 15 CFR Part 922

Administrative practice and procedure, Coastal zone, Education, Environmental protection, Marine resources, Penalties, Recreation and recreation areas, Reporting and recordkeeping requirements, Research.

Dated: January 8, 2001.

Margaret A. Davidson,

Acting Assistant Administrator for Ocean Services and Coastal Zone Management.

Accordingly, for the reasons set forth in the preamble, 15 CFR part 922 is amended as follows:

PART 922— NATIONAL MARINE SANCTUARY PROGRAM REGULATIONS

1. The authority citation for part 922 continues to read as follows:

Authority: 16 U.S.C. 1431 *et seq.*

2. Section 922.161 is revised to read as follows:

§ 922.161 Boundary.

The Sanctuary consists of an area of approximately 2900 square nautical miles (9,800 square kilometers) of coastal and ocean waters, and the submerged lands thereunder, surrounding the Florida Keys in Florida. Appendix I to this subpart sets forth the precise Sanctuary boundary.

3. In § 922.162, definitions for “Length overall (LOA) or length,” “Stem,” and “Stern” are added alphabetically as follows:

§ 922.162 Definitions.

Length overall (LOA) or length means, as used in § 922.167 with respect to a vessel, the horizontal distance, rounded to the nearest foot (with 0.5 ft and above rounded upward), between the foremost part of the stem and the aftermost part of the stern, excluding bowsprits, rudders, outboard motor brackets, and similar fittings or attachments.

Stem means the foremost part of a vessel, consisting of a section of timber or fiberglass, or cast, forged, or rolled metal, to which the sides of the vessel are united at the fore end, with the lower end united to the keel, and with the bowsprit, if one is present, resting on the upper end.

Stern means the aftermost part of the vessel.

4. In § 922.164, paragraphs (d)(1)(v), (d)(1)(vi), and (g) are revised, and paragraphs (d)(1)(viii) and (ix) are added to read as follows:

§ 922.164 Additional activity regulations by Sanctuary area.

- (d) * * *
- (1) * * *
- (v) Anchoring in the Tortugas Ecological Reserve. In all other Ecological Reserves and Sanctuary Preservation Areas, placing any anchor in a way that allows the anchor or any portion of the anchor apparatus (including the anchor, chain or rope) to touch living or dead coral, or any attached living organism. When anchoring dive boats, the first diver down must inspect the anchor to ensure that it is not touching living or dead coral, and will not shift in such a way as to touch such coral or other attached organism. No further diving shall take place until the anchor is placed in accordance with these requirements.
- (vi) Except in the Tortugas Ecological Reserve where mooring buoys must be

used, anchoring instead of mooring when a mooring buoy is available or anchoring in other than a designated anchoring area when such areas have been designated and are available.

* * * * *

(viii) Except for passage without interruption through the area, for law enforcement purposes, or for purposes of monitoring pursuant to paragraph (d)(2) of this section: entering the Tortugas South area of the Tortugas Ecological Reserve; or entering the Tortugas North area of the Tortugas Ecological Reserve without a valid access permit issued pursuant to § 922.167 or entering or leaving the Tortugas North area with a valid access permit issued pursuant to § 922.167 without notifying FKNMS staff at the Dry Tortugas National Park office by telephone or radio no less than 30 minutes and no more than 6 hours, before entering and upon leaving the Tortugas Ecological Reserve.

(ix) Tying a vessel greater than 100 feet (30.48 meters) LOA, or tying more than one vessel (other than vessels carried on board a vessel) if the combined lengths would exceed 100 feet (30.48 meters) LOA, to a mooring buoy or to a vessel tied to a mooring buoy in the Tortugas Ecological Reserve.

* * * * *

(g) *Anchoring on Tortugas Bank.* Vessels 50 meters or greater in registered length, are prohibited from anchoring on the portion of Tortugas Bank within the Florida Keys National Marine Sanctuary west of the Dry Tortugas National Park that is outside of the Tortugas Ecological Reserve. The boundary of the area closed to anchoring by vessels 50 meters or greater in registered length is formed by connecting in succession the points at the following coordinates (based on the North American Datum of 1983):

- (1) 24 deg. 32.00’ N 83 deg. 00.05’ W
- (2) 24 deg. 37.00’ N 83 deg. 06.00’ W
- (3) 24 deg. 39.00’ N 83 deg. 06.00’ W
- (4) 24 deg. 39.00’ N 83 deg. 00.05’ W
- (5) 24 deg. 32.00’ N 83 deg. 00.05’ W

5. Revise the heading of § 922.166 to read as follows:

§ 922.166 Permits other than for access to the Tortugas Ecological Reserve— application procedures and issuance criteria.

§ 922.167 [Redesignated as § 922.168]

6. Redesignate § 922.167 as § 922.168 and revise it to read as follows:

§ 922.168 Certification of preexisting leases, licenses, permits, approvals, other authorizations, or rights to conduct a prohibited activity.

(a) A person may conduct an activity prohibited by §§ 922.163 or 922.164 if such activity is specifically authorized by a valid Federal, State, or local lease, permit, license, approval, or other authorization in existence on July 1, 1997, or by any valid right of subsistence use or access in existence on July 1, 1997, provided that:

(1) The holder of such authorization or right notifies the Director, in writing, within 90 days of July 1, 1997, of the existence of such authorization or right and requests certification of such authorization or right; for the area added to the Sanctuary by the boundary expansion for the Tortugas Ecological Reserve, the holder of such authorization or right notifies the Director, in writing, within 90 days of the effective date of the boundary expansion, of the existence of such authorization or right and requests certification of such authorization or right.

(2) The holder complies with the other provisions of this § 922.168; and

(3) The holder complies with any terms and conditions on the exercise of such authorization or right imposed as a condition of certification, by the Director, to achieve the purposes for which the Sanctuary was designated.

(b) The holder of an authorization or right described in paragraph (a) of this section authorizing an activity prohibited by Secs. 922.163 or 922.164 may conduct the activity without being in violation of applicable provisions of Secs. 922.163 or 922.164, pending final agency action on his or her certification request, provided the holder is in compliance with this § 922.168.

(c) Any holder of an authorization or right described in paragraph (a) of this section may request the Director to issue a finding as to whether the activity for which the authorization has been issued, or the right given, is prohibited by Secs. 922.163 or 922.164, thus requiring certification under this section.

(d) Requests for findings or certifications should be addressed to the Director, Office of Ocean and Coastal Resource Management; ATTN: Sanctuary Superintendent, Florida Keys National Marine Sanctuary, P.O. Box 500368, Marathon, FL 33050. A copy of the lease, permit, license, approval, or other authorization must accompany the request.

(e) The Director may request additional information from the certification requester as he or she

deems reasonably necessary to condition appropriately the exercise of the certified authorization or right to achieve the purposes for which the Sanctuary was designated. The information requested must be received by the Director within 45 days of the postmark date of the request. The Director may seek the views of any persons on the certification request.

(f) The Director may amend any certification made under this § 922.168 whenever additional information becomes available justifying such an amendment.

(g) Upon completion of review of the authorization or right and information received with respect thereto, the Director shall communicate, in writing, any decision on a certification request or any action taken with respect to any certification made under this § 922.168, in writing, to both the holder of the certified lease, permit, license, approval, other authorization, or right, and the issuing agency, and shall set forth the reason(s) for the decision or action taken.

(h) Any time limit prescribed in or established under this § 922.168 may be extended by the Director for good cause.

(i) The holder may appeal any action conditioning, amending, suspending, or revoking any certification in accordance with the procedures set forth in § 922.50.

(j) Any amendment, renewal, or extension made after July 1, 1997, to a lease, permit, license, approval, other authorization or right is subject to the provisions of § 922.49.

7. Add a new § 922.167 to read as follows:

§ 922.167 Permits for access to the Tortugas Ecological Reserve.

(a) A person may enter the Tortugas North area of the Tortugas Ecological Reserve other than for passage without interruption through the reserve, for law enforcement purposes, or for purposes of monitoring pursuant to paragraph (d)(2) of § 922.164, if authorized by a valid access permit issued pursuant to § 922.167.

(b)(1) Access permits must be requested at least 72 hours but no longer than one month before the date the permit is desired to be effective. Access permits do not require written applications or the payment of any fee. Permits may be requested via telephone or radio by contacting FKNMS at any of the following numbers:

Key West office: telephone: (305) 292-0311
Marathon office: telephone: (305) 743-2437

(2) The following information must be provided, as applicable:

- (i) Vessel name.
- (ii) Name, address, and telephone number of owner and operator.
- (iii) Name, address, and telephone number of applicant.
- (iv) USCG documentation, state license, or registration number.
- (v) Home port.
- (vi) Length of vessel and propulsion type (*i.e.*, motor or sail).
- (vii) Number of divers.
- (viii) Requested effective date and duration of permit (2 weeks, maximum).

(c) The Sanctuary Superintendent will issue a permit to the owner or to the owner's representative for the vessel when all applicable information has been provided. The Sanctuary Superintendent will provide a permit number to the applicant and confirm the effective date and duration period of the permit. Written confirmation of permit issuance will be provided upon request.

8. Revise Appendices I, II, IV, V, VI, and VII to Subpart P of Part 922 to read as follows:

Appendix I to Subpart P of Part 922—Florida Keys National Marine Sanctuary Boundary Coordinates

(Appendix Based on North American Datum of 1983)

(1) The boundary of the Florida Keys National Marine Sanctuary—

(a) Begins at the northeasternmost point of Biscayne National Park located at approximately 25 degrees 39 minutes north latitude, 80 degrees 05 minutes west longitude, then runs eastward to the point at 25 degrees 39 minutes north latitude, 80 degrees 04 minutes west longitude; and

(b) Then runs southward and connects in succession the points at the following coordinates:

- (i) 25 degrees 34 minutes north latitude, 80 degrees 04 minutes west longitude,
- (ii) 25 degrees 28 minutes north latitude, 80 degrees 05 minutes west longitude, and
- (iii) 25 degrees 21 minutes north latitude, 80 degrees 07 minutes west longitude;
- (iv) 25 degrees 16 minutes north latitude, 80 degrees 08 minutes west longitude;

(c) Then runs southwesterly approximating the 300-foot isobath and connects in succession the points at the following coordinates:

- (i) 25 degrees 07 minutes north latitude, 80 degrees 13 minutes west longitude,
- (ii) 24 degrees 57 minutes north latitude, 80 degrees 21 minutes west longitude,
- (iii) 24 degrees 39 minutes north latitude, 80 degrees 52 minutes west longitude,
- (iv) 24 degrees 30 minutes north latitude, 81 degrees 23 minutes west longitude,
- (v) 24 degrees 25 minutes north latitude, 81 degrees 50 minutes west longitude,
- (vi) 24 degrees 22 minutes north latitude, 82 degrees 48 minutes west longitude,
- (vii) 24 degrees 37 minutes north latitude, 83 degrees 06 minutes west longitude,

(viii) 24 degrees 46 minutes north latitude, 83 degrees 06 minutes west longitude,
 (ix) 24 degrees 46 minutes north latitude, 82 degrees 54 minutes west longitude,
 (x) 24 degrees 44 minutes north latitude, 81 degrees 55 minutes west longitude,
 (xi) 24 degrees 51 minutes north latitude, 81 degrees 26 minutes west longitude, and
 (xii) 24 degrees 55 minutes north latitude, 80 degrees 56 minutes west longitude;
 (d) Then follows the boundary of Everglades National Park in a southerly then northeasterly direction through Florida Bay, Buttonwood Sound, Tarpon Basin, and Blackwater Sound;
 (e) After Division Point, then departs from the boundary of Everglades National Park and follows the western shoreline of Manatee Bay, Barnes Sound, and Card Sound;
 (f) then follows the southern boundary of Biscayne National Park to the southeasternmost point of Biscayne National Park; and
 (g) then follows the eastern boundary of Biscayne National Park to the beginning point specified in paragraph (a).
 (2) The shoreward boundary of the Florida Keys National Marine Sanctuary is the mean high-water mark except around the Dry Tortugas where the boundary is coterminous

with that of the Dry Tortugas National Park, formed by connecting in succession the points at the following coordinates:
 (a) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude;
 (b) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 58 minutes 0 second west longitude;
 (c) 24 degrees 39 minutes 0 seconds north latitude, 82 degrees 58 minutes 0 seconds west longitude;
 (d) 24 degrees 43 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude;
 (e) 24 degrees 43 minutes 32 seconds north latitude, 82 degrees 52 minutes 0 seconds west longitude;
 (f) 24 degrees 43 minutes 32 seconds north latitude, 82 degrees 48 minutes 0 seconds west longitude;
 (g) 24 degrees 42 minutes 0 seconds north latitude, 82 degrees 46 minutes, 0 seconds west longitude;
 (h) 24 degrees 40 minutes 0 seconds north latitude, 82 degrees 46 minutes 0 seconds west longitude;
 (i) 24 degrees 37 minutes 0 seconds north latitude, 82 degrees 48 minutes 0 seconds west longitude; and

(j) 24 degrees 34 minutes 0 seconds north latitude, 82 degrees 54 minutes 0 seconds west longitude.
 (3) The Florida Keys National Marine Sanctuary also includes the area located within the boundary formed by connecting in succession the points at the following coordinates:
 (a) 24 degrees 33 minutes north latitude, 83 degrees 09 minutes west longitude,
 (b) 24 degrees 33 minutes north latitude, 83 degrees 05 minutes west longitude, and
 (c) 24 degrees 18 minutes north latitude, 83 degrees 05 minutes west longitude;
 (d) 24 degrees 18 minutes north latitude, 83 degrees 09 minutes west longitude; and
 (e) 24 degrees 33 minutes north latitude, 83 degrees 09 minutes west longitude.

Appendix II to Subpart P of Part 922— Existing Management Areas Boundary Coordinates

(1) The boundary of each of the Existing Management Areas is formed by connecting in succession the points at the following coordinates:

National Oceanic and Atmospheric Administration

KEY LARGO-MANAGEMENT AREA

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.19'45" N	80 deg.12'00" W.
2	25 deg.16'02" N	80 deg.08'07" W.
3	25 deg.07'05" N	80 deg.12'05" W.
4	24 deg.58'03" N	80 deg.19'08" W.
5	25 deg.02'02" N	80 deg.25'25" W.
6	25 deg.19'45" N	80 deg.12'00" W.

LOOE KEY MANAGEMENT AREA

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.31'62" N	81 deg.26'00" W.
2	24 deg.33'57" N	81 deg.26'00" W.
3	24 deg.34'15" N	81 deg.23'00" W.
4	24 deg.32'20" N	81 deg.23'00" W.
5	24 deg.31'62" N	81 deg.26'00" W.

United States Fish and Wildlife Service

GREAT WHITE HERON NATIONAL WILDLIFE REFUGE

[Based on the North American Datum of 1983]

Point	Latitude	Longitude
1	24 deg.43.8' N	81 deg.48.6' W.
2	24 deg.43.8' N	81 deg.37.2' W.
3	24 deg.49.2' N	81 deg.37.2' W.
4	24 deg.49.2' N	81 deg.19.8' W.
5	24 deg.48.0' N	81 deg.19.8' W.
6	24 deg.48.0' N	81 deg.14.4' W.
7	24 deg.49.2' N	81 deg.14.4' W.
8	24 deg.49.2' N	81 deg.08.4' W.
9	24 deg.43.8' N	81 deg.08.4' W.
10	24 deg.43.8' N	81 deg.14.4' W.
11	24 deg.43.2' N	81 deg.14.4' W.

GREAT WHITE HERON NATIONAL WILDLIFE REFUGE—Continued

[Based on the North American Datum of 1983]

Point	Latitude	Longitude
12	24 deg.43.2' N	81 deg.16.2' W.
13	24 deg.42.6' N	81 deg.16.2' W.
14	24 deg.42.6' N	81 deg.21.0' W.
15	24 deg.41.4' N	81 deg.21.0' W.
16	24 deg.41.4' N	81 deg.22.2' W.
17	24 deg.43.2' N	81 deg.22.2' W.
18	24 deg.43.2' N	81 deg.22.8' W.
19	24 deg.43.8' N	81 deg.22.8' W.
20	24 deg.43.8' N	81 deg.24.0' W.
21	24 deg.43.2' N	81 deg.24.0' W.
22	24 deg.43.2' N	81 deg.26.4' W.
23	24 deg.43.8' N	81 deg.26.4' W.
24	24 deg.43.8' N	81 deg.27.0' W.
25	24 deg.43.2' N	81 deg.27.0' W.
26	24 deg.43.2' N	81 deg.29.4' W.
27	24 deg.42.6' N	81 deg.29.4' W.
28	24 deg.42.6' N	81 deg.30.6' W.
29	24 deg.41.4' N	81 deg.30.6' W.
30	24 deg.41.4' N	81 deg.31.2' W.
31	24 deg.40.8' N	81 deg.31.2' W.
32	24 deg.40.8' N	81 deg.32.4' W.
33	24 deg.41.4' N	81 deg.32.4' W.
34	24 deg.41.4' N	81 deg.34.2' W.
35	24 deg.40.8' N	81 deg.34.2' W.
36	24 deg.48.0' N	81 deg.35.4' W.
37	24 deg.39.6' N	81 deg.35.4' W.
38	24 deg.39.6' N	81 deg.36.0' W.
39	24 deg.39.0' N	81 deg.36.0' W.
40	24 deg.39.0' N	81 deg.37.2' W.
41	24 deg.37.8' N	81 deg.37.2' W.
42	24 deg.37.8' N	81 deg.37.8' W.
43	24 deg.37.2' N	81 deg.37.8' W.
44	24 deg.37.2' N	81 deg.40.2' W.
45	24 deg.36.0' N	81 deg.40.2' W.
46	24 deg.36.0' N	81 deg.40.8' W.
47	24 deg.35.4' N	81 deg.40.8' W.
48	24 deg.35.4' N	81 deg.42.0' W.
49	24 deg.36.0' N	81 deg.42.0' W.
50	24 deg.36.0' N	81 deg.48.6' W.
51	24 deg.43.8' N	81 deg.48.6' W.

KEY WEST NATIONAL WILDLIFE REFUGE

[Based on the North American Datum of 1983]

Point	Latitude	Longitude
1	24 deg.40.0' N	81 deg.49.0' W.
2	24 deg.40.0' N	82 deg.10.0' W.
3	24 deg.27.0' N	82 deg.10.0' W.
4	24 deg.27.0' N	81 deg.49.0' W.
5	24 deg.40.0' N	81 deg.49.0' W.

(2) When differential Global Positioning Systems data becomes available, these coordinates may be published in the **Federal Register** to reflect the increased accuracy of such data.

**Appendix IV to Subpart P of Part 922—
Ecological Reserves Boundary**

in succession the points at the following coordinates:

Coordinates

(1) The boundary of the Western Sambo Ecological Reserve is formed by connecting

WESTERN SAMBO

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.33.70' N	81 deg.40.80' W.
2	24 deg.28.85' N	81 deg.41.90' W.

WESTERN SAMBO—Continued
[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
3	24 deg.28.50' N	81 deg.43.70' W.
4	24 deg.33.50' N	81 deg.43.10' W.
5	24 deg.33.70' N	81 deg.40.80' W.

(2) The Tortugas Ecological Reserve consists of two discrete areas, Tortugas North and Tortugas South.

(3) The boundary of Tortugas North is formed by connecting in succession the points at the following coordinates:

TORTUGAS NORTH

Point	Latitude	Longitude
1	24 deg.46.00' N	83 deg.06.00' W.
2	24 deg.46.00' N	82 deg.54.00' W.
3	24 deg.45.80' N	82 deg.48.00' W.
4	24 deg.43.53' N	82 deg.48.00' W.
5	24 deg.43.53' N	82 deg.52.00' W.
6	24 deg.43.00' N	82 deg.54.00' W.
7	24 deg.39.00' N	82 deg.58.00' W.
8	24 deg.39.00' N	83 deg.06.00' W.
9	24 deg.46.00' N	83 deg.06.00' W.

(4) The boundary of Tortugas South is formed by connecting in succession the points at the following coordinates:

TORTUGAS SOUTH

Point	Latitude	Longitude
1	24 deg.33.00' N	83 deg.09.00' W.
2	24 deg.33.00' N	83 deg.05.00' W.
3	24 deg.18.00' N	83 deg.05.00' W.
4	24 deg.18.00' N	83 deg.09.00' W.
5	24 deg.33.00' N	83 deg.09.00' W.

Appendix V to Subpart P of Part 922—Sanctuary Preservation Areas Boundary Coordinates

The boundary of each of the Sanctuary Preservation Areas (SPAs) is formed by connecting in succession the points at the following coordinates:

ALLIGATOR REEF

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.50.98' N	80 deg.36.84' W.
2	24 deg.50.51' N	80 deg.37.35' W.
3	24 deg.50.81' N	80 deg.37.63' W.
4	24 deg.51.23' N	80 deg.37.17' W.
5	24 deg.50.98' N	80 deg.36.84' W.

Catch and release fishing by trolling only is allowed in this SPA.

CARYSFORT/SOUTH CARYSFORT REEF

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.13.78' N	80 deg.12.00' W.
2	25 deg.12.03' N	80 deg.12.98' W.
3	25 deg.12.24' N	80 deg.13.77' W.
4	25 deg.14.13' N	80 deg.12.78' W.
5	25 deg.13.78' N	80 deg.12.00' W.

CHEECA ROCKS

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.54.42' N	80 deg.36.91' W.

CHEECA ROCKS—Continued
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
2	24 deg.54.25' N	80 deg.36.77' W.
3	24 deg.54.10' N	80 deg.37.00' W.
4	24 deg.54.22' N	80 deg.37.15' W.
5	24 deg.54.42' N	80 deg.36.91' W.

COFFINS PATCH
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.41.47' N	80 deg.57.68' W.
2	24 deg.41.12' N	80 deg.57.53' W.
3	24 deg.40.75' N	80 deg.58.33' W.
4	24 deg.41.06' N	80 deg.58.48' W.
5	24 deg.41.47' N	80 deg.57.68' W.

CONCH REEF
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.57.48' N	80 deg.27.47' W.
2	24 deg.57.34' N	80 deg.27.26' W.
3	24 deg.56.78' N	80 deg.27.52' W.
4	24 deg.56.96' N	80 deg.27.73' W.
5	24 deg.57.48' N	80 deg.27.47' W.

Catch and release fishing by trolling only is allowed in this SPA.

DAVIS REEF
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.55.61' N	80 deg.30.27' W.
2	24 deg.55.41' N	80 deg.30.05' W.
3	24 deg.55.11' N	80 deg.30.35' W.
4	24 deg.55.34' N	80 deg.30.52' W.
5	24 deg.55.61' N	80 deg.30.27' W.

DRY ROCKS
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.07.59' N	80 deg.17.91' W.
2	25 deg.07.41' N	80 deg.17.70' W.
3	25 deg.07.25' N	80 deg.17.82' W.
4	25 deg.07.41' N	80 deg.18.09' W.
5	25 deg.07.59' N	80 deg.17.91' W.

GRECIAN ROCKS
 [Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.06.91' N	80 deg.18.20' W.
2	25 deg.06.67' N	80 deg.18.06' W.
3	25 deg.06.39' N	80 deg.18.32' W.
4	25 deg.06.42' N	80 deg.18.48' W.
5	25 deg.06.81' N	80 deg.18.44' W.
6	25 deg.06.91' N	80 deg.18.20' W.

EASTERN DRY ROCKS

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.27.92' N	81 deg.50.55' W.
2	24 deg.27.73' N	81 deg.50.33' W.
3	24 deg.27.47' N	81 deg.50.80' W.
4	24 deg.27.72' N	81 deg.50.86' W.
5	24 deg.27.92' N	81 deg.50.55' W.

THE ELBOW

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.08.97' N	80 deg.15.63' W.
2	25 deg.08.95' N	80 deg.15.22' W.
3	25 deg.08.18' N	80 deg.15.64' W.
4	25 deg.08.50' N	80 deg.16.07' W.
5	25 deg.08.97' N	80 deg.15.63' W.

FRENCH REEF

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.02.20' N	80 deg.20.63' W.
2	25 deg.01.81' N	80 deg.21.02' W.
3	25 deg.02.36' N	80 deg.21.27' W.
4	25 deg.02.20' N	80 deg.20.63' W.

HEN AND CHICKENS

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.56.38' N	80 deg.32.86' W.
2	24 deg.56.21' N	80 deg.32.63' W.
3	24 deg.55.86' N	80 deg.32.95' W.
4	24 deg.56.04' N	80 deg.33.19' W.
5	24 deg.56.38' N	80 deg.32.86' W.

LOOE KEY

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.33.24' N	81 deg.24.03' W.
2	24 deg.32.70' N	81 deg.23.85' W.
3	24 deg.32.52' N	81 deg.24.70' W.
4	24 deg.33.12' N	81 deg.24.81' W.
5	24 deg.33.24' N	81 deg.24.03' W.

MOLASSES REEF

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	25 deg.01.00' N	80 deg.22.53' W.
2	25 deg.01.06' N	80 deg.21.84' W.
3	25 deg.00.29' N	80 deg.22.70' W.
4	25 deg.00.72' N	80 deg.22.83' W.
5	25 deg.01.00' N	80 deg.22.53' W.

NEWFOUND HARBOR KEY

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.37.10' N	81 deg.23.34' W.
2	24 deg.36.85' N	81 deg.23.28' W.
3	24 deg.36.74' N	81 deg.23.80' W.
4	24 deg.37.00' N	81 deg.23.86' W.
5	24 deg.37.10' N	81 deg.23.34' W.

ROCK KEY

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.27.48' N	81 deg.51.35' W.
2	24 deg.27.30' N	81 deg.51.15' W.
3	24 deg.27.21' N	81 deg.51.60' W.
4	24 deg.27.45' N	81 deg.51.65' W.
5	24 deg.27.48' N	81 deg.51.35' W.

SAND KEY

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.27.58' N	81 deg.52.29' W.
2	24 deg.27.01' N	81 deg.52.32' W.
3	24 deg.27.02' N	81 deg.52.95' W.
4	24 deg.27.61' N	81 deg.52.94' W.
5	24 deg.27.58' N	81 deg.52.29' W.

Catch and release fishing by trolling only is allowed in this SPA.

SOMBRERO KEY

[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.37.91' N	81 deg.06.78' W.
2	24 deg.37.50' N	81 deg.06.19' W.
3	24 deg.37.25' N	81 deg.06.89' W.
4	24 deg.37.91' N	81 deg.06.78' W.

Catch and release fishing by trolling only is allowed in this SPA.

Appendix VI to Subpart P of Part 922—Special-Use Areas Boundary

Coordinates and Use Designations

The boundary of each of the Special-Use is formed by connecting in succession the points at the following coordinates:

CONCH REEF

(Research Only)—[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.56.83' N	80 deg.27.26' W.
2	24 deg.57.10' N	80 deg.26.93' W.
3	24 deg.56.99' N	80 deg.27.42' W.
4	24 deg.57.34' N	80 deg.27.26' W.
5	24 deg.56.83' N	80 deg.27.26' W.

EASTERN SAMBO

(Research Only)—[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.29.84' N	81 deg.39.59' W.
2	24 deg.29.55' N	81 deg.39.35' W.
3	24 deg.29.37' N	81 deg.39.96' W.

EASTERN SAMBO—Continued

(Research Only)—[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
4	24 deg.29.77' N	81 deg.40.03' W.
5	24 deg.29.84' N	81 deg.39.59' W.

LOOE KEY

(Research Only)—[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.34.17' N	81 deg.23.01' W.
2	24 deg.33.98' N	81 deg.22.96' W.
3	24 deg.33.84' N	81 deg.23.60' W.
4	24 deg.34.23' N	81 deg.23.68' W.
5	24 deg.34.17' N	81 deg.23.01' W.

TENNESSEE REEF

(Research Only)—[Based on differential Global Positioning Systems data]

Point	Latitude	Longitude
1	24 deg.44.77' N	80 deg.47.12' W.
2	24 deg.44.57' N	80 deg.46.98' W.
3	24 deg.44.68' N	80 deg.46.59' W.
4	24 deg.44.95' N	80 deg.46.74' W.
5	24 deg.44.77' N	80 deg.47.12' W.

Appendix VII to Subpart P of Part 922—Areas To Be Avoided Boundary

Coordinates

IN THE VICINITY OF THE FLORIDA KEYS

[Reference Charts: United States 11466, 27th Edition—September 1, 1990 and United States 11450, 4th Edition—August 11, 1990]

Point	Latitude	Longitude
1	25 deg.45.00' N	80 deg.06.10' W.
2	25 deg.38.70' N	80 deg.02.70' W.
3	25 deg.22.00' N	80 deg.03.00' W.
4	25 deg.00.20' N	80 deg.13.40' W.
5	24 deg.37.90' N	80 deg.47.30' W.
6	24 deg.29.20' N	81 deg.17.30' W.
7	24 deg.22.30' N	81 deg.43.17' W.
8	24 deg.28.00' N	81 deg.43.17' W.
9	24 deg.28.70' N	81 deg.43.50' W.
10	24 deg.29.80' N	81 deg.43.17' W.
11	24 deg.33.10' N	81 deg.35.15' W.
12	24 deg.33.60' N	81 deg.26.00' W.
13	24 deg.38.20' N	81 deg.07.00' W.
14	24 deg.43.20' N	80 deg.53.20' W.
15	24 deg.46.10' N	80 deg.46.15' W.
16	24 deg.51.10' N	80 deg.37.10' W.
17	24 deg.57.50' N	80 deg.27.50' W.
18	25 deg.09.90' N	80 deg.16.20' W.
19	25 deg.24.00' N	80 deg.09.10' W.
20	25 deg.31.50' N	80 deg.07.00' W.
21	25 deg.39.70' N	80 deg.06.85' W.
22	25 deg.45.00' N	80 deg.06.10' W.

IN THE VICINITY OF KEY WEST HARBOR

[Reference Chart: United States 11434, 21st Edition—August 11, 1990]

Point	Latitude	Longitude
23	24 deg.27.95' N	81 deg.48.65' W.
24	24 deg.23.00' N	81 deg.53.50' W.
25	24 deg.26.60' N	81 deg.58.50' W.
26	24 deg.27.75' N	81 deg.55.70' W.

IN THE VICINITY OF KEY WEST HARBOR—Continued
 [Reference Chart: United States 11434, 21st Edition—August 11, 1990]

Point	Latitude	Longitude
27	24 deg.29.35' N	81 deg.53.40' W.
28	24 deg.29.35' N	81 deg.50.00' W.
29	24 deg.27.95' N	81 deg.48.65' W.

AREA SURROUNDING THE MARQUESAS KEYS
 [Reference Chart: United States 11434, 21st Edition—August 11, 1990]

Point	Latitude	Longitude
30	24 deg.26.60' N	81 deg.59.55' W.
31	24 deg.23.00' N	82 deg.03.50' W.
32	24 deg.23.60' N	82 deg.27.80' W.
33	24 deg.34.50' N	82 deg.37.50' W.
34	24 deg.43.00' N	82 deg.26.50' W.
35	24 deg.38.31' N	81 deg.54.06' W.
36	24 deg.37.91' N	81 deg.53.40' W.
37	24 deg.36.15' N	81 deg.51.78' W.
38	24 deg.34.40' N	81 deg.50.60' W.
39	24 deg.33.44' N	81 deg.49.73' W.
40	24 deg.31.20' N	81 deg.52.10' W.
41	24 deg.28.70' N	81 deg.56.80' W.
42	24 deg.26.60' N	81 deg.59.55' W.

AREA SURROUNDING THE DRY TORTUGAS ISLANDS
 [Reference Chart: United States 11434, 21st Edition—August 11, 1990]

Point	Latitude	Longitude
43	24 deg.32.00' N	82 deg.53.50' W.
44	24 deg.32.00' N	83 deg.00.05' W.
45	24 deg.39.70' N	83 deg.00.05' W.
46	24 deg.45.60' N	82 deg.54.40' W.
47	24 deg.45.60' N	82 deg.47.02' W.
48	24 deg.42.80' N	82 deg.43.90' W.
49	24 deg.39.50' N	82 deg.43.90' W.
50	24 deg.35.60' N	82 deg.46.40' W.
51	24 deg.32.00' N	82 deg.53.50' W.