

Tortugas Ecological Reserve



U.S. Department of Commerce

National Oceanic and
Atmospheric Administration

National Ocean Service

Office of National Marine Sanctuaries

Final Supplemental Environmental Impact Statement/ Final Supplemental Management Plan



EXECUTIVE SUMMARY

The National Ocean Service of the National Oceanic and Atmospheric Administration, working in cooperation with the State of Florida, the Gulf of Mexico Fishery Management Council, and the National Marine Fisheries Service, proposes to establish a 151 square nautical mile “no-take” ecological reserve to protect the critical coral reef ecosystem of the Tortugas, a remote area in the western part of, and to the west of the Florida Keys National Marine Sanctuary (FKNMS or Sanctuary). The reserve would consist of two sections, Tortugas North and Tortugas South, and would require an expansion of the Sanctuary boundary to protect important coral reef resources in the areas of Sherwood Forest and Riley’s Hump.

An ecological reserve in the Tortugas will preserve the richness of species and health of fish stocks in the Tortugas and throughout the Florida Keys, helping to ensure the stability of commercial and recreational fisheries. The reserve will protect important spawning areas for snapper and grouper, as well as valuable deep water habitat for other commercial species. Restrictions on vessel discharge and anchoring will protect water quality and habitat complexity. The reserve’s geographical isolation will help scientists distinguish between natural and human-caused changes to the coral reef environment.

Protecting Ocean Wilderness

Creating an ecological reserve in the Tortugas will protect some of the most productive and unique marine resources of the Sanctuary. Because of its remote location 70 miles west of Key West and more than 140 miles from mainland Florida, the Tortugas region has the best water quality in or near the Sanctuary. Healthy baitfish populations support thriving seabird communities, including sooty and noddy terns, masked boobies and the only roosting population of magnificent frigate birds in the continental U.S. Due to its location at the juncture of several major ocean currents, the Tortugas has a high potential for exporting the larvae of fish, lobster, and other marine organisms downstream to the Keys and the east coast of Florida. The U.S. Fish and Wildlife Service has stressed the importance of this area to the well-being of the Key West and Great White Heron National Wildlife Refuges.

The Tortugas reefs also boast the healthiest coral in the region. In the area known as “Sherwood Forest,” coral cover often exceeds 30%, compared to an average of 10% elsewhere in the Florida Keys. The well-developed reef forms a false bottom, interspersed with gorgonian-forests, sponges, and black corals. Scientists examining one bizarre, mushroom-shaped coral, characteristic of Sherwood Forest, found it to be approximately 400 years old. Other areas contain high relief pinnacles that protrude like mountains upward from the seafloor, providing ideal habitat for a diverse array of fish.

Organisms rarely seen elsewhere in the Keys, such as crinoids (feather stars) and black corals, occur on Tortugas' reefs. Some species such as the red-tailed triggerfish only occur in the Tortugas.

Threats to the Tortugas' resources exist and are on the increase. Commercial and recreational fishing pressure has reduced the average size of black grouper in the Tortugas from 22.5 lbs. to 9 lbs. The FKNMS regulations prohibit freighters from anchoring on the lush reefs of Tortugas Bank, but other parts of the region are still threatened by damage from anchors weighing up to several tons. Visitation to the Dry Tortugas National Park indicates a dramatic upward trend, from 18,000 visitors in 1984 to 72,000 in 1998. Continued pressures on this remote area are likely to intensify with improved navigational technology and faster boats.

No-Take Areas in the Florida Keys National Marine Sanctuary

The 2,800 square nautical mile FKNMS was established in 1990 by the Florida Keys National Marine Sanctuary and Protection Act (FKNMSPA) to ensure the sustainability of the marine environment by balancing resource protection with compatible resource use. In that Act, Congress directed the Secretary of Commerce to consider temporal and geographic zoning to ensure the protection of Sanctuary resources. Like zoning on land, marine zoning designates different areas for different uses. "No-take" areas, which are closed to the taking of marine life, are one type of marine zone.

While no-take areas are a relatively new concept in the United States, resource managers worldwide have used them successfully to protect species diversity, replenish fish populations, and provide opportunities for education and research. Reserves provide protection to species not covered by traditional commercial and recreational fishing regulations. They protect habitat and food that fish and other creatures need to survive.

In 1997, the Sanctuary implemented a groundbreaking marine zoning plan featuring a network of 23 no-take areas classified as ecological reserves, sanctuary preservation areas and special use areas. These areas protect much of the critical shallow reef habitat. Figure 1 of the FSEIS shows the 23 existing no-take areas along with the existing 27 Wildlife Management Areas. While an ecological reserve was proposed to be established at that time for the Tortugas region, it was not established because of public comments indicating that the proposed boundaries did not include the most significant coral reef resources and would cause serious economic harm to commercial fishermen. Instead, the Sanctuary's final management plan called for a collaborative initiative bringing together all stakeholders to determine the area of the Tortugas that needed zoning protection and the degree of protection needed.

The Collaborative Process

To develop a Preferred Alternative, a 25-member Working Group was established composed of commercial and recreational fishers, divers, conservationists, scientists, concerned citizens, and government agencies. The Working Group used the best available information to develop a range of alternatives and recommend a Preferred Alternative to the State of Florida and to the Sanctuary Advisory Council (SAC). The Working Group used an “ecosystem approach,” recommending alternatives based on natural resources rather than jurisdictional boundaries.

The Working Group gathered ecological and socio-economic information through two public meetings, and a site characterization document, and the firsthand experiences of commercial and recreational fishermen and others. A series of public scoping meetings was held throughout South Florida in the fall of 1998 to gather input. In May 1999, the Working Group reached a consensus on proposed boundaries and regulations for the Reserve. In June 1999, the Sanctuary Advisory Council unanimously approved the Working Group’s proposal.

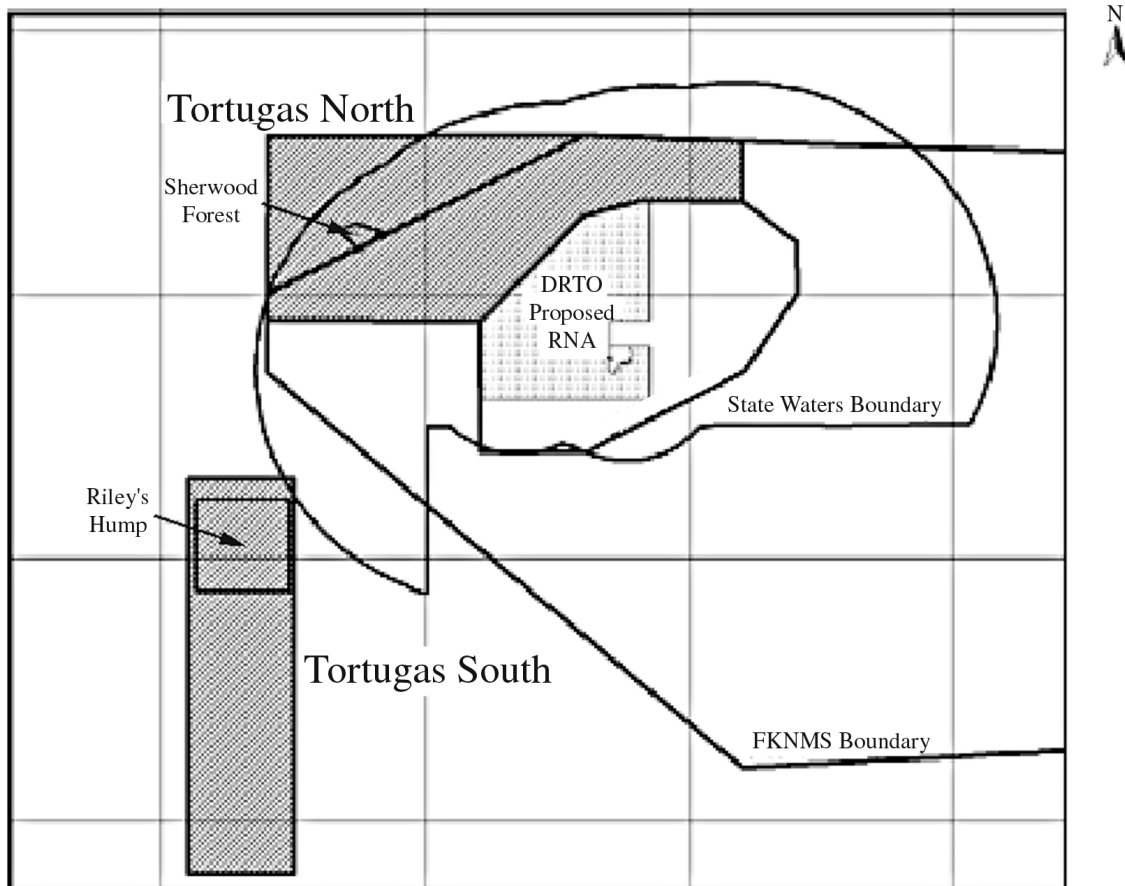
The Tortugas Ecological Reserve Proposal Contained in the DSEIS issued in May 2000

The Preferred Alternative for the establishment of an ecological reserve in the Tortugas region, contained in the Draft Supplemental Environmental Impact Statement (DSEIS), consists of a boundary component (Boundary Alternative III) and a regulatory component (Regulatory Alternative C). The boundary component would expand the boundary of the Sanctuary by approximately 96 square nautical miles (nm) to include two significant coral reef areas known as Sherwood Forest and Riley’s Hump and establish an ecological reserve (the Tortugas Ecological Reserve) of approximately 151 square nm in two separate areas. The first area would include and surround Sherwood Forest, and would encompass approximately 91 square nm. This area would be called Tortugas North. The second area would include and surround Riley’s Hump and would encompass approximately 60 square nm. This area would be called Tortugas South.

The Preferred Alternative would expand the boundary of the Sanctuary in its northwestern corner by approximately 36 square nm to include Sherwood Forest and would expand the boundary in the south by adding a noncontiguous area of approximately 60 square nm to include Riley’s Hump. The Tortugas North section would incorporate approximately 55 square nm of the existing Sanctuary.

The regulatory component would apply existing Sanctuary-wide and existing ecological reserve regulations to Tortugas North and South; would prohibit anchoring in

Tortugas North and South; would control access to Tortugas North and South for other than continuous transit or for law enforcement purposes via a simple, no cost permit; would require call-in for entering and leaving Tortugas North and South; and would prohibit vessels longer than 100 ft LOA from using a mooring buoy.



The Tortugas Ecological Reserve Proposal Contained in the FSEIS

The Preferred Alternative for the establishment of an ecological reserve in the Tortugas region, contained in the Final Supplemental Environmental Impact Statement (FSEIS), is the same as that for the Preferred Alternative in the DSEIS except that the regulatory component is Alternative D instead of Alternative C. The difference between Regulatory Alternatives C and D is that Regulatory Alternative D would prohibit access in Tortugas South except for continuous transit, law enforcement, or for scientific research or educational purposes pursuant to a sanctuary permit. Under Alternative C, which is less restrictive, access to Tortugas South, except for continuous transit and law enforcement purposes would require a simple, no-cost permit and would require call-in for entering and leaving.

The Gulf of Mexico Fishery Management Council (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 square nautical mile marine reserve in the same location as Tortugas South and in the 13 square nautical mile 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 NOS prohibit anchoring by all vessels in the reserve and that NOS 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, the Preferred Alternative in the FSEIS has been revised from the Preferred Alternative in the DSEIS to prohibit all diving in Tortugas South except for research or educational purposes pursuant to a Sanctuary permit. Non-consumptive diving would 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 would provide exceptional resource appreciation and public education benefits. Also, prohibiting diving in Tortugas South would 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 an ecological reserve. Positive effects to surrounding areas through long-term fisheries replenishment are also likely.

The FSEIS Preferred Alternative would adequately protect the nationally significant coral reef resources of the Tortugas region and fulfill the objectives of the FKNMSPA and the National Marine Sanctuaries Act (NMSA). The Preferred Alternative is of sufficient size and imposes adequate protection measures to achieve the goals and objectives of the FKNMSPA and the NMSA while not unduly impacting user groups.

Commenting on the Proposal

NOAA encouraged the public to comment on the alternatives contained in the DSEIS. Comments were accepted until July 31, 2000. NOAA held a series of public hearings throughout South Florida to accept comments on the DSEIS in conjunction with the National Park Service/Dry Tortugas National Park, Florida Fish and Wildlife Conservation Commission, and the Gulf of Mexico Fishery Management Council.

More than 4,000 comments were received on the DSEIS/SMP and the proposed implementing regulations for the proposed Tortugas Ecological Reserve. Almost 3000 of the comments were form letters expressing general support for the creation of the Tortugas Ecological Reserve. Two-hundred and forty-five persons commented by signing a petition. The responses to comments received on the DSEIS are contained in Appendix H of the FSEIS. A copy of the FSEIS is available by calling (305) 743-2437 or by visiting: <http://www.fknms.nos.noaa.gov/tortugas/>.