

**NAWPA COMMITTEE  
MARINE WILDERNESS & PROTECTED AREAS WORKING GROUP**

**CASE STUDY OF MPA ESTABLISHMENT – DRY TORTUGAS NATIONAL PARK AND  
FLORIDA KEYS NATIONAL MARINE SANCTUARY, FLORIDA, U.S.A.**



*Park diver by Brett Seymour*



*Fort Jefferson by NPS*



*Coral reef by NOAA*

**KEY MESSAGE**

*Located 70 miles (113 km) west of Key West, Florida, the Dry Tortugas support regional marine ecosystems – fishes and invertebrates produced there are carried by currents throughout the Florida Keys and south Florida. Dry Tortugas National Park (DTNP), with its shallow reefs and sea grass beds, provides nursery areas for fishes spawned in the region. Surrounding the national park, the Florida Keys National Marine Sanctuary, with its deep reefs, provides habitat and spawning grounds. Both parts are critical for the protected areas to be effective. Regional declines in coral reefs and fish populations lead to increasing protection and cooperative management by federal and state agencies. A report after 5 years of protection found that exploited fish populations were enhanced inside and outside the boundaries of the no-take areas.*

**BENEFITS**

- Tourism is the number one industry in the Florida Keys where it's estimated that 3 million annual visitors spend over \$1.2 billion. Recreational and commercial fishing annually contribute an estimated \$500 million and \$57 million respectively to the local economy.
- Annual visitation to DTNP increased from 17,000 in 1994 to 84,000 in 2000.
- In 2010, DTNP visitation was 54,000 and total spending by visitors was \$4.7 million. The estimated number of full- and part-time jobs resulting from visitor spending was 52.

**CRITICAL STEPS**

- It was evident in the 1980s-1990s that the Dry Tortugas was experiencing habitat degradation due to natural and anthropogenic factors, and that the region needed better protection.
- DTNP, the Florida Keys National Marine Sanctuary and the state of Florida implemented public planning processes in the early 2000s to identify management solutions.
- Implementation of a state-federal science plan and cooperative monitoring of the no-take reserves in the mid-2000s documented their effectiveness at protecting marine resources.

**LESSONS LEARNED**

- Transparent, stakeholder-driven planning processes were used to develop management solutions.
- A collaborative science plan to study conservation efficacy of the no-take marine reserves guided federal and state agency implementation (prioritization of activities and resources).
- Dedicated program managers provided leadership ensuring collaboration and communication between federal and state agencies while developing and implementing the science plan.

**FACT SHEET**  
**DRY TORTUGAS NATIONAL PARK**  
**FLORIDA, U.S.A.**

**Name:** Dry Tortugas National Park (DTNP) and Florida Keys National Marine Sanctuary (FKNMS).

**Location:** Waters adjacent to the Dry Tortugas Islands 70 mi (113 km) west of Key West, Florida.

**Size:** FKNMS is 3,784 mi<sup>2</sup> (9,800 km<sup>2</sup>) and the no-take Tortugas Ecological Reserves (TERs) in FKNMS and Florida waters are 200 mi<sup>2</sup> (518 km<sup>2</sup>). DTNP is 128 mi<sup>2</sup> (331 km<sup>2</sup>) and the no-take Research Natural Area (RNA) is 61 mi<sup>2</sup> (158 km<sup>2</sup>). FKNMS surrounds the boundary of DTNP.

**Year Established:** FKNMS was established in 1990. The Tortugas Ecological Reserves were established by FKNMS and the state of Florida in 2001. DTNP was established in 1992 and the Research Natural Area was established in 2007.

**Purpose:**

DTNP: To protect and interpret a pristine subtropical marine ecosystem and populations of fish and wildlife, cultural resources and provide opportunities for scientific research and education.

FKNMS: To protect the marine resources of the Florida Keys, interpret the marine environment to the public and facilitate human uses consistent with resource protection.

**History:**

- In 1935, President Roosevelt designated the Dry Tortugas as Fort Jefferson National Monument, the world's first underwater national park. Dry Tortugas National Park was established in 1992
- Since the 1970s, reef-forming corals like *Acropora* spp. declined by 90% due to strong cold fronts, disease, bleaching and hurricanes. Two *Acropora* species were listed as threatened under the Endangered Species Act in 2006.
- By 2000, 65% of groupers, snappers, grunts and wrasses were overfished. The declines were attributed to habitat degradation and increases in recreational and commercial fishing.
- DTNP proposed a no-take RNA in a public planning process that began in 1998 and ended with a record of decision in 2001. DTNP implemented regulations to create the RNA in 2007.
- In 1998, FKNMS created a working group of fishermen, divers, scientists, conservationists, concerned citizens and government agencies to develop recommendations for protective zoning.
- The state of Florida established the Tortugas Ecological Reserves in state waters in 2001. FKNMS established the Tortugas Ecological Reserves in federal waters the same year.
- Planning for the RNA and TER was undertaken concurrently and collaboratively by NPS and FKNMS; 97% of the comments received during the public process supported the no-take reserves.
- In 2006, NPS and Florida signed an agreement to develop a cooperative monitoring and research plan for DTNP to evaluate the effectiveness of the RNA.
- In 2008, the National Oceanic and Atmospheric Administration (manages FKNMS), the state of Florida, academic scientists and the National Park Service (manages DTNP) agreed on common protocols to cooperatively monitor coral reef fish populations in South Florida.
- In 2012, NPS and Florida published a monitoring report that found "...increases in the abundance of exploited species within the RNA" and concluded "...that the RNA has played a substantive role in enhancing some exploited reef fish species populations...[The] benefits have not only occurred within its borders, but extend beyond its borders via larval transport."