

# Florida Keys National Marine Sanctuary

## Marine Zone Effectiveness

### Management Issue

Marine zones are an integral resource management tool for the Florida Keys National Marine Sanctuary (FKNMS or Sanctuary). All zone types implemented to manage a certain aspect of use or resource protection need to be (re)evaluated to determine if the zone type and associated regulations are producing the expected results for the resource and the user groups affected by the associated protection strategy.

### Description

Consideration of geographic and temporal zoning as a tool to ensure the protection and conservation of resources within the FKNMS is mandated under the Florida Keys National Marine Sanctuary and Protection Act and is an integral part to performance based resource management. While marine zoning has been used successfully world-wide to protect a variety of sensitive marine resources from overuse, and has been effectively used to separate conflicting visitor uses, an effective research and monitoring program is needed to ensure that zone type, number, and size meet the needs of ecosystem management. Through the continued evaluation and modification of research and monitoring protocols, management practices, including zoning, can be modified to meet the changing needs of both the marine ecosystem and resource users.



Illustration of jurisdictional boundaries in south Florida, including the Florida Keys National Marine Sanctuary (blue line) and its zones. Map credit: FKNMS

### Questions and Information Needs

- 1) How can the FKNMS zoning strategy be modified to better meet the long-term needs of the resource and accommodate the sustainable activities of various user groups?
- 2) Can the FKNMS more effectively utilize temporal zoning to complement existing zones?
- 3) What would be the socioeconomic impacts of changing the sizes, numbers, and types of zones used in Sanctuary management?
- 4) Based on ecological function and integrity, is there an optimal proportion of the Sanctuary that needs to be zoned as an Ecological Reserve?
- 5) Is there enough authoritative presence to enforce zone regulations?
- 6) How would FKNMS be affected by similar zoning strategies in adjacent jurisdictions (e.g., Dry Tortugas and Biscayne National Parks)?

### Scientific Approach and Actions

- Utilize a zone monitoring program to evaluate the efficacy of the FKNMS zones, including socioeconomic analysis of zoning strategy and its implementation.

Updated: 12/02/14

For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>

## Potential Key Partners and Information Sources

NOAA Fisheries, NOAA's Atlantic Oceanographic and Meteorological Laboratory, the Florida Fish and Wildlife Conservation Commission, the University of Miami, NOVA Southeastern University, Florida International University, the University of Massachusetts Amherst, the Reef Environmental Education Foundation, the Coral Restoration Foundation, Mote Marine Laboratory, and volunteers.

## Management Support Products

- GIS maps of zoning alternatives
- Socioeconomic surveys
- Zone Monitoring Program summaries (report cards)

## Planned Use of Products and Actions

- Results of the Zone Monitoring Program will be compiled into a summary report for wide distribution
- Results of the Zone Monitoring Program will be distilled by the Science and Education & Outreach teams to reach a wide audience
- New zoning strategies can be discussed and developed by the public and FKNMS managers

## Program References

### FKNMS Management Plan

- Research and Monitoring Action Plan, Strategy W.33, W.36
- Education and Outreach Action Plan, Strategy E.1, E.3, E.10

### Other Documents

- FKNMS Comprehensive Science Plan (2002)
- FKNMS Condition Report (2011)



*Scientists look for coral diseases inside the Marine Zones of FKNMS.  
Photo credit: Mote Marine Lab*

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