

Florida Keys National Marine Sanctuary Revised Management Plan



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This document is the revised management plan for the Florida Keys National Marine Sanctuary. It replaces the management plan that was implemented in 1996 and will serve as the primary management document for the Sanctuary during the next five years.

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Note to Reader

In an effort to make this document more user-friendly, we have included references to the Florida Keys National Marine Sanctuary Web site rather than including the entire text of many bulky attachments or appendices that are traditionally included in management plans. Readers who do not have access to the Internet may call the Sanctuary office at (305) 809-4700 to request copies of any documents that are on the Sanctuary's Web site. For readers with Internet access, the Sanctuary's Web site can be found at floridakeys.noaa.gov.

ABOUT THIS DOCUMENT

This document is a report on the results of NOAA's five-year review of the strategies and activities detailed in the 1996 *Final Management Plan and Environmental Impact Statement* for the Florida Keys National Marine Sanctuary. It serves two primary purposes: 1) to update readers on the outcomes of successfully implemented strategies - in short, accomplishments that were merely plans on paper in 1996; and, 2) to disseminate useful information about the Sanctuary and its management strategies, activities and products. The hope is that this information, which charts the next 5 years of Sanctuary management, will enhance the communication and cooperation so vital to protecting important national resources.

Sanctuary Characteristics

The Florida Keys National Marine Sanctuary extends approximately 220 nautical miles southwest from the southern tip of the Florida peninsula. The Sanctuary's marine ecosystem supports over 6,000 species of plants, fishes, and invertebrates, including the nation's only living coral reef that lies adjacent to the continent. The area includes one of the largest seagrass communities in this hemisphere. Attracted by this tropical diversity, tourists spend more than thirteen million visitor days in the Florida Keys each year. In addition, the region's natural and man-made resources provide recreation and livelihoods for approximately 80,000 residents.

The Sanctuary is 2,900 square nautical miles of coastal waters, including the 2001 addition of the Tortugas Ecological Reserve. The Sanctuary overlaps four national wildlife refuges, six state parks, three state aquatic preserves and has incorporated two of the earliest national marine sanctuaries to be designated, Key Largo and Looe Key National Marine Sanctuaries. Three national parks have separate jurisdictions, and share a boundary with the Sanctuary. The region also has some of the most significant maritime heritage and historical resources of any coastal community in the nation.

The Sanctuary faces specific threats, including direct human impacts such as vessel groundings, pollution, and overfishing. Threats to the Sanctuary also include indirect human impacts, which are harder to identify but are reflected in coral declines and increases in macroalgae and turbidity. More information about the Sanctuary can be found in this document and at the Sanctuary's Web site.

Management Plan Organization

Within this document, the tools that the Sanctuary uses to achieve its goals are presented in five management divisions: 1) Science; 2) Education, Outreach & Stewardship; 3) Enforcement & Resource Protection; 4) Resource Threat Reduction; and 5) Administration, Community Relations, & Policy Coordination. Each management division contains two or more *action plans*, which are implemented through supporting *strategies* and *activities*. The strategies described in the 1996 *Management Plan* generally retain their designations in this document. As in the 1996 plan, two or more action plans may share a strategy where their goals and aims converge. The 1996 plan can be accessed on the Sanctuary's Web site floridakeys.noaa.gov

Accomplishments and Highlights

The Sanctuary's programs and projects have made significant progress since the original management plan was implemented 1996. An overview of these accomplishments is provided in the Introduction. In addition, each action plan contains bulleted lists of accomplishments since the 1996 management plan was adopted.

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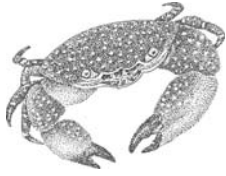
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Acronyms

ACHP	Advisory Council on Historic Preservation
AGRRA	Atlantic and Gulf Rapid Reef Assessment Program
ASA	Abandoned Shipwreck Act
ATBA	Areas to Be Avoided
AWT	Advanced Wastewater Treatment
CAD	Computer Automated Dispatch
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERP	Comprehensive Everglades Restoration Plan
CFR	Code of Federal Regulations
CRCP	Coral Reef Conservation Program
DARP	Damage Assessment and Restoration Program
DEP	Florida Department of Environmental Protection
DTNP	Dry Tortugas National Park
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
F.S.	Florida Statutes
FAC	Florida Administrative Code
FDACS	Florida Department of Agriculture and Consumer Services
FDCA	Florida Department of Community Affairs
FDHR	Florida Division of Historical Resources
FDOT	Florida Department of Transportation
FKNMS	Florida Keys National Marine Sanctuary
FKNMSPA	Florida Keys National Marine Sanctuary Protection Act
FPS	Florida Park Service
FR	Federal Register
FWC	Florida Fish and Wildlife Conservation Commission
FWRI	Fish and Wildlife Research Institute
FY	Federal Fiscal Year
GIS	Geographic Information System
GMD	Growth Management Division (Monroe County)
GMFMC	Gulf of Mexico Fishery Management Council
GPS	Global Positioning System
HAZMAT	Hazardous Materials
ICS	Incident Command Structure
ICW	Intra-coastal Waterway
IMO	International Maritime Organization
MBTA	Migratory Bird Treaty Act
MEERA	Marine Ecosystem Event Response and Assessment
MHR	Maritime Heritage Resources
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding

MRD	Marine Resources Division (Monroe County)
NCCOS	National Centers for Coastal Ocean Science
NEPA	National Environmental Policy Act
NGO	Non-governmental Organization
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NMS	National Marine Sanctuary
NMSA	National Marine Sanctuary Act
NMSF	National Marine Sanctuary Foundation
NMSP	National Marine Sanctuary Program
NOAA	National Oceanic and Atmospheric Administration
NOAA/OLE	NOAA Office of Law Enforcement
NOS	National Ocean Service
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRDA	Natural Resource Damage Assessment Claims
NURC	National Undersea Research Center
OFW	Outstanding Florida Waters
OSDS	On-Site Disposal System
OSTDS	On-Site Sewage Treatment and Disposal System
PREP	National Prepared for Response Exercise Program
PSSA	Particularly Sensitive Sea Area
RECON	Reef Ecosystem Condition Program
REEF	Reef Environmental Education Foundation
RNA	Research Natural Area
RSMAS	University of Miami/Rosenstiel School of Marine and Atmospheric Science
SAFMC	South Atlantic Fishery Management Council
SAP	Science Advisory Panel
SAV	Submerged Aquatic Vegetation
SCR	Submerged Cultural Resources
SEFSC	Southeast Fisheries Science Center
SFWMD	South Florida Water Management District
SHIELDS	Sanctuary Hazardous Incident Emergency Logistics Database System
SPA	Sanctuary Preservation Area
SWIM	Surface Water Improvement and Management Act
SWM	Stormwater Management
TAC	Technical Advisory Committee
TNC	The Nature Conservancy
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDOC	U.S. Department of Commerce
USDOI	U.S. Department of Interior
USDOS	U.S. Department of State
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WAMS	Waterway Assessment and Marking System

WMA Wildlife Management Area
WQPP Water Quality Protection Program
WQSC Water Quality Steering Committee



3.3 ENFORCEMENT & RESOURCE PROTECTION

This management division bundles all of the essential legal tools that are available to Sanctuary Managers to protect the natural and historical resources of the Florida Keys National Marine Sanctuary. These action plans include: the Regulatory Action Plan; the Enforcement Action Plan; Damage Assessment and Restoration Action Plan; and the Maritime Heritage Resources Action Plan. Each of these action plans serves a direct role in protecting and conserving Sanctuary resources, whether they are natural or historic resources.

Effective management requires a comprehensive set of regulations and an enforcement program to implement those regulations. The most successful marine protected areas are committed to enforcement of their regulations. The Sanctuary regulations and the interpretive approach to enforcing those regulations are described in this section.

Vessel groundings and damage to submerged Sanctuary resources are a major management issue in the Sanctuary. An average of over 500 vessel groundings occur every year in the Sanctuary and this destructive activity has resulted in the need for a separate action plan to describe the Sanctuary's approach to damage assessments and restoration.

Historical resources are also protected within the Sanctuary and the action plan that describes the Sanctuary's approach to protecting these resources is described in this management division. A rich and colorful history of exploration and discovery of submerged historical resources in the Florida Keys has necessitated the development of an action plan that integrates the State of Florida and NOAA's trustee responsibilities for these resources.

3.3.1 Regulatory Action Plan

Introduction

Overview

Regulations are an integral component of the FKNMS management process. They make up an important part of the management plan by regulating certain activities on a Sanctuary-wide basis and by regulating other activities depending on how that area of the Sanctuary has been categorized or zoned. Permitting, certification, and notification and review processes allow certain activities that are otherwise prohibited to take place under carefully controlled circumstances.

The strategies in this action plan implement and refine a comprehensive, coordinated regulatory program that complies with the requirements of the Florida Keys National Marine Sanctuary and Protection Act and the National Marine Sanctuaries Act. The first strategy describes the Sanctuary's permitting program that is routinely implemented to allow activities compatible with resource protection to be conducted with appropriate monitoring and conditions. The second strategy outlines 16 management issues that the Sanctuary Advisory Council, its working groups, and the general public have identified as requiring review and, where appropriate, revision of the existing regulations.

Background

Drawing on 20 years of management experience in the Key Largo and Looe Key National Marine Sanctuaries, NOAA developed regulations to protect natural and historic resources as part of the *Final 1996 Florida Keys National Marine Sanctuary Management Plan* (Appendix C). These regulations meet national legislative mandates as well as carefully considering resource protection and multiple uses compatible with resource protection. These regulations were developed through a process that included an impact assessment of expected environmental and socioeconomic consequences and extensive public comment. As outlined in the Management Agreement between the State of Florida and NOAA, any changes to the regulations will need to be reviewed and approved by the Governor and Cabinet, acting as the Board of Trustees of the Internal Improvement Trust Fund.

In addition to establishing new regulations, NOAA utilized existing regulations under federal, state, and local laws to the extent possible. These authorities include existing federal laws, such as the Coastal Zone Management Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Clean Water Act, the Rivers and Harbors Act, Coastal Barrier Resources Act. They also include state laws, such as: the Beach and Shore Preservation Act, the Florida Environmental Land and Water Management Act, the Florida Air and Water Pollution Control Act, the Florida Aquatic Preserves Act of 1975, and the Florida Clean Vessel Act. To achieve this coordination, Sanctuary regulations supplement, rather than replace, existing authorities that already regulated some portion of the actions called for in specific management strategies. In a few instances, agencies have specifically requested that Sanctuary regulations incorporate existing laws and regulations. This is accomplished using tools which can be administered under the NMSA and the FKNMSPA. At the local level, the regulations in this action plan complement the goals, objectives, and policies established by Monroe County in its *Year 2010 Comprehensive Plan*.

In the end, new regulations were adopted to address 19 management strategies from the 1996 management plan. Another 34 management strategies that had a regulatory component were either

addressed by regulations that had already been established by another agency or required scientific analysis before regulations could be established.

Goals and Objectives

The goal of this action plan is to refine and continue implementation of a comprehensive and coordinated regulatory program for the Sanctuary to ensure the protection and use of Sanctuary resources in a manner that:

- Complements existing regulatory authorities;
- Facilitates all public and private uses of the Sanctuary that are consistent with the primary objective of resource protection;
- Utilizes a system of temporal and geographic zoning to ensure effective site-specific resource protection and use management;
- Ensures coordination and cooperation between Sanctuary managers and other federal, state, and local authorities with jurisdiction within or adjacent to the Sanctuary;
- Achieves simplicity in the regulatory process and promotes ease of compliance with Sanctuary regulations;
- Promotes mechanisms for making informed regulatory decisions based on the best available research and analysis, taking into account information about the environmental, economic, and social impacts of Sanctuary regulations; and
- Complements coordination among appropriate federal, state, and local authorities to enforce existing laws that fulfill Sanctuary goals.

The objectives of this action plan are to:

- Continue implementing an efficient and effective permitting program;
- Further refine the regulations that guide Sanctuary management based on experience since 1997.

Accomplishments

Since implementation of the 1996 management plan, there has been a number of enforcement, permitting and regulatory accomplishments, such as:

- Since July 1, 1997, the following regulations have been implemented: 1) 1998 regulations establishing a large no-anchor zone in the Tortugas for ships 50 meters or more in length, and 2) Regulations expanding the Sanctuary boundary and establishing a permanent 151-square-nautical mile no-take zone called the Tortugas Ecological Reserve,.
- On recommendation of the Water Quality Steering Committee and EPA, the State of Florida and NOAA have established a no-discharge zone for state waters in the Sanctuary. The Water Quality Steering Committee has requested no-discharge regulations for the entire Sanctuary. The process to establish a no-discharge zone for the entire Sanctuary has been initiated with a goal to complete the process by 2009.
- Since 1997, over 400 permits have been issued that represent more than 300 discrete research or educational projects. A permitting database, continually updated, tracks the status of permits and summarizes research projects.
- Since 1997, an average of 210 no-cost bait fish permits have been issued yearly by the Sanctuary to facilitate the charterboat fishing industry's need for live bait. Permit holders report catch and location data annually.

- A new process to issue “hair-hooking” permits was initiated in 2004. Almost 60 permits have been issued.
- A no-cost, paperless permit system was instituted in 2001 to track entrance to and egress from Tortugas North Ecological Reserve. The system ensures that mooring buoys are available and regulations are understood by vessels visiting the reserve.

Strategies

There are two strategies associated with this action plan:

- R.1 Maintaining the Existing Permit Program
- R.2 Regulatory Review and Development

Each of these strategies is detailed below. Table 3.6 provides estimated costs for implementation of each strategy over the next five years.

Table 3.6 Estimated costs of the Regulatory Action Plan

Regulatory Action Plan Strategies	Estimated Annual Cost (in thousands)					Total Estimated 5 Year Cost
	YR 1	YR 2	YR 3	YR 4	YR 5	
R.1: Maintaining the Existing Permit Program	100	100	100	100	100	500
R.2: Regulatory Review	100	100	100	100	100	500
Total Estimated Annual Cost	<i>200</i>	<i>200</i>	<i>200</i>	<i>200</i>	<i>200</i>	1,000

Strategy Summary

The issuance of permits assures protection and conservation of Sanctuary resources from harmful activities and practices. A well-developed and implemented permitting program allows scientists and others to conduct their work while following the conditions defined in an established permitting process. Scientific findings from permitted activities can enhance managers' understanding about Sanctuary issues and resources and assist in the implementation of management programs.

Since implementation of the 1996 Management Plan, the FKNMS has used a comprehensive permitting program to issue and track research, education, archeological and other projects that occur in Sanctuary waters that may have minor or uncertain resource impacts. Permits may be issued under various categories (see 15 CFR 922.166) as General Permits, Historical Resources Permits (now titled Maritime Heritage Resource Permits), and Special Use Permits. Specific regulatory review criteria for each permit category must be satisfactorily met for a permit to be issued. Over 200 permits are issued yearly to private and public institutions, non-governmental organizations, and individuals to perform otherwise prohibited activities. A straightforward application process and inclusive database exist to facilitate permit issuance and track permit requirements and reports.

Activities (6)

(1) Continue Support for General Permits. A Sanctuary general permit may be issued if the activity proposed will: (1) further research or monitoring related to Sanctuary resources, (2) further educational value of the Sanctuary, (3) further natural, cultural or historical resource value, (4) further salvage and recovery operations from an air or marine casualty, (5) assist in managing the Sanctuary, and (6) otherwise further Sanctuary purposes. The majority of general permits issued by the FKNMS are granted to further research or monitoring related to Sanctuary resources, and are described in the Science Management and Administration Action Plan. Other types of general permits are issued less frequently, but are available if applicable to the project proposed and if review criteria are met.

Status: On-going.

Implementation: The NOAA aspect of FKNMS has the lead agency for this activity since this is a federal function, which has been fully implemented and continues as a critical management tool.

(2) Continue Support for Maritime Heritage Resource Permits. Sanctuary permits may be issued for the survey/inventory and research/recovery of historical and cultural resources. Administration of these permits follows all necessary federal and state regulations. The issuance of Maritime Heritage Resource (MHR) permits is further described in the MHR Action Plan.

Status: On-going.

Implementation: The NOAA aspect of FKNMS has the lead agency for this activity; active consultation with state agencies is described in the MHR Action Plan.

(3) Continue Support for Special Use Permits. Special Use Permits have been issued infrequently since 1997. Requirements regarding the issuance of special use permits are contained in section 310 of

the NMSA (16 USC 1431 et seq.), which states that special use permits may be issued to establish conditions of access to and use of Sanctuary resources or to promote public use and understanding of those resources. Since 1997, some issues have been brought forward by the public, other agencies, and Sanctuary staff that may be best resolved through the issuance of special use permits. For example, a special use permit may be the most appropriate means by which to allow permit holders to conduct concession-type or commercial activities under certain conditions. Special Use permits may also address the need for marine mammal viewing tours to adhere to specific viewing guidelines to avoid disturbance. Any additions or changes regarding the issuance of special use permits in the FKNMS will be consistent with the NMSA.

Status: Five special use permits have been issued by the FKNMS over the last several years. Currently, the types of activities eligible for special use permits are limited.

Implementation: The NOAA aspect of FKNMS has the agency responsible for this activity and will undertake an assessment of various types of special use permits in conjunction NMSP headquarters as resources permit.

(4) Develop Permit Guidelines. In cooperation with the NMSP, the FKNMS has developed permitting guidelines that describe permit procedures, request application information, and include staff contact information. A permit application form, primarily aimed at research and education permit applicants, is posted at the Sanctuary's Web site and may be submitted electronically (floridakeys.noaa.gov).

Status: On-going.

Implementation: This process has been implemented, with periodic updates to the Permit Guidelines as needed, and continues as a critical management activity.

(5) Establish a Permit Protocol. A protocol for records management and permit tracking was established in 1997. Records management strives to incorporate electronic technologies as much as possible to file the numerous documents associated with each permit, including application forms, correspondence, copies of permits and amendments, and reports. Permit tracking via an electronic database continues to be the cornerstone of the FKNMS and NMSP permitting program. Significant advances to the database will streamline data entry for both the applicant and Sanctuary staff and are being undertaken at this time by NMSP headquarters.

Status: On-going.

Implementation: An effective permit protocol has been established and continues to be implemented. The permit database is running for NMSP staff and is anticipated to be available to the public in 2007/2008.

(6) Promote Interagency Collaboration in Permitting. Sanctuary permitting staff communicates with other federal, state, and local agencies and organizations involved in regulating or overseeing projects with potential resource impacts to: (1) determine potential effects to Sanctuary resources, (2) aid in developing conditions to avoid or minimize resource impacts, (3) offer suggestions for mitigation of unavoidable impacts, and (4) provide technical assistance and consultation regarding activities occurring in Sanctuary waters. A specific example of this coordination is the guidance that Sanctuary staff provides in permitting and installing idle-speed/no-wake shoreline markers (see the Waterways Management Action Plan, Strategy B.4 - Waterway Management/Marking, Activity 10). Another

specific example of this coordination is the direct communication with federal, state and local governments for marine debris removal and derelict or abandoned vessel issues.

Status: On-going.

Implementation: FKNMS continues consultation with agencies and organizations on projects and activities affecting marine resources, whether a FKNMS permit is being issued or another agency is leading the permit process. Regional and national headquarters staff (both federal and state) are requested as needed.

STRATEGY R.2 REGULATORY REVIEW AND DEVELOPMENT

Strategy Summary

Since implementation of the 1996 management plan, the Sanctuary Advisory Council, its working groups, and the general public identified a number of management issues that require review and, where appropriate, potential revision of existing regulations. Such issues include but are not limited to:

- Commercial salvage and tow-boat operations
- Operation of personal watercraft and other vessels within the Sanctuary
- Bait fishing in Sanctuary Preservation Areas
- Catch-and-release trolling in four Sanctuary Preservation Areas
- Definition of “trolling”
- Boundary adjustment(s) of some protected areas
- Clarification of the intent of regulations in Research-only Areas
- Special Use permits for marine mammal expeditions
- Consistency between state and federal regulations for wastewater discharges
- Cruise ship sedimentation plumes
- Possible need for identification and establishment of additional marine zones

Additionally, some topics such as artificial reefs and fish feeding are national issues that the NMSP is addressing on a system-wide basis.

The following activities identify existing regulations that will be considered for revision in order to address the management issues that have been identified. Although the 1996 management plan incorporated regulations as a component of plan adoption, these potential revisions to current regulations will be undertaken as a separate action, following this management plan review process. As part of the separate process other federal, state and local agencies with jurisdiction, as well as the general public, will be invited to participate in the scoping, review and development of any potential changes to the FKNMS regulations. As outlined in the Management Agreement between the State of Florida and NOAA, any changes to the FKNMS regulations will need to be reviewed and approved by the Governor and Cabinet, acting as the Board of Trustees of the Internal Improvement Trust Fund.

Activities (17)

(1) Evaluate Need for Marking of Channels and Reefs. Working with the Sanctuary Advisory Council, determine if there is a need to revise regulations. Currently, there is a prohibition on vessel speeds greater than idle speed in areas designated as idle-speed only/no-wake, and within 100 yards of navigational aids indicating emergent or shallow reefs (partially addressed in CFR 922.163(a)(5)).

(2) Evaluate Boat Groundings. Working with the Sanctuary Advisory Council, determine if there is a need to revise regulations. Currently, there is a prohibition on prop scarring or other injury to seagrasses or the seabed (partially addressed by CFR 922.163(a) (5)).

(3) Consider Pollution Discharge controls. Currently, there is a prohibition on discharging or depositing materials or other matter in the Sanctuary (addressed by CFR 922.163(a) (4)). Exceptions to this prohibition include: discharging or depositing fish, fish parts, and bait during traditional fishing operations and discharging cooling water, engine exhaust, deck wash and effluent from marine sanitation devices during normal vessel operations. However, in protected zones, including Wildlife Management Areas, Ecological Reserves, Sanctuary Preservation Areas, and Special-use Areas, only discharges from engine exhaust and cooling water are allowed.

In 2002, the EPA and State of Florida established a no-discharge zone² through the federal Clean Water Act for the state waters of the Sanctuary. This action came at the recommendation of the Sanctuary's Water Quality Steering Committee and as a request by the Governor of Florida to the Administrator of the Environmental Protection Agency. Draft regulations were issued for public review and the public overwhelmingly recommended approval. The EPA issued the final rule (67 FR 35735) in May 2002. The Sanctuary's Water Quality Steering Committee has requested that NOAA establish a similar no-discharge zone for the federal waters of the Sanctuary. Sanctuary managers will conduct a similar public process to evaluate this request.

(4) Reduce Impacts from Salvaging and Towing. This activity seeks to identify a methodology to reduce damage to natural resources resulting from improper vessel salvage methods. Salvagers or towboat operators responding to vessel groundings are required to report the groundings to the appropriate authorities (USCG, the state, or the Sanctuary). This is to ensure an appropriate response on the part of the agencies to the incident and to report the safety of passengers, the condition of the vessel and any resource damage. This requirement is not always followed and there have been documented instances where additional damage to the submerged resources has occurred.

NOAA did not issue regulations to implement this strategy in 1997; however, it attempted to work with the salvage and tow industry to achieve this goal. During the period in which the Sanctuary regulations have been in effect, the issue of lack of notification to appropriate officials by some salvage and towboat operators, as well as other resource injury problems, has surfaced repeatedly.

² Section 312 of the Clean Water Act gives the Environmental Protection Agency and states the authority to designate "No Discharge Zones". A no discharge zone is an area of a waterbody or an entire waterbody into which the discharge of sewage (whether treated or untreated) from all vessels is completely prohibited. No discharge zones are designed to give states an additional tool to address water quality issues associated with sewage contamination.

(To the extent that a salvage operation involves prohibited activities, CFR section 929.166 provides for the issuance of National Marine Sanctuary General Permits to allow the activity.)

The Regulatory Action Plan Working Group recommended revising Strategy B.13 to establish Special-Use permits for salvage and towboat operators. One potential approach may be to develop standard salvage procedures, which may include, but not be limited to: 1) obtaining a permit, 2) notifying authorities, 3) where appropriate, having an authorized observer at the site or receiving permission to proceed, 4) providing operator training, and 5) promoting environmentally sound salvaging and towing practices. These or similar procedures could be implemented as part of a permit for salvaging and towing operations.

(5) Reduce Impacts from Personal Watercraft (PWC) and Other Vessels. This activity will consider the issuance of new or revised regulations addressing the impacts from PWC and other types of vessels. The issue of personal watercraft operation within the Sanctuary received the largest volume of public comment during the nine-month review of the draft 1996 management plan. The issue of personal watercraft continued throughout the comment period to be among the Sanctuary Advisory Council's most heavily debated issues. Actions implemented in 1997, beginning with the final regulations, took a proactive approach to dealing with this issue based on recommendations from the Sanctuary Advisory Council.

Since implementation of the 1996 FKNMS management plan, the controversy over PWC operation has diminished some, but local concerns continue to be frequently voiced. While the PWC industry has made efforts to address noise and pollution, conflicts among PWC users, the resources, and other Sanctuary users continue. The problems created by these conflicts continue to be brought to the attention of FKNMS managers by the Sanctuary Advisory Council and others in the community. Following implementation of FKNMS regulations, Monroe County attempted to resolve PWC issues through its Marine and Port Advisory Committee and Board of County Commissioners. The efforts did not move forward and the issue continues to be brought before the Sanctuary Advisory Council.

The Sanctuary Advisory Council established a PWC Working Group in 1998, held a series of public meetings and followed a rigorous schedule in an attempt to resolve the conflicts. The PWC working group presented a series of options or recommendations to the Sanctuary Advisory Council in June 2000.

In addition, the Sanctuary Advisory Council's Regulatory Working Group spent many hours reviewing the minutes of PWC Working Group meetings, held throughout 1999, 2000 and 2001, and established the regulatory alternatives that will be considered during the two years following the acceptance of this plan (See Appendix G). These alternatives will be incorporated into the required National Environmental Policy Act documentation that will be prepared in conjunction with any draft regulations. These draft alternatives are being considered for the management of all vessels in the Sanctuary, including personal watercraft.

(6) Ensure Consistency Among Fishing Regulations. This activity will improve administrative and regulatory coordination between fisheries regulatory agencies operating within Sanctuary waters through a protocol for drafting and revising fisheries regulations in order to implement a consistent set of fishing regulations throughout the Sanctuary. Working with the Sanctuary Advisory Council, FWC, and South Atlantic and Gulf of Mexico fishery management councils, FKNMS managers will

ensure administrative and regulatory coordination between fisheries regulatory agencies operating within the Sanctuary.

(7) Consider Need for Mariculture Regulations. Working with the Sanctuary Advisory Council, FWC, South Atlantic and Gulf of Mexico fishery management councils and Florida Department of Agriculture and Consumer Services, FKNMS managers will determine if there is a need to establish mariculture operations regulations and proceed accordingly. This activity may help reduce fishing pressures on wild marine-life species and help satisfy the commercial demand for these species. This is a long-term effort designed to identify and develop mariculture techniques and, possibly, to allow the development of mariculture operations that are consistent with the Sanctuary's primary purpose of resource protection.

Currently FKNMS staff is working with a number of groups including the Florida Aquarium, Mote Marine Laboratory, the University of Florida and marine life collector Ken Nedimeyer to establish coral aquaculture sites in the FKNMS.

(8) Consider Need for Artificial Reefs Regulations. Artificial reefs are addressed by CFR 922.163(a) (3) and (4), which prohibit alteration of or construction on the seabed and discharge/deposit of materials without a permit, CFR section 922.166 which provides for the issuance of national marine sanctuary general permits, and CFR section 922.49 which governs notification and review of applications for leases, licenses, permits approvals, or other authorizations to conduct a prohibited activity. In addition, the "Policy Statement of the National Marine Sanctuary Program: Artificial Reef Permitting Guidelines" was finalized in July 2005.

Working with the Sanctuary Advisory Council, Sanctuary managers will determine if there is a need to revise FKNMS regulations and proceed accordingly.

(9) Consider Need for Exotic Species Regulations. While the release of exotic species into Sanctuary waters is already prohibited under CFR 922.163(a) (7), there are no specific references to exotic species released in ballast water. This is an emerging issue nationally and may need to be addressed in the Sanctuary. Working with the Sanctuary Advisory Council, FKNMS managers will determine if there is a need to revise these regulations. FKNMS managers will develop any potential regulations consistent with international law and other state and federal agencies' regulations that address the discharge of ship ballast water containing exotic or non-indigenous species. The State of Florida currently has in place Florida Statute 370.081 (1) which makes it unlawful to import any marine plant or animal non-indigenous to the area. Paragraph (5) under this same statute makes it unlawful to release into the waters of the state any non-indigenous saltwater species.

(10) Consider Need for Fishing Gear/Fishing Methods Regulations. Certain fishing methods and/or gear types are addressed by CFR section 922.163(a) (11), which prohibits explosives, poisons, oil, and bleach as fishing methods and by the Protocol for Cooperative Fisheries Management. Working with the Sanctuary Advisory Council, FWC, South Atlantic and Gulf of Mexico fishery management councils, Sanctuary managers will determine if there is a need to revise these regulations and proceed accordingly. If required, regulations will likely be developed requiring the use of low-impact gear and methods in priority areas in consultation with the fishery management councils and the FWC.

(11) Consider Need for Spearfishing Regulations. Currently, spearfishing is addressed by CFR 922.164, which prohibits spearfishing in Ecological Reserves, Sanctuary Preservation Areas, the Key Largo and Looe Key Existing Management Areas, and the four Special-use (research-only) Areas and by the Protocol for Cooperative Fisheries Management. The need for spearfishing restrictions for high priority areas (e.g., areas of low abundance, a high degree of habitat damage, or a high degree of user conflicts) will be reviewed. Working with the Sanctuary Advisory Council, FWC, South Atlantic and Gulf of Mexico fishery management councils, Sanctuary managers will determine if there is a need to revise these regulations and proceed accordingly. If restrictions are deemed appropriate they might include provisions such as gear or tournament prohibitions or the closure of selected areas, such as around residential areas. Further scientific review of the impacts of spearfishing may be needed in the future.

(12) Consider Need for Fish Feeding Regulations. In November 2001, the FWC voted to prohibit divers from fish feeding in state waters. In compliance with the Protocol for Cooperative Fisheries Management, the Sanctuary will initiate the public rule-making process to consider a prohibition of fish feeding by divers or any persons in federal waters beginning with the regulatory review process to be initiated in 2007/2008.

Initial stages of this process will include an assessment of the biological and behavioral impacts of fish feeding by divers in Sanctuary waters. The results of this assessment will be used in the regulatory review process for possible implementation of an appropriate fish-feeding strategy. Regulatory alternatives to be considered may include: (1) Status quo - no regulation, or (2) Prohibiting fish feeding within the federal waters of the Sanctuary to have consistent federal and state regulations. Working with the Sanctuary Advisory Council, Sanctuary managers will determine if there is a need to develop regulations and proceed accordingly.

(13) Consider Need for Bait Fishing Regulations. During the scoping period and at regulatory working group meetings, it was recommended that FKNMS managers consider amending regulations to eliminate the provision for bait fishing in Sanctuary Preservation Areas. The regulatory working group determined that there is a need to assess the impact of bait fishing in the areas before regulatory action can be considered.

As such, an assessment of the impact of bait fishing will be conducted. Should such an assessment demonstrate impacts FKNMS managers working with the Sanctuary Advisory Council and FWC will determine if there is a need to develop regulations and proceed accordingly. Assuming a regulatory need is identified a set of alternatives will be considered that will include consideration of user conflicts, enforcement difficulties, and ecological impacts.

(14) Consider Regulations to Govern Catch and Release Trolling in Four Sanctuary Preservation Areas. Currently, catch-and-release fishing while trolling is allowed in the Conch, Alligator, Sombrero Reef, and Sand Key preservation areas. During the scoping period and at regulatory working group meetings, it was recommended that this activity be re-evaluated and possibly eliminated.

An assessment of the impact of catch-and-release trolling in Conch, Alligator, Sombrero Reef and Sand Key SPAs will be conducted. After the assessment of the impact of catch-and-release trolling is completed, various alternatives will be considered during the NEPA process to establish regulations

and will be undertaken in consultation with FWC, the Sanctuary Advisory Council, and the general public.

15) Consider Need for Dredging Regulations. Currently, dredging is addressed by CFR 922.163(a)(3) which, with certain exceptions, prohibits alteration of the seabed; 922.163(a)(4), which prohibits discharging or depositing materials or other matter (with exceptions); 922.166, which sets forth a permitting mechanism for allowing otherwise prohibited activities in the Sanctuary; 922.168, which sets forth requirements and procedures for the certification of preexisting leases, licenses, permits, approvals, other authorizations, or rights to conduct a prohibited activity; and 922.49 which requires the notification of and review of applications for leases, licenses, permits, approvals, or other authorizations to conduct a prohibited activity. Revising these regulations could help to eliminate negative resource impact dredge-and-fill activities within the Sanctuary. Revising these regulations could also help to promote the use of low-impact technologies for maintenance dredging and potentially prohibit such dredging in areas where significant reestablishment of sensitive benthic communities has occurred (e.g., seagrass and coral habitats).

Dredge-and-fill activities may be allowed if in the public interest (as determined by USACE and the State of Florida on its sovereign submerged lands) and if little or no environmental degradation is likely to occur. An example of this would be directly after a hurricane to remove or move large quantities of sand or dirt from the waterways. FKNMS will work with the Sanctuary Advisory Council, USACE, and the State of Florida to determine if there is a need to revise these regulations and proceed accordingly.

(16) Consider Regulations Specific to Touching Coral. Currently, touching coral is addressed by CFR section 922.163(a)(2), which prohibits removal, damage, distribution, or injury of any living or dead coral or coral formation and section 922.164, which prohibits touching coral in Sanctuary Preservation Areas and Ecological Reserves. This activity proposes to review the potential need to further protect coral communities from damage by prohibiting the touching of coral in high-use, sensitive, and vulnerable areas. Working with the Sanctuary Advisory Council, FWC, Southeast Atlantic and Gulf of Mexico Fishery Management Councils Sanctuary managers will determine if there is a need to revise these regulations and proceed accordingly.

(17) Evaluate Allowable Activities in Existing Zones and Make Regulatory Changes as Needed. There are five types of zones in the Sanctuary: Sanctuary Preservation Areas, Ecological Reserves, Special-use (Research-only) Areas, Wildlife Management Areas, and Existing Management Areas. Each type of zone has specific regulations for certain activities. Allowable activities for each area require periodic evaluation and may need to be changed to address issues of concern (also see the Marine Zoning Action Plan). For example, if data indicates conflicts with wildlife in an area that has allowed idle-speed-only/no-wake access, the possibility of changing the zone to no-motorized access will be evaluated.

The activities currently allowed within the zones have yet to be evaluated. FKNMS is the agency responsible for this activity and will undertake regulatory assessments and associated changes as resources permit.