

I. INTRODUCTION TO THE DOCUMENT

This section introduces the management plan. It provides overviews of the Office of National Marine Sanctuaries (ONMS) and the Stellwagen Bank National Marine Sanctuary. It addresses ONMS authorization and sanctuary designation. It describes the management plan review process and the extensive role of the Sanctuary Advisory Council in development of the action plans. And, it illustrates the management continuum envisioned for the sanctuary.

OVERVIEW OF THE OFFICE OF NATIONAL MARINE SANCTUARIES

The Office of National Marine Sanctuaries (ONMS) serves as the trustee for a system of 14 marine protected areas¹, encompassing more than 290,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from New England to American Samoa (Figure 1). The ONMS is an office within the National Ocean Service of the National Oceanic and Atmospheric Administration (NOAA) (see Sidebar). The sanctuary system includes: 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. The ONMS works cooperatively with the public to protect the living marine and non-living resources of sanctuaries while allowing recreational and commercial activities that are compatible with the primary goal of resource protection. The ONMS raises public awareness of sanctuary resources and management issues through programs of scientific research, monitoring, exploration, education and outreach.

The national marine sanctuaries are an essential part of this country's collective environmental riches. Within their protected waters, giant whales feed, breed and nurse their young, coral colonies flourish, and shipwrecks tell stories of our maritime history. Sanctuary habitats include beauti-

ful rocky reefs, lush kelp forests, whale migration corridors and destinations, spectacular deep-sea canyons, and underwater archaeological sites. Our nation's marine sanctuaries provide a safe habitat for species close to extinction or protect historically significant shipwrecks. They range in size from one-quarter square mile in American Samoa's Fagatele Bay to the more than 140,000 square miles in the Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands—one of the largest marine protected areas in the U.S. Each sanctuary is a unique place needing special protection. Serving as natural classrooms, cherished recreational spots and places for valuable commercial activities, marine sanctuaries represent many things to many people.

The ONMS provides oversight and coordination of the sanctuary system by setting priorities for addressing resource management issues and directing program and policy development. The ONMS is responsible for ensuring that the management plan prepared for each sanctuary is consistent with the National Marine Sanctuaries Act. The ONMS provides a general budget for expenditures for program development, operating costs and staffing. On an annual basis, the ONMS reviews and adjusts funding priorities and requirements to reflect resource management needs of the respective sanctuaries. The ONMS also monitors the effectiveness of the management plan, makes recommendations to promulgate regulatory changes where necessary, and monitors intra- and inter-agency agreements.

FIGURE 1. THE SYSTEM OF NATIONAL MARINE SANCTUARIES.



THE NATIONAL MARINE SANCTUARIES ACT

The National Marine Sanctuaries Act (NMSA) (16 U.S.C. 1431 et seq.) is the organic legislation governing the National Marine Sanctuary System (Appendix A). The ONMS authorizes the Secretary of Commerce to designate as national marine sanctuaries areas of the marine environment or Great Lakes with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational or aesthetic qualities. Sanctuaries are special areas set aside in perpetuity for long-term protection and conservation and are part of our nation's legacy to future generations; in many ways the marine equivalent to our national parks. The ONMS is the Federal program within NOAA charged with managing national

marine sanctuaries. The primary objective of the NMSA is to protect sanctuary resources. The NMSA also directs the ONMS to facilitate all public and private uses of those

¹ Ex. Ord. No. 13158, May 26, 2000, 65 F.R. 34909 Sec. 2. (a) defines a "marine protected area" as, "...any area of the marine environment that has been reserved by Federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein."

resources, to the extent that they are compatible with the primary objective of resource protection.

The purposes and policies of the NMSA are

- (1) To identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System;
- (2) To provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner that complements existing regulatory authorities;
- (3) To maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations and ecological processes;
- (4) To enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the natural, historical, cultural and archeological resources of the National Marine Sanctuary System;
- (5) To support, promote and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas;
- (6) To facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities;
- (7) To develop and implement coordinated plans for the protection and management of these areas with appropriate Federal agencies, state and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;
- (8) To create models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and
- (9) To cooperate with global programs encouraging conservation of marine resources.

COMPREHENSIVE MANAGEMENT OF NATIONAL MARINE SANCTUARIES

The NMSA states that the ONMS will “maintain for future generations the habitat and ecological services of the natural assemblage of living resources that inhabit [sanctuaries]” (16 U.S.C. 1431 et seq., §301(a)(4)(A)). The NMSA further recognizes that “while the need to control the effects of particular activities has led to enactment of resource-specific legislation, these laws cannot in all cases provide a coordinated and comprehensive approach to the conservation and management of the marine environment” (16 U.S.C. 1431 et seq., §301(a) (3)). Accordingly, the ONMS subscribes to a broad and comprehensive management approach to meet the NMSA’s primary objective of resource protection.

National Oceanic and Atmospheric Administration (NOAA)

NOAA Mission: To understand and predict changes in Earth’s environment and conserve and manage coastal and marine resources to meet our Nation’s economic, social, and environmental needs (NOAA, 2005).

The ONMS is part of the National Oceanic and Atmospheric Administration (NOAA), which conducts research and gathers data about the global oceans, atmosphere, space and sun, and applies this knowledge to science and service that touch the lives of all Americans (www.noaa.gov). In doing so, NOAA warns of dangerous weather, charts the nation’s seas and skies, guides the use and protection of ocean and coastal resources, and conducts research to improve the collective understanding and stewardship of the environment that sustains the nation.

A Commerce Department agency, NOAA provides these services through five major organizations: the National Weather Service; the National Ocean Service; the National Marine Fisheries Service; the National Environmental Satellite, Data and Information Service; the Office of Oceanic and Atmospheric Research; as well as numerous special program units. In addition, NOAA research and operational activities are supported by the nation’s seventh uniformed service, the NOAA Corps, a commissioned officer corps of men and women who operate NOAA ships and aircraft, and serve in scientific and administrative posts.

National Ocean Service (NOS)

The ONMS is part of the National Ocean Service (NOS). The NOS (<http://www.nos.noaa.gov>) develops the national foundation for coastal and ocean science, management, response, restoration and navigation. The NOS maintains a leadership role in coastal and ocean stewardship by bridging the gap between science, management, and public policy in the areas of healthy coasts, navigation, coastal and ocean science, and coastal hazards. Ten program offices are located within the NOS:

- Office of National Marine Sanctuaries
- Center for Operational Oceanographic Products and Services (CO-OPS)
- National Centers for Coastal Ocean Science (NCCOS)
- Coastal Services Center (CSC)
- Office of Coast Survey (OCS)
- Office of Ocean and Coastal Resource Management (OCRM)
- Office of Response and Restoration (OR&R)
- National Geodetic Survey (NGS)
- International Program Office (IPO)
- Management and Budget Office (MBO)

This comprehensive management approach differs from that of various other national and local agencies and laws directed at resource-specific management. Comprehensive sanctuary management serves as a framework for addressing long-term protection of a wide range of living and non-living marine resources, while allowing multiple uses of the sanctuary to the extent that they are compatible with the primary goal of resource protection. The resources managed by the ONMS span diverse geographic, administrative, political and economic boundaries. Strong partnerships among resource management agencies, the scientific community, stakeholders and the public at-large are needed to realize the coordination and program integration that the NMSA calls for in order to comprehensively manage national marine sanctuaries.

OVERVIEW OF THE STELLWAGEN BANK NATIONAL MARINE SANCTUARY

DESIGNATION

Designation of Stellwagen Bank as the nation's twelfth (and New England's first and only) national marine sanctuary was the culmination of over a decade of effort (see Appendix B). In the late 1980s, an elevated public awareness of regional development activities prompted calls for greater protection of New England's marine resources. Stellwagen Bank was first nominated for consideration as a national marine sanctuary in 1982 by the Center for Coastal Studies in Provincetown, Massachusetts and the Defenders of Wildlife in Washington, D.C. The following year NOAA added Stellwagen Bank to its "Site Evaluation List" from which NOAA chose ocean areas as active candidates for designation as national marine sanctuaries.

NOAA elevated the Stellwagen Bank proposal to Active Candidate status on April 19, 1989 (54 FR 15787). This was done in response to a requirement in the 1988 amendments to the NMSA that a prospectus on the Stellwagen Bank proposal be submitted to Congress by September 30, 1990 (P.L. 100-627, s. 205(b)(1)). NOAA commenced gathering public comment and prepared the Draft Environmental Impact Statement/Management Plan and the Prospectus for Congress. These were published on February 8, 1991, initiating a 60-day public comment period and a 45-day Congressional review period. During the comment period, a series of public hearings were held, 860 written comments were submitted, and petitions signed by more than 20,000 persons supporting designation of the Stellwagen Bank National Marine Sanctuary were received by NOAA.

On October 7, 1992, Congress passed legislation reauthorizing and amending Title III of the Marine Protection, Research and Sanctuaries Act (MPRSA) [now also known as the National Marine Sanctuaries Act]. This legislation was signed into law on November 4, 1992. Section 2202 of that law designates the Stellwagen Bank National Marine Sanctuary. Among related initiatives, it establishes the sanctuary boundary; prohibits the exploration for and mining of sand and gravel and other minerals in the sanctuary; and

requires consultation with the Secretary of Commerce by Federal agencies proposing agency actions in the vicinity of the sanctuary that may affect sanctuary resources. The sanctuary consists of an area entirely within federal waters, measuring approximately 842 square miles (638 square nautical miles) and lying off the coast of Massachusetts.

RESOURCE CHARACTERISTICS

The Stellwagen Bank sanctuary was designated for a multitude of reasons, including its high natural productivity and species diversity, as well as its long history of human use. Primary production at Stellwagen Bank is comparatively high; it is three times greater than the GoM in general and twice as high as at Georges Bank. There are well over 575 known species in the sanctuary and the list is largely incomplete. Living landscapes (anemone forests, sponge gardens, hydroid meadows, worm tube beds) carpet the seafloor and the associated marine communities support benthic and pelagic species that are dependent upon them. Water column and seafloor habitats sustain over 80 species of fish and provide important feeding and nursery grounds for 22 marine mammal species including the endangered humpback and fin whales and the critically endangered North Atlantic right whale. The area supports foraging activity by 53 species of seabirds dominated by gulls, storm petrels, gannets, auks (alcids), sea ducks and shearwaters. Fish and invertebrate populations include both demersal and pelagic species, such as cod, flounders, bluefin tuna, herring, lobster and scallops. Leatherback and Kemp's ridley sea turtles (endangered species) on occasion visit the area for feeding.

Sitting astride historic fishing grounds and shipping routes, the Stellwagen Bank sanctuary has been a locus for a variety of human maritime activities for centuries. As Gloucester is America's oldest seaport, Stellwagen Bank (formerly Middle Bank) is among the most historic fishing grounds in the GoM, harkening back to colonial times. The major shipping corridors established in the past are still prominent today where they cross the sanctuary. Shipwrecks on the sanctuary's seafloor represent the development of commercial fishing and maritime transportation during the nearly 400 years that maritime commerce passed through the area. To date 35 historic shipwreck sites have been located in the sanctuary; four shipwreck sites are listed on the National Register of Historic Places. These shipwrecks are tangible connections to the past that allow the sanctuary to study and better understand the area's history.

SANCTUARY MANAGEMENT PLAN REVIEW

The sanctuary management plan review (MPR) process is based on three fundamental steps: 1) public scoping, which includes a formal comment period and public meetings to identify a broad range of issues and concerns related to management of the sanctuary; 2) analysis and prioritization of the issues raised during scoping, followed by the development of action plans; and 3) preparation of the draft and final management plans and relevant NEPA documentation, such as an Environmental Impact Statement or Environmen-

tal Assessment. Public review of the draft management plan provides guidance for staff to revise the document and prepare the final management plan. Once approved by NOAA, the final management plan outlines the sanctuary's priorities for the next five years.

Management plans are sanctuary-specific documents that perform many functions, including describing regulations and boundaries; outlining staffing and budget needs; setting priorities and performance measures for resource protection, research and education programs; and guiding development of future budgets and management activities. Periodic management plan review, required by law for all National Marine Sanctuaries, is conducted to ensure that each site properly conserves and protects its nationally significant living and cultural resources. The Stellwagen Bank sanctuary's existing management plan was published in July 1993. Five years later, NOAA initiated its five-year management plan review.

From December 1998 to January 1999, the sanctuary initiated formal review of its management plan by holding public scoping meetings in Barnstable, Boston and Gloucester (MA) to ask the public for comments on the status of site management. The MPR was delayed several years due to a change in sanctuary management. The MPR resumed with an open public comment period during July 2–October 18, 2002. An additional round of nine public scoping meetings, coincident with this comment period, was held during September and October at the following locations: Mystic, CT; New Bedford, MA; Provincetown, MA; Falmouth, MA; Plymouth, MA; Boston, MA; Gloucester, MA; Portsmouth, NH; and Portland, ME. The *State of the Sanctuary Report*, published in June 2002, set the stage for these meetings and public comment period.

During the scoping process, the public identified a range of important considerations for sanctuary management. Eight key topics comprised of 27 issues were synthesized by sanctuary staff from the input of over 300 participants who attended the scoping meetings and the approximately 20,000 written comments received during both public comment periods. These key topics and their respective issues are listed in Appendix C. Upon conclusion of public scoping, the Sanctuary Advisory Council engaged in an intensive effort during 2002–2005 to prioritize these issues and, through working groups, develop action plans with recommendations to address them.

The Draft Management Plan was released for a six-month public review and comment period. The initial comment period was May 6 - August 4, 2008. Eight public meetings in four states were held in June at the following locations throughout New England: Portland, ME; Portsmouth, NH; Wenham, MA; Boston, MA; Plymouth, MA; Hyannis, MA; N. Dartmouth, MA; and, Mystic, CT. A total of 103 people provided comment at these meetings (total attendance was 274). The comment period was extended to October 3, 2008 in response to requests made at these meetings for additional time for the public to complete reviews and

submit comments. The sanctuary received a total of 25,529 comments on the draft management plan from all 50 states, two U.S. Territories and 48 countries. All comments are provided on the sanctuary's website and are analyzed and summarized in Section X of this document.

SANCTUARY ADVISORY COUNCIL

Citizens of New England are politically and socially engaged on issues affecting their communities and the surrounding environment, including the ocean. The Stellwagen Bank sanctuary came about largely due to the dedication and determination of thousands of local citizens and elected officials who strongly advocated for sanctuary designation. To this day, public participation permeates nearly every aspect of the sanctuary's management and operation, with people serving on the Sanctuary Advisory Council and its working groups, becoming involved in the sanctuary's community outreach and educational activities, as well as offering informal advice on a variety of sanctuary issues and related opportunities.

Much of the time, this public interest is channeled through the Advisory Council, which serves as the primary connection to the stakeholders of the sanctuary, including concerned citizens. The Advisory Council is formed of members from the public to provide advice to the sanctuary superintendent on the management and protection of the sanctuary. Section 315 of the National Marine Sanctuaries Act authorizes the Secretary of Commerce to establish Sanctuary Advisory Councils. This authority has been delegated to the Director of the ONMS.

The current Stellwagen Bank Sanctuary Advisory Council was formally constituted and approved on October 3, 2001; the first meeting was convened on November 5, 2001. The Advisory Council is comprised of a total 21 members, of which 15 voting public members represent various stakeholder interests and 6 non-voting *ex-officio* members (or their designee) represent state and federal agencies. There are also 15 alternates for the public seats, who assume the seat and vote in the absence of the respective public member. [Note: the Advisory Council charter was amended on December 10, 2007 to increase the number of public members to 17.] The Stellwagen Bank Sanctuary Advisory Council has public representation from four states (Connecticut, Massachusetts, New Hampshire and Maine) and eight Congressional districts; the Advisory Council is among the largest in the national system and is distinguished by its multi-state representation. Advisory Council membership is listed in Appendix D.

Advisory Council members are selected through an open recruitment process to represent the views of their particular constituency. Applications are reviewed by the Advisory Council executive committee working with the sanctuary superintendent, who makes final recommendations. Appointment is by the Director of the ONMS. Members are volunteers serving two- or three-year terms. The Stellwagen Bank Sanctuary Advisory Council has participated in every

step of the MPR process, including the public scoping meetings.

Between 2002 and 2005 the Advisory Council held frequent meetings to accomplish the following:

- prioritize issues
- formulate action plan topics
- agree on working group tasking and make-up
- convene working groups to develop and recommend action plans
- review, revise and adopt working group action plans
- forward amended action plans to the sanctuary superintendent
- prioritize action plan strategies
- formulate a sanctuary vision statement

Appendix E lists the Advisory Council meetings related to MPR.

ROLE OF WORKING GROUPS

The preparation of action plans required a prodigious effort, involving the simultaneous convening of 11 working groups of the Advisory Council (see Sidebar). This effort was possible because of the able leadership and dedication of the Advisory Council members and alternates, who served as chairs for these groups. Other working group members represented stakeholder interests, including industry and environmental organizations, and government agencies having relevant jurisdiction and technical capacities, academia and general educational institutions, and members of the concerned public. In some cases, technical advisors informed working groups on specific issues. Sanctuary staff represented the sanctuary on each working group and offered support services, such as making meeting arrangements and preparing minutes. After the other 11 working groups had completed their tasks, an additional working group on compatibility determination was convened. This sequencing was necessary because the sanctuary did not have the capacity to simultaneously staff this working group, in addition to the others.

Working group topics generated considerable discussion among the Advisory Council, particularly with regard to fishing. Some members felt that fishing warranted its own action plan. Others felt that the working groups should be organized around issues and concerns, irrespective of the type of activity that may be involved. As an outcome, the effects of fishing were largely subsumed within the broader context of ecosystem alteration and other related concerns, such as marine mammal entanglement and damage to maritime heritage resources. The Advisory Council chose to evaluate the suite of impacts first, and then consider their cause in relation to human activity.

Working group members were selected through an open, competitive recruitment process approved by the Advisory Council. Recruitment was conducted by the Advisory Council executive committee working with the sanctu-

Developing Action Plans

- Administrative Capacity and Infrastructure Development and Maintenance
- Interagency Cooperation
- Public Outreach and Education
- Compatibility Determination
- Ecosystem-Based Sanctuary Management
- Ecosystem Alteration
- Water Quality
- Marine Mammal Behavioral Disturbance
- Marine Mammal Vessel Strike
- Marine Mammal Entanglement
- Maritime Archaeology
- Site Characterization

ary superintendent. The working groups followed a set of ground rules that were approved by the Advisory Council. Working groups elected to operate by consensus rather than voting and allowed for alternates among their membership. Combined membership on the working groups totaled more than 200 people and is listed in Appendix F.

PRINCIPAL OUTCOMES

The Advisory Council reviewed and, where deemed necessary, modified the working group action plans at their October 10, 2004 meeting. The amended action plans were adopted by vote of the Advisory Council, and then forwarded as advice for consideration by the sanctuary superintendent. At a follow-up meeting in November 5, 2004, the Advisory Council prioritized the strategies and activities within each action plan. At their July 11, 2005 meeting, the Advisory Council developed a vision statement for the sanctuary that has been adopted by NOAA and included in this document. It reads as follows:

“The Stellwagen Bank National Marine Sanctuary is teeming with a great diversity and abundance of marine life supported by diverse, healthy habitats in clean ocean waters. The ecological integrity of the sanctuary is protected and fully restored for current and future generations. Human uses are diverse and compatible with maintaining natural and cultural resources.”

The intent and overall goals of the action plans, as submitted by the Advisory Council, have been maintained and serve as the foundation for the management plan. NOAA has significantly reorganized and condensed these versions in order to eliminate duplication among them and to make them more strategic in their expression. The action plans are presented in Section VII of this document.

Based on the large number of comments on the draft management plan submitted from across the country and

from around the world, management of the Stellwagen Bank National Marine Sanctuary clearly elicits broad national and international interest. The vast majority of the comments received urged that more be done to restore and protect the sanctuary's resources and indicates that the existence value (i.e., non-market value) of the sanctuary's resources is highly regarded. This overriding expression of interest and concern for this special place validates the sanctuary being designated by Congress as one of the nation's notable marine treasures and denotes strong public resolve that the actions recommended in the draft plan be implemented.

THE MANAGEMENT PLAN

This management plan serves as a non-regulatory policy framework for addressing the issues facing the Stellwagen Bank sanctuary over the next five years. The document provides strategic guidance for management actions and focuses those actions on four priority programmatic areas: capacity building, ecosystem protection, marine mammal protection and maritime heritage management. NOAA is focusing on these priority areas because they will significantly contribute to achieving the vision and mission of the sanctuary.

At this time, NOAA is not proposing any regulations or changes to the designation document and an environmental assessment (Section VII) accompanies this management

plan, rather than an environmental impact statement pursuant to the requirements of the National Environmental Policy Act (42 U.S.C sec. 4321-4370 et seq.) and Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508). However a suite of regulatory initiatives that derives from the strategies presented in the draft management plan ultimately could be considered. Figure 2 illustrates the management continuum envisioned and examples of potential management actions.

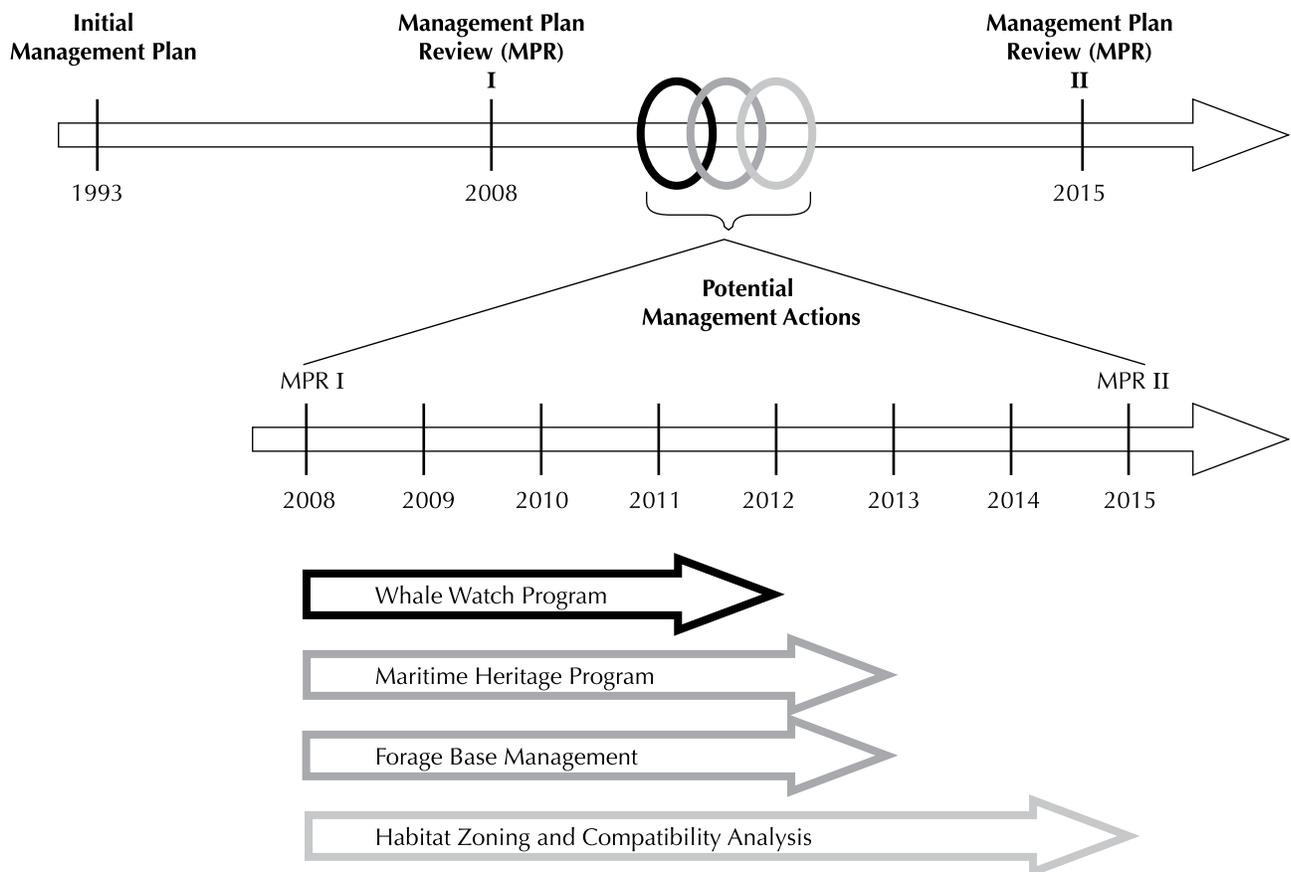
The remainder of this document is organized into ten sections.

Section II. Institutional Setting provides an overview of the administration of the sanctuary and how the sanctuary interacts with other federal and state agencies to accomplish its mission.

Section III. Sanctuary Setting introduces the concept of managing sanctuary resources for biodiversity conservation. It describes the physical characteristics of the sanctuary and the primary producers and decomposers that are essential to the sanctuary's ecosystems function.

Section IV. Resource States offers an in-depth analysis of the status of the natural and cultural resources of the sanctuary, drawing on extensive new information never before compiled in one synthesis. For each resource state, the analysis begins with a discussion of status, followed by a

FIGURE 2. ILLUSTRATION OF THE PROPOSED MANAGEMENT CONTINUUM FOR THE STELLWAGEN BANK SANCTUARY.



description of pressures, and concludes with a summary of the current protections in place.

Section V. Status of Human Uses characterizes the primary uses occurring within or near the sanctuary.

Section VI. Summation reviews points raised in previous sections, forms conclusions and considers outcomes of cumulative actions and effects.

Section VII. Actions Plans presents the suite of recommended strategies and activities that should be implemented to adequately address the many issues that need to be resolved, in order to manage, protect and restore the resources of the sanctuary.

Section VIII. Environmental Assessment complies with NEPA and CEQ regulations and provides a description of the proposed management action and alternatives.

Section IX. Sources Cited lists more than 840 technical references that offer substantive documentation supporting or elaborating on statements made in the text.

Section X. Public Comments presents results of the public comment process including a numerical and geographic analysis of the findings. It provides general responses to comments and questions and summarizes the revisions made.

Section XI. Appendices include background documentation that lends support, context and fuller understanding to the management plan.