



VIII. DRAFT ENVIRONMENTAL ASSESSMENT

The ultimate purpose of the revised draft management plan is to update NOAA's approach to managing, protecting and restoring the resources of the sanctuary. This section presents the environmental assessment that provides analyses and supporting documentation for the agency to determine whether the preferred alternative, revision of the management plan, is warranted.

PURPOSE AND NEED

NEED FOR ACTION

Congress designated the Gerry E. Studds Stellwagen Bank National Marine Sanctuary (sanctuary or SBNMS) through the Oceans Act of 1992 (November 4, 1992; Public Law 102-587 at section 2202). In 1993, the National Oceanic and Atmospheric Administration (NOAA) issued final regulations and released a final management plan and environmental impact statement (EIS) to implement this designation (NOAA 1993).

Section 304(e) of the National Marine Sanctuaries Act (NMSA) requires NOAA to review its management plans for national marine sanctuaries every five years and to evaluate the substantive progress toward implementing the management plans and goals for each sanctuary, especially the effectiveness of site-specific management techniques (16 U.S.C. 1434(e)). Pursuant to this requirement, NOAA initiated its five-year management plan review (MPR) in 1998, in cooperation with members of the Sanctuary Advisory Council. The MPR was delayed two years due to a change in sanctuary management and was continued in 2002 with an additional round of scoping meetings in the fall of 2002. The State of the Sanctuary Report, published in June 2002, set the stage for the scoping meetings and public comment period that ended on October 18, 2002.

The MPR revealed that many of the initial goals and objectives of the 1993 management plan had been met; however, in some areas these goals and objectives were non-specific and general in scope and/or based on limited scientific knowledge. New information about the natural and cultural resources of the sanctuary and the human uses of the resources made it apparent to NOAA that the plan is out-of-date and outmoded. NOAA decided to incorporate this new knowledge by developing a new approach to management. Consequently, NOAA developed a new vision, mission, and statement of goals and objectives to guide management. In addition, NOAA has revised the content and formatting requirements for national marine sanctuary management plans. These structural elements were not employed in the 1993 management plan.

PURPOSE FOR TAKING ACTION

The ultimate purpose of the revised draft management plan is to update NOAA's approach to managing, protecting, and restoring the resources of the sanctuary pursuant to the purposes and policies of the NMSA, which 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 which 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.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

The original 1993 Final Management Plan/Final Environmental Impact Statement described a number of alternatives for the management framework of the sanctuary, including differing boundary options, regulatory options, and management regimes. Extensive analyses of possible environmental and socioeconomic impacts were conducted for each alternative before the current boundaries, regulations, and management regime were selected. The 1993 plan can be viewed online at <http://stellwagen.noaa.gov/management>.

For this revision, NOAA considered the options of preparing an entirely new management plan or minimally revising the current management plan. As discussed in the "Need for Action" section, awareness of new issues affecting sanctuary management and the fulfillment of most of the prior plan's objectives necessitated the development of a new plan. Additionally, NOAA decided that this revision would be a non-regulatory management plan that establishes a policy framework for future management actions.

This environmental assessment provides analyses and supporting documentation for the agency to determine whether a Finding of No Significant Impact is warranted. For this determination, only two alternatives are being considered: leaving the current management plan in place or revising the current management plan to reflect those changes, as noted above. The preferred alternative is to

revise the management plan. A discussion of each of the alternatives follows.

NO-ACTION ALTERNATIVE

This alternative would maintain the 1993 management plan despite its outdated format and inclusion of completed tasks, along with the nominal list of goals and objectives. The no-action alternative does not infer a secession of management in the sanctuary. Management actions described in the existing management plan, such as regulations, educational and research activities, and enforcement actions, would continue.

ALTERNATIVE 1—PREFERRED ALTERNATIVE

This alternative proposes a revision of the current management plan. The revised plan updates the vision, goals, and objectives to better reflect the new paradigm of sanctuary management within the National Marine Sanctuary Program (NMSA); removes old tasks and incorporates new and planned management strategies and activities (Section II); reformats the document so it is in line with the preferred format; lays out performance measures with which to better evaluate the sanctuary management's effectiveness; and lays the groundwork for potential future regulatory actions addressing high priority issues.

Specifically, changes made to the management plan include:

- An updated description of natural and cultural resources (Sections III and IV);
- A new vision and mission statement (Section VII);
- An updated statement of goals and objectives to reflect the new vision and mission statements and current status of sanctuary resources and efforts;
- A restructuring of the management plan into a series of action plans (based on resource conservation issues) in keeping with the templates of current sanctuary management plans (Section VII); and
- A new set of outcomes and performance indicators included (Section VII);

Action plans (APs) are detailed five-year plans that address an issue or problem in the sanctuary. Action plans are issue-driven, not program- or thematically-driven, and are composed of a collection of strategies sharing common management objectives. They provide an organized structure and process for implementing strategies, including a description of the requisite activities, organizations involved, and requirements necessary for either full or partial implementation. The following action plans form the backbone of the proposed revised management plan:

ADMINISTRATIVE CAPACITY AND INFRASTRUCTURE ACTION PLAN (ADMIN AP)

The ADMIN AP provides recommendations to strengthen the sanctuary's base-level staffing, facilities infrastructure and program support to effectively meet the basic needs of

sanctuary management. Emphasis is placed on the human and physical infrastructure and financial resource requirements of the site.

INTERAGENCY COOPERATION ACTION PLAN (IC AP)

The IC AP addresses public scoping comments concerning clarification of overlapping agency responsibilities, and interagency coordination and effectiveness. This AP provides the framework to help clarify the roles, responsibilities, and relationships among associated agencies in order to strengthen resource protection within the sanctuary as well as improve interagency communication.

PUBLIC OUTREACH AND EDUCATION ACTION PLAN (POE AP)

The POE AP makes recommendations to resolve issues including low name recognition of the sanctuary, need for better information dissemination through leveraged partnerships and public education through programming support. The POE AP is predicated on developing outreach and education tools that serve to help achieve sanctuary management goals and objectives.

COMPATIBILITY DETERMINATION ACTION PLAN (CD AP)

One of the purposes of the NMSA is to facilitate those uses of the sanctuary that are compatible with the primary objective of resource protection. The CD AP addresses issues raised by public scoping comments concerning the need to clarify, justify, and recommend an approach NOAA should take in performing compatibility analyses of human uses of the sanctuary. This AP describes a framework for how to develop a compatibility analysis. It does not make any determination regarding the appropriateness of any specific sanctuary use, current or potential, nor does it recommend any actions that affect the outcome of other APs recommended by other working groups.

ECOSYSTEM-BASED SANCTUARY MANAGEMENT ACTION PLAN (EBSM AP)

The EBSM AP includes recommendations for comprehensive ecosystem protection, restoration and protection of biological diversity, zoning including no-take zones, ecosystem-based management practices and consideration of boundary modification. The AP does not propose any regulatory changes.

ECOSYSTEM ALTERATION ACTION PLAN (EA AP)

The EA AP includes recommendations to reduce or mitigate anthropogenic perturbations in the sanctuary, as distinguished from impacts due to natural disturbance. Anthropogenic, or human imposed impacts, include the laying of submarine pipelines and cables, fishing activities, pollution and degradation of water quality, ocean dumping and marine debris, disposal of dredged materials, introduction of exotic species, offshore mariculture and coastal development activities. This action plan focuses on the laying of pipelines and cables and fishing activities. Other sources of ecosystem alteration are treated variously in other action plans, such as for ecosystem based management, water qual-

ity and interagency cooperation. The AP does not propose any regulatory changes.

WATER QUALITY ACTION PLAN (WQ AP)

The WQ AP includes recommendations to address water quality concerns within the sanctuary. Point and non-point sources of pollution, both sea and shore-based, may be degrading the quality of the sanctuary's waters. NOAA must ensure that the quality of water within its boundary and in surrounding areas does no harm to the site's living marine and cultural resources, i.e., pursuant to section 922.142(a)(i) and (ii) of the regulations. The following two needs were identified: to assess water quality and circulation to characterize baseline conditions, and to reduce pollutant discharges and waste streams that may be negatively impacting sanctuary resources. The AP does not propose any regulatory changes.

MARINE MAMMAL BEHAVIORAL DISTURBANCE ACTION PLAN (MMBD AP)

The MMBD AP includes recommendations to reduce the risk of behavioral disturbance and harassment of marine mammals resulting from the following activities: whale watching, tuna fishing, aircraft overflights and noise pollution. The sanctuary serves as a major feeding ground for seven species of endangered, threatened and protected whales and smaller cetaceans. The sanctuary is also a high use area for commercial and recreational vessel traffic and, consequently, a high-risk area for marine mammal disturbance by human-induced activities within and around the sanctuary.

MARINE MAMMAL VESSEL STRIKE ACTION PLAN (MMVS AP)

The MMVS AP includes recommendations to reduce the risk of collision between vessels and marine mammals that cause injury or mortality to the animals, harm to operators and damage to vessels. Ship strikes represent one of the two major threats that are likely to prevent the recovery of critically endangered North Atlantic right whales and endangered humpback whales. Efforts in the U.S. have attempted to slow vessel speeds and to create an 'early warning system' to inform mariners of locations of right whales in and near shipping channels. Despite efforts to date, vessel strikes continue to kill and injure right whales at a level that compromises the species' survival. Concern in recent years has intensified as marine traffic has come to involve larger and faster vessels.

MARINE MAMMAL ENTANGLEMENT ACTION PLAN (MME AP)

The MME AP includes recommendations to reduce the risk of entanglement of marine mammals in commercial fishing gear in the sanctuary. The concern extends to sea turtle and sea bird entanglement. The immediate effects of entanglement can include mortality, serious injury, or minor injury that when combined with other factors may have significant consequences. The long-term effects can include deteriorating health, behavioral disruptions, or decreased reproductive ability.

MARITIME HERITAGE MANAGEMENT ACTION PLAN (MHM AP)

The MHM AP includes recommendations for the inventory and assessment of historical resources, the management and protection of historical resources, and MH interpretation. The AP addresses sanctuary-specific historical resource assessment, management, protection, and MH outreach and education requirements; it fulfills the NOAA NMSP and the NOAA Maritime Heritage Program (MHP) strategic plans; and it complies with the President's Preserve America Executive Order (E.O.13287) tasking NOAA with preserving and protecting historic resources in the agency's care, including shipwrecks.

AFFECTED ENVIRONMENT

The existing management plan and environmental impact statement for the Sanctuary (NOAA 1993) contains a complete description of the sanctuary environment, including natural and cultural resources and human uses. Section I: Sanctuary Setting of the revised management plan updates the information provided in the 1993 plan with substantial new findings and information. These documents are incorporated by reference into this environmental assessment and briefly summarized below.

BOUNDARY

The sanctuary boundary encompasses 638 square nautical miles (approximately 2181 square kilometers) of ocean waters and the submerged lands thereunder, over and surrounding the submerged Stellwagen Bank and additional submerged features, at the mouth of Massachusetts Bay. The boundary encompasses the entirety of Stellwagen Bank; Tillies Bank to the northeast of Stellwagen Bank; and southern portions of Jeffreys Ledge to the north of Tillies Bank. Portions of the sanctuary are co-terminus with the state waters of the Commonwealth of Massachusetts. The entire sanctuary lies in federal waters (Figure 9). See Appendix R for a listing of boundary coordinates.

SANCTUARY RESOURCES

The sanctuary's complex seafloor topography influences current flow and site productivity. Site productivity is seasonal with the overturning and mixing of ocean waters from deeper strata producing a complex and rich system of overlapping midwater and benthic habitats. This heightened seasonal productivity supports 22 species of marine mammals, 34 species of seabirds, and over 80 fish species.

The sanctuary serves as a critical feeding ground for numerous whales and other marine mammals, several of which are endangered. It may also be an important nursery area for certain of these species. The sanctuary's multiple habitat types support a high diversity of fish species and an impressive assemblage of invertebrates. And, its rich forage base provides productive habitat for a wide variety of coastal and pelagic seabirds.

For a full description of sanctuary resources see Section II.

ENVIRONMENTAL CONSEQUENCES

NO-ACTION ALTERNATIVE

Taking no action would result in no change of the current management regime of the sanctuary. The 1993 management plan/environmental impact statement contains a full analysis of the environmental impacts of each alternative discussed therein. Taking no action would result in no additional socioeconomic impacts to those already associated with the operation of the sanctuary. The existing management plan/environmental impact statement contains a full analysis of the socioeconomic impacts of each alternative discussed therein.

ALTERNATIVE 1: PROPOSED ACTION

The revised management plan would make no boundary or regulatory changes; however, existing non-regulatory programs would be updated and enhanced, and new ones would be launched. NOAA expects this would have a positive environmental effect, by increasing protection of resources through interagency cooperation, by reaching more people and expanding the stewardship message of the sanctuary. The revised plan itself does not enable any of these activities listed in the action plans to take place; they could take place without the revision under current regulatory and statutory authority, as well as under the current management plan. The sanctuary management plan proposes to develop processes to consider future regulatory actions, which would include the appropriate NEPA analysis and formal public input at appropriate times in the future. The environmental impacts of each action plan are described below.

ADMINISTRATIVE CAPACITY AND INFRASTRUCTURE ACTION PLAN

The ADMIN AP would provide the framework for the organizational structure and functions of the sanctuary to address marine resource protection, research and monitoring, exploration, evaluation, and education and outreach. This administrative framework also would ensure that sanctuary management activities are coordinated between disciplines at the sanctuary and with activities administered at the NMSP level. Because of its administrative nature, this AP would not result in significant positive or negative environmental impacts. In addition, actions described in this AP would all meet the NOAA requirements for a categorical exclusion under NEPA¹, which is further indication of the absence of significant environmental impacts.

INTERAGENCY COOPERATION ACTION PLAN

The IC AP would clarify the roles, responsibilities, and relationships among associated agencies in order to strengthen resource protection, research and education/outreach within the sanctuary as well as improve interagency communication. Because of its consultative nature, this AP would not result in significant positive or negative environmental impacts. In addition, actions described in the AP would all

meet the NOAA requirements for a categorical exclusion under NEPA², which is further indication of the absence of significant environmental impacts.

PUBLIC OUTREACH AND EDUCATION ACTION PLAN

The IC AP would clarify the roles, responsibilities, and relationships among associated agencies in order to strengthen resource protection, research and education/outreach within the sanctuary as well as improve interagency communication. Because of its consultative nature, this AP would not result in significant positive or negative environmental impacts. In addition, actions described in the AP would all meet the NOAA requirements for a categorical exclusion under NEPA³, which is further indication of the absence of significant environmental impacts.

COMPATIBILITY DETERMINATION ACTION PLAN

The CD AP would describe how NOAA would determine the compatibility of human uses of sanctuary resources. This AP would establish a framework and process to develop a compatibility analysis. It would not make any determination regarding the appropriateness of any specific sanctuary use, current or potential. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

ECOSYSTEM-BASED SANCTUARY MANAGEMENT ACTION PLAN

The EBSM AP could result in beneficial impacts to the environment by addressing the need for comprehensive ecosystem protection; conservation of biological diversity; zoning in the sanctuary, including no-take zones; ecosystem-based management practices; and boundary modification. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

ECOSYSTEM ALTERATION ACTION PLAN

The EA AP could result in beneficial impacts to the environment by addressing ecosystem alteration(s) that result from human activities. In particular, this AP will focus on reducing impacts to the ecosystem from the laying of cables and pipelines, reducing habitat alteration by mobile fishing gear and reducing ecosystem impacts of biomass removal by fishing activity. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

1 NOAA Administrative Order 216-6 §6.03c.3(i)

2 NOAA Administrative Order 216-6 §6.03c.3(i)

3 NOAA Administrative Order 216-6 §6.03c.3(i)

WATER QUALITY ACTION PLAN

The WQ AP would describe how NOAA would address water quality within the sanctuary. Concerns of particular importance addressed by this AP are the development of a better understanding and assessment of water quality and circulation, and a reduction of pollutant discharges and waste streams that may be negatively impacting sanctuary resources. Actions described in this AP could result in beneficial impacts to the environment by potentially reducing harmful discharges in the sanctuary. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

MARINE MAMMAL BEHAVIORAL DISTURBANCE ACTION PLAN

The MMBD AP would describe how NOAA would address the potential harassment, including behavioral disturbance, of marine mammals resulting from the following activities: whale watching, fishing, aircraft overflights, and noise generation. Actions described in this AP could result in beneficial impacts to the environment by minimizing the incidence of behavioral disturbance to the marine mammals that frequent the waters of the sanctuary. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate the potential impacts in a meaningful way. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

MARINE MAMMAL VESSEL STRIKE ACTION PLAN

The MMVS AP would describe actions NOAA would take to minimize collisions between marine mammals and vessels, which can cause injury or mortality to marine mammals and humans, and damage to vessels. Actions described in this AP could result in beneficial impacts to the environment by decreasing the occurrence of marine mammal vessel strikes in the sanctuary. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

MARINE MAMMAL ENTANGLEMENT ACTION PLAN

The MME AP would describe actions NOAA would take to minimize the entanglement of marine mammals in commercial fishing gear. Actions described in this AP could result in beneficial impacts to the environment by decreasing the occurrence of marine mammal entanglements in the sanctuary. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate potential impacts. To consider potential environmental impacts of this AP would be purely

speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts

MARITIME HERITAGE MANAGEMENT ACTION PLAN

The MHM AP would address three primary issues relating to the sanctuary's MHR: the need for inventory and assessment; the lack of a plan for management and protection; and the lack of interpretation. This AP describes actions NOAA would take to prevent threats to maritime heritage resources and, indirectly, to the surrounding area. All actions ensuing from this AP will undergo the appropriate NEPA analysis when NOAA has developed the proposal enough to evaluate the potential impacts in a meaningful way. To consider potential environmental impacts of this AP would be purely speculative. This AP would not, in and of itself, result in significant positive or negative environmental impacts.

CONCLUSION

The preferred alternative, if implemented, will not result in significant positive or negative environmental impacts. Therefore, it qualifies for a categorical exclusion from the requirement to conduct an environmental assessment or environmental impact statement.

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