EXECUTIVE SUMMARY

ES.1 Introduction and Purpose and Need

This Final Environmental Impact Statement (FEIS) is the fourth of four volumes that are the result of an extensive Joint Management Plan Review (JMPR) process at Cordell Bank National Marine Sanctuary (CBNMS), Gulf of the Farallones National Marine Sanctuary (GFNMS), and Monterey Bay National Marine Sanctuary (MBNMS), all of which are offshore of northern/central California. Volumes I, II, and III contain the Draft Management Plans (DMP) for each of the three sanctuaries. These DMPs include information about the sanctuaries' environment and resources, regulations and boundaries, staffing and administration, priority management issues, and actions proposed to address them over the next five years. Volume IV, this FEIS, is an evaluation of the potential environmental impacts of each Sanctuary's proposed regulatory actions (changes to Sanctuary regulations and designation documents) associated with the JMPR. The Proposed Actions and alternative actions are described in Chapter 2 of this FEIS. The National Oceanic and Atmospheric Administration (NOAA) is the lead agency for this project.

This FEIS has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (U.S.C.) § 4321 et seq.,) and its implementing regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508). This FEIS presents, to the decision makers and the public, information required to understand the potential environmental consequences of the Proposed Action and alternatives. The notice of intent (NOI) to prepare the DEIS is provided in Appendix A.

The FEIS incorporates changes made as a result of public and agency comments on the Draft EIS and information from the related Draft Supplemental EIS issued in March 2008. Appendix A includes the NOI for the Supplemental DEIS.

ES.1.1 Background

National Marine Sanctuaries Act and National Marine Sanctuary Program

The National Marine Sanctuaries Act, as amended (NMSA) (16 U.S.C. § 1431 et seq.), is the legislative mandate that governs the National Marine Sanctuary Program (NMSP)¹. Under the NMSA, the Secretary of Commerce (Secretary) is authorized to designate and manage areas of the marine environment as national marine sanctuaries. Such designation is based on attributes of special national significance, including conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, and aesthetic qualities. The primary objective of the NMSA is resource protection.

Resource protection for national marine sanctuaries is carried out by regulations under the NMSA, which are codified as 15 CFR Part 922, and through the issuance of permits, coordination with other local, state, and federal agencies, outreach, education, research, monitoring, and enforcement. The NMSP regulations include prohibitions on specific kinds of activities, descriptions of Sanctuary boundaries, and a permitting system to allow certain types of activities to be conducted within sanctuaries that would otherwise be prohibited. Each of the thirteen national marine sanctuaries has its own set of site-specific regulations within subparts F through R of 15 CFR Part 922. The regulations for CBNMS, GFNMS, and MBNMS are found at Subpart K, H, and M. Proposed changes to these regulations constitute the Proposed Action for this EIS.

Joint Management Plan Review Process

A Sanctuary management plan is a site-specific planning and management document. Each Sanctuary has an individual management plan that describes regulations and boundaries, outlines staffing and budget needs, presents management actions and performance measures, and guides development of future budgets and management activities. The 1992 congressional legislation that reauthorized the NMSA required that each National Marine Sanctuary engage in periodic management plan reviews to reevaluate site-specific goals and objectives, management techniques, and strategies (16 U.S.C. § 1434[e]). The purpose of this review process is to ensure that each site properly conserves and protects its natural and cultural resources.

The NMSP reviewed the management plans of CBNMS, GFNMS, and MBNMS at the same time through a joint process, termed the Joint Management Plan Review (JMPR). These sanctuaries are adjacent to one another, managed by the same program, and share many of the same resources and issues. In addition, all three sites share overlapping interest and user groups. It also has been more cost effective for the NMSP to review the three sites jointly rather than conducting three independent reviews.

The JMPR, initiated in 2001, involved four main phases: issue identification (through public scoping meetings), issue prioritization, development of action plans, and preparation of draft management plans, associated regulatory changes, and appropriate environmental impact documents. As a result of this process, numerous changes to management policies and regulations are proposed to reflect the updated goals, objectives, strategies, and actions. The revised management plans will guide the operation of the sanctuaries

¹ The National Marine Sanctuary Program was recently elevated to an "Office" level within NOAA's National Ocean Service (NOS). Therefore, the official name of the operating unit within NOAA that implements the National Marine Sanctuaries Act is the National Ocean Service Office of National Marine Sanctuaries. However, to minimize confusion that might be created by using different operating unit names between the draft and final environmental impact statements, we have chosen to use National Marine Sanctuary Program and its associated acronym NMSP in this document.

for the next five years, helping each Sanctuary set budget and project priorities for resource protection in preparation of its annual operating plan.

ES.1.2 Project Location

All three sanctuaries are located offshore of northern/central California. Figure ES-1 shows the regional location of the three sanctuaries, including the Sanctuary boundaries and surrounding area. The three sanctuaries cover the coastal area from Bodega Bay in Sonoma County southward to Cambria in San Luis Obispo County, excluding San Francisco Bay and the seaward areas adjacent to San Francisco and northern San Mateo Counties.

CBNMS is entirely offshore and shares its southern and eastern boundary with GFNMS. The eastern boundary of CBNMS is six miles from shore and the western boundary is the 1,000-fathom isobath on the edge of the continental slope. This area contains unique geological and oceanic features that create conditions that support extraordinarily diverse and abundant marine life.

GFNMS extends seaward from the mean high water mark or the seaward boundary of the Point Reyes National Seashore. Between Bodega Head and Point Reyes Headlands, the Sanctuary extends seaward to three nautical miles beyond territorial waters. The Sanctuary also includes the waters within 12 nautical miles of Noonday Rock and the mean high water mark on the Farallon Islands, and the waters between the islands and the mainland from Point Reyes Headlands to Rocky Point.

MBNMS is adjacent to and south of GFNMS. It stretches along the shoreline between the Marin Headlands and Cambria. MBNMS's western boundaries average a distance of 30 miles from shore.

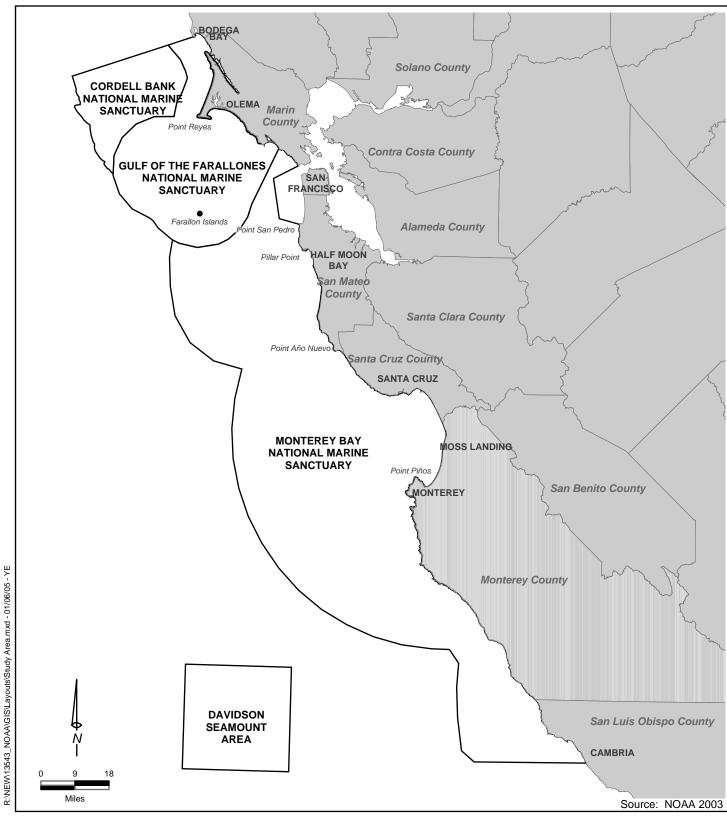
ES.1.3 Purpose and Need for Proposed Action

The purpose and need for the Proposed Action are based on both regulatory requirements for management plan review and the need to address current management issues and concerns within each Sanctuary.

Management Plan Update

No formal reviews or revisions of the three Sanctuary management plans or regulations have occurred since the time of original designation. CBNMS was designated in 1989, GFNMS was designated in 1981, and MBNMS was designated in 1992. Congress has amended the NMSA numerous times since it was established in 1972, strengthening and clarifying the conservation principles for the program. The amended NMSA calls on each national marine sanctuary to review its management plan at five-year intervals and to revise the management plan and regulations as necessary to fulfill the purposes and policies of the NMSA (16 U.S.C. § 1434[e]). Therefore, the primary purpose and need of the Proposed Action are to review and update the three Sanctuary management plans and regulations to comply with the NMSA.

Stemming from issues raised in the public scoping process, Sanctuary staff, Sanctuary advisory councils, public forum groups, and NMSP leadership contributed to the identification of priority resource management issue categories to be considered in the new management plans. The DMPs (volumes I, II, and III of this document) address the resource management issues through numerous action plans. The CBNMS DMP includes six action plans, the GFNMS DMP includes nine action plans, and the MBNMS DMP includes 22 action plans. In addition, there are five cross-cutting action plans that outline joint implementation strategies for the three sanctuaries. The action plans contain specific strategies and activities that identify how the



The JMPR study area covers over 5,000 square nautical miles of open ocean.

Joint Management Plan Review Study Area

Northern/Central California



sanctuaries will address the various marine management issues, including the necessary research, monitoring, education, outreach, policy, or enforcement actions to be implemented. Each action plan outlines how different strategies will be conducted, presents the costs that might be incurred for each strategy, provides a coordinated timeline for carrying out all strategies, and provides performance indicators as a measure of management effectiveness.

Proposed Changes to Sanctuary Regulations

For some resource management issues, it is necessary to modify existing sanctuary regulations to better manage and protect the resource and implement the action plans. In some circumstances, the sanctuaries need to regulate new activities occurring or that may occur within Sanctuary boundaries in order to protect and conserve resources. Therefore, specific regulatory changes proposed and analyzed in this FEIS address several of the priority resource management issues (see Chapter 2 for full description of proposed regulatory changes). Note that only a small portion of the action plans require regulatory changes, thus the regulatory changes are essentially a small subset of the overall strategies to address priority issues established in the DMPs. There is a broad suite of education, outreach, research, monitoring, and resource protection activities that have been identified during the management plan review and that do not involve regulatory changes.

The proposed regulatory changes presented in this FEIS, and the action plans in the DMPs are all needed to meet the goals and mission of the NMSP (15 CFR Part 922.2[b]).

Changes to Sanctuary Designation Documents

When contemplating changes to Sanctuary regulations, a proposed regulation change may necessitate corresponding changes to the designation document to establish authority for the new or modified regulation. In the case of the three sanctuaries' JMPR process, in addition to the nonregulatory strategies and activities developed to address priority issues, there are some specific boundary and regulatory changes under consideration that would require changes to the Sanctuary designation documents. These revisions are narrow in scope, corresponding directly to several proposed regulation changes.

ES.1.4 Scope of EIS

This FEIS is an evaluation of the environmental impacts associated with the proposed revised regulatory actions and alternatives to the proposed regulatory actions. The Proposed Action in this FEIS consists of revising existing CBNMS, GFNMS, and MBNMS regulations, adopting several new regulations, and revising the Sanctuary designation documents. Alternatives to the Proposed Action consist of variations in the proposed regulations. Specific regulatory changes contained within the Proposed Action and Alternative Regulatory Actions are described in detail in Chapter 2 and are analyzed in terms of impacts in Chapter 3.

Numerous proposed regulatory changes are minor technical or administrative modifications that do not result in changes to the environment. These types of changes are noted in the project description (Chapter 2) and in the introduction to the environmental analysis in Chapter 3. This FEIS focuses on the regulatory changes that could affect the environment.

Additionally, because Section 304(a)(4) of the NMSA requires that "terms of designation may be modified only by the same procedures by which the original designation is made," the proposed changes to a sanctuary's designation documents require a NEPA process and analysis within an EIS.

This FEIS is not an analysis of all of the activities in the proposed DMPs. The bulk of the three updated management plans is nonregulatory management strategies and actions that Sanctuary staff and their partners will use to address various issues identified during the management plan review process. Section 6.03c3(d) of NOAA Administrative Order 216-6 (48 Federal Register 14734) specifies that these and other administrative or routine program functions that have no potential for causing significant environmental impacts are eligible for a categorical exclusion from NEPA. The proposed actions within the DMPs individually and cumulatively will have no significant impact on the environment and, therefore, are categorically excluded from NEPA's requirement for conducting an environmental assessment or preparing an EIS. The non-regulatory actions identified in the DMPs can be implemented independently from the proposed regulatory actions and are not dependent on approval of the proposed regulatory changes. The proposed action plans of each Sanctuary are summarized in Appendix B and are described in detail in each Sanctuary's draft management plan (volumes I through III).

ES.1.5 Revisions to DEIS and Incorporation of Supplemental DEIS

This FEIS is composed of the original DEIS, with revisions made in response to comments on the proposed regulatory actions, on the DEIS analysis, and on the Supplemental DEIS. Some public and agency comments warranted corrections, revisions, or clarifications of the DEIS text. These revisions were made, where they were relevant to the impact analysis. The proposed actions (proposed changes to sanctuary regulations) were also slightly revised as a result of public and agency comments on the DEIS. These changes are reflected in Chapter 2 (Project Description), and the impact analysis was adjusted accordingly. Most of the changes to the proposed actions were technical, not requiring substantive revisions to the overall impact analysis. Changes in the Proposed Action are listed in Section 1.6 of the FEIS.

On May 11, 2007, NOAA received a request from the California State Water Resources Control Board to prohibit discharges from certain vessels in national marine sanctuaries off the shore of California. After reviewing public comments on the proposed regulations and further analyzing vessel discharge issues, NOAA decided to revise the CBNMS, GFNMS, and MBNMS proposed discharge regulations to prohibit discharges of all sewage from vessels 300 gross registered tons (GRT) or more with sufficient holding tank capacity to hold sewage while within the sanctuary. In the MBNMS, NOAA decided to limit the exception for graywater discharges to vessels less than 300 GRT and vessels 300 GRT or more without the capacity to hold graywater while within the MBNMS. The revised proposed regulations include prohibitions consistent with the request from the State of California for the CBNMS, GFNMS, and MBNMS.

NOAA issued a Supplemental DEIS in March 2008 to address these revised discharge prohibitions. Information from the Supplemental DEIS is incorporated into the impact analysis in Chapter 3 of this FEIS.

In addition to the above revisions, clarifications were provided to several issue discussions in Chapter 3.

ES.1.6 Decisions to be Made

Decisions related to the Proposed Action in this FEIS include the following:

- Approval of the updated Management Plans for each of the three sanctuaries;
- Approval of proposed changes to regulations for each of the three sanctuaries; and
- Approval of proposed changes to the designation documents for each of the three sanctuaries.

ES.1.7 Agency Coordination

No federal agencies were formally requested to be cooperating agencies, nor have any federal or state agencies requested this status. Nonetheless, NOAA is working closely with a variety of pertinent resource agencies on the DMPs, the proposed regulations, and the FEIS. NOAA has also sought the input of numerous federal, state, and local officials and agencies in preparing this FEIS. These officials and agencies are listed in Chapter 6.

ES.1.8 Public Involvement

Section 1.9 of this FEIS outlines public involvement in the management plan review process and the steps that have taken place in developing the Action Plans and proposed regulatory changes that will define how these sanctuaries will operate in the future.

Twenty scoping meetings were held between November 2001 and January 2002. A summary scoping report (February 25, 2002) was prepared, based on over 12,500 comments received on the JMPR and is provided in Appendix A.

The NMSP held a series of workshops with its Sanctuary Advisory Councils to help them identify priority issues. The results from the workshops were published in a report and posted on the project Web site for additional public comment and further deliberation at advisory council meetings. Based on input from the public and the advisory councils, the NMSP selected a final list of priority issues to be addressed in the JMPR. These were also posted on the Web site.

NMSP staff also developed a work plan that characterized the issues to be addressed, identified potential working group members, outlined the timelines for completion, and described the potential products to be created as part of either the working group or an internal team effort. Each advisory council reviewed site-specific and cross-cutting Action Plans developed by issue-specific working groups and provided their recommendations to NOAA. These Action Plans form the core foundation of the Management Plans.

The DEIS was widely circulated in order to solicit public comments on the document. A 90-day public review period was provided following publication of the DEIS. Numerous public hearings were held no sooner than 30 days after the Notice of Availability was published in the Federal Register and at least 15 days before the end of the comment period. In addition, a Supplemental DEIS was issued in March 2008 to address revisions to the proposed discharge prohibitions. A 30-day public review period was provided for the Supplemental DEIS. During the public comment period, oral and written comments were received from federal, state, and local agencies and officials, organizations, and interested individuals. A summary of these comments and the corresponding responses is included in this FEIS in Chapter 7, along with responses to comments on the Supplemental DEIS.

After this FEIS is issued, there will follow a 30-day mandatory waiting period, after which NOAA may issue its Record of Decision.

ES.2 Project Description

ES.2.1 Proposed Action Definition

This FEIS is focused on proposed regulatory changes that are being put forward as part of the JMPR. The Proposed Actions include changes to the regulations for CBNMS, GFNMS, and MBNMS, and

corresponding changes to each Sanctuary designation document. The Proposed Actions represent NOAA's preferred alternative, described in Section 2.2. Certain proposed changes are related to site-specific issues and regulations and are addressed by the individual Sanctuary. Other issues were determined to apply to all three sanctuaries and are addressed as cross-cutting measures. In evaluating alternatives for analysis in the FEIS, NOAA considered proposed regulatory changes appropriate for and consistent with achieving increased protection of the Sanctuary's natural and cultural resources. The proposed regulatory changes are intended to further protect and conserve natural resources, thereby minimizing impacts on the environment.

ES2.2 Proposed and Alternative Regulatory Changes

As part of the JMPR, regulations were reviewed to determine if modifications or clarifications were necessary to meet the original intent of a given regulation, to address new resource threats and changes in resource management issues and priorities, to eliminate inconsistencies between sites (if appropriate), and to make technical corrections. New regulations (or prohibitions) also are proposed by each of the three sanctuaries to provide added protection to Sanctuary resources and to address specific resource management issues. In several issues, the proposed change or new prohibition is the same for all three sanctuaries (cross-cutting regulations), but in some cases the proposed regulation may differ among the sanctuaries due to different conditions, circumstances, and needs. The reader should note that alternative regulatory actions have been developed for some, but not all, of the Proposed Actions. The proposed cross-cutting and sanctuary-specific regulations are described in detail in Section 2.2 and listed in Table 2-1.

ES.2.2.1 Proposed Cross-Cutting Regulations in the Sanctuaries

The proposed cross-cutting actions present relatively minor regulatory changes for each of the three sanctuaries to address water quality and associated biological resources issues. The proposed regulations would do the following:

- Prohibit the release of introduced species to the sanctuaries, except striped bass released during catch
 and release fishing activity, and species cultivated by existing mariculture activities in Tomales Bay
 (located in GFNMS) pursuant to a valid lease, permit, license or other authorization issued by the
 State of California;
- Prohibit the discharge of wastewater or any other material (other than clean vessel engine cooling water, vessel generator cooling water, and anchor wash) from cruise ships in the sanctuaries;
- Prohibit sewage discharges/deposits from within or into the CBNMS, GFNMS, and MBNMS from vessels of 300 GRT or more with sufficient sewage holding tank capacity while within the sanctuary;
- Clarify and narrow the existing wastewater discharge exceptions for food wastes and sewage. This
 eliminates exceptions for discharging wastes resulting from meals on board vessels and chumming
 for non-fishing purposes, and clarifies that, for vessels less than 300 GRT, discharges allowed from
 marine sanitation devices apply only to Type I and Type II Marine Sanitation Devices (MSDs) (no
 raw sewage dumping).

There is one alternative proposal, which would allow cruise ships to discharge treated wastewater under an approved discharge plan.

ES.2.2.2 Cordell Bank National Marine Sanctuary Regulations

The proposed regulations would do the following:

- Prohibit the disturbance of the seabed on Cordell Bank or the submerged lands on or within the line representing the 50-fathom isobath surrounding the Bank;
- Prohibit the disturbance of the seabed on the submerged lands outside the line representing the 50fathom isobath surrounding the Bank, with the exception of anchoring;
- Modify an existing regulation protecting benthic invertebrates and algae to define the area within 50-fathoms by specific coordinates; and;
- Prohibit "taking" or possessing wildlife within the Sanctuary.

Alternative versions of the seabed and benthic resources protection regulations would include more limitations on fishing in the Sanctuary, equivalent to the NOAA Fisheries restrictions on bottom-contact fishing gear on or within the 50-fathom isobath surrounding Cordell Bank.

ES.2.2.3 Gulf of the Farallones National Marine Sanctuary Regulations

The proposed regulations call for the following:

- Prohibit attracting white sharks anywhere in the Sanctuary or approaching them within a line approximating 2 nm around the Farallon Islands;
- Prohibit discharging from outside the Sanctuary anything that enters and injures a Sanctuary resource;
- Prohibit anchoring a vessel in a designated seagrass protection zone in Tomales Bay, except as necessary for mariculture operations conducted pursuant to a valid lease, permit or license.
- Prohibit deserting a vessel or leaving a deserted vessel with harmful matter aboard;
- Prohibit "taking" or possessing wildlife within the Sanctuary; and
- Permanently fix the shoreward boundary along the western side of Tomales Bay to the boundary along the Point Reyes National Seashore at the time of sanctuary designation in 1981.

An alternative would prohibit attracting or approaching white sharks anywhere within the Sanctuary.

ES.2.2.4 Monterey Bay National Marine Sanctuary Regulations

The proposed regulations would do the following:

- Add a square area of about 585 square nautical miles around Davidson Seamount to the Sanctuary in which most of the existing site regulations would apply;
- Correct the definition of motorized personal watercraft (MPWC) in order to prohibit their use outside the established MPWC zones in the Sanctuary;
- Expand the prohibition on attracting white sharks to federal waters of the Sanctuary;
- Prohibit deserting vessels or leaving harmful matter aboard a deserted vessel;
- Prohibit possessing, moving, or injuring historic resources in the Sanctuary, with exception of those resulting incidentally from kelp harvesting, aquaculture, or lawful fishing; and
- Define and codify three sites for the disposal of dredged material within the Sanctuary.

Alternative regulations would do the following:

- Create a circular shape for the Davidson Seamount addition to the Sanctuary;
- Prohibit fishing below 914 meters (3,000 feet) in the Davidson Seamount area under the authority of the NMSA; and
- Eliminate MPWC zones and prohibit all MPWC from MBNMS. The alternative would include revising the definition of MPWC to more adequately identify all MPWC of concern.

ES.2.3 No Action Alternative

Under the No Action alternative, no new regulations would be adopted, and no changes to the Sanctuary Designation Documents would be made. The No Action alternative could involve maintaining the current management plans and regulations for the three sanctuaries. All management practices currently occurring would continue, and the current regulations would remain in place. However, Action Plans and other policies and provisions of the proposed management plans not requiring regulatory or designation document changes could also be implemented.

ES.2.4 Proposed Changes to Sanctuary Designation Documents

In addition to and in conjunction with the revisions to the individual Sanctuary regulations mentioned above, there are some specific boundary and regulatory changes under consideration that would require changes to the Sanctuary designation documents. These revisions, discussed in detail in Section 2.5, are primarily focused on the descriptions of the areas each Sanctuary encompasses and the activities in each area that are subject to regulation. Such changes are necessary to establish the authority for certain regulatory activities that are being proposed in the above regulation changes.

ES.2.5 Technical Regulatory Changes

There are several proposed technical changes that would not result in adverse impacts and therefore are not subject to detailed environmental analysis in each issue area in Chapter 3. In all three sanctuaries technical corrections have been made to the textual boundary description and the list of defining coordinates in order to assure accuracy and consistency in the boundary delineation. Technical changes at CBNMS include clarifying that submerged lands are part of the Sanctuary, and making minor changes to the Sanctuary manager permitting requirements. At GFNMS, technical changes include clarifying that submerged lands are part of the Sanctuary, protecting cultural resources, administrative technical changes for vessel regulation, and modifying permit regulations. For MBNMS, technical changes include corrections to the Sanctuary boundaries, managing submerged lands, and protecting wildlife. All such changes are summarized in Section 2.6.

ES.3 Summary of Impacts

Tables ES-1, ES-2, and ES-3 provide a summary of the impacts identified for the Proposed Action, the Alternative Regulatory Actions, and the No Action alternative, respectively.

The Proposed Action would result in no significant adverse impacts; less than significant adverse impacts on commercial fisheries, land use and development, marine transportation, public access and recreation, and socioeconomics; and beneficial impacts on air quality, biological resources, ocean/geological resources, water quality, commercial fisheries, cultural resources, hazardous materials, land use and development, marine

transportation, public access and recreation, research and education, socioeconomics, and visual resources. No significant unavoidable impacts would occur as a result of the Proposed Action.

The Alternative Regulatory Actions would result in a significant, but mitigable impact on recreational resources from the prohibition of MPWCs throughout MBNMS; less than significant adverse impacts on commercial fisheries, marine transportation, public access and recreation, and socioeconomics; and beneficial impacts on air quality, biological resources, ocean/geology, water quality, commercial fisheries, cultural resources, hazardous materials, public access and recreation, research and education, socioeconomics, and visual resources.

The No Action alternative would result in less than significant impacts on biological resources and water quality. There would be no beneficial impacts from No Action.

NOAA issued a Supplemental DEIS in March 2008 to address revised discharge prohibitions for vessels 300 GRT or more. In summary, the impact analysis in the DEIS is not changed. These prohibitions would result in less than significant impacts on marine transportation. The proposed prohibition would result in slightly beneficial impacts on air quality and climate, biological resources, water quality, commercial fisheries, hazardous wastes and waste disposal, land use and development, marine transportation, public access and recreation, research and education, socioeconomic, demographic, and environmental justice.

Table ES-1 Impacts of Proposed Action

Location	Proposed Regulatory Change	Air Quality	Biological Resources	Ocean/ Geological	Water Quality	Fisheries	Cultural	Hazards	Land Use/ Development	Marine Transportation	Public Access/ Recreation	Research and Education	Socio- economics	Visual	Summary
CC	Cruise Ship Definition and Discharges	+	+	0	+	+	0	+	0	0	+	+	+	+	O +
CC	Discharge - MSDs and Graywater	+	+	0	+	⊙ +	0	+	0+	0	+	+	0	+	O+
CC	Discharge Regulations Clarifications	+	+	0	+	⊙ +	0	+	0+	0	+	+	O+	+	O+
CC	Introduced Species	0	+	0	+	<u>O</u> +	+	+	O+	0	+	+	<u>O</u> +	0	O+
СВ	Benthic Habitat Protection	0	+	+	0	+	+	0	0	0	+	0	0	0	0+
СВ	Seabed Protection	0	+	+	0	+	+	+	0	0	+	0	0	+	0+
CB	Wildlife Disturbance	0	+	0	0	0	0	0	0	0	+	0	+	0	0+
GF	Cultural Resources	0	0	0	0	0	+	0	0	0	+	0	+	0	0+
GF	Deserted Vessels	+	+	0	+	⊙ +	+	+	0	0	+	+	<u>O</u> +	+	⊙+
GF	Manager Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GF	Oil and Gas Clarification	0	+	+	+	0	0	+	0	0	+	0	0	0	0+
GF	Discharge From Outside the Sanctuary	0	+	0	+	+	0	+	⊙+	O+	0	+	0	0	O+
GF	No-Anchoring Seagrass Protection Zones	0	+	0	+	+	0	0	0	0	0	0	0	0	O+
GF	White Shark Attraction/ Approaching	0	+	0	0	0	0	0	0	0	0	0	0	0	O +
GF	Wildlife Disturbance	0	+	0	0	0	0	0	0	0	+	0	0	0	0+
MB	Boundary Changes – Davidson Seamount	+	+	+	+	O+	+	+	0	0	0	+	0	+	O+

Table ES-1 Impacts of Proposed Action (continued)

Location	Proposed Regulatory Change	Air Quality	Biological Resources	Ocean/ Geological	Water Quality	Fisheries	Cultural	Hazards	Land Use/ Development	Marine Transportation	Public Access/ Recreation	Research and Education	Socio- economics	Visual	Summary
MB	Cultural Resources	0		0	0	0	0	0	0	0	0	0	0	0	0+
MB	Deserted Vessels	+	+	0	+	<u>O</u> +	+	+	0	0	+	+	0+	+	O+
MB	Dredge Disposal – Santa Cruz and Monterey Harbors	0	0	0	0	0	+	0	0	0	0	0	0	0	0+
MB	Dredge Disposal – SF- 12	+	+	+	+	0	+	0	0	0	+	+	0	+	0+
MB	Motorized Personal Watercraft	+	+	0	+	0	0	+	0	0	<u>O</u> +	+	O+	+	O+
MB	White Shark Attraction and Approaching	0	+	0	0	0	0	0	0	0	0	0	0	0	0+
MB	Wildlife Disturbance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All	Cumulative Impacts	+	+	+	+	⊙+	+	+	0	0	+	+	+	+	0+
	Summary	+	+	+	+	<u>O</u> +	+	+	0+	0	<u>O</u> +	+	0+	+	

Notes:

O – No impact

+ – Beneficial impact

○ – Less than significant adverse impact
 ○ – Significant mitigable impact

● – Significant unavoidable impact

CC – Cross-Cutting Regulation

CB – Cordell Bank NMS

GF – Gulf of the Farallones NMS

MB – Monterey Bay NMS

Table ES-2 Impacts under Alternative Regulatory Actions

Location	Proposed Regulatory Change	Air Quality	Biological Resources	Ocean/ Geological	Water Quality	Fisheries	Cultural	Hazards	Land Use/ Development	Marine Transportation	Public Access/ Recreation	Research and Education	Socio- economics	Visual	Summary
CC	Cruise Ship Prohibition Alternative	+	+	0	+	+	0	+	0	0	+	+	+	+	0+
СВ	Benthic Habitat Protection Alternative	0	+	+	0	0+	+	0	0	0	+	0	0	0	O+
СВ	Seabed Protection Alternative	0	+	+	0	0+	+	+	0	0	+	0	0	+	O+
GF	White Shark Approach Prohibition	0	+	0	0	0	0	0	0	0	0	0	0	0	O+
MB	Davidson Seamount Circular Boundary Alternative	+	+	+	0	O+	+	+	0	0	0	0	0	+	O+
MB	Davidson Seamount NMSA Alternative	0	+	+	0	O+	+	+	0	0	0	0	0	0	0+
MB	Motorized Personal Watercraft Alternative	+	+	0	+	0	0	+	0	0	0+	+	0	+	⊘ +
All	Cumulative Impacts	+	+	+	+	0+	+	+	0	0	+	+	+	+	O+

Notes:

O – No impact

+ – Beneficial impact

○ – Less than significant adverse impact
 ○ – Significant mitigable impact

● – Significant unavoidable impact

CC – Cross-Cutting Regulation

CB – Cordell Bank NMS

GF – Gulf of the Farallones NMS

MB – Monterey Bay NMS

Table ES-3 Impacts under the No Action Alternative

Location	Air Quality	Biological Resources	Ocean/ Geological	Water Quality	Fisheries	Cultural	Hazards	Land Use/ Development	Marine Transportation	Public Access/ Recreation	Research and Education	Socio- economics	Visual	Summary
CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
СВ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MB	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All (Cumulative)	0	0	0	0	0	0	0	0	0	0	0	0	0	

Notes:

- O No impact
- + Beneficial impact
 O Less than significant adverse impact
- – Significant mitigable impact● Significant unavoidable impact

- CC Cross-Cutting Regulation
- CB Cordell Bank NMS
- GF Gulf of the Farallones NMS
- MB Monterey Bay NMS