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**APPENDIX B**

**SUMMARY OF PROPOSED ACTION PLANS**



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### SUMMARY OF PROPOSED ACTION PLANS FOR CBNMS, GFNMS AND MBNMS

The proposed action plans for each sanctuary are summarized below and are described in detail in each sanctuary's forthcoming final management plan (Volumes I through III). Action plans calling for new or modified sanctuary regulations are described in more detail in Section 2.2 of the Final EIS.

#### ***Cross-Cutting (Multi-Sanctuary) Action Plans***

Several cross-cutting plans would be implemented through coordination among each of the three sanctuaries. The following action plans will be included as appendices to the sanctuary management plans:

#### **Administrative and Operations**

This action plan will outline coordination and cooperation across all three sites and will identify methods to work and function as an integrated team.

#### **Community Outreach**

This action plan will build awareness about the existence and purpose of the three sanctuaries and why they are relevant to their communities. Implementation will identify how sanctuary administrators work with constituents and how groups can help accomplish sanctuary goals.

#### **Ecosystem Monitoring**

This action plan provides a framework to coordinate the various monitoring activities and to conduct a monitoring needs assessment. MBNMS will also coordinate with the other sites in expanding the Sanctuary Integrated Monitoring Network (SIMoN) to integrate the numerous ecosystem monitoring operations throughout the sanctuary.

#### **Maritime Heritage**

Implementing this action plan will establish a maritime heritage program at each of the three sites, will outline how the administrators of the West Coast marine heritage program will conduct a submerged-site inventory and assessment, will identify and address submerged hazards, and will provide for extensive education and outreach.

#### **Northern Management Area (NMA)**

This action plan outlines how this area will be managed, given the recent transfer of management and administrative functions from MBNMS to GFNMS in the NMA, an area of MBNMS extending from the Santa Cruz-San Mateo county line north to the adjacent GFNMS boundary.

#### ***Cordell Bank Action Plans***

The CBNMS proposed management plan includes five action plans addressing education and outreach, ecosystem protection/fishing impacts, partnerships with community groups, conservation science, and administration.

### **Education and Outreach**

The action plan for this broad category includes numerous strategies to increase public awareness of sanctuary resources by building community support and partnerships, developing a volunteer training program, using local and national media opportunities, conducting educational programs, and establishing an education working group.

### **Ecosystem Protection**

The goal of this proposed action plan is to better understand impacts from various activities on sanctuary resources and to promote ecosystem health. Action plan strategies are to accomplish the following:

- Establish ongoing regionwide sanctuary representation at the PFMC and CDFG meetings;
- Establish processes to track human use activities and evaluate impacts;
- Develop policy recommendations to address impacts from human use activities on sanctuary resources;
- Work with GFNMS and MBNMS to support actions prohibiting the commercial harvest of krill;
- Develop a socioeconomic profile of fishing activities and coastal communities;
- Assess impacts from acoustics on sanctuary resources; and
- Assess impacts from marine debris on sanctuary resources and conduct mitigation activities.

### **Partnerships with Community Groups**

This proposed action plan would develop partnerships with the research community to increase opportunities to fulfill the sanctuary's research goals, raise the profile of the Sanctuary Advisory Council as a link to the community, use media opportunities to promote research programs, and identify mechanisms to raise additional sources of revenue and in-kind services.

### **Conservation Science**

The proposed action plan includes numerous strategies to characterize and monitor sanctuary habitats and communities.

### **Administration**

The administration action plan includes provisions to address operations, staffing, partnerships, interagency coordination, protected resources enforcement, emergency response, regulations and permitting, new and emerging issues, boundary modifications, planning and evaluation, and performance evaluation.

### **Gulf of the Farallones Action Plans**

GFNMS proposes action plans related to water quality, wildlife disturbance, introduced species, ecosystem protection, vessel spills, education, conservation science, resource protection, and administration.

### Water Quality

*Estuarine and Nearshore Environments.* This proposed action plan would develop a program to coordinate partnerships in implementing a comprehensive water quality monitoring program to track impacts on the estuarine and nearshore environment, to address anthropogenic pathogens and pollutants in these areas from boating and marinas, to coordinate with agencies to address land-based discharges, and to evaluate vessel discharge effects on areas of special biological significance (ASBS) within the sanctuary.

*Open Coastal Environment.* Continuation of the long-term data collection efforts related to the Mussel Watch program would occur under this plan.

*Additional Areas:* Related water quality issues would be addressed through establishing a water quality working group of the Sanctuary Advisory Council, developing administrative capacity to support a coordinated water quality protection plan, developing an annotated bibliography of water quality research and monitoring programs to evaluate data and determine the overall water quality in the Sanctuary, and educating local decision makers on land-based water quality impacts.

### Wildlife Disturbance

Several strategies are proposed to address wildlife protection, including creating an accessible database to house information on wildlife disturbance, monitoring human activity impacts, coordinating with other agencies and programs to better understand and address impacts from vessels and low-flying aircraft, developing interpretive enforcement and law enforcement efforts to address human behavior impacts, developing wildlife viewing guidelines, and maximizing media venues to augment outreach efforts and increase public awareness of wildlife disturbance issues.

### Introduced Species

The proposed action plan for this issue includes measures to develop a native and introduced species inventory and database, to develop programs to detect and monitor introduced species, to establish a volunteer program for outreach monitoring, to develop partnerships with other agencies and organizations, to design and implement procedures to control introduced species, and to provide public outreach efforts to increase awareness of pathways through which introduced species may enter the Sanctuary.

### Ecosystem Protection

*Fishing Activities.* This action plan would develop a resource characterization of the Sanctuary to better understand habitats, species, and processes; to develop a socioeconomic profile of fishing activities and communities; to evaluate impacts from fishing activities on Sanctuary resources; to develop policy recommendations to address impacts; to increase public awareness about importance of maritime communities and reliance on healthy Sanctuary waters; to establish region-wide Sanctuary representation at the PFMC and CDFG meetings; and to work with CBNMS and MBNMS to ensure that impacts from krill harvesting are addressed.

*Ecosystem Protection.* General ecosystem issues would be addressed by developing a resource protection plan, creating a “Living Resource and Habitat Protection” working group, and developing a strategy to protect habitats that are known to be “special areas of concern.”

### Vessel Spills

This action plan proposes numerous strategies to improve and expand data to analyze vessel spill risks in the Sanctuary, to participate in regional forums regarding vessel traffic issues, to establish an on-going vessel spills working group, to revise the Sanctuary's emergency response plan, and to outreach to mariners.

### Education and Outreach

In addition to education and outreach programs identified for individual issue areas, the Sanctuary proposes a general plan with a suite of measures to educate students, teachers, and the public about Sanctuary resources.

### Conservation Science

Under this proposed action plan, sanctuary staff would maintain the Beach Watch Program to monitor marine life and human activities, would conduct research to guide permit conditions for white shark viewing, and every other year would host a research workshop for information exchange among researchers conducting research activities in and around GFNMS.

### Resource Protection

*New and Emerging Issues.* This action plan would set up procedures for addressing new issues that arise in the future. The plan calls for establishing a framework to identify, track, and address emerging issues on a timely basis and to develop a coordinate communication system among the National Marine Sanctuaries and other resource management agencies to stay informed about new and emerging issues.

*Regulatory Development.* The Sanctuary proposes to develop a formalized review program to consistently and continuously review and evaluate effectiveness of Sanctuary regulations.

*Permitting.* A permit program is in place for the Sanctuary. The action plan calls for developing a formalized permit program that would include continuing to review permits on a case-by-case basis, establishing a national Web-based permit application program, and conducting outreach on the permit process.

*Protected Resources Enforcement.* To increase resource protection through compliance with Sanctuary and other applicable regulations, under this proposed plan interpretive enforcement would be used and legal enforcement priorities would be developed.

*Emergency Response.* In order to be prepared to respond to an incident that may affect Sanctuary resources, sanctuary staff will regularly review and revise their emergency response plan.

*Damage Assessment and Restoration.* The Sanctuary proposes to develop a formal plan to respond to incidents that damage its resources and qualities, by coordinating with the Office of Response and Restoration and other NOAA offices to assess damage and implement ecosystem restoration projects, to monitor restoration efforts, and to take legal action, if appropriate.

*Boundary Modifications.* The proposed action plan includes strategies to provide a framework to re-examine, evaluate, and, as appropriate, redefine the Sanctuary's boundary based on new information that may be developed in the future.

*Collaborative Planning and Management.* To provide an opportunity for public input in identifying and resolving resource management issues, this plan would continue to culture partnerships and coordinate collaborative processes.

*Radioactive Waste Dump.* This proposed action plan addresses the area referred to as the Farallon Islands Radioactive Waste Dump. Under the plan, the condition of the dump area would be evaluated through a coordinated agency effort, and an outreach campaign to inform the public of potential risks would be developed.

### **Administration**

The administration action plan includes provisions to address operations, staffing, partnerships, interagency coordination, and planning and evaluation.

### **Monterey Bay Action Plans**

The proposed MBNMS management plan includes twenty-two action plans that will guide the Sanctuary for the next five years. Most of the action plans are grouped into four main marine management themes: coastal development, ecosystem protection, water quality, and wildlife disturbance. Two additional sections, partnerships, and opportunities as well as operations and administration, compose action plans and strategies that address how the Sanctuary will function and operate.

### **Coastal Development**

*Coastal Armoring:* The armoring of the coastline for protection of private and public structures continues to expand throughout the Sanctuary. This action plan proposes to address coastal armoring issues through development of a program to coordinate with the California Coastal Commission and other agencies to identify planning regions and guidelines and where possible, alternatives to armoring.

*Desalination:* Increased demand for water in various communities adjacent to the Sanctuary, together with advancements in technology, has made desalination an attractive source of fresh water. The Sanctuary proposes development of a regional program and policy regarding desalination facility locations. The action plan also includes development of facility siting guidelines and a modeling and monitoring program for desalination discharges.

*Harbors and Dredge Disposal:* The Sanctuary will continue to review the disposal of dredged material in approved locations at sea or along the shoreline. This action plan proposes several agency coordination improvements, and the development of review guidelines. It would also implement a sediment monitoring and reduction program, address fine grain material disposal at sea, and evaluate alternative disposal methods for the four harbors in the Sanctuary.

*Submerged Cables:* The installation, operation, and removal of submerged cable may disturb sensitive habitats and negatively impact areas of the seafloor. Implementation would provide administrative

guidelines for applications and define sensitive Sanctuary habitats that should be avoided. This would include a program to provide siting guidelines in a Geographic Information System (GIS) to identify environmental constraints.

### Ecosystem Protection

*Big Sur Coastal Ecosystem Plan:* The Sanctuary is proposing development of a program to coordinate and integrate management plans from seven coastal agencies with jurisdiction in the Big Sur area. Full implementation would integrate management plans into one comprehensive regional plan and identify potential methods and locations of disposal associated with landslides and maintenance of Highway 1 in Big Sur.

*Bottom Trawling Effects on Benthic Habitats:* The effects of bottom trawling on benthic habitats in areas of the Sanctuary are not completely known. Implementation of this action plan would include development of a program to examine where trawling occurs and its impacts to sanctuary resources, and if necessary, to present potential protective measures to the National Marine Fisheries Service, the Pacific Fishery Management Council, and the California Department of Fish and Game.

*Davidson Seamount:* The Davidson Seamount is a pristine undersea volcano that is proposed for inclusion in the Sanctuary as part of the Jmpr. Inclusion of the Davidson Seamount would provide additional protection of the seamount, additional regulations, and a new management zone. Implementation of the action plan would initiate monitoring, research, and education activities focused on the Davidson Seamount increasing the public's knowledge of seamounts, and the variety of deep sea flora and fauna inhabiting the area.

*Emerging Issues:* This action plan provides a framework for staff to evaluate and adequately address emerging resource issues in a timely and responsible manner. The strategies outline a process to provide adequate staffing and operations.

*Introduced Species:* The introduction of non-native species can destroy natural biological communities and potentially harm commercial activities. The Sanctuary would develop a program to prevent introduction, collect baseline information, and develop a research and monitoring program. The action plan also includes development of a detection and response program for potential introductions or releases of non-native species.

*Sanctuary Integrated Monitoring Network (SIMoN):* Comprehensive, long-term monitoring is a fundamental element of resource management and conservation. The MBNMS, in collaboration with the regional science and management community, designed SIMoN to identify and track natural and human induced changes to the MBNMS. This action plan outlines how SIMoN integrates and interprets results of individual efforts in a large ecosystem-wide context and continuously updates and disseminates data summaries to facilitate communication between researchers, managers, educators, and the public. Timely and pertinent information is provided to all parties through tools such as a SIMoN web site, an annual symposium, and a series of technical and public reports.

*Marine Protected Areas (MPAs):* The action plan outlines how the Sanctuary will examine the utility of additional marine protected areas (MPAs) in maintaining the integrity of biological communities. It also outlines a program for identifying various types of ocean uses, integrated management, MPA



design criteria, socioeconomic impact analysis, MPA enforcement, outreach, and monitoring. This plan also provides a framework to identify how the Sanctuary will coordinate with the National Marine Fisheries Service, Pacific Fishery Management Council, and California Department of Fish and Game.

### **Operations and Administration**

*Operations and Administration:* This action plan provides the administrative guidelines for programs such as operational planning, staffing and infrastructure needs, volunteer programs, administrative initiatives, interagency coordination, and reviewing requests to conduct prohibited activities that may injure Sanctuary resources. Other activities consist of streamlining the permit review process, including improved outreach and interagency coordination; improved permit compliance; and monitoring and enforcement of permit conditions. Part of this action plan also addresses operation of the Sanctuary Advisory Council and the standing working groups (Conservation Working Group, Sanctuary Education Panel, Business and Tourism Advisory Panel, and Research Activities Panel).

*Performance Evaluation:* MBNMS will effectively and efficiently incorporate performance measurement into the regular cycle of management. This action plan details how strategy and related activities are to be measured for effectiveness during implementation by staff. This action plan also details the process by which the Sanctuary will measure its management performance over time and report its progress in meeting goals and objectives.

### **Partnerships and Opportunities**

*Fishing-Related Education and Research:* The Sanctuary will work with the fishing community to develop education programs; enhance stakeholder communication; promote understanding of sustainable fisheries; increase involvement in education and research; promote fishery, socioeconomic, cultural, and historical data collection and distribution; and help educate the public on the role of healthy ecosystems and fish stocks.

*Interpretive Facilities:* This action plan describes the need for and location of interpretive facilities including visitor centers, kiosks, virtual experiences, and signage at various locations along the coastline. Implementation would include development of a Sanctuary Exploration Center in Santa Cruz and provide for a key education and outreach tool component for all of the priority action plans.

*Ocean Literacy and Constituent Building:* This action plan addresses the need to cultivate an informed, involved constituency who cares about restoring, protecting and conserving our precious ocean resources. The Sanctuary will implement an integrated outreach program to pull together specific outreach and education activities outlined in other sections of this management plan and coordinate their execution, further developing the Sanctuary's relationships with its constituencies.

### **Water Quality**

*Beach Closures and Microbial Contamination:* In the last ten years, beach closures and warnings due to microbial contamination have become more common. This action plan provides a program to identify sources of contamination; research pathogen sources; increase monitoring, education, and enforcement; expand notification and emergency response; and develop a database and a source control program to reduce beach closures and postings due to microbial contamination.

*Cruise Ship Discharges:* Cruise ships can carry upwards of 3,000 people, and the discharge of waste may harm the water quality and resources. The Sanctuary proposes to prohibit discharges from cruise ships and conduct outreach and coordination with the cruise ship industry, providing it with information about the MBNMS. The MBNMS would also monitor and enforce potential cruise ship discharges.

*Water Quality Protection Program Implementation:* Pollutants running off the land often lower the quality of the water as both a habitat and resource for recreational and commercial use. The Sanctuary has four existing action plans that are in place to prevent pollution and facilitate water quality improvements as part of the Water Quality Protection Program: Urban Runoff, Regional Monitoring, Marinas and Boating, and Agriculture and Rural Lands. This action plan integrates the four existing plans into the Sanctuary management plan and provides for full implementation to address pollutants and their sources.

### **Wildlife Disturbance**

*Marine Mammal, Seabird, and Turtle Disturbance:* Various activities occurring on the water, in the air, or on land have the potential to harm the sensitive wildlife inhabiting the Sanctuary. Through increased monitoring, education, outreach, and enforcement, the Sanctuary will address disturbance to marine mammals, birds, and turtles from vessels, aircraft, shore-based activities, marine debris, commercial harvest, and acoustic disturbance.

*Motorized Personal Watercraft (MPWC):* MPWC use has increased in the Sanctuary with the development of larger and more powerful vehicles for use in the marine environment. The MBNMS is proposing an updated definition of MPWC in order to address the original intent of the existing MBNMS regulation, which was to restrict them to four zones outside of the surf area. This action plan includes education and enforcement procedures and exploration of the need for certain exceptions.

*Tidepool Protection:* The MBNMS will evaluate and prioritize high-visitation tidepool areas and address possible impacts associated with potentially excessive use. The action plan includes education and enforcement programs, and implementation would include the development of guidelines for tidepool access and enjoyment.