

# Executive Summary

## Background

Monterey Bay National Marine Sanctuary (MBNMS) is one of 14 national marine sanctuaries administered by NOAA. MBNMS extends from Marin County to Cambria, encompassing approximately 276 miles (444 kilometers) of shoreline and 6,094 square miles (15,783 square kilometers) of ocean extending an average distance of 25 miles (40 kilometers) from shore (see Figure ES-1). At its deepest point, MBNMS reaches 12,743 feet (3,884 meters). The sanctuary is home to numerous species of mammals, seabirds, fishes, invertebrates, and algae in a productive coastal environment. Within its boundary is a rich array of habitats, from rugged rocky shores and lush kelp forests to one of the largest underwater canyons in North America and an extinct underwater volcano. These habitats abound with life, from tiny microscopic plants to enormous blue whales. Approximately 8 million people live within 50 miles (80 kilometers) of its shoreline, many of whom rely on sanctuary resources for pleasure or work. With its great diversity of habitats and life, and its importance to the human communities along its shoreline, MBNMS is a national focus for recreation, research, and education.

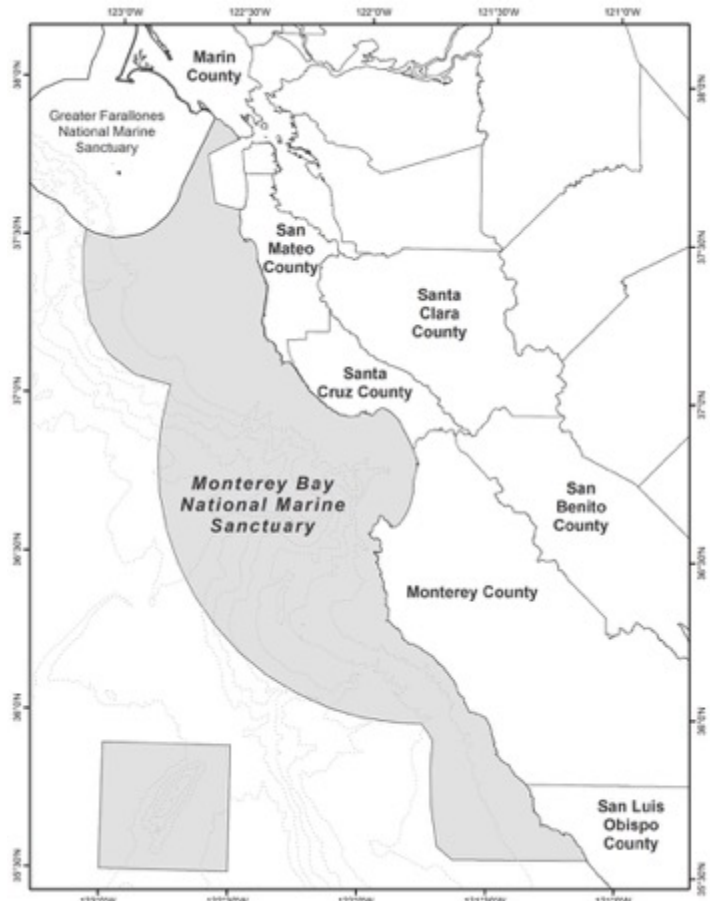


Figure ES-1. MBNMS boundaries and adjacent coastal counties. Image: NOAA

## Management Plan Review

This management plan for MBNMS was developed as part of a process known as a management plan review. NOAA's Office of National Marine Sanctuaries (ONMS) reviewed MBNMS's 2008 management plan using a community-based process promoting numerous opportunities for public input. The review process examined current issues and threats to sanctuary resources and the extent to which the 2008 management plan provided adequate resource protections.

## ***The Management Plan***

This management plan revises the 2008 management plan, and focuses on how best to understand and protect the sanctuary's resources. The management plan includes 14 action plans grouped into issue- and program-based themes guiding MBNMS staff over the coming decade.

### ***Issue-Based Action Plans***

*Climate Change:* Sanctuary waters, as well as surrounding coastal areas and communities, are experiencing climate-related stressors (e.g., sea level rise, extreme storms), and these are expected to worsen over the coming decades. This action plan proposes to address coastal resilience, climate adaptation, and ocean acidification through capacity building and collaborative partnerships.

*Coastal Erosion and Sediment Management:* The natural shoreline of the sanctuary has been altered by human activities such as coastal armoring, mining operations, coastal construction, and altering streams and rivers. This plan would reduce human-caused coastal erosion through collaboration with local, state, and federal agencies to address and restore sediment balance in nearshore habitats throughout the sanctuary.

*Davidson Seamount Management Zone (DSMZ) and Sur Ridge:* New scientific information is needed to support resource protection decisions and education related to seamount and deep ridge areas. This plan proposes to increase our understanding of the DSMZ and Sur Ridge through characterization and ecological process studies, and the development of education programs on these unique features of the sanctuary.

*Emerging Issues:* Although a wide range of current issues have been outlined in depth in the existing management plan, emerging issues are not addressed similarly. This action plan focuses on developing a framework to identify and address future resource protection issues.

*Introduced Species:* Introduced species are an increasingly common global threat, and the rate of invasion of introduced species continues to accelerate. The strategies outline efforts to prevent the introduction, spread, and establishment of introduced species, and to control and eradicate populations of introduced species already established in the sanctuary.

*Marine Debris:* We need a better understanding of types of marine debris impacting MBNMS resources and how those impacts can be reduced or eliminated. This plan will assess and seek to reduce the amount of marine debris in or entering the sanctuary.

*Water Quality:* The sanctuary's proximity to the coastline makes it vulnerable to pollution originating from [watershed areas](#) draining into it, including contaminants such as sediments, nutrients, bacteria, pesticides, metals, and detergents. Implementation of this action plan will raise awareness of water quality issues and improve the quality of water entering the sanctuary.

*Wildlife Disturbance:* Disturbance of marine wildlife is increasing in frequency and severity as an expanding urbanized society and increased tourism interacts with wild animals. This plan aims to maintain and improve protection of sanctuary wildlife by evaluating and remediating adverse impacts from human activities.

## **Program-Based Action Plans**

*Education, Outreach, and Communication:* The NMSA envisions sanctuary management conducting extensive education, outreach, and communication strategies to engage public constituents and fulfill the MBNMS mission. This plan seeks to increase protection and appreciation of sanctuary resources by building greater public understanding, engagement, and stewardship throughout our highly diverse coastal communities.

*Marine Spatial Planning:* ONMS addresses a wide range of resource protection and management issues, varying in complexity and geographic scope. This action plan focuses on issues requiring marine spatial planning approaches and strategies, seeking to balance uses and protections of sanctuary resources, and improve scientific understanding.

*Maritime Heritage:* Constantly changing human uses define the maritime heritage of the central coast and interpret our evolving relationship with sanctuary resources. Activities include inventorying, locating, surveying, and monitoring historic shipwrecks and those posing potential threats to sanctuary resources; and characterizing and protecting maritime heritage resources.

*Operations and Administration:* This action plan addresses the necessary operational and administrative activities required for implementing an effective program, including staffing, infrastructure needs, and operational improvements.

*Research and Monitoring:* One of the stated purposes of the National Marine Sanctuaries Act is “to support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of areas designated as sanctuaries.” This action plan proposes to assess the condition of and changes in species, habitats, and ecosystem processes, to better characterize and understand the sanctuary ecosystem, and support ecosystem-based management, resource protection, and education.

*Resource Protection:* The resource protection program identifies and reduces impacts to wildlife and other sanctuary resources through collaborative management with local stakeholders. The resource protection plan seeks to protect and restore the biological, historical, and cultural resources in the sanctuary.

## **Prioritized Action Plan Implementation**

The action plans and strategies in this management plan comprise a body of work, which if fully implemented, requires resources well beyond what is currently available to MBNMS and ONMS. Implementation of some action plans depend on a variety of funding scenarios such as grant awards, funding priorities of outside parties, or reliance on partner participation, in addition to federal appropriations. The implementation of various action plans in the management plan may therefore occur at different stages based on urgency, benefit to sanctuary resources, and resource availability.