

## Section 1: Introduction



A black oystercatcher (*Haematopus bachmani*) perches on a rock at Moonstone Beach, Cambria, California. Photo: Robert Schwemmer/NOAA

- Background
- Monterey Bay National Marine Sanctuary Regulations and Marine Zones
- Monterey Bay National Marine Sanctuary Management
- Monterey Bay National Marine Sanctuary Setting
- Monterey Bay National Marine Sanctuary Condition Report
- The Management Plan Review Process

## Background

### Overview of the Office of National Marine Sanctuaries

The Office of National Marine Sanctuaries (ONMS) resides within the Department of Commerce, managed by the National Ocean Service (NOS) in the National Oceanic and Atmospheric Administration (NOAA). ONMS manages a national system of marine protected areas (MPAs). Since 1972, ONMS has worked cooperatively with the public and federal, state, tribal, and local officials to promote conservation while allowing compatible commercial and recreational activities. Increasing public awareness and protection of our marine environment and the natural and cultural resources within it are accomplished through site management, scientific research, monitoring, exploration, and educational programs.

The National Marine Sanctuary System consists of 15 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. The system encompasses more than 620,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys and from Lake Huron to American Samoa (Figure I-1). ONMS has recently designated two new sanctuaries: Mallow's Bay-Potomac River National Marine Sanctuary and Wisconsin Shipwreck Coast National Marine Sanctuary. ONMS provides oversight and coordination among the National Marine Sanctuary System by setting priorities for addressing resource management issues and directing program and policy development. ONMS is responsible for ensuring each sanctuary has an updated management plan consistent with the NMSA. The plans include management strategies to address current and emerging threats.

## NATIONAL MARINE SANCTUARY SYSTEM



Figure I-1. The National Marine Sanctuary System is made up of 15 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. Image: NOAA

### The National Marine Sanctuaries Act

The National Marine Sanctuaries Act (NMSA), as amended (16 U.S.C. §1431 *et seq.*), is the law creating and guiding management of the National Marine Sanctuary System. The NMSA

authorizes the Secretary of Commerce to designate areas of the marine environment or Great Lakes with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or aesthetic qualities as national marine sanctuaries. The primary objective of the NMSA is to protect sanctuary resources. The NMSA also directs facilitation of all public and private uses of those resources compatible with the primary objective of resource protection.

A complete version of the NMSA is available from the [ONMS website](#).

## Monterey Bay National Marine Sanctuary

NOAA established MBNMS for the purposes of resource protection, research, education, and public use. Designated in 1992, MBNMS stretches from Rocky Point in Marin County to Cambria, encompassing a shoreline length of 276 miles (444 kilometers) and 6,094 square miles (15,783 square kilometers) of ocean, extending an average distance of 25 miles (40 kilometers) from shore. At the deepest point, the waters within MBNMS reach down 12,743 feet (3,884 meters).

The natural resources of MBNMS include one of our nation's largest contiguous kelp forests, an underwater extinct volcano, one of North America's largest underwater canyons, and the closest-to-shore deep ocean environment off the continental United States. MBNMS is home to some of the most diverse and productive marine ecosystems in the world, including a vast diversity of marine life, with 36 species of marine mammals (MBNMS is one of the best places in the world to view elephant seals, sea otters, and a huge variety of whales and dolphins), 180 species of seabirds, 525 species of fish, four species of sea turtles, 31 phyla of invertebrates, and more than 450 species of marine algae. This highly productive and biodiverse area is often referred to as the "Serengeti of the Sea." MBNMS is also home to 30 species receiving special protection under the Endangered Species Act (ESA). Federally-listed threatened or endangered species

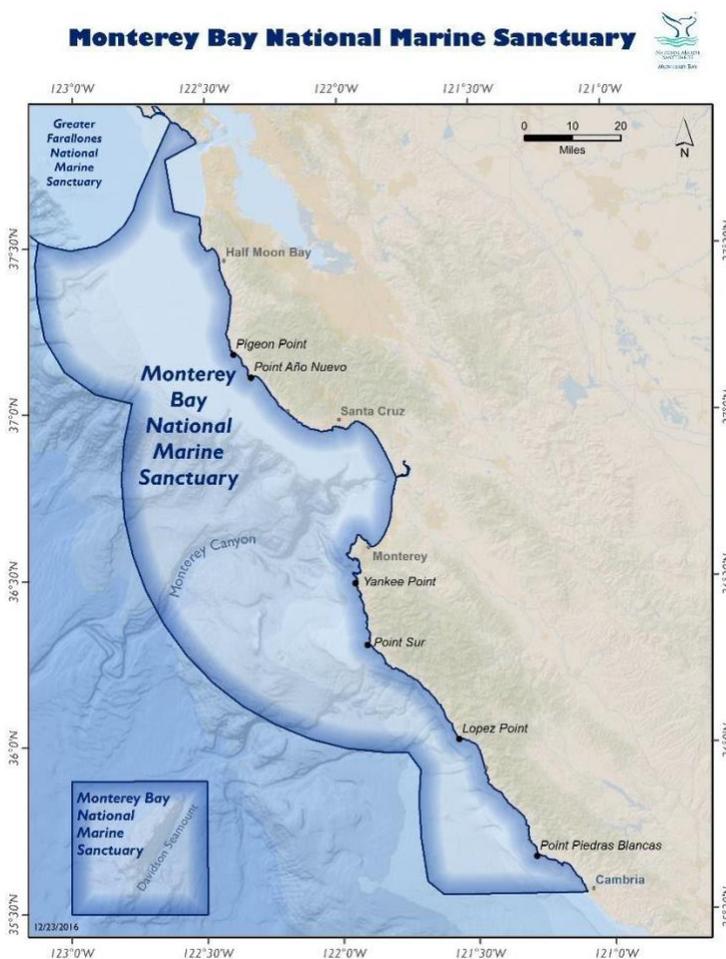


Figure I-2. Monterey Bay National Marine Sanctuary boundary. Image: NOAA

include seven species of large whales, the southern sea otter, Steller sea lion, Guadalupe fur seal, California condor, California clapper rail, western snowy plover, marbled murrelet, four species of sea turtles, six species of salmon or steelhead, two species of sturgeon, eulachon (a smelt), and the tidewater goby. MBNMS is also a meeting place for the geographic ranges of many species. MBNMS lies at the southern end of the range for some species, like the Steller sea lion, which occur from Central California north to Alaska and Japan. The sanctuary lies at the northern end of the range for others, like giant kelp, occurring from San Francisco to Baja California, Mexico.

[Early human use of resources](#) is evidenced through an abundance of artifacts in MBNMS, and cultural resources in MBNMS are protected by sanctuary regulations. Humans settled in the vicinity of MBNMS at least 10,000 years ago. At the time of Spanish arrival in the early 1700's, about 40 Native American tribes populated coastal areas from San Francisco Bay to Point Sur consuming acorns, terrestrial plants and animals, intertidal invertebrates, fish, and marine mammals. The Spanish called the Indigenous people in the area “Costanoans,” meaning “coast dwellers.” Today they are known as the Ohlone, meaning “people of the west.” Shell middens left by the Costanoans have been found at most substantial watersheds and shorelines between Morro Bay and Monterey Bay.

Archaeologists also estimate 450 reported modern-day historical vessel (shipwreck or aircraft) losses within the waters of MBNMS and approximately 718 historic sites (former village sites, customs houses, and submerged cultural sites) within the sanctuary and adjacent coastal zone.

A variety of potential resource threats and opportunities exist within MBNMS due to the sensitivity of habitats and species in the region, the long stretch of adjacent populated coastline with several urban centers, and the multiple uses of the marine environment. ONMS research and monitoring programs evaluate the status and health of marine species, habitats, and ecosystems, provide critical information to resource managers, and coordinate activities with the array of world-class research institutions in the region. Resource protection activities use a variety of means to reduce or prevent detrimental human impacts, including collaborative planning and management efforts, regulations and permits, emergency response activities, and enforcement. Responsible recreation and tourism activities are opportunities for equitable experiences that are aligned with resource protection. Education and outreach are critical elements in enhancing understanding and stewardship of this national treasure, using tools ranging from visitor centers and public events, to interactive teacher workshops and extensive written materials.

## ***Monterey Bay National Marine Sanctuary Regulations and Marine Zones***

Activities compatible with resource protection (e.g., fishing, boating, diving, research, and education) may be conducted in MBNMS unless prohibited or otherwise regulated. All activities are subject to liability for destruction of, loss of, or injury to sanctuary resources under Section 312 of the NMSA, as amended.

## Scope of Regulations

The terms of designation of MBNMS identify the following activities as subject to regulation, including prohibition, to the extent necessary and reasonable to ensure the protection and management of sanctuary resources and qualities. Complete text of the MBNMS terms of designation can be found in published and online versions of the Federal Register, 73 FR 70488.

- A. Exploring for, developing, or producing oil, gas, or minerals (e.g., clay, stone, sand, metalliferous ores, gravel, non-metalliferous ores, or any other solid material or other matter of commercial value) within the sanctuary;
- B. Discharging or depositing, from within or into the sanctuary, any material or other matter, except dredged material deposited at disposal sites authorized prior to the effective date of sanctuary designation, as described in Appendix C to the regulations, provided that the activity is pursuant to and complies with the terms and conditions of, a valid federal permit or approval existing on the effective date of sanctuary designation;
- C. Discharging or depositing, from beyond the boundary of the sanctuary, any material or other matter, except dredged material deposited at the authorized disposal sites described in Appendix D to the site regulations, provided that the activity is pursuant to and complies with the terms and conditions of, a valid federal permit or approval;
- D. Taking, removing, moving, catching, collecting, harvesting, feeding, injuring, destroying, or causing the loss of, or attempting to take, remove, move, catch, collect, harvest, feed, injure, destroy, or cause the loss of, a marine mammal, sea turtle, bird, historical resource or other sanctuary resource;
- E. Drilling into, dredging, or otherwise altering the submerged lands of the sanctuary; or constructing, placing, or abandoning any structure, material, or other matter on or in the submerged lands of the sanctuary;
- F. Possessing within the sanctuary a sanctuary resource or any other resource, regardless of where taken, removed, moved, caught, collected, or harvested, that, if it had been found within the sanctuary, would be a sanctuary resource; possessing, moving, or injuring any sanctuary historical resource;
- G. Flying a motorized aircraft above the sanctuary;
- H. Operating a vessel (i.e., water craft of any description) within the sanctuary;
- I. Aquaculture or kelp harvesting within the sanctuary;
- J. Interfering with, obstructing, delaying, or preventing an investigation, search, seizure, or disposition of seized property in connection with enforcement of the act or any regulation or permit issued under the act; and
- K. Introducing or otherwise releasing from within or into the sanctuary an introduced species.

Where necessary to prevent or minimize the destruction of, loss of, or injury to a sanctuary resource or quality, or minimize the imminent risk of such destruction, loss, or injury, any and all activities, including those not listed above, may be subject to immediate temporary regulation, including [prohibition](#).

## Marine Zones

Certain human activities can pose negative impacts to special habitats and key physical and biological resources within the sanctuary. As a result, federal, state, and local agencies have attempted to protect resources present within MBNMS by designating discrete areas (e.g., marine life protection areas, dredged material disposal sites) where human activities are controlled through special regulatory zoning and seasonal/spatial restrictions. The 6,094 square-mile sanctuary contains over 75 such marine zones which are designated by numerous agencies and may be overlapping. Approximately 82% of these zones encompass nearshore waters and are managed by NOAA, U.S. Department of Defense (DOD), CDFW, California Department of Parks and Recreation (CDPR), State and Regional Water Control Boards (SRWCB) and National Park Service (NPS). The remaining 18% of zones encompass offshore marine habitats and are managed by NOAA, U.S. Army Corps of Engineers (USACE), U.S. Coast Guard (USCG), DOD, and U.S. Environmental Protection Agency (EPA). While most special zones within MBNMS are restrictive in nature, some allow uses or activities otherwise prohibited (e.g., MPWC operations, dredge spoil disposal, and jade collection).

The following identify and describe the marine regulatory zones directly managed by NOAA or incorporated by reference within sanctuary regulations (see Figure I-3):

*Jade Collection Zone:* A 2-mile stretch of coastal waters along the Big Sur coast where traditional small-scale collection of loose jade is allowed within MBNMS below mean high water. Zone regulations allow small-scale collection to support local collectors, geologists, and artisans while protecting the mineral resources and benthic habitat of the sanctuary from systematic mining and exploitation.

*Dredged Material Disposal Zones (four zones):* Areas designated by USACE as disposal sites for dredged material free of harmful contaminants. Periodic seafloor dredging is necessary to maintain multiple channels and basins of the four small-craft harbors adjacent to the sanctuary. Without such dredging, marine sediment transport processes would fill channels and basins, effectively closing harbors to vessel traffic. Disposal of dredge spoils is highly monitored and regulated by the EPA, USACE, NOAA, and the state of California to prevent contaminated sediments from being discharged into the sanctuary.

*Restricted Overflight Zones (four zones):* Nearshore areas over which motorized aircraft are restricted from flying below 1,000 feet (305 meters) to protect sensitive marine wildlife from visual, physical, and audible disturbance. These zones often encompass areas with high densities of marine mammals or seabirds, including key reproductive, foraging, and resting sites.

*Motorized Personal Watercraft Zones (five zones):* Areas designated for the use of MPWC. These zones allow this watersport recreation while protecting nearshore marine life from disturbance or other injury and minimizing conflicts with other users, such as surfers and kayakers.

*Davidson Seamount Management Zone:* The DSMZ is a special zone prohibiting take or disturbance of any sanctuary resources below a depth of 3,000 feet (914 meters) of seawater. Though sanctuary regulations do not apply to fishery resources at the DSMZ, NMFS regulations prohibit fishing below 3,000 feet (914 meters) at the seamount. Thus, the two regulatory

authorities establish a comprehensive prohibition against disturbance of resources on and around the underwater dormant volcano. The DSMZ was designated to protect the fragile and pristine seamount environment including rare corals and sponge communities. The DSMZ is an internationally significant study site for improving scientific understanding of deep-sea ecological communities.

*Vessel Traffic Zones:* Congress directed the Secretary of Commerce and the Secretary of Transportation to evaluate potential threats from spills of oil or other hazardous materials to sanctuary resources and possible ways to reduce those threats. USCG and NOAA established traffic separation schemes to maximize protection of sanctuary resources while allowing for safe, efficient, and environmentally sound transportation. Distances offshore of Point Sur and Pigeon Point strengthen informal patterns of current practices, and where necessary, shift certain types of vessels further offshore to reduce the level of threats to resources. Implementation is through recommended tracks approved by the United Nations' International Maritime Organization (IMO), an organization of the world's key shipping nations.

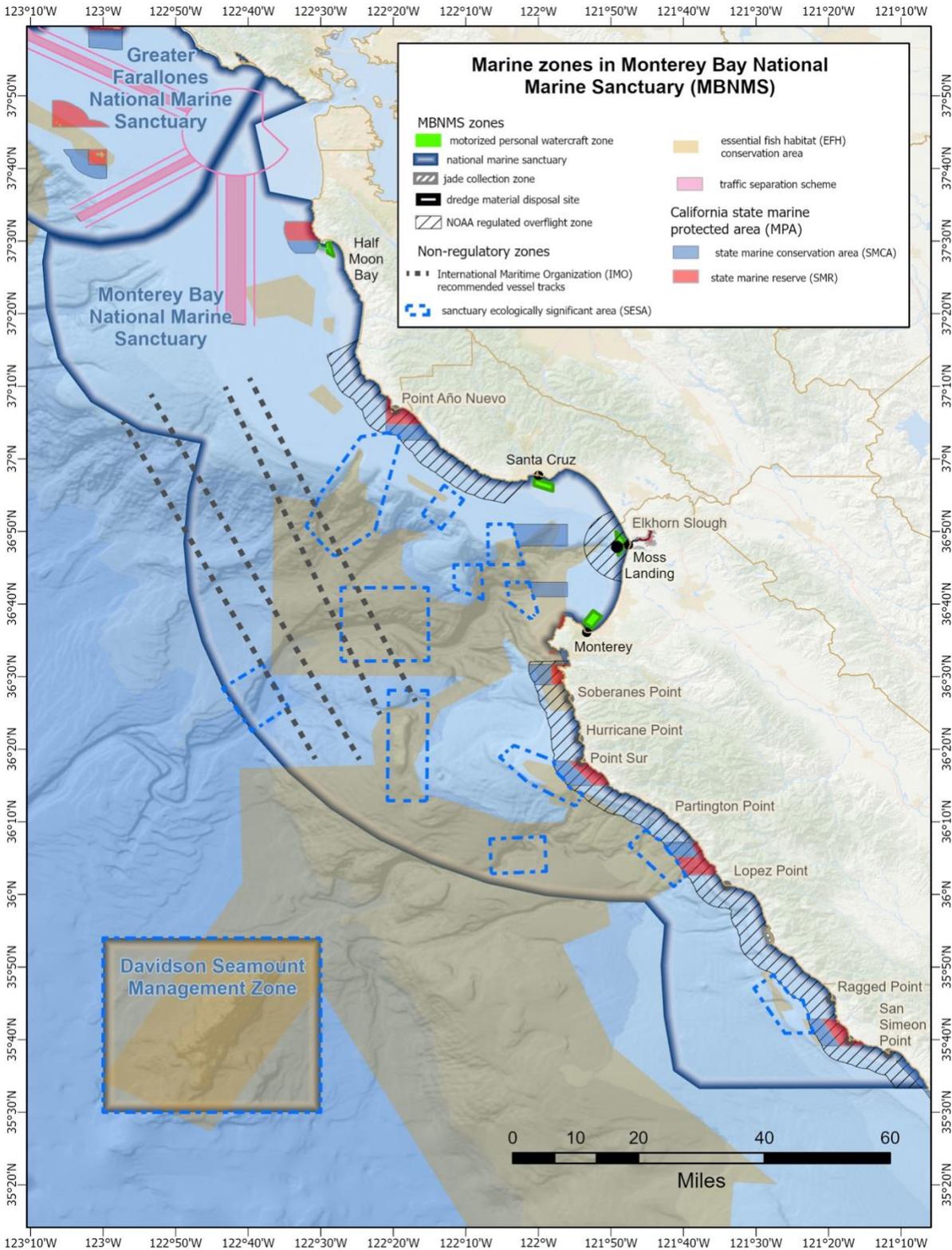


Figure I-3. Monterey Bay National Marine Sanctuary marine zones. Image: NOAA

## Monterey Bay National Marine Sanctuary Management

NOAA ONMS's mission for MBNMS is: *To understand and protect the coastal ecosystem and cultural resources of Monterey Bay National Marine Sanctuary.*

ONMS' management goals for MBNMS are to:

- A. Collaborate with strategic partners to conserve natural habitats, populations, and ecological processes by preventing, minimizing, and/or mitigating stressors on resources in the sanctuary.
- B. Enhance the understanding of ecosystem processes and inform ecosystem-based management efforts through scientific research, monitoring, and characterization.
- C. Enhance ocean and climate literacy, promote awareness of the sanctuary, and foster ocean stewardship through education, outreach, and interpretation efforts.
- D. Maintain and protect the sanctuary's natural biological diversity and, where appropriate, restore and enhance sanctuary ecosystems.
- E. Increase knowledge and appreciation of maritime heritage (living cultures, traditions, and cultural resources).
- F. Facilitate wise and sustainable use in sanctuaries to the extent such uses are compatible with resource protection.
- G. Build, maintain, and enhance an operational capability and infrastructure.

### Focus of the Research and Monitoring Program

The research and monitoring program's focus is on science-based activities to support resource management by: determining information gaps; developing studies to improve understanding of distinct management issues and long-term sanctuary health; and interpreting research for decision makers. ONMS is part of the world-renowned and collaborative research community in coastal Central California. Twenty research institutions are represented on the MBNMS Research Activity Panel (RAP). Members of the RAP and other scientists from regional institutions (Figure I-4) share their expert knowledge, facilities, equipment, and academic programs to help address issues identified in the MBNMS management plan. The research and monitoring program, in collaboration with regional partners, has achieved notable regional and international success through advisory committees, organizing symposia, developing websites with monitoring information, developing sanctuary condition reports with associated data sharing portals, obtaining research grants, gaining access to national research assets, conducting research expeditions, publishing scientific papers, and integrating science into education, research, and resource management endeavors.

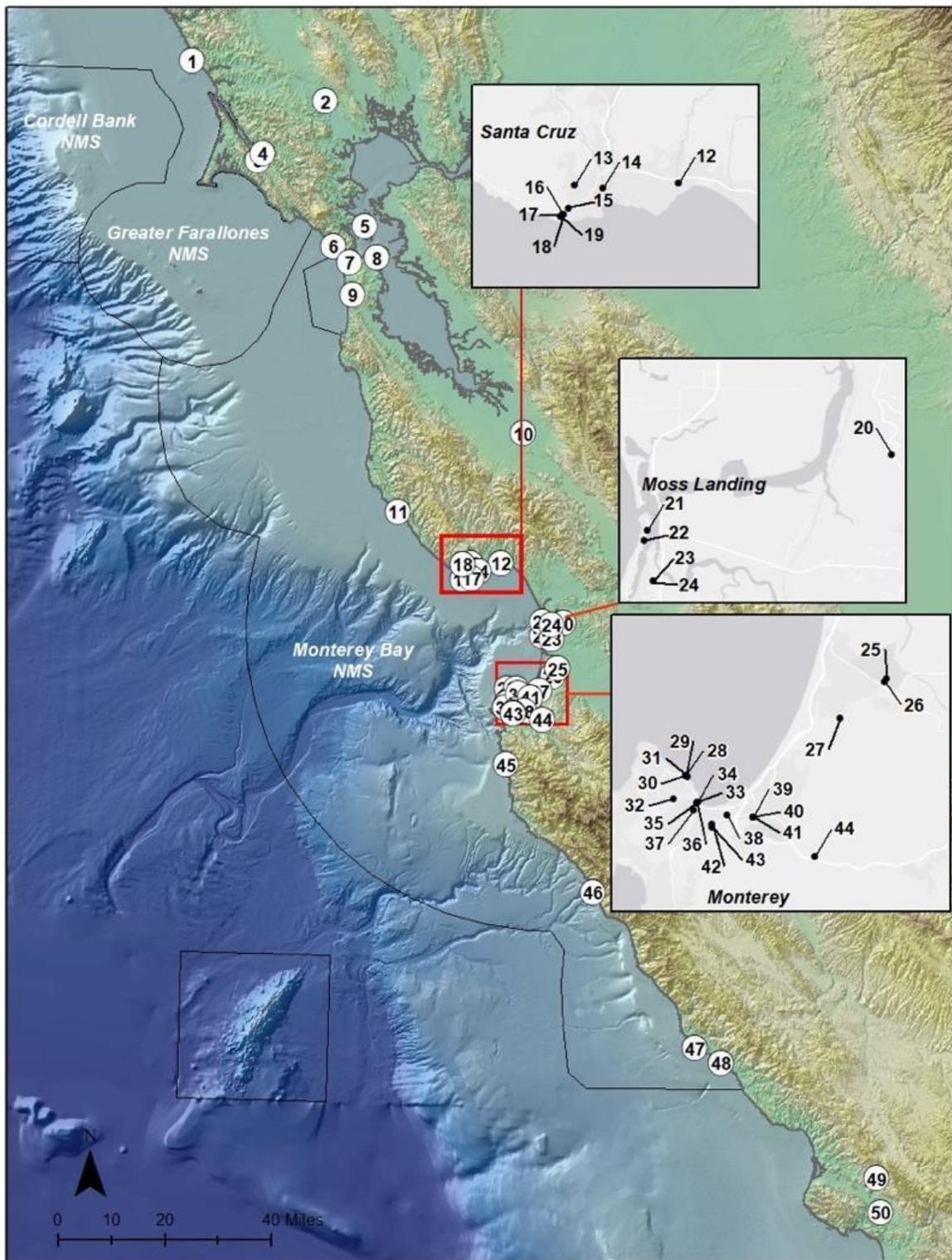


Figure I-4. Regional research institutions. Image: NOAA

## **Focus of the Resource Protection Program**

One of the primary mandates of the NMSA is to protect and restore the biological, historical, and cultural resources in the sanctuary. A key objective of the management plan is to ensure human activities in MBNMS do not adversely affect natural resources, including habitats. This objective is accomplished through a variety of approaches, including collaborative planning efforts to prevent and reduce human impacts, regulations, permits, and enforcement efforts. Management efforts also involve education and outreach programs to teach the public about how they can minimize or eliminate harmful impacts to the sanctuary. The resource protection program also supports the Sanctuary Advisory Council's Conservation Working Group (CWG), which serves as a forum for conservation issues, identifying resource protection needs and providing advice, views, and factual information on resource protection, sanctuary management, and other issues.

The sanctuary's long coastline, including four harbors and several urban areas, creates multiple complex threats to the coastal ecosystem. In addition, changes to the climate are causing sea level rise, extreme storms, and ocean acidification. ONMS will need to focus on collaborative solutions at the local, regional and national level to adapt to these changes.

## **Focus and Accomplishments of the Education and Outreach Program**

ONMS's education and outreach efforts help connect people to the marine environment and support resource protection and conservation science. With the goal to promote public awareness and understanding of our national marine sanctuaries, programs strive to empower citizens with the knowledge necessary to make informed decisions, ultimately leading to the responsible stewardship of marine ecosystems. Since the creation of two sanctuary interpretative centers, the Coastal Discovery Center in 2006 and the Sanctuary Exploration Center in 2012, hundreds of thousands of visitors have experienced education programs and interpretative exhibits focused on sanctuary research and conservation. Partnerships and collaboration have also played a key role in the development and implementation of the sanctuary's educational and outreach efforts, with the sanctuary's visitor center facilities hosting numerous community partner programs, special events, film festivals, and conferences.

Overall, education and outreach programs have accomplished many important objectives of the sanctuary management plan over the past decade, increasing public awareness and providing issue-based education and programming for students and teachers.

## **Public Participation and the Sanctuary Advisory Council**

The citizens of Central California are politically and socially engaged on issues affecting their communities and surrounding environment, including the coast and ocean. MBNMS owes its existence largely to the dedication and determination of thousands of local citizens and elected officials who strongly advocated for its designation. Public participation permeates nearly every aspect of sanctuary management and operation, including support and management of the Sanctuary Advisory Council and its working groups, volunteering for the many programs that help ONMS achieve its education and research missions, and participating in community festivals and symposia.

The [Sanctuary Advisory Council](#) advises the superintendent on policy issues affecting the sanctuary, and is composed of 20 voting members with alternates and eight non-voting members representing various stakeholders. The council has played a vital role in many decisions affecting the Central California coast. The Sanctuary Advisory Council has three standing working groups:

**[Conservation Working Group](#)**: Coordinates the efforts of existing conservation-focused organizations and helps promote and achieve comprehensive and long-lasting stewardship of MBNMS through continued advice, input, and advocacy.

**[Research Activity Panel](#)**: Provides scientific advice and objective information, assists in the implementation of programs to increase our scientific understanding of the sanctuary, promotes a comprehensive understanding of existing research activities and institutions, reviews research proposals, and advises on research priorities.

**[Sanctuary Tourism and Recreation Working Group](#)**: strengthens economic partnerships with ONMS and local businesses, and provides a forum for local businesses and ONMS to coordinate and promote recreation and tourism opportunities in the sanctuary.

## **[Monterey Bay National Marine Sanctuary Setting](#)**

Five counties border MBNMS: Marin, San Mateo, Santa Cruz, Monterey, and San Luis Obispo. Three additional counties, San Francisco, Santa Clara and San Benito, have watersheds draining directly into MBNMS. Each is diverse in terms of population and economic base.

A rich history of human use of this region's marine resources begins with Native Americans and continues to the present. Today the sanctuary's spectacular scenery, moderate climate, abundance of marine life and relatively clean ocean waters all draw large numbers of divers, kayakers, boaters, fishers, surfers, tide poolers, and bird and mammal watchers. Coastal tourism, agriculture, education, and commercial fisheries are all pillars of the regional economy with direct links to MBNMS.

MBNMS contains one of the world's most geologically diverse and complex seafloors and continental margins. The sanctuary is located on a plate boundary separating the North American Plate from the Pacific Plate and is marked by the San Andreas Fault system. The active tectonic region frequently experiences earthquakes, submarine landslides, turbidity currents, flood discharges, and coastal erosion.

Oceanographic processes in MBNMS are influenced largely by the California Current and upwelling. The California Current is an eastern boundary current that is generally characterized as a broad, shallow, and slow-moving current, exhibiting high spatial and temporal variability. It is usually located several miles offshore, flowing north to south, beginning in Alaska and terminating off Baja California. The California Current is the eastward portion of the clockwise North Pacific Gyre and transports cool water with low salinity towards the equator. Associated with the coastal surface flow is an undercurrent moving in the direction of the North Pole, the California Undercurrent, also referred to as the Davidson Current. Several agencies and research groups are studying the physical, chemical, and biological properties of this current system and

how atmospheric conditions influence oceanic conditions, which in turn affect productivity of pelagic (i.e., open water) ecosystems.

The California Current has many semi-stationary jets and eddies. Satellite imagery has shown cold filaments approximately 30 miles (48.3 kilometers) wide, extending approximately 150 miles (241.4 kilometers) offshore. The importance of these features, which represent the highly variable oceanographic weather of the California Current, lies in their offshore transport of cool, nutrient-rich water from depths to the surface, referred to as upwelling.

For a complete description of the sanctuary setting (Human Environment, Socioeconomics, Human Uses, Physical Environment, and Living Marine Resource) please refer to the [final environmental assessment](#) associated with this management plan.

## ***Monterey Bay National Marine Sanctuary Condition Report***

Diverse human activities put significant pressure on sanctuary resources. Some of the most prominent pressures include vessel traffic, commercial and recreational fishing, agricultural and urban runoff, harmful algal blooms, coastal development, marine debris, the introduction of non-indigenous species (i.e., introduced species), and disturbances to wildlife. In addition, larger, more global issues, such as climate change and ocean acidification, are significant areas of concern where some impacts are being detected, but long-term effects are not well understood.

ONMS uses a socioecological approach to assess, protect, and improve resources in national marine sanctuaries. Sanctuary condition reports combine the latest environmental and socioeconomic data with extensive expert input to provide the public, particularly stakeholders, with periodic updates of the status and trends for driving forces, pressures, natural and archaeological resource conditions, and ecosystem services in national marine sanctuaries. The reports also describe the links between current management activities and issues of concern and the benefits of actions to resources and the public. With that information, not only is sanctuary management better prepared to respond to changing conditions with proactive management and sensible regulations, but the public is better equipped to make practical recommendations as participants in the management plan review process for their national marine sanctuaries.

Condition reports use the best available science and most recent data to assess the status of various parts of the sanctuary's ecosystem. Because of the considerable differences within the sanctuary among the estuarine, nearshore, offshore, and seamount environments, resource status and trends are assessed individually for each environment. Elkhorn Slough is the only estuary located inside sanctuary boundaries and thus, is the focus of the estuarine environment section in the report. For condition report purposes, the nearshore environment is defined as extending from the shoreline boundary of the sanctuary (mean high water mark) to the 30-meter isobaths and includes the seafloor and water column. The offshore environment is defined as extending from the 30-meter isobath out to the offshore boundary of the sanctuary and includes the seafloor and water column. The seamount environment includes the seamount and surrounding seafloor and water column within the Davidson Seamount Management Zone (DSMZ). The DSMZ was added to MBNMS in November 2008 and was assessed for the first time in the [most recent condition report](#) update in 2015.

Overall, the updated assessment of the state of sanctuary resources indicates the sanctuary is doing quite well in comparison to other parts of the world's ocean. As of the 2015 publication of the MBNMS condition report, the abundance and diversity of wildlife seen in Monterey Bay is remarkable compared to many parts of the world and many sanctuary resources are showing relative stability or improvement. Long-term monitoring along rocky shores and in kelp forests shows that biogenic habitat, including canopy-forming kelp, understory algae, and many structure-forming invertebrates, have been generally abundant and stable. The number of native species in sanctuary habitats, one measure of biodiversity, appears to be stable with no known losses of native species. Though some non-native species are present in the sanctuary, no new introductions are known to have occurred in any of the sanctuary's environments. Most of the sanctuary's regularly monitored key species and species assemblages appear to be stable or slightly improving in status.

The findings in the 2009 MBNMS condition report and the 2015 update were used to support the process to review and update the MBNMS management plan. This new management plan builds on the 2008 management plan, which contained a number of management actions to address issues and concerns. The plan stressed an ecosystem-based approach to management, which requires consideration of ecological interrelationships not only within the sanctuary, but also within the larger context of the California Current ecosystem. A summary of links between activities from this management plan and the 2015 condition report update can be found in Appendix C.

## *The Management Plan Review Process*

### **Management Plan Review**

The NMSA requires management plan review to be conducted by all national marine sanctuaries (16 U.S.C. §1434(e)) to ensure each site properly conserves and protects its living and cultural resources. Management plans describe regulations and boundaries, outline staffing and budget needs, present management actions and performance measures, and guide the development of future budgets and management activities. ONMS last reviewed the MBNMS management plan in 2008.

This management plan review fulfills the requirements of 16 U.S.C §1434(e) to (1) evaluate the substantive progress toward implementing the management plan and goals for the sanctuary, especially the effectiveness of site-specific management techniques and strategies; (2) revise the management plan and regulations as necessary to fulfill the purposes and policies of this chapter; and (3) include a prioritization of management objectives.

### **Public Scoping**

Using community-based processes and providing numerous opportunities for public input, ONMS examined current issues and threats to the resources and determined if the current management plan is adequately protecting MBNMS resources. Four scoping meetings were held between September 2015 and October 2015 and over 220 comments were received. A report summarizing the scoping results (December 11, 2015) was used by the Sanctuary Advisory Council to help them provide advice on the highest priority issues (MBNMS, 2015).

## Identification and Prioritization of Issues

Following the public process of scoping, issues to be addressed were selected through a prioritization process. Through a binning exercise, the Sanctuary Advisory Council members provided feedback and recommendations on the resource issues and narrowed the number of issues to be addressed. The [results from this exercise](#) were published on the MBNMS website (MBNMS, 2016). The resulting focused set of priority issues was presented at an April 2016 meeting of the Sanctuary Advisory Council. Following selection of the priority issues, ONMS developed a series of workshops and presentations for the Sanctuary Advisory Council in order to receive feedback on the scope and appropriate activities to address the issues. For three of the priority issues, working groups composed of staff, Sanctuary Advisory Council members, stakeholders, and subject experts were established to further characterize the issues and develop strategies to address them. Internal teams comprised of ONMS staff addressed other issues and developed proposed action plans and presented them to the Sanctuary Advisory Council for review.

## Action Plan Development

The management plan is composed of action plans developed by staff, using input from the Sanctuary Advisory Council and external experts. Within the plans are the recommended strategies and activities addressing specific priority issues identified during the scoping and prioritization phases of the management plan review.

The action plans were then brought to the Sanctuary Advisory Council in February and April of 2018 for review. The council reviewed and made recommendations on action plans and generally recommended the strategies and activities as proposed by the staff and working groups.

## Action Plan Components

Action plans are the means by which NOAA identifies and organizes the various management issues and the methods and tools with which to address a given issue. Each action plan has an overarching goal, an introduction of the issue and, in some cases, what has been done to date on the issue. Each plan consists of a series of strategies articulating what needs to be implemented and the various steps (activities) in the program or project. Each action plan contains a table of identified measures by which ONMS will evaluate progress toward a desired outcome. These measures will be evaluated periodically and reported as explained in the Operations and Administration Action Plan.

## Multidisciplinary Implementation

The action plans are grouped by common themes: issue-based action plans and program-based action plans. Each action plan is intended to be a discrete plan addressing the issue or problem. However, all issues require common tools of research, monitoring, education, outreach, enforcement, agency coordination, and partnership development. ONMS will seek to maximize the synergy between and among plans by exploring mutual research and monitoring needs for the various action plans and combining outreach needs to common audiences. Each of the action plans requires support from all four program areas to guarantee the multi-disciplinary

approach of the action plans and to ensure that ONMS staff are successful in implementing sanctuary management.

## **Performance Evaluation**

ONMS will use performance measures identified in each of the action plans and summarized in the Operations and Administration Action Plan to evaluate progress. In addition to ONMS working toward the implementation of each of the action plans, its staff will work cooperatively with its partners, including federal, state, and local agencies and non-governmental organizations, as well as the Sanctuary Advisory Council and its working groups. Successful implementation of previous management plans relied on stakeholder and partnership coordination and collaboration, which will continue as ONMS addresses the new and continued marine management issues outlined in this management plan.

## **Action Plan Prioritization**

The action plans and strategies in this management plan comprise a body of work that is well beyond the standard of effective management and if fully implemented would require resources well beyond what is currently available to ONMS. ONMS worked with the Sanctuary Advisory Council to prioritize the issues in order to identify the order in which to implement action plans. Implementation of some action plans may also be dependent on a variety of funding scenarios such as grant applications, funding priorities of outside parties, or reliance on partner participation. The implementation of various action plans in the management plan may occur at different stages based on urgency, benefit to sanctuary resources, and resource availability. The prioritization of actions is an ongoing process and is formally assessed every 3-5 years.

## **Regulatory Changes Resulting from the Management Plan Review Process**

As a result of management plan review, NOAA is also revising the regulations for MBNMS to address resource protection concerns in the sanctuary. NOAA is making the following changes to the sanctuary's regulations:

1. Add a definition for the "beneficial use of dredged material" and a regulatory clarification that the existing prohibition against disposal of dredged material in Monterey Bay National Marine Sanctuary at locations other than pre-1992 disposal sites does not apply to habitat protection and restoration projects using suitable dredged sediment material from any of the four harbors adjacent to MBNMS because the beneficial use of dredged material would not be considered "disposal of dredged material."
2. Reduce the sea state condition required for motorized personal watercraft access to the Mavericks seasonal-conditional zone.
3. Correct an administrative error to properly document the list of exempted Department of Defense activities within the Davidson Seamount Management Zone.
4. Modify the boundaries of four existing year-round motorized personal watercraft zones.

A final environmental assessment describes the purpose, need and environmental consequences of the management plan and new regulations.

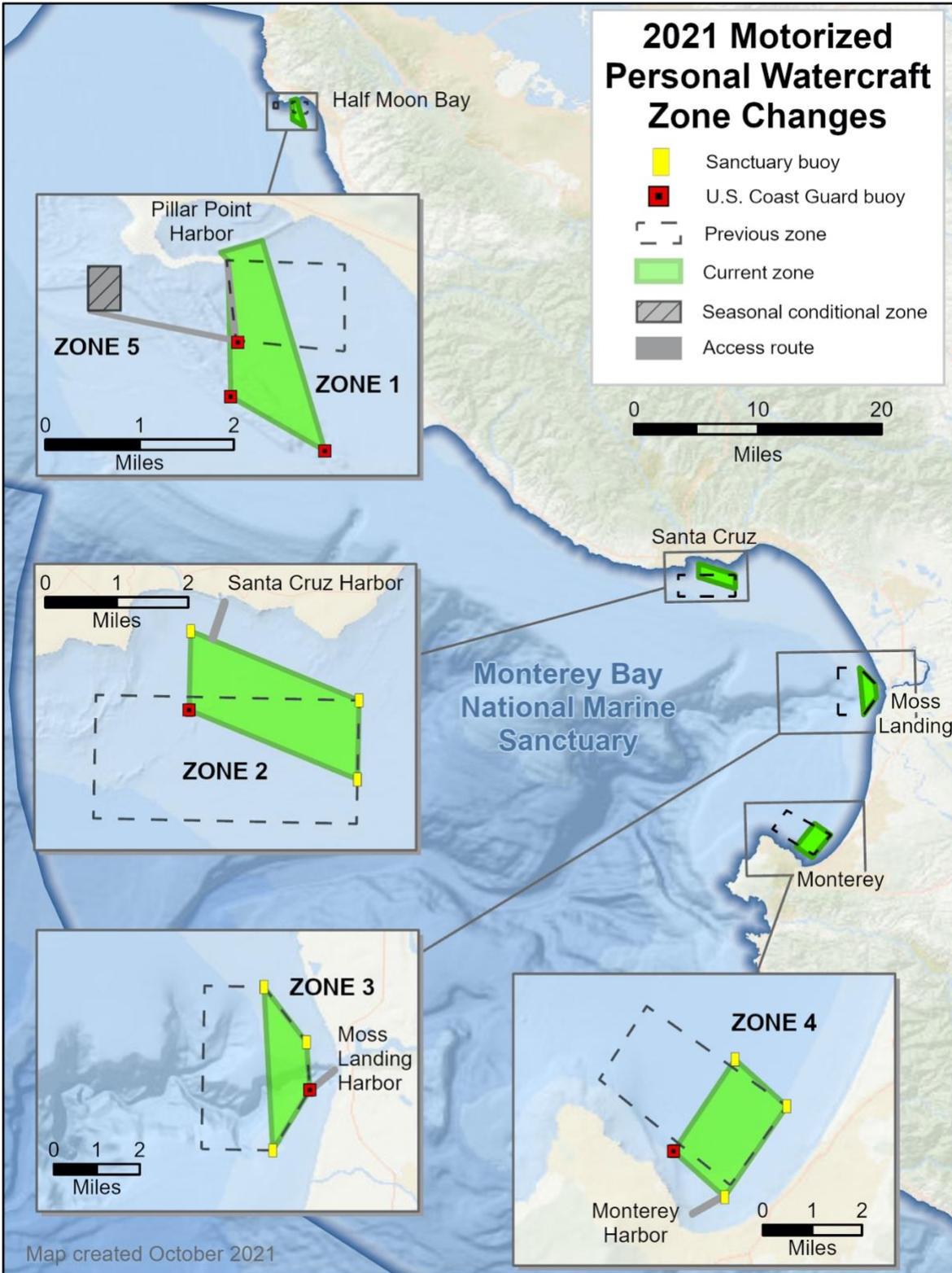


Figure I-5. 2021 Motorized Personal Watercraft Zone Changes in Monterey Bay National Marine Sanctuary