

SECTION I: INTRODUCTION



Figure 2. Breaching humpback whales may be seen at the Channel Islands during their seasonal migrations through the Santa Barbara Channel. (David O. James)

This section provides background on the National Marine Sanctuary Program, the Channel Islands National Marine Sanctuary, and the management plan review process. It describes the organic act establishing the National Marine Sanctuary Program and the administrative hierarchy within which the program resides. Next, it details the history, goals, and accomplishments of the Channel Islands National Marine Sanctuary. Finally, this section introduces the fundamental steps of the management plan review process and explains how this process has been carried out at the Channel Islands concluding with development of this revised management plan.

Overview of the National Marine Sanctuary Program

The National Marine Sanctuary Program (NMSP)³ serves as the trustee for a system of 14 marine protected areas,⁴ encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes: 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument in the northwestern Hawaiian Islands (see Figure 3). The NMSP is part of the National Oceanic and

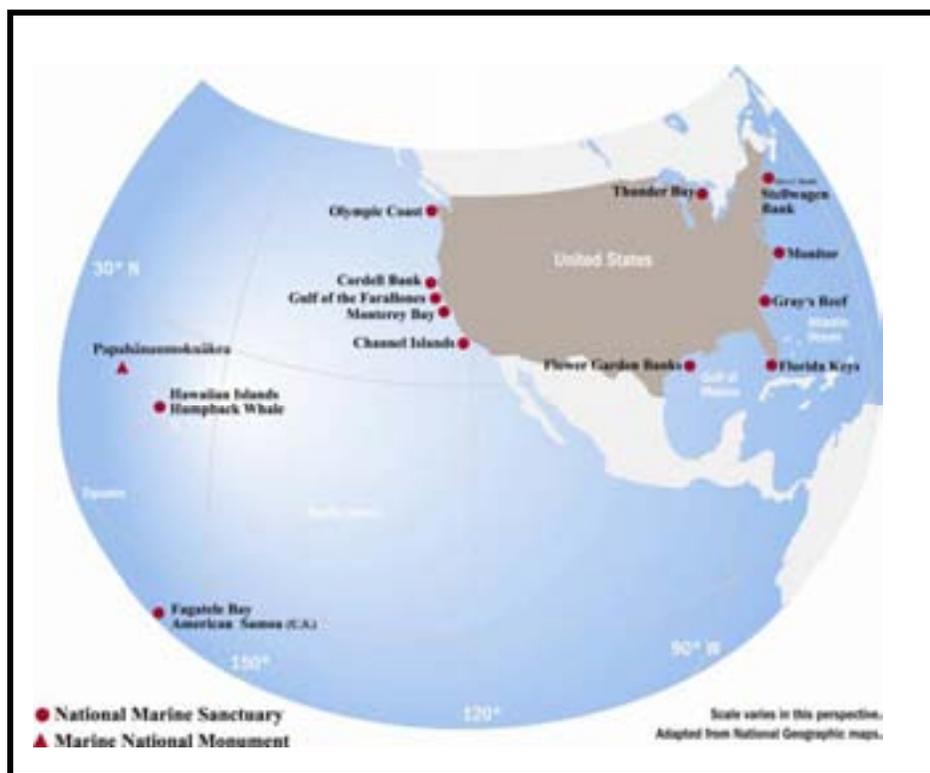


Figure 3. *The National Marine Sanctuary System*

³ 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 now 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.

⁴ Ex. Ord. No. 13158, May 26, 2000, 65 F.R. 34909 sec. 2. (a) defines a “marine protected area” as, “...any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.”

Atmospheric Administration (NOAA), which manages sanctuaries by working cooperatively with the public to protect sanctuaries while facilitating compatible recreation and commercial activities. Within NOAA, the NMSP is administered by the NOAA Ocean Service, Office of National Marine Sanctuaries. The mission of the NMSP is to identify, protect, conserve, and enhance the natural and historical/cultural resources, values, and qualities of the National Marine Sanctuary System for this and future generations throughout the nation. Toward this mission, the NMSP works to achieve seven program-wide goals:

1. Identify, designate, and manage sanctuaries to maintain the natural biological communities in sanctuaries and to protect and, where appropriate, restore and enhance natural habitats, populations, and ecological processes, through innovative, coordinated, and community-based measures and techniques.
2. Build and strengthen the nation-wide system of marine sanctuaries, maintain and enhance the role of the NMSP's system in larger marine protected area networks, and help provide both national and international leadership for marine protected area management and marine resource stewardship.
3. Enhance nation-wide public awareness, understanding, and appreciation of marine and Great Lakes ecosystems and maritime heritage resources through outreach, education, and interpretation efforts.
4. Investigate and enhance the understanding of ecosystem processes through continued scientific research, monitoring, and characterization to support ecosystem-based management in sanctuaries and throughout U.S. waters.
5. Facilitate human use in sanctuaries to the extent such uses are compatible with the primary mandate of resource protection, through innovative public participation and interagency cooperative arrangements.
6. Work with the international community to strengthen global protection of marine resources, investigate and employ appropriate new management approaches, and disseminate NMSP experience and techniques.
7. Build, maintain, and enhance operational capability and infrastructure that efficiently and effectively support the attainment of the NMSP's mission and goals.

The national marine sanctuaries embrace part of our collective riches as a nation. Within their protected waters, giant humpback whales breed and calve their young, coral colonies flourish, and shipwrecks tell stories of our maritime history. Sanctuary habitats include beautiful rocky reefs, lush kelp forests, whale migration corridors, spectacular deep-sea canyons, and underwater archaeological sites. Our nation's sanctuaries can provide a safe habitat for species close to extinction or protect historically significant shipwrecks. Ranging in size from one-quarter square mile in American Samoa's Fagatele Bay to the more than 5,300 square miles of Monterey Bay, California, to the more than 139,000 square miles of Papahānaumokuākea Marine National Monument in Hawaii, each protected area administered by the NMSP is a unique place needing special protection. Together, these areas protect over 150,000 square miles of coastal, open ocean and Great Lake waters and habitats. Natural classrooms, cherished recreational spots, and valuable commercial industries – marine sanctuaries represent many things to many people.

The National Oceanic and Atmospheric Administration (NOAA)

The National Oceanic and Atmospheric Administration (NOAA) conducts research and gathers data about the global oceans, atmosphere, space, and sun, and applies this knowledge to science and service that touch the lives of all Americans (www.noaa.gov). In doing so, NOAA warns of dangerous weather, charts our seas and skies, guides our use and protection of ocean and coastal resources, and conducts research to improve our understanding and stewardship of the environment that sustains us all.

A Commerce Department agency, NOAA provides these services through five major organizations: the National Weather Service, the National Ocean Service, the National Marine Fisheries Service, the National Environmental Satellite, Data and Information Service, and NOAA Research; and numerous special program units. In addition, NOAA research and operational activities are supported by the nation's seventh uniformed service, the NOAA Corps, a commissioned officer corps of men and women who operate NOAA ships and aircraft, and serve in scientific and administrative posts.

The NMSP provides oversight and coordination among the thirteen sanctuaries by setting priorities for addressing resource management issues and directing program and policy development. The NMSP also has responsibility for ensuring the management plan prepared for each sanctuary is consistent with the NMSA and provides a general budget to estimate expenditures for program development, operating costs and staffing.

On an annual basis, the NMSP reviews and adjusts funding priorities and requirements to reflect resource management needs at each of the thirteen sanctuaries. The NMSP also monitors the effectiveness of the management plan, makes recommendations to promulgate regulatory changes where necessary and monitors intra- and inter-agency agreements.

The National Marine Sanctuaries Act

The National Marine Sanctuaries Act (16 U.S.C. 1431 *et seq.*) is the organic legislation governing the NMSP.⁵ The NMSA authorizes the Secretary of Commerce to designate as national marine sanctuaries 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. In addition, the NMSA established the

NMSP as the federal program charged with managing national marine sanctuaries. The primary objective of the NMSA is to protect marine resources. The NMSA also directs the NMSP to facilitate all public and private uses of those resources compatible with the primary objective of resource protection.

The purposes and policies of the NMSA are as follows (this is the complete list of purposes and policies taken verbatim from 16 U.S.C. 1431 (b)):

1. To identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System;
2. To provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities;

⁵ See <http://www.sanctuaries.nos.noaa.gov/natprogram/nplegislation/nplegislation.html>.

3. To maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes;
4. To enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the natural, historical, cultural, and archeological resources of the National Marine Sanctuary System;
5. To support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas;
6. To facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities;
7. To develop and implement coordinated plans for the protection and management of these areas with appropriate federal agencies, state and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;
8. To create models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and
9. To cooperate with global programs encouraging conservation of marine resources.

NOAA Ocean Service

As the nation's principal advocate for coastal and ocean stewardship, the NOAA Ocean Service, or NOS (www.nos.noaa.gov), develops the national foundation for coastal and ocean science, management, response, restoration, and navigation. NOS maintains a leadership role in coastal stewardship by bridging the gap between science, management, and public policy in the areas of healthy coasts, navigation, coastal and ocean science, and coastal hazards. Ten program offices are located within NOS:

- *The Office of National Marine Sanctuaries*
- *Center for Operational Oceanographic Products and Services (CO-OPS)*
- *National Centers for Coastal Ocean Science (NCCOS)*
- *Coastal Services Center (CSC)*
- *Office of Coast Survey (OCS)*
- *Office of Ocean and Coastal Resource Management, (OCRM)*
- *Office of Response and Restoration (OR&R)*
- *National Geodetic Survey (NGS)*
- *International Program Office (IPO)*
- *Management and Budget Office (MBO)*

The NMSA and Ecosystem-Based Management

NOAA has a unique mandate from Congress to be a lead federal agency in protecting, managing, and restoring marine resources. To meet this mandate, our scientists, specialists, and external partners contribute world-class expertise in oceanography, marine ecology, marine archeology, fisheries management, conservation biology, natural resource management, and risk assessment. To achieve balance among ecological, environmental, and social influences, we have adopted an ecosystem approach to management. We recognize the transition to an ecosystem approach must be incremental and collaborative. In pursuing this approach, we strive to integrate the concerns, priorities, and expertise of all citizens and sectors in the management of coastal and marine resources.

According to NOAA (2005), “An ecosystem approach to management is management that is adaptive, specified geographically, takes into account ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives.”

Marine ecosystem-based management relies on the best available scientific information from both the natural and social sciences. It requires an understanding of oceanographic processes, habitat distribution and health, ecological services, and specific information on the abundance and distribution of marine life. In addition, ecosystem-based management requires adapting and learning from new culturally based and socioeconomic information (Agardy 1999). Given ecosystems span diverse geographic, administrative, political and economic boundaries, the need for strong partnerships among resource agencies, non-governmental interests, members of the public and scientific community, user groups and conservationists is essential.

These ideas are supported by the NMSA, which states the NMSP is to “maintain the natural biological communities, and to protect, and, where appropriate, restore and enhance natural habitats populations, and ecological processes” (16 U.S.C. 1431(b)(3)) and “while the need to control the effects of particular activities has led to enactment of resource-specific legislation, these laws cannot in all cases provide a coordinated and comprehensive approach to the conservation and management of the marine environment” (16 U.S.C. 1431(a)(3)).

As such, the 13 national marine sanctuaries subscribe to a broad and comprehensive management approach in keeping with the NMSA’s primary objective of resource protection. This approach is unique in that it differs from the various national and local agencies and laws directed at managing single or limited numbers of species or specific human activities within the ocean. As such, for CINMS, ecosystem-based management serves as a framework for addressing long term protection of a wide range of living and non-living marine resources, while allowing multiple uses of the Sanctuary compatible with resource protection.

Overview of the Channel Islands National Marine Sanctuary

Background

Designated in 1980, the Channel Islands National Marine Sanctuary consists of an area of approximately 1110 square nautical miles (nmi) of coastal and ocean waters, and the submerged lands thereunder, off the southern coast of California. The Sanctuary boundary begins at the Mean High Water Line of and extends seaward to a distance of approximately six nmi from the following islands and offshore rocks: San Miguel Island, Santa Cruz Island, Santa Rosa Island, Anacapa Island, Santa Barbara Island, Richardson Rock, and Castle Rock (the Islands) (see Figure 4). In 2007, NOAA completed the Channel Islands marine protected area (MPA) network, consisting of a total of ten marine reserves (no-take zones) and two marine conservation areas (limited take zones) within the CINMS, which was initiated by a unique, community-based process. NOAA and the California Department of Fish and Game cooperatively enforce the Channel Islands MPA network through a combination of federal and state regulations.⁶ The MPAs are distributed throughout the CINMS. Four of the marine reserves extend slightly beyond the original boundaries of the CINMS, increasing the overall size of the Sanctuary by

⁶ The state regulations took effect on April 9, 2003.

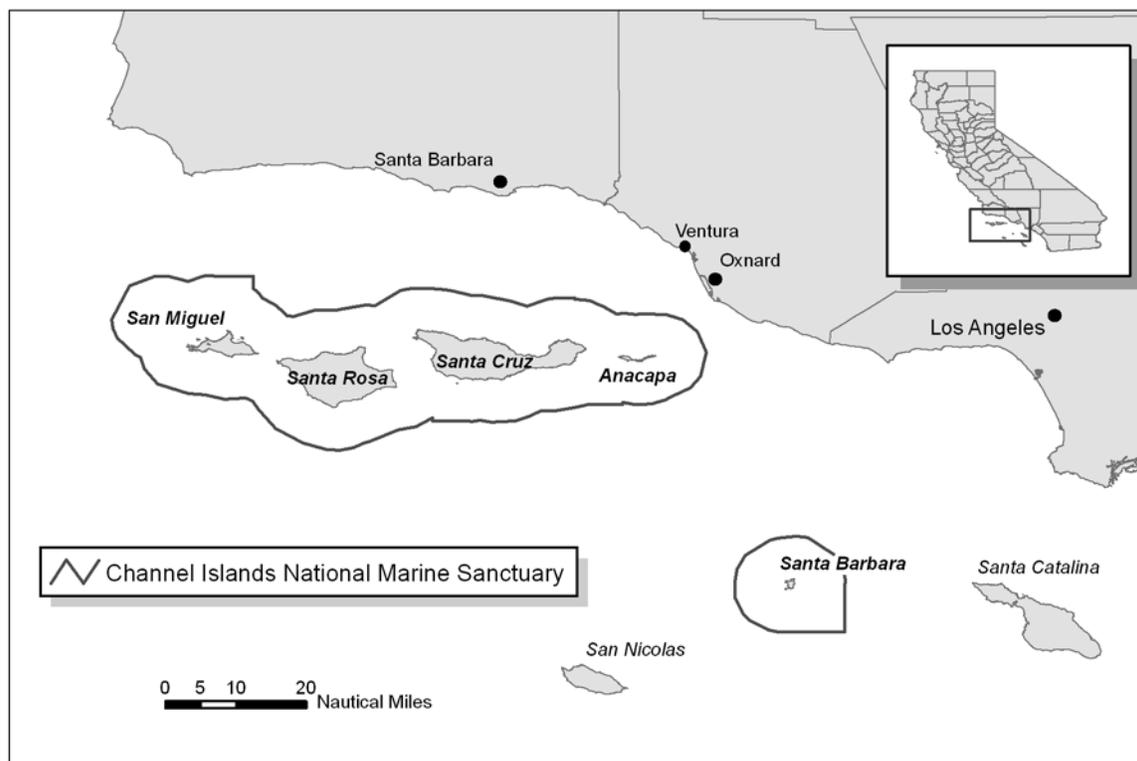


Figure 4. *The Channel Islands National Marine Sanctuary*

approximately 15 square nautical miles to approximately 1110 square nautical miles.⁷ This approximately 15 square nautical mile increase allows the boundaries of these four marine reserves to be defined by straight lines projecting outside the original CINMS boundary, allowing for better enforcement. For a map depicting the MPA network please see Figure 35 on p. 90.

San Miguel, Santa Rosa, Santa Cruz and Anacapa islands are parallel to the east-west trend of the California coast and vary in distance from 12 to 29 nautical miles offshore. Santa Barbara Island lies about 40 nautical miles south of Point Mugu, California.

The Sanctuary supports a rich and diverse range of marine life and habitats, unique and productive oceanographic processes and ecosystems, and culturally significant resources such as submerged Chumash cultural artifacts and hundreds of shipwrecks. The physical, biological, and cultural characteristics of the Sanctuary together provide outstanding opportunities for scientific research, education, recreation, and commerce. Examples of these include commercial and recreational fisheries, marine wildlife viewing, sailing, boating, kayaking and other recreational activities, and maritime shipping. A description of the Sanctuary setting is discussed in Section II of this document.

⁷ From 1980 to 2007, the area of CINMS was described as approximately 1252.5 square nautical miles. However, in 2007 NOAA re-calculated the original CINMS area as approximately 1113 square nautical miles (72 FR 29208) and increased the overall size of the Sanctuary by approximately 15 square nautical miles due to the boundary of four of the marine reserves projecting outside the original CINMS boundary. Adjusting for technical corrections and using updated technologies, NOAA has re-calculated the CINMS area as approximately 1470 square statute miles (1110 square nmi). This change does not constitute a change in the geographic area of the Sanctuary, but rather an improvement in the estimate of its size.

Sanctuary Goals

The management plan review process necessarily includes a review of Sanctuary goals. The original 1983 CINMS management plan contained a series of goals and related objectives. At the onset of the current management plan review, NMSP and CINMS staff reviewed the Sanctuary's original goals, and discussed these goals and Sanctuary performance since they were established, with the Sanctuary Advisory Council.

The Sanctuary's original 1983 goals were stated as follows:

- Resource Protection - The goal assigned highest priority for management is to enhance protection of the marine environment and resources of the Channel Islands National Marine Sanctuary.
- Research - Research activities within the program are directed to resolving management concerns and increasing the understanding of the Sanctuary environment and significant resources.
- Interpretation - Interpretative programs aim to enhance public awareness and understanding of the significance of the Sanctuary and the need to protect its resources.
- Visitor Use - The Sanctuary goal for visitor management is to encourage commercial and recreational use of the Sanctuary that is compatible with protection of its significant resources.

In general, the Sanctuary has made progress towards accomplishing the broad goal areas of the original plan: resource protection, research, interpretation, and visitor use. Through enforcement of regulations and collaboration with other agencies and constituents CINMS has enhanced protection of Sanctuary resources. The Sanctuary has made strides towards directing research efforts to resolving management concerns and increasing understanding of the Sanctuary environment and resources, including through use of the Sanctuary's research vessels. The Sanctuary has developed interpretative programs that enhance public awareness and understanding of the significance of the Sanctuary and the need to protect its resources. The Sanctuary has encouraged commercial and recreational use of the Sanctuary that is compatible with protection of its significant resources, such as placing trained naturalists on board commercial whale watching vessels.

Since Sanctuary designation in 1980, Congress has reauthorized and revised the language of the NMSA, the guiding legislation for the NMSP, several times. The NMSP has determined that the most direct manner of stating the Sanctuary's current goals is to reflect the current guidance from the NMSA.

While the above original Sanctuary goals are still in line with the direction provided by the NMSA, they are missing several important concepts and nuances covered by the current NMSA. The revised set of CINMS goals, derived from the findings, and purposes and policies of the NMSA,⁸ directly reflect the overarching mission of the NMSP and are as follows:

1. Protect the natural habitats, ecological services and biological communities of all living resources inhabiting the Channel Islands National Marine Sanctuary, and the Sanctuary's cultural and archaeological resources, for future generations;
2. Enhance public awareness, understanding, and appreciation of the marine environment and the natural, historical, cultural and archaeological resources of the Channel Islands National Marine Sanctuary;
3. Support, promote, and coordinate scientific research on, and long-term monitoring of, Channel Islands National Marine Sanctuary resources.

⁸ The CINMS goals do not reflect NMSA purpose and policy (1) to identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System. This is appropriate as a purpose of the broader NMSP, but not as a goal for an individual national marine sanctuary.

4. Where appropriate, restore and enhance natural habitats, populations and ecological processes within the Channel Islands National Marine Sanctuary;
5. Provide comprehensive and coordinated conservation and management of the Channel Islands National Marine Sanctuary, as well as the activities affecting it, in a manner complementing existing regulatory authorities;
6. Create models of and incentives for ways to conserve and manage national marine sanctuaries, including the application of innovative management techniques;
7. Facilitate to the extent compatible with the primary objective of resource protection, public and private uses of Sanctuary resources not prohibited pursuant to other authorities, and enhance such uses where they are wise and sustainable;
8. Cooperate with national and international programs encouraging conservation of marine resources; and
9. Develop and implement coordinated plans for the protection and management of the Channel Islands National Marine Sanctuary, with appropriate federal agencies, state and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing the Sanctuary's health and resilience.

These goals are carried out by CINMS in its ecosystem-based approach to management, using the best available natural and social science information.

Accomplishments

Relative to these goals, CINMS has had many major accomplishments since Sanctuary designation in 1980. The following bullets highlight some of these achievements by thematic area.

Education and Outreach

- Promotion of community involvement in Sanctuary management through the formation of the Sanctuary Advisory Council and several working groups;
- Assistance in development of the Santa Barbara Sea Center and the Outdoor Santa Barbara Visitor Center;
- Development of "Los Marineros," an acclaimed 5th grade marine education program that reached numerous classes and thousands of students per year throughout Santa Barbara County between 1987 and 2005;
- Development and rapid growth of the Multicultural Education for Resource Issues Threatening Oceans (MERITO) Program in the Channel Islands region that reaches thousands of teachers and students by integrating watershed and ocean science into public education and extended learning programs;
- Ongoing educational outreach efforts reaching more than 80,000 people per year through the distribution of publications and other products (such as the Alolkoy newsletter, Sanctuary brochures, special reports, posters, educational resource directories), as well as active participation in public programs, lectures, and events;
- Production of a state-of-the-art, content-rich web site enabling public access to a wealth of information about the Sanctuary (such as marine life, research projects, management issues, public meetings, maps and weather) and receives over 10,000 visits per month;
- Expanding regional awareness and understanding of the Sanctuary through opening of an office in Ventura County

Conservation Science

- Convening with partners the first ever comprehensive symposium on the performance of the Channel Islands marine protected area network in 2008

- Holding CINMS marine protected area (MPA) network monitoring workshop with over 100 experts and stakeholders and development of Draft Ecological and Socioeconomic Monitoring Recommendations;
- Increasing knowledge of CINMS and the surrounding environment by providing the scientific community with appropriate opportunities to use Sanctuary research vessels and aircraft;
- Development of a state-of-the-art Geographic Information System, allowing visual characterization of Sanctuary features to improve management decision making and enhance educational opportunities;
- Hosting of the Sustainable Seas Expeditions in 1999 and 2000 to conduct unique surveys (1-person submersible dives to 2000 feet) within and near the Sanctuary, including geologic and fish assessments, sidescan sonar, and characterization of the Santa Barbara Channel eddy;
- Ongoing vessel and staff support for long-term environmental monitoring programs, such as the University of California Santa Barbara's Plumes and Blooms oceanographic study (monitoring ocean color variation in the Santa Barbara Channel through water sampling and satellite data comparison) and Bight '98 and Bight '03 (regional marine monitoring surveys of marine life and water quality along the Southern California Coast);
- Collection of tens of thousands of data points on marine mammals and vessel use within CINMS through the Sanctuary's aerial monitoring program;
- Procurement of state-of-the-art research vessel *Shearwater*

Resource Threat Reduction

- Development of an MPA network in state and federal waters of the Sanctuary through a fair and open community-based process that brought together key stakeholders and the best available scientific and socioeconomic data;
- Establishment of a permanent prohibition on new oil and gas development within 6 miles of the Channel Islands since 1980;
- Reduction in air traffic disturbance to wildlife;
- Establishment of vessel traffic restrictions to help prevent large cargo vessel groundings at the islands;
- Prohibition of pollutant discharges into Sanctuary waters to preserve and protect water quality;
- Protection of hundreds of Chumash artifacts and over 150 known shipwrecks

Community Involvement and Support

- Providing opportunities for approximately 20 interns per year and hundreds of volunteers to learn about the Sanctuary, help protect its resources, and gain valuable career experience;
- Consultation with local mariners to develop ethnographic data about Sanctuary resources and uses, providing for enhanced management decision-making;
- Providing public access to sanctuary interactive kiosks (with over 40 online regional weather links) at local harbors and visitor centers;
- Annual training and deployment of a base of over 100 volunteers to provide naturalist interpretive services on whale-watching boats and island hikes (Channel Islands Naturalist Corps).

Although these accomplishments constitute major successes for the Sanctuary, new management issues have emerged, existing management issues have changed, and CINMS continues to adapt its management actions to build on these successes and best protect the Sanctuary's resources while allowing compatible resource use. This is accomplished through the management plan review process.

CINMS Management Plan Review

The Management Plan Review Process

Management plan review, which is required by the NMSA (16 U.S.C. 1434(e)) for all national marine sanctuaries, is conducted to ensure each site conserves and protects its living and historical/cultural resources. Management plans are sanctuary-specific documents describing regulations and boundaries, outline staffing and budget needs, present management actions and performance measures, and guide development of future budgets and management activities.

The management plan review process is based on three fundamental steps: 1) public scoping meetings; 2) the prioritization of issues and development of action plans; and 3) the preparation of draft and final management plans and the relevant NEPA documentation (such as an Environmental Impact Statement or Environmental Assessment). Public comments on the draft plan help staff revise the document into a final management plan outlining the Sanctuary's priorities for the next five to ten years.

Revisiting the 1983 Management Plan

The previous management plan for CINMS was published in 1983. Since then, many things have changed at the Sanctuary. Whereas the population of southern California⁹ was approximately 13.5 million in 1980 (U.S. Census Bureau 1995), population levels now reach nearly 20 million, including over 1.1 million in Santa Barbara and Ventura counties (U.S. Census Bureau 2000a). This represents a regional increase in population of approximately 43%. Coupled with population growth continuing urbanization of the region has increased pressures on CINMS marine resources. Increasing, shifting, and new uses of the marine environment have made Sanctuary management more complex and challenging.

Advances in resource management techniques and tools have also occurred over the last 25 years. As such, CINMS has developed a more sophisticated understanding of the Sanctuary's natural and human environment while coming to the realization much of the existing management plan is outdated. As such, the Sanctuary began the review of its management plan by initiating the scoping process and soliciting the views of a wide variety of regional interests to determine the most current, relevant, and high-priority resource management issues for the Sanctuary.

The Sanctuary Advisory Council

In December 1998, CINMS convened a 20-member Sanctuary Advisory Council to provide guidance and offer advice to the Sanctuary Superintendent. Today, the Advisory Council includes 10 voting government agency seats and 11 voting community stakeholder seats (with an alternate for each seat) and provides a platform for public input into the management of the Sanctuary. Throughout the entire management plan revision process, this partnership with the Advisory Council has allowed CINMS to build on and use unique knowledge and resources the private sector and other agencies have to offer. The Advisory Council has participated in every step of the management plan review process, including the public scoping meetings. The Advisory Council has also been an effective body for drawing in public participation and building a shared understanding of Sanctuary management through open discussion and collaborative efforts.

Scoping

CINMS began review of its existing management plan in 1998. Seven public scoping meetings were held throughout the region, from San Luis Obispo in the north to Long Beach in the south (one meeting was

⁹ Defined for purposes of deriving U.S. census population estimates contained within this management plan as the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura.

also held in Washington, D.C.). A wide range of local, regional and national resource management issues were raised and out of these emerged several general issue categories. These issue categories were further analyzed and refined as staff worked with the Sanctuary Advisory Council to identify specific resource management issues. These issues and concerns are addressed in the action plans and in the Final Environmental Impact Statement.

The Environmental Impact Statement (EIS)

The basic elements of an environmental impact statement include: the purpose and need for the proposed action, a description of alternatives including the proposed action, the affected environment and the environmental consequences of the alternatives (the alternatives analysis). In the case of the CINMS management plan, the requirement to prepare an EIS was triggered by the process of proposing revisions to the terms of designation of the Sanctuary. The EIS focuses on presenting and analyzing changes to Sanctuary regulations.

When a federal agency prepares an EIS, it must first define its study area - a geographic range within which resources, uses and management issues are analyzed. CINMS staff conducted a review of the various components making up the Sanctuary ecosystems, such as the range of species found within the Sanctuary, the distribution of habitats, oceanographic processes, and the geographic scope of human threats to Sanctuary resources. This review revealed that many key species and habitats, as well as important ecosystem processes (*e.g.*, upwelling areas, currents, and gyres) extend beyond the boundaries of the Sanctuary. Building upon the staff's work, in the fall of 1999, the Sanctuary contracted Dr. Michael McGinnis to recommend a study area for the management plan review. Dr. McGinnis produced his findings "A Recommended Study Area for the CINMS Management Planning Process: Ecological Linkages in the Marine Ecology from Point Sal to Point Mugu" in January 2000. Subsequently, in 2000, Sanctuary staff discussed Dr. McGinnis' recommendations with the Sanctuary Advisory Council and Sanctuary stakeholders, and determined a final study area.

Given the geographic range of Sanctuary resources, and the scope of human activities occurring throughout the Santa Barbara Channel, the study area extends from the current Sanctuary boundary to the mainland coast, approximately from Point Sal to Point Dume.¹⁰ The study area encompasses portions of the two bioregions within the northern Southern California Bight and includes additional ecosystem qualities and attributes providing support services to Sanctuary resources. (See Figure 5.)

At the January 20, 2000 Advisory Council meeting, the Sanctuary announced it had selected Tetra Tech, Inc. to develop the draft EIS (DEIS) based on the study developed and approved by the Advisory Council. Through the Advisory Council, CINMS regularly updated the public on the progress and development of the DEIS, which analyzed a range of alternatives for modified and new Sanctuary regulations.

In 2008, NOAA completed a supplemental DEIS (SDEIS) containing an analysis of further modifications proposed for the Sanctuary's discharge/deposit regulation, thereby revising the discharge regulation changes proposed in the DEIS. The SDEIS analysis addressed regulation of sewage and graywater discharges/deposits from vessels 300 GRT or more.

¹⁰ A similarly sized study area was also developed during the 1980 Sanctuary designation process.

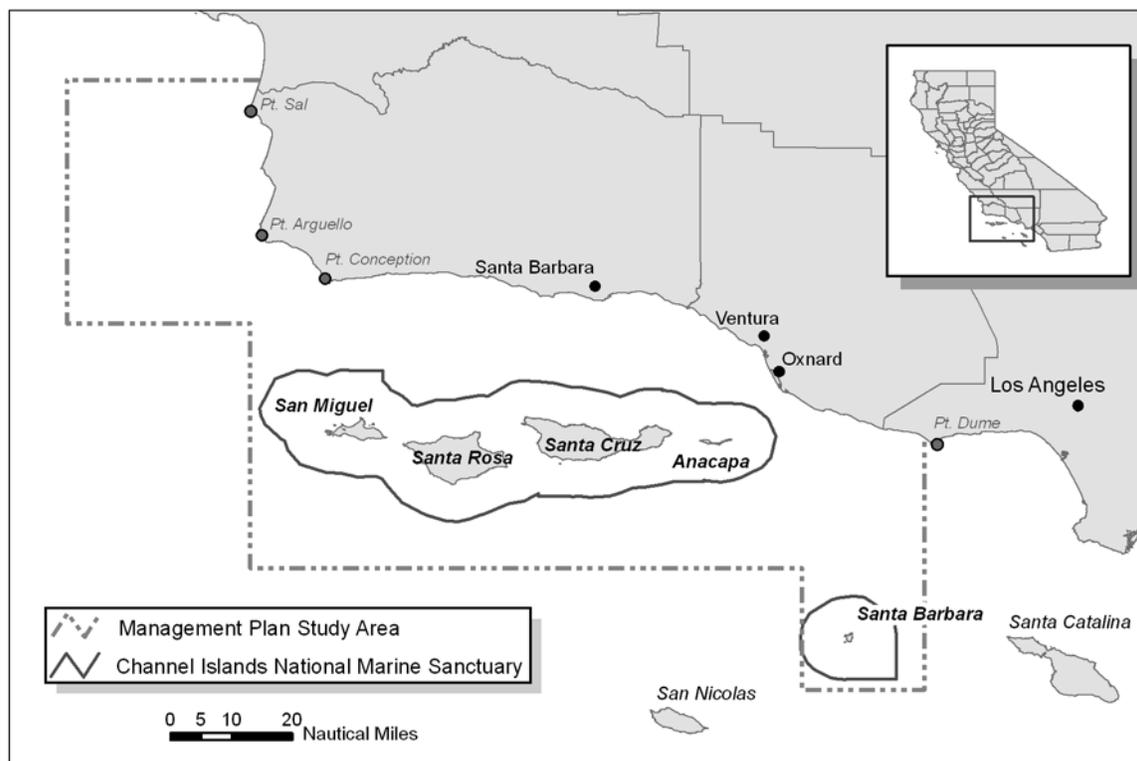


Figure 5. CINMS Management Plan Review Study Area

Applying Science, Socioeconomics, and Local Knowledge

Once the study area was defined, CINMS focused its evaluation of the natural resources and human activities associated within this defined area. In addition to input from the general public and the Sanctuary Advisory Council, Sanctuary staff relied on three strategic tools to assist in the development of actions for the revised management plan: science, socioeconomics, and local knowledge.

- **Science:** Scientific research and monitoring programs provide information for the Sanctuary to better understand and evaluate the effectiveness of management programs and policies. As a result, science has helped CINMS better measure, understand and predict change in the Sanctuary ecosystems. CINMS has collected data from individual researchers, institutions, and state and federal agencies, and, where possible, integrated it into a geographic information system (GIS) to help more clearly identify Sanctuary marine resources, habitats, and physical and geological features.
- **Socioeconomics:** Recognizing ecosystem sustainability and economic health are mutually beneficial, CINMS staff considered both the potential negative impacts that may be caused by management restrictions on income-generating activities, net economic user values, and the potential public benefits derived from long-term protection of nationally significant resources. A socioeconomic analysis considering impacts to user groups from proposed actions in this revised management plan is contained in the FEIS (Volume II, Section 4.0).
- **Local Knowledge:** CINMS recognizes local citizens' understanding and respect of the regional environment. Many of the community partners involved in the development of this management plan have been in and on the waters of the Sanctuary for up to a half-century and their knowledge can be more extensive than available scientific research. In addition, community voices represent

local interests, issues and concerns. As such, the local mariners interviewed in 2000 for a CINMS Ethnographic Data Survey (Kronman 2000a), the general public and the Advisory Council have all provided invaluable information used to develop this revised management plan.

Developing the Action Plans

Action plans are the means by which the NMSP identifies and organizes the wide variety of management tools it employs to manage and protect its marine resources. Action plans allow the NMSP to articulate the programs, projects and regulations it uses to address the resource issues identified for this management plan and to fulfill the purposes and policies of the NMSA. The action plans in this document were developed by the CINMS staff with input from the Advisory Council and the general public. In general, they are designed to address:

- The management issues identified during the management plan review process;
- The goals and objectives of the NMSA;
- Extensive comments, input and ideas from the Sanctuary Advisory Council;
- The scientific, socioeconomic and local knowledge gathered about the status of Sanctuary resources and resource management issues;
- The unique, non-duplicative, and beneficial services CINMS can offer to improve resource management; and
- The need for determining Sanctuary effectiveness over time.

The action plans are in Section III of this document. Section II: The Sanctuary setting, which follows, describes various aspects of the CINMS regional ecosystems and human uses of the Sanctuary.¹¹ It also provides information on Sanctuary administration and management organization.

Public Comments / Finalizing the Management Plan and EIS

This management plan and the Final EIS are the result of finalizing the draft documents per responses to public and agency comments, and minor changes made by Sanctuary staff. In May 2006, NOAA released the draft management plan and DEIS for public review and comment. NOAA received over 600 comments from individuals, organizations, and government agencies. In March 2008, NOAA released for public review and comment a supplemental DEIS (SDEIS) containing an analysis of further modifications proposed for the Sanctuary's discharge/deposit regulation. The SDEIS analysis addressed regulation of sewage and graywater discharges/deposits from vessels 300 GRT or more. NOAA has addressed all substantive public and agency comments from 2006 and 2008, and where appropriate has revised the management plan and EIS according to responses to comments. Public and agency comments received during the 2006 and 2008 public comment periods, and NOAA's responses to these comments, are provided in Vol. II, Appendix B.

In addition to revising the management plan and EIS per responses to comments, Sanctuary staff have made minor revisions to update outdated information, and to correct minor typographical, technical, and formatting errors. Vol. I, Appendix C and Vol. II, Appendix B contain information about changes made to the management plan and EIS, respectively, between Draft and Final versions.

¹¹ For an in-depth analysis of many of these features, see Section 3.0 in the Final Environmental Impact Statement.