



Chumash Heritage National Marine Sanctuary

Final Management Plan



The National Oceanic and Atmospheric Administration (NOAA) respectfully acknowledges that the ocean waters, seafloor, and coast of Chumash Heritage National Marine Sanctuary are, and always have been, the native homelands of Chumash Peoples and their ancestors, and that adjacent waters and coasts further north are also the native homelands of Salinan Peoples and their ancestors. NOAA designates this sanctuary with respect and reverence for the Indigenous Peoples of this coastal area, and looks forward to a future of partnership and co-stewardship to protect and honor this special place.

U.S. Department of Commerce
Gina Raimondo, Secretary

National Oceanic and Atmospheric Administration
Richard W. Spinrad, Ph.D., Under Secretary of Commerce for Oceans and Atmosphere and
NOAA Administrator

National Ocean Service
Nicole LeBoeuf, Assistant Administrator

Office of National Marine Sanctuaries
John Armor, Director



**NATIONAL
MARINE
SANCTUARIES**

Cover photo: Coastal view looking north from Point Conception Lighthouse. This point of land is culturally significant for Chumash Peoples and their ancestors, known as Humqaaq ("the ravens come") but with several different spellings (kumqaaq', humkak, humqaa'a, kumkak', kunq'aaq'). Photo: Robert Schwemmer/NOAA

Table of Contents

| | |
|---|------------|
| Table of Contents | i |
| Acknowledgements | ii |
| Glossary of Acronyms | iii |
| Executive Summary | iv |
| About the Sanctuary | iv |
| About the Management Plan..... | iv |
| Section 1: Introduction | 1 |
| Background: About the Sanctuary | 1 |
| Purpose of the Management Plan | 6 |
| Developing and Implementing the Management Plan | 7 |
| Looking to the Future: Phase 2 of Sanctuary Conservation..... | 7 |
| Indigenous Collaborative Co-Stewardship..... | 8 |
| Section 2: Action Plans | 19 |
| Indigenous Cultural Heritage Action Plan | 20 |
| Climate Change Action Plan..... | 26 |
| Maritime Heritage Action Plan | 31 |
| Offshore Energy Action Plan..... | 35 |
| Water Quality Action Plan..... | 39 |
| Blue Economy Action Plan..... | 44 |
| Wildlife Disturbance Action Plan..... | 48 |
| Boundary Adjustment Action Plan | 52 |
| Education and Outreach Action Plan..... | 56 |
| Resource Protection Action Plan..... | 60 |
| Research and Monitoring Action Plan | 64 |
| Operations and Administration Action Plan..... | 70 |
| References | 74 |
| Appendix A: Terms of Designation | 76 |
| Appendix B: Estimated Operating Budget | 81 |



Acknowledgements

Several individuals from NOAA and the Office of National Marine Sanctuaries (ONMS) were instrumental in supporting the development of this final management plan. The following staff members are acknowledged for their assistance in preparing and editing this document and its supporting information: Bridget Hoover, Dave Lott, Dayna McLaughlin, Eleri Griffiths, Erik Federman, Kirsten White, Laura Ingulsrud, Martha McCoy, Michael Murray, Michele Roest, Nicole Capps, Paul Michel, Robert Schwemmer, Ryan Freedman, Sara Hutto, Sarah Stein, William Douros, and Zac Cannizzo. In addition, many ONMS and NOAA document reviewers were helpful in guiding this plan to fruition.

ONMS also respectfully acknowledges and appreciates the numerous Tribes, Indigenous groups, and Indigenous community members that actively participated in the sanctuary designation process. Their generously shared wisdom and input significantly shaped and inspired this management plan.

Glossary of Acronyms

| | |
|--------|--|
| BA | Boundary Adjustment, used in numbering strategies and activities |
| BE | Blue Economy, used in numbering strategies and activities |
| CC | Climate Change, used in numbering strategies and activities |
| C.F.R. | Code of Federal Regulations |
| CHNMS | Chumash Heritage National Marine Sanctuary |
| CINMS | Channel Islands National Marine Sanctuary |
| EO | Education and Outreach, used in numbering strategies and activities |
| ICAP | Indigenous Cultures Advisory Panel |
| ICH | Indigenous Cultural Heritage, used in numbering strategies and activities |
| IPC | Intergovernmental Policy Council |
| JPA | Joint Project Authority |
| MBNMS | Monterey Bay National Marine Sanctuary |
| MH | Maritime Heritage, used in numbering strategies and activities |
| MOA | Memorandum of Agreement |
| NHPA | National Historic Preservation Act |
| NMSA | National Marine Sanctuaries Act |
| NOAA | National Oceanic and Atmospheric Administration |
| OA | Operations and Administration, used in numbering strategies and activities |
| OCNMS | Olympic Coast National Marine Sanctuary |
| OE | Offshore Energy, used in numbering strategies and activities |
| ONMS | Office of National Marine Sanctuaries |
| RAP | Research Activities Panel |
| RM | Research and Monitoring, used in numbering strategies and activities |
| RP | Resource Protection, used in numbering strategies and activities |
| SAC | Sanctuary Advisory Council |
| SIMoN | Sanctuary Integrated Monitoring Network |
| SLOCAL | Visit SLOCAL – San Luis Obispo, California |
| U.S.C. | United States Code |
| WD | Wildlife Disturbance, used in numbering strategies and activities |
| WQ | Water Quality, used in numbering strategies and activities |

Executive Summary

About the Sanctuary

Chumash Heritage National Marine Sanctuary (CHNMS) covers 4,543 square miles of central California's coastal and ocean waters along 116 miles of coastline between San Luis Obispo and Santa Barbara counties (see Figure 1). The sanctuary's eastern boundary follows California's shoreline at the high water line, beginning approximately two miles southeast of the Diablo Canyon Power Plant marina breakwater and extends along the shoreline south to Naples Reef on the Gaviota Coast. The southern boundary extends offshore along the western edge of Channel Islands National Marine Sanctuary and around Arguello Canyon and Rodriguez Seamount. The western boundary extends further into the Pacific Ocean to a maximum of 60 miles offshore and 11,580 feet below sea level. Offshore, the northern boundary spans 55 miles over part of the Santa Lucia bank directly adjacent to the mouth of the Santa Maria River in an east-west direction, and turns due north for 12 miles to reconnect with the point southeast of Diablo Canyon Power Plant.


The sanctuary has special, nationally significant ecological qualities, shaped by important offshore geologic features. Seasonal upwelling caused by the California Current drives the area's high biological productivity, supporting dense aggregations of marine life. The presence of a biogeographic transition zone, where temperate waters from the north meet warmer southern currents, adds to the sanctuary's significance in terms of biodiversity and abundance of birds, marine mammals, sea turtles, fishes, invertebrates, and marine plants. The coast and sanctuary waters have been, and remain, sacred to Indigenous Peoples.

About the Management Plan

This final management plan, the first for CHNMS, charts an initial course for understanding and protecting sanctuary resources by addressing critical and emerging threats, research and monitoring needs, and public engagement, and effectively implementing and sustaining core programs in collaboration with Tribes and Indigenous community partners.¹ This plan consists of goals and strategies that are generally broad in nature, providing flexible direction as NOAA explores how to best integrate the sanctuary into communities, pursues opportunities for partnerships, and determines additional actions needed. This final management plan for CHNMS includes 12 action plans covering issue-based and program-based themes that are intended to guide actions over the coming five to 10 years. Each action plan contains strategies with multiple activities to achieve goals.

Core priorities for designating this sanctuary, and that are supported in this plan, include pursuing opportunities to raise public awareness and appreciation of Indigenous cultures, collaboratively incorporating Indigenous Knowledge and co-stewardship participation into sanctuary management, and protecting resources essential to these cultures. A key sanctuary

¹ This management plan uses "Tribes and Indigenous communities" and other related phrases to refer broadly to federally recognized Tribes, those Native American Indian Tribes not federally recognized, and other Indigenous groups and organizations. When appropriate to reference the federally recognized Tribe in this area, the Santa Ynez Band of Chumash Indians, the management plan specifically names that Tribe.



management structure is the Indigenous Collaborative Co-Stewardship Framework, which intends to facilitate engagement and partnership building with local Indigenous communities and offers a variety of ways for a range of Tribal and Indigenous community members to be seen and heard. In addition to Indigenous cultural values, this plan also upholds the importance of sanctuary waters for a variety of public uses, such as recreation, tourism, commercial and recreational fishing, research, education, and the appreciation of maritime heritage resources (e.g., historic shipwrecks).

In preparing this plan, NOAA's Office of National Marine Sanctuaries (ONMS) spent considerable time reviewing the nomination, public comments, and drawing on experience gained at other national marine sanctuaries in California, looking closely at the condition of and threats to sanctuary resources, and learning from Tribes and Indigenous community members. Public comment on the draft management plan and other designation materials led to a number of important improvements and clarifications.

This management plan describes the myriad ways ONMS will manage this important national treasure. Numerous partners are identified for all of the action plans, because effective coastal and marine conservation and management requires partnerships. While there are aspirational aspects of this management plan, NOAA intends to work diligently on all of the strategies and activities within it. Nonetheless, the speed and breadth of NOAA's efforts to implement this management plan will depend on public and private resources of the agency itself and those available for its partners.

Section 1: Introduction



A sand dollar (*Clypeasteroidea*) bed stretches across the ocean floor near Cojo Bay. Photo: Robert Schwemmer/NOAA

Background: About the Sanctuary

Through its designation as the 17th national marine sanctuary of the National Marine Sanctuary System, Chumash Heritage National Marine Sanctuary (CHNMS) is acknowledged as a national oceanic gem and underwater treasure. This sanctuary was proudly built upon a community-based vision and four decades of locally-driven efforts aimed at ensuring these special waters would be given lasting protection, care, and stewardship to benefit all.

This sanctuary is respectfully designated within a broader region of deep spiritual significance, cultural identity, and historical value to the Indigenous Peoples of the local coastal area. This is and always has been their place.

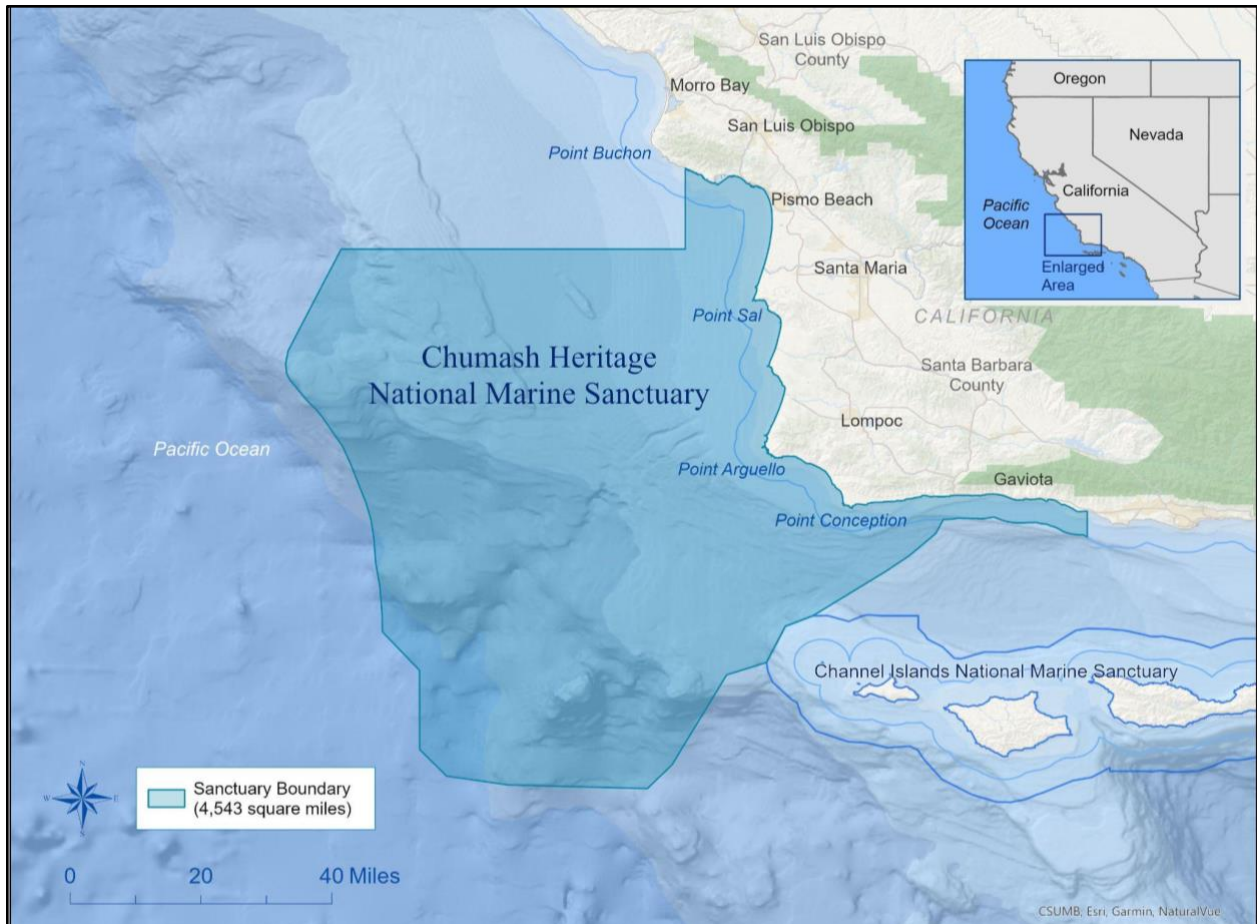


Figure 1. Boundary of Chumash Heritage National Marine Sanctuary. Image: NOAA

Description of the Area

Sanctuary Size, Location, and Coastal Communities

CHNMS covers 4,543 square miles of central California's coastal and ocean waters along 116 miles of coastline between San Luis Obispo and Santa Barbara counties (Figure 1). The sanctuary's eastern boundary follows California's shoreline at the high water line beginning approximately two miles southeast of the Diablo Canyon Power Plant marina breakwater and extends along the shoreline south to Naples Reef on the Gaviota Coast. The southern boundary extends offshore along the western edge of Channel Islands National Marine Sanctuary (CINMS) and around Arguello Canyon and Rodriguez Seamount. The western boundary extends further into the Pacific Ocean to a maximum of 60 miles offshore and 11,580 feet below sea level. Offshore, the northern boundary spans 55 miles over part of the Santa Lucia Bank directly adjacent to the mouth of the Santa Maria River in an east-west direction, and turns due north for 12 miles to reconnect with the point southeast of Diablo Canyon Power Plant.

There are several cities along the stretch of coast bordering the sanctuary between San Luis Obispo and Santa Barbara counties. Along the sanctuary's northern coastal area is Avila Beach (population 1,599), Pismo Beach (population 7,948), Grover Beach (population 12,547), and Arroyo Grande (population 18,243). The adjacent city of San Luis Obispo (population 49,244) is located further inland. In northern Santa Barbara County, the coastline adjacent to the

sanctuary is largely rural and remote. Guadalupe (population 8,622) and Lompoc (population 43,045) are located relatively close to the sanctuary coastline, and Santa Maria (population 109,987) is the largest inland city near the sanctuary located about 12 miles from the coast. Just beyond the sanctuary's eastern boundary on the Gaviota Coast is the city of Goleta (population 32,665), neighboring Santa Barbara (population 86,499).²

Most of the sanctuary coast is rural and sparsely populated, interspersed with bluffs and long stretches of sandy beaches, sand dunes, and mountainous regions. The sanctuary coastline hosts a large military installation (Vandenberg Space Force Base), private ranches (e.g., Hollister Ranch on the Gaviota Coast), and many state and local parks (e.g., Rancho Guadalupe Dunes Preserve, Point Sal State Beach). The marine environment provides a special sense of place to coastal communities. Four state marine protected areas are located within state waters of the sanctuary, including: Vandenberg and Point Conception state marine reserves, and Kashitayit and Naples state marine conservation areas. Visitors are attracted by the area's significant historic, archaeological, cultural, and aesthetic resources, as well as its beauty and recreational opportunities.

Indigenous Peoples

California's central coast has been inhabited by Indigenous Peoples for at least 10,000 years, and evidence exists for occupation dating as far back as 18,000 years (Braje et al., 2021). The Chumash and Salinan Peoples hold the region's coastal ecosystem as essential to their heritage and have been its stewards since the beginning of their creation.

Chumash Peoples settled the coast from approximately Paso Robles and Morro Bay south to Malibu, and the northern Channel Islands. Once the largest cultural group in California, they occupied hundreds of villages and are a maritime culture well known and respected for their ocean-going skills, including their tomol (plank canoe) construction and navigation (McGinnis et al., 2004). Chumash Peoples are also well known and respected for their fine basketry, arts, and storytelling, and had advanced monetary developments and wide trade networks. The Chumash Peoples, including Chumash culture, values, cosmology, lifeways, epistemologies, and languages have emerged specifically from the lands and waters of the sanctuary region and have continued to develop and change in relationship with them (Cordero et al., 2016). It is understood that the northern coastal territory of the Chumash partially overlapped with the southern coastal territory of the Salinan.

The Salinan Peoples occupied a territory, primarily north of the sanctuary, that ranged from approximately Morro Bay to just north of Big Sur, with an inland extent south to the Caliente Range and north to Salinas. There are at least 21 recorded Salinan village sites within this area, with more likely to be submerged off the coast, and others yet to be discovered inland. Salinan Peoples speak a unique language, and have a rich cultural heritage that includes a variety of traditional practices, storytelling, art forms, and the construction and use of tule canoes.

The region's temperate coastal climate, along with rich and varied resources available for subsistence, likely plays an important part of the long history of Indigenous habitation. Ocean and coastal ecosystems provided fish, shellfish, marine mammals, and kelp for food; shells and

² Populations retrieved from [California Demographics](#) in 2024.

bones for tools such as fishhooks and harpoons; feathers and pelts for clothing; and asphaltum tar for sealing baskets and waterproofing Chumash tomols. Tomols made possible travel from along the coast and to the northern Channel Islands, which were also the site of densely populated permanent villages.

The traditional histories of the Indigenous Peoples reflect ancestors who thrived in villages and small settlements along the coast, inland, and at the northern Channel Islands. Following the arrival of European explorers and Spanish missionaries to California beginning in the 17th century, the establishment of the Spanish Mission system in San Diego in 1769 signaled the beginning of a time of great hardship for California's native coastal peoples. Villages were decimated by conflict, disease, and forced relocation to mission settlements. Traditional cultural names were replaced with designations (such as Barbareño and Migueleño) that reflected the missions to which they were subjugated. The populations of Native Peoples plummeted. As a result, it was often advantageous for Native Peoples to hide their Indigenous identity to avoid persecution. It is important to recognize that despite this devastating history, the Indigenous Peoples of this coast did not disappear. Rather, they have maintained and revitalized themselves as California Native American Tribes. The Chumash and Salinan Peoples are still here, and remain dedicated to the ongoing stewardship of their cultures, lands, traditions, resources, and sacred sites.

The opportunity to respectfully incorporate Indigenous Knowledge, and the facilitation of Tribal and Indigenous community collaborative co-stewardship, are core components of the sanctuary's management approach. Through the protection, practice, restoration, and revitalization of traditional knowledge and culture, Indigenous Peoples have continued their role as stewards of the central California coast. Their participation is vital for the successful implementation of this management plan.

Military Presence

The Department of Defense operates the Point Mugu Sea Range off the coast of central and southern California, overlapping a large area of the sanctuary. Military readiness training and testing, warfare practice exercises, weapons testing including ballistic missile tests, and other operations occur within the range. The Department of Defense also operates Vandenberg Space Force Base with commercial, civil, and military launches common from the base.

Sanctuary Resources

Natural and Biological Resources

The sanctuary contains remarkable marine biodiversity, productive ecosystems, and sensitive species and habitats. The ecology of the sanctuary is shaped by unique offshore geologic features such as Rodriguez Seamount, Santa Lucia Bank, and Arguello Canyon. Seasonal upwelling caused by the California Current serves as the engine of the sanctuary's high biological productivity, supporting dense aggregations of marine life. The distinctive presence of a biogeographic transition zone, where temperate waters from the north meet warmer southern currents, adds to the sanctuary's national and international significance, enhancing biodiversity and supporting a high abundance of seabirds, marine mammals, sea turtles, fishes, invertebrates, and marine plants. Ocean productivity in the sanctuary remains relatively high, despite recent recurrent marine heat waves.

There are a variety of important marine habitats within the sanctuary, including sandy beaches, rocky shores, kelp forests and rocky reefs, estuaries and seagrass beds, shallow sandy seafloor areas, deep seafloor environments, and pelagic habitats. These habitats support a diverse range of marine species, including invertebrates, fish, seaweed, marine plants, marine mammals, and seabirds.

Maritime Heritage Resources

NOAA estimates approximately 200 losses and other casualties of ships and aircraft reported within the sanctuary. Major shipwrecks located within the sanctuary include the U.S. Quartermaster steam auxiliary bark *Edith* lost at the San Antonio River, the U.S. Coast Guard Cutter *McCulloch* which lies offshore from Point Conception (NOAA, 2020), and the Gold Rush era steamship *Yankee Blade* lost off Point Arguello.

Challenges Confronting Sanctuary Ecosystems

The ecosystem of the sanctuary faces many challenges. Climate change threats include sea level rise, warming ocean temperatures, and increased ocean acidification. Additionally, other human activities and industrial uses could disturb or harm sanctuary resources.

- California’s central coast is expected to experience 2.1 to 6.7 feet of sea level rise by 2100 ([Ocean Protection Council, 2018](#)), which will greatly exacerbate coastal flooding, shoreline erosion, inundation of wetlands and estuaries, and saltwater intrusion into aquifers. Cultural and historic resources as well as existing built infrastructure along the coast face damaging consequences. Coastal archaeological sites important to Tribes and Indigenous communities are also at risk.
- California ocean waters are acidifying at twice the rate of the global ocean average. More acidic water makes it difficult for foraminifera (single-celled plankton) to flourish and for shellfish to build a thick calcium carbonate shell.
- While offshore wind energy is a critical component of a transition away from fossil fuels and may help mitigate the impacts of climate change, the region is experiencing increased efforts to advance offshore wind energy development which may itself have impacts on the marine environment and create conflicts with other ocean users.
- Coastal and offshore energy facilities are scheduled for decommissioning and removal over the next decade, which presents risks in the form of habitat damage, harmful discharges, and noise impacts on marine species, yet also important opportunities for beneficial outcomes like restoration of habitats.
- Existing activities and events with the potential to impact sanctuary resources include watershed runoff of pollutants and debris (e.g., from agricultural and urban landscapes), sanitary sewer overflows, heated water discharge and intake system entrainment from the Diablo Canyon Power Plant, seismic surveys, whale-ship strikes, and the continued operation and eventual decommissioning of oil and gas production facilities.
- Pressures generally associated with human population growth pose additional direct and indirect threats, such as potential wildlife disturbance or increased debris and pollution.

National Marine Sanctuaries

The National Marine Sanctuaries Act (NMSA; 16 United States Code (U.S.C.) § 1431 *et seq.*) authorizes the Secretary of Commerce to designate and manage areas of the marine and Great Lakes environments in a way that limits the impact of those human activities that are not compatible with the primary objective of sanctuary resource protection. A designation as a sanctuary is based on attributes of special national significance, including conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or aesthetic qualities.

Day-to-day management of national marine sanctuaries has been delegated by the Secretary of Commerce to NOAA's ONMS, which serves as the trustee for 17 national marine sanctuaries and two marine national monuments, areas encompassing approximately 629,000 square miles of ocean and Great Lakes waters from the Hawaiian Islands to the Florida Keys, and from the Olympic Coast to American Samoa. National marine sanctuaries protect our nation's most vital coastal and marine natural and cultural resources. Through active research, management, and public engagement, national marine sanctuaries sustain healthy environments that are the foundation for thriving communities and stable economies.

Purpose of the Management Plan

Management plans identify immediate, mid-range, and long-term challenges and opportunities; outline management priorities, programs, and potential partners; and are reflective of public input and best available science. A management plan describes programs geared toward resource protection, research, education, destination stewardship, and outreach that guide sanctuary activities and operations. A management plan also specifies how a sanctuary should best protect its resources. This final management plan for CHNMS outlines the goals, strategies, and range of activities necessary to conserve the sanctuary's nationally significant biological, cultural, recreational, and historical sanctuary resources. The plan also explores innovative management practices to respond to emerging issues in the sanctuary, and it respectfully invites engagement with local Tribes and Indigenous communities interested in collaborative co-stewardship of the area.

The first management plan for a new national marine sanctuary typically consists of broad goals and strategies, scaled appropriately for a new site with many strategies focused on developing and initiating programs. While this management plan includes more detail than what has been typically included in many initial management plans for other national marine sanctuaries, NOAA recognizes that it takes several years for new sanctuaries to take root in communities, receive resources for management activities, explore opportunities for partnerships, and determine more specific activities to pursue. The management plan is intended to adapt over time as the sanctuary management implements elements of the plan to respond to current and emerging issues. Management plans are informed through the public comment process based on input from the general public, local governments, state and federal agencies, user groups, and Tribes and Indigenous communities who have interest in the management and operation of the sanctuary.

The CHNMS management plan consists of 12 action plans:

1. Indigenous Cultural Heritage
2. Climate Change
3. Maritime Heritage
4. Offshore Energy
5. Water Quality
6. Blue Economy
7. Wildlife Disturbance
8. Boundary Adjustment
9. Education and Outreach
10. Resource Protection
11. Research and Monitoring
12. Operations and Administration

Developing and Implementing the Management Plan

The action plans were originally informed by the general public, Tribes, and Indigenous groups through a scoping process conducted from November 2021 to January 2022, and were further informed during public review of the draft management plan from August to October 2023. In 2022, at the draft stage, NOAA hosted workshops to gather additional input on select topics and inform development of several action plans: Climate Change, Indigenous Cultural Heritage, Water Quality, Wildlife Disturbance, Education and Outreach, and Research and Monitoring. NOAA's formal consultation process with the federally recognized Santa Ynez Band of Chumash Indians also helped inform the preparation of action plans. Each action plan provides specific strategies and activities to address key issues and sustain core sanctuary programs.

The sanctuary's large coastal and oceanic area combined with the broad scope of issues and activities necessitate the involvement of organizations beyond ONMS. To develop this management plan, ONMS strengthened ongoing partnerships and developed new collaborations with: Tribes and Indigenous communities; federal, state, and local agencies; academic institutions; organizations; and businesses.

Looking to the Future: Phase 2 of Sanctuary Conservation

NOAA's designation of CHNMS in 2024 (see Figure 1) represents Phase 1 of sanctuary conservation on California's central coast. NOAA envisions a Phase 2 opportunity to consider expanding sanctuary protections in the future. As explained in NOAA's 2024 final environmental impact statement (see response to comment BO-1 in Appendix A), the basis of this phased approach involves providing time for offshore wind energy development plans to solidify and for leaseholders to receive necessary approvals and permits for subsea electrical transmission cables extending from the three Morro Bay Lease Areas within the Morro Bay Wind Energy Area to grid connection points at Morro Bay and Diablo Canyon Power Plant. Phase 2 will consider three discrete portions of the initially proposed sanctuary area for sanctuary conservation, including: 1) waters north of the CHNMS boundary up to the Monterey Bay National Marine Sanctuary (MBNMS) southern boundary; 2) waters west of the CHNMS boundary; and 3) waters within the Morro Bay Estuary.

NOAA will assess the nationally significant resources in these areas and the threats to those resources, and evaluate if national marine sanctuary status is the most appropriate tool to protect those resources. Options could include expanding the CHNMS boundaries, adjusting the MBNMS boundary, or designating a new sanctuary in this area. In order to initiate a review by 2032, NOAA acknowledges that analysis and characterizations may need to begin soon after CHNMS is designated, and remains committed to working with the diverse communities in the region on Phase 2, including through the Sanctuary Advisory Council (SAC).

The Boundary Adjustment Action Plan within this management plan describes the Phase 2 evaluation process. Importantly, inclusion of this action plan does not mean NOAA has decided to expand the sanctuary. Rather, this action plan sets the stage for NOAA to decide if pursuing such a change is warranted.

Indigenous Collaborative Co-Stewardship

A key priority for CHNMS is to deliberately provide mechanisms for interested Tribes and Indigenous communities,³ including individuals with knowledge of Indigenous culture, history, and environment, to participate in collaborative co-stewardship of the sanctuary. It is also NOAA's intent for the sanctuary to highlight and honor the Indigenous cultural heritage of local peoples, the first stewards of these lands and waters. This approach is derived from principles underlying the [Joint Secretarial Order](#) on *Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters*, signed by the Secretary of Commerce in 2022 (U.S. Department of the Interior & U.S. Department of Agriculture, 2021). As derived from that Joint Secretarial Order, co-stewardship⁴ as referenced in this management plan broadly refers to collaborative or cooperative arrangements between NOAA and Tribes related to shared interests in the sanctuary. Collaborative and cooperative arrangements can take a wide variety of forms, including but not limited to sharing technical expertise; combining the capabilities of NOAA and Tribes through cooperative arrangements or other means to improve resource management and advance the responsibilities and interests of each; and incorporating Indigenous Knowledge, experience, and perspectives into NOAA's management of the sanctuary.

In carrying out this management plan, NOAA, through outreach and coordination with interested Tribes and Indigenous communities, intends to:

- Respect and honor the intent of the sanctuary nomination regarding Indigenous community involvement;
- Adapt and improve collaboration over time through substantive, ongoing involvement;

³ This management plan uses "Tribes and Indigenous communities," and other related phrases to refer broadly to federally recognized Tribes, those Native American Tribes that are not federally recognized, and other Indigenous groups and organizations. Where appropriate to reference the federally recognized Tribe in this area, the Santa Ynez Band of Chumash Indians, the management plan specifically names that Tribe.

⁴ See [here](#) for NOAA's draft definition for co-stewardship, October 2023.

- Build on Indigenous Knowledge⁵ to help achieve shared marine conservation goals;
- Provide for appropriate, substantive involvement of all interested local Indigenous community groups (federally and non-federally recognized local Tribes and Indigenous groups) in the ongoing stewardship of the sanctuary; and
- Strive to inform and inspire others by serving as an example of effective Tribal and Indigenous community collaboration, consultation, and engagement in a national marine sanctuary.

An Indigenous collaborative co-stewardship approach to managing the sanctuary would be sovereignty affirming for Tribal governments, and recognize and respect the independent authority of governing Tribes. By collaborating with interested Tribes and Indigenous communities, NOAA invites meaningful input on sanctuary program development and management decision making, seeking to find consensus and protect cultural interests.

An Indigenous collaborative co-stewardship approach to sanctuary management is intended to include:

- Bringing interested federally and non-federally recognized local Tribes and Indigenous communities into planning processes under appropriate authorities;
- Providing suitable opportunities for Tribes and Indigenous communities to join in decision-making processes;
- Greater recognition of the need for Tribal-federal coordination;
- Bringing Indigenous forms of knowledge and practice to solve resource management problems;
- Pooling of resources (e.g., funding, labor, knowledge) to address needs that parties could not address adequately on their own; and
- Creating opportunities for mutual learning and building respect for different ways of knowing (Donoghue et al., 2010, available [online](#)).

As described in the Indigenous Cultural Heritage Action Plan, NOAA invites federally and non-federally recognized Tribes and Indigenous communities to collaborate on a range of planned activities, including:

- Working together under appropriate authorities to adopt an organizational framework for Tribal and Indigenous participation and collaborative co-stewardship of the sanctuary;
- Identifying cultural resources within the sanctuary and integrating Indigenous Knowledge;
- Providing protection to cultural resources within the sanctuary;
- Providing cultural outreach and educational opportunities to serve Tribal and Indigenous communities and the public;
- Facilitating and supporting Tribal and Indigenous community cultural access, connection to, and activities within the sanctuary; and

⁵ As referred to throughout this management plan, the meaning Indigenous Knowledge, as put forth by the [Council on Environmental Quality in 2022](#), is “a body of observations, oral and written knowledge, innovations, practices, and beliefs developed by Tribes and Indigenous Peoples through interaction and experience with the environment” (Council on Environmental Quality, 2022, p. 4).

- Providing ongoing cultural training to sanctuary staff, volunteers, and advisory council members.

Following sanctuary designation, additional details will be documented to define roles and responsibilities related to the participation of Tribal and Indigenous group representatives. This will include development of a memorandum of agreement (MOA) and a charter for the Intergovernmental Policy Council (IPC), as well as a charter for the SAC. Additionally, this could include developing guidelines for the envisioned Indigenous Cultures Advisory Panel (ICAP) once created as a working group of the SAC. These groups are described further below.

NOAA has developed an Indigenous Collaborative Co-Stewardship Framework to guide and facilitate Tribal and Indigenous community participation and collaborative co-stewardship of the sanctuary. This framework is meant to provide a starting point, realizing that through mutual learning and experience, adaptations and improvements will be made over time as the new sanctuary matures and builds the relationships necessary for sustained success.

Participation and Inclusion

NOAA intends to use an inclusive approach to engage appropriately with local stakeholders and groups, residents, and Tribes and Indigenous communities. NOAA is guided by Section 301(b)(7) of the NMSA, which states that one of the intended purposes of national marine sanctuaries is “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.”

There are many groups and voices throughout the diverse communities of California’s central coast, including those involved with Chumash and Salinan history, heritage, education, cultural practices, and more. NOAA understands that some of these groups may self-identify as a Tribe and/or Tribal-related nonprofit organization; some may offer to share documented lineage to their historic village areas; some may be otherwise externally recognized as a Tribe or Tribal contact; and at this time only one group is a federally recognized sovereign Tribal government, the Santa Ynez Band of Chumash Indians.

NOAA does not have the authority to adjudicate claims of authenticity or disputes concerning Tribal ancestry, and declines to do so. Rather than inappropriately attempt to arbitrate current conflicts, NOAA is focusing on implementing this management plan to respectfully honor the deep connection and history of Indigenous Peoples to the local waters and coastal areas of the sanctuary.

History, Resilience, and Rights

In 2023, President Biden acknowledged in a [White House National Native American Heritage Month Proclamation](#) that, during the course of our Nation's history: “Native people were pressured to assimilate, banned from practicing their traditions and sacred ceremonies, and forced from their homes and ancestral homelands. This violence and devastation cost countless lives, tore families apart, and caused lasting damage to Tribal communities and institutions. Despite centuries of violence and oppression, Native peoples remain resilient and proud.”

In addition, in 2009, Congress⁶ recognized that “there have been years of official depredations, ill-conceived policies, and the breaking of covenants by the federal government regarding Indian tribes,” and apologized “on behalf of the people of the United States to all Native Peoples for the many instances of violence, maltreatment, and neglect inflicted on Native Peoples by citizens of the United States.”

The [United Nations Declaration on the Rights of Indigenous Peoples](#) (UNDRIP) was adopted in 2007 by the UN General Assembly.⁷ Among its many articles, UNDRIP includes the right of Indigenous Peoples to “maintain, protect and develop” their cultures in the past, present, and future. NOAA understands the UNDRIP principles and respects that the United States is supportive of, but not currently a signatory to, this declaration.⁸ The sanctuary aligns well with UNDRIP principles, particularly given the collaborative co-stewardship approach planned to elevate Indigenous voices, and the sanctuary’s programmatic emphasis honoring Indigenous Peoples connected to the local coasts and ocean.

ONMS recognizes the strength and resilience of Tribal Nations and Indigenous communities of the sanctuary area, and is committed to working collaboratively with Indigenous Peoples to collectively achieve a shared interest to care for the marine ecosystem.

Framework for Collaboration and Co-Stewardship

For thousands of years, the coast and waters off central California have been home to Indigenous Peoples and remain of sacred importance to this day. NOAA recognizes the unique and special focus that a national marine sanctuary can bring to the cultural heritage of this coastal area. One of the principal objectives of designating this new sanctuary is to bring Indigenous Knowledge together with Western approaches and science to guide sanctuary management.

This section describes initial plans for collaborative co-stewardship arrangements and approaches that would support meaningful engagement with Tribes and Indigenous communities surrounding the sanctuary. While a new collaborative co-stewardship structure would likely take time to evolve and formally solidify, NOAA is committed to using a variety of approaches to work with local Tribes and Indigenous communities in support of mutual goals and improved management of the new sanctuary.

ONMS seeks to offer and support a variety of ways that interested Tribes and Indigenous communities could get involved with the sanctuary. These opportunities are shown and described below as a series of organizational groups that are envisioned to interconnect and work in concert to maximize Tribal and Indigenous community involvement in support of the mission of the sanctuary (Figure 2). The elements described include: (1) sanctuary management by NOAA pursuant to its federal agency responsibilities; (2) required government-to-

⁶ The [2009 Congressional statement](#) can be found in the statute titled Department of Defense Appropriations Act, 2010, cited as: Pub. L. No. 111-118, § 8113, 123 Stat. 3409, 3453 (2009).

⁷ More information on the adoption of UNDRIP is available [online](#).

⁸ The UNDRIP is not legally binding on states and does not impose legal obligations on governments, but like all human rights instruments, it carries moral force. While not endorsing the UNDRIP, the United States has agreed to support the Declaration. More information is available [online](#).

government Tribal consultations; (3) an IPC; (4) the SAC; (5) an ICAP; and (6) a nonprofit foundation (or foundations).

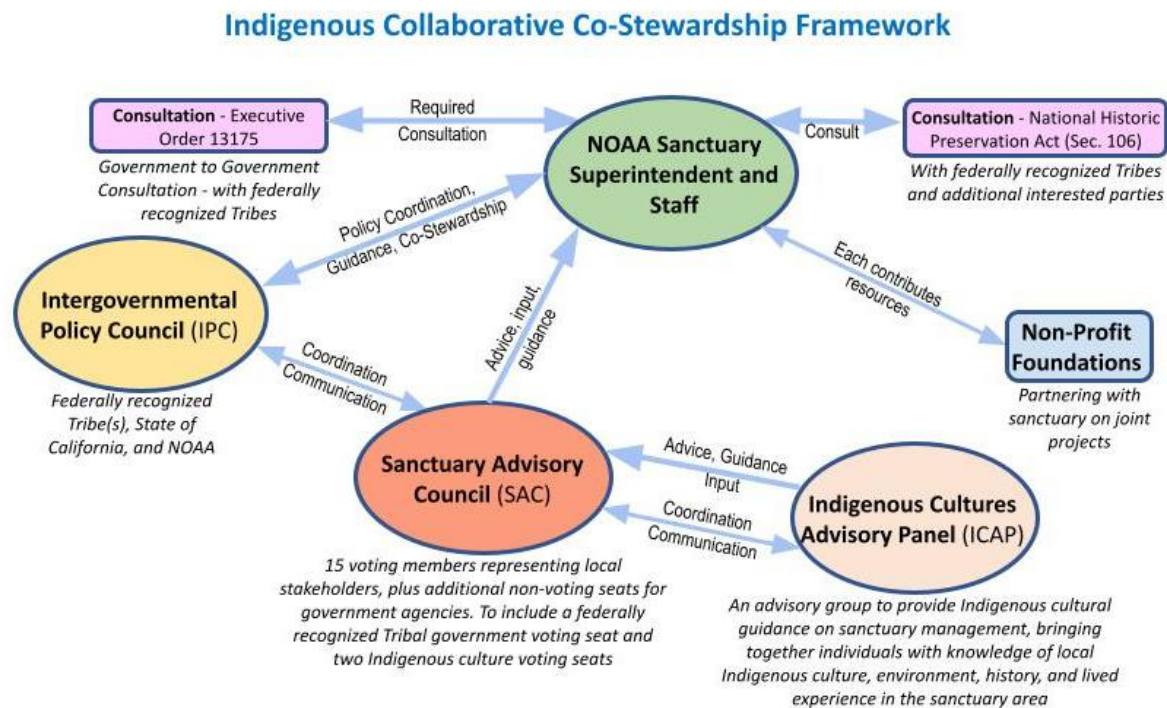


Figure 2. Indigenous Collaborative Co-Stewardship Framework. Graphic: NOAA

NOAA's Sanctuary Management Role and Responsibilities

NOAA's role in supporting the Indigenous Collaborative Co-Stewardship Framework rests primarily on its unique authorities and management responsibilities. The ability, responsibility, and legal authority to designate a national marine sanctuary, including its boundaries and federal regulations, rests with the federal government per the NMSA. NOAA seeks to exercise these responsibilities and authorities in a manner that is supportive of collaborative co-stewardship arrangements established with local Tribes and Indigenous community groups, as described in more detail below. NOAA will be expected to do its part by handling certain management and operational responsibilities including, but not limited to:

- Hiring of federal staff and associated personnel management.
- Enforcement of sanctuary regulations.
- Management plan issuance and revision (built on Tribal, Indigenous community, and broader public input).
- Issuance and oversight of sanctuary permits.
- Government-to-government consultation with federally recognized Tribes consistent with Executive Order 13175 (see also Figure 2).
- Consultation with federally recognized Tribes, as well as discretionary consultation with non-federally recognized Tribes serving as additional interested parties, pursuant to Section 106 of the National Historic Preservation Act (NHPA; see also Figure 2).

- Periodic federal regulatory review and rulemaking for the sanctuary under the NMSA and other applicable laws (following input from Tribal and Indigenous communities and the broader public).
- Management of the sanctuary’s congressionally appropriated federal budget.
- Procurements made with federal funds.
- Environmental compliance responsibilities that rest with NOAA/ONMS related to sanctuary actions being considered.
- Maintenance and operation of federally owned or funded office facilities, associated information technology functions, and necessary security requirements.
- Research vessel acquisition, ownership, and responsibility for operation and maintenance, including compliance with certifications such as scuba diving.
- Establishment (under NMSA authority) of a SAC, with seat structures, charter details, and operations to be overseen by ONMS.

Although NOAA has several fundamental responsibilities for establishing and managing the sanctuary, the sanctuary’s overarching vision, and many of its programs and projects, are of joint interest to ONMS and Tribes and Indigenous communities. The organizational structures described below present a variety of ways that collaborative co-stewardship can occur.

Tribal Consultation

It is important to note that while the Indigenous Collaborative Co-Stewardship Framework invites local Tribes and Indigenous groups and communities, including individuals with knowledge of Indigenous culture, history, and environment, to come together to pursue a collaborative approach to co-stewardship of the sanctuary, NOAA also has ongoing legal responsibilities under federal law and executive orders that involve consultations with individual federally recognized Tribes, when appropriate. NOAA acknowledges the unique trust responsibilities to and relationship between the federal government and federally recognized Indian Tribal governments, and the Tribal consultation requirement as set forth in Executive Order 13175.⁹ Further, the January 26, 2021 [Presidential Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships](#) commits the federal government to fulfilling trust and treaty obligations and recognizes the need for frequent and robust consultation with federally recognized Tribal Nations. Accordingly, throughout the designation process NOAA engaged in a formal government-to-government consultation process with the Santa Ynez Band of Chumash Indians, the only federally recognized Tribal Nation in the sanctuary vicinity.

In addition to a requirement to consult with federally recognized Tribes, Section 106 of the NHPA and its implementing regulations at 36 Code of Federal Regulations (C.F.R.) part 800 guides federal agencies to identify and consult on a discretionary basis with additional consulting parties that have a demonstrated interest in and concerns about the potential effects of planned federal projects on Tribal cultural and historic properties and resources. This could apply, for example, to a future sanctuary management action being considered by NOAA. NOAA understands and respects that these consultations with additional parties may include non-federally recognized Tribes and Indigenous groups that have a demonstrated interest in the

⁹ [Executive Order 13175](#), Consultation and Coordination with Indian Tribal Governments (November 6, 2000).

federal undertaking and concerns about the effects of the undertaking on historic properties (36 C.F.R. 800.2(c)(5)).

Sanctuary Advisory Council

[Sanctuary advisory councils](#) are established by ONMS under the authority of Section 315 of the NMSA (16 U.S.C. 1445a) to “advise and make recommendations to [NOAA through the sanctuary superintendent] regarding the designation and management of national marine sanctuaries.” The SAC may have up to 15 voting seats,¹⁰ and with the concurrence of the sanctuary superintendent, may create subcommittees and/or working groups that report to the full SAC on specific issues. Across the entire National Marine Sanctuary System, advisory councils have been critical for ensuring meaningful community involvement and have proven to be strong guides of sanctuary management. In fact, most significant sanctuary conservation actions developed from close involvement with, and the leadership of, advisory councils.

The SAC provides one of several opportunities for Tribal and Indigenous community participation with the sanctuary. Among the council’s 15 voting seats, ONMS envisions the SAC will have a voting seat for federally recognized Tribes and two Indigenous Cultural Knowledge voting seats to represent knowledge, history, and culture of the local Indigenous community. Each SAC seat includes a primary member and an alternate member (two people per seat). Individuals with Indigenous cultural knowledge could seek to participate through one of these seats. Beyond the 15 voting seats, several additional non-voting seats will be added to allow additional government agencies to participate; a student seat is also planned.

As has been the case at all national marine sanctuaries, the SAC is expected to become an essential advisory body helping to guide management based on local knowledge, and an open community forum for learning, respectful discussion and deliberation, and the promotion of sanctuary stewardship.

Intergovernmental Policy Council

Background: The IPC is a structural management element modeled after [the IPC at Olympic Coast National Marine Sanctuary \(OCNMS\)](#) in Washington state. The purpose of the Olympic Coast IPC is to provide: “an effective and efficient forum for communication and exchange of information and policy recommendations regarding the management of the marine resources and activities within the boundaries of the OCNMS. Its role is to bring together State, Federal and tribal governments for timely policy discussions, planning management initiatives, and to provide management direction to the OCNMS” ([OCNMS IPC MOA, 2017, p. 2, Sec I.B.](#)).

¹⁰ Pursuant to the NMSA (16 U.S.C. § 1445a(c)), for sanctuaries designated on or before November 4, 1992, such as CINMS and MBNMS, the voting seat membership of Advisory Councils may be greater than 15 members. For sanctuaries designated after that date, voting seat membership is capped at 15.

Participation: For the sanctuary, ONMS will establish an IPC to be engaged in collaborative co-stewardship. Participants would be governmental. Specific participants would include (at least initially):

- Federally recognized Tribe(s) in the vicinity of the sanctuary.
- State of California (led by an agency invested in Tribal management and conservation, likely the California Natural Resources Agency or one of its departments).
- NOAA (a non-voting participant).

Currently, only one federally recognized Tribal government is located within the area adjacent to the sanctuary: the Santa Ynez Band of Chumash Indians. That said, IPC participants could expand over time if additional Tribes receive federal-recognition status.

Role: The IPC will function as a collaborative co-stewardship entity for federally recognized Tribes and the state of California, allowing direct input to NOAA as it administers the new sanctuary. The IPC is expected to focus on cultural issues, opportunities, and projects that Tribes and Indigenous communities could engage in to support sanctuary goals, as well as sanctuary actions that could support Tribal community priorities. This could involve developing project proposals as well as providing management recommendations and guidance for the sanctuary.

A charter document will be created for the IPC to establish its structure, role, and approach to meetings, seats, and additional details, and a MOA between the IPC and NOAA will further formalize the relationship. It is not envisioned that participation in the IPC would be administratively burdensome. Looking to the [Olympic Coast IPC's charter](#), i.e., Section II (ONMS et al., 2007) and the [2018 MOA](#) with ONMS (ONMS, 2018), the following additional roles could be considered for the IPC:

- Engage with ONMS in identifying and evaluating emergent or critical issues involving use of the sanctuary and activities within it, or sanctuary resources and the impact of sanctuary management decisions. This may include advising ONMS on the development of annual budget and programmatic priorities, research and education objectives, and resource management initiatives.
- Coordinate and collaborate resource management efforts in the sanctuary among participating agencies and Tribal governments.
- Assist in the review of the sanctuary management plan; monitor and assess the success of the implementation of the management plan and related marine resource management initiatives.
- Coordinate and prioritize research objectives, and exchange technical, scientific, and policy information related to sanctuary resources and management.
- Reinforce the cooperative relationship between participants and their respective staffs.
- Undertake efforts to improve the awareness and understanding of the sanctuary among interested constituencies.
- Strive to ensure the IPC's guidance, direction, and recommendations are consistent with the statutory obligations of NOAA and the National Marine Sanctuary System to implement the NMSA and achieve the Act's primary objective of resource protection.

Indigenous Cultures Advisory Panel

Background: During the sanctuary designation process, ONMS discussions with many Tribes and Indigenous community groups and members, and public comments on draft designation materials, revealed support for the idea of creating a group setting that appropriately invites a variety of community members possessing knowledge of local Indigenous culture to work together on sanctuary-related issues. ONMS envisions that an ICAP could bring together individuals possessing knowledge of locally relevant Indigenous culture, history, environment, and interests to develop and provide essential advice supporting sanctuary management. NOAA respectfully expects this group could provide focused attention on critical issues for which the expertise and perspectives of working group members are necessary, and create unique and essential advice and guidance that is informed by knowledge of local Indigenous culture.

Participation: Participants are envisioned to possess knowledge or understanding of local Indigenous culture, history, environment, and lived experience across various geographic regions and historic Indigenous territories within the sanctuary area, including but not limited to such knowledge specific to local Tribes and Indigenous groups. Participants should have a meaningful interest in sanctuary management, and need not necessarily be members of a federally or non-federally recognized Tribe. Organizationally, the ICAP would be created by the SAC, with the concurrence of the sanctuary superintendent, as an advisory council working group. The SAC would develop a charter for the ICAP, including suggestions for determining its representative membership seats and processes for appointment of a chairperson.

Role: The ICAP would provide essential advice and guidance to the SAC on Indigenous cultural issues and opportunities related to the sanctuary. ICAP advice would flow to and through the SAC: the ICAP would develop their own recommendations on sanctuary issues in need of attention or guidance, passing their work to the SAC for deliberation before the SAC transmits the recommendations to the superintendent. NOAA also envisions that expertise and knowledge of ICAP members, their ideas, and recommendations could also be shared with the IPC as well as any nonprofit foundation that partners with the sanctuary, as appropriate. Coordination and communication between groups will be important to ensure efforts are aligned in pursuit of the sanctuary's mission and goals. Also, the SAC, IPC, or a partnering foundation may identify items that need further investigation, proper cultural advice, or Tribal and Indigenous protocol guidance, which the SAC could then request of the ICAP, as appropriate.

Examples of areas the ICAP might focus on include but are not limited to, development of traditional programs that promote Indigenous culture, design of outreach materials containing cultural references or artwork, appropriate cultural messaging for educational and outreach programs, and establishment of inter-Tribal and Indigenous protocols related to cultural activities in different areas of the sanctuary.

Nonprofit Foundation(s) and Use of Joint Project Authority

During the sanctuary designation process ONMS heard from some Tribes and Indigenous communities that a nonprofit foundation (or more than one) could be a valuable partnering entity to support Tribal and Indigenous community involvement in the implementation of sanctuary programs. For decades, ONMS has been partnering with a variety of nonprofit foundations that have entered into agreements supporting a partnership approach to advancing

sanctuary goals. A national example is the [National Marine Sanctuary Foundation](#). In California, other examples are the [Greater Farallones Association](#) and the [California Marine Sanctuary Foundation](#). These organizations raise funds from multiple sources, pursue and receive a variety of grants, and are run by their own leadership (executive directors) and a variety of staff. These organizations also have a Board of Directors and can form sub-groups as needed.

An important linkage between NOAA’s management of a sanctuary and local or national foundations is to rely on proven tools for collaboration, such as Joint Project Authority (JPA). The Department of Commerce’s JPA, 15 U.S.C. 1525, provides: “In the case of nonprofit organizations, research organizations, or public organizations or agencies, the Secretary may engage in joint projects, or perform services, on matters of mutual interest, the cost of which shall be apportioned equitably, as determined by the Secretary, who may, however, waive payment of any portion of such costs by others, when authorized to do so under regulations approved by the Office of Management and Budget.” NOAA-approved agreements under the JPA are currently in place in several locations to support sanctuary management, including the JPA Agreement between ONMS/Greater Farallones and Cordell Bank National Marine Sanctuaries and the [Greater Farallones Association](#), and a relatively new JPA Agreement between ONMS/MBNMS/CINMS and the [California Marine Sanctuary Foundation](#).

The purpose of these JPAs is to enable sanctuaries and partnering foundations to work together on joint projects that support the missions of the respective sanctuaries and of the nonprofit partner by providing structure including roles and responsibilities. Both entities—the sanctuary and the foundation—agree to invest equitably apportioned amounts of funding and/or in-kind resources to achieve project success. These collaborative projects must be justified as something that could not succeed without the unique and differing coordinated contributions of each partnering entity.

ONMS envisions that the use of a JPA, with an appropriate nonprofit, research, or public organization partner, could greatly enhance the capacity of the new sanctuary while offering another entity that could invite members of Tribes and Indigenous communities to play important roles in supporting sanctuary programs. A JPA would be a tool to support sanctuary projects that ONMS staff could not implement alone, and would require the unique talents and Indigenous Knowledge found within local Indigenous communities. Whether use of a JPA is appropriate in any instance, however, depends on the specific mission and objectives of the nonprofit foundation partner as well as sanctuary management.

JPAs could allow co-development and co-implementation with ONMS on a variety of important projects. Potential joint projects that might be of mutual interest include:

- Community science.¹¹
- Visitor center programs and exhibits.
- Tourism, heritage, and outdoor recreation.
- Coastal signage.
- Tribal cultural landscape assessments.

¹¹ Also known as “citizen science,” ONMS is shifting to using the term “community science” to be more inclusive and better reflect the collaborative community-driven nature of volunteer data collection.

- Education and outreach events.

To ensure collaborations remain on track as agreed and designed, NOAA and partnering foundation leadership would need to communicate regularly. Note that any new foundation formed with a mission to support the new sanctuary would be independent of NOAA. NOAA would not control the formation of any such foundation or the selection of its director, staff, or other organizational details.

Section 2: Action Plans



ROV *Hercules* explores a coral garden on Santa Lucia Bank. Photo: Ocean Exploration Trust/NOAA

This management plan document includes 12 action plans covering issue-based and program-based themes intended to guide the Office of National Marine Sanctuaries (ONMS) over the coming five to 10 years. Each action plan contains strategies with multiple activities to achieve goals.

1. Indigenous Cultural Heritage Action Plan
2. Climate Change Action Plan
3. Maritime Heritage Action Plan
4. Offshore Energy Action Plan
5. Water Quality Action Plan
6. Blue Economy Action Plan
7. Wildlife Disturbance Action Plan
8. Boundary Adjustment Action Plan
9. Education and Outreach Action Plan
10. Resource Protection Action Plan
11. Research and Monitoring Action Plan
12. Operations and Administration Action Plan

Indigenous Cultural Heritage Action Plan

Goal: Respectfully honor, highlight, and protect the unique Indigenous cultural heritage and resources connected to the sanctuary through meaningful collaboration and partnership with Indigenous communities. This could include sharing Indigenous history and culture, where appropriate, with the public.

Introduction

With reverence and respect for the Indigenous Peoples of the sanctuary coastline and for the submerged lands occupied by their ancestors, NOAA is honored to work in partnership with Tribes and Indigenous communities to commemorate and protect this sacred ocean space. Collaboration, respect, and partnership serve as a foundation for the strategies and activities described in this action plan. Priorities focus on the understanding and protection of cultural resources within the sanctuary, the appropriate application of Indigenous Knowledge, and giving prominence to local Indigenous culture through sanctuary programs. Supporting the self-determined interests and needs of the Indigenous Peoples of this coast is a priority for management of the sanctuary. Success will require support for Indigenous community sanctuary access, uplifting Indigenous voices, strengthening connection to place, fostering meaningful involvement in sanctuary management, and working together to be effective stewards.

For past, present, and future Chumash and Salinan Peoples, the coast and waters within the sanctuary are of deep cultural significance. Of foremost importance for this sanctuary is the enduring presence of the area's Indigenous Peoples. Their unique knowledge, wisdom, cultural practices, and deep understanding of this place offers expertise and inspiration essential to sustaining both marine ecosystems and cultural identity. For hundreds of generations, the Indigenous Peoples of this coast have lived in a reciprocal relationship of balance, adjustment, and reverence with nature, actively sustaining and caring for the environment and their culture, while resiliently surviving the brutal trials and trauma of their history. These include having been forced to live and work on missions, other enslavement, devastating smallpox, murder, and the loss of traditional lands.

ONMS is grateful for the generous sharing of ideas, advice, and wisdom provided by a wide range of local Tribes and Indigenous community members that have inspired and informed preparation of this action plan. Input was provided over multiple years, starting with the sanctuary nomination proposal submission, and continuing through multiple Tribes and Indigenous community members commenting during the scoping period (see Chumash Heritage National Marine Sanctuary (CHNMS) Final Environmental Impact Statement, Appendix B), through the 2023 commenting period for review of draft documents, as part of consultation meetings and discussions pursuant to Section 106 of the National Historic Preservation Act (NHPA), through the government-to-government formal consultation process with the Santa Ynez Band of Chumash Indians, and during several other Tribal group meetings and workshops.

As described in the Introduction section of this management plan, NOAA intends to use a collaborative co-stewardship management structure for the sanctuary to provide for the respectful and meaningful involvement of local representatives and partners from multiple Tribes and Indigenous communities. Although the framework has been designed, operational

details and agreements for the envisioned management structure may take time to evolve and formally solidify. ONMS is committed to thoughtfully using a variety of inclusive approaches to work closely with Tribes and Indigenous community members in support of mutual interests and improved sanctuary management.

As this new sanctuary emerges and staff begin formative work, respectful and dedicated efforts will be required by all involved to build partnerships and trust over time between ONMS, Tribes, and local Indigenous communities. ONMS is committed to this long-term effort.

Given that honoring Indigenous cultural heritage (ICH) is a foundational purpose of the sanctuary, there are many additional supporting strategies and activities related to Indigenous engagement throughout the other action plans of this management plan. Throughout these action plans, a cross-cutting intent is to incorporate environmental justice and equity considerations.

Strategy ICH-1: Work with Tribal and Indigenous communities to adopt an organizational framework for Tribal and Indigenous participation and collaborative co-stewardship

Activity ICH-1.1: Work with Tribes and Indigenous community partners to understand, refine, adopt, and begin to implement the Indigenous Collaborative Co-Stewardship Framework described in the management plan Introduction section. This will include developing necessary agreements, policies, and procedures to guide the envisioned organizational groups and their processes (see also Figure 2). This also includes the development of appropriate protocols regarding the treatment of potentially sensitive information.

Activity ICH-1.2: Work with Tribes and Indigenous communities,¹² the Indigenous Cultures Advisory Panel (ICAP; once it is formed as a working group of the Sanctuary Advisory Council (SAC)), and other partners as appropriate, to seek ways to best implement, adapt, and improve the Framework for Indigenous Collaborative Co-Stewardship.

Strategy ICH-2: Identify Indigenous cultural resources and integrate Indigenous Knowledge

Activity ICH-2.1: Identify priorities for future cultural resource surveys in the sanctuary, including an assessment of resources required. Work with Tribal entities to develop uniform guidelines/protocols for cultural resource data collection in the sanctuary while maintaining consideration for Indigenous data sovereignty and information security.

Activity ICH-2.2: Prioritize the analysis of threats, conditions, and trends for known culturally sensitive or sacred sites, and other submerged cultural resources, in or immediately adjacent to

¹² This management plan uses “Tribes and Indigenous communities” and other related phrases to refer broadly to federally recognized Tribes, Native American Tribes that are not federally recognized, and other Indigenous groups and organizations. Where appropriate to reference the federally recognized Tribe in this area, the Santa Ynez Band of Chumash Indians, the management plan specifically names that Tribe. Where appropriate to reference federally recognized Tribes more broadly, the management plan uses the terms “federally recognized Tribe(s)” or “federally recognized Tribal Nation(s).” As such, use of the term “Tribe” or “Tribal” is not intended to refer only to federally recognized Tribes unless otherwise specified.

the sanctuary during development of the sanctuary’s first condition report. Seek guidance from the ICAP and other Tribal and Indigenous communities, and consider approaches taken elsewhere, including the Chumash Ecosystem Services Assessment within the [Channel Islands National Marine Sanctuary \(CINMS\) Condition Report](#) (ONMS, 2019, pp.185–207).

Activity ICH-2.3: Enhance sanctuary management and research by working with Tribes and Indigenous community members, the ICAP, and other cultural experts to explore ways to gather, share, and apply (when and where appropriate) Indigenous Knowledge,¹³ local and customary knowledge, and information obtained from cultural resource analyses. Work collaboratively with participating partners to produce a guidance document on these practices, including implementation recommendations, drawing on sources of documented best practices and specific Tribal community input received during the development of this management plan:

- Acknowledge, respect, and support the appropriate and responsible use of Indigenous Knowledge.
- Incorporate Indigenous Knowledge into management practices and programs.
- Show respect for and heed Indigenous methods, wisdom, and deep knowledge.
- Do not ignore Indigenous Knowledge.
- Uplift Indigenous perspectives, acknowledging the value of deep collective wisdom.
- Make Indigenous Knowledge a cornerstone to guide resource protection, conservation actions, programs, and informed management.
- Help preserve knowledge and traditions for future generations.
- Ensure that the holders of privileged Indigenous Knowledge receive compensation as appropriate and that information shared receives confidentiality and protection.
- Follow guidance and best practices for engaging and incorporating Indigenous Knowledge in decision-making ([NOAA Sea Grant Program, 2018](#)).

Activity ICH-2.4: Host scholarly and educational events that bring together experts in Indigenous Knowledge, natural science, and social science to discuss sanctuary conservation management issues (i.e., resource protection, science needs, educational programming) and the potential applications of Indigenous Knowledge with guidance from the ICAP and local Tribes and Indigenous groups.

Activity ICH-2.5: Provide interested Tribes and Indigenous communities with support and guidance to conduct Tribal cultural landscape characterization, including searching for, studying, and protecting paleoshorelines or submerged archaeological and cultural resources. There is a paucity of information on the threats and pressures from rising sea levels, beach loss, and coastal erosion on archaeological sites in the sanctuary. These assessments will help deepen holistic understanding of the local Tribal and Indigenous communities’ connection to place (sanctuary waters and adjacent coastal lands) and cultural identity. Use the framework presented in the [Guidance Document for Characterizing Tribal Cultural Landscapes](#) (Ball et

¹³ In the [2022 Guidance](#) for Federal Departments and Agencies on Indigenous Knowledge, the Council on Environmental Quality describes Indigenous Knowledge as “a body of observations, oral and written knowledge, innovations, practices, and beliefs developed by Tribes and Indigenous Peoples through interaction and experience with the environment” (see also: Office of Science and Technology Policy & Council on Environmental Quality, 2022).

al., 2015) and coordinate with the Bureau of Ocean Energy Management and partners that have also been offering cultural landscape assessment assistance. Receive guidance from the ICAP and interested Tribal and Indigenous communities on how best to support development of the Tribal and Indigenous communities' knowledge bases through ethnographic and oral history inquiries, use of non-invasive and culturally sensitive methods, and following established Tribe-specific protocols regarding any disposition of culturally sensitive information.¹⁴

Strategy ICH-3: Provide protection for Indigenous cultural resources within the sanctuary

Activity ICH-3.1: Develop and provide cultural resource training and information to law enforcement partners that enforce sanctuary regulations (see also Resource Protection Action Plan) and sanctuary volunteers/educators. Raise awareness (where appropriate and supported by local Tribes and Indigenous groups) of culturally sensitive sites, culturally important species and locations, and potentially harmful activities in need of greater oversight and protective interpretation/outreach.

Activity ICH-3.2: Seek ways to avoid disturbance to submerged Indigenous cultural resources when processing sanctuary research permit requests or through other decision points under the sanctuary regulations. Coordinate with the Intergovernmental Policy Council (IPC) as needed and receive ICAP advice as appropriate to integrate local cultural values and cultural resource sensitivity information into permitted educational materials and briefings on actions.

Activity ICH-3.3: Following outreach to and coordination with partners, develop and adhere to a set of best practices for respecting, protecting, and avoiding disturbance to sanctuary cultural resources when conducting ONMS research and management activities or promoting tourism. Include guidance for pre-mission briefings, use of cultural observers, and handling/reporting unplanned activities.

Activity ICH-3.4: Conduct timely and meaningful consultation processes and engagement with Tribes and Indigenous groups, as appropriate, prior to ONMS decision-making on projects that could affect cultural resources or Tribal and Indigenous interests. Work with local Tribes and Indigenous communities to develop and follow project consultation and engagement protocols. This process is inclusive of NOAA meeting legally required government-to-government consultation responsibilities with the federally recognized Santa Ynez Band of Chumash Indians and NOAA meeting its consultation obligations under NHPA Section 106.

¹⁴ Tribal Cultural Landscape: Any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of Indigenous People whose cultural practices, beliefs, or identity connects them to that place. A Tribal cultural landscape is determined by and known to a culturally related group of Indigenous People with relationships to that place. See ONMS' Characterizing Tribal Cultural Landscapes [webpage](#) (ONMS, n.d).

Strategy ICH-4: Collaborate with Indigenous communities on education programs

Activity ICH-4.1: Ensure Indigenous cultural information is appropriately incorporated into sanctuary public outreach and education programs based upon direct guidance and involvement from participating Tribes and Indigenous community members. Seek, receive, and use guidance from the ICAP.

Activity ICH-4.2: Partner with the ICAP and interested Tribes and Indigenous groups to identify meaningful ways to incorporate sanctuary information into existing or new Tribal educational programs and initiatives.

Activity ICH-4.3: Develop a sanctuary internship program that provides meaningful opportunities for high school- and college-level students from Indigenous communities. Request design assistance from the ICAP. Mentor youth to help them build skills and experience in sanctuary program areas (e.g., leadership, volunteer coordination, marine science, cultural heritage, resource stewardship, education and outreach, marine operations). Explore grant opportunities in partnership with Tribal and Indigenous representatives for expanding career opportunities for high school and college-level students.

Strategy ICH-5: Facilitate and support Tribal community cultural access, connection to, and activities within the sanctuary

Activity ICH-5.1: Support access to and connection with the sanctuary for Indigenous cultural activities. Drawing on guidance and assistance from the ICAP, provide ONMS support for maritime events and activities, ranging from tomol or tule boat paddling and associated vessel safety services, coastal gatherings and ceremonies, Tribal and Indigenous community participation in vessel- and shore-based science and stewardship activities, field trips for Indigenous youth, traditional fishing demonstrations, cultural tourism, beach cleanups, coastal hikes, and more.

Activity ICH-5.2: In consultation with the ICAP, support and provide permit guidance on gathering of ceremonial cultural materials within the sanctuary, such as feathers, shells, bones, and traditional foods. In particular, develop permit guidance, as appropriate, for the sanctuary's permit category for Native American cultural or ceremonial activities. Where permits are required, ONMS will provide guidance and assistance.

Activity ICH-5.3: Work with Tribes and Indigenous community partners, the ICAP, IPC (as appropriate), and government agencies to identify and connect Indigenous language place names, species names, stories, traditions, and other cultural information to maps, interpretive materials, exhibits, signage, online presence, and other identifying sanctuary resources.

Strategy ICH-6: Provide ongoing Indigenous cultural training to sanctuary staff, volunteers, and advisory council members

Activity ICH-6.1: Work with the ICAP and other appropriate partners to develop and deliver appropriate training experiences for sanctuary staff members. Training topics may include, but not be limited to, regional history of Indigenous Peoples, cultural values and heritage of contemporary Tribes and Indigenous communities, protocols for territorial acknowledgements, and best practices for respectful and meaningful Indigenous community engagement.

Activity ICH-6.2: Work with the ICAP and other appropriate partners to develop and deliver appropriate training experiences for sanctuary volunteers and advisory council members. See Activity ICH-6.1 for subject matter details.

Activity ICH-6.3: Work to prioritize building Tribal and Indigenous presence and knowledge within sanctuary staff and partner organizations through hiring, volunteer programs, and internships.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal and State Governments and Agencies

Bureau of Ocean Energy Management, California State Lands Commission.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations¹⁵

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

¹⁵ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Climate Change Action Plan

Goal: Protect and enhance ecosystem function and resilience to climate change through research and monitoring, assessment and adaptation, mitigation actions, education and outreach, and Tribal and Indigenous community partnerships.

Introduction

Confronting and addressing the effects of climate change on national marine sanctuaries is a top priority for ONMS. The [2024–2026 ONMS Climate Resilience Plan](#) commits to integrating a climate-informed approach to management, and recent climate change-related projects have increased our understanding of the immediate threats and feasibility of responses to climate change within the greater West Coast region.

The impacts of climate change from unabated greenhouse gas emissions have intensified both globally and locally, threatening physical, social, economic, cultural, and environmental wellbeing. The waters of CHNMS and surrounding coastal areas and communities are experiencing climate-driven stressors, including sea level rise and erosion, increasing water temperature, deoxygenation, changing oceanographic processes, and ocean acidification. These stressors are expected to amplify over the coming decades. Impacts on biological and cultural resources (several hundred Indigenous coastal village sites and archaeological sites in the study area¹⁶ are at risk from sea level rise) and ecosystem functions are anticipated in all coastal waters.

The special setting of CHNMS, at the convergence of two oceanographic regimes, provides one of the best ecological and oceanographic opportunities in the world for the study of ecosystem transition zones and climate change. Understanding climate impacts on the highly diverse communities of organisms found at this transition, and how these communities and their associated ecosystem functions and services change with shifting oceanographic regimes, is critical. To understand these changes and to maintain ecosystem function and resilience considering worsening climate impacts, this Climate Change (CC) Action Plan focuses on four strategies that will support climate-informed management through increased understanding and prediction, communication, partnerships, and adaptation and mitigation actions. Meaningful climate action should be rooted in strong climate science, Indigenous Knowledge, and focus on Tribal and Indigenous and community values and experiences.

Strategy CC-1: Assess and plan for climate impacts on sanctuary resources and communities

To enhance climate resilience of sanctuary resources and communities, ONMS will develop both a thorough assessment of current climate impacts and an assessment of likely future vulnerabilities to climate change. These products will enable the development of targeted

¹⁶ The study area comprises the coastline and waters offshore San Luis Obispo and northern Santa Barbara counties and includes the Santa Lucia Bank, its escarpment, Rodriguez Seamount, Arguello Canyon, and other offshore features and resources to approximately 78 miles offshore. See the final environmental impact statement for more details on the study area for CHNMS.

management strategies to reduce vulnerability and increase resource resilience while supporting community conversations regarding adaptive capacity to climate impacts.

Activity CC-1.1: Conduct a review and characterization of climate-driven impacts, including cumulative effects, on sanctuary resources (biological, cultural, and historical) and adjacent communities to develop a baseline understanding of resource conditions and the influence of climate change.

Activity CC-1.2: Conduct a comprehensive review and support regional coordination of existing climate planning processes, working with local partners to include vulnerability assessments, adaptation plans, resilience plans, and other climate planning and assessment documents and activities already completed in the region to inform sanctuary-focused planning and assessment.

Activity CC-1.3: Conduct a climate vulnerability assessment to identify how biological and cultural resources as well as ecosystem services within the sanctuary may be affected by future climate and ocean conditions, incorporating Indigenous Knowledge where possible. This should cover known and predicted thresholds or tipping points. Outcomes will include: (1) a set of local ocean climate indicators linked to larger scale regional indicators (e.g., ocean acidification, sea surface temperature) that focus research and monitoring across the region to detect and track climate effects; and (2) a climate vulnerability assessment report with information on the species, habitats, cultural resources, and ecosystem services that are most vulnerable and will inform resilience planning.

Activity CC-1.4: Develop a climate adaptation plan, detailing management actions that target specific climate impacts and vulnerabilities identified in activities CC-1.1, CC-1.2, and CC-1.3, to increase the resilience of sanctuary resources to climate change. Where possible, recommended actions should prioritize nature-based solutions, incorporate Indigenous Knowledge, reflect inclusive community engagement, and be based on appropriate Tribal and Indigenous collaboration and consultation.

Activity CC-1.5: Engage in public, intergovernmental, and Tribal and Indigenous community engagement, and offer public workshops to inform the community about anticipated climate impacts and vulnerabilities, and work with state, Tribal, and local governments to identify and address mutual priorities. Baseline information will be assembled to establish current awareness of sanctuary communities regarding climate change impacts, and evaluate adaptive capacity for the future.

Strategy CC-2: Minimize greenhouse gas emissions and contribute to natural atmospheric carbon dioxide sequestration and storage

To limit to the extent practical the sanctuary's own contribution to climate change, ONMS will minimize greenhouse gas emissions from any new infrastructure or operations in support of CHNMS. ONMS will also support climate mitigation measures by investigating the application of blue carbon habitat protection and enhancement and marine carbon dioxide removal approaches. Future management plans could assess the need to further reduce this sanctuary's carbon footprint based on the initial level of operation.

Activity CC-2.1: In the development of facilities plans, include consideration of facility locations and design to minimize greenhouse gas emissions and seek carbon neutrality to the extent possible. Include considerations for activities which occur within sanctuary boundaries but fall outside the scope of sanctuary operations (e.g., the application of voluntary ship speed reductions to reduce greenhouse gas emissions).

Activity CC-2.2: Map and measure the extent of existing blue carbon habitats (e.g., kelp forest, salt marsh, eelgrass, soft benthos), and areas suitable for restoration. Assess the impact of both climate change and non-climate stressors on the capacity of these habitats to continue sequestering carbon, using information from Activity CC-1.3.

Activity CC-2.3: Develop management approaches to maintain and, where possible, enhance or restore natural carbon sequestration and storage in the sanctuary by using the information gathered as part of Activity CC-2.2.

Activity CC-2.4: Investigate the practicality, authority, and impacts associated with techniques and applications of marine carbon dioxide removal¹⁷ and other strategies for greenhouse gas mitigation that are compatible with the sanctuary's resource protection goals, such as blue carbon habitat conservation and restoration, macroalgal aquaculture, marine spatial planning, and other strategies and technologies.

Strategy CC-3: Engage with the public on sanctuary resources and solutions relative to climate change

ONMS intends to promote climate literacy in the community and build support for sanctuary efforts that reduce impacts from climate change. As such, ONMS will work to understand existing climate education programs and products in the region and fill identified gaps (e.g., in schools and public programming). ONMS will incorporate climate action recommendations in products and messaging to encourage community involvement in reducing climate change impacts.

Activity CC-3.1: With guidance from local Tribes and Indigenous communities, develop multilingual, culturally appropriate climate messaging and education materials for various audiences in partnership with educators in the region, including formal K–16 curricula and informal products and programs in partnership with informal education providers in the area (e.g., signage in museums, zoos, aquaria).

Activity CC-3.2: Develop and participate in a supportive network of partners promoting community-based, climate-friendly actions and solutions, and share education and communication resources. Incorporate NOAA and ONMS Ocean and Climate Literacy messages into education and communication materials. Share best practices to help advance public understanding of climate change impacts and the role of marine protected areas in reducing its impacts.

¹⁷ NOAA is also pursuing marine carbon dioxide removal research directly, and Activity CC-2.4 would look to and follow existing information for guidance. See [NOAA's guidance](#) for the application of marine carbon dioxide removal in national marine sanctuaries, NOAA's [Carbon Dioxide Removal Strategy](#), and NOAA's Ocean Acidification Program [webpage](#) for more information on NOAA's marine carbon dioxide removal research efforts.

Strategy CC-4: Support, track, and share climate change research and monitoring

To understand the impacts of climate change on the unique setting of CHNMS as an ecological transition zone, and to support the long-term tracking of climate-relevant ocean conditions, ONMS will pursue and develop collaborative research and monitoring partnerships. This strategy is cross-cutting with the Research and Monitoring Action Plan.

Activity CC-4.1: Conduct an assessment and gap analysis of current research and monitoring programs/projects in the sanctuary for the climate indicators developed in Activity CC-1.3. Collaborate with research partners to develop a plan for filling those gaps and supporting long-term climate indicator monitoring programs to track regional changes in oceanographic, coastal, and biogeographic conditions that are relevant to management.

Activity CC-4.2: Develop collaborative research partnerships, including by working with partners who hold archaeological Indigenous Knowledge, relevant to understanding the impacts of climate change.

Potential Partners

The following list reflects potential sanctuary partners and is expected to change over time as opportunities, conditions, and entities evolve.

Federal and State Governments and Agencies

Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Coastal Commission, California State Parks, California Ocean Protection Council, California Department of Fish and Wildlife, California State Lands Commission.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

***Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations*¹⁸**

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

¹⁸ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.



Academic and Affiliated Institutions

California Polytechnic State University, San Luis Obispo; University of California, Santa Barbara; California Cooperative Oceanic Fisheries Investigations.

Industry

Offshore wind lease holders, telecommunications companies, commercial and recreational fishing, shipping, local recreation and tourism companies.

Nongovernmental Organizations

Point Blue Conservation Science.

Maritime Heritage Action Plan

Goal: Identify, protect, and raise awareness of the sanctuary’s maritime, historical, and archaeological resources. Collaborate with community partners engaged in maritime traditions, Indigenous Knowledge, and protection of sanctuary waters.

Introduction

This action plan describes strategies and activities focused on the understanding, protection, and interpretation of the unique maritime heritage resources and values connected to sanctuary waters. Inclusive of this important work is collaborative engagement with the community and Tribal and Indigenous community partners who seek to continue stewarding these invaluable waters. ONMS prioritizes education and outreach to increase public awareness and appreciation of the cultural connections and maritime history associated with sanctuaries.

Historical archaeological and cultural resources are collectively referred to as “maritime heritage” (MH) and include the wide variety of tangible and intangible resources that represent human connections to ocean areas, such as shipwrecks, lighthouses, archaeological sites, and other cultural resources within the sanctuary.

The 2015 sanctuary nomination for CHNMS described the coastal area as inhabited for centuries by early Chumash, an ocean-going, Indigenous coastal people. The sanctuary embodies a special sense of place with sacred meaning and significant cultural values for local Indigenous Peoples that still reside in the region today (NOAA, 2020). During the historic period, the California central coast comprised a historic breadth of maritime activities since the mid-16th century. Juan Rodriguez Cabrillo and his successor, Bartolome Ferrer, led the first European exploration of this coastline from 1542–1543. The Spanish east-bound Manilla Galleon Trade Route starting in 1565 continued for about 250 years with vessels sailing south along the central coast. In the years to follow, Pedro Unamuno, 1587, and Sebastian Vizcaino, 1602, were in the region exploring and mapping the coastline and establishing place names (Bailey, 1982). During the Spanish Mission period (1769–1821), missions and presidios were established along the California coast extending from Sonoma to San Diego. San Luis Obispo de Tolosa (1772) was the first mission founded in the land of the Chumash Peoples. In the early 19th century, agriculture and ranching activities led to the growth of the hide and tallow trade. Other maritime activities included the fur trade, whaling, commercial fisheries, and foreign and domestic trade. During World War II, the Japanese Imperial Navy's submarines attacked U.S. merchant ships in the region, successfully sinking the Union Oil Company of California tanker SS *Montebello* in 1941 (Webber, 1992).

There are numerous submerged historic maritime heritage resources that include the remains of landings, wharves, piers, and ship and aircraft wrecks located in the sanctuary, some of which are important to our nation’s history and are listed on the National Register of Historic Places (U.S. Coast and Geodetic Survey & Davidson, 1889). NOAA estimates approximately 200 ship and aircraft wrecks reported in the sanctuary area.

Strategy MH-1: Inventory and assess maritime heritage resources

In compliance with Section 110 of the NHPA, and in consultation with the California State Lands Commission as appropriate, ONMS will inventory, assess, and protect traditional cultural properties, submerged shipwrecks, aircraft, and other maritime heritage resources.

Activity MH-1.1: Inventory maritime heritage resources within the sanctuary, populate shipwreck databases, and expand the ONMS Maritime Anthropological Resource Inventory System. Potential historic properties under the jurisdiction or control of the sanctuary should be identified and evaluated using the National Register of Historic Places criteria for nomination.

Activity MH-1.2: Develop plans for and, if funding allows, conduct survey expeditions focused on identifying paleoshorelines and historical habitation along those shorelines, in conjunction with Activity ICH-2.5. Archaeological surveys should include seafloor mapping associated with historic research and paleoshorelines. Develop strong partnerships and effective consultations with Tribes and Indigenous community members, as well as partnerships for external funding opportunities.

Activity MH-1.3: Build upon external partnerships, and as funding allows, inventory traditional historic properties, shipwrecks, aircraft, and other maritime heritage sites with: federal, Tribal, state, and local agencies; private sector and avocational archaeologists; commercial and recreational divers; and fishermen. Develop partnership programs for periodic site monitoring of known maritime heritage resources to document environmental change or human impacts. Assess the potential for ecological damage from potentially polluting shipwrecks, with initial focus on *Pacbaroness* as a potential priority mission (a shipwreck assessed by NOAA in 2002, 15 years after it first sank).

Activity MH-1.4: Continue to work with partners, including Indigenous Knowledge holders, to analyze sanctuary seafloor mapping data, remotely operated vehicle footage, and autonomous underwater vehicle surveys to identify new maritime heritage resources. Information sources will include previously acquired data as well as new data of opportunity from NOAA and other partner mapping missions.

Strategy MH-2: Manage and protect submerged maritime heritage resources

In compliance with Section 106 of the NHPA, ONMS is required to take into account the effects of its undertakings on historic properties. ONMS will protect and manage maritime heritage resources via: (1) permitting and authorization decisions; (2) education initiatives to inform the public of the regulations and mentoring in a stewardship capacity; and (3) enforcement coordinated with federal, Tribal, and state partners.

Activity MH-2.1: Regularly conduct NHPA Section 106 reviews for proposed undertakings, including when issuing permits. Section 106 of the NHPA requires federal agencies to consider the impact of their actions on historic properties. Consider development of a Programmatic Agreement under Section 106 of the NHPA to provide a framework for consultation with the California State Historic Preservation Officer, Tribes, and other parties that fosters a consistent process as to how undertakings are defined, reviewed, and documented throughout the ongoing management of the national marine sanctuary.

Activity MH-2.2: Coordinate stewardship initiatives with key partners to protect maritime heritage resources including: (1) Indigenous partners; (2) the sport diving community; (3) learning centers and museums; and (4) appropriate local law enforcement agencies.

Activity MH-2.3: Work toward the development of future protocols to monitor climate-related effects on maritime heritage resources. Sanctuary waters are experiencing the effects of climate-related stressors (e.g., ocean acidification, increasing water temperatures, deoxygenation, changing oceanographic processes) that are expected to worsen over the coming decades.

Strategy MH-3: Develop maritime cultural landscape-focused education and outreach

Maritime cultural landscapes, which describe the relationship between people and the ocean, provide an assessment tool for better understanding the wide range of heritage resources and values associated with marine protected areas. Effectively implementing the landscape approach offers opportunities to acquire a deeper knowledge of these resources across the span of history and geography of these places, providing essential context for contemporary management decision making, and actively engaging key communities.

Activity MH-3.1: Cultivate partnerships to develop a maritime cultural landscape study focused on the deeper knowledge of the sanctuary and its surrounding maritime heritage resources and related activities. Build off related work conducted by the Bureau of Ocean Energy Management, and engage the public, Tribes and Indigenous community partners, local and academic communities, and stakeholders.

Activity MH-3.2: Conduct research on maritime culture, including Indigenous practices, shipwrecks, shoreline structures (e.g., lighthouses), coastal and geological surveys, traditional recreational activities (e.g., surfing, fishing, diving), and stewardship. Develop maritime cultural landscape studies in collaboration with relevant experts.

Activity MH-3.3: Develop content for the sanctuary's maritime heritage [webpage](#). Potential themes may include Tribal and Indigenous community partners and their connections to place, maritime heritage resources, living journals of shipwreck survivors, archaeological expedition surveys and updates, and the development of a shipwreck story map. Content should also include information on the importance of not disturbing historical resources and should enhance destination stewardship/sustainable tourism, tying tourism to maritime heritage and engaging new audiences in ocean conservation.

Activity MH-3.4: Support efforts for existing partner exhibits related to sanctuary maritime heritage resources, and associated public lectures. Pursue these arrangements in partnership with visitor centers and learning centers including the Monterey Bay National Marine Sanctuary (MBNMS) Coastal Discovery Center, Cambria Historical Museum, Santa Barbara Maritime Museum, Morro Bay Maritime Museum, California State Natural History Museum Morro Bay, Lompoc Valley Historical Society, Piedras Blancas Lighthouse Association, Santa Ynez Chumash Museum and Cultural Center, and The Nature Conservancy's Jack and Laura Dangermond Preserve.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal and State Governments and Agencies

Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Coastal Commission, California State Parks, California Ocean Protection Council, California Department of Fish and Wildlife, California State Lands Commission.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations¹⁹

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions and Associations

California State University Channel Islands; California Polytechnic State University, San Luis Obispo; California State University Long Beach; California State University Northridge; Monterey Bay Aquarium Research Institute; Santa Barbara City College; University of California, Santa Barbara; University of California, Los Angeles; Ventura County Community College District.

Nongovernmental Organizations

Marine Applied Research and Exploration, museums and historical centers, Cambria Historical Museum, Santa Barbara Maritime Museum, Morro Bay Maritime Museum, California State Natural History Museum Morro Bay, Lompoc Valley Historical Society, Piedras Blancas Lighthouse Association, The Nature Conservancy's Jack and Laura Dangermond Preserve.

¹⁹ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Offshore Energy Action Plan

Goal: Aid long-term management of sanctuary resources, ecosystem services, and cultural heritage by responsibly managing offshore energy activities, conducting necessary research and monitoring, and coordinating with other agencies and affected stakeholders.

Introduction

The coastal zone and offshore waters in San Luis Obispo and Santa Barbara counties have hosted a large and serially diverse energy production industry for over 100 years. As one technology begins to fade, a new technology develops. Over the next 10 years, the decommissioning and removal of offshore oil and gas infrastructure off the Santa Barbara County coast, and the possible decommissioning of the nuclear power plant at Diablo Canyon Power Plant in San Luis Obispo County, are likely. Meanwhile other industrial development, namely offshore wind production, is likely to begin. While the diversity of threats from coastal and offshore energy development was a principal driver for community leaders to propose a national marine sanctuary, decommissioning and removal of industrial facilities and energy production of offshore wind can also have ecosystem benefits. As is true for other issue areas, NOAA may not be able to address all issues and opportunities related to offshore energy at the time of designation. However, this action plan will establish a mechanism and process to consider and study potential threats, communicate them to the public and affected stakeholders, and participate in interagency processes to support best outcomes.

The portfolio of offshore energy (OE) projects, especially wind energy development, in or adjacent to CHNMS, is large and complex. It will require time for sanctuary staff and management to fully understand the existing and proposed construction, operations, decommissioning, and removal plans for offshore energy facilities. This should begin as soon as is practicable.

Strategy OE-1: Expand knowledge and aid communications

Activity OE-1.1: Meet with agencies involved in permit review of coastal and offshore energy projects to discuss the regulatory requirements and CHNMS goals expressed in the management plan, and understand the process steps, timelines, and goals of those other agencies. Conduct similar meetings with industry representatives for projects in or adjacent to CHNMS.

Activity OE-1.2: After the SAC has been created and is operational, conduct workshops or other public meetings within the advisory council process to better understand the public awareness of offshore energy projects and the expectations and goals of these various groups regarding offshore energy in and adjacent to the sanctuary.

Strategy OE-2: Collaborate on scientific studies

Activity OE-2.1: Develop a research plan to inform permitting, new construction, and decommissioning. Working with science staff from the sanctuary, agencies, academia, and other partners, develop a research and monitoring plan that will aid decision-making and compliance assessment of adverse and beneficial impacts on sanctuary resources from offshore energy construction, operations, decommissioning, and removal activities. Some of this work may

involve, to the extent practical, baseline monitoring of forthcoming industry activities, while other steps may be developed to assess long-term impacts.

Activity OE-2.2: Create partnerships with academic institutions, federal, state, and local agencies to develop coordinated plans to understand and assess potential impacts on sanctuary resources from offshore and coastal energy activities.

Activity OE-2.3: Organize and deploy sanctuary assets to aid data gathering. ONMS will assess what data-gathering assets exist at adjacent sanctuaries that can support field work and data analysis, including staff, vessels, and monitoring equipment. The plan should also identify new assets necessary to fulfill essential science missions.

Strategy OE-3: Clarify and communicate permit processes

Activity OE-3.1: Make available additional permitting guidance²⁰ about the ONMS process to consider permit requests for subsea cables, both subsea electrical transmission cables and submarine fiber optic cables. Elements of the guidance will cover information ONMS will require for a complete application, and the likely permit conditions and other information to be required at the time of action, as well as permit review timelines. This guidance will consider the benefits of consistency with the Bureau of Ocean Energy Management and U.S. Army Corps of Engineers permit application requirements in federal waters, and with the California Coastal Commission permit and California State Lands Commission lease application requirements in state waters.

Activity OE-3.2: Make additional permitting guidance available about the ONMS process to consider permit requests for decommissioning and removal of coastal or offshore industrial facilities, including oil and gas development and production facilities, fiber optic cables, and other coastal facilities. Elements of the guidance will cover what information ONMS will require for a complete application, and the likely permit conditions and other information to be required at the time of action, as well as permit review timelines. This guidance will consider the benefits of consistency with the Bureau of Safety and Environmental Enforcement and U.S. Army Corps of Engineers permit application requirements in federal waters, and with the California Coastal Commission permit and California State Lands Commission lease application requirements in state waters.

²⁰ As announced in its August 16, 2024 Federal Register notice ([89 FR 66689](#)), ONMS is working on updating the 2011 cable permitting guidance in national marine sanctuaries. ONMS will share the updated draft guidance publicly when available. In the interim, the Federal Register notice explained that for a two-year period beginning on August 16, 2024, the special use permit category for the continued presence of commercial submarine cables does not apply to commercial submarine cables in new sanctuaries designated after that date; during this timeframe, the continued presence of such cables on or within the submerged lands in newly designated sanctuaries are not subject to the requirements of Section 310 of the NMSA.

Strategy OE-4: Support joint agency cooperation and review of new development and decommissioning

Activity OE-4.1: Participate in National Environmental Policy Act and California Environmental Quality Act joint agency review processes. Joint agency review is the best way to ensure effective communication and collaboration between agencies and provide clarity to developers. Sanctuary staff will strive to participate in as many joint agency review processes as possible to ensure all parties are informed of sanctuary regulatory goals.

Activity OE-4.2: Review and comment on agency actions. The process to make decisions and issue permits for development activities located in the sanctuary will require sanctuary staff involvement and time for review. Moreover, once agency actions are issued, developers will be developing plans for construction and decommissioning that will require sanctuary staff involvement and review (see Strategy OE-5 below).

Activity OE-4.3: Work with the SAC, Tribal and Indigenous communities, and education and outreach staff to keep interested parties informed about new offshore energy development and facility decommissioning and removal activities that may affect sanctuary resources, and what actions the sanctuary is taking on permit requests. Within the SAC processes, collaborate with the Bureau of Ocean Energy Management, the state of California, and interested parties on the demand for new offshore wind energy development in state and federal waters within and adjacent to the sanctuary.

Activity OE-4.4: In collaboration with federal partner agencies (e.g., Bureau of Ocean Energy Management, National Marine Fisheries Service), state partner agencies (e.g., California Coastal Commission, California State Lands Commission, California Energy Commission), and in consultation with the offshore wind industry, telecommunications industry, Tribes and Indigenous groups, and stakeholders, evaluate various siting and mitigation programs to provide further guidance about constructing, operating, maintaining, and removing cables or other infrastructure in or adjacent to the sanctuary. Work with the National Centers for Coastal Ocean Science to conduct core biogeographic and multi-use assessments of spatial and other limitations in the region.

Strategy OE-5: Support monitoring and mitigation review

Activity OE-5.1: Large and complex industrial projects require effective monitoring and mitigation programs for expected impacts from construction, operation, and abandonment/decommissioning. NOAA will develop plan(s), in collaboration with Tribal governments and local, state, and federal agencies, to monitor development activities within or adjacent to the sanctuary. This may include close collaboration with staff and contractors hired by developers to ensure effective data collection.

Activity OE-5.2: Contribute via fieldwork to monitor activities as appropriate. The research and monitoring activities described in Strategy OE-2 will also identify how NOAA will participate in and contribute to monitoring activities. Explore opportunities for partnership with academic institutions on monitoring.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

National Marine Fisheries Service Southwest Fisheries Science Center, National Center for Coastal and Ocean Studies, Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, U.S. Army Corps of Engineers, California Ocean Protection Council, California Coastal Commission, California State Lands Commission, California Department of Fish and Wildlife, California Energy Commission, Public Utilities Commission, County of San Luis Obispo, County of Santa Barbara.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Chumash Tribes, Bands, and Clans; and Culturally-Related Associations and Organizations²¹

Northern Chumash Tribal Council, yak tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

California Polytechnic State University, San Luis Obispo; University of California, Santa Barbara.

Nongovernmental Organizations

Point Blue Conservation Science.

Industry

Offshore wind lease holders, developers, and their trade associations; telecommunications companies and support associations; commercial fishers.

²¹ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Water Quality Action Plan

Goal: Ensure water quality in the sanctuary and adjoining watersheds can support aquatic life and human health while accommodating many diverse uses.

Introduction

This Water Quality (WQ) Action Plan focuses on understanding water quality conditions in CHNMS and its watersheds and working with partners to protect and restore it. By increasing knowledge of the watersheds and characterizing water quality, NOAA will be better able to identify water quality threats to sanctuary resources and mitigate those threats through education, implementation of best practices, research, and other actions by partners. The main water quality threats in this region include urban runoff, commercial shipping, drilling for hydrocarbons (and natural seeps), agriculture and other focused land uses, and the military.

A characterization of the land use and land cover along the coastline adjacent to the sanctuary that affects the coastal environment can be found in Section 1, *Sanctuary Size, Location, and Coastal Communities*, of the management plan, including descriptions of coastal cities and development activities. Within the sanctuary boundaries, the two largest water bodies flowing to the coast are the Santa Maria River and Santa Ynez River. Other smaller creeks and tributaries in between run to the ocean. Typical contaminants in these freshwater systems include sediment, nutrients, bacteria, pesticides, and other common urban pollutants. Within CHNMS watersheds, water bodies have been determined by the Central Coast Regional Water Quality Control Board to be impaired under sections 303(d) and 305(b) of the Clean Water Act (State Water Resources Control Board, 2022).

In the [2020-2022 Integrated Report](#), there are 16 water bodies (creeks, rivers, estuaries, beaches, and coastal areas) that flow to or are adjacent to the sanctuary that do not attain their designated beneficial uses because of frequent high concentrations of specific contaminants (State Water Resources Control Board, 2022). The most common pollutants across the stretch of coast are fecal indicator bacteria and sediment. Other common listings include water temperature (too warm), dissolved oxygen (too low), nitrate, and turbidity. The most polluted freshwater bodies include Oso Flaco Creek, Santa Maria River, Orcutt Creek and its tributary, and Green Valley Creek. These water bodies are listed for high concentrations of diazinon, chlorpyrifos, dieldrin, malathion, dichloro-diphenyl-trichloroethane (DDT), polychlorinated biphenyls (PCBs), and toxicity. Several coastal beaches, including Avila Beach, Pismo State Beach, Guadalupe Dunes, and Ocean Beach, have been listed for exceedances of fecal indicator bacteria. Port San Luis Bay is on the list for exceedances of arsenic, polycyclic aromatic hydrocarbons, dieldrin, and PCBs.

This action plan includes strategies and activities related to increasing knowledge of water quality conditions, coordination with government and nongovernmental organizations, promoting public engagement and stewardship, increasing research and best practices to mitigate contaminants, and finally, developing a program to assess and prevent debris, particularly plastic debris, from entering the sanctuary.

Strategy WQ-1: Improve understanding of water quality conditions in adjoining watersheds to better identify and prioritize improvement efforts

A crucial step in carrying out collaborative efforts to improve water quality in the watersheds that drain to CHNMS will be to foster relationships and collaborate on compiling existing knowledge from partners and stakeholders.

Activity WQ-1.1: Develop a Water Quality Needs Assessment to understand the water quality issues, sources, and impacts similar to the one done for CINMS (see CINMS document [A Water Quality Needs Assessment for CINMS Vol 1 Appendix E of CINMS Management Plan](#) (2005)).

Activity WQ-1.2: As an early step in understanding water quality threats to the sanctuary, complete a water quality characterization report to determine baseline conditions. This report should include, among other things, an evaluation of maximum, minimum, and average year flows, in all watersheds.

Activity WQ-1.3: Promote investigations into the effects of pollutants on marine ecosystems, and support current and future studies through active participation, helping to seek funding, providing technical guidance, or engaging in peer review.

Strategy WQ-2: Coordinate with federal, state, and local agencies; local Tribes and Indigenous communities; and interest groups with a mandate or interest to protect water quality

Water quality knows no boundaries. There are many layers of regulation and jurisdictions with authority over water. The emphasis will be to bring organizations together to share information, promote success, and leverage resources to improve water quality.

Activity WQ-2.1: Conduct an inventory of water quality organizations and monitoring programs, including information on jurisdictional water quality authorities, roles, and responsibilities. Determine if a coordinating committee is needed for sharing information and developing strategies.

Activity WQ-2.2: Develop partnerships with organizations working on sector-specific water quality issues related to agriculture, stormwater, beach water quality, boating, and other areas with the intent to find collaborative solutions to improve and protect water quality.

Activity WQ-2.3: Review, evaluate, and comment on ordinances, regulations, and permits from other agencies with the potential to affect water quality in CHNMS, and ensure sanctuary resources are considered. Examples might include: support for local actions to reduce use of single-use plastic containers, which would reduce plastic debris on sanctuary beaches; or commenting on the Water Board National Pollutant Discharge Elimination System (NPDES) Low Threat Discharge permit, which might allow for short-term, very specific discharges into the ocean. The sanctuary might comment on the types of discharges that could be included in this general permit.

Activity WQ-2.4: Identify existing activities located within sanctuary boundaries that would require a sanctuary permit under CHNMS regulations specific to a direct discharge into CHNMS (see Activity RP-2.2).

Activity WQ-2.5: Determine if an agency memorandum of agreement (MOA) is needed related to roles and responsibilities of federal, state, and local government agencies with oversight of water quality regulations. Develop a MOA if needed. Use the existing MOA at MBNMS as an example.

Activity WQ-2.6: Collaborate with harbors to expand and ensure widespread usage of pump-out facilities, and to ensure ongoing maintenance to enhance long-term reliability.

Activity WQ-2.7: Participate in the Statewide Desalination Interagency Group coordinated by the State Water Resources Control Board which is collating information necessary for proposed successful ocean-based desalination and water supply projects. Through discussions with the SAC, consider adapting the [MBNMS Desalination Guidelines](#) as needed for CHNMS.

Activity WQ-2.8: Develop permitting guidelines for the beneficial use of dredged material within CHNMS adapted from the [MBNMS Beneficial Use Permitting Guidelines](#).

Strategy WQ-3: Promote public engagement and stewardship of watersheds and water flowing to CHNMS

Creating a sense of ownership and responsibility to protect our natural world has been a highly successful means of improving water quality at other national marine sanctuaries. Focusing on solutions and not just problems empowers the community to action. Through education and engagement, citizens will be informed about water quality conditions and the actions they can take.

Activity WQ-3.1: Coordinate with existing volunteer monitoring programs and support their efforts while expanding sanctuary messaging. Consider establishing a community science water quality monitoring program if needed.

Activity WQ-3.2: Participate in partner-sponsored outreach events including water quality monitoring and beach cleanups.

Activity WQ-3.3: Increase the public's understanding of effects of pollutants on marine ecosystems by contributing knowledge of water quality conditions to other CHNMS outreach materials and social media (see Education and Outreach Action Plan).

Activity WQ-3.4: Organize a water quality symposium within the first two years with partners to gather water quality information, share local research, and build relationships to increase the understanding of water quality conditions and identify information gaps.

Strategy WQ-4: Collaborate on solution-focused watershed activities in urban, agricultural, and rural landscapes to promote healthy conditions for humans and aquatic resources

Industry experts and those with specialized local knowledge in agriculture or municipalities are key partners in identifying solutions to most challenges they face. They can provide access to research, knowledge of their systems, and ability to leverage monetary and in-kind resources.

Activity WQ-4.1: Work with industry experts to promote examples of successful, innovative, and effective practices, technologies, and systematic approaches to reduce pollutant loads.

Activity WQ-4.2: Collect and assimilate pertinent data to better respond to CHNMS condition report questions related to water quality (see Activity RM-4.1).

Activity WQ-4.3: Consider establishing a program like expanding/extending the Agriculture Water Quality Alliance in MBNMS to establish a voluntary program to protect water quality and maintain productivity of farmlands in watersheds draining into CHNMS.

Strategy WQ-5: Assess and reduce debris, particularly plastic, in or entering CHNMS

An estimated eight million metric tons of plastic waste enters the world's ocean each year with approximately one to two million metric tons entering from the United States. A report from the National Academies Press titled, [Reckoning with the U.S. Role in Global Ocean Plastic Waste \(2021\)](#), provides a comprehensive briefing on the magnitude of the problem along with recommendations.

Activity WQ-5.1: Complete an assessment of ongoing current marine debris preventative actions and programs and data collection efforts within CHNMS. Assess, and as appropriate adopt, recommendations from the [Bren School's "Waste Free Waves"](#) evaluation of CHNMS marine debris.

Activity WQ-5.2: Support efforts of partners to reduce sources of plastic entering CHNMS.

Activity WQ-5.3: Develop and conduct general and targeted outreach programs about reducing plastic debris with partners and stakeholders, especially on-the-water businesses (see Education and Outreach Action Plan).

Potential Partners

The following list reflects potential sanctuary partners, and is expected to expand and change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

Bureau of Ocean Energy Management; U.S. Fish and Wildlife Service; National Marine Fisheries Service; U.S. Environmental Protection Agency Region 9; California Coastal Commission; California State Parks; California Ocean Protection Council; California Department of Fish and Wildlife; California State Lands Commission; California State Water Resources Control Board; Central Coast Regional Water Quality Control Board; Santa Maria, Pismo Beach, and other cities and municipalities along the coast of the sanctuary.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²²

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions and Affiliations

California Polytechnic State University, San Luis Obispo; University of California, Santa Barbara; University of California Cooperative Extension.

Nongovernmental Organizations

California Marine Sanctuary Foundation, Central Coast Ambient Monitoring Program, Central Coast Water Quality Preservation, Inc., Central Coast Wetlands Group, Creek Lands Conservation, Morro Bay National Estuary Program, CHNMS Research Activities Panel (RAP), Natural Resources Conservation Services, Coastal San Luis Resource Conservation District, Environmental Defense Center, Santa Barbara Channel Keeper, Surfrider.

Industry

Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, San Luis Obispo County Farm Bureau, Santa Barbara County Farm Bureau.

²² NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Blue Economy Action Plan

Goal: To contribute to the region’s Blue Economy (BE), while protecting sanctuary resources and supporting the broader community.

Introduction

The Blue Economy spans a diversity of sectors including seafood production, marine research and technology development, marine transportation, ocean exploration, coastal resilience, fisheries, and tourism and recreation (including recreational fishing). NOAA’s data, tools, and services that support coastal economies and their contribution to the national economy touch all aspects of American life. In 2018, the American Blue Economy, including goods and services, contributed about \$373 billion to the nation’s gross domestic product, supported 2.3 million jobs, and grew faster than the nation’s economy in its entirety (NOAA National Ocean Service, 2021).

In the initial period after sanctuary designation, tourism and recreation will be the primary Blue Economy focus for CHNMS, which aligns with the U.S. Department of Commerce’s National Travel and Tourism Strategy (available [online](#)). This approach uses a whole-of-government strategy to accelerate full recovery and employment in the travel and tourism sector. Goals include restoring U.S. competitiveness in the sector by encouraging travel to the U.S., spreading the economic benefits of travel and tourism across the U.S. (especially in underserved communities and populations), and preparing the sector for the effects of climate change. A secondary focus is to incorporate environmental justice and equity considerations into the following strategies and activities (e.g., expanded opportunities for recreational access for Tribes and Indigenous communities and traditionally underserved communities, as well as job training through recreation and tourism sector partnerships).

Tourism is a major contributor to San Luis Obispo County’s economy. In 2017, 7.2 million visitors spent nearly \$1.69 billion (Tourism Economics, 2018). In Santa Barbara County, key findings from a survey between September 2016 and August 2017 showed that total direct visitor-related spending contributed \$1.9 billion to the local economy (Destination Analysts Inc., 2017). A major destination of this tourism is to beaches and nearshore waters. Common activities include whale watching, recreational fishing, kayaking, sailing, surfing/paddle boarding, beach walking, and tide pooling.

Marine-related research and technology can also benefit from the presence of a national marine sanctuary since ocean science and exploration are key elements of sanctuary management. Sanctuary science needs can help drive investments in research and technology-associated jobs.

ONMS, as a place-based organization, is uniquely positioned to use a destination stewardship approach to work collaboratively with communities to promote sustainable tourism and contribute to local economies, while also protecting sensitive marine wildlife and habitats.

This Blue Economy Action Plan is intended to address tourism and recreational uses, aimed at supporting a viable economy while protecting sanctuary resources and supporting the broader community.

Note that ***sustainable tourism*** is defined by the United Nations World Tourism Organization as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.” NOAA is relying on this definition when it uses “sustainable tourism” in this management plan.

Strategy BE-1: Evaluate the need for and interest in a sustainable tourism and recreation program

The many recreational and tourism offerings and new opportunities, along with the Indigenous heritage significance of this coast, could create a need for and interest in developing sustainable recreation and tourism programs for CHNMS. This strategy addresses the need to assess through the SAC how recreation and tourism fits into a future sanctuary.

Activity BE-1.1: In coordination with the SAC, consider developing a “Sustainable Tourism and Recreation” working group to conduct research on visitor information and sanctuary awareness. This will include evaluating the need for additional tourism programs or for additional messaging regarding sustainable practices during recreation and tourism activities.

Activity BE-1.2: Work with the Sustainable Tourism and Recreation working group, if established, to create and grow online sanctuary-related content for partners, including a periodic newsletter that highlights local recreation and tourism opportunities and special events.

Activity BE-1.3: If recommended by the SAC, work with local and regional organizations to promote sanctuary sustainable and equitable tourism, activities, and events. Groups like Central Coast Tourism Council; Visit San Luis Obispo, California (SLOCAL); Visit Santa Barbara; as well as local, regional, and state chambers of commerce and business groups will be key potential partners. Also, work with ONMS Headquarters Business Advisory Council to explore opportunities.

Strategy BE-2: Cultivate a generation of travelers who are also ocean stewards

It is critical that NOAA and tourism vendors work together in raising public awareness of tourism and recreation impacts on the ocean. By educating visitors to make informed and responsible decisions regarding ocean health, national marine sanctuaries aim to cultivate a generation of travelers and ocean recreational users who are also ocean stewards. A better-informed travel industry will enhance NOAA’s ability to manage and protect sanctuary resources and ensure a better visitor experience through a destination stewardship approach.

Activity BE-2.1: Work with local Tribes and Indigenous groups, local and state parks, museums, visitor centers, aquaria, and others to foster awareness of ocean health and sustainable tourism practices and develop outreach materials that include Indigenous heritage as part of the sanctuary messaging.

Activity BE-2.2: Identify opportunities for partnership on public events (e.g., ocean-themed fairs, “Get Into Your Sanctuary”) and stewardship activities (e.g., creek and beach cleanups). Cultivate a shared message from these opportunities and entice the public into participating in

these events regularly. Ensure there is a Tribal and Indigenous community component of these events where appropriate.

Activity BE-2.3: Work with local on-the-water recreation vendors (e.g., kayak, paddle board, surfboard, etc. rental companies) to identify opportunities for marketing and sanctuary messaging, including wildlife viewing guidelines.

Activity BE-2.4: Utilize the ONMS human use and visitation monitoring program. This survey-based, system-wide monitoring and research program will enable NOAA to understand the value of, impacts on, and contributions to local and regional economies.

Activity BE-2.5: Collaborate with recreational fishing community members to improve understanding of the sanctuary and explore ways to promote sanctuary enjoyment by this community. Work together with interested parties to define activities, messages, and initiatives that promote responsible recreational fishing within sanctuary waters, and engage these members in stewardship opportunities. Pursue a partnership-based approach with state and federal agencies, such as National Marine Fisheries Service and California Department of Fish and Wildlife.

Strategy BE-3: Support utilization and advancement of the marine technology sector

The marine technology sector of the Blue Economy is a dynamic and growing part of our national economy, critically important to advancing products and services for maritime industry and research. Ocean measurements, mapping, observations, modeling, and forecasting all contribute to sustaining important activities such as shipping and navigation, fishing and aquaculture, coastal protections, and more.

Activity BE-3.1: Characterize the marine technology sector in the CHNMS region. Invite assistance and participation from the telecommunications industry, along with other regionally-based marine technology entities, as critical participants in this activity (as well as Activity BE-3.2)

Activity BE-3.2: Reach out to industry, academia, and public agencies to identify elements of the marine technology sector that connect with CHNMS goals and investigate their utility in assisting the sanctuary. The offshore wind energy projects in the area, and possibly the diverse decommissioning projects, may create opportunities to help develop technologies and techniques for sustainably conducting these kinds of projects and applying them to aid sanctuary science and management.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal and State Governments and Agencies

Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Coastal Commission, California State Parks, California Ocean Protection Council, California Department of Fish and Wildlife, California State Lands Commission.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²³

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

University of California, Santa Barbara; California Polytechnic State University, San Luis Obispo.

Local Governmental Agencies and Community Organizations

Chambers of Commerce, Visit SLOCAL, Central Coast Tourism Council, San Luis Obispo County Business Improvement District, Regional Economic Action Coalition, local and state parks, museums, visitor centers, aquaria, visitor-serving organizations.

Nongovernmental Organizations

Point Blue Conservation Science.

²³ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Wildlife Disturbance Action Plan

Goal: Assess and mitigate disturbance of wildlife within sanctuary boundaries.

Introduction

Viewing marine animals in their natural habitat can be an exciting and educational experience. More and more people are visiting shorelines and coastal waters to view and photograph wildlife or recreate in these habitats. Although it can be tempting to try to get close to marine animals, it's always best to view them from a safe and respectful distance. Often, people are unaware that their proximity or activity can be harmful to the wildlife itself, which is why education and outreach are major themes of this action plan. In addition, understanding the scope and extent of wildlife disturbance (WD) in the sanctuary can help direct efforts where there may be recurring or ongoing disturbance.

As coastal recreation and tourism continue to grow, and advancements in technology are made (e.g., drones and other motorized craft), wildlife disturbance has increased at other national marine sanctuaries on the West Coast and is anticipated (and observed at some places) in CHNMS. Climate change, too, is increasing stress in many species, likely making wildlife less resilient to disturbance. In most incidents, people unknowingly disturb wildlife because they are unaware that such disturbances can cause impacts on food resources, proper rest, protection from predators, and offspring survival.

Categories of wildlife disturbance include shoreside disturbance, on-the-water disturbances from recreational or commercial users, and disruptions from low-flying aircraft. These disturbances cause several negative events associated with marine mammals and birds: disruption of haul-out behavior in seals and sea lions, disturbing resting or grooming animals, and flushing nesting birds from their nests. Additionally, boaters and kayakers may approach migrating whales, often mother-calf pairs, altering their feeding or migration activities. Studies by wildlife protection agencies have found education efforts that enhance awareness and sensitivity to be highly effective in reducing disturbances, while regular monitoring in sensitive areas helps reduce violations of wildlife disturbance laws. Educating people about wildlife and how to avoid disturbance is critical to minimizing this type of harm.

Several areas that have experienced incidences of wildlife disturbance include Shell Beach, particularly the offshore rocks and cliffs near Dinosaur Caves Park and Margo Dodd Park, Surf Beach, and Gaviota Pier.

Strategy WD-1: Evaluate wildlife disturbance by visitors and recreational users

Activity WD-1.1: Conduct a general assessment of the overall level of wildlife disturbance by all users within or adjacent to the boundaries of the sanctuary. This assessment may use direct observations by staff, volunteers, agency partners, and reporting by the public. The intent of this assessment is to better understand levels of disturbance and places where these disturbances tend to occur.

Activity WD-1.2: Conduct a specific assessment, in partnership with agency partners and users, as well as the SAC, to determine the need for regulatory and/or non-regulatory actions to

address actual or potential wildlife disturbance caused by motorized personal watercraft, and related emerging technologies.

Activity WD-1.3: Work with partners to establish wildlife disturbance educational materials and programming using the [ONMS Wildlife Viewing Guidelines](#), and collaborate with partners on the most effective means to distribute and deliver these materials.

Activity WD-1.4: Monitor white shark activity and potential disturbance. This effort can help better understand the white shark population, areas frequented by white sharks, and if disturbance is happening.

Strategy WD-2: Evaluate wildlife disturbance via aircraft

Activity WD-2.1: Work with partners (such as the Seabird Protection Network, Point Blue Conservation Science, and California State Parks) to educate small aircraft aviators from nearby airports to avoid sensitive breeding and nesting areas. Education and outreach could include developing and distributing one-pagers or brochures and presentations to aviator clubs.

Activity WD-2.2: Work with partners and environmental staff at military bases to identify and document sensitive breeding and nesting areas to be avoided and/or mitigated for disturbances.

Activity WD-2.3: Conduct a specific assessment, in partnership with agency partners and users, as well as the SAC, to determine the level of use, location, potential impact of, and need for regulatory and/or non-regulatory actions regarding potential wildlife disturbance caused by low-flying aircraft. NOAA should evaluate the success of other strategies on the West Coast to minimize impact, including use of zones, height of flight restrictions, area avoidance, seasonal restrictions, and education and outreach.

Strategy WD-3: Evaluate potential wildlife disturbance from offshore commercial activities, including wind energy development and operation, and marine shipping

Activity WD-3.1: With the anticipated development of the Morro Bay Wind Energy Area, NOAA should ensure any related infrastructure (e.g., turbines, platforms, cables, substations, associated mooring lines) minimizes threats to wildlife within and adjacent to the sanctuary. Evaluations will help inform resource protection efforts focused on avoiding, minimizing, and mitigating negative impacts. Specific research and monitoring actions would be identified in plans necessary for Strategy OE-2.

Activity WD-3.2: Through the SAC, assess the level of wildlife disturbance caused by shipping—specifically, strikes on whales by large marine vessels within the boundaries of the sanctuary. This should include considering non-regulatory mitigation methods similar to those NOAA has used at other national marine sanctuaries on the West Coast, such as recommending slower vessel speeds when whales are present, adjusting shipping lanes where appropriate, and education and outreach efforts to industry. See Activity RP-6.3 if it becomes apparent a speed restriction via regulation may be necessary.

Strategy WD-4: Identify and establish partner relationships to address wildlife disturbance

Activity WD-4.1: Document reports of wildlife disturbance from the public and partners to evaluate the need for additional dedicated enforcement staff.

Activity WD-4.2: Consider establishing a Law Enforcement Technical Advisory Committee to assist in coordinating with other law enforcement partners on wildlife disturbance issues and hot spots.

Activity WD-4.3: Consider the need to support whale entanglement response teams in the sanctuary, and to work in conjunction with similar programs at adjacent sanctuaries (see also Strategy OA-5).

Strategy WD-5: Develop education and outreach materials and programs to teach the public about wildlife behavior, needs, and ways to avoid and minimize disturbance

Education and outreach to the general public, as well as to recreational users, will help inform them about marine wildlife and prevent disturbance. Staff will work with partners to develop materials and means of reaching the public through printed materials, web content, signage (with QR codes), videos, etc. Coordinate with staff developing educational programming and messaging to address resource threats in Activity EO-3.3.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal and State Governments and Agencies

Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, National Marine Fisheries Service, NOAA Office of Law Enforcement, NOAA Sea Grant, California Coastal Commission, California State Parks, California Ocean Protection Council, California Department of Fish and Wildlife, California State Lands Commission, California State Parks, California Department of Fish and Wildlife.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²⁴

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Nongovernmental Organizations

California Marine Protected Area Collaborative Network, Community Active Wildlife Stewards, Point Blue Conservation Science, Seabird Protection Network, Sea Otter Savvy, Pacific Wildlife Center, The Marine Mammal Center, Morro Bay National Estuary Program, Recreate Responsibly, Surfrider, Respect Wildlife (California-based).

Industry

Offshore wind developers, telecommunications companies.

²⁴ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Boundary Adjustment Action Plan

Goal: Beginning no later than January 2032, conduct a robust, open process to consider, analyze, and support future decision-making on sanctuary conservation options for areas outside the sanctuary.

Introduction

Three primary areas adjacent to the sanctuary were considered in boundary alternatives during the designation process: 1) the coastal and nearshore waters from Cambria down to the sanctuary's current northern coastal boundary (approximately two miles southeast of the marina at Diablo Canyon Power Plant); 2) deeper offshore waters west of the sanctuary's outer boundary; and 3) waters of the Morro Bay Estuary.

For each of these three areas, NOAA will determine: (A) if there are nationally significant resources in the area; (B) if those resources are under threat; and (C) if national marine sanctuary status is an appropriate mechanism to protect those resources from threats they face. Options to provide sanctuary status could include expanding the CHNMS boundary, expanding the MBNMS boundary, or designating a new national marine sanctuary.

It is important to clarify that inclusion of this Boundary Adjustment (BA) Action Plan does not mean NOAA has decided to expand the sanctuary. Rather, this action plan sets the stage for NOAA to decide if pursuing such a change is warranted. If, after implementing the evaluation steps described in the strategies in this action plan, NOAA decides that there is merit in considering additional sanctuary conservation in this area, any additional proposed sanctuary designation or expansion would require a separate public process. Any subsequent public process would feature a public comment period, preparation of an environmental impact statement per the National Environmental Policy Act and NMSA, rulemaking per the Administrative Procedure Act, and other interagency and Tribal consultations. In addition, NOAA would address the potential need to rename the sanctuary, if appropriate, given specific sanctuary conservation actions, such as a boundary adjustment versus a new stand-alone sanctuary.

Strategy BA-1: Evaluate and consider the need for a future boundary expansion (or other sanctuary conservation action) for waters north of CHNMS

With input from the SAC²⁵ and IPC, NOAA would evaluate and determine if and how conservation of the nearshore waters north of the CHNMS boundary, extending along the coast up to the MBNMS southern boundary at Cambria, could benefit from sanctuary status. This would include consideration of other management issues associated with the possible boundary changes, including the name of the sanctuary, or how existing sanctuary programs and initiatives may need to change or evolve.

Activity BA-1.1: Track and monitor offshore wind energy development plans and related agency permitting processes, both locally and elsewhere in the National Marine Sanctuary

²⁵ Throughout the Boundary Adjustment Action Plan, when the SAC is mentioned, that includes SAC working groups, such as the ICAP.

System or other U.S. waters. Gain a better understanding of planned floating substation and cable installations and how it could intersect with sanctuary authorities.

Activity BA-1.2: Track ongoing research and new studies that advance understanding of offshore wind energy development impacts, including effects on marine and cultural resources, upwelling, noise, vessel activities, pollution, and other activities associated with construction, installation, operation, and maintenance.

Activity BA-1.3: Assess and update NOAA’s understanding of the living marine and cultural resources of this area, building on information gathered during the sanctuary designation process.²⁶

Activity BA-1.4: During the sanctuary’s first management plan review process, use information gained from activities BA-1.1, BA-1.2, and BA-1.3, as well as input from the SAC and IPC to determine if sanctuary protection may be an appropriate conservation tool to address threats to the area’s resources. As necessary, explore how conservation objectives for the area could be achieved by mechanisms other than inclusion within a national marine sanctuary.

Strategy BA-2: Evaluate and consider the need for a future boundary expansion for waters west of CHNMS

With input from the SAC and IPC, evaluate and determine if and how conservation of the offshore waters west of the sanctuary boundary could benefit from sanctuary status.

Activity BA-2.1: Conduct a biogeographic assessment to understand the known, likely, or expected living marine resources in the ocean and submerged lands of this area.

Activity BA-2.2: Work with historians and marine archaeologists to understand the known, likely, or expected submerged maritime heritage resources on the submerged lands of this area.

Activity BA-2.3: Work with the ICAP to understand and characterize the Indigenous cultural significance of resources in this area, and with members of the SAC on any other cultural significance of this area.

Activity BA-2.4: Assess the status and any known trends of living marine, historical, and cultural resources in this offshore area. Determine the threats to any potentially nationally significant resources.

Activity BA-2.5: During the sanctuary’s first management plan review process, use information gained from activities BA-2.1 through BA-2.4 and input from the SAC and IPC to determine if sanctuary protection may be an appropriate conservation tool to address threats to the area’s resources. As necessary, explore how conservation objectives for the area could be achieved by mechanisms other than inclusion within a national marine sanctuary.

²⁶ This type of assessment is usually included in ONMS’ sanctuary condition reports. NOAA could consider including information gathered in activities BA-1.3 and BA-2.4 in the sanctuary’s first condition report. More information on ONMS’ condition reports is available [online](#).

Strategy BA-3: Evaluate and consider Morro Bay Estuary for future sanctuary inclusion

Collaborate with the Morro Bay National Estuary Program, the SAC, and the IPC, to consider if and how conservation of the important Morro Bay Estuary could be enhanced and complemented by sanctuary management or other conservation measures. Inform an ONMS decision on inclusion of the estuary within the sanctuary. Consider other management issues associated with a possible boundary change, including the name of the sanctuary, or how existing sanctuary programs and initiatives may need to change or evolve.

Activity BA-3.1: Improve understanding of the historical Indigenous uses of the estuary and its importance to both Salinan and Chumash Peoples, including the location and sensitivity of potential village sites.

Activity BA-3.2: Evaluate how sanctuary programs could complement the Morro Bay National Estuary Program, and how to build on the program's collaborations with partners to enhance monitoring, research, restoration, conservation, education, and outreach efforts.

Activity BA-3.3: Identify additional protections and management support that could be achieved if the estuary were included as part of the sanctuary.

Activity BA-3.4: During the sanctuary's first management plan review, use information gained from activities BA-3.1, BA-3.2, and BA-3.3, as well as input from the SAC and IPC to determine if sanctuary protection may be an appropriate conservation tool to address threats to the area's resources. As necessary, explore how conservation objectives for the area could be achieved by mechanisms other than inclusion within a national marine sanctuary.

Potential Partners

The following list reflects potential sanctuary partners and is expected to change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, National Marine Fisheries Service, NOAA Sea Grant, California Coastal Commission, California State Parks, California Ocean Protection Council, California Department of Fish and Wildlife, California State Lands Commission, City of Morro Bay, Baywood-Los Osos unincorporated community.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²⁷

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

University of California, Santa Barbara; California Polytechnic State University, San Luis Obispo; California Cooperative Oceanic Fisheries Investigations.

Nongovernmental Organizations

Morro Bay National Estuary Program, Point Blue Conservation Science.

Industry

Offshore wind developers, telecommunications companies, commercial and recreational fishing, shipping, local recreation and tourism companies.

²⁷ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Education and Outreach Action Plan

Goal: Promote and encourage appreciation and stewardship of cultural and natural resources by enhancing greater public understanding of sanctuary resources. The plan outlines a strategy to develop an education and outreach program and grow sanctuary awareness through collaboration with partners.

Introduction

In the Education and Outreach (EO) Action Plan, education refers to K–12 school and after-school programs, college-level education at community colleges and universities, as well as community-based education such as at museums, environmental centers, and interpretive facilities. Outreach is less structured, one-way communication using brief messaging such as that communicated through social media, infographics, and at public events. NOAA’s education program develops education and outreach materials aligned with national science and climate literacy standards (see [Next Generation Science Standards](#)), ONMS Ocean Literacy principles, and national education standards for STEAM (Science, Technology, Education, Arts, and Math).

Most science-based K–12 and college-level educational curricula in use today, as well as many informal environmental education programs, are deficient in recognizing the important role of Indigenous Knowledge in modern ecosystem management. NOAA welcomes the opportunity to highlight Indigenous Knowledge in coastal, cultural, and ocean education programs and outreach messages. Education partners include formal education programs, schools and higher learning institutions, informal education programs, Indigenous communities, docent and volunteer programs, and nonprofit organizations. Outreach opportunities and partnerships may be developed through media outreach, including publications that provide information about the sanctuary, chambers of commerce and local businesses, and regional tourism organizations.

Strategy EO-1: Identify, establish, and enhance relationships with partners

Activity EO-1.1: Conduct a comprehensive survey of government agencies as well as formal and informal education provider programs in the region, to identify what environmental education programs already exist and what their key messaging and methods are. The survey should also assess the potential for partnership relationships. Potential partners include: federal, state, and local agencies; school districts, colleges, and universities; Tribes and Indigenous communities; and organizations that provide science-based education about the cultural and natural history of the area, such as museums, botanical gardens, aquaria, and outdoor environmental education facilities.

Activity EO-1.2: In conjunction with the SAC, consider creating an Education and Outreach Activities Working Group. Identified local expert partners would be invited to participate and make recommendations regarding program and curriculum development and other materials, outreach activities and events, and assessing success of these efforts. Members of this panel would include: formal education providers; informal education providers (such as nonprofit organizations and after-school programs); cultural, Tribal, and Indigenous community representatives; and ONMS staff. Similarly, engage the ICAP in providing guidance for meaningful Tribal and Indigenous outreach that draws on Indigenous Knowledge.

Activity EO-1.3: Reference the Sanctuary-U.S. Forest Service partnership initiated in 2016 between ONMS West Coast Region and U.S. Forest Service Region 5, with similar missions and compelling opportunities for collaboration. Efforts will be made to develop joint messaging and destination stewardship programs, as well as project descriptions for outreach and restoration activities primarily with the Los Padres National Forest.

Strategy EO-2: Conduct a needs assessment for a detailed communication, education, and outreach plan

Work products from Strategy EO-1 can be used to develop a needs assessment for comprehensive education and outreach program development. The outcome of the assessment will be a task list forming the foundation of a detailed communication, education, and outreach plan.

Activity EO-2.1: Develop a needs assessment built off the survey of existing programs in Activity EO-1.1. Included in the needs assessment would be consideration of constructing a new visitor center and/or developing exhibits and signage for existing visitor centers and museums, developing outreach materials and messaging for tourism organizations, conducting public outreach campaigns and programs, and developing education programs for both formal school programs and informal after-school programs or clubs and environmental education programs. A trained docent corps that can provide accurate information through a variety of community outlets may be established with its own in-depth training. Information should be shared with local environmental nonprofit organizations and Tribal and Indigenous partners.

Activity EO-2.2: Develop a five-year plan for physical outreach tools including coastal signage, new exhibits in existing visitor centers, and a new visitor center that would be dedicated to providing information about the sanctuary.

Activity EO-2.3: Develop social media strategies and tactical plans, including sharing messages with partner organizations for effective cross-referencing.

Strategy EO-3: Establish core programs and messaging

NOAA will develop core educational concepts and messaging for different issues and different audiences. These core educational concepts must be aligned with national science, ocean, and climate literacy standards, other relevant education standards, and ONMS educational goals. Input from Tribal and Indigenous representatives is essential for accurate and consistent representation of regional cultural and natural history. Core messages will be developed for media outreach, tourism organizations, and businesses promoting the sanctuary, its resources, and public engagement with those resources. The goals of this strategy are to ensure timely delivery of accurate and consistent messaging through all venues that address key resource threats and habitat protection.

Activity EO-3.1: Invite input from Tribal and Indigenous representatives on establishing core programs and messaging that reflects Tribal and Indigenous values and ecological viewpoints regarding conservation of coastal ecosystems, as well as cultural and historical resources.

Activity EO-3.2: Develop key messages and story maps to highlight special habitats and distinctive features of the sanctuary, like the Rodriguez Seamount, Arguello Canyon, the

sanctuary's ecological transition zone, kelp forests, beaches, and rocky intertidal areas. Draw on these messages when creating outreach materials such as posters.

Activity EO-3.3: Develop key messages and education programs for resource threats (e.g., climate change, introduced species, wildlife disturbance, water quality, increased industrial activity).

Activity EO-3.4: Develop key messages related to support of sustainable fisheries (as defined by state and federal fishery managers) as compatible with sanctuary management.

Strategy EO-4: Develop a business and public affairs engagement plan

Effective and comprehensive outreach should include targeted efforts to business organizations (e.g., chambers of commerce, special districts) and government forums (e.g., city councils, councils of government, county boards of supervisors, other government agencies). An implementation plan will be developed that identifies opportunities for regular briefings, participation in committees, and other groups.

Activity EO-4.1: Develop a list of coastal businesses with ties or proximity to the sanctuary for inclusion in an outreach plan. Special emphasis will be on businesses related to recreation and tourism to maximize sanctuary connection, opportunities for partnership, and marketing destination stewardship.

Activity EO-4.2: Develop a list of government agencies that should receive regular briefings on sanctuary matters and consider opportunities for sanctuary participation in various forums. Staff should develop an annual calendar of scheduled briefings and regular local government meetings to track any coastal issues in these forums.

Strategy EO-5: Assess program effectiveness

Regular assessment of education and outreach program effectiveness through standardized measures, such as the number of individuals reached by demographic, can help guide and improve efforts. Understanding the effectiveness of messaging, as identified by voluntary public feedback, volunteers and docents, and staff, can also inform development and placement of products such as signage, exhibits, and kiosks. Qualitative assessment will include assessing community awareness and attitudes toward sanctuary natural and cultural resources.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

ONMS Education and Outreach staff, U.S. Forest Service, National Park Service, National Estuary Program, NOAA National Centers for Coastal and Ocean Science, NOAA Climate Education Program, National Marine Fisheries Service, National Marine Fisheries Service Restoration Center, NOAA Sea Grant, NOAA Bay Watershed Education and Training Program, NOAA Integrated Ecosystem Assessment Program, California Department of Parks and Recreation, California State Historic Preservation Office, California Regional Environmental

Education Community Network, San Luis Obispo and Santa Barbara County Offices of Education.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²⁸

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

California Polytechnic State University, San Luis Obispo; California State University Channel Islands; University of California, Santa Barbara; Antioch University; community colleges serving the area; Cabrillo High School Aquarium Program; extended education and community education programs; private educational institutions.

Nongovernmental Organizations

Museums and historical centers, Multicultural Education for Resources Issues Threatening Oceans (MERITO) Academy, Central Coast State Parks Association, Morro Bay National Estuary Program, Guadalupe Business Association, Lompoc Valley Historical Society, Port San Luis Lighthouse Association, Point Blue Conservation Science, The Nature Conservancy's Jack and Laura Dangermond Preserve, San Luis Obispo Botanical Garden, Santa Barbara Museum of Natural History and Santa Barbara Botanical Garden, Environmental Center of San Luis Obispo, Surfrider.

Business and Tourism

Regional tourism marketing organizations and businesses that provide informal education and outreach to visitors and customers, Visit SLOCAL, South Coast Chambers of Commerce, San Luis Obispo County Business Improvement District, other local and regional chambers of commerce, local on-the-water businesses.

²⁸ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Resource Protection Action Plan

Goal: Maintain and improve the sanctuary’s natural biological and ecological resources and processes and cultural and maritime resources by evaluating and addressing adverse impacts from human activities and applying Indigenous Knowledge and perspectives.

Introduction

The general approach of the resource protection (RP) program is to collaborate on management efforts with local stakeholders and agency partners to identify impacts on wildlife and other protected resources. Then, through improved scientific understanding, reduce impacts and strengthen protection of sanctuary resources.

This action plan aims to establish a resource protection program and to conduct activities addressing site-specific issues based on NOAA’s collective experience in other sanctuaries, the knowledge and experience of other agencies, and relevant local partners. NOAA’s activity planning uses local and Indigenous Knowledge and Tribal and Indigenous perspectives. Resource protection issues will be addressed through both a proactive and emergency response approach, including enforcement of sanctuary regulations, issuing permits with conditions to minimize impacts, and reviewing/commenting on coastal development projects and permit application procedures. This action plan also includes strategies and activities such as collaborative planning and management, marine policy, resource protection-based outreach and interpretation, and the incorporation of Tribal and Indigenous approaches.

Strategy RP-1: Establish a resource protection program through partnerships to protect sanctuary wildlife, habitats, qualities, and cultural resources

A new sanctuary of this size and scope, with an ecosystem-wide approach to resource protection, will require an initial period of development to build capacity, understand the issues and threats more fully, and establish collaborative partnerships, allowing it to be both effective and sustainable.

Activity RP-1.1: Identify the needed partnerships and collaborations among local, state, and federal agencies, user groups, nongovernmental organizations, and Tribes and Indigenous communities to effectively address sanctuary resource threats. Begin to work with partners on effective programs that address threats.

Activity RP-1.2: Expand upon existing sanctuary volunteer programs like community science water quality monitoring and interpretive enforcement programs, such as [Team OCEAN](#) (on-the-water kayak or small boat-based) and [Bay Net](#) (shore-based), which interact with the public about the importance of the sanctuary, stewardship, and avoiding wildlife disturbances. Experience has shown these volunteer programs work best in partnership with other organizations and/or a nonprofit partner.

Activity RP-1.3: Evaluate the effectiveness of protections for the Rodriguez Seamount and, if needed, consider additional conservation measures to address changing threats from physical, oceanographic, biologic, or anthropogenic sources.

Strategy RP-2: Establish and implement a permitting and environmental review program

The [NOAA ONMS permit program](#) provides a mechanism to review requests to conduct certain otherwise prohibited activities, such as disturbing the submerged lands or discharging within the sanctuary. Where appropriate, NOAA will permit or authorize these activities with specific terms and conditions focused on reducing and/or mitigating impacts to sanctuary resources. Types of sanctuary general permits include research, education, management, and Native American cultural or ceremonial activities. NOAA can also issue certifications, ONMS authorizations and special use permits.

Activity RP-2.1: Develop a permit program for CHNMS that is adaptive to the changing demands for regulatory review in the new sanctuary (e.g., certification applications in the first 120 days or ONMS authorizations in collaboration with partner permitting agencies).

Activity RP-2.2: Track, review, and comment (when needed) on projects, plans, and proposed actions of other agencies that may affect sanctuary resources and provide information to federal, state, and local agencies regarding sanctuary policies and regulations.

Activity RP-2.3: Given the number of construction projects in or adjacent to the sanctuary, develop a mechanism to monitor compliance with any sanctuary-issued permits. In addition, develop a mechanism to monitor compliance for large construction projects (including decommissioning, removal, and restoration activities) impacting the sanctuary area.

Activity RP-2.4: Create a mechanism for sharing with the IPC permit application requests and develop a process to receive timely feedback, thus avoiding delays, prior to finalizing any decisions on individual permit requests.

Strategy RP-3: Establish an enforcement presence and build enforcement partnerships

Effective surveillance and enforcement capabilities are critical to ensuring protection of sanctuary resources. This includes the visibility of enforcement through an officer in the field, deputized state enforcement partners who carry out activities through a joint enforcement agreement, and other enforcement partners who can report incidents and provide important information.

Activity RP-3.1: Build partnerships and support interagency coordination of enforcement, as appropriate, through NOAA Office of Law Enforcement and with California state wardens and rangers to address potential and actual sanctuary violations in the field.

Activity RP-3.2: Facilitate communication among law enforcement entities through coordination of a dedicated Law Enforcement Technical Advisory Committee. In other sanctuaries, these committees meet regularly to provide updates on issues, training, and enhanced coordination and communication.

Activity RP-3.3: Track and report incidents within and affecting the sanctuary consistent with the region-wide tracking system. This would likely involve potential sanctuary regulatory violations, permit violations, and vessel incidents like groundings and sinkings.

Strategy RP-4: Interpret and distribute resource protection information

NOAA will provide information to the SAC, volunteers, interns, and the public on issues of concern. Outreach will be delivered through reports, products, and presentations. Key areas to consider initially include protecting water quality and wildlife disturbance and the importance of Indigenous Knowledge to specific resource protection.

Activity RP-4.1: Consider establishing a Conservation Working Group of the SAC to serve as a forum for discussing conservation issues and identifying potential actions to address resource protection needs and threats. Working group members could include resource agencies, nongovernmental organizations, Tribal and Indigenous community members, and user groups.

Activity RP-4.2: Provide content for technical reports and information appropriate for social media, websites, presentations, and requests from the public. The content would be focused on threats and ways to address and mitigate those threats, and the various public agencies to contact for more information.

Strategy RP-5: Respond to emergencies that threaten sanctuary resources

Activity RP-5.1: Coordinate with the U.S. Coast Guard and other emergency response organizations through the local Area Contingency Planning process for response to oil and other hazardous spills. Sanctuary staff would participate in Area Contingency Planning and ensure sanctuary resources (and staff expertise) are considered.

Activity RP-5.2: Ensure the California Office of Emergency Services and the U.S. Coast Guard notifies CHNMS of any discharges, sinking, or grounding of vessels within CHNMS, and that staff are trained and available to respond as needed.

Strategy RP-6: Track and monitor vessel traffic compliance

The International Maritime Organization is the United Nations' specialized agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. Recommended tracks, adopted by the International Maritime Organization, were established in 2000 to reduce threats of spills by vessel traffic such as container ships, bulk carriers, and oil tankers. Compliance with these tracks is important to protecting sanctuary resources.

Activity RP-6.1: Track and monitor container ships, bulk freighters, and vessels carrying hazardous materials for compliance with International Maritime Organization recommended tracks.

Activity RP-6.2: Coordinate with the U.S. Coast Guard on contact and notifications for vessels deviating from tracks. The U.S. Coast Guard has jurisdiction for all mariners and can contact a vessel directly while underway and request that they resume use of the recommended tracks.

Activity RP-6.3: Coordinate at a regional level reducing the number of whale ship strikes in national marine sanctuaries in California, as outlined in Activity WD-3.2. If ONMS determines at a regional level that voluntary vessel speed reduction programs at some or all national marine sanctuaries on the West Coast are insufficient at protecting whales from vessel strikes,

coordinate with the SAC, IPC, and other sanctuaries' SACs to evaluate the need for and scope of a regulatory restriction on vessel speed, vessel routing, or other non-voluntary measures.

Potential Partners

The following list reflects potential sanctuary partners and is expected to change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

U.S. Coast Guard, National Marine Fisheries Service, NOAA Office of Law Enforcement, NOAA Sea Grant, U.S. Fish and Wildlife Service, Pacific Fisheries Management Council, California Department of Fish and Wildlife, California State Parks, California State Lands Commission, California Coastal Commission, City of Morro Bay, Baywood-Los Osos unincorporated community.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations²⁹

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

University of California, Santa Barbara; California Polytechnic State University, San Luis Obispo.

Nongovernmental Organizations

Point Blue Conservation Science.

²⁹ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Research and Monitoring Action Plan

Goal: Ensure the best available science is accessible to address current and projected needs of sanctuary management, resource protection, and education/outreach.

Introduction

An essential management obligation NOAA has for a national marine sanctuary is to conduct and coordinate research and monitoring (RM). This ensures the agency understands the natural ecological and oceanographic processes and human uses affecting the sanctuary. Research and monitoring activities must be responsive to both existing resource protection and management concerns and must improve understanding of the ecosystem services provided by the sanctuary to local communities, including local Tribes and Indigenous communities, and the nation. Such research and monitoring activities enable CHNMS to identify issues of emerging concern, and to provide ONMS with the information fundamental to sound decision-making. NOAA will use field-based and analytical social and ecological research to address the diverse issues the sanctuary ecosystem faces and disseminate information to aid sanctuary management.

Critically for this sanctuary, research and monitoring will rely on both Indigenous and Western perspectives to guide scientific planning. The principle of incorporating both Western and Indigenous Knowledge is referred to as a “two-eyed way of knowing,” and will guide all ecological assessments conducted by CHNMS. The strategies in this action plan highlight a mix of directed, NOAA-led research and partnerships to achieve a balanced portfolio. The action plan also outlines a strategic approach to using research findings and Indigenous Knowledge to inform management decisions, including how knowledge is translated and interpreted from Indigenous and Western perspectives. The strategies outlined below will equip sanctuary management with the best available science to conserve, protect, and enhance the natural and cultural resources found within sanctuaries.

As with other sites in the National Marine Sanctuary System, most research will be generated through partnership and coordination at the local, regional, and national levels. ONMS relies heavily on partners (e.g., federal and state agencies, academic institutions, nongovernmental organizations, private sector companies) and engages with partners through announcement of funding opportunities, provision of letters of support, and in-kind contributions of field or analytical time and vessel support. To support partnership building, the CHNMS team could help advance research collaborations through establishment, in conjunction with the SAC, of a RAP. The RAP would aim to include Indigenous Peoples, experts, and researchers, and would bring together Western and Indigenous Knowledge. This dual perspective will be critical to serving the Tribes and Indigenous communities that live in the area and supporting the intention of the sanctuary’s designation. Distilled information will be made available to ONMS education, outreach, and resource protection staff, and will be distributed via the [Sanctuary Integrated Monitoring Network](#) (SIMoN) web portal, presentations at conferences and workshops, and through the development of technical reports and peer-reviewed publications. Additionally, the CHNMS research team will participate in several mentoring opportunities, such as hosting fellows and interns to teach the next generation about the role of science in management and policy.

Strategy RM-1: Develop new research partnerships and infrastructure

ONMS relies heavily on partnerships with local universities, the private sector, nongovernmental organizations, other branches of NOAA, and other government agencies. ONMS uses research infrastructure like vessels, dive teams, remotely operated vehicles (ROVs), and other tools to support partners in conducting research to fulfill management needs.

Activity RM-1.1: In conjunction with the SAC, consider launching and supporting a RAP as a working group of the SAC. The RAP would be composed of representatives from regional research institutions and organizations (with both Western and Indigenous approaches). The RAP would have several key objectives:

- Advise staff on conservation science issues that will influence policy (e.g., address research questions in the CHNMS management plan [see Activity RM-6.1]).
- Review research issues and documents for the SAC and sanctuary staff.
- Facilitate the exchange of regional research information and create opportunities for project coordination.
- Convey regional research needs and opportunities to the SAC.

Activity RM-1.2: Develop and maintain partnerships with Tribes and Indigenous communities and social scientists to document and understand Indigenous Knowledge, culturally important species, and the threats these resources face due to climate change and other threats. Integrate these findings with the ongoing management and research efforts of CHNMS.

Activity RM-1.3: Identify equipment needs for CHNMS, including vessel requirements (e.g., size, berthing requirements, equipment needs, harbor slip location), necessary field training for staff and partners, required field operations equipment, and storage. These needs should be defined in accordance with the mission requirements of CHNMS based on priority conservation issues and information/science needs, maritime heritage, emergency response, damage assessment, enforcement, equipment deployment/maintenance, partner needs, etc. After the identification of needs, work with ONMS headquarters and local partners to procure needed equipment and training (also see Activity OA-5.2).

Activity RM-1.4: Develop and maintain partnerships with various entities, including federal and state government agencies, academic institutions, nongovernmental organizations, Tribes and Indigenous communities, the private sector, and foundations. ONMS will integrate with existing networks, including use of the RAP and research consortia.

Strategy RM-2: Characterize and monitor the sociological trends, human dynamics, and cultural landscapes associated with the sanctuary

Understanding and supporting Tribal and Indigenous community values, cultural landscapes, Indigenous Knowledge, and cultural practices is an integral priority for this sanctuary. The sanctuary supports several ecosystem services, which represent the benefits people gain from ecosystem functions (e.g., provisioning services such as swordfish used for both food and ceremonial objects, and non-material cultural services such as connection and responsibility of Indigenous Peoples to ocean stewardship). Documenting and supporting the ecosystem services that encompass Tribal and Indigenous cultures, values, and ways of knowing is vital for

successful sanctuary management. Indigenous perspectives can, and should, be integrated with their Western science counterparts equally. Furthermore, this integrated perspective will be valuable for assessing and supporting the adaptability of communities, including Tribes and Indigenous communities, to forecasted ecosystem change.

Activity RM-2.1: Identify relevant social-ecological indicators important to Tribes and Indigenous communities to incorporate into CHNMS management. NOAA will work with Tribal and Indigenous partners to document contemporary and traditional Indigenous Knowledge (also see Activity ICH-2.3) and values used to track sanctuary status and trends.

Activity RM-2.2: Work with Tribal and Indigenous partners to conduct cultural landscape studies of the communities on and near the waters of CHNMS to enhance the focus on Indigenous culture and values unique to this sanctuary. By utilizing established frameworks³⁰ and coordinating with the Bureau of Ocean Energy Management and partners that work on cultural landscape assessments, this activity will support development of an Indigenous Knowledge base through ethnographic and oral history inquiries, use of noninvasive and culturally sensitive methods, and follow protocols specific to Tribes and Indigenous groups regarding any disposition of culturally sensitive information. This activity corresponds to and supports the Indigenous and Cultural Heritage Action Plan, specifically Activity ICH-2.5.

Activity RM-2.3: Work with Tribes and Indigenous groups, as appropriate, to develop individual information collection requests/surveys from the NOAA Compendium of Questions to survey communities on the central California coast and assess the needs and desires of local Tribes and Indigenous groups and other community members. This directed survey will allow CHNMS to better understand and cater to the variety of central California coast community members and their needs.

Strategy RM-3: Characterize and monitor the biological and physical features and processes associated with the sanctuary

Identifying, tracking, and researching the biophysical environment is fundamental to understanding sanctuary management challenges. ONMS will address information gaps and continue to collect critical long-term monitoring data with partners. Examples of areas of focus are habitat mapping, climate change, oceanographic conditions and drivers, upwelling processes, acoustic monitoring, ecosystem connectivity, and ocean acidification.

Activity RM-3.1: Leverage and support ongoing characterization and monitoring of the sanctuary through partners' activities. Work with partners to assess current and ongoing monitoring in the sanctuary boundary and develop new protocols to address sanctuary needs, and improve inclusivity and access to information for Tribal and Indigenous communities.

Activity RM-3.2: Engage Tribes and Indigenous communities in identifying research priorities and projects, including community science opportunities such as [Beach COMBERS](#) (Coastal Ocean Mammal/Bird Education and Research Surveys), [LiMPETS](#) (Long-Term Monitoring Program and Experiential Training for Students), and other youth programs that can be composed of Indigenous-led teams.

³⁰ See the Bureau of Ocean Energy Management study: [A Guidance Document for Characterizing Tribal Cultural Landscapes](#) (Ball et al., 2015).

Activity RM-3.3: Conduct gap analysis to understand biophysical research and exploration needs for CHNMS, with special care to include resources of value to local Tribes and Indigenous communities. This gap analysis should cover the range of biophysical and socioeconomic data types deemed relevant by local partners, including development of foundational data layers like seafloor and habitat maps. This activity could be the initial task of the RAP.

Activity RM-3.4: Characterize and monitor the biology, ecology, geology, and ecosystem services and functions with a special focus on two areas: deep-sea ecosystems and nearshore biological communities. Nearshore work should include utilizing existing, standardized programs and methods (e.g., the [Partnership for Interdisciplinary Studies of Coastal Oceans](#)). Explore developing new technologies to improve monitoring in hard-to-reach locations and conditions. New technologies include environmental DNA, passive acoustic monitoring, satellite observations, and acoustic telemetry. Develop research proposals that seek funding from NOAA and external partners in support of projects related to top sanctuary ecosystem service science needs. Direct this work to better understand human use within CHNMS and the benefits people derive from the interacting sanctuary resources.

Activity RM-3.5: Characterize and monitor the biology, ecology, geology, and ecosystem functions of the Rodriguez Seamount as an underwater feature within CHNMS that has special ecological and scientific national significance (also see Activity RP-1.3).

Activity RM-3.6: Assess and consider using or establishing community science programs underway in adjacent sanctuaries and state marine protected areas tailored to and focused on the particular science needs of CHNMS.

Strategy RM-4: Interpret and apply scientific information and Indigenous Knowledge to meet sanctuary needs

Timely interpretation of the best available science, including Indigenous Knowledge, is critical to support sanctuary decision-making and to prevent further impact on resources. ONMS will convene groups of external researchers to provide timely analysis and synthesis that meet management, resource protection, and education/outreach needs.

Activity RM-4.1: Serve as scientific experts on a wide array of topics in support of management, resource protection, and education/outreach needs. This can include the development of white papers, responses to internal agency requests and public inquiries, and the creation of media, including stories, articles, videos, exhibits, signs, and interactive technologies.

Activity RM-4.2: Develop relevant monitoring and research partnerships to understand impacts of offshore wind energy development on biological resources, including soundscape monitoring. Resource monitoring protocols and programs will be developed for the Morro Bay Wind Energy Area study period, installation, operation, and decommissioning. Input on the design and/or evaluation of mitigation measures is also an area for partnership consideration.

Activity RM-4.3: Expand the online [SIMoN](#) database and web portal of existing and historic monitoring programs and current marine events. SIMoN's online database of monitoring-related projects is kept up-to-date with both current (active) and historical data sets.

Strategy RM-5: Develop research and monitoring projects to support issue-based action plans and emerging needs

Activity RM-5.1: Develop project ideas and write ecosystem monitoring and research proposals for internal (e.g., NOAA Vessel Time) and external funding to address resource protection and management needs at site, regional, and national levels. Proposals will support projects related to site, regional, and national top science needs, topics related to issue-based action plans, and emerging priorities.

Activity RM-5.2: Provide letters of support for appropriate applied research proposals. Many grant-funding agencies require an applied-use component to their grants, or some indication of the societal benefits of the proposed research. ONMS will write letters of support for scientists proposing research addressing priority ecosystem service science needs and emerging issues.

Strategy RM-6: Support science needs and expertise

As a national network of protected areas, sanctuaries can benefit from national collaborations that inform issues affecting sites around the National Marine Sanctuary System. By focusing on cohesive ways to track and report on issues that broadly impact multiple sanctuaries, the research team can advance ocean conservation nationally and internationally and share ideas from a broad range of researchers.

Activity RM-6.1: Contribute sanctuary-related science needs assessments (see [ONMS Science Needs Assessment](#)) to the ONMS website for reference by interested scientists. Science needs assessments will be targeted to the specific needs for CHNMS and developed from the results of the gap analysis mentioned in this action plan (Activity RM-3.3).

Activity RM-6.2: Share research expertise across national marine sanctuary sites. Research staff will regularly share information and resources with other sanctuary sites, especially within the ONMS West Coast Region, focused on areas of expertise such as condition report development, ocean noise, telemetry, deep-sea exploration, human dimensions, maritime heritage, ecosystem services, upwelling, climate change, and seafloor characterization.

Activity RM-6.3: Build upon ONMS' diversity and inclusion (see [A Transformational Vision for National Marine Sanctuaries](#)) by encouraging opportunities for local Tribal and Indigenous community members to gain paid experience and employment in marine research and conservation.

Activity RM-6.4: Seek opportunities to expand or, if feasible, support national, regional, and cross-site science initiatives that enhance understanding of CHNMS and its resources, such as soundscape monitoring (see [SanctSound](#)), U.S. Geological Survey's [EXPRESS Campaign](#) (e.g., seafloor mapping and characterization), and [NOAA Sentinel Site](#) development. These opportunities will be particularly valuable in the early years of the sanctuary when its full array of science staff will still be in development.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal Governments and Agencies

NOAA Deep-Sea Coral and Research Technology Program, Bureau of Ocean Energy Management, National Centers for Coastal Ocean Science, U.S. Integrated Ocean Observing System Program, National Marine Fisheries Service Southwest Fisheries Science Center.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations³¹

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

California State University Long Beach; University of California, Santa Barbara; California State University Channel Islands; University of California, Santa Cruz; California Polytechnic State University, San Luis Obispo; California Cooperative Oceanic Fisheries.

Nongovernmental Organizations

Morro Bay National Estuary Program, Santa Barbara Channel Long-Term Ecological Research, Monterey Bay Aquarium, Monterey Bay Aquarium Research Initiative, Point Blue Conservation Science, wind energy lease holders and developers, Partnership for Interdisciplinary Studies of Coastal Oceans.

³¹ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

Operations and Administration Action Plan

Goal: Create sanctuary infrastructure, staffing, advisory groups, and program support to ensure effective and efficient implementation of the management plan.

Introduction

CHNMS is established to preserve and protect the sanctuary's unique and irreplaceable natural and cultural resources. Protecting these resources requires appropriate facilities, staff, vessels, trained personnel and volunteers, funding and partnerships, and specialized equipment. Developing an effective and sustainable infrastructure will be a major focus in the first few years of operations. See Appendix B: Estimated Operating Budget.

The highest priority for the Operations and Administration (OA) Action Plan is the establishment of a SAC and facilitating creation of its working groups, such as the ICAP, RAP, and Conservation Working Group. These groups will be an essential component of ensuring public, including Tribal and Indigenous community, participation in sanctuary management. SAC members will represent the community's various interests, and may include local government, education, research, user and industry groups, business groups, Tribal government representatives, Indigenous Knowledge-holders, and the community-at-large. SAC members serve as liaisons between their constituents and the sanctuary, keeping sanctuary staff informed of issues and concerns and performing outreach to their respective constituents on the sanctuary's behalf. Creation of the ICAP is meant to bring together individuals possessing knowledge or understanding of the local Indigenous culture, history, and environment to develop and provide essential advice supporting sanctuary management. To the extent more representation is needed, the ICAP would provide much more space for Indigenous community members and others because, unlike advisory councils, the ICAP would not be subject to the seat limitation restrictions or require NOAA's formal application, review, and appointment decision-making processes. See the SAC Implementation Handbook [online](#).

The sanctuary will also benefit greatly from partnerships within NOAA and nongovernmental organizations; private businesses; education and cultural institutions; community groups; private citizens; and local, state, and federal agencies. Establishing a NOAA presence within sanctuary communities will be imperative to strengthening the pool of partners and collaborators. The sanctuary will develop these partnerships to create or improve several essential capacities, including research vessels and equipment, administrative space, law enforcement, and education and outreach.

Strategy OA-1: Establish and support a Sanctuary Advisory Council

Activity OA-1.1: Acknowledging the sanctuary's geographical expanse, community diversity, and local knowledge, establish a SAC to support community-informed management of the sanctuary. Develop a SAC charter in accordance with the NMSA and ONMS Advisory Council Implementation [Handbook](#), documenting basic expectations and structural elements.³²

³² Per the NMSA, the SAC may have up to 15 voting seats, each represented by a member and alternate representative. Additional non-voting seats may also be appointed, separate from the 15-seat limit. See details at ONMS' SAC [webpage](#).

Activity OA-1.2: Conduct public outreach to build awareness of the new SAC. Announce, advertise, and recruit community members to apply for membership. Invite select government agency partners to participate. Appoint the initial SAC membership roster.

Activity OA-1.3: Develop initial steps for supporting meetings of the SAC. This will include setting the number and location of sessions to be held per year. NOAA staff will support the SAC in their initial decision-making concerning group administration and planning, to include an election of officers to the group, SAC identification of priorities and tasks to address, and the establishment of any additional meeting protocols as needed. Also support coordination and collaboration with the established neighboring advisory councils for MBNMS and CINMS.

Activity OA-1.4: Request that the SAC consider approving creation of the envisioned ICAP as a council working group (see the Introduction section of this action plan for more information). Provide staff support for ICAP recruitment efforts to convene the group. Also, work with the SAC to support their consideration of the formation of additional working groups, as mentioned in various action plans, to help bring focused input together in support of sanctuary research, conservation, education and outreach activities, and sustainable tourism and recreation. Provide the SAC with guidance and staff support for establishing any council working group.

Strategy OA-2: Develop a “NOAA presence”

Activity OA-2.1: Conduct an evaluation of infrastructure and operations requirements. In cooperation with sanctuary communities, develop a strategic plan for creating a “NOAA presence” in each community, to include offices, infrastructure, research, education, outreach, exhibits and signage, and marketing/branding considerations. Coordinate this work with Strategy EO-2.

Activity OA-2.2: Enhance the visibility and use of the first administrative office for the new sanctuary (located on campus at California Polytechnic State University, San Luis Obispo). Work with partner agencies and stakeholders to effectively establish NOAA’s local presence in order to best serve communities adjacent to the sanctuary.

Strategy OA-3: Identify and acquire staff needed to support sanctuary operations and resource protection, education and outreach, and research programs

Activity OA-3.1: Identify appropriate staffing requirements for the sanctuary based on this plan. Subject to the availability of appropriations, consider hiring a sanctuary superintendent, a Tribal liaison, and a resource protection/permitting specialist, as well as a SAC coordinator and research coordinator.

Activity OA-3.2: Supplement staff by entering into cooperative agreements and partnerships with other agencies, institutions, and stakeholders to further the sanctuary’s mission. Establish or participate in paid internship programs including work study through local universities or Tribal and Indigenous community development initiatives to employ student interns and offer training and career opportunities.

Strategy OA-4: Develop infrastructure for research vessels, small boats, equipment, and field operations

Activity OA-4.1: Meet the sanctuary's initial small boat and research vessel and research equipment needs through existing NOAA assets in the region.

Activity OA-4.2: Consistent with Activity RM-1.3, conduct a needs assessment for CHNMS field operations requirements including research vessels, research equipment, diving, staffing, and maintenance requirements. This assessment should consider the availability of existing NOAA assets in the region.

Activity OA-4.3: Once the needs assessment in Activity OA-4.2 is complete, explore how partners in academia or nongovernmental organizations can help supplement NOAA's needs for field operations, including vessels, equipment, dock/pier space, or related facilities.

Activity OA-4.4: Once the needs assessment in Activity OA-4.2 is complete, if a new small boat is required, develop a plan to acquire that vessel(s) subject to the availability of funding.

Strategy OA-5: Seek development partnerships and opportunities that support the sanctuary's mission

Activity OA-5.1: Partner with an existing local nonprofit group(s) and/or explore working with the National Marine Sanctuary Foundation to establish a chapter of the national foundation to support the sanctuary's mission, including research, education, community engagement, and operations. Explore reliance on Joint Project Authority (JPA) to share in the costs and benefits of various critical sanctuary initiatives.

Activity OA-5.2: Consider cooperative agreements with local, regional, and national nonprofits to provide additional funding to support Tribal and Indigenous programs specific to CHNMS.

Strategy OA-6: Establish sanctuary support infrastructure that enhances sanctuary programs

Activity OA-6.1: Recruit, train, and retain long-term volunteers to support and enhance sanctuary programs, including monitoring, research, and education and outreach.

Activity OA-6.2: Expand a paid intern program to provide short-term support and enhance sanctuary programs, while offering on-the-job training and career opportunities. Local universities, community colleges, and underserved and diverse populations, as well as youth and adults from Tribes and Indigenous communities, would be encouraged to apply for internship opportunities.

Strategy OA-7: Establish a process for evaluating and reporting on CHNMS program effectiveness and management plan implementation

It is important for NOAA to track management plan implementation and effectiveness to facilitate adaptive measures and inform review when it is time to update the management plan. A system of annual assessment should be developed to keep ongoing evaluation current.

Potential Partners

The following list reflects potential sanctuary partners, and is expected to change over time as opportunities, conditions, and entities evolve.

Federal, State, and Local Governments and Agencies

U.S. Coast Guard, Bureau of Ocean Energy Management, Department of Defense, Vandenberg Space Force Base, California Department of Fish and Wildlife, California State Parks, City of Morro Bay Harbor Department, Port San Luis Harbor District.

Federally Recognized Tribal Governments

Santa Ynez Band of Chumash Indians.

Other Chumash and Salinan Tribes, Bands, and Clans; Culturally-Related Associations and Organizations³³

Northern Chumash Tribal Council, yak tityu tityu yak tilhini (YTT) Northern Chumash Tribe and YTT Northern Chumash Nonprofit, Northern Chumash Bear Clan, Coastal Band of the Chumash Nation, Barbareño Band of Chumash Indians, Barbareño Chumash Tribal Council, Barbareño/Ventureño Band of Mission Indians, Chumash Heritage Foundation, Chumash Maritime Association, Wishtoyo Foundation, Salinan Tribe of Monterey and San Luis Obispo Counties, Xolon Salinan Tribe, Salinan Trowtraahl of the Salinan Nation Cultural Preservation Association.

Academic and Affiliated Institutions

California Polytechnic State University, San Luis Obispo; University of California, Santa Barbara.

Nongovernmental Organizations

California Marine Sanctuary Foundation, Morro Bay National Estuary Program.

³³ NOAA acknowledges there is one federally recognized Tribe in the area, the Santa Ynez Band of Chumash Indians, and has a special government-to-government relationship with this sovereign nation. NOAA also understands that there are a variety of distinctions among other non-federally recognized Tribes and groups listed or mentioned in this action plan, and different types of histories and backgrounds that underpin the formation of these Tribes and groups. NOAA does not present these names to suggest that they are all the same type of entity. The names of Tribes and groups listed as potential partners in this action plan reflect those entities that came forward to NOAA during the sanctuary designation process.

References

- Bailey, J. H. (1982). Morro Bay History: Timeline. Historical Society of Morro Bay. <http://historicalmorrobay.org/a-timeline/>
- Ball, D., Clayburn, R., Cordero, R., Edwards, B., Grussing, V., Ledford, J., McConnell, R., Monette, R., Steelquist, R., Thorsgard, E., & Townsend, J. (2015). A Guidance Document for Characterizing Tribal Cultural Landscapes (OCS Study BOEM 2015-047; BOEM Interagency Agreement M12PG00035). BOEM Pacific OCS Region, NOAA ONMS, Makah Tribe, Confederated Tribes of Grand Ronde Community of Oregon, Yurok Tribe, and National Marine Sanctuary Foundation. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Pacific-Region/Studies/BOEM-2015-047.pdf>
- Braje, T. J., Erlandson, J. M., & Rick, T. C. (2021). Islands Through Time: A Human and Ecological History of California's Northern Channel Islands. Rowman & Littlefield.
- Cordero, A., Waiya, L., Sanchez, G., Diaz, S., Jaimes, M., Moreno, M., Sanchez, D., Valenzuela, D., Vasquez, V., & Olmstead, J. W. (2016). Chumash Ecosystem Services Assessment, Channel Islands National Marine Sanctuary Condition Report. Silver Spring, MD. <https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/2016-condition-report-channel-islands-nms.pdf#page=187>
- Council on Environmental Quality. 2022. Guidance for Federal Departments and Agencies on Indigenous Knowledge. Dec. 1, 2022. Memorandum for Heads of Federal Departments and Agencies. Executive Office of the President, Office of Science and Technology, Council on Environmental Quality. 46 p. <https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf>
- Destination Analysts Inc. (2017). 2016/17 Santa Barbara South Coast Visitor Profile & Tourism Economic Impact Study [Presentation]. <https://santabarbaraca.com/wp-content/uploads/2017/10/Santa-Barbara-Visitor-Profile-and-Economic-Impact-Study-2016-17-DECK.pdf>
- Donoghue, E. M., Thompson, S. A., & Bliss, J. C. (2010). Tribal-Federal Collaboration in Resource Management. *Journal of Ecological Anthropology*, 14(1), 22–38. <https://scholarcommons.usf.edu/jea/vol14/iss1/2>
- McGinnis, M.V. et al. (2004). Tribal Marine Protected Areas: Protecting Maritime Ways and Practice, A Special White Paper for the Wishtoyo Foundation. <https://mawiya.squarespace.com/s/TribalMPAsWhitePaper.pdf>
- Ocean Protection Council. (2018). State of California Sea-Level Rise Guidance. https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_ Exhibit-A OPC SLR Guidance-rd3.pdf
- ONMS (Office of National Marine Sanctuaries). (2018). Memorandum of Agreement Between the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Office of National Marine Sanctuaries and the Hoh Tribe, Makah Tribe, Quileute Tribe, Quinault Indian Nation, State of Washington. NOS Agreement Code: MOA-2017-136/11519. May 30, 2007. <https://nmsolympiccoast.blob.core.windows.net/olympiccoast-prod/media/docs/moa-2017-136-11519.pdf>
- ONMS (Office of National Marine Sanctuaries). (2019). Channel Islands National Marine Sanctuary 2016 Condition Report. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 482 pp. <https://sanctuaries.noaa.gov/media/docs/2016-condition-report-channel-islands-nms.pdf>

- ONMS (Office of National Marine Sanctuaries), Hoh Indian Tribe, Makah Tribe, Quileute Tribe, Quinault Indian Nation, & State of Washington. (2007). Charter of the Olympic Coast Intergovernmental Policy Council. https://nmsolympiccoast.blob.core.windows.net/olympiccoast-prod/media/archive/management/ipc_charter_5-30-2007.pdf
- ONMS (Office of National Marine Sanctuaries). (n.d). Characterizing Tribal Cultural Landscapes. U.S. Department of Commerce National Oceanic and Atmospheric Administration Office of National Marine Sanctuaries. <https://sanctuaries.noaa.gov/Tribal-landscapes/>
- NOAA. (2020). Technical Report: Five-Year Review of the Chumash Heritage National Marine Sanctuary Nomination. NOAA Office of National Marine Sanctuaries. <https://nmsnominate.blob.core.windows.net/nominate-prod/media/documents/20200922-chnms-technical-report-5-year-review.pdf>
- NOAA National Ocean Service (2021). NOAA Strategy to Enhance Growth of American Blue Economy. <https://oceanservice.noaa.gov/economy/blue-economy-strategy/>
- NOAA Sea Grant Program. (2018). Traditional Local Knowledge - A vision for the Sea Grant Network. https://seagrant.noaa.gov/wp-content/uploads/2023/06/TraditionalLocal_110118.pdf
- State Water Resources Control Board. (2022). 2020-2022 Integrated Report for Clean Water Act Sections 303(d) and 305(b). California Environmental Protection Agency. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_revised_final/2020-2022-integrated-report-final-staff-report.pdf
- Tourism Economics. (2018). Economic Impact of Tourism in San Luis Obispo County, California - 2017. https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/slocal/SLO_CAL_Economic_Impact_Report_22d17f05-ebae-488f-bc4b-9e830174d08d.pdf
- U.S. Coast and Geodetic Survey & Davidson, G. (1889). Pacific Coast: Coast Pilot of California, Oregon, and Washington (4th ed.). Washington, Government Printing Office. <https://catalog.hathitrust.org/Record/012436925>
- U.S. Department of the Interior & U.S. Department of Agriculture. (2021). Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters. Order No. 3403. <https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3403-joint-secretarial-order-on-fulfilling-the-trust-responsibility-to-indian-tribes-in-the-stewardship-of-federal-lands-and-waters.pdf>
- Webber, B. (1992). Silent Siege – III Japanese Attacks on North American in World War II – Ships Sunk Air Raids Bombs Dropped Civilians Killed. Webb Research Group.

Appendix A: Terms of Designation

As published in the Federal Register within NOAA’s final rule for designation of Chumash Heritage National Marine Sanctuary, the final terms of designation for Chumash Heritage National Marine Sanctuary are provided here. The final rule, which includes sanctuary regulations and the terms of designation can be found on the [Chumash Heritage National Marine Sanctuary website](#).

Terms of Designation for Chumash Heritage National Marine Sanctuary

Section 304(a)(4) of the National Marine Sanctuaries Act (NMSA) as amended, 16 U.S.C. 1434(a)(4), requires that the terms of designation be described at the time a new sanctuary is designated, including the geographic area to be included within the sanctuary, the characteristics of the area that give it conservation, recreational, ecological, historical, research, educational, or aesthetic value, and the types of activities that will be subject to regulation to protect those characteristics.

The following represents the terms of designation:

Preamble

Under the authority of the NMSA, approximately 4,500 mi² (3,400 nmi²) of the coast of central California’s San Luis Obispo and Santa Barbara counties are hereby designated as a National Marine Sanctuary for the purpose of providing long-term protection and management of the ecological, cultural, and historical resources and the conservation, recreational, scientific, educational, and aesthetic qualities of the area.

Article I: Effect of Designation

The NMSA authorizes the issuance of such regulations as are necessary and reasonable to implement the designation, including managing and protecting the ecological, cultural, and historical resources and the conservation, recreational, scientific, educational, and aesthetic qualities of Chumash Heritage National Marine Sanctuary (the “Sanctuary”). Section 1 of article IV of these terms of designation lists those activities that may have to be regulated on the effective date of designation, or at some later date, in order to protect Sanctuary resources and qualities. Listing an activity does not necessarily mean that it will be regulated. However, if an activity is not listed it may not be regulated, except on an emergency basis, unless section 1 of article IV is amended by the same procedures by which the original Sanctuary designation was made.

Article II: Description of the Area

Chumash Heritage National Marine Sanctuary covers approximately 4,500 mi² (3,400 nmi²) in central California. The Sanctuary’s shoreline is approximately 116 miles long along the mainland, and 132 miles long when also counting the shoreline of offshore rocks and islands. The boundary begins at the mean high water line approximately two miles southeast of Diablo Canyon marina in San Luis Obispo County, and extends to the south along the mean high water line to approximately two miles east of Dos Pueblos Canyon near the township of Naples along the Gaviota Coast, in Santa Barbara County. The boundary then shifts due south offshore to the

State waters line, then to the west along the State waters line to approximately the outfall of Gaviota Creek, then in a southwest direction along the western end of Channel Islands National Marine Sanctuary, southward to include Rodriguez Seamount and shifting to the northwest in an arc reaching approximately 60 miles due west of Purisima Point and, at a distance approximately 55 miles west of the Santa Maria River mouth, it turns due east for 43 miles then due north for 12 miles to the point of origin at mean high water line at the coastline approximately two miles southeast of the Diablo Canyon marina. Port San Luis and the small harbor area at Vandenberg Space Force Base are not included in the Sanctuary. The Sanctuary includes offshore waters and seafloor features such as Rodriguez Seamount, Arguello Canyon, and large portions of the Santa Lucia Bank. The boundary coordinates are defined by regulation (see 15 C.F.R. 922.230 and appendix A to 15 C.F.R. part 922, subpart V).

Article III: Special Characteristics of the Area

For well over 10,000 years, First Peoples along North America have resided on the coast and in inland valleys adjacent to central California. Caves and other village sites at the nearby Channel Islands indicate occupation in this region as much as 13,000 years before present. At that time, due to glaciation at northern latitudes, the sea level was as much as 10 miles offshore from the present coastline. Paleoshorelines may exist in this area that could provide further evidence of early human occupation. The Native Americans who live in this coastal area today, the Chumash and Salinan, can trace generations of family lineages in this region, that, when coupled with other historical accounts and archaeological data, show this coast and ocean area have supported their people, cultures, and heritage for thousands of years.

The special characteristics of the coast east of Point Conception, consisting of a south-facing coast with a channel sheltered by offshore islands, allowed Chumash to develop and make use of the plank canoe, called a “tomol,” for fishing and trade with other Chumash groups. Chumash villages north of Point Conception could not as easily make use of the plank canoe in the rougher waters, but relied on the abundance of shellfish in this area and reed canoes, also used by Salinans. Between the Santa Maria River through the Gaviota Coast, 14 Chumash villages existed at the time of contact with Europeans, nearly 500 years ago. The largest Chumash village on the California coast at that time was “Mikiw,” located on the west bluff of Dos Pueblos Canyon. Numerous sites exist further north along the Sanctuary’s coast, many on private lands and undisclosed. Most of the inhabited sites were located at the mouths of rivers or along the seashore where there was an abundance of food. The range of sites documented along or near the Sanctuary’s coast includes rock art, shrines, village sites, camp sites, cemeteries, organic remains, evidence of trade systems, and evidence of various forms of subsistence, including hunting, fishing, and extraction.

Serial use and development along this coastline, beginning with Indigenous Peoples, then Spanish exploration and occupation, Russian fur trading, ranching and the trade for hides and tallow, discovery of gold, commercial fishing, and onshore and offshore oil and gas development have all had a hand in shaping this region’s coast and human use of resources. All of these uses have been dependent on marine transportation, and as a result over 200 ship and aircraft wrecks are recorded in this area, including several of national significance such as the *Yankee Blade*. Commercial fishing for numerous abundant fish stocks and commercial fishermen are also part of the rich maritime heritage in the central coast region.

The natural resources of the ocean have been a principal element of most of the human occupation and exploitation of the region. Strong and persistent coastal winds drive upwelling, an oceanographic process critical to the highly productive marine ecosystem. Large kelp forests, vast sandy beaches, rocky shorelines, shallow and deep reefs, and coastal wetlands are interconnected, co-dependent biological communities prominent in this region. Important, large-scale features include the Santa Lucia Bank, a highly productive, approximately 1,000-square mile area about half of which is within the Sanctuary, and thriving deep sea communities at Rodriguez Seamount and in Arguello Canyon. These productive waters complement other protected portions of the California Current by serving as critical foraging habitat for huge populations of shearwaters from New Zealand, humpback whales born offshore of Central America, leatherback sea turtles that migrate from and back to Indonesian islands, and albatross from Hawaii. More sedentary, local species depend on healthy communities in the Sanctuary, including the endangered snowy plover and black abalone, and commercially-important fish species like Dungeness crab, sablefish, spot prawn, squid, salmon, and lingcod. An estimated 33 species of marine mammals are found in the area, 18 of which can be seen on a regular basis. The Sanctuary is considered a seabird hot spot, with a higher richness of bird species than other sanctuaries offshore California. At least 400 species of fish have been documented in the area, which is also a higher richness of species than in nearby areas, likely because the Sanctuary includes warmer waters south and east of the ecological transition zone around Point Conception – Point Arguello and colder waters to the north.

The nationally significant ecological transition zone in the area around Point Conception – Point Arguello, where species more common in sub-tropical waters to the south meet with species more common in colder temperate waters to the north, is a central feature of the Sanctuary. The northern range of many warmer water species and the southern range of many colder water species meet in the area between Point Conception and Point Arguello. Increasing ocean temperatures and other impacts from climate change intensify the need to study biogeographic shifts in this area and affirm the importance of protecting the habitats on which these species depend.

Rodriguez Seamount, 45 mi southwest of Point Conception, formed 10–12 million years ago through volcanic activity. It rises more than a mile above the seafloor to a relatively shallow depth of around 2,000 ft. below sea level. Scientists consider it to be relatively rare in that it may once have been an island, rising to possibly 200 ft. above sea level; due to sea level rise and seafloor subsidence, the seamount is now fully submerged. From its time as an island, it has remnants of sandy beach features and from its time as a seamount, it has large coral and sponge colonies. Preliminary studies indicate a high percentage of invertebrate species as well as fish species found on Rodriguez Seamount that are not found on other nearby seamounts. Some surveys have uncovered substantial aggregations of coral colonies, with large individuals likely decades old, indicating a low level of disturbance to date. A special management zone for Rodriguez Seamount has been designated by Sanctuary regulations to allow for special protection in the water column 500 ft. above the seamount and to complement regulations adopted separately under the Magnuson-Stevens Fishery Conservation and Management Act to protect benthic habitats.

The area contains dramatic coastlines consisting of rocky shorelines, large bluffs, and sweeping sandy beaches. Other than an approximately 10-mile stretch of urban development along the coast from Port San Luis through Oceano, most of the 116 miles of Sanctuary coastline is undeveloped due to State and county park ownership, a large stretch owned by the U.S. Government as a military installation, and private landholdings of large and small ranches or dispersed single-family dwellings. This lack of development creates a sense of wildness and highly-valued aesthetics of a natural coastal setting worthy of national marine sanctuary designation.

Article IV: Scope of Regulations

Section 1. Activities Subject to Regulation

The following activities are subject to regulation, including prohibition, as may be necessary to ensure the protection and effective management of the ecological, cultural, historical, conservation, recreational, scientific, educational, or aesthetic resources or qualities of the area:

- 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 physical matter of commercial value) within the Sanctuary;
- b. Discharging or depositing, from within or into the boundary of the Sanctuary, or from beyond the boundary of the Sanctuary, any material or other matter;
- c. Taking, removing, moving, catching, collecting, harvesting, feeding, injuring,
- d. destroying, attracting, possessing, or causing the loss of, or attempting to take, remove, move, catch, collect, harvest, feed, injure, destroy, attract, 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
- f. on or in the submerged lands of the Sanctuary;
- 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. Introducing or otherwise releasing from within or into the Sanctuary an introduced species; and,
- k. Interfering with, obstructing, delaying, or preventing an investigation, search,
- l. seizure, or disposition of seized property in connection with enforcement of the NMSA or any regulation or permit issued under the NMSA.

Listing an activity here means the Secretary of Commerce can regulate the activity, after complying with all applicable regulatory laws, without going through the designation procedures required by paragraphs (a) and (b) of section 304 of the NMSA, 16 U.S.C. 1434(a) and (b). No term of designation issued under the authority of the NMSA may take effect in California State waters within the Sanctuary if the Governor of California certifies to the Secretary of Commerce that such term of designation is unacceptable within the review period specified in the NMSA.

Section 2. Emergencies

Where necessary to prevent or minimize the destruction of, loss of, or injury to a Sanctuary resource or quality, or to minimize the imminent risk of such destruction, loss, or injury, any and all activities, including those not listed in section 1, are subject to immediate temporary regulation, including prohibition.

Article V: Effect on Leases, Permits, Licenses, and Rights

Pursuant to section 304(c)(1) of the NMSA, no valid lease, permit, license, approval, or other authorization issued by any Federal, State, or local authority of competent jurisdiction, or any right of subsistence use or access, may be terminated by the Secretary of Commerce or designee as a result of this designation or as a result of any Sanctuary regulation if such authorization or right was in existence on the effective date of this designation. The Secretary of Commerce or designee, however, may regulate the exercise (including, but not limited to, the imposition of terms and conditions) of such authorization or right consistent with the purposes for which the Sanctuary is designated.

In no event may the Secretary or designee issue a permit authorizing, or otherwise approve: (1) The exploration for, development of, or production of oil, gas, or minerals within the Sanctuary; (2) the discharge of primary-treated sewage except for regulation, pursuant to section 304(c)(1) of the Act, of the exercise of valid authorizations in existence on the effective date of Sanctuary designation and issued by other authorities of competent jurisdiction; or (3) the disposal of dredged material within the Sanctuary other than at sites authorized by the U.S. Environmental Protection Agency prior to the effective date of designation. The disposal of dredged material does not include the beneficial use of dredged material. Any purported authorizations issued by other authorities after the effective date of Sanctuary designation for any of these activities within the Sanctuary shall be invalid.

Article IV does not authorize the direct regulation of lawful fishing activities (commercial and recreational) within the Sanctuary, such as setting catch quotas, establishing spatial closures for fishing, or setting fishing seasons. However, all activities listed in article IV could apply to a person engaged in the act of fishing, such as, but not limited to, vessel operations, wildlife disturbance, discharges, introduction of an introduced species, or disturbance of cultural or historical resources. Aquaculture and kelp harvesting, by contrast, are subject to direct regulation under these terms of designation. Fishing in the Sanctuary may be regulated by other Federal or State authorities of competent jurisdiction, and designation of the Sanctuary shall have no effect on any fishery management regulation, permit, or license issued thereunder.

Article VI: Alteration of this Designation

The terms of designation, as defined under section 304(a)(4) of the NMSA, may be modified only by the same procedures by which the original designation is made, including public hearings, consultations with interested Federal, State, Tribal, regional, and local authorities and agencies, review by the appropriate congressional committees, and approval by the Secretary of Commerce, or his or her designee.

[End of terms of designation]

Appendix B: Estimated Operating Budget

The National Marine Sanctuaries Act requires NOAA to include “an estimate of the annual cost to the Federal Government of the proposed designation, including costs of personnel, equipment and facilities, enforcement, research, and public education” (16 U.S.C. § 1434(a)(2)(C)(v)). NOAA estimates these annual costs to be between \$400,000 and \$2,000,000 depending on the availability of funding.

Management of the sanctuary will be supported by federal appropriations; external funding; collaborations with other agencies and organizations; in-kind contributions from partners; and volunteer service. The amount of federal funding available to support sanctuary management will be contingent on several factors, including the annual Congressional appropriations levels and spending priorities determined by NOAA leadership. Collaboration with partners, including other NOAA programs, other federal agencies, universities, private for-profit companies, and non-profit organizations, is also anticipated to help implement key programs and activities. As funding becomes available, the activities NOAA will focus on following designation include:

- hiring a sanctuary superintendent;
- establishing an administrative office;
- supporting the creation and operation of a Sanctuary Advisory Council (SAC);
- staff support for sanctuary administration and operation;
- staff support for resource protection needs including permitting, review and certification of existing permitted activities, and reviewing planned projects in the sanctuary;
- hiring a Tribal cultural liaison to work closely with numerous Tribal and Indigenous partners;
- creating a NOAA presence in the community with exhibits and signage;
- mapping, characterization, archaeological documentation, and other activities described in the Maritime Heritage Action Plan;
- designing, building, and initial operation of a dedicated research vessel;
- implementing volunteer community science programs and a water quality protection program; and
- implementing sustainable recreation and tourism program activities.



NATIONAL MARINE
SANCTUARIES

AMERICA'S UNDERWATER TREASURES