



NATIONAL FACILITIES AND EXHIBITS MASTER PLAN 2010

NOAA'S OFFICE OF NATIONAL MARINE SANCTUARIES



INTRODUCTION

NOAA's Office of National Marine Sanctuaries (ONMS) is a dynamic Federal program that manages more than 158,000 square miles of ocean and Great Lakes. The National Facilities and Exhibits Master Plan, completed in 2010, presents a framework and context for both the current requirements and projected paths for the future, which will assist in ONMS' planning of construction priorities. It establishes standards and best practices for the acquisition, operations and maintenance, and utilization of facilities and other assets used to support activities of the program. This master plan is not a budget document and is intended for program planning purposes. Execution of all projects will be contingent on available resources.

The master plan demonstrates that ONMS facilities and exhibits are developed through a strategic planning process, thus improving opportunities to achieve the mission and goals in an open forum. The master plan has been compiled using input from individual sites, regional staff, headquarters staff, and subject matter experts.

This rendering of the Ocean Science Education Building on University of California Santa Barbara property illustrates a facility collaboration between the Channel Islands National Marine Sanctuary (NMS) and UCSB's Marine Science Institute. When completed, the facility will provide dynamic exhibits, education space, and labs for local K-12 students, coupled with administrative space for the site.



*Image: EHDD Architecture,
rendered by Frank M. Costantino*

SUCCESS STORIES

NOAA's Office of National Marine Sanctuaries leverages community partner support to achieve its missions of resource protection and education. The examples below demonstrate how the ONMS leverages its investment dollars, develops creative partnerships, and supports coastal communities.



ONMS' Crissy Field Campus in the Presidio, San Francisco, CA, has helped revitalize the renovation and efficient use of these Federal facilities. Photo: FPC

ONMS optimizes use of underutilized Federal space

- A major contribution to the revitalization and reuse of the Presidio in San Francisco is the ONMS renovation of five buildings in Crissy Field to create a visitor center, office space, K-12 education facilities, and the Center for Climate Change, in partnership with the National Park Service.
- NOAA accepted ownership of a dilapidated historic government facility in Kīhei, Maui, HI. ONMS is currently renovating two buildings to create a visitor center and administrative office space.
- NOAA assumed ownership of a portion of the Truman Annex Navy Facility in Key West, FL, and restored one former warehouse with historic and aesthetic qualities into the Florida Keys Eco Discovery Center, along with the construction of office and maintenance facilities and a boat dock.



The California Academy of Sciences attracts two million visitors yearly, just one example of the nearly ten million that are reached each year by ONMS' various facilities and exhibits. Photo: ONMS

ONMS leverages partnerships to connect to communities, and to stimulate local economies

- ONMS has partnered with the University of California Santa Barbara to design and build the Ocean Science Education Building that will serve as headquarters for the Channel Islands NMS and support K-12 science education.
- ONMS has partnered with the City of Santa Cruz to design and build the Monterey Bay NMS Exploration Center on city-owned property adjacent to the boardwalk and beach in the downtown area.
- Fagatele Bay NMS is working closely with the American Samoa Department of Commerce to renovate the convention center to provide administrative office space, conference space, and build exhibits interpreting regional marine resources.

ONMS has made greening of their facilities a priority

- The Dr. Nancy Foster Florida Keys Environmental Complex in Key West, FL, is LEED® Silver certified and features a green roof, photo voltaic panels, and visitor center exhibits that showcase these green features.
- The Stellwagen Bank NMS campus in Scituate, MA, has completed major renovation work designed to LEED® standards and installed a geothermal heat exchange system.



The Great Lakes Maritime Heritage Center in Alpena, MI, is a LEED® Gold building that features exhibits that explain building features that were designed to reduce energy consumption. Photo: ONMS

FACILITY FIVE YEAR OUTLOOK

Currently, the ONMS occupies approximately 145,200 SF within 27 facilities. An estimated 37,000 square feet of new construction and facility renovations are underway in 2010. The chart below gives an outlook for future facility requirements for a dynamic national program.

Region	State	Site/Location Name	Facility Function								
			GROWTH OR EXPANSION SPACE	SATELLITE OFFICE	EDUCATION AND OUTREACH	RESOURCE PROTECTION	RESEARCH AND SCIENCE	CONFERENCE OR TRAINING SPACE	VESSEL OPERATIONS	VESSEL STORAGE	TECHNOLOGY UPDATES
West Coast	CA	Monterey Bay	●	●		●		●	●		
		Coastal Discovery Center - San Simeon									
		West Coast Regional Office	○				○				
		Channel Islands	●	●			●	○	○	○	
		State Street Office									
		Oxnard Harbor					●				
		Gulf of the Farallones	●		○	●				●	
		Half Moon Bay	○		○						
		Cordell Bank	●	○			●				
Pacific Islands	WA	Olympic Coast	○	○			○		○		
		HI	Hawaiian Islands Humpback Whale (Kīhei)				●				
			Hawai'i Kai	●							
			Līhu'e, Kaua'i	○					●		
			Kona	○		○			○		
			Papahānaumokuākea MNM	○		●					
			Hawai'i Kai	●							
		Hilo	●				●				
		American Samoa	Fagatele Bay	○	○			○			
		North East (Great Lakes)	MI	Thunder Bay	○	○					
Stellwagen Bank	●				●		●	●	●	○	
South East (Gulf of Mexico)	VA	Monitor		○	○	○	●	●	●	●	
		TX	Flower Garden Banks		○	○		●	●		
		GA	Gray's Reef			●			○	○	
		FL	Florida Keys (Lower Keys)				○				
Florida Keys (Upper Keys)				○							
Marathon			○				●				

Key: ○ Facility need ● Facility Need; possible partnership opportunity ● Facility need that is already underway

OPERATIONS AND MAINTENANCE COSTS

NOAA's Office of National Marine Sanctuaries needs to operate and maintain their facilities properly, including projecting Operations and Maintenance (O&M) expenditures for leased and owned facilities.

ONMS construction funding for facilities and exhibits comes from PAC, and funding for O&M comes from ORF

The primary intent of Procurement, Acquisition, and Construction (PAC) appropriated funds is to pay for the expense of capital assets, acquisition or construction including alteration and modification costs. ONMS uses PAC funding to build new capital assets that are used to support its mission. ONMS seeks to leverage its PAC funding to encourage partnerships with other institutions that share common goals and interests and to also to stimulate economic growth and connect with local communities.

The appropriation of Operations, Research, and Facilities (ORF) funds is to pay for the expenses of activities authorized by law for NOAA, including programs (e.g., education and outreach, research and monitoring, damage assessment and restoration, enforcement), staffing, contracts, and other acquisitions such as cooperative agreements and grants. ORF funds are also used to cover O&M costs as well as the cost of human capital to operate and maintain facilities. As PAC funds are spent to create new facilities and exhibits, an increased level of ORF funding is needed to cover O&M costs.

Consistent With Industry Standards, O&M Costs for FY2010 are estimated to be \$2.175 million, and expected to increase in the future

The Whitestone Building Maintenance and Repair Cost Reference 2008-2009 for O&M costs* indicates that for every 10,000 square feet of leased space or new construction, an annual average allocation of \$150,000 should be made to pay for necessary O&M costs. These O&M costs include:

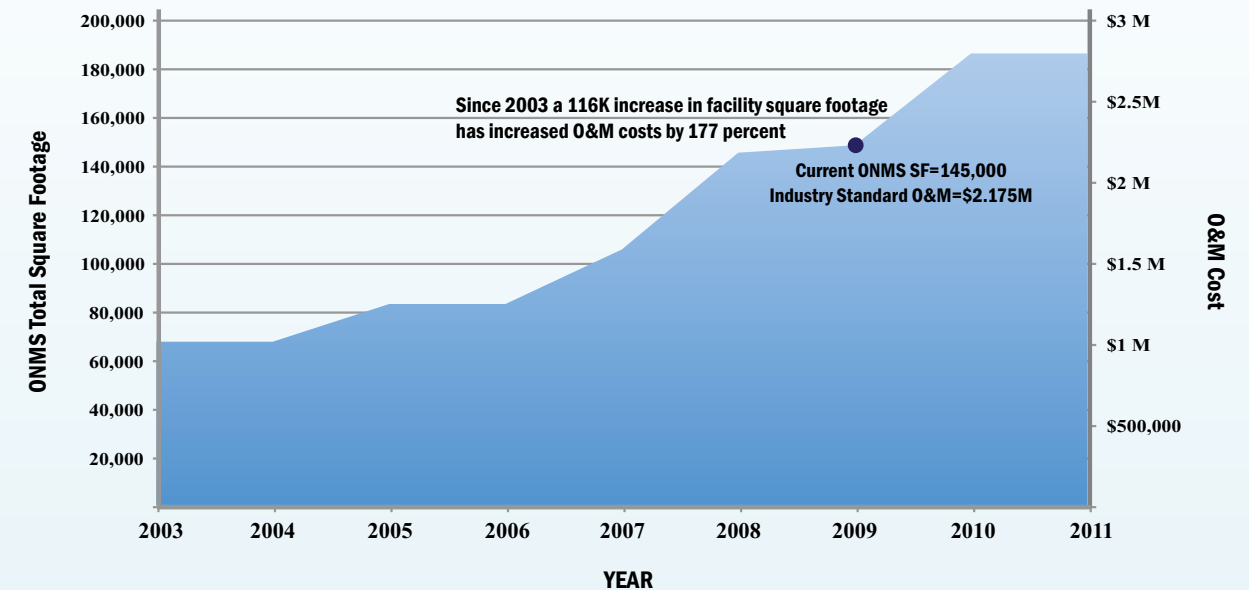
- Custodial service
- Energy
- Grounds
- Maintenance and repair
- Management
- Pest control
- Refuse
- Road clearance
- Security
- Telecommunications
- Water
- Sewer

The industry standard does not include the human capital costs associated with managing facilities. O&M costs for ONMS facilities in 2010 are nearly \$2.175 million. Since 2003, O&M costs have increased by 177 percent (Figure 1) based on increased square footage and inflation.

* ONMS and NOAA, along with other Federal agencies, use the Whitestone Building Maintenance and Repair Cost Reference (as opposed to the GSA or other industry standards) because it is based upon an annual study covering several facility types that better reflects the nature of NOAA's diverse facilities (e.g., laboratories, visitor centers, vessel support, satellite data tracking stations).

OPERATIONS AND MAINTENANCE COSTS

Figure 1: The growth in O&M Costs



ONMS Construction Projects Have a Positive Impact on Local Economies



Groundbreaking ceremony for the Ocean Science Education Building on the campus of the University of California at Santa Barbara; a partnership project between the ONMS and UCSB's Marine Science Institute that will generate 100 jobs lasting 18 months in Goleta, CA. Photo: NOAA

ONMS Visitor Centers Encourage Community Involvement



The Thunder Bay NMS's Great Lakes Maritime Heritage Center in Alpena, MI, encourages community pride and connectivity, provides jobs, and attracts 70,000 visitors a year, helping to revitalize the local economy. Photo: ONMS

ONMS Occupies Historic Buildings Which Incur High Renovation and O&M Costs



In addition to basic O&M costs, periodic overhauls and repairs are needed on facilities. The restoration work on this historic structure in Kīhei, Maui, will repair long term structural damage. Photo: Paul Wong

ONMS EXHIBITS, SIGNS, AND KIOSKS

NOAA's Office of National Marine Sanctuaries exhibits, signs, and kiosks are physical assets that display marine conservation messages, educate the public, and improve NOAA's public visibility. The master planning effort recognized the importance of interpretation in serving to help protect resources by enhancing awareness of marine conservation and educating the public. Exhibits, signs, and kiosks bring sanctuaries to the public, allowing people to experience our nation's underwater treasures without getting wet.

NOAA collaborates with partners to carry out this important mission.

The ONMS plans for new exhibits, signs, and kiosks in the future, including:

- Development of new exhibits that showcase NOAA's role in the community in Lāhaina, Maui. Plans include indoor exhibits and community use areas.
- ONMS interactive kiosks use innovative technology to serve as a NOAA portal that provides information on sanctuary resources and up to the minute weather and marine forecast information.
 - New interactive kiosks are being installed at various sanctuaries around the system.
- Planning integrated exhibits, sign, and kiosk strategies for Gray's Reef NMS and Stellwagen Bank NMS is underway.
- New ONMS visitor centers are being built in the West Coast Region including the Santa Cruz Exploration Center and the Ocean Science Education Building at the University of California Santa Barbara.
- The ONMS interpretive sign program connects residents and visitors with sanctuary resources in specific communities by placing interpretive signs in strategic locations.



Exhibit rendering of proposed feature in the Santa Cruz Exploration Center. Photo: BIOS



ONMS uses a combination of interpretive signs, exhibits, kiosks, and interactive media to impart sanctuary messages. Photo: ONMS



Interpretive signs placed along the coast educate visitors on the importance of marine conservation and other NOAA messages. Photo: ONMS



Partnerships such as that with the Mariner's Museum's USS Monitor Center are an important way to leverage resources to carry out ONMS' education mandate. Photo: ONMS

EXHIBIT, SIGN, AND KIOSK FIVE YEAR OUTLOOK

This chart references major exhibit, sign, and kiosk elements planned in the next five years.

The ONMS exhibit, sign, and kiosk program faces many of the same issues as facilities; while there is no industry standard associated with the operation and maintenance of signs, exhibits, and kiosks, it should be noted that the same operation and maintenance cost consideration that applies to facilities should also be applied to interpretive assets.



Mokupapapa Discovery Center in Hilo, Hawaii, reached more than 55,000 visitors in FY09. Photo: ONMS.

Region	State	Site/Location Name	Exhibit Type						
			VISITOR CENTER	STORE FRONT	EXHIBITS	INTERPRETIVE SIGNS	INTERACTIVE KIOSK	PARTNERSHIPS	
West Coast	CA	Monterey Bay				●		●	
		Monterey	●		●	●		●	
		San Simeon	●		●	○	○	●	
		Santa Cruz	●		●	○	○	●	
		Channel Islands							
		Santa Barbara	●		●	●	○	●	
		Oxnard Harbor		●	●	●	●	●	
		Gulf of the Farallones							
		San Francisco	●		●	●	●	●	
		Half Moon Bay	○			●		●	
		Cordell Bank							
Point Reyes			●	●	●	●			
Oakland			●		○	●			
West Coast	WA	Olympic Coast							
		Port Angeles	●		●	○		●	
		Seattle		○	○	○	○	○	
Pacific Islands	HI	Hawaiian Islands Humpback Whale							
		Oahu			●	●	●	●	
		Maui	●		●	●	●	●	
		Kauai		○	○			○	
		Papahānaumokuākea MNM							
		Oahu						●	
		Hawai'i		●	●	○		●	
American Samoa									
American Samoa		Fagatele Bay	●		●	○	●		
North East	MI	Thunder Bay	●		●		●	●	
		Stellwagen Bank	Scituate						●
			Boston		○		○	○	○
	MA	Gloucester			●			●	
		Provincetown		○	○	●	○	○	
		VA	Monitor						
			Virginia			●	○	●	●
North Carolina			●	○	●	●			
South East	TX	Flower Garden Banks							
		Galveston			●	○	●	●	
		Corpus Christi			●		●	●	
	Tennessee			●			●		
	GA	Gray's Reef							
		Savannah		○	○	○	○	○	
Tybee Island				●	○	○	●		
Atlanta			●	○		●			
FL	Florida Keys (Lower Keys)	●		●	○	●	●		
	Florida Keys (Upper Keys)		○		●	○	●		

Key:

● In place

◐ Programmed (Funded)

○ Planned

REGIONAL PRIORITIES - FIVE YEAR OUTLOOK

North East Region

The North East Region includes the Thunder Bay NMS in Alpena, MI, the Stellwagen Bank NMS in Scituate, MA, and the Monitor NMS in Newport News, VA.

North East regional priorities include:

- Relocate regional headquarters offices to the North East Region.
- Implement planned improvements to the Thunder Bay NMS's Great Lakes Maritime Heritage Center, which include the addition of exhibit space, new exhibits, and the replacement or enhancement of existing exhibits.
- Design, fabricate and install ONMS exhibits in partnerships with local communities and institutions located in coastal areas in North Carolina.
- Develop and implement a plan to design, fabricate, and install exhibits in Boston and other coastal communities adjacent to Massachusetts Bay that will increase public awareness and understanding of the Stellwagen Bank NMS, enhance ONMS' visibility in local communities and help stimulate local economies.
- Design and build/renovate a Marine Operations Center using the existing boat house and pier at the Stellwagen Bank NMS campus in Scituate, MA.



Aerial view of three Stellwagen Bank NMS buildings, denoted by red roofs, in Scituate, MA. The boathouse and pier (far left) will become a marine operations center. Photo: ONMS

South East Region

The South East Region includes the Gray's Reef NMS in Savannah, GA, the Florida Keys NMS with locations in Key Largo and Key West, and the Flower Garden Banks NMS in Galveston, TX.



Flower Garden Banks NMS's administrative office building on the campus of the National Marine Fisheries Service Galveston Laboratory after restoration of roofing tiles, windows, and doors to resist hurricane damage. Photo: ONMS

South East regional priorities include:

- Establish office space in the National Marine Fisheries Service facility in St. Petersburg, FL.
- Develop and implement a plan for exhibits, signs, and kiosks to increase public awareness of the Grays Reef NMS in Savannah, GA.
- Complete the design and renovation of the Flower Garden Banks NMS administrative office building located at the National Marine Fisheries Service campus in Galveston, TX.

REGIONAL PRIORITIES - FIVE YEAR OUTLOOK

West Coast Region

The West Coast Region includes the Olympic Coast NMS in Port Angeles, WA, Cordell Bank NMS at the Point Reyes National Seashore, Gulf of the Farallones located in San Francisco (a satellite office is located in Half Moon Bay), Monterey Bay NMS in Monterey (a satellite visitor center is located in San Simeon), and the Channel Islands NMS in Santa Barbara, CA (a satellite office is located in Oxnard).

West Coast regional priorities include:

- Construct the Monterey Bay NMS Exploration Center in Santa Cruz to serve as the northern gateway to the Monterey Bay NMS.
- Acquire and deploy a new research vessel to replace the aging vessel in the Olympic Coast NMS.
- Acquire a shared vessel for Gulf of the Farallones NMS and Cordell Bank NMS to provide frequent and reliable access for research and monitoring activities.
- Complete the renovation of the Gulf of the Farallones NMS's Crissy Field campus (5 buildings).
- Complete the expansion of Cordell Bank NMS's offices within the Red Barn and build a new storage facility at the Point Reyes National Seashore complex.
- Complete construction of the Ocean Science Education / Outreach Center for Teaching Ocean Sciences (OCTOS) Building in partnership with University of California Santa Barbara, to provide administrative office space for the Channel Islands NMS, and a K-12 learning center to be operated jointly by UCSB and the site.
- Acquire expanded administrative office space for the Monterey Bay NMS.



Construction of the planned Monterey Bay NMS Exploration Center will provide local jobs for several months and attract tourism when completed. Photo: Thomas Hacker Architects, Inc.

Pacific Islands Region

The Pacific Islands Region includes multiple locations and sites, including the Hawaiian Islands Humpback Whale NMS located in Maui with offices in Honolulu and Kauai, the Papahānaumokuākea MNM in the Northwestern Hawaiian Islands with offices in Honolulu and Hilo, and the Fagatele Bay NMS located in Pago Pago, American Samoa.

Regional priorities for the Pacific Islands Region primarily include implementing the requirements identified in the regional master plan, completed in 2009.



The Hawaiian Islands Humpback Whale NMS headquarters is located at the Kīhei campus in Maui, HI. The campus is currently undergoing renovations to the historic Blue House. Photo: ONMS

Priorities include:

- Complete renovations of the Hawaiian Island Humpback Whale NMS facilities in Kīhei, Maui, including the renovation of two existing buildings to create a visitor center and administrative office space, and the creation of an outdoor courtyard containing exhibits and connected to interpretive trails leading to an ancient fish pond and a dune restoration project.
- Complete a partnership project with the American Samoa Department of Commerce to renovate office space and provide exhibits for the Territorial Discovery Center.
- Complete development of new exhibits for the Lāhaina Visitor Center.
- Acquire facility space on Kaua'i to accommodate a Pacific Islands Region office expansion.

THE NATIONAL MARINE SANCTUARY SYSTEM

The National Marine Sanctuaries Act is one of the strongest pieces of federal legislation for protecting natural and cultural resources in the ocean and Great Lakes.



Marine National Monument



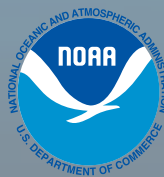
National Marine Sanctuary

Scale varies in this perspective.
Adapted from National Geographic Maps

You can learn more about the Office of National Marine Sanctuaries by visiting <http://sanctuaries.noaa.gov>

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