

FACILITIES MASTER PLAN FOR THE PACIFIC ISLANDS REGION NATIONAL MARINE SANCTUARY PROGRAM

October 16, 2009

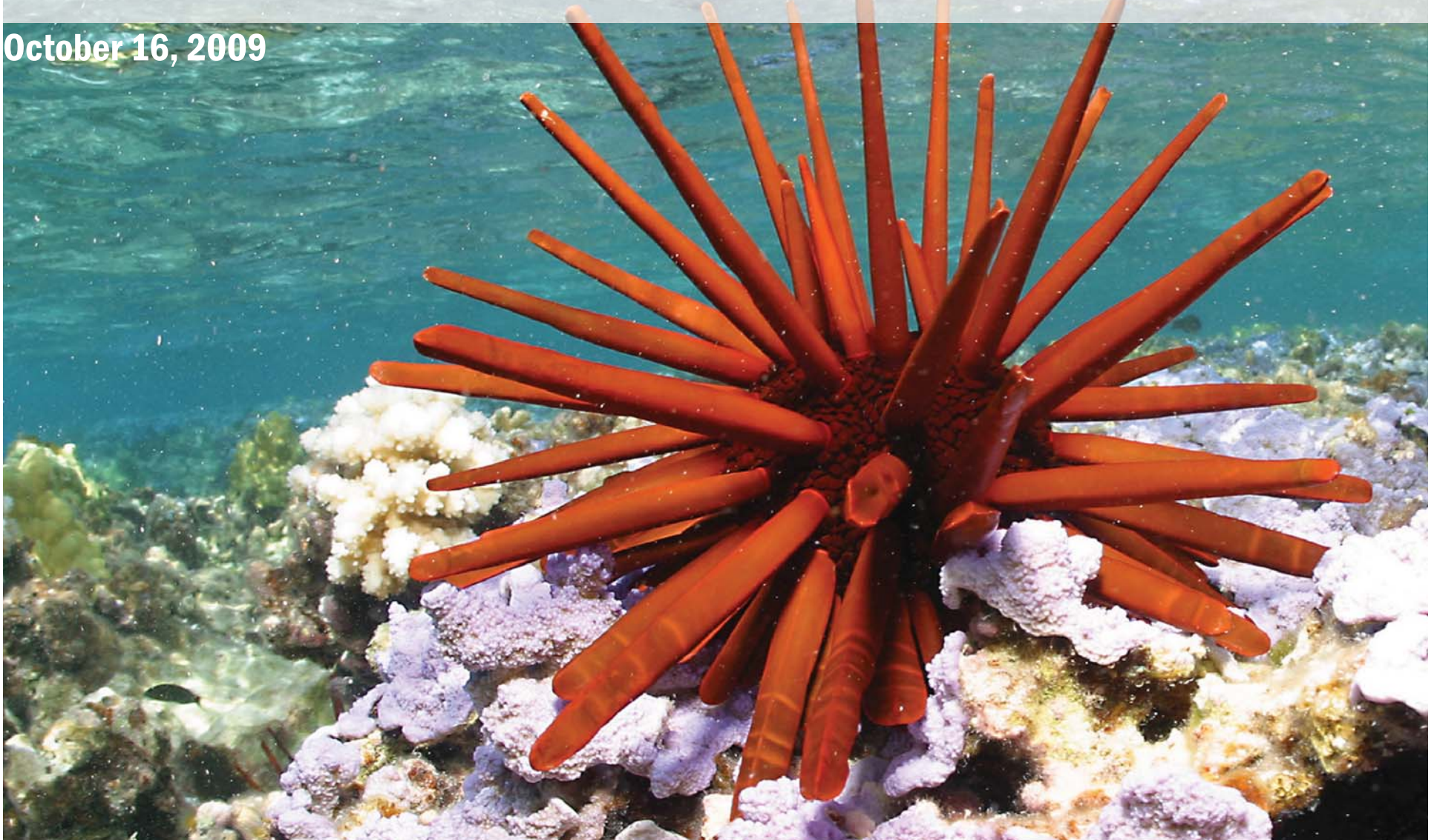


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LETTER FROM SUPERINTENDENTS

Aloha / Talofa,

This document represents the latest planning efforts by NOAA's Office of National Marine Sanctuaries (ONMS) for facilities in the Pacific Islands Region, which includes the Hawaiian Islands Humpback Whale National Marine Sanctuary, Papahānaumokuākea Marine National Monument, and Fagatele Bay National Marine Sanctuary.

The sanctuaries and the monument preserve special places. In the main Hawaiian Islands, humpback whales come to the only place in the United States where they give birth, nurse their calves, and mate. In the Northwestern Hawaiian Islands, the monument protects a 1,200-mile string of islands and atolls that are home to a pristine coral reef ecosystem unique in its biodiversity. In American Samoa, Fagatele Bay contains a significant example of Indo-Pacific reefs which are found nowhere else in the U.S.

Marine sanctuaries and monuments may be compared to national parks, but are often located where the public has limited or no access to them. In many cases people do not even know that such marine protected areas exist let alone their rules and regulations. For these reasons, visitor centers and local offices play key roles in facilitating partnerships with local communities. Visitor centers and offices can provide the necessary link to the community and to stakeholders by providing centers where the public can come to learn about these special places and by helping to protect them through good stewardship.

This document provides the reader with a quick snapshot of the current visitor and office facilities in Hawai'i and American Samoa, as well as a vision for future facilities. Please keep in mind that the proposed ideas are just that, ideas. The ONMS has not made any final decisions on future locations, sites, or type of centers. Future discussions with staff, community members, and partners would take place before any plans are finalized. In the future, there may be additional areas in the Pacific Islands Region that will also require office and visitor facilities.

LETTER FROM SUPERINTENDENTS

We hope that this document provides the reader with an idea of the current status of ONMS facilities in the Pacific Islands, and more importantly, an idea of where we are headed in terms of increasing our presence and becoming more integrated with our local communities.

Mahalo / Fa'afetai

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- Ted Lillestolen - Deputy Director of Facilities, Safety, Vessels, and Aircraft
- Matt Stout - Branch Chief, Communications Branch

NOAA - ONMS Pacific Islands Region

- Allen Tom - Regional Director
- CDR Dave J. Rathbun - Deputy Regional Director
- Hans Van Tilburg - Regional Maritime Heritage Coordinator

NOAA - Hawaiian Islands Humpback Whale National Marine Sanctuary

- Naomi McIntosh - Sanctuary Superintendent
- Paul Wong - Operations Coordinator
- Patty Miller - Maui Programs Coordinator
- Jean Souza - Kaua'i Programs Coordinator
- Christine Brammer - O'ahu Programs Coordinator
- David Mattila - Science and Rescue Coordinator

NOAA - Papahānaumokuākea National Marine Monument

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- Moani Pai - Administrative Officer
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- Linda Schubert - Mokupāpapa Discovery Center Manager

NOAA - Fagatele Bay National Marine Sanctuary

- Gene Brighthouse - Sanctuary Superintendent
- Kevin Grant - Program Analyst

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- Justin Viezbicke - Hawai'i Island Programs Coordinator

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1 | EXECUTIVE SUMMARY

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Executive Summary

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EXECUTIVE SUMMARY

The Office of National Marine Sanctuaries (ONMS) Pacific Islands Region encompasses approximately 141,200-square miles of Pacific waters, and is the largest region in the program of thirteen national marine sanctuaries and one monument.

The region includes:

- Fagatele Bay National Marine Sanctuary
- Hawaiian Islands Humpback Whale National Marine Sanctuary
- Papahānaumokuākea Marine National Monument

The Office of National Marine Sanctuaries, as a global leader in fostering an ocean stewardship ethic, requires a master plan for effective facilities in support of its mission. This Facilities Master Plan is a strategic document that allows ONMS to begin dialogue with outside stakeholders. It is the intention that this dialogue will foster partnerships and relationships that together can leverage the facilities on all islands to more effectively fulfill the NOAA mission.

The focus areas of the ONMS include:

- Research
- Resource Protection
- Education
- Stewardship
- Management

Many of the existing locations are inadequate to fully support the ONMS vision, mission, and goals. This master plan makes recommendations to improve seven existing facility locations and proposes eight new locations that currently do not exist. The recommendations contained in this document provide an opportunity to bring the facilities into equilibrium with the future direction for the Office of National Marine Sanctuaries Pacific Islands Region.

The recommendations of this master plan enhance some of the current facilities; and propose new, much needed additional facilities for ONMS to carry out its mission in the Pacific Islands Region.



Photo Source: Photospin

EXECUTIVE SUMMARY

The master plan focuses on four areas:

1. Identification and analysis of concerns, function and space requirements of current facilities through 2018.
2. Quantification of the need for potential upgraded and/or new facilities.
3. Recommendations for the future facilities at each location including opportunities to partner with other agencies to take advantage of their potential new concepts that fit within the vision of the ONMS.
4. Budget analysis for the costs of the recommended facilities projects, operations, and maintenance.



Photo Source: Photospin

Summary of the Recommendations

This master plan presents, in very broad terms, recommendations for each of the seven existing locations within the sanctuary. In addition, eight new concepts are proposed:

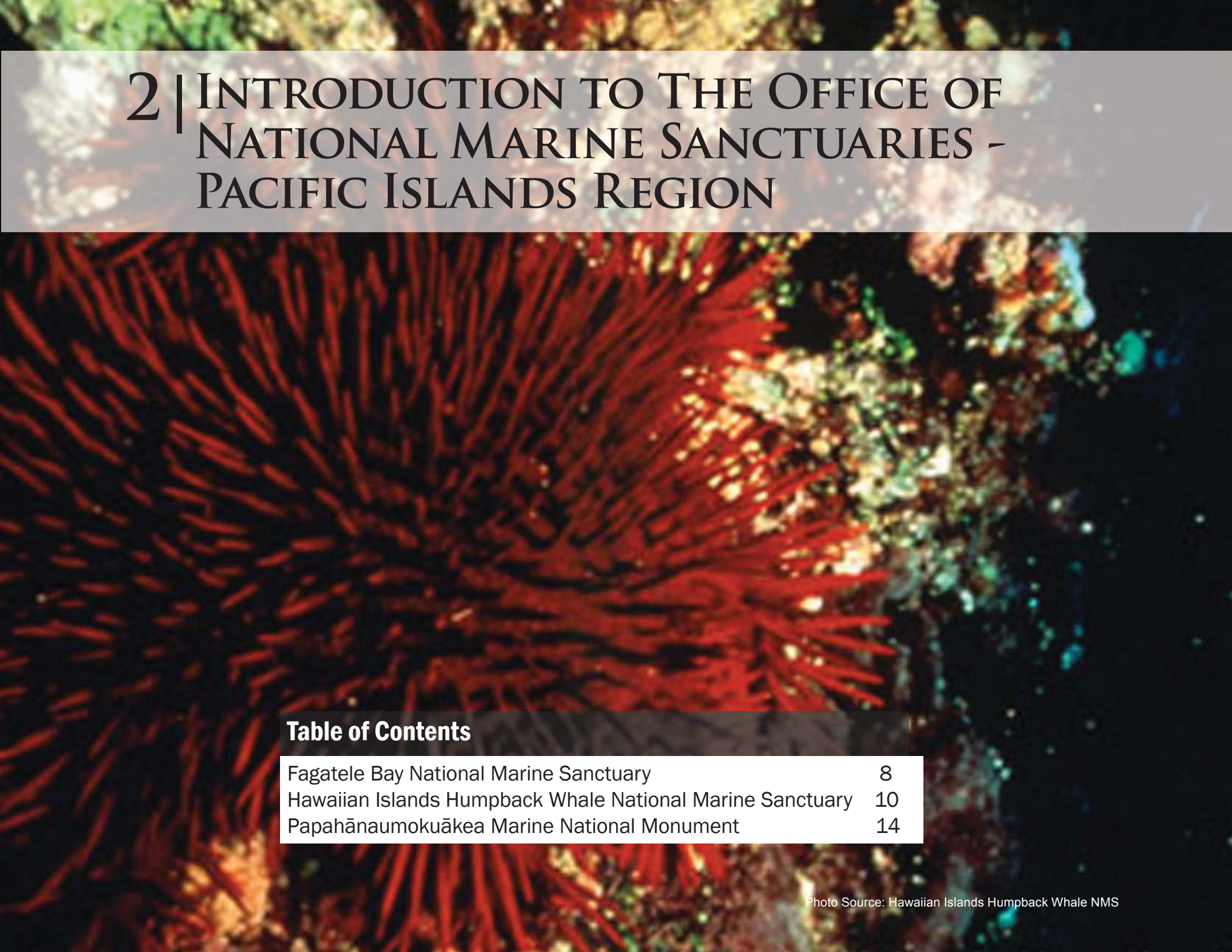
Existing Locations:

- Mokupāpapa Discovery Center - Hilo
- Kona, Hawai'i
- Kīhei, Maui
- Hawai'i Kai
- Pacific Regional Center – Ford Island
- Līhu'e
- American Samoa

Proposed New Concepts:

- Marine Mammal Research Center
- Hawai'i Eco-Discovery Center
- Children's Marine Discovery Center
- Cultural Exchange Center
- North Shore, O'ahu
- Lāhaina Visitor Center
- Moloka'i Leadership Institute
- Territorial Science Center

Each recommendation is described on the following pages. The costs associated with each recommendation are presented in more detail in Chapter Six.

An underwater photograph showing a large red sea urchin in the foreground, with a coral reef and other marine life in the background. The image is used as a background for the document.

2 | INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES - PACIFIC ISLANDS REGION

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INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Location Map

The map below shows the locations of all the national marine sanctuaries and monuments. The ONMS Pacific Islands Region is comprised of Fagatele Bay National Marine Sanctuary, the Hawaiian Islands Humpback Whale National Marine Sanctuary, and the Papahānaumokuākea Marine National Monument.

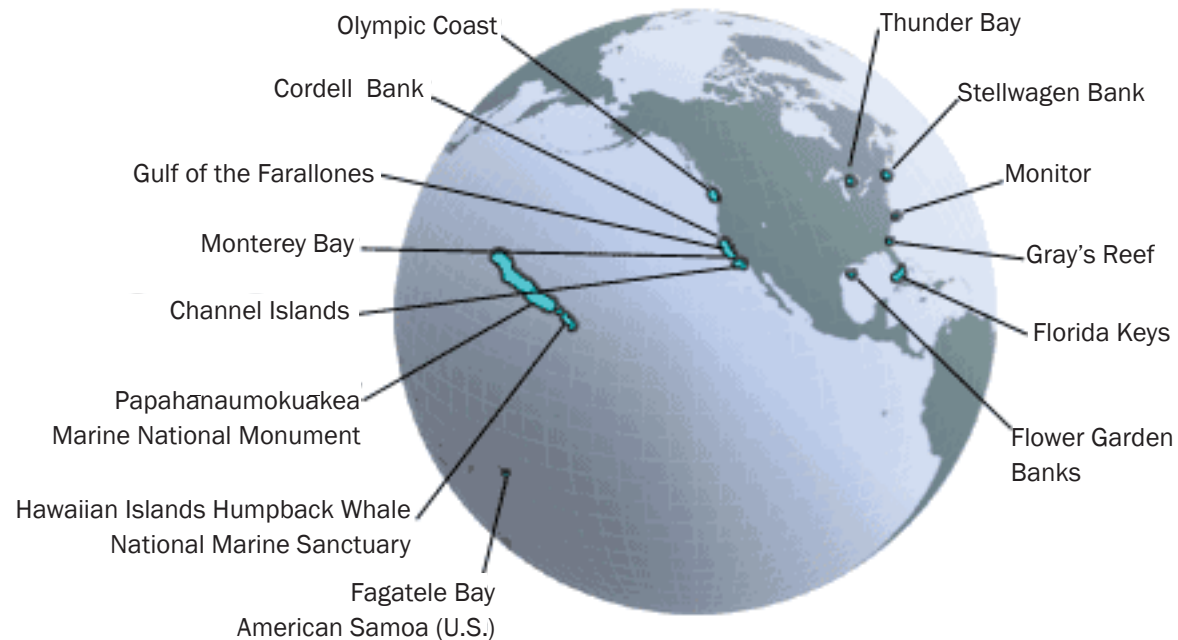


Figure 1: Office of National Marine Sanctuaries

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Office of National Marine Sanctuaries



NATIONAL MARINE SANCTUARIES



The Office of National Marine Sanctuaries manages a world-class system of sanctuaries and monuments that protect the nation's natural and cultural marine resources for this and future generations and provides both national and international leadership for marine conservation.

Photo Source: <http://www.sanctuaries.noaa.gov/welcome.html>

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Fagatele Bay National Marine Sanctuary

Location

Fagatele Bay National Marine Sanctuary protects 163 acres (0.25 square miles) of fringing-coral-reef ecosystem nestled within an eroded volcanic crater on the island of Tutuila, American Samoa. This smallest and most remote of all the national marine sanctuaries is the only one located in the Southern hemisphere, and is the only true tropical reef in the system.

History

In response to a proposal from the American Samoa Government, Fagatele Bay (Fahng-ah-téh-lay) was put on the list of recommended sanctuary sites in 1982 and later that same year was moved to the active candidate list. On April 29, 1986, it was designated as the fifth national marine sanctuary.

Purpose

The official purpose of designating the sanctuary is “to protect and preserve an example of a pristine tropical marine habitat and coral reef terrace ecosystem of exceptional productivity; to expand public awareness and understanding of tropical marine ecosystems; to expand scientific knowledge of marine ecosystems; to improve resource management techniques; and, to regulate uses within the sanctuary to ensure the health and well-being of the ecosystem and its associated flora and fauna”¹



Fagatele Bay, Tutuila, American Samoa / Photo Source: Kip Evans

¹ (Federal Register, 4/29/86) (Source:<http://fagatelebay.noaa.gov/>)

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Fagatele Bay National Marine Sanctuary

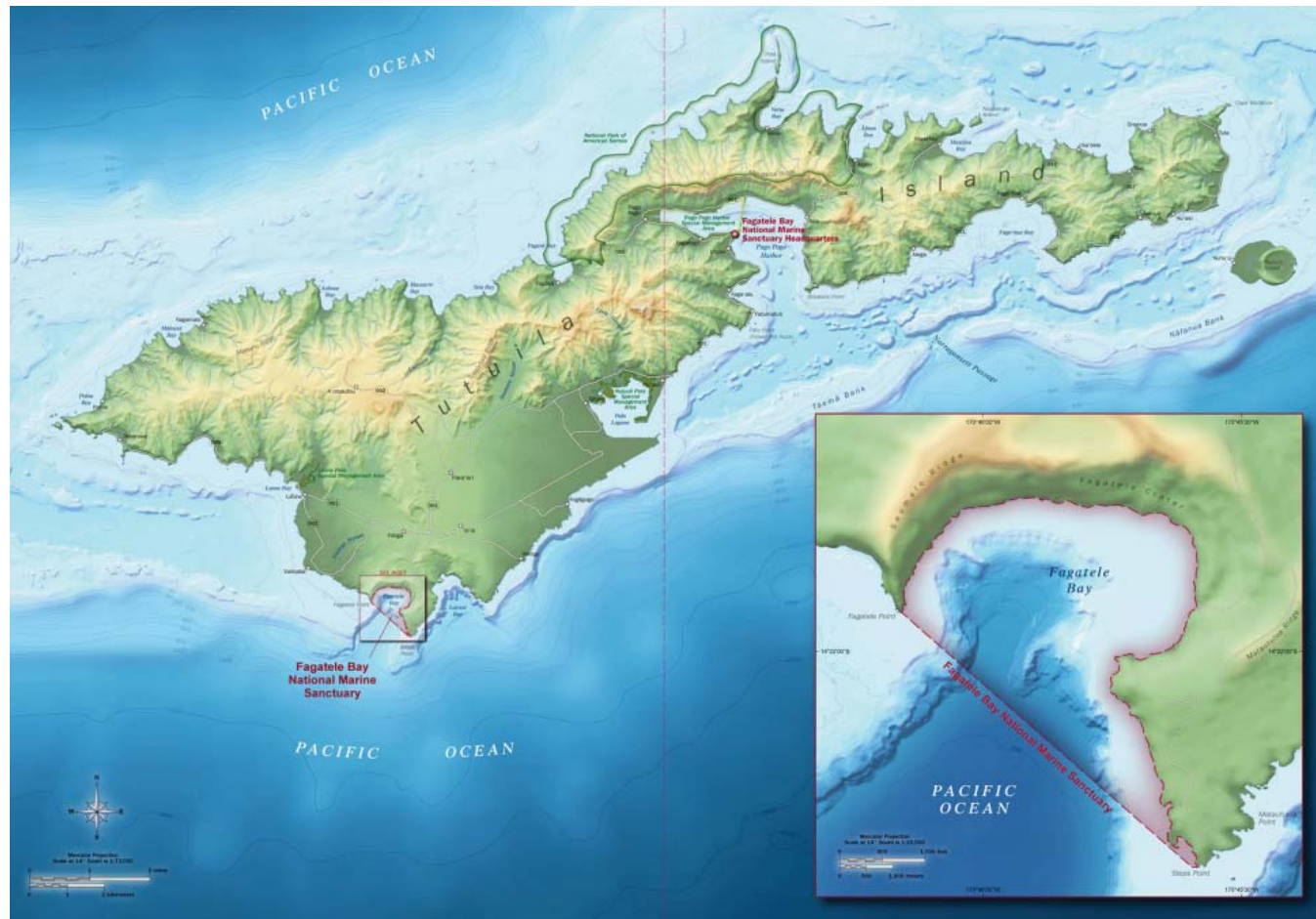


Figure 2: Fagatele Bay National Marine Sanctuary

Source: NOAA

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Hawaiian Islands Humpback Whale National Marine Sanctuary

Location

The Hawaiian Islands Humpback Whale National Marine Sanctuary is actually a series of five marine protected areas distributed across the main Hawaiian Islands. The total area of the sanctuary is about 1,370 - square miles. The largest contiguous portion of the sanctuary is delineated around Maui, Lana'i and Moloka'i and encompasses about half of the total sanctuary area. The four smaller portions are located off the north shore of Kaua'i, along Hawai'i's Kona coast, and off the north and southeast coasts of O'ahu. Each of the five sanctuary areas has its own distinct natural character and social significance. The sanctuary's configuration presents unique challenges and opportunities for protecting sanctuary resources, developing programs, and increasing public awareness of humpback whales throughout the state requiring a presence on six of the main Hawaiian Islands.

History

In consultation with the State of Hawai'i, Congress designated the Hawaiian Islands Humpback Whale National Marine Sanctuary on November 4, 1992.

In response to public concern about what a sanctuary presence would mean to the people of Hawai'i, numerous

public information meetings and hearings were held on each of the main Hawaiian Islands. The National Marine Sanctuary Program also established a Sanctuary Advisory Council, which is made up of user groups and government agencies, to provide advice and recommendations for the site's continued development and management.

On June 5, 1997, over four years after the Hawaiian Islands Humpback Whale National Marine Sanctuary was designated the nation's 12th marine sanctuary, Hawai'i Governor Benjamin Cayetano formally approved of the sanctuary in state waters. To enhance the protection of humpback whales and their habitat, the sanctuary incorporated existing restrictions including those dealing with approaching and harassing the whale population, discharging wastes into the water, and altering the sea bed. The sanctuary is co-managed by NOAA's Office of National Marine Sanctuaries and the State of Hawai'i Department of Land and Natural Resources.

Purpose

The Hawaiian Islands National Marine Sanctuary Act identified the following purposes for the sanctuary: to protect humpback whales and their habitat within the sanctuary; to educate and interpret for the public the relationship of humpback whales and the Hawaiian Islands marine environment; to manage

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Hawaiian Islands Humpback Whale National Marine Sanctuary

human uses of the sanctuary consistent with the Hawaiian Islands National Marine Sanctuary Act and the National Marine Sanctuary Act; and, to identify marine resources and ecosystems of national significance for possible inclusion in the sanctuary.



Humpback Whale / Photo Source: Stan Butler, NMFS

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Hawaiian Islands Humpback Whale National Marine Sanctuary (North)

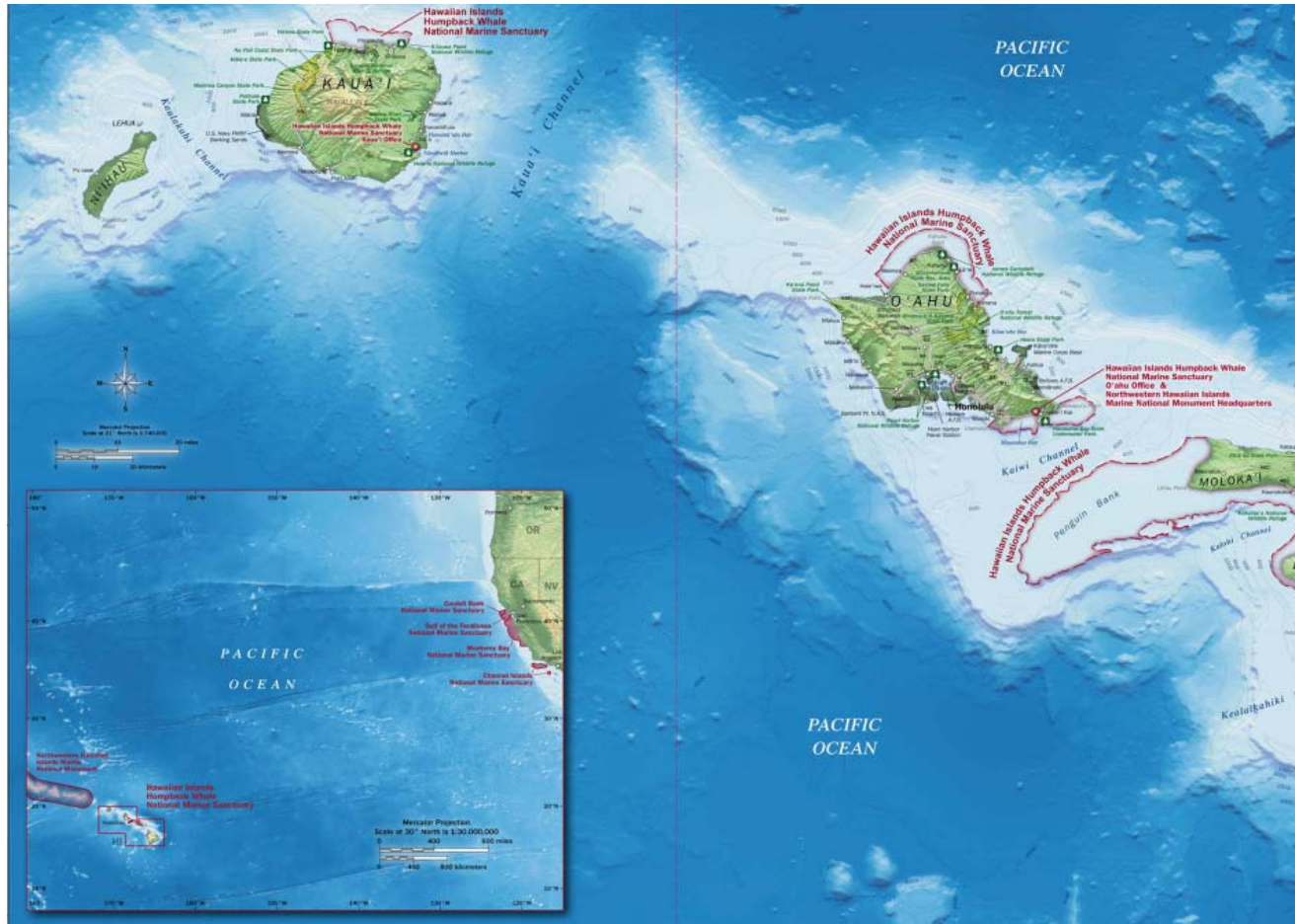


Figure 3: Hawaiian Islands Humpback Whale National Marine Sanctuary

Source: NOAA

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Hawaiian Islands Humpback Whale National Marine Sanctuary (South)

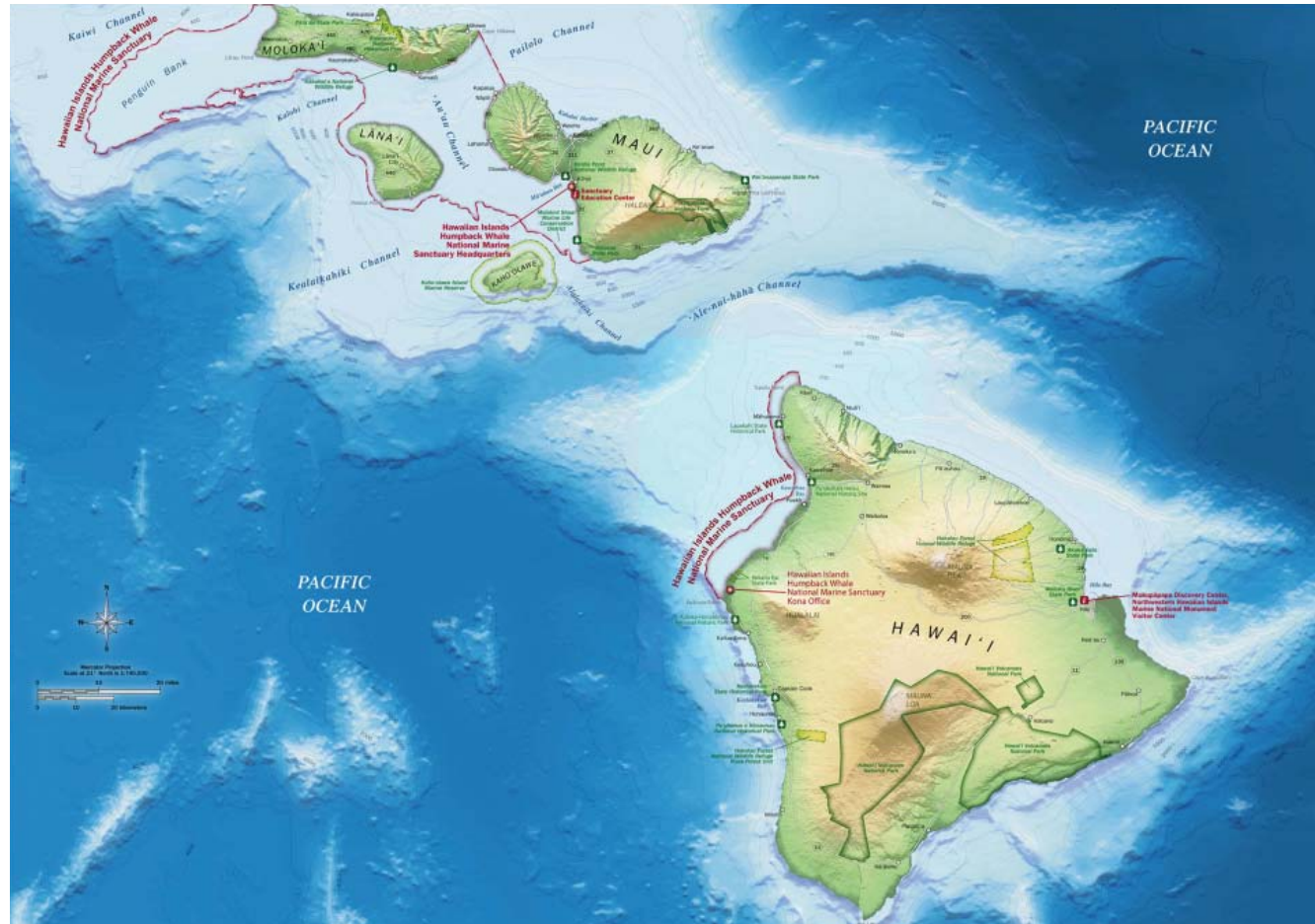


Figure 4: Hawaiian Islands Humpback Whale National Marine Sanctuary

Source: NOAA

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Papahānaumokuākea Marine National Monument

Location

The Papahānaumokuākea Marine National Monument includes all federally owned or controlled emergent and submerged lands of the Northwestern Hawaiian Islands (NWHI) and the waters that surround and lie atop them. The outer boundaries of the monument include marine waters in the NWHI extending out approximately 50 miles on both sides of the chain of islands.

The Northwestern Hawaiian Islands are a chain of small islands, atolls, submerged banks, and reefs in the central North Pacific Ocean. They begin approximately 140 miles northwest of the main Hawaiian Islands, and extend northwest for more than 1,200 miles. ¹

History

The Papahānaumokuākea Marine National Monument was created by Presidential proclamation on June 15, 2006. The Papahānaumokuākea Marine National Monument is the single largest conservation area under the U.S. flag, and it is one of the largest marine conservation areas in the world. It encompasses 139,797 - square miles of the Pacific Ocean (105,564-square nautical miles), an area larger than all the country's national parks combined. ²

To provide the most effective management of Papahānaumokuākea, Governor Linda Lingle, Secretary of

Commerce Carlos M. Gutierrez, and Secretary of the Interior Dirk Kempthorne signed a Memorandum of Agreement (MOA) on December 8, 2006, which provided for coordinated administration of all the Federal and State lands and waters within the boundaries of the Monument. ³

The name Papahānaumokuākea (pronounced Pa-pa-hah-now-mo-koo-ah-keh-ah) comes from an ancient Hawaiian tradition concerning the genealogy and formation of the Hawaiian Islands, and a deep honoring of the dualisms of life. Papahānaumokuākea is a mother figure personified by the earth and Wākea is a father figure personified in the expansive sky; the two are honored and highly recognized ancestors of Native Hawaiian people. It is believed that their union resulted in the creation, or birthing, of the entire Hawaiian archipelago--thus the designation of the monument honors and preserve these names, serves to strengthen Hawai'i's cultural foundation, and provides for grounding Hawaiians to an important part of their history. ⁴

¹ (source: <http://hawaiiireef.noaa.gov/about/faq.html#1>)

² (source: <http://hawaiiireef.noaa.gov/about/welcome.html>)

³ (source: <http://hawaiiireef.noaa.gov/management/cotrustee.html>)

⁴ (source: <http://hawaiiireef.noaa.gov/about/name.html>)

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Papahānaumokuākea Marine National Monument

Purpose

- Preserve access for Native Hawaiian cultural activities
- Provide for carefully regulated educational and scientific activities
- Enhance visitation in a special area around Midway Island
- Prohibit unauthorized access to the monument;
- Phase out commercial fishing over a five-year period
- Ban other types of resource extraction and dumping of waste.¹



Hawaiian Coral Reef / Photo Source: James Watt Oceanstock

¹(source: <http://www.whitehouse.gov/news/releases/2006/06/20060615-9.html>)

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

Papahānaumokuākea Marine National Monument

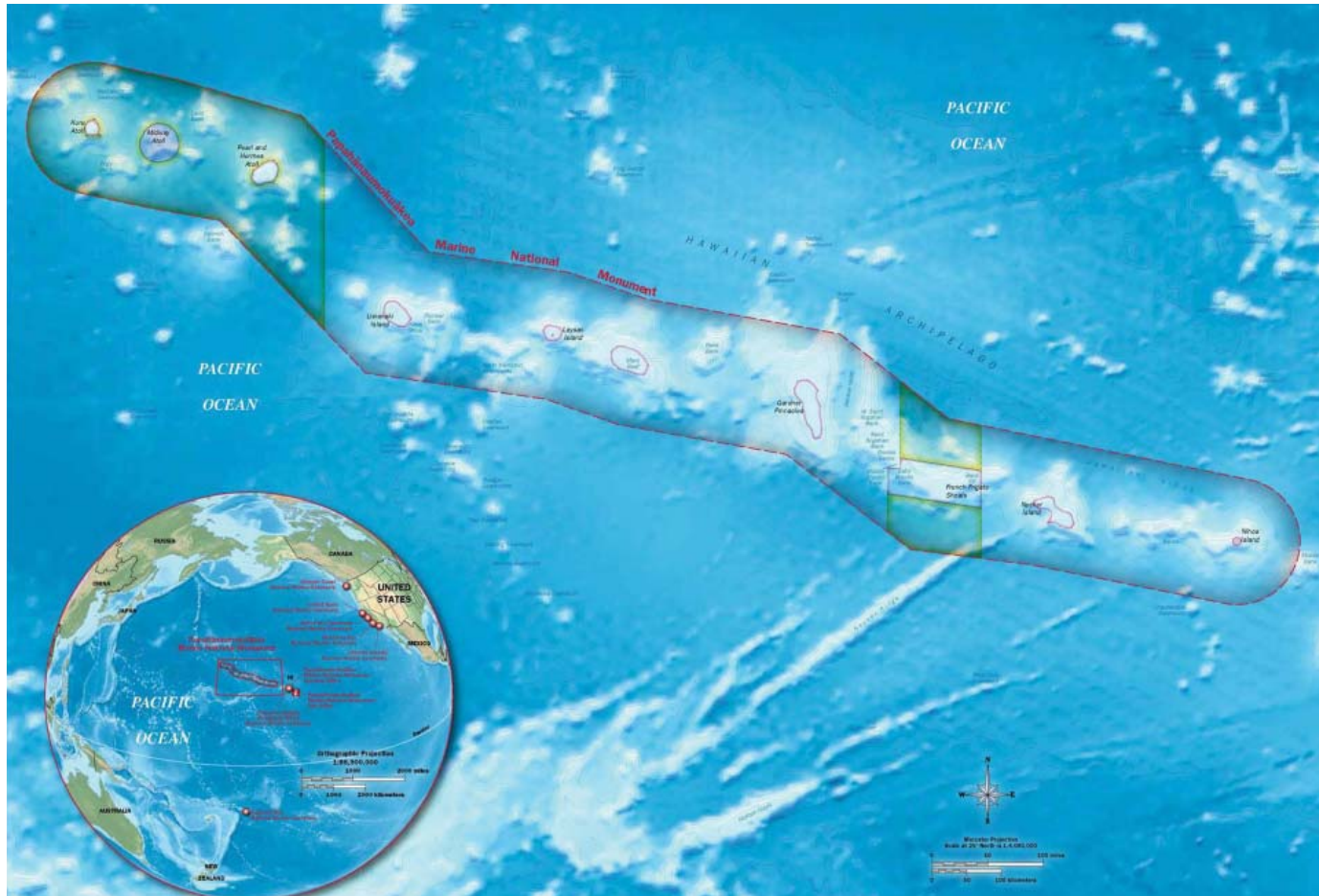


Figure 5: Papahānaumokuākea Marine National Monument

Source: NOAA

INTRODUCTION TO THE OFFICE OF NATIONAL MARINE SANCTUARIES

Pacific Islands Region

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3 | FACILITIES MASTER PLAN GOALS

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Photo Source: James Watt Oceanstock

FACILITIES MASTER PLAN GOALS

Framework

NOAA has initiated a Facilities Master Plan for the Office of National Marine Sanctuaries (ONMS) Pacific Islands Region including:

- Fagatele Bay National Marine Sanctuary
- Hawaiian Islands Humpback Whale National Marine Sanctuary
- Papahānaumokuākea Marine National Monument

This master plan focuses on the following seven (7) existing locations and eight (8) potential future concepts:

Existing Locations

- Hilo-Mokupāpapa Discovery Center
- Kona
- Kīhei
- Hawai'i Kai
- Pacific Regional Center-Ford Island
- Līhu'e
- Fagatele Bay, American Samoa

Proposed New Concepts

- Marine Mammal Research Center
- Hawai'i Eco-Discovery Center
- Children's Marine Discovery Center
- Cultural Exchange Center
- North Shore, O'ahu
- Lāhaina Visitor Center
- Moloka'i Leadership Institute
- Territorial Science Center (American Samoa)

Goals of the ONMS Strategic Plan 2005-2015

The Facilities Master Plan is being developed within the framework of the National Marine Sanctuaries Strategic Plan 2005-2015, dated April 2005. In summary, the ONMS Strategic Plan 2005-2015 goals are to:

- 1) Identify, manage, and protect (and where appropriate), restore resources through innovative, coordinated and community-based measures.
- 2) Build and strengthen the nation-wide system of marine sanctuaries.
- 3) Raise nation-wide awareness and appreciation of marine ecosystems and maritime heritage resources through outreach, education, and interpretation.
- 4) Conduct scientific research to support ecosystem-based management in sanctuaries and throughout U.S. waters.
- 5) Facilitate compatible human use in sanctuaries through innovative public participation and interagency cooperative arrangements.
- 6) Work with the international community to strengthen global protection of marine resources.
- 7) Build, maintain, and enhance operational capability and infrastructure to support the ONMS's mission and goals.

FACILITIES MASTER PLAN GOALS

Goals of this Facilities Master Plan

The goals of the Facilities Master Plan are to:

- 1) Support the National Marine Sanctuaries Strategic Plan 2005-2015 goals.
- 2) Identify current and projected facilities needs, constraints, and resources.
- 3) Develop technologically advanced facilities.
- 4) Develop environmentally conscious and sustainable facilities that are responsive to site, climate, and local resources.
- 5) Develop facilities that acknowledge local history and cultural traditions.
- 6) Support high-performance workplace design that exemplifies a workplace of choice.
- 7) Identify opportunities related to:
 - a. Increasing operational efficiency
 - b. Partnerships
 - c. Community involvement, outreach, and education
 - d. Appropriate and compatible public use
 - e. International cooperation to strengthen global protection of marine resources



Green Sea Turtle / Photo Source: Terry McLemore



Humpback Whales / Photo Source: Brandon Cole

A large school of red-striped snappers (Lutjanus fulvus) swimming over a coral reef. The fish are bright orange-red with white horizontal stripes. They are swimming in a loose formation, with some looking towards the camera. The background shows a variety of coral and reef structures.

4 | FACILITIES MASTER PLAN RECOMMENDATIONS

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FACILITIES MASTER PLAN RECOMMENDATIONS

Summary of Recommendations

This section presents a summary of the facility recommendations at each of the seven (7) existing locations and eight (8) proposed new concepts within the sanctuary:

Existing Locations

- Mokupāpapa Discovery Center, Hilo
- Kona
- Kīhei
- Hawai'i Kai
- Pacific Regional Center, Ford Island
- Līhu'e
- Fagatele Bay, American Samoa

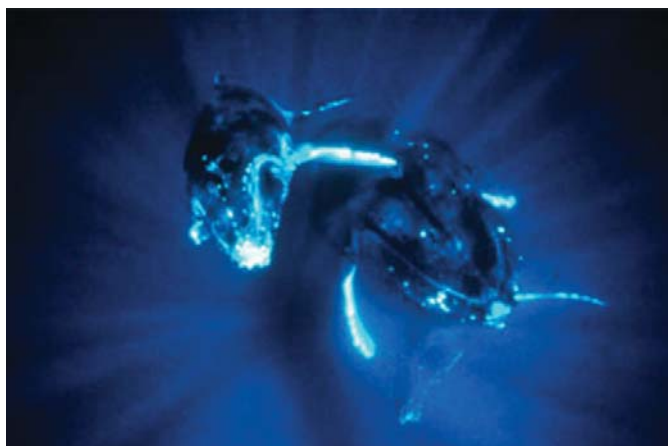
Proposed New Concepts

- Marine Mammal Research Center
- Hawai'i Eco-Discovery Center
- Children's Marine Discovery Center
- Cultural Exchange Center
- North Shore, O'ahu
- Lāhaina Visitor Center
- Moloka'i Leadership Institute
- Territorial Science Center

Following is a snapshot of the recommendations for each location. The findings, analysis, and alternatives that led to the following recommendations are described in greater detail in the following section.

At each location, at least five alternatives were considered:

- a. No action, remain as is
- b. Presence without facility option (fulfilling the mission without a facility using signage, exhibits, kiosks, etc.)
- c. Partnering in a third-party facility
- d. Renovate and expand the existing facility (where applicable)
- e. New facility



Humpback Whales / Photo Source: National Marine Fisheries Services

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Hilo - Mokupāpapa Discovery Center (PMNM)

1. Current Facilities

The Mokupāpapa Discovery Center raises awareness and support for Papahānaumokuākea Marine National Monument (PMNM) and provides opportunities to learn about the unique ecosystems, geography and human history of the monument. The facility is a vital part of the community, hosting numerous community meetings each month, and is located in leased space in downtown Hilo.

2. Summary of Need

To grow and serve a broader audience, additional facilities are necessary for:

- Exhibit space
- Meeting space for more effective workshops and partner programs
- Access to the ocean and to a dock for a boat for more ocean-based activities and monitoring

3. Alternatives

- a. No action, remain as is:
Mokupāpapa Discovery Center is very successful in its current location and is to be retained. However, no action will limit the monument's ability to enhance fulfillment of its mission.

- b. Presence without a facility option:
Mokupāpapa Discovery Center is an existing and vital ONMS presence in Hilo.
- c. Partner in a third-party facility:
NOAA partners are engaged at Mokupāpapa Discovery Center. These partnerships can be strengthened by enhancing facility capabilities. Opportunity exists to partner with the County of Hawai'i Parks Department for an ocean front presence to support PMNM's mission. Any future opportunity to partner with UH Hilo in the development of a science building or brand



Students at Mokupāpapa Discovery Center / Photo Source: Ferraro Choi and Associates

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations -Hilo - Mokupāpapa Discovery Center

d. Renovate and expand the existing facility:

Also provide additional facilities to effectively support the monument's mission, including:

- Ocean Access
- Small boat support
- Storage
- Yard storage
- Vehicle storage

(These additional facilities would not be adjacent to the current downtown building but would be at the waterfront.)

e. New facility:

Potential to collaborate on the development of a new NOAA building at the University of Hawai'i at Hilo; however, UH Hilo does not provide the tourist / visitor patronage (66,000 a year) as does the current location in downtown Hilo.

4. Preferred Alternative

Keep the successful, current location; expand it, and seek out partners who will share their space to provide the needed additional capability for PMNM.



The Location of Mokupāpapa Discovery Center in Downtown Hilo / Photo

Source: Ferraro Choi and Associates

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations - Kona

Kona (HIHWNMS)

1. Current Facilities

The office is adjacent to the Hawaiian Islands Humpback Whale National Marine Sanctuary and provides for outreach and resource protection programs on Hawai'i Island, specifically along the Kona coast. The small office space is within the Natural Energy Laboratory of Hawai'i Authority (NELHA) facility in Kona.

2. Summary of Need

- Additional space to house staff and partners.
- A small visitor center or storefront to engage visitors and the local population because the current location lacks visibility.
- Facilities to dock a small boat to provide for easy access to sanctuary waters.

3. Alternatives

- a. No action, remain as is:
The existing inadequate facility impairs the ONMS ability to fulfill its mission.
- b. Presence without a facility option:
The Kona office is an existing ONMS presence.
- c. Partner in a third-party facility:
NOAA partners are engaged at the Kona facility. These partnerships can be strengthened by enhancing facility capabilities. Opportunity to partner with others for a new facility is desirable.

- d. Renovate and expand existing facility:

Existing facility is leased from NELHA. Expansion of existing is not practical because of the lack of visibility.

- e. New facility:

Develop a new facility to effectively support the ONMS mission with partners. Current partnership with the Department of Land and Natural Resources (DLNR) could be expanded.

4. Preferred Alternative

Develop new facility that is easier for the public to access and that incorporates space for partners.



NELHA Gateway Energy Center in Kona / Photo Source: Ferraro Choi and Associates

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations - Kīhei

Kīhei (HIHWNMS)

1. Current Facilities

This facility in Maui is located on the shoreline in the heart of the Hawaiian Islands Humpback Whale National Marine Sanctuary. It includes a visitor center, office building, and a new multipurpose education building. This NOAA-owned facility provides for numerous outreach and education programs; and, it is the base for research and rescue activities for the sanctuary. This unique location is fronted by a historical Hawaiian fishpond and provides for easy access to the shoreline for education activities. A vessel and storage are located nearby at Mā'alea harbor.

2. Summary of Need

- Renovate and update office space
- Develop a modern, state-of-the-art visitor center
- Provide more opportunity to share the cultural and historical aspects of the site

3. Alternatives

- a. No action, remain as is:
No action impairs the ONMS ability to fulfill its mission.
- b. Presence without a facility option:
The campus at Kīhei is a valuable resource.
- c. Partner in a third-party facility:
NOAA partners are engaged at the Kīhei facility. These partnerships can be strengthened by enhancing facility capabilities.

d. Renovate and expand existing facility:

Renovate the visitor center and office space to provide effective facilities in support of the ONMS mission.

e. New facility:

Development of a new facility is not desirable.

4. Preferred Alternatives

Take advantage of the recently completed multi-purpose building to provide swing space needed to restore the iconic main building, incorporating a new visitor center that overlooks the sanctuary waters. Renovate or replace the existing visitor center (masonry building) for administrative offices, and unify the space between the buildings into an inviting, open-air campus.

Move the visitor center to the current office building's lower floor to greatly enhance the visitor experience and help unify the campus.



The Kīhea Campus / Photo Source: HIHWNMS

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations - Hawai'i Kai

Hawai'i Kai

1. Current Facilities

The Hawai'i Kai office in Honolulu is currently the center for all administrative and management activities in Hawai'i for the Papahānaumokuākea Marine National Monument, the Hawaiian Islands Humpback Whale National Marine Sanctuary, and the Pacific Islands Region. All operations are housed in 13,550-square feet of leased space in a commercial office building on the east side of O'ahu, overlooking humpback whale sanctuary waters.

2. Summary of Need

- Office space for additional staff and contractors.
- Additional dry storage.
- Community outreach in the form of exhibits and/or kiosks.

3. Alternatives

- a. No action, remain as is:
Present conditions provide inadequate office space for ONMS, impairing the ONMS ability to fulfill its mission.
- b. Presence without a facility option (N/A)
- c. Partner in a third-party facility:
NOAA partners are engaged at the Hawai'i Kai facility. These partnerships can be strengthened by enhancing facility capabilities.
- d. Renovate and expand existing facility:
The existing facility should be expanded to provide effective and adequate office space until the NOAA



The ONMS Offices are Located in the Hawai'i Kai Corporate Plaza in East Honolulu / Photo Source: HIHWNMS

Pacific Regional Center is available Page 30). Maintaining an office at Hawai'i Kai provides outreach, educational, and partnering opportunities.

- e. New facility:
Development of a new facility is not desirable.

4. Preferred Alternative:

Short Term: An additional office space of 3,100-square feet in the Hawai'i Kai Executive Center is being built-out to accommodate seventeen more people. Secure dry storage should be leased nearby.

Long Term: This office provides a convenient and necessary location for access by the public, for coordinating with other agencies and organizations, and for providing easy access to resources. It is also located adjacent to the sanctuary waters. For these reasons, the sanctuary should maintain its presence in the Hawai'i Kai community, even after the NOAA Pacific Regional Center is operational.

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations -Pacific Regional Center (Ford Island)

Pacific Regional Center on Ford Island

1. Current Facilities

The Pacific Regional Center (PRC) is a new facility at Pearl Harbor that is intended to accommodate nearly all NOAA operations on O'ahu. A portion of the PRC is already operational and the rest is under design and/or construction.¹

2. Summary of Need

Current PRC re-planning efforts have identified the space needs for sanctuary office staff and support facilities. If all ONMS requirements cannot be supported in the final PRC facilities due to space or funding restrictions, then the unfulfilled, or additional requirements need to be identified and accommodated.

3. Preferred Alternative

Follow the direction provided by the PRC planning effort to consolidate sanctuary operations at this location, also identify activities that might not relocate for functional or operational reasons.



Ford Island in Pearl Harbor on O'ahu / Photo Source: Google Earth



*Location of the Pacific Regional Center on Ford Island /
Photo Source: Ferraro Choi and Associates*

¹ PRC is a separate NOAA project.

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations - Kaua'i

Kaua'i

1. Current Facilities

The sanctuary office is centrally located in leased space in Līhu'e, Kaua'i. It serves as the administrative and logistical center for sanctuary activities around the island. However, the urban setting lacks any visual or physical connection to the ocean. There is insufficient space to accommodate operational programs, storage, volunteer training, and public meetings. As a result, these activities occur in various other venues.

2. Summary of Need

- A joint HIHWNMS-PMNM facility, centered on a marine-focused visitor center.
- Support facilities for field operations.

3. Alternatives

- a. No action, remain as is:
Present conditions provide inadequate office, operational, outreach, and storage facilities, impairing the ability of ONMS to fulfill its mission.
- b. Presence without a facility option:
A permanent facility is required on Līhu'e.
- c. Partner in a third-party facility:
NOAA partners are engaged at the Līhu'e facility. These partnerships can be strengthened by enhancing facility capabilities. Partner opportunities exist with Kaua'i County Parks and Recreation and National Park Service to extend ONMS's presence on island.



Nawiliwili Harbor in Līhu'e on Kaua'i / Photo Source: Randon Boat Company

- d. Renovate and expand existing facility:
The existing facility is small and does not fully support the ONMS mission.
- e. New facility:
Develop new facility to provide effective support of NMS's mission, with partners.

4. Preferred Alternative

Further planning is required. ONMS should develop a facility strategy that accommodates and supports the various sanctuary and monument activities on Kaua'i. Identify specific capital improvements – leased or owned – including vessels and support facilities, that are required to implement the strategy.

Short term: Develop presence at partner locations to extend the ONMS outreach on the island.

Long term: Implement the recommendations that are identified in the facility strategy.

FACILITIES MASTER PLAN RECOMMENDATIONS

Existing Locations -American Samoa (Fagatele Bay)

American Samoa (FBNMS)

1. Current Facilities

Current facilities for the Fagatele Bay National Marine Sanctuary (FBNMS) are provided by the American Samoa government in Utulei, Pago Pago consisting of a very small office area and an adjoining shared auditorium with a display highlighting the features of Fagatele Bay. The office is located within the convention center, which provides for additional meeting space and exhibit space that is specifically about FBNMS.

2. Summary of Need

- Office space for six staff.
- Enhanced display, outreach and meeting space.

3. Alternatives

- a. No action, remain as is:
Present conditions provide inadequate office, operational, outreach, and storage facilities and impair the ONMS ability to fulfill its mission.
- b. Presence without a facility option:
A permanent facility is required at American Samoa.
- c. Partner in a third-party facility:
ONMS is currently partnered in a third-party facility. This partnership can be strengthened by enhancing facility capabilities.
- d. Renovate and expand existing facility:
Expansion of the facility to provide effective and

adequate facilities is required in support of the ONMS mission.

e. New facility:

Develop new facility to provide effective support of the ONMS mission.

4. Preferred Alternatives

Renovate and expand the existing facility to provide effective, functional office space for a minimum of six staff. Provide auditorium upgrades that include interior renovations, new sound and lighting systems, a new roof, structural repairs due to termite damage, and functional air conditioning.



Photo Source: NOAA ONMS, <http://www.divegallery.com>

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts

The following facilities do not currently exist, but have been identified as possible venues to further the ONMS mission in the Pacific Islands Region. Because each of the following ideas is only a concept, the preferred alternative in each case is similar. Additional “real-world” planning is required to turn the concept into reality.



Hawaiian Monk Seal / Photo Source: James Watt Oceanstock

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Marine Mammal Research Center

Marine Mammal Research Center

(Humpback Whale Research Center of Excellence)

1. Summary of Need

At least 15 species of cetaceans (whales and dolphins) are regularly documented in Hawaiian waters. Traditionally, cetacean research in Hawai'i has primarily been focused on only two species, the humpback whale and spinner dolphins. A marine mammal research and training center is needed to increase and build research capacity to learn more about all behavior and care of all local marine mammal species including the critically endangered Hawaiian monk seal.

The facility will include:

- Classroom space
- Wet and dry laboratories
- Necropsy and housing for tissue samples
- Vessel support facilities
- Interpretive exhibits
- A discovery area
- Administrative space storage
- Chart room
- Dormitory
- Animal pens and pools
- Marine mammal diagnosis
- Treatment and husbandry
- Animal food preparation
- Pharmacy



Hawaiian Coast Line / Photo Source: Photospin

2. Alternatives

- a. Presence without a facility:
A temporary or traveling presence could be developed for the Marine Mammal Research Center.
- b. Partner in a third-party facility:
Partner with third parties such as Hawai'i Institute of Marine Biology at Moku o Lo'e (Coconut Island) or Maui Community College.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.
- d. No action, remain as is:
No action will result in ONMS not developing capability to provide leadership in marine mammal research, impairing ONMS ability to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Marine Mammal Research Center to provide effective support of the ONMS mission.

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Hawai'i Eco-Discovery Center

Hawai'i Eco-Discovery Center

1. Summary of Need

This new visitor center would provide a central gateway for people to seamlessly learn about Hawai'i's unique and diverse natural resources at one location. Through exhibits, demonstrations and multimedia, visitors would be exposed to Hawai'i's unique ecosystems and see their connectedness through natural and traditional Hawaiian viewpoints. This center will, similar to the Florida Keys Eco-Discovery Center, serve as a point of orientation and a starting point for further investigation.

This visitor center would be staffed jointly by multiple agencies, and might be located in a popular tourist area such as Waikiki in order to connect with the greatest possible number of people.

2. Alternatives

- a. Presence without a facility:
A temporary, or traveling, ONMS presence could be developed for the Hawai'i Eco-Discovery Center.
- b. Partner in a third-party facility:
Partner with third parties such as Hawai'i's visitor industry.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.

d. No action, remain as is:

No action will result in ONMS not developing a Hawai'i Eco-Discovery Center, impairing the ability of ONMS to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Hawai'i Eco-Discovery Center to provide effective support of the ONMS mission.



Photo Source: Andy Newman

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Children's Marine Discovery Center

Children's Marine Discovery Center

1. Summary of Need

In Hawai'i, the ocean offers a natural educational framework that is infused in Hawaiian culture, yet Hawai'i lacks a place that is designed specifically from a child's point of view for exploring and experiencing the marine environment—a child-centric place that allows children to explore without hindrance to their natural curiosity.

This facility should be a place for young children to further investigate the marine environment on their own.

2. Alternatives

a. Presence without a facility:

A temporary, or traveling ONMS presence could be developed for the Children's Marine Discovery Center.



Photo Source: Georgia Aquarium



Photo Source: Point Defiance Marine Discovery Center

b. Partner in a third-party facility:

Partner with third parties such as Hawai'i's visitor industry and/or Hawai'i Children's Discovery Center.

c. New facility:

Develop a new facility, incorporating partners to provide effective support of the ONMS mission.

d. No action, remain as is:

No action will result in ONMS not developing a Children's Marine Discovery Center, impairing the ability for ONMS to fulfill its mission to the fullest.

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Cultural Exchange Center

Cultural Exchange Center

1. Summary of Need

As the Office of National Marine Sanctuaries continues to build relationships and work throughout the Pacific, there is a need for a facility that provides a venue for sharing the cultures of Hawai'i, Polynesia, and Oceania cultures, as well as traditional understanding of how to manage natural resources.

This center would likely include:

- Covered, outdoor gathering space.
- Dormitories and private accommodation.
- Communal kitchen.
- Outdoor common space for families.
- Cultural protocols and requirements.



Performance of a Traditional Hawaiian Hula /

Photo Source: Carleen Bush

2. Alternatives

- a. Presence without a facility:
A temporary or traveling ONMS presence could be developed for the Cultural Exchange Center.
- b. Partner in a third-party facility:
Partner with third parties such as the Office of Hawaiian Affairs or Hawai'i Tourism Authority.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.
- d. No action, remain as is:
No action will result in NMS not developing a Cultural Exchange Center, impairing ONMS's ability to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Cultural Exchange Center to provide effective support of the ONMS mission.

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - North Shore, O'ahu

North Shore, O'ahu

1. Summary of Need

A new visitor center on O'ahu's North Shore, which is adjacent to the sanctuary, would provide opportunities to reach out to the high number of tourists and residents that visit the area year-round.

A presence on O'ahu's North Shore could also provide a needed base of operations for resource protection, law enforcement, volunteer and education programs.

2. Alternatives

A presence on O'ahu's North Shore provides an opportunity to extend education about the Northwest Hawaiian Islands using the similar ecology found at Ka'ena Point's Alternatives

- a. Presence without a facility:
A temporary or traveling NMS presence could be developed on the North Shore.
- b. Partner in a third-party facility:
Partner with third parties such as Kamehameha Schools.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.

d. No action, remain as is:

No action will result in ONMS not developing a North Shore presence, impairing the ONMS ability to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a presence or facility on O'ahu's North Shore to provide effective support of the ONMS mission.



Waimea Bay on the North Shore of O'ahu / Photo Source: John Fischer

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Lāhaina Visitor Center

Lāhaina Visitor Center

1. Summary of Need

Lāhaina / Kā'anapali is the number one tourist destination on Maui, but it is situated 25 miles from the existing Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) headquarters in Kīhei. Lāhaina/ Kā'anapali allows for easy viewing of humpback whales during the winter. This area of Maui with its whaling history and high tourism would provide an excellent opportunity for a new visitor center to outreach to visitors about the marine environment in the HIHWNMS and PMNM.

2. Alternatives

- a. Presence without a facility:
A temporary or traveling ONMS presence could be developed in Lāhaina / Kā'anapali.
- b. Partner in a third-party facility:
Partner with third parties such as Lāhaina Town Action Committee (Lāhaina Visitor Center) or Whaler's Village Museum.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support the ONMS mission.
- d. No action, remain as is:
No action will result in the ONMS not developing a Lāhaina / Kā'anapali presence, impairing the ONMS ability to fulfill its mission to the fullest.



Humpback Whale / Photo Source: Alex King

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Lāhaina Visitor Center to provide effective support of the ONMS mission. The preferred location would be on Front Street, Lāhaina, where the majority of West Maui visitors congregate, including local boat harbor traffic, ocean recreation groups, and ferry passengers to Lāna'i.

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Moloka'i Leadership Institute

Moloka'i Leadership Institute

1. Summary of Need

There is a need to provide a leadership training academy for resource conservation practitioners and to examine the close connection of native peoples with the natural environment. The objective of this facility would be to serve as a forum for participants to acquire knowledge, skills and tools necessary to develop leadership skills that foster successful partnerships and collaborative efforts.

The facility would include:

- Classroom
- Dormitory Space
- Wet Lab
- Dry Lab
- Storage
- Administrative Space



Moloka'i / Photo Source: Galen Rowell

2. Alternatives

- a. Presence without a facility:
A temporary, or traveling ONMS presence could be developed on Moloka'i.
- b. Partner in a third-party facility:
Partner with third parties such as the University of Hawai'i.
- c. New facility:
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.
- d. No action, remain as is:
No action will result in the ONMS not developing a Moloka'i Leadership Institute presence, impairing the ONMS ability to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Moloka'i Leadership Institute to provide effective support of the ONMS mission.

FACILITIES MASTER PLAN RECOMMENDATIONS

Proposed New Concepts - Territorial Science Center

Territorial Science Center (American Samoa)

1. Summary of Need

American Samoa has never had a marine laboratory capable of supporting quality research by local agencies and visiting scientists. There is a need in the South Pacific for a marine science laboratory and outreach center.

The new Territorial Science Center could be utilized by all agencies that have an interest in marine conservation efforts including:

- Territorial government agencies
- National Park of American Samoa
- National Marine Fisheries Service
- The U.S. Fish and Wildlife Service
- American Samoa Community College

The Territorial science center will also serve as a research base that could attract scientists who might not otherwise have considered working in and performing research in American Samoa, due to a lack of local facilities. Attracting scientists from around the world will allow local marine



Photo Source: iStock

management agencies to leverage resources while gaining needed scientific data. The center would also serve school groups, the general public, Independent Samoa, and possibly other Pacific countries.

2. Alternatives

- Presence without a facility:**
ONMS has an existing, inadequate facility in American Samoa which currently provides office space and outreach only. There are no adequate marine laboratory facilities for ONMS scientists in American Samoa
- Partner in a third-party facility:**
ONMS is currently partnered in a third-party facility. This partnership can be strengthened by enhancing facility capabilities.
- New facility:**
Develop a new facility, incorporating partners to provide effective support of the ONMS mission.
- No action, remain as is:**
No action will result in ONMS not developing a Territorial Science Center, thus impairing the ONMS ability to fulfill its mission to the fullest.

3. Preferred Alternative

Further planning is required. ONMS should develop in partnership with others, a Territorial Science Center to provide effective support of the ONMS mission.

5 | DETAILED FACILITY REQUIREMENTS AND ANALYSIS

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DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Process

This master plan addresses the current and future needs at seven (7) existing and eight (8) potential locations. The sanctuary performs a variety of activities, but not every activity is appropriate for each site.

In order to develop recommendations that are specific to each location, the master plan includes the following analysis:*

Step 1: Determine the purpose of this site and who it serves. Determine the vision for the future of the location, and how it differs from the status quo.

Step 2: Determine how to define success at this location to help in comparing and evaluating possible alternative solutions.

Step 3: Describe the existing conditions.

- Summarize of the existing facilities
- Analysis of existing facilities
 - Existing space utilization
 - Tenure of space (leased or owned)
 - Historical and cultural issues
 - Building code, life safety, and accessibility issues
- Identify site issues
 - Environmental issues
 - Utility infrastructure issues

- Access and parking
- Vessel support

Step 4: Determine which requirements will need to be accommodated at this site. Discover where the existing facilities fall short of the vision.

Step 5: Determine the order of priorities. (The master plan uses a color logic to illustrate desired priorities using light, medium, and dark blue. Light blue is the highest priority).

Step 6: Evaluate the partnering opportunities at this location. Can the sanctuary achieve its vision by using facilities that belong to potential partners, or conversely, should the sanctuary plan on accommodating partners on-site?

Step 7: Reveal the functional relationships that will affect a potential solution using a functionality matrix.

Step 8: Outline the alternatives studied and how they compared to each other.

Step 9: Provide recommendations

** These steps are repeated for each location.*

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Developing Alternatives

Alternatives accommodate the current and projected requirements at each location. Alternatives fall into one of the following five categories:

1. No action – keep the existing condition
2. Presence without a facility option
3. Partner in a third-party's facility (government agency or non-governmental organization)
4. Renovate and expand the current facility
5. New facility



Photo Source: iStock

Evaluation Criteria to Compare Alternatives

In addition to analyzing the current facilities and developing recommendations for each location, the master plan also establishes criteria for potential site selections and outreach locations. These criteria are (in descending order of priority):

1. Meets the shared needs of the sanctuary and monument
2. Meets the shared needs of the co-manager, and/or co-trustee
3. Proximity to sanctuary or adjacent to land-sea connection that reinforces the ONMS mission.
4. Easily accessible by the community
5. Functionally accessible for operations (vessel operations, educational opportunities)

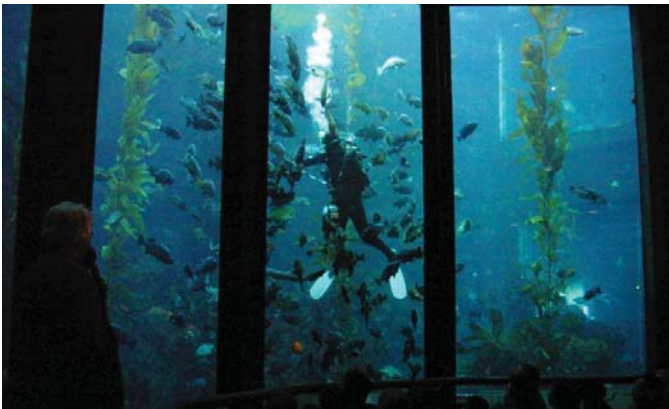
These five criteria were consistently used to evaluate options at each existing location.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Establishing the Desired Sequence of Projects

After comparing possible alternatives, the master plan identifies the following criteria for determining the sequence of potential projects:

- Need
 - Emergency
 - Repair
 - Upkeep
 - Stewardship
- Political
- Community Benefit
- Opportunity: Often a project opportunity simply presents itself out of sequence
- Funding Availability: Projects can be taken out of sequence if appropriate



Monterey Bay Aquarium / Photo Source: commons.wikipedia.org



Florida Keys Eco-Discovery Center / Photo Source: roadstraveled.com

The data and resultant analysis and recommendations for each site follow:

Existing Locations:

- Hilo-Mokupāpapa Discovery Center
- Kona
- Kīhei
- Hawai'i Kai
- Pacific Regional Center-Ford Island
- Līhu'e
- Fagatele Bay, American Samoa

Proposed New Concepts:

- Marine Mammal Research Center
- Hawai'i Eco-Discovery Center
- Children's Marine Discovery Center
- Cultural Exchange Center
- North Shore, O'ahu
- Lāhaina Visitor Center
- Moloka'i Leadership Institute
- Territorial Science Center

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

The following data are analyzed for each location:

- Summary of existing facilities
- Existing Space Utilization
- Tenure of space (leased or owned)
- Historical issues
- Building Code issues
- Environmental issues
- Utility Infrastructure issues
- Site issues
- Access and parking
- Vessels
- Requirements
- Partnering Opportunities
- Recommendations

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Summary of the Existing Facilities

Mokupāpapa Discovery Center was opened to the public in 2003, to raise awareness and support for the Papahānaumokuākea Marine National Monument. Approximately 66,000 people visit the Discovery Center each year and learn about the animals and plants that make up the unique ecosystems of the area and its compelling human history. Visitors learn through viewing exhibits, attending lectures, or participating in a program, (such as school programs that reach 3,500 students each year). The facility is also a vital part of the community, hosting



The Mokupāpapa Discovery Center in Hilo / Photo Source: NOAA



The Mokupāpapa Discovery Center in Hilo / Photo Source: NOAA

numerous community meetings each month.

Current staff and programs utilize the Discovery Center space to full capacity. In order to grow and serve a broader audience, expansion is needed. The current location is ideal for the exhibit space; however, more programs could be accomplished with additional space elsewhere in Hilo. Access to the ocean and a dock for a boat would allow for more ocean activities and monitoring on site. A larger wet lab (current lab will only accommodate 16 people) would enable to better accommodate larger groups and expand the university partnership. Additional meeting space would allow hosting of more elaborate workshops and partner programs.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Additional facilities for Mokupāpapa would help serve an ever widening audience, broadening NOAA's reach, and therefore integrating even more fully with partner organizations.

Existing Space Utilization

Size of existing space is approximately 5,674 square feet consisting of:

- Office
- Storage
- Exhibits
- Wet lab
- 2,500-gallon aquarium
- Meeting

Tenure of Space (Leased or Owned)

PMNM Mokupāpapa Discovery Center is located in leased space in the S. Hata Building. The lease expires on November 30, 2010.

Historical Issues

None

Building Code Issues

The Mokupāpapa Discovery Center is managed by PMNM and located in the S. Hata Building and was constructed as a "tenant improvement". Hawai'i County is currently using the International Building Code 2003 with Hawai'i County



The Mokupāpapa Discovery Center in Hilo / Photo Source: NOAA

Environmental Issues

The master plan does not include a National Environmental Policy Act (NEPA) environmental review process stage one. NOAA should conduct further environmental analysis (NEPA Stage One) prior to commencement of future design and construction work.

Utility Infrastructure Issues

Future sites will need to be evaluated for the following services as part of a site selection process.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

- Water

Water-service is provided as part of the S. Hata Building services by the County of Hawai'i Department of Water Supply. No water service issues are anticipated for expansion at the S. Hata Building.

- Sanitary Sewer

Sanitary-sewer service is provided as part of the S. Hata Building services by the County of Hawai'i, Department of Environmental Management, Wastewater Division. No sanitary sewer service issues are anticipated for expansion at the S. Hata Building.

- Storm Sewer

Storm-sewer service is provided as part of the S. Hata Building services by the County of Hawai'i, Department of Public Works. No storm-sewer-service issues are anticipated for expansion at the S. Hata Building.

- Gas

Gas service is not provided as part of the S. Hata Building services for the Mokupāpapa Discovery Center. No gas-service issues are anticipated for expansion at the S. Hata Building.

- Electric Service

Electrical service is provided as part of the S. Hata

Building services by Hawaiian Electric Light Company. No electrical-service issues are anticipated for expansion at the S. Hata Building.

- Telecommunication

Telecommunication service is provided as part of the S. Hata Building services by Hawaiian Telephone Company. No telecommunication-service issues are anticipated for expansion at the S. Hata Building.

Access and Parking

Access and parking for Mokupāpapa, with the exception of parking for government vehicles, are adequate. Public parking is available at no cost in downtown Hilo for both staff and public use.

Vessels

Mokupāpapa Discovery Center presently does not have any vessels.

Facility Requirements

- Administrative

Additional office for four (4) staff.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

- **Dry storage**
Additional dry storage space for outreach materials and general storage. Presently outreach materials and general storage occupies a portion of the Mokupāpapa Discovery Center staff office on the second level of the S. Hata Building.
- **Education**
A shore-side location to provide opportunity for students, community members, and tourists to enter the near-shore waters and experience the marine environment. Additional meeting space and a larger wet laboratory would provide opportunities to serving larger groups and hosting larger events.
- **Research**
The existing wet laboratory is satisfactory.
- **Operations**
No operational requirements
- **Enforcement**
No enforcement requirements
- **Storage**
Additional exterior storage in an outside storage yard for outreach materials and sampling equipment is required.
- **Outreach**
Existing exhibits are satisfactory. Exhibits should be updated and refreshed as part of the normal course of business.
- **Parking**
Secure parking for two (2) government vehicles is required. These vehicles consist of a minivan and an education mini-bus.
- **Vessel Support**
 - Large vessel dock - Dock space for a seasonal 60-foot to 100-foot vessel is required.
 - Vessel-gear storage - Storage for vessel gear and sampling gear is required.
 - Parking - Dock side parking is required.



The Mokupāpapa Discovery Center in Hilo / Photo Source: NOAA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Location: Hilo Discovery Center				
	Projected Needs	Priority	Area (SF)	Assumptions
Administrative				
Office Space for ONMS Staff	4 additional people	2	1200	200 sf per person *1.5 circulation
Education				
Classroom				
Outdoor Activity Space	water access for groups off site tide pools water sampling station 20-30 people parking potable water access snorkel gear cleaning/drying	1		
Storage				
Dry Storage	out reach materials general storage	2	150	assumed
Refrigerated Storage				
Covered Outside Storage				
Outside Storage Yard	at satellite area for education materials, sampling equipment	2	600	assumed
Outreach				
Museum, Aquarium, or Science Center	volcano national park and elsewhere	1		
Parking				
Staff				
ONMS Vehicles or Equipment	minivan education center bus	1	1000	2 cars @ 200sf *1.5 circulation
Enclosed Garage				
Visitors				
Waterfront				
Dock for Large Vessels	60-100' boat seasonal	3	2500	100ft x 25ft
Storage	boat gear sampling gear	3	400	assumed
Dockside Parking	parking for 20 school bus drop off	3	6000	20 cars @ 200sf *1.5 circulation
Signage				
Informational & Directional	directional signs to facility	1		
Other Requirements				
Retail				
Support & Circulation	n/a			inc. in existing facility

Table 1: Hilo - Mokupāpapa Discovery Center Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Partnering Opportunities

- Off-site storage
There may be opportunities to store materials offsite with Hawai'i County and others.
- Ocean front access
Hawai'i County Parks and Recreation
- Vessel Support
Partnering opportunities may exist with State of Hawai'i Department of Land and Natural Resources (DLNR) and/or U.S. Coast Guard for dual use of vessels and to support facilities (docks, storage, and parking).
- Education and Outreach
Numerous partnering opportunities exist with county, state and federal entities. Formal MOA's are in place with Hawai'i Volcanoes National Park and Imiloa Astronomy Center. Activities are done informally with UH Hilo, Hilo Bay Watershed Advisory Group, Hawai'i Wildlife Fund, and other local environmental groups.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Expand the Downtown Presence and Seek Out Additional Locations to Enhance Capability
Meets the shared needs of the sanctuary and monument		✓
Meets the shared needs of the co-manager, and/or co-trustee		✓
Proximity to sanctuary offshore boundaries		
Easily accessible by the community	✓	✓
Accessible for water operations		✓

Table 2: Hilo - Mokupāpapa Discovery Center Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

Recommendations

- S. Hata Building

Lease additional space for storage and office space. The additional space requirements for office space and dry storage possibly can be accommodated on the second floor in the S. Hata Building. The new office space should be adjacent to the existing office space. The dry storage may be not directly adjacent to the existing office space. It may be possible to co-locate the additional office space requirements within the existing space by re-allocating space within the existing office and by locating storage in a separate suite.

- Off-Site Storage

The S. Hata building does not have the capability of providing the required outside yard storage, or government vehicle storage. Acquire outside yard storage and ONMS vehicle / equipment storage.

- Vessel Support

Acquire access and use of large vessel dock with vessel-gear storage and dock side parking. Vessel support should be located at the Wailoa Sampan Basin and Boat Harbor in Hilo Bay, or in Hilo Bay Commercial Harbor. Explore partnering opportunities.

- Education and Outreach

Acquire and/or develop, in partnership with the County of Hawai'i parks department, opportunities and facilities to support education and outreach in the near-shore marine environment for school children, residents, and tourists. The space for education and outreach could be located at one of the county parks along the coast near Hilo such as Richardson's park.



The Waterfront Along Downtown Hilo / Photo Source: Picasaweb.google.com

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hilo - Mokupāpapa Discovery Center

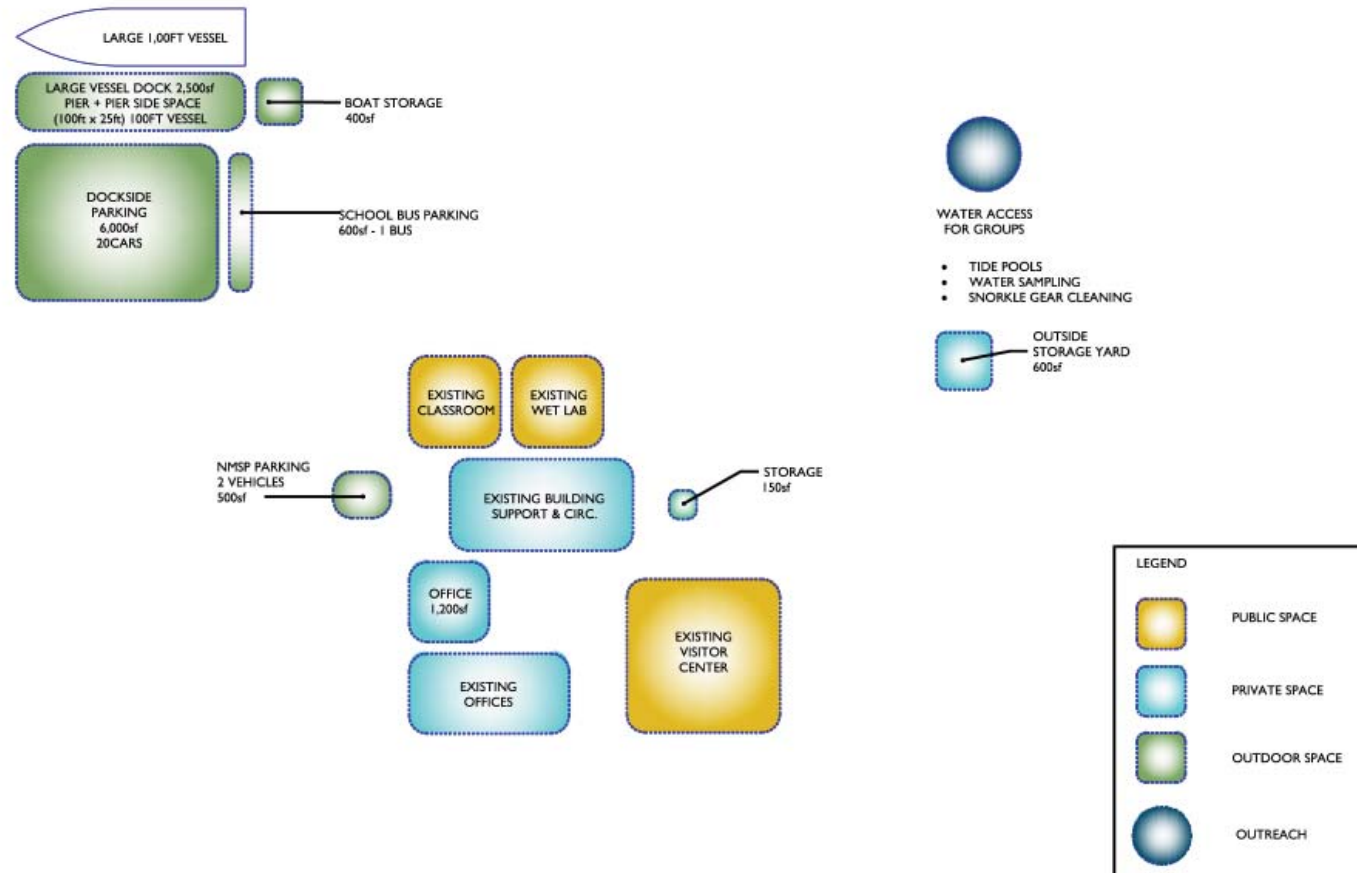


Figure 6: Mokupāpapa Discovery Center Concept Illustration

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Summary of the Existing Facilities

The Hawaiian Islands Humpback Whale Sanctuary (HIHWNMS) Kona Office is currently located in space made available to NOAA and DLNR by the Natural Energy Laboratory Hawai'i Authority (NELHA). The existing facility is not satisfactory because it is difficult to get to, does not provide adequate storage or public meeting space, and has little potential to accommodate future needs.

Existing Space Utilization

- Office
- Meeting
- Storage
- Visitor center

Tenure of Space (Leased or Owned)

The HIHWNMS Kona office is in space provided by the (NELHA) through a no-cost lease agreement between DLNR and NELHA. The agreement has been reviewed and renewed every two years since 2004.

Historical Issues

None

Building Code Issues

The Kona Office is located in the NELHA facilities. Hawai'i County is currently using the International Building Code 2003, with Hawai'i County Amendments. No building code

issues were noted.

NOAA's future projects in NELHA should procure a Hawai'i County building permit to maintain the integrity of NELHA's building certificate(s) of occupancy, and may be required by the landlord tenant agreement.

NOAA future projects on federal government controlled land will not require Hawai'i County building permit approval. Rather, the architect and engineers of record have a duty to design the facility to conform to the then current building codes and standards as their standard of care.

Environmental Issues

The master plan does not include a National Environmental Policy Act (NEPA) environmental review process stage one. NOAA should conduct further environmental analysis (NEPA stage one) prior to commencement of future design and construction work.

Utility Infrastructure Issues

Future sites will need to be evaluated for the following services as part of a site selection process.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

- **Water**
Water service is provided as part of the NELHA facility services by the County of Hawai'i, Department of Water Supply. No water-service issues are anticipated for expansion at the NELHA facility.
- **Sanitary Sewer**
Sanitary-sewer service is provided as part of the NELHA facility services. No sanitary-sewer-service issues are anticipated for expansion at the NELHA facility.
- **Storm Sewer**
Storm-sewer service is provided as part of the NELHA facility services. No storm-sewer-service issues are anticipated for expansion at the NELHA facility.
- **Gas**
Gas service is not provided as part of the NELHA facility services. No gas-service issues are anticipated for expansion at the NELHA facility.
- **Electric Service**
Electrical service is provided as part of the NELHA facility services by Hawaii Electric Light Company. No electrical-service issues are anticipated for expansion at the NELHA facility.



Pu'ukohola Heiau National Historical Site in Kona / Photo Source: FCA

- **Telecommunication**
Telecommunication service is provided as part of the NELHA facility services by Hawaiian Telephone Company. No telecommunication-service issues are anticipated for expansion at the NELHA facility.

Internet 2 service is desired at this location.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Access and Parking

- Private Vehicles
The Kona office should provide adequate parking for both public and staff. Parking for four (4) staff and sixteen (16) visiting public is required.
- Public Transportation
In Hawai'i County, public transportation is available only by the public bus "Hele-on" which provides limited service.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff at the Kona facility.

Vessels

The Kona office currently has one inflatable boat with outboard motor used for disentangling of humpback whales. The inflatable vessel is stored un-inflated in a corner of the office along with the outboard motor and disentangling gear. Vessel support may be located separately from the Kona facility at the small boat harbor at Honokōhau, Kailua-Kona or Keauhou small boat harbor. Boat ramp access is required as well as vehicle parking.

Facility Requirements

- Administrative
 - Office space - Additional office for three (3) staff.
 - Office space for partners – Office space for one (1) partner agency.
- Education
 - Outdoor activity – Outside space for outdoor activity.
- Research
 - Wet laboratory – A wet laboratory with lab sink and refrigeration is required to support research operations.
 - Operations – No operational requirements.



Hilo Bay / Photo Source: pictopia.com

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

- Operations
 - Dive locker – A dive locker to support gear storage for four (4) divers.
- Enforcement
 - Secure storage – Secure storage for law enforcement with freezer.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.
 - Covered outside – Covered, outside storage to store whale-disentanglement-inflatable boat and gear.
- Outreach
 - Visitor center – A visitor center for education and outreach.
 - Community room – A community room for education and outreach.
 - Storefront or kiosk – Several kiosks or signage locations for outreach and education.
- Parking
 - Staff – Parking for staff vehicles.
 - Government vehicles – Parking for a government vehicle is required.
 - Visitors – Parking for visitors.
- Vessel Support
 - Dock – Dock space for small vessels, up to 35 foot maximum.
 - Vessel storage - Storage for vessel gear and sampling gear.
 - Parking at dock side.



Kahalu'u Bay / Photo Source: hawaii-kona.com

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Location: Kona Natural Energy Lab of Hawaii - Expansion				
	Projected Needs	Priority	Area (sf)	Assumptions
Administrative			1200	
Office Space for ONMS Staff	3 staff total (1 existing + 2 additional)	1	900	200 sf per person *1.5 circulation
Conference/Media Center				
Education				
Classroom				
Research				
Wet Laboratory	lab sink fume hood lab tables single work center lab freezer/fridge coral tank	2	600	600 sf
Operations				
Enforcement				
Storage				
Dry Storage	appropriate office storage education supplies outreach materials	1	200	200 sf
Refrigerated Storage	in lab	1		
Covered Outside Storage	inflatable boat with outboard motor buoys, floats 200 sf	1	600	600 sf
Outreach				
Visitor Center	500 sf with regional message staff required	2	500	given
Community Room/Conference Center	seating for 50 multi-use	1	1125	15 sf per person * 1.5 circulation
Storefront or Kiosk	200 sf kiosk, harbor, airport?	1	200	given
Museum, Aquarium, or Science Center				

Table 3: Kona Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Location: Kona Natural Energy Lab of Hawaii - Expansion				
	Projected Needs	Priority	Area (sf)	Assumptions
Parking				
Staff	4 Spaces	1	1200	200 sf per car * 1.5 circulation
ONMS Vehicles or Equipment				
Enclosed Garage		2	300	
Visitors	16 Spaces	2	4875	200sf per car * 1.5 circulation
Waterfront				
Dock for Large Vessels				
Dock for Small Boats	35' max with utilities gated pier	2	1440	40ft x 36ft
Storage	maintenance equip marine animal rescue equipment	2	900	given
Maintenance facilities		2		
Utilities				
Parking	2 spaces	2	600	200 sf per car * 1.5 circulation
Technology				
I2		2		
Satellite				
High Speed Internet		1		
Videoconferencing		1		
GIS				
Signage				
Informational & Directional	arrival signage at NELHA Authority	2	300	
Other Requirements				
Retail				
Support & Circulation		n/a		

Table 3: Kona Requirements contd.

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Partnering Opportunities

- National Park Service
Education and outreach partnerships with the National Park Service are underway at Pu'ukohala Heiau National Historical Site. Potential partnership at Kaloko-Honokōhau National Historical Park should be explored.
- Hotels
Education and outreach partnerships with National Parks Service are underway at Pu'ukohala Heiau and with the hotel at Kahalu'u Bay.
- Airport
Partnership with the Kona airport to provide interpretive materials (signage and exhibits) to educate visitors and residents should be explored.



Kona International Airport / Photo Source: pictopia.com



Photo Source: visitusa.com



Pu'ukohala Heiau National Historical Site in Kona /

Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support HIHWNMS Kona. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for the Kona facilities (leased or owned) including vessel support facilities.
- Implement the capital improvements to procure and establish the Kona facilities.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Expand at the Current Location	C. Relocate to Another, More Convenient Facility
Meets the shared needs of the sanctuary and monument		✓	✓
Meets the shared needs of the co-manager, and/or co-trustee		✓	✓
Proximity to sanctuary offshore boundaries			✓
Easily accessible by the community			✓
Functionally accessible for operations			✓

Table 4: Kona Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kona

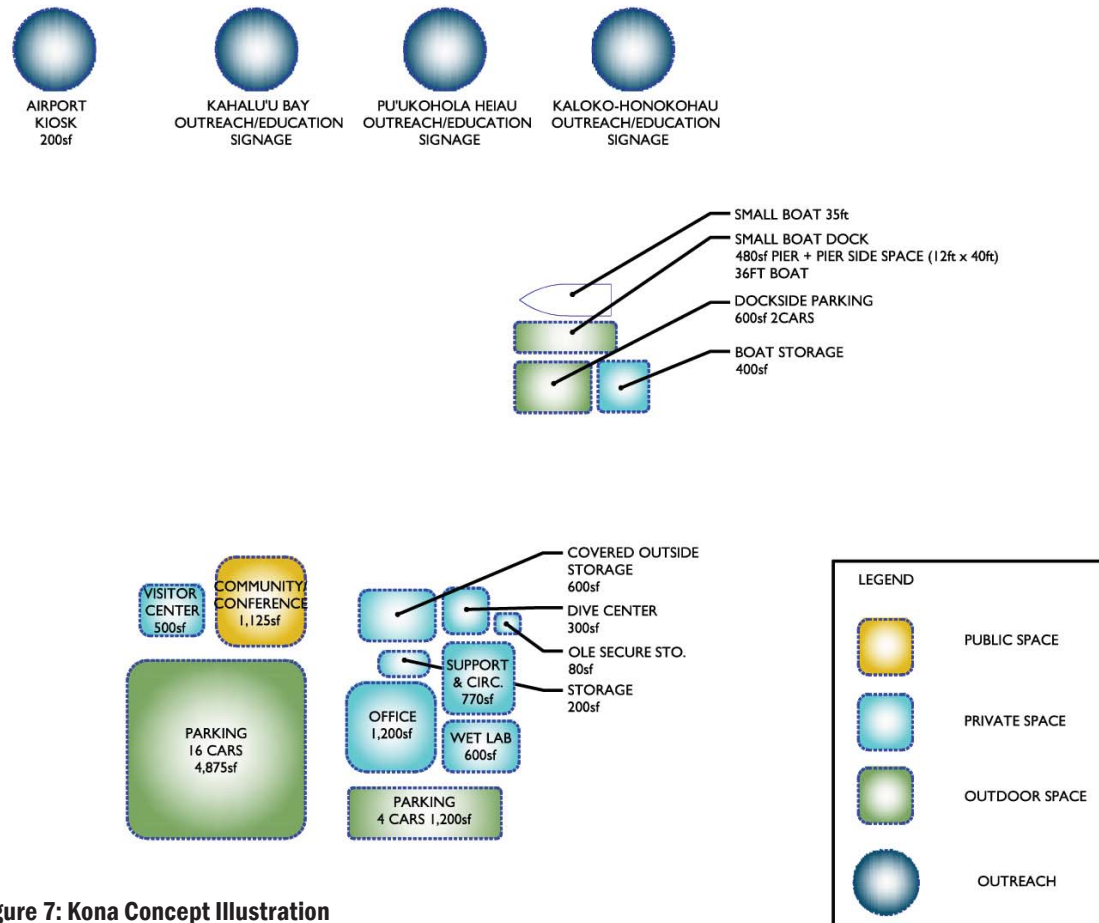


Figure 7: Kona Concept Illustration

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

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DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Summary of the Existing Facilities

The Kīhei facility consists of three (3) separate buildings, the main building (blue house), the Education Center (the masonry building) and the new multi-purpose building.

Existing Space Utilization

- Office
- Meeting
- Storage
- Visitor center

A vessel and storage are located nearby at Mā'alea harbor.

Tenure of Space (Leased or Owned)

The HIHWNMS managed Kīhei facility in Maui is located on federal government land presently owned by the Department of Commerce of which NOAA is a part. This facility is considered the headquarters of the HIHWNMS, since it is in the “heart” of the sanctuary and provides the venue for public education and outreach activities, as well as the base for research and resource protection efforts.

Historical Issues

- Purpose
This historical building evaluation is presented in order to give a brief overview of the evolution and significant characteristics of the buildings on the site that are over 50 years old. Neither of these buildings is on, nor has been determined to be eligible for inclusion on the

National or State of Hawai'i Register of Historic Places. The observations and recommendations made herein are intended as a guide for future rehabilitation, or restoration projects.

- Methodology
Background information as well as historic photographs of the site were consulted and a field investigation was conducted on June 9, 2008.
- Historical Description
The site of the Hawaiian Islands Humpback Whale National Marine Sanctuary in Kīhei, Maui is currently home to three (3) diverse buildings. It is situated along the eastern shore of Ma'alaea Bay directly adjacent to the Kalepolepo Fish Pond.



*HIHWNMS Small Boats Located in Maalaea Harbor on Maui / Photo
Source: NOAA*

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

The property was leased by the federal government and used as a Navy degaussing facility beginning in 1941. Construction began on the main administration building and adjacent garage building (no longer exists) in 1942. In 1947, the National Bureau of Standards constructed radio transmitting antennas on the site as part of Kaua'i's utility radio station WWVH.

In 1954, a concrete masonry unit (CMU) building was constructed on the property. The property was then purchased in 1956 from Ka'ono'ulu Ranch and continued to house the WWVH operations until 1971.

In 1971, the federal government shifted use of the property to NOAA for the National Environmental Satellite, Data and Information Station. Then, in 1994, the Federal government shifted the property to its current tenants.

Two smaller buildings have recently been removed from the site to make room for the newly constructed multi-purpose building.

Administration Building, or Main Building (The Original Blue Building)

This square building, constructed in 1942, is a two-story wooden structure with a hip roof and a central cupola. It

is constructed on concrete piers with a concrete-masonry skirting enclosing the crawlspace. The exterior has shiplap siding and imitation slate roof. A series of wood decks are found on three sides of the building at the first and second levels, along with two exterior staircases to the second floor. An elevated walkway / ramp extends from the parking lot to the attached first floor deck on one side. Vinyl, double-hung, 6/6 windows are predominant, but the larger second floor windows that face the ocean are single-pane and fixed. The wooden louvers below these fixed windows are secured with hinged plywood.



*The Administration Building at the Kīhei Facility /
Photo Source: NOAA*

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Feature	Description	Condition	Recommendation	Photo
Building Form	Original square plan with no building additions	Good	Retain original square building form	
Hip Roof	Pyramidal hip roof with non-original shingles	Good	Retain roof form - consider replacing shingles with original roofing material	
Cupola	Single room at third level, accessed by an internal staircase	Good, some evidence of old termite, or other damage to wood floors	Retain	
Shiplap siding	8" wide horizontal shiplap siding	Good, needs to be painted	Retain and maintain with proper paint procedures	
Original exterior doors	Two original exterior panel doors with upper glazing and replacement hardware	Good	Replace inappropriate hardware with period appropriate	 
Original interior casework	Plywood built-ins in kitchen, conference room, main office	Fair/good - slightly over painted	Retain	

Table 5: Character Defining Features – Administration Building

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Feature	Description	Condition	Recommendation	Photo
Original hardware	Intermittent original door hardware on interior doors	Good - slightly over painted	Retain and remove paint	
Original light fixtures	Original lamp holders at second floor deck - no globe	Fair	Consider replacing globes	
Canec Ceilings	Interior, second floor	Good	Retain	

Table 5: Character Defining Features – Administration Building contd.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Feature	Description	Condition	Recommendation	Photo
Vinyl Windows	Replacement double-hung 6/6 with transom	Good	Consider replacing with wood windows that more closely replicate the original window type and muntin pattern	
Added Decks and Railings	Non-original front and side decks with non-original style railings	Good		
Staircases	Two non-original exterior staircases with Trex decking	Good	Required for code	
Replacement Door	Aluminum and vinyl	Good	Replace with more period appropriate style	

Table 6: Detracting Features – Administration Building

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Feature	Description	Condition	Recommendation	Photo
Replacement Railings	Vertical wood railing system at decks and ramps	Good	Consider replacing the railing system with a more horizontally oriented style closer to the original	
Solar Collector	Roof-mounted solar hot-water heater	Unknown		
Deck skirting	Diagonally-oriented deck skirting at first floor	Fair		
Replacement hardware	Non-original brushed aluminum door hardware	Good	Replace with period appropriate door hardware	

Table 6: Detracting Features – Administration Building contd.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

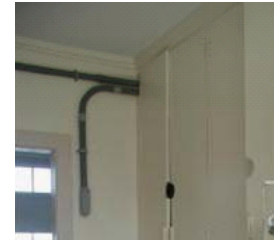
Feature	Description	Condition	Recommendation	Photo
Surface-mounted electrical	Interior and exterior wall-mounted conduits and wire mold	Good		
Storefront Door	Non-original glazed-aluminum main entry door	Good	Replace with period-appropriate entrance door	

Table 6: Detracting Features – Administration Building contd.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

The Education Center (The Visitor Center, or the Masonry Building)

This rectangular structure, built in 1954, is a single-story concrete masonry building with a low gable roof. The roof consists of wood trusses with diagonally-oriented wood tongue-and-groove sheathing with asphalt shingles. The building has an irregular pattern of vinyl sliding windows and an aluminum storefront door which faces the parking lot. There is one original-wood, Dutch door on the ocean side of the building. The interior consists of one large, open room with two smaller rooms on opposite ends. The wood roof trusses and decking are exposed and the floor is concrete.



Education Center / Photo: GMA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kihei

Feature	Description	Condition	Recommendation	Photo
Building Form	Original rectangular plan with no building additions	Good	Retain	
Rafters	Exposed wood rafters with wood fascia	Good	Retain	
Roof Sheathing	Diagonally-oriented wood tongue-and-groove roof sheathing	Good	Retain	
Wood Trusses	Exposed wood truss system	Good	Retain	
Interior Gable Walls	Wood tongue-and-groove gable walls, above main CMU portion of two interior walls	Good	Retain	
Dutch Door	V-groove, vertical board Dutch door	Fair - with repairs and replacement hardware	Retain - replace non-original hardware with period appropriate	

Table 7: Character defining features – Education Center

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kihei

Feature	Description	Condition	Recommendation	Photo
Vinyl Windows	Vinyl sliding windows	Good	Replace with wood windows that more closely replicate the original window type and muntin pattern	
Main Entry Door	Double aluminum storefront door	Good	Replace with period appropriate style door	

Table 8: Detracting Features - Education Center

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Building Code Issues

ONMS staff are officed in the three (3) buildings with public activities occurring on a regular basis in the Education Center and multi-purpose building. Maui County is currently using the Uniform Building Code 1997, with Maui County Amendments. No building code issues were noted.

NOAA's future projects at Kīhei are not required to procure a Maui County building permit. Rather, the architect and engineers of record have a duty to design the facility to conform to the then current building codes and standards as their standard of care.

Renovation of existing buildings that exceed 50% of the area of the building will require the entire building to comply with current building code.

Site Issues

- Environmental issues
The master plan does not include an NEPA environmental review process stage one. NOAA should conduct further environmental analysis (NEPA stage one) prior to commencement of future design and construction work.

Utility Infrastructure Issues

- Water
Water service is provided as part of the Kīhei facility services, by the County of Maui Department of Water Supply. No water-services issues are anticipated for expansion at the Kīhei facility.
- Sanitary Sewer
Sanitary sewer service is provided by County of Maui. No sanitary-sewer-service issues are anticipated.
- Storm Sewer
Storm-sewer services are either non-existent or undersized along South Kīhei Road. The facility has experienced flooding in the recent past from Kūlanihākoʻi Gulch. Flooding is an area issue and needs to be addressed by improvements off site from the Kīhei facility.

Flood Insurance Rate Map (FIRM) indicates the site to be in zone V10 which is defined as area of 100-year-coastal flood with velocity wave action.

New construction will either be required to be above the flood elevation, similar to the new multi-purpose building, or flood-proofed.
- Gas
Gas service is not provided at the Kīhei site. No gas-

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

services issues are anticipated.

- **Electric Service**
Electrical service is provided by Maui Electric Company (MECO) from MECO utility pole #77 and #1-105; and, is fed underground to an existing 45kVa utility transformer. We understand electrical service upgrades are being made.

The electric service comes into the site from across the street to a utility pole near the front entrance driveway. This pole should eventually be eliminated in order to improve the aesthetics of the entrance way. The electric service could be rerouted to the site either under the road way, or the utility pole could be relocated away from the entrance, preferably near the southeast corner of the property.

- **Telecommunication**
Telecommunication service is provided by Hawaiian Telephone Company. No telecommunication-service issues are anticipated for expansion at the Kīhei facility.

Internet 2 service is desired at this location.

Access and Parking

- **Private Vehicles**
Provide adequate parking for both public and staff. Parking for up to twenty (20) staff and up to one hundred (100) visiting public.
- **Public Transportation**
Public transportation in Maui County is provided by “Maui Bus”, which provides limited service.
- **Bikes**
Bike racks should be provided along with a shower and changing facility for staff at Kīhei facility.
- **Boats**
Vessel support for two small boats. Vessel support may be located separately from the Kīhei facility at the small boat harbor at Ma‘alaea. Boat ramp access and vehicle parking is required. A vessel maintenance facility would also serve for storing and maintaining the small boats.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Flooding

The campus lies within the 100 year flood plain and storm water sheet flows across the site. Regional flood mitigation should be explored with the County of Maui.

New construction will either be required to be above the flood elevation, similar to the new multi-purpose building, or flood-proofed.

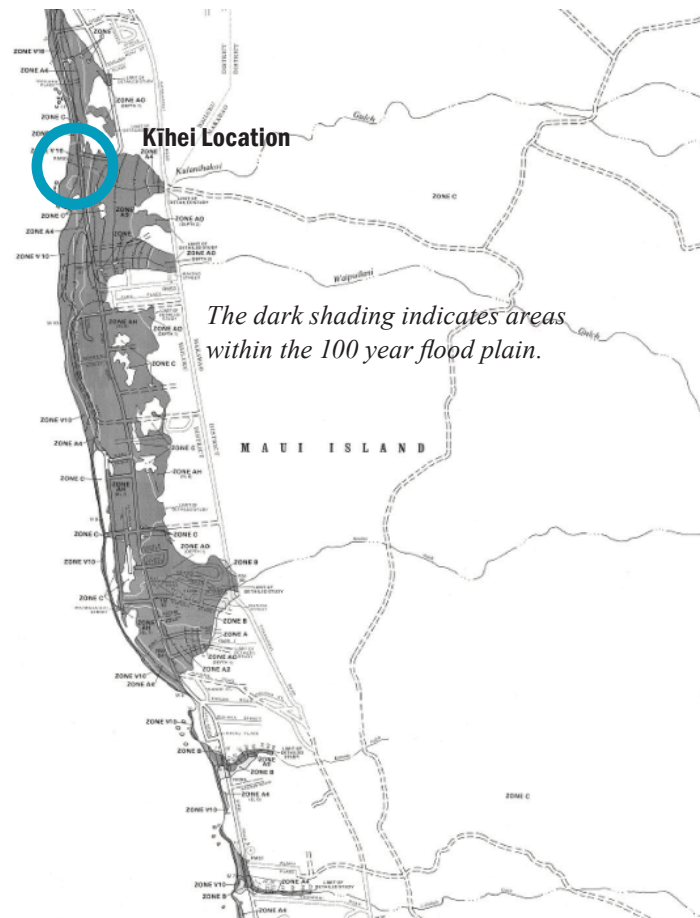


Figure 8: Kīhei, Maui Flood Insurance Rate Map

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Shoreline Erosion

The reconstruction of the Ko'ie'ie fishpond appears to be resolving some of the shoreline erosion issues. However, an analysis should be done to determine if the shoreline needs to be further hardened to protect the administration building from high waves or storm surge.

Operations and Maintenance

No issues are anticipated with the operations and maintenance.

Vessels

HIHWNMS presently has one (1) 23-foot vessel and an 11m vessel. The vessels are docked at the State of Hawai'i's Ma'alaea Small Boat Harbor in a slip borrowed from State of Hawai'i's Division of Conservation and Resources Enforcement (DOCARE). There is the potential for a 41-foot vessel to be managed by the sanctuary and to be based out of this harbor.

Preliminary plans call for further discussions with the U.S. Coast Guard and the harbor master in regards to utilizing the slip adjacent to their new pier which is adjacent to the Coast Guard station.

Facility Requirements

- Administrative
 - Office space – Should include a total of 21 spaces for staff and others.
 - Office space for partners – The above number should accommodate four (4) partner-agency staff.
- Education
 - Create a campus-like setting that would tie the buildings together.
 - Develop a pedestrian courtyard with seating, benches, and outdoor classroom.
 - Provide connections to the adjacent county open space and park on the north and south and to the pedestrian trail system.
- Research
 - Wet laboratory – dual-use, mini-lab for education (with touch tanks) and also research/rescue application (with -80 F freezer).
- Operations
 - Sleeping space for four (4) guests in two (2) rooms with adjacent guest bathroom.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

- Enforcement
 - Secure storage – Secure storage for law enforcement with freezer.
- Storage
 - Covered outside – Flammables cabinets, locked and protected but not all-weather.
- Outreach
 - Visitor Center – A visitor center for education and outreach.
 - Potential to locate visitor center or storefront in either Lāhaina, or at Whaler’s Village at Ka’anapali.
- Parking
 - Private Vehicles – Provide adequate parking for both public and staff. Parking for up to twenty (20) staff and up to one hundred (100) visiting public.
 - ONMS vehicles – fenced area for two (2) government vehicles and “carport” for small boat on trailer storage.
 - Visitors – parking for visitors. The existing site is constrained and cannot support the visitor parking requirement. Off-site parking for visitors should be considered as a solution to the parking issue.
 - Public transportation in Maui County is provided by “Maui Bus,” which provides limited service.
- Bikes – Bike racks should be provided along with a shower and changing facility for staff at
- Boats – vessel support for two small boats. Vessel support may be located separately from the HIHWNMS Kīhei facility at the small boat harbor at Ma’alaea. Boat-ramp access, a maintenance facility, and vehicle parking are required.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kihei

Location: Kihei, Maui				
	Projected Needs	Priority	Area (sf)	Assumptions
Administrative			4800	
Office Space for ONMS Staff	maximize existing admin. building (blue) and education center 6 staff from existing 1st floor and 6 additional new staff	1	3600	new addition to Multi-purpose /Education building
Office Space for Partners	4 additional workstations	1	1200	new addition to Multi-purpose /Education building
Education				
Outdoor Activity Space	create a campus-like setting that ties buildings together develop a pedestrian courtyard with seating, benches, and outdoor classroom provide connections to the adjacent county parks on the north and south and to the pedestrian trail system	1	5000	converted from a portion of the existing outdoor parking area between buildings
Research				
Wet Laboratory	dual use mini-lab for education (with touch tanks) and also research/rescue application (-80° freezer)	1	600	600 sf new addition to Multi-purpose/Education building
Operations				
Dormitory	bunk space for 4 guests in 2 rooms	3	400	200 sf per room in new addition to Multi-purpose building
Enforcement				
Secure Storage	70 sf with small freezer	1	70	given, to be located in new addition to Multi-purpose building
Storage				
Covered Outside Storage	flamable cabinets - locked	1	400	assumed 400 sf
Outside Storage	protected but not all weather	1	400	assumed 400 sf
Outreach				
Visitors Center	1,500 sf of exhibit space	1	3000	Blue Building, assumed 1500 store and related storage
(access to a location not controlled by ONMS)	Maui ocean center and Ma'alaea harbor (for boat storage) plus possible partnership with USCG to use their facility	1		

Table 9: Kihei, Maui Requirements

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Location: Kīhei, Maui				
	Projected Needs	Priority	Area (sf)	Assumptions
Parking				
ONMS Vehicles or Equipment	fenced area for 2 vehicles	1	600	200 sf per car *1.5
Enclosed Garage	fenced carport for boat	1	400	400 sf
Visitors	parking for 100 people (includes existing)	3	30000	200 sf per car *1.5
Waterfront				
Dock for Small Boats	1 - 41' length 15' beam boat (50' trailer) 1 - 22' length boat secure location - swells - public (gated pier)	1		
Storage	200 sf for marine rescue disentanglement equipment	1	200	given
Maintenance facilities	daily maintenance - not long term maintenance yard and shelter for long term maintenance by others	2		
Utilities	at dock and maintenance facility	1		
Erosion Control	shoreline erosion and site flooding due to runoff	1		
Technology				
I2		1		
Satellite		1		
Videoconferencing		1		
Signage				
Informational & Directional	arrival signage	1		
Security	site security to protect against vandalism and after hours use	1		

Table 9: Kīhei, Maui Requirements contd.

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

- Vessel Support
 - Dock – Dock space for two (2) small vessels
 - Forty-one-foot (41') boat
 - Twenty-two-foot (21') boat
 - Vessel storage- Storage for vessel gear and disentanglement gear
 - Maintenance facilities
 - Parking at dock side

Partnering Opportunities

Office space for partner agency.

Potential partnership with U.S. Coast Guard for vessels-support facilities at Ma'alaea Small Boat Harbor.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Move to a New Location	C. Develop a Facility Strategy that Best Fits the Sanctuary's Needs on Kauai
Meets the shared needs of the sanctuary and monument		✓	✓
Meets the shared needs of the co-manager, and/or co-trustee		✓	✓
Proximity to sanctuary offshore boundaries			✓
Easily accessible by the community	✓	✓	✓
Functionally accessible for operations			✓

Table 10: Kīhei, Maui Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

Recommendations

- Develop a strategy for procurement of the facilities required to support Kīhei. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for Kīhei facilities for vessel support, leased or owned.
- Implement the capital improvements to procure and establish the Kīhei facilities.
- Commission a shore-line-erosion study
- Enter into discussion with County of Maui for improvements to regional storm-water drainage.



Existing shoreline erosion / Photo: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

- Site Improvements
 - Create a hardscaped plaza between the buildings that can also be used for overflow \ parking during special events.
 - Regrade the site around the Masonry Building.
 - Expand the lawn area next to the Main Building.
 - Install signage and kiosks to present the cultural resources and history of the site.
 - Rebuild the outdoor classroom adjacent to the Masonry Building.

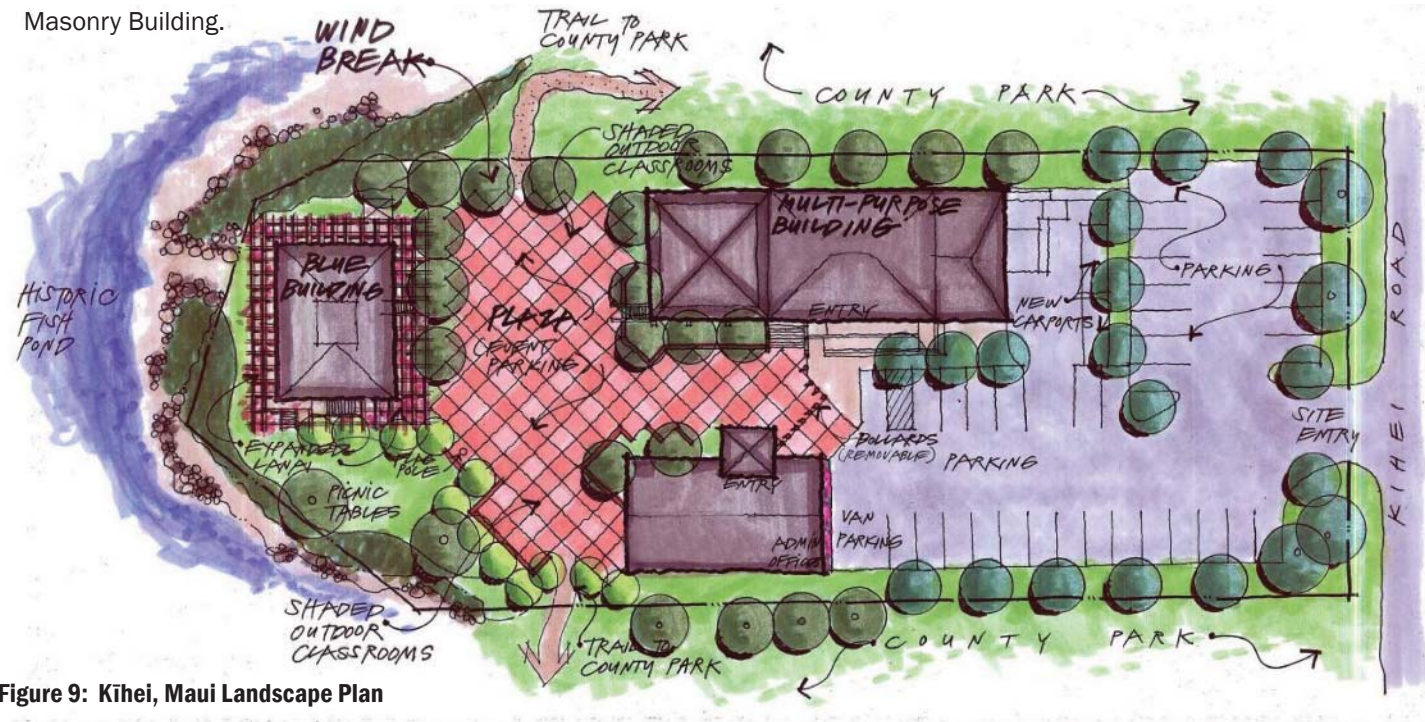


Figure 9: Kīhei, Maui Landscape Plan

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

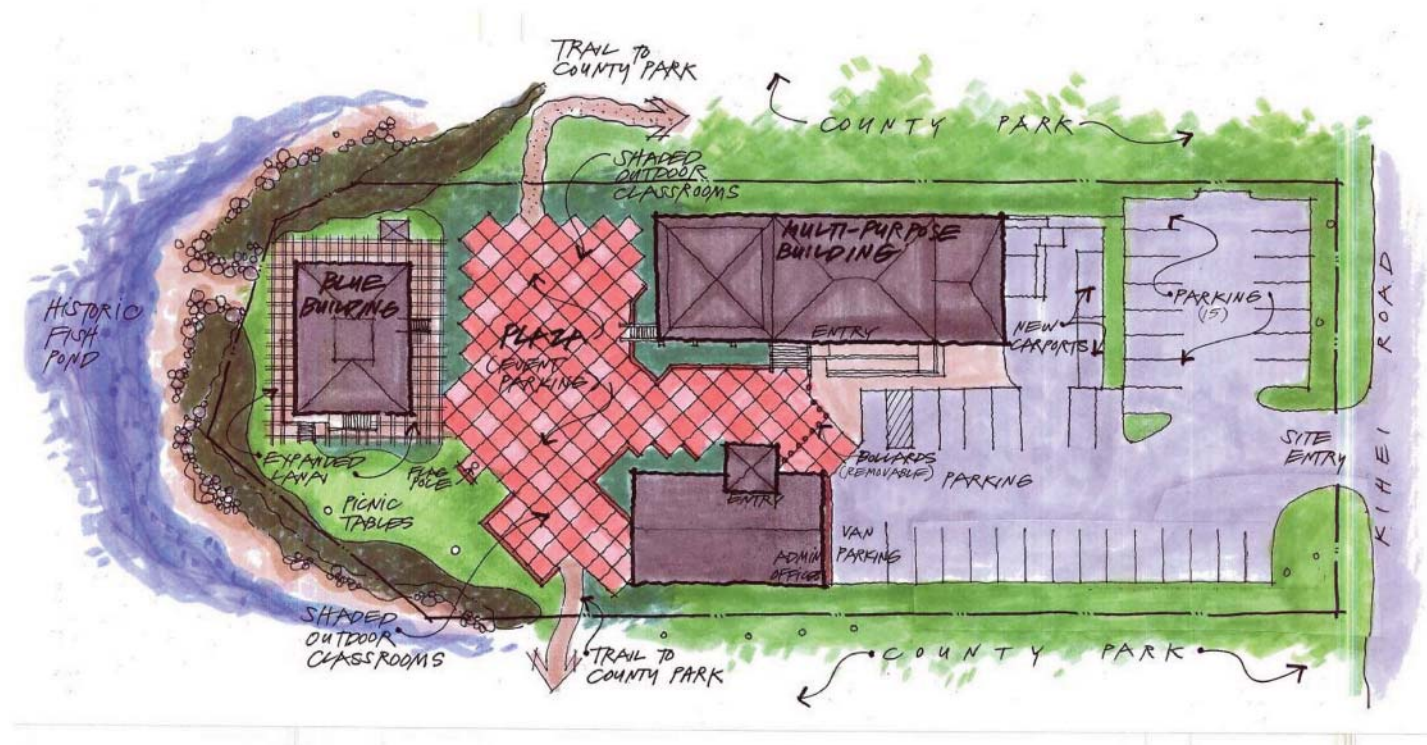
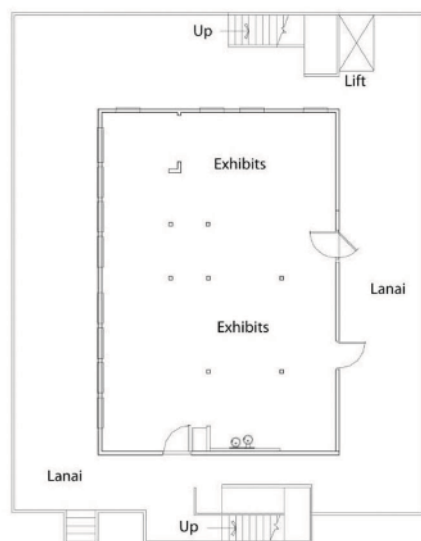


Figure 10: Kīhei, Maui Hardscape Plan

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

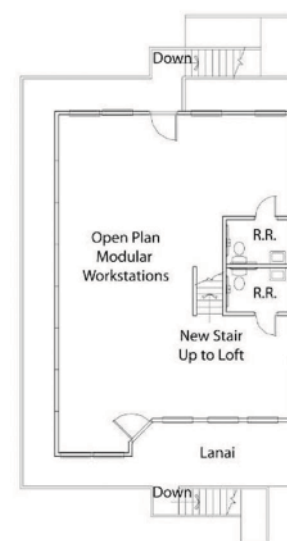
- Main Building
 - Make needed repairs to stabilize the building.
 - Convert the first floor into a new Visitor Center and construct an expanded lanai.
 - Remodel the second floor into efficient office space for staff.



Recommended

Blue Building
(Main Building)
First Floor Plan

1,666 Sq. Ft. Interior
2,462.5 Sq. Ft. Lanai



Recommended

Blue Building
(Main Building)
Second Floor Plan

1,551 Sq. Ft. Interior
613 Sq. Ft. Lanai

Figure 11: Kīhei, Maui Main Building, First Floor

Figure 12: Kīhei, Maui Main Building, Second Floor

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kīhei

- Implement historic preservation recommendations
 - Replace shingles with original roofing material.
 - Retain shiplap siding and maintain with proper paint procedures.
 - Replace inappropriate doors and hardware.
 - Replace vinyl windows with wood windows that more closely replicate the original type and pattern.
 - Replace railing and lanai system with rails and lanai closer to original style without compromising required egress.
 - Replace inappropriate light fixture.
- Masonry Building (Education Center)
 - Make interior improvements and convert from a visitor center to offices.
- Implement historic preservation recommendations
 - Retain building.
 - Replace windows with ones that more closely replicate the originals.
 - Replace inappropriate doors and hardware.



Photo: iStock

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kihei

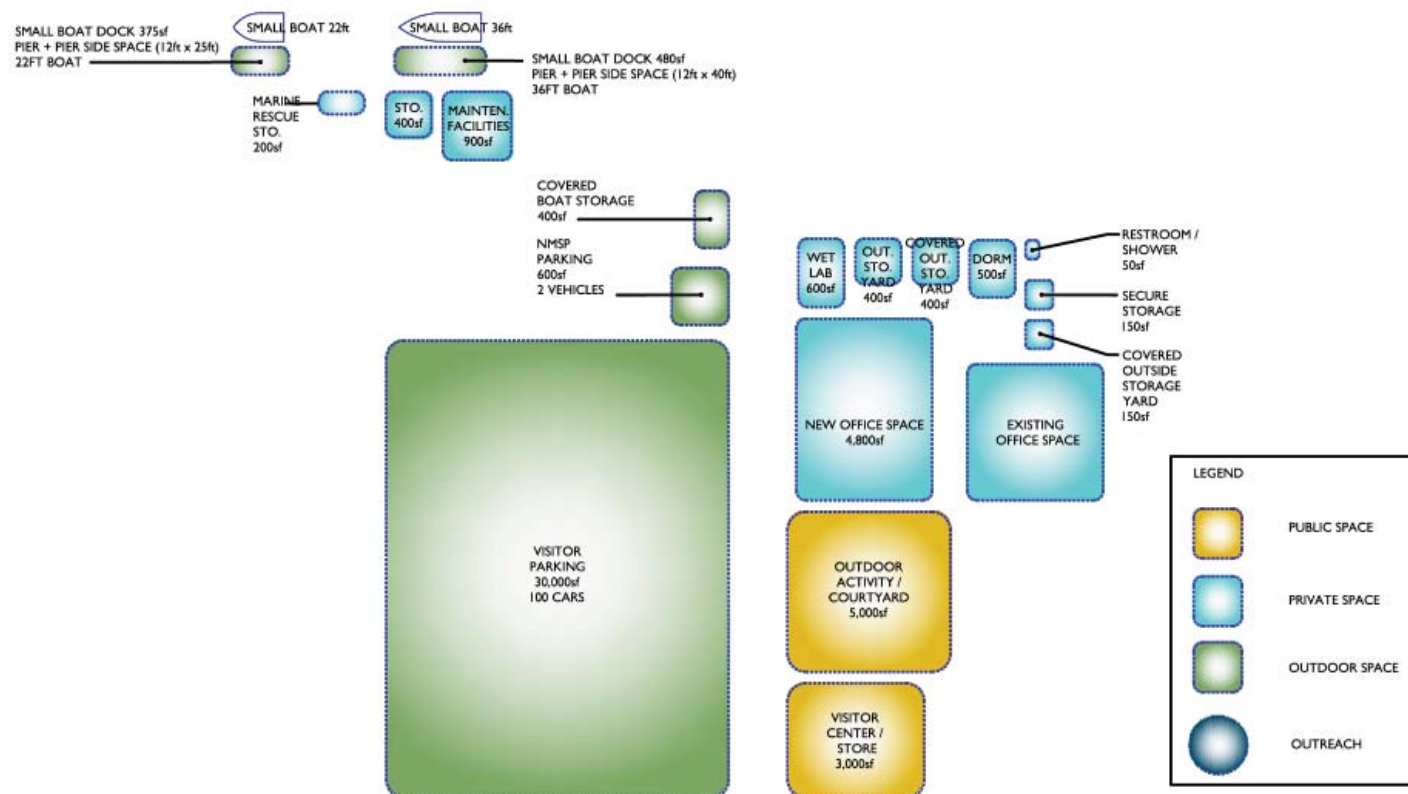


Figure 13: Kihei, Maui Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Summary of the Existing Facilities

The Hawai'i Kai facility supports the Pacific Islands Region (PIR) office, Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWMNS) office, and the Papahānaumokuākea Marine National Monument (PMNM) offices. A medium-sized conference room is in this facility and several self-storage lockers are leased at a nearby self-storage facility.

The existing facility is at maximum capacity for office space.

The Pacific Regional Center facility is planned to support nearly all NOAA operations on O'ahu. Refer to the next section for information on Pacific Regional Center.

Existing Space Utilization

- Office
- Meeting
- Storage

Tenure of Space (Leased or Owned)

The HIHWNMS, PMNM, and PIR offices are located in leased space in the Hawai'i Kai Corporate Plaza. The lease expires on September 30, 2014.

Historical Issues

No historical issue for the existing Hawai'i Kai office.



The ONMS Offices in the Hawai'i Kai Corporate Plaza / Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Building Code Issues

The HIHWNMS, PMNM, and PIR offices are located in the Hawai'i Kai Corporate Plaza and were constructed as a "tenant improvement". The City and County of Honolulu is currently using the International Building Code 2003, with City and County of Honolulu Amendments. No building code issues were noted and no building code issues are anticipated by future development as "tenant improvements" in the Hawai'i Kai Professional Center building.

NOAA's future projects in Hawai'i Kai Corporate Plaza building should procure a City and County of Honolulu building permit to maintain the integrity of the Hawai'i Kai Corporate Plaza building certificate(s) of occupancy, and may be required by the landlord tenant agreement.

NOAA's future project on federal government controlled land will not require City and County of Honolulu building permit approval. Rather, the architect and engineers of record have a duty to design the facility to conform to the then current building codes and standards as their standard of care.

Environmental Issues

The master plan does not include a NEPA environmental review process stage one. NOAA should conduct further environmental analysis (NEPA stage one) prior to commencement of future design and construction work.

Utility Infrastructure Issues

- **Water**
Water service is provided as part of the Hawai'i Kai Corporate Plaza building services by the Board of Water Supply, City and County of Honolulu. No water-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.
- **Sanitary Sewer**
Sanitary sewer service is provided as part of the Hawai'i Kai Corporate Plaza building services by the City and County of Honolulu, Department of Environmental Services. No sanitary-sewer-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.
- **Storm Sewer**
Storm-sewer service is provided as part of the Hawai'i Kai Corporate Plaza building services by the City and County of Honolulu, Department of Environmental Services. No storm-sewer-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.
- **Gas**
Gas service is provided as part of the Hawai'i Kai Corporate Plaza building services by the Gas Company. No gas-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Kai Corporate Plaza.

- **Electric Service**

Electrical service is provided as part of the Hawai'i Kai Corporate Plaza building services by Hawaiian Electric Company (HECO). No electrical-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.

- **Telecommunication**

Telecommunication service is provided as part of the Hawai'i Kai Corporate Plaza building services by Hawaiian Telephone Company and Oceanic Cable/Time Warner. No telecommunication-service issues are anticipated for expansion at the Hawai'i Kai Corporate Plaza.

Future sites will need to be evaluated for telecommunication service as part of a site selection process.

Access and Parking

- **Private Vehicles** – Existing parking is adequate.

- **Public transportation**

In City and County of Honolulu is provided by “The Bus”. The Bus provides frequent service at a stop directly in front of the Hawai'i Kai facility.

- **Bikes**

Bike racks should be provided along with a shower and

changing facility.

- **Boats**

Vessel support is planned as part of Pacific Regional Center, Marine Science & Storage Facility.

Operations and Maintenance

No issues are anticipated with the operations and maintenance.

Vessels

The HIHWNMS Hawai'i Kai office currently has one inflatable boat with outboard motor used for disentanglement of Humpback whales within the sanctuary. The inflatable vessel is stored un-inflated in a container on the site of the Pacific Regional Center at Ford Island, Pearl Harbor. This inflatable will be stored in Pacific Regional Center Marine Science and Storage Facility when completed in 2010, as part of NOAA's small-boats program.

Papahānoumokuākea Marine National Monument Hawai'i Kai office presently manages a 11-meter vessel that is stored at the Pacific Regional Center. The vessel has been used by HIHWNMS on Maui from November to May the past couple of years in support of research and rescue of humpback whales.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Facility Requirements

- Administrative

As of January 2009 additional office space is being pursued in the Hawai'i Kai Executive Plaza with the capacity for seventeen (17) additional workspaces.

- Education

Maintain programs that utilize nearby Maunalua Bay as a field-studies site to educate students about the marine environment. The conference room is used as the classroom in order to support field studies. Additional space and facilities would be required if the education program is to expand.

- Research

Current requirements are being fulfilled by partners. Future requirements will be fulfilled at the NOAA Pacific Regional Center.

- Operations

A security system is being installed to provide for controlled access to the offices.

- Enforcement

No additional requirements.

- Storage

Currently additional storage units have been leased in a nearby storage facility.

- Outreach

There is a need for better visibility of the ONMS office through signage. In addition, exhibits should be located in the facility for office visitors and interpretive signage should be located in nearby areas that have views of the sanctuary.

- Parking

Twenty-four hour parking is required for three (3) government vehicles. Staff parking can be accommodated in the existing parking currently provided.

- Vessel Support

Nearby vessel support would be useful to support training near the office and response within the HIHWNMS. Future small-boat support is planned as part of Pacific Regional Center Marine Science & Storage Facility.

Pacific Regional Center has completed construction of small-boat, finger piers at Ford Island as part of the Ship Operations Facility of Pacific Regional Center.

Partnering Opportunities

No additional requirements.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Location: Hawaii Kai				
Location: Hawaii Kai	Projected Needs	Priority	Area (SF)	Assumptions
Administrative				
Office Space for ONMS Staff - Now	35	1	13550	Existing leased office space
Office Space for ONMS Staff and Partners - Immediate	52	1	15645	Existing leased office space with additional leased 3,000 sf
Office Space for ONMS Staff and Partners - 5 years (totals)	35	1	13550	Assumes completion of the Pacific Regional Center and Hawaii Kai office third floor as outreach location
Office Space for ONMS Staff and Partners - 20 years (totals)	35	1	13550	Assumes completion of the Pacific Regional Center and Hawaii Kai office third floor as outreach location
Conference/Media Center		1		Included in existing leased office space
Education				
Classroom				
Outdoor Activity Space				
Research				
Wet Laboratory				
Dry Laboratory				
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				
Secure Storage				
Storage				
Dry Storage		3	1000	Assumed
Refrigerated Storage				
Covered Outside Storage				
Outside Storage Yard				

Table 11: Hawai'i Kai Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Location: Hawaii Kai				
Location: Hawaii Kai	Projected Needs	Priority	Area (SF)	Assumptions
Outreach				
Visitors Center				
Community Room/Conference Center				
Storefront or Kiosk	yes	2		
Museum, Aquarium, or Science Center	airport	1		
(access to a location not controlled by ONMS)				
Parking				
Staff				
ONMS Vehicles or Equipment				
Enclosed Garage				
Visitors				
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Technology				
I2		2		
Satellite				
High Speed Internet				
Videoconferencing				
GIS				
Signage				
Informational & Directional	directional - arrival -	2		

Table 11: Hawai'i Kai Requirements continued

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Hawai'i Kai

Recommendations

- Short Term:

An additional office space of 3,095 square feet in the Hawai'i Kai Executive Center is being built-out to accommodate seventeen (17) more people.

Secure dry storage should be leased nearby.

- Long Term:

This office has provided a convenient and necessary location for access by the public, for coordinating with other agencies and organizations; and, for providing easy access to resources. It is also located adjacent to the sanctuary waters. For these reasons, this space is important for the sanctuary and monument to maintain its presence in the Hawai'i Kai community even after the NOAA Pacific Regional Center is operational.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Move to a New Location (larger, but farther away)	C. Expand into Nearby Short Term Lease Space
Meets the shared needs of the sanctuary and monument		✓	✓
Meets the shared needs of the co-manager, and/or co-trustee		✓	✓
Proximity to sanctuary offshore boundaries			✓
Easily accessible by the community	✓		✓
Functionally accessible for operations			✓

Table 12: Hawai'i Kai Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

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DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center

Summary of the Existing Facilities

The Pacific Regional Center (PRC) has been planned to consolidate all O'ahu NOAA operations into one facility under the vision of One NOAA.

Presently the Ship Operations Facility is completed and in operations by NOAA including small-boat finger piers for support of the small-boat program.

The Marine Science & Storage Facility is presently being designed with construction expected to be completed in early 2010. This facility provides support for:

- NOAA's Small Boat Program.
- Warehouse storage including climate-controlled storage.
- Animal research facilities including captive-care tanks and physiology laboratory.
- Metal, wood, and electronics shops to support scientific activities and small boats program activities.

Existing Space Utilization

- Office
- Meeting
- Storage
- Visitor center



Pacific Regional Center / Source: HOK



PCR Interior / Source: HOK



PCR Interior / Source: HOK

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center

Tenure of Space (Leased or Owned)

The PRC is located on, and is planned for, federal government land controlled by the Department of Navy and used by NOAA under a memorandum of agreement between NOAA and Navy Region Hawai'i.

Historical Issues

Ford Island is located within the U.S. Naval Base at Pearl Harbor and is recognized as a National Historic Landmark consisting of numerous facilities, structures, and ships memorializing the attack on December 7, 1941.

Previously used as aircraft hangers, Buildings 175 and 176 are currently classified as Category II under the Integrated Cultural Resource Management Plan. Building 130 was also an aircraft hangar previously and classified as Category II under the Integrated Cultural Resource Management Plan as well.

Category II represents aspects of the built environment that possess sufficient historic significance to merit consideration for long-term preservation, but do not meet the criteria for assignment to Category I. Category II properties should be preserved over the long run if doing so does not seriously impede the installation or activity mission. Adaptive uses of Category II property should be actively sought.

Building Code Issues

The PRC consists of several buildings located on Ford Island, Pearl Harbor, Hawai'i. As the Department of the Navy's building code agent, Naval Facility Engineering Command Pacific (NAVFAC PAC) utilizes the International Building Code 2003, and National Fire Protection Association (NFPA) 101 for life safety egress issue.

No building code issues are anticipated.

NOAA's future projects that are to be located on federal government controlled land will not require City and County of Honolulu building permit approval. Rather, the architect and engineers of record have a duty to design the facility to conform to the then-current building codes and standards as their standard of care.

Environmental Issues

The PRC project has conducted environmental assessments and hazardous material surveys. Issues resulting from these assessments and surveys are being addressed by the PRC project.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center

Utility Infrastructure Issues

All utility issues are addressed by the PRC project.

Vessels

Pacific Regional Center Marine Science and Storage Facility is planned to accommodate up to thirty (30) small boats and presently has a set of small-boat finger piers.

Requirements

- Administrative
 - Pacific Regional Office – ten (10) staff.
 - Hawaiian islands Humpback Whale Sanctuary – thirty (30) staff.
 - Papahānaumokuākea Marine National Monument – sixty-nine (69) staff.
 - National Marine Sanctuaries program Research – thirteen (13) staff.
 - Two (2) open meeting rooms.
 - Copy Rooms.
- Education

The ability to do hands-on field-activities is essential as part of a successful education program which would include a wet lab and field sites. Due to the nature and use of Ford Island, there probably are no areas suitable for

field studies with students.

- Research

Research Labs (shared).
- Operations

No additional requirements.
- Enforcement

No additional requirements.
- Storage

Pacific Region Office (PRO), HIHWNMS and PMNM require one (1) storage room each for publications and exhibits.
- Outreach

ONMS works closely with local communities in support of its programs including advisory councils, field studies, education programs, and outreach activities. Due to the access restrictions of Ford Island, some of these programs may have to be done off-site as general public access is required.
- Parking

No additional requirements.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center

- Vessel Support
Small-boat support is planned as part of Pacific Regional Center Marine Science and Storage Facility.

The PRC project has completed construction of small-boat finger piers at Ford Island as part of the Ship Operations Facility of Pacific Regional Center.

Partnering Opportunities

The PRC is a NOAA facility.

Functional Relationships

Functional relationships at the PRC have been previously established.

Evaluating the Alternatives

The decision to relocate to Ford Island was made by NOAA. No alternatives were considered.

Recommendations

The head count provided for in the PRC re-planning effort (NOAA PRC Amendment 24) draft provides for all of the above requirements except for two (2) standard offices in the shared ONMS office area and six (6) workstations for ONMS research staff.

Concept Diagram

The concept diagram for the PRC has been previously established.



PRC Front Entry / Source: HOK

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center

HEADCOUNT SUMMARY 2018										NOAA PRC									
User Group	Executive Office / Mtg	Director	Division Chief	Standard Office	Large Workstation	Standard Workstation	Other	Total Headcount for June 2008 Plans	Total Headcount for May 2006 Plans	Change	Critical Adjacencies	Dedicated Support	Remarks						
LEGEND: Numbers that have changed since May 2006.									Research headcount must be located with Labs					Red Text No update provided					
National Marine Fisheries Service (NMFS - OLE)																			
OLE		1	2	11	8	1	1				Exterior entry, Fitness Center	Sep. lobby, Front ofc, Evidence receiving, Interview Rm, Holding Rm, Weapons Stg, Conf Rm, VMS Rm, Evidence Stg, Tech Stg, Secure File Rm, Lan Rms, Pantry, Workroom, Intel Rm	Secured space; 2 modified WS in front office (one floor does not count in headcount calculation)						
Subtotal									0	1	2	11	8	1	1	24	24	0	
National Ocean Service (NOS - PSC)																			
PSC	1		7	18	18	18			0		NWS PRH, NESDIS	1 storage rm							
Subtotal									1	0	7	18	18	18	62	52	10		
National Ocean Service (NOS - NMSP)																			
PRO		1	1	2	2	4					NOS groups	1 storage rm							
HIHWNMS		1	1	10	5	13					NOS groups	1 storage rm							
PMNM (formerly NWHICRER)		1	2	25	12	29					NOS groups	1 storage rm	PMNM =						
NMSP Research					3	10					Research Labs	Reference Center Pubs/Exhibit storage room Multi-media room 2 open meetings areas Copy room	Papahānāmokuākea Marine National Monument						
Subtotal									0	3	4	37	22	56	122	76	46		
National Weather Service (NWS)																			
EXEC	1		1			4					OAR & NESDIS								
AMD			1	1	4	1					AMD								
SOD			1	2	2	1					EXEC								
ESSD			1	6	1	1					HETU								
HETU - offices				1	3	0					Staff work in AWIPS Rm								
Subtotal									1	0	4	10	10	7	32	32	0	Open work area= to 6 lg w.s.	

Table 13: Pacific Regional Center Head-Count Summary 2018 (16 June 2008 Report)

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Pacific Regional Center



Figure 14: Pacific Regional Center, Level One Plan (2 July 2009 Report)

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Summary of the Existing Facilities

The HIHWNMS Kaua'i office is currently located in leased office space in Līhu'e. The existing facility is not satisfactory in that it does not provide adequate office space, operational spaces, storage, and public meeting space.

Existing Space Utilization

- Office
- Meeting
- Storage
- Visitor center

Tenure of Space (Leased or Owned)

The HIHWNMS Kaua'i office is located in leased space in the Kukui Grove Executive Center building. The lease expired in December 2008 but has been extended for short durations a few times since then. As of January 2009, the General Services Administration (GSA) is trying to extend the lease by three (3) years at the same annual cost.

Historical Issues

No historical issues for the existing HIHWNMS Kaua'i office.

Building Code Issues

The HIHWNMS Kaua'i office is located in Kukui Grove Executive Center and was constructed as a "tenant improvement." Kaua'i County is currently using the International Building Code 2003, with Kaua'i County Amendments. No building

code issues were noted and no building code issues are anticipated by future development as "tenant improvements" in the Kukui Grove Executive Center building.

For future projects in Kukui Grove Executive Center building or other leased space, NOAA should procure a Kaua'i County building permit to maintain the integrity of the Kukui Grove Executive Center building certificate(s) of occupancy, and may be required by the landlord tenant agreement.

NOAA's future project on federal government controlled land will not require Kaua'i County building permit approval. Rather the architect and engineers of record have a duty to design the facility to conform to the current building codes and standards as their standard of care.

Environmental Issues

The master plan does not include a NEPA environmental review process stage one; NOAA should conduct further environmental analysis (NEPA stage one) prior to commencement of future design and construction work.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Utility Infrastructure Issues

- Water

Water service is provided as part of the Kukui Grove Executive Center building services by the County of Kaua'i, Water Department. No water-service issues are anticipated for expansion at the Kukui Grove Executive Center.

Future sites will need to be evaluated for water service as part of a site selection process.

- Sanitary Sewer

Sanitary-sewer service is provided as part of the Kukui Grove Executive Center building services by the County of Kaua'i, Department of Public Works. No sanitary-sewer-service issues are anticipated for expansion at the Kukui Grove Executive Center.

- Storm Sewer

Storm sewer service is provided as part of the Kukui Grove Executive Center building services by the County of Kaua'i, Department of Public Works. No storm-sewer-service issues are anticipated for expansion at the Kukui Grove Executive Center.

Future sites will need to be evaluated for storm-sewer service as part of a site selection process.

- Gas

Gas service is not provided as part of the Kukui Grove Executive Center building services. No gas-service issues are anticipated for expansion at the Kukui Grove Executive Center.

Future sites will need to be evaluated for gas service as part of a site selection process.

- Electric Service

Electrical service is provided as part of the Kukui Grove Executive Center building services by Kaua'i Island Utility Cooperative. No electrical-service issues are anticipated for expansion at the Kukui Grove Executive Center.

- Telecommunication

Telecommunication service is provided as part of the Kukui Grove Executive Center building services by Hawaiian Telephone Company. No electrical-service issues are anticipated for expansion at the Kukui Grove Executive Center.

Future sites will need to be evaluated for telecommunication service as part of a site-selection process.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Access and Parking

- Private Vehicles

The Kaua'i office should provide adequate parking for both public and staff. Parking for four (4) staff and sixteen (16) visiting public is required.

- Public Transportation

Kaua'i County is limited to the public bus "The Kaua'i Bus," which provides limited service.

- Bikes

Bike racks should be provided along with a shower and changing facility for staff at Kaua'i facility.

- Boats

Future vessel support for a large vessel (one-hundred foot [100']) and a small boat (maximum thirty-six feet [36']). Vessel support may be located separately from the Līhu'e facility at the small-boat harbor at Nāwiliwili harbor, or Port Allen. Boat ramp access is required as well as vehicle parking.

Operations and Maintenance

No issues are anticipated with the operations and maintenance.

Vessels

The HIHWNMS Kaua'i office presently does not have any vessels.

Facility Requirements

- Administrative

- Office space for six (6) staff and ten (10) volunteers.
- Office space for partners – Office space for four (4) partner-agency staff.
- Conference space for twelve (12) people.

- Education

- Classroom – Classroom for thirty (30) people with dry-laboratory capability.

- Research

- Wet laboratory – A wet laboratory to accommodate thirty (30) students with one (1) research station.
- Dry laboratory – See education above.
- Operations
- Dive locker – A dive locker to support gear storage for six (6) divers.

- Enforcement

- Secure storage – Secure storage for law enforcement with freezer.
- Storage

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

- Dry storage – Dry storage, appropriate to support office functions.
- Refrigerated storage – Small walk-in freezer for storing samples.
- Covered outside – Covered outside storage to small boat and gear.
- Outreach
 - Visitor Center – A visitor center for education and outreach.
 - Community Room – A community room for education and outreach for up to one hundred seventy-five (175) people.
- Signage, or kiosk with exhibits, could possibly go at these locations, though further assessment is required.
 - Cruise ship terminal
 - Airport
 - Kīlauea Point National Wildlife Refuge
 - Hanalei National Wildlife Refuge
 - Po'ipū Beach Park
 - Wailuanuiho'ano
 - Hanama'ulu Bay and Ahukini Recreational Pier
- Parking
 - Private Vehicles – The Kaua'i office should provide adequate parking for both public and staff. Parking for



Exhibits in the Kaua'i Office / Photo Source: FCA

four (4) staff and sixteen (16) visiting public is required.

- ONMS vehicles – Parking for one (1) government vehicle.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

- Visitors – Eighty (80) parking spaces for visitors.
 - Public transportation in Kaua'i County is limited to the public bus "The Kaua'i Bus," which provides limited service.
 - Bikes – Bike racks should be provided along with a shower and changing facility for staff at Līhu'e facility.
 - Boats – Vessel support for a large vessel (One-hundred foot [100']) and a small boat (maximum thirty-six feet [36']). Vessel support may be located separately from the Līhu'e facility at the small boat harbor at Nāwiliwili harbor, or Port Allen. Boat ramp access is required as well as vehicle parking.
-
- Vessel Support
 - Dock vessel – One hundred foot (100') length
 - Small boat – Up to thirty-six feet (36') length maximum.
 - Vessel storage- Storage for vessel gear and sampling gear.
 - Boathouse and maintenance facility.
 - Parking at dock side for fifteen (15) vehicles.
 - Boat ramp.



Nāwiliwili Harbor / Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Location: Lihue, Kauai Proposed (Consolidated)				
Location: Kauai Lihue Proposed (Consolidated)	Projected Needs	Priority	Area (SF)	Assumptions
Administrative			3600	
Office Space for ONMS Staff	6 staff total plus space for up to 10 volunteers	1	1800	200 sf per person * 1.5 circulation
Conference/Media Center	space for 12	1	600	50 sf per person
Office Space for Partners	4 people	1	1200	200 sf per person * 1.5 circulation
Education				
Classroom	30 people dry lab location	1	1200	40 sf per person
Outdoor Activity Space	whale watching station open grass areas paved areas with some cover shore line access	1		
Research				
Wet Laboratory	1 educational - 30 kids 1 research - 1 station	1	1200	40 sf per person
Dry Laboratory	see classroom	2		
Operations				
Dive Locker with Showers	6 people compressed air	3	450	25 sf per person * 50 sf per person storage
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				

Table 14: Kaua'i Requirements

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Location: Lihue, Kauai Proposed (Consolidated)				
Location: Kauai Lihue Proposed (Consolidated)	Projected Needs	Priority	Area (SF)	Assumptions
Secure Storage	60 SF with small freezer	2	60	
Storage				
Dry Storage	general classroom storage outreach materials furniture stor. Vehicle access	1	150	5 sf per person
Refrigerated Storage	small walk in freezer	2	60	
Covered Outside Storage	small boat on trailer supplies	2		
Outside Storage Yard	extension of above	3	600	600 sf
Outreach				
Visitor Center	4000 SF	1	4000	given
Community Room/Conference Center	175 people max flexibility of space for classroom, lecture, multipurpose	1	3938	15 sf per person * 1.5 circulation
Storefront or Kiosk	at airport or cruise ship terminal	1		
Museum, Aquarium, or Science Center	Kilauea Point National Wildlife Refuge Hanalei National wildlife refuge and others	1		
(access to a location not controlled by ONMS)				

Table 14: Kaua'i Requirements contd.

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Location: Lihue, Kauai Proposed (Consolidated)				
Location: Kauai Lihue Proposed (Consolidated)	Projected Needs	Priority	Area (SF)	Assumptions
Parking				
Staff	12 to 15	1	4500	200 sf per car * 1.5 circulation
ONMS Vehicles or Equipment	one	1	300	200 sf per car * 1.5 circulation
Enclosed Garage		1		
Visitors	calculate demand	1	79	100 sf per required parking stall for both visitor center and community, 200 sf per car * 1.5 circulation
Bus Parking	two school busses two mini-busses	1	1200	40ft x 10ft * 1.5 circulation
Waterfront				
Dock for Large Vessels	100 ft	1	2500	100ft x 25ft
Dock for Small Boats	36 ft	1	480	40ft x 36ft
Storage	400 SF	1	400	given
Maintenance facilities	boathouse for 36 ft.	1	878	45ft x 20ft (12ft*1.5)
Utilities	yes	1		
Dockside parking	15 spaces	1	4500	200 sf per car * 1.5 circulation
Technology				
I2		1		
Satellite		1		
High Speed Internet		1		
Videoconferencing		1		
GIS				
Signage				
Informational & Directional	directional and arrival	1		
Other Requirements				
Retail				
Support & Circulation	n/a		2500	

Table 14: Kaua'i Requirements contd.

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Partnering Opportunities

- U.S. Fish and Wildlife Service
- Kaua'i Community College
- State of Hawai'i Department of Land and Natural Resources (DLNR)
- Airport – Partnership with airport to provide education and outreach should be explored.
- Cruise Ship



*Hanalei National Wildlife Refuge /
Photo Source: U.S. Fish and Wildlife Service*



*Kilauea Point National Wildlife Refuge /
Photo Source: U.S. Fish and Wildlife Service*



Po'ipū Beach Park / Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

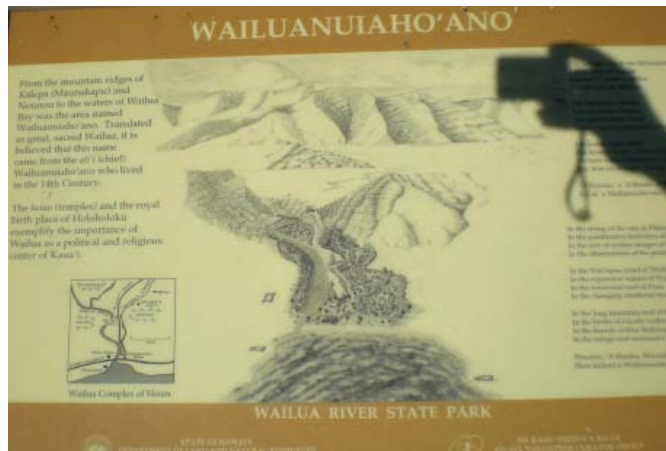
Existing Locations - Kaua'i



Ahukini Pier at Hanama'ulu Bay / Photo Source: FCA



Cruise Ship at Nawiliwili Harbor / Photo Source: FCA



Wailuanuiho'ano / Photo Source: FCA



Lihue International Airport / Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

Recommendations

Develop an acquisition strategy for procurement of the facilities required to support PIR, HIHWNMS, and PMNM activities on Kaua'i. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.

Select and acquire a site for Kaua'i facilities (leased or owned) including vessel support facilities.

Implement the capital improvements to procure and establish the Kaua'i facilities.

EVALUATION OF ALTERNATIVES			
	A. Maintain the Status Quo	B. Move to a New Location	C. Develop a Facility Strategy that Best Fits the Sanctuary's Needs on Kauai
Meets the shared needs of the sanctuary and monument		✓	✓
Meets the shared needs of the co-manager, and/or co-trustee		✓	✓
Proximity to sanctuary offshore boundaries			✓
Easily accessible by the community	✓	✓	✓
Functionally accessible for operations			✓

Table 15: Kaua'i Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - Kaua'i

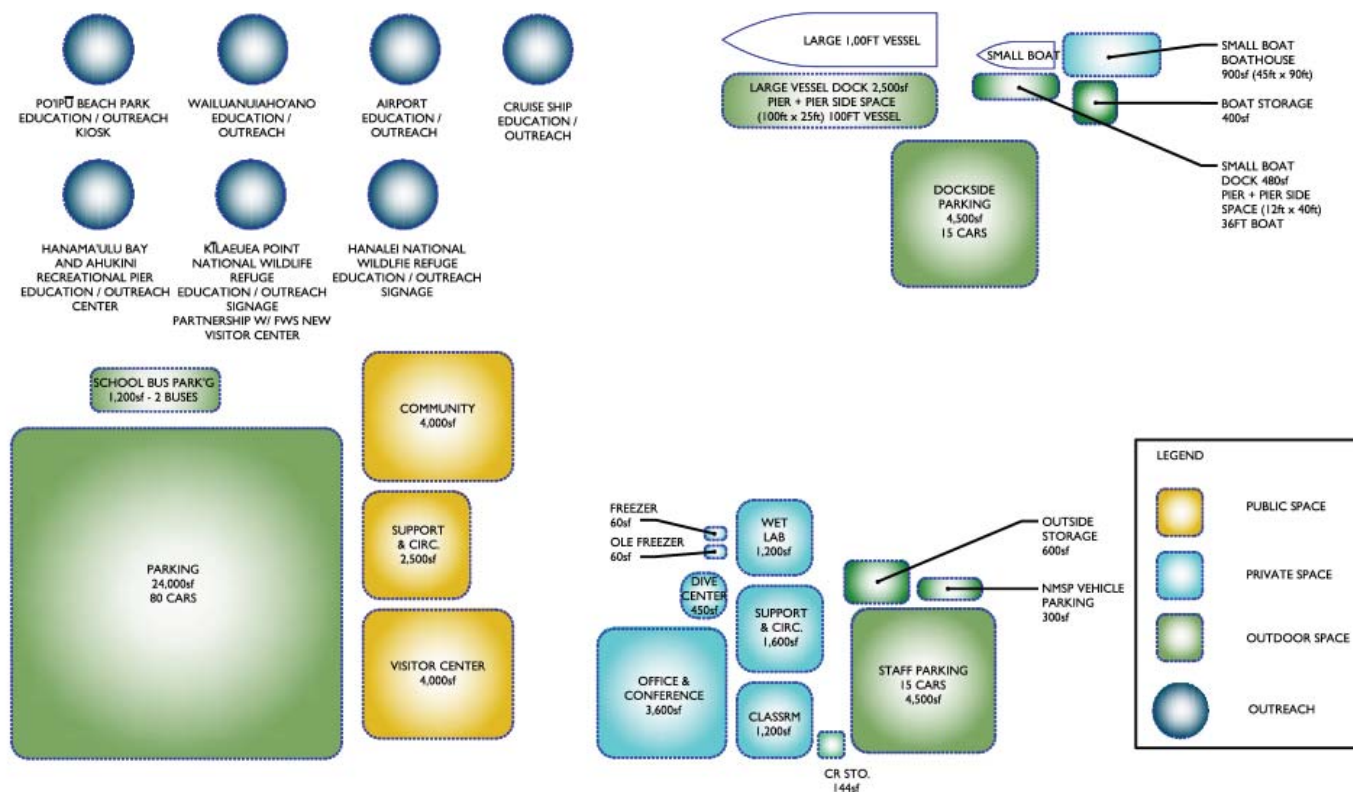


Figure 15: Kaua'i Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

Summary of the Existing Facilities

The Fagatele Bay National Marine Sanctuary (FBNMS) office is currently located in office space provide by the Government of American Samoa. The existing facility is not satisfactory in that it does not provide adequate office space, operational spaces, storage, and public meeting space.

Existing Space Utilization

- Office
- Storage

Tenure of the Space (Lease or Owned)

The FBNMS offices are located in space provide by the Government of American Samoa in the old convention center building.

Historical Issues

No historical issue for the existing FBNMS office.

Building Code Issues

The FBNMS office is located in the old convention center building and was inhabited in as-is condition by NOAA.

A NOAA future project on federal government controlled land will not require American Samoa building permit approval. Rather the architect and engineers of record have a duty to design the facility to conform to the then current building codes and standards as their standard of care.

Environmental Issues

The master plan does not include a NEPA environmental review process stage one. NOAA should conduct further environmental analysis (NEPA stage one) prior to commencement of future design and construction work.

Utility Infrastructure Issues

- Water

Water service is provided as part of the old convention center building services. Future sites will need to be evaluated for water service as part of a site selection process.



Location of the Convention Center and FBNMS Office / Photo Source: NOAA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa



Convention Center Next to the FBNMS Office / Photo Source: NOAA

- **Sanitary Sewer**
Sanitary-sewer service is provided as part of the old convention center building services.

Future sites will need to be evaluated for sanitary-sewer service as part of a site selection process.
- **Storm Sewer**
Storm-sewer service is provided as part of the old convention center building services. Future sites will need to be evaluated for storm-sewer service as part of a site selection process.
- **Gas**

Gas service is not provided as part of the old convention center building services. Future sites will need to be evaluated for gas service as part of a site selection process.

- **Electric Service**
Electrical service is provided as part of the old convention center building services. Future sites will need to be evaluated for telecommunication service as part of a site selection process.
- **Telecommunication**
Telecommunication service is provided as part of the old convention center building services. Future sites will need to be evaluated for telecommunication service as part of a site selection process.

Access and Parking

- **Private Vehicles**
The FBNMS office should provide adequate parking for both public and staff. Parking for four (4) staff and sixteen (16) visiting public is required.
- **Public Transportation**
In American Samoa, public transportation is provided by The American Samoa Bus Association.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

- Bikes
Bike racks should be provided along with a shower and changing facility for staff at FBNMS facility.

Operations and Maintenance

No issues are anticipated with the Operations and Maintenance.

Vessels

- Boats
Future vessel support for a large vessel (one-hundred foot [100']) and small boat (maximum thirty six feet [36']). Vessel support may be located separately from the FBNMS facility at the small boat harbor. Boat ramp access is required as well as vehicle parking

Facility Requirements

- Administrative
 - Office space for four (4) staff.
 - Office space for partners – Office space for two (2) partner agency staff.
- Education
 - Classroom – Classroom for one-hundred (100) people (see Outreach below).
 - Outdoor activity space.
- Research
 - Wet laboratory
 - Dry laboratory
- Operations
 - No requirements.
- Enforcement
 - Secure storage – Secure storage for law enforcement with freezer.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions and education outreach material storage.
- Outreach
 - Visitor Center – A Visitor Center for education and outreach including retail component.
 - Community Room – A community room for education and outreach for up to one hundred (100) people.
 - Signage or kiosk with exhibits
 - Airport
 - National Park
 - Parking

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

- ONMS Vehicles
 - Parking for two (2) government vehicles.
 - Visitors – Eighty (80) parking spaces for visitors.
 - Private Vehicles – The FBNMS office should provide adequate parking for both public and staff. Parking for four (4) staff and sixteen (16) visiting public is required.
 - Public transportation in American Samoa is provided by The American Samoa Bus Association.
 - Bikes – Bike racks should be provided along with a shower and changing facility for staff at FBNMS facility.
- Vessel Support
 - Dock space
 - Large vessel – one-hundred foot (100') length
 - Small boat – up to thirty-six feet (36') length maximum
 - Vessel storage- Storage for vessel gear and sampling gear
 - Boathouse and maintenance facility
 - Parking at dock side for fifteen (15) vehicles
 - Boat ramp



Pago Pago International Airport / Source: Google Images

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

Location: American Samoa				
Location: Samoa	Projected	Priority	Area (sf)	Assumptions
Administrative			1200	
Office Space for ONMS Staff	4 Staff	1	800	200 sf per person *1.5 circulation
Conference/Media Center	for at least 100 people / see Outreach section	1	0	see outreach below
Office Space for Partners	2 - Territory / NMFS / NOAA ?		400	200 sf per person *1.5 circulation
Education				
Classroom	100 / can be combined with Outreach	2	1200	40 sf per person
Outdoor Activity Space	100	2	1200	40 sf per person
Research	cp			
Wet Laboratory	cp	2	600	assumed 600sf
Dry Laboratory	yes - but not a priority	3	600	assumed 600sf
Operations				
Dive Locker	none on island	1	450sf	
Dive Chamber	none on island	1		
Holding tanks		2		
Quarantine Facility		3		
Greenhouse		3		
Enforcement				
Secure Storage	already exists on island	2		
Storage				
Dry Storage	major need	1	600	assumed
Refrigerated Storage		1		
Covered Outside Storage		3		
Outside Storage Yard		1		
Outreach			5250	
Visitors Center / Store	50 people minimum / would also like place for a store	1	3000	40 sf per person * 1.5 circulation
Community Room/Conference Center	100 - same as visitor center	1	2250	15 sf per person * 1.5 circulation
Storefront or Kiosk	yes	2		
Museum, Aquarium, or Science Center	airport / National Park	2		
(access to a location not controlled by ONMS)				

Table 16: American Samoa Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

Location: American Samoa				
Location: Samoa off site location	Projected .e.g in another part of the island	Priority 2	Area (sf)	Assumptions
Signage	road side signs - much like Hawaii - not	1		
Parking		1	1800	
Staff		1	1200	4 cars @ 200 sf per car *1.5 circulation
ONMS Vehicles or Equipment		1	600	2 cars @ 200 sf per car *1.5 circulation
Enclosed Garage		3		
Visitors		1	15750	52 cars @ 200 sf per car *1.5 circulation
Waterfront				
Dock for Large Vessels		2	2500	100ft x 25ft
Dock for Small Boats		1	480	40ft x 36ft
Storage		1	400	assumed
Maintenance facilities		2	900	assumed
Utilities		2		
Dockside parking			4500	15 cars @ 200 sf per car * 1.5 circulation
Technology				
I2		1		
Satellite		1		
DSL Internet		1		
Videoconferencing		1		
GIS		2		
Signage				
Informational & Directional	signs pointing to Sanctuary or office	1		
roadside -	see above under Outreach			
Other Requirements				
Would prefer direct access to marine water - e.g. location	marine lab to be based on ocean			
Retail				
Support & Circulation			1600	

Table 16: American Samoa Requirements contd.

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

Partnering Opportunities (FBNMS)

- U.S. Fish and Wildlife Service – Rose Atoll Marine National Monument
- National Park Service – National Park of American Samoa
- Airport – Partnership with airport to provide education and outreach should be explored.

Recommendations

Renovate the existing facility to provide functional office space for a minimum of six (6) staff. Auditorium upgrades that include interior renovations, new sound and lighting systems, a new roof, structural repairs due to termite damage, and functional air conditioning.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Move to a New Location	C. Upgrade and Enlarge the Current Office Space and Make Improvements to the Auditorium
Meets the shared needs of the territory		✓	✓
Proximity to sanctuary offshore boundaries	✓	✓	✓
Easily accessible by the community	✓		✓
Functionally accessible for operations			✓

Table 17: American Samoa Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Existing Locations - American Samoa

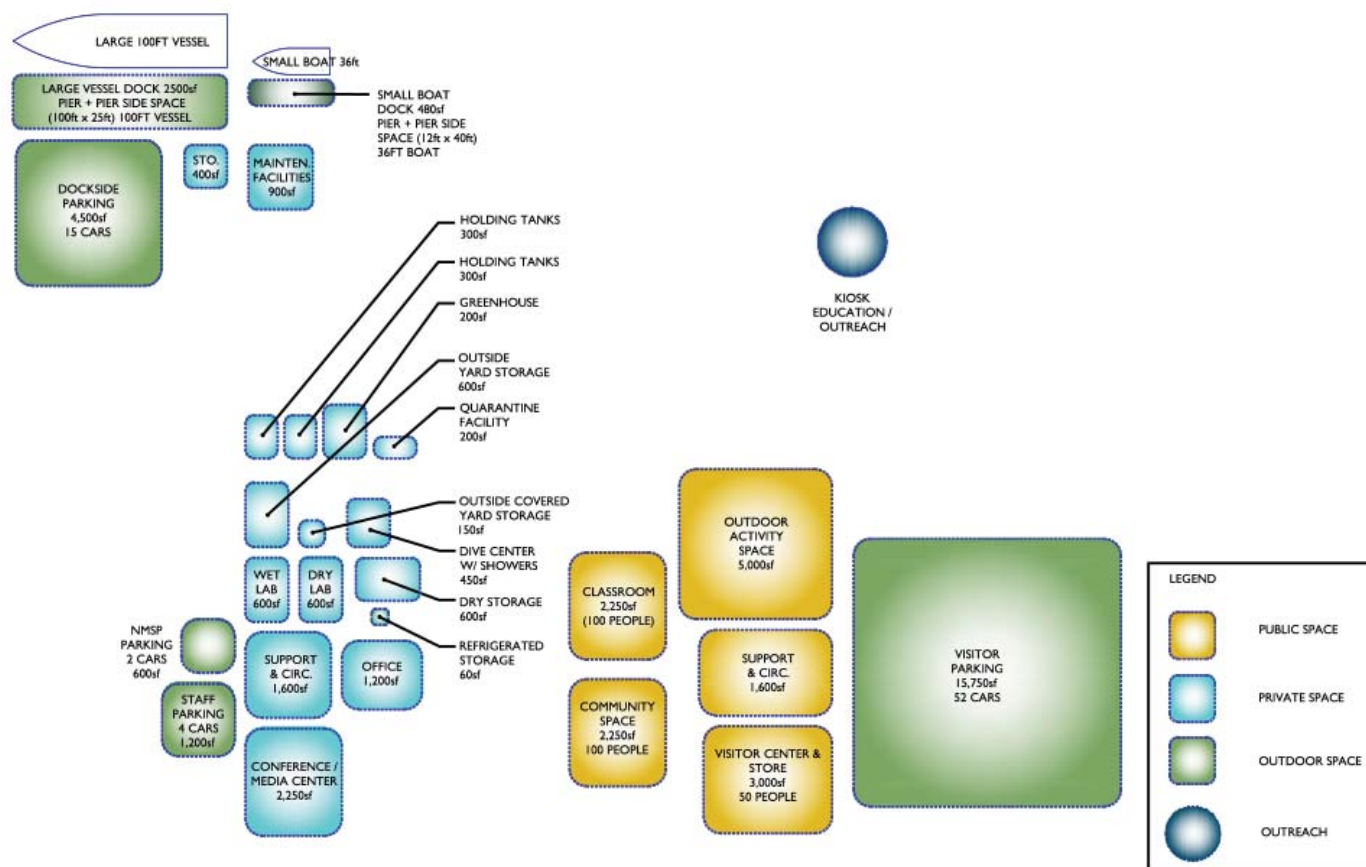


Figure 16: American Samoa Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

Marine Mammal Research Center

Vision

The Marine Mammal Research Center (Humpback Whale Research Center of Excellence) is envisioned as a facility to support the need for increased research on marine mammals and for training students and professionals that provide information to natural resource managers. The Center will help NOAA and the ONMS achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices. ONMS will partner with NOAA Fisheries to realize this vision.



Photo Source: NOAA

Facility Requirements

- Administrative
 - Office space for seven (7) staff
 - Office space for partners - Office space for four (4) partner agency staff.
 - Conference space for fifteen (15) people.
- Accommodations
 - Dormitories for research for ten (10) people, double occupancy.
- Food service
 - Kitchen and dining to support researchers accommodated in dormitories.
- Education
 - Classroom – Classroom for thirty-five (35) people with dry laboratory capability.
- Research
 - Wet laboratory
 - Dry laboratory
 - Marine Mammal rescue rehabilitation including captive care.
- Operations
 - No requirements.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

- Enforcement
 - No requirements.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.
 - Refrigerated storage – Small walk-in freezer for storing samples.
 - Covered outside storage – Covered outside storage to small boat and gear.
 - Outside yard storage – Open, secure storage.
- Outreach
 - Signage or kiosk with exhibits
- Parking
 - Government vehicles – Parking for one (1) government vehicle.
 - Visitors – Eighty (80) parking spaces for visitors.
 - Private Vehicles – Provide adequate parking for both public and staff. Parking for ten (10) staff and up to fifty (50) visiting public.
 - Public transportation in Maui County is provided by “Maui Bus,” which provides limited service.
 - Bikes – Bike racks should be provided along with a shower and changing facility for staff.
- Vessel Support
 - Dock space
 - Small vessels – Up to thirty-five feet (35') in length maximum.
 - Vessel storage – Storage for vessel and research gear; may be located separately from the facility at the small boat harbor at Ma'alaea.
 - Parking at dock side for fifteen (15) vehicles.
 - Boat ramp
 - Vessel-support-boat ramp access, maintenance facility, and vehicle parking are required.



Photo Source: Flip Nicklin, Minden Pictures

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

Location: Marine Mammal Research Center				
Location: Future Research Center	Projected Needs	Priority	Area (sf)	Assumptions
Administrative				
Office Space for ONMS Staff	7		2100	200 sf per person *1.5 circulation
Conference/Media Center				
Office Space for Partners	15		4500	200 sf per person *1.5 circulation
Education				
Classroom	35		1400	40 sf per person
Outdoor Activity Space				
Research				
Wet Laboratory	yes		600	600 sf
Dry Laboratory	yes		600	600 sf
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				
Secure Storage				
Storage				
Dry Storage	yes		200	200 sf
Refrigerated Storage	yes		200	200 sf
Covered Outside Storage	yes		600	600 sf
Outside Storage Yard	yes		800	800 sf
Outreach				
Visitor Center				
Community Room/Conference Center				
Storefront or Kiosk	yes			
Museum, Aquarium, or Science Center				
(access to a location not controlled by ONMS)				

Table 18: Marine Mammal Research Center Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

Location: Marine Mammal Research Center				
Location: Future Research Center	Projected Needs	Priority	Area (sf)	Assumptions
Parking				
Staff	10		3000	200 sf per car *1.5 circulation
ONMS Vehicles or Equipment	2		600	200 sf per car *1.5 circulation
Enclosed Garage	1		300	200 sf per car *1.5 circulation
Visitors	50		9000	30 cars @ 200 sf per car *1.5 circulation
Waterfront				
Dock for Large Vessels				
Dock for Small Boats	35'		480	40 x 36ft
Storage	500 sq ft		500	given
Maintenance facilities				
Utilities				
Dockside parking	5 spaces		1500	200 sf per car * 1.5 circulation
Technology				
I2				
Satellite				
DSL Internet	yes			
Videoconferencing	yes			
GIS	yes			
Signage				
Informational & Directional	yes			
Other Requirements				
Retail				
Support & Circulation			1250	

Table 18: Marine Mammal Research Center Requirements contd.

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

Partnering Opportunities

University of Hawai'i, Maui Community College may present an opportunity to co-locate this facility. Other partnering opportunities include NOAA Fisheries.

Recommendations

Develop an acquisition strategy for procurement of the facilities required to support humpback whale and marine mammals research activities on Maui. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.

Select and acquire a site for marine mammal research facilities – leased, owned, or in partnership with University of Hawai'i – including vessel support facilities.

Implement the capital improvements to procure and establish the humpback whale research facilities.

EVALUATION OF ALTERNATIVES

	A. Maintain the Status Quo	B. Move to a New Location
Meets the needs of the sanctuary and monument		✓
Meets the shared needs of the co-manager, and/or co-trustee		✓
Proximity to sanctuary offshore boundaries		✓
Easily accessible by the community		✓
Functionally accessible for operations		✓

Table 19: Marine Mammal Research Center Alternatives

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Marine Mammal Research Center

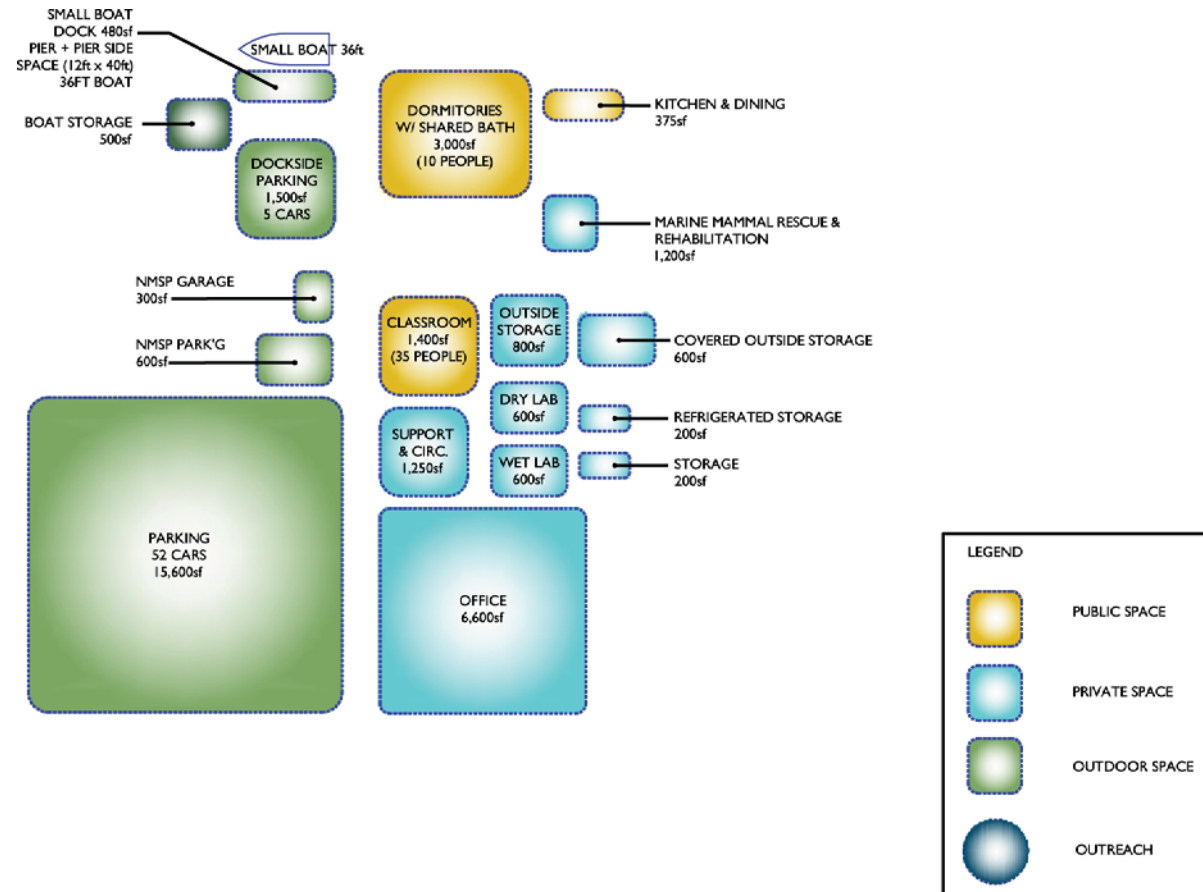


Figure 17: Marine Mammal Research Center Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco-Discovery Center

Hawai'i Eco-Discovery Center

Vision

The Eco-Discovery Center would interpret Hawai'i's ecosystem as discovered by Polynesian voyagers and as it was settled by Native Hawaiians. It would highlight the ecosystems in Hawai'i including those in the Hawaiian Island Humpback Whale National Marine Sanctuary and Papahānaumokuākea Marine National Monument. The Center will help NOAA and the OMNSP achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.

Facility Requirements

- Administrative
 - Office space for two (2) staff.
 - Office space for partners – Office space for four (4) partner agency staff.
- Education
 - Classroom – Classroom for forty (40) people.
 - Outdoor Activity Space for twenty-five (25) people.
- Research
 - No requirement.
- Operations
 - No requirement.



Florida Keys Eco-Discovery Center / Photo Source: Andy Newman

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco-Discovery Center

- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.
- Outreach
 - Visitor Center with retail component.
 - Conference Center.
- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – One-hundred-sixteen (116) parking spaces for visitors.
- Vessel support
 - No requirement.



Maui Ocean Center / Photo Source: FCA

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco -Discovery Center

Location: Hawaii Eco-Discovery Center				
	Projected Needs	Priority	Area(sf)	Assumptions
Administrative				
Office Space for ONMS Staff	2		600	200 sf per person *1.5 circulation
Conference/Media Center				
Office Space for Partners	4		1200	200 sf per person *1.5 circulation
Education				
Classroom	40		1600	40 sf per person
Exhibition Space				
Outdoor Activity Space	25		1000	40 sf per person
Exhibits	n/a		1125	25% of Visitor Center floor area
Research				
Wet Laboratory				
Dry Laboratory				
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Enforcement				
Secure Storage				
Storage				
Dry Storage			1000	Misc. Storage
Refrigerated Storage				
Covered Outside Storage				
Outside Storage Yard				
Outreach				
Visitor Center	200		4500	given
Community Room/Conference Center	200		4500	15 sf per person * 1.5 circulation
Storefront or Kiosk				
Museum, Aquarium, or Science Center (access to a location not controlled by ONMS)				

Table 20: Hawai'i Eco-Discovery Center Requirements

- (1) Light Blue = highest priority
- (2) Medium Blue = second highest priority
- (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco-Discovery Center

Location: Hawaii Eco-Discovery Center				
	Projected Needs	Priority	Area(sf)	Assumptions
Parking				
Staff	6		1800	200 sf per car *1.5 circulation
ONMS Vehicles or Equipment				
Enclosed Garage				
Visitors	116		34800	116 Cars @ 200 sf per car *1.5 circulation
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Dockside parking				
Technology				
I2	yes			
Satellite	yes			
DSL Internet	yes			
Videoconferencing	yes			
GIS				
Signage				
Informational & Directional	yes			
Other Requirements				
Retail			450	10% of Visitor Center space
Support & Circulation	n/a		3700	25% total floor area

Table 20: Hawai'i Eco-Discovery Center Requirements contd.

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco-Discovery Center

Partnering Opportunities

- State of Hawai'i - State Parks
- City and County Parks
- National Park Service
- U.S. Fish and Wildlife Service

Access and Parking

- Private Vehicles

Provide adequate parking for both public and staff.

Parking for six (6) staff and up to one-hundred-sixteen (116) visiting public.

- Public transportation

In City and County of Honolulu is provided by "The Bus."
The Bus provides frequent service throughout O'ahu.

- Bikes

Bike racks should be provided along with a shower and changing facility for staff.

- Boats

None



Florida Keys Eco-Discovery Center / Photo Source: Andy Newman

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support Hawai'i Eco-Discovery Center.
- Select and acquire a site for Hawai'i Eco-Discovery Center facilities – leased or owned.
- Implement the capital improvements to procure and establish the Hawai'i Eco-Discovery Center facilities.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Hawai'i Eco-Discovery Center

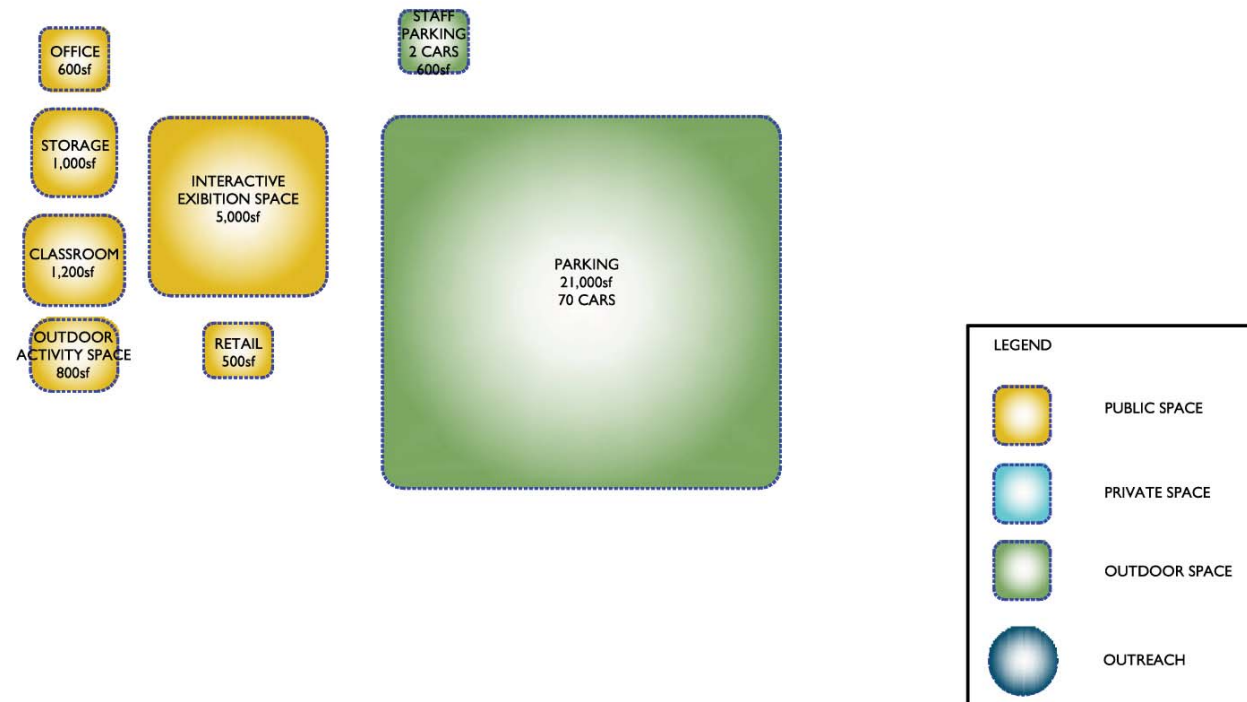


Figure 18: Hawai'i Eco-Discovery Center Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

Children's Marine Discovery Center

Vision

The Children's Marine Discovery Center is envisioned as a facility where families can learn about and experience the marine environment through hands on discovery. The Center will help both NOAA and the OMNS achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.



Photo Source: San Francisco Exploratorium



Photo Source: Monterey Bay Aquarium

Facility Requirements

- Administrative
 - Office space for two (2) staff.
- Education
 - Classroom – Classroom for thirty (30) keikis (children).
 - Exhibition Space.
 - Outdoor Activity Space for twenty (20) people.
- Research
 - No requirement.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

- Operations
 - No requirement.
- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support exhibit functions.
- Outreach
 - Retail component as part of exhibition space.
- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – Seventy (70) parking spaces for visitors.
- Vessel support
 - No requirement.



Photo Source: Monterey Bay Aquarium

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

Location: Children's Marine Discovery Center				
	Projected Needs	Priority	Area(sf)	Assumptions
Administrative				
Office Space for ONMS Staff	2		600	200 sf per person *1.5 circulation
Conference/Media Center				
Office Space for Partners				
Education				
Classroom	30		1200	40 sf per person
Exhibition Space	100		5000	50 sf per person
Outdoor Activity Space	20		800	40 sf per person, adjacent to classrooms
Exhibits	n/a		1250	25% of exhibition floor area
Research				
Wet Laboratory				
Dry Laboratory				
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				
Secure Storage				
Storage				
Dry Storage			1000	Misc. Storage
Refrigerated Storage				
Covered Outside Storage				
Outside Storage Yard				
Outreach				
Visitor Center				
Community Room/Conference Center				
Storefront or Kiosk				
Museum, Aquarium, or Science Center				
(access to a location not controlled by ONMS)				

Table 21: Children's Marine Discovery Center Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

Location: Children's Marine Discovery Center				
	Projected Needs	Priority	Area(sf)	Assumptions
Parking				
Staff	2		600	2 cars @ 200 sf per car *1.5 circulation
ONMS Vehicles or Equipment				
Enclosed Garage				
Visitors	70		21000	70 cars @ 200 sf per car *1.5 circulation (Public space sf / 100 = # of parking spaces)
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Dockside parking				
Technology				
I2	no			
Satellite	no			
DSL Internet	yes			
Videoconferencing	no			
GIS	no			
Signage				
Informational & Directional	yes			
Other Requirements				
Retail			500	10% of Exhibit Space
Support & Circulation	n/a		2150	25% of total floor area

Table 21: Children's Marine Discovery Center Requirements contd.

- (1) Light Blue = highest priority
- (2) Medium Blue = second highest priority
- (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

Partnering Opportunities

- Children's Discovery Center – Honolulu
- Bishop Museum

Access and Parking

- Private Vehicles
Provide adequate parking for both public and staff.
Parking for six (6) staff and up to one-hundred-seventy (170) visiting public.
- Public transportation
In City and County of Honolulu is provided by "The Bus."
The Bus provides frequent service throughout O'ahu.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff.
- Boats
None

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support Children's Marine Discovery Center activities on O'ahu. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for Children's Marine Discovery Center facilities (leased or owned).
- Implement the capital improvements to procure and establish the Children's Marine Discovery Center facilities.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Children's Marine Discovery Center

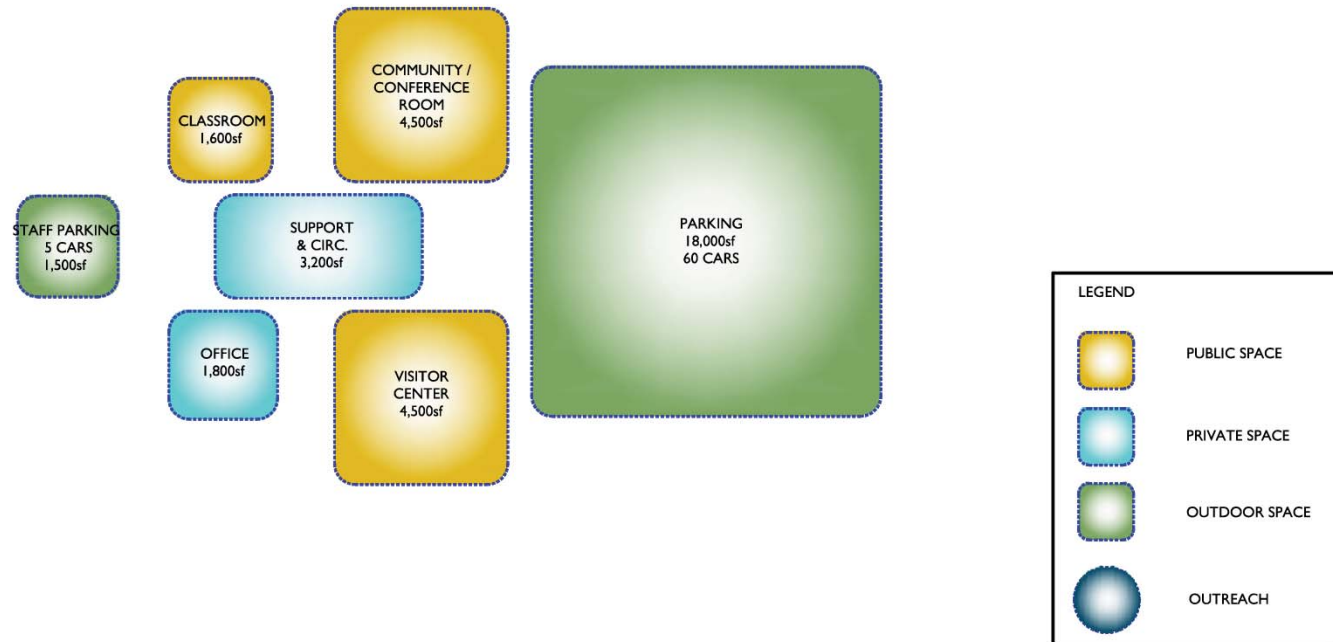


Figure 19: Children's Marine Discovery Center Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center

Cultural Exchange Center

Vision

The Cultural Exchange Center is envisioned as a facility to improve collaboration and knowledge for managing natural areas throughout the Pacific by providing a venue where traditional knowledge and cultural practices can be shared. The Center will help NOAA and the OMNSP achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.



Queen Lil'uokalani Children's Center on Kaua'i / Photo Source: FCA



Kona Village Resort Hale / Photo Source: www.konavillage.com

Facility Requirements

- Administrative
 - Office space for four (4) staff.
 - Office space for partners – Office space for two (2) partner agency staff.
- Accommodations
 - Western (private) accommodations for sixteen (16) people in double-occupancy hale (house).
 - Communal accommodations for twenty-five (25) people.
 - Outdoor accommodations for forty (40) people.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center

- Food Service
 - Kitchen and dining to support researchers accommodated in dormitories.
- Meeting
 - Large meeting room for forty (40) people.
 - Breakout rooms, three (3) for twelve (12) people each.
 - Exterior meeting space for forty (40) people with hula mound.
 - Informal meeting space.
- Education
 - No requirement.
- Research
 - No requirement.
- Operations
 - No requirement.
- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support office and meeting functions.
- Outreach
 - No requirement.



Admiral Gooding Center in Washington, DC / Photo Source: Unknown

- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – One hundred (100) parking spaces for visitors.
- Vessel support
 - Shoreline access would facilitate the practices of traditional seafaring and traditional uses of the ocean.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center

Location: Cultural Exchange Center				
Location: Cultural Exchange Ctr	Projected Needs	Priority	Area(sf)	Assumptions
Administrative				
Office Space for ONMS Staff	4		1200	200 sf per person *1.5 circulation
Conference/Media Center				
Office Space for Partners	2		600	200 sf per person *1.5 circulation
Accommodations				
Western (private)	2 (4 max)		4800	8 private hale @ 400 sf each *1.5 circulation
Communal (w/ shared bath)	25		2500	25 people @ 100 sf each
Outdoor	40		2000	10 tents @ 200 sf each, 4 ppl. per tent
Food Service				
Kitchen			1500	100 person service max
Dining	100		2250	15 sf per person *1.5 circulation
Meeting				
Large Meeting Room	40		4000	100 sf per person
Breakout Room	12		450	25 sf per person *1.5 circulation
Exterior Meeting Space	100		3000	20 sf per person *1.5 circulation
Informal Space (Prefunction)	90		2000	15 sf per person *1.5 circulation
Education				
Classroom				
Exhibition Space				
Outdoor Activity Space				
Research				
Wet Laboratory				
Dry Laboratory				
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				
Secure Storage				
Storage				
Dry Storage			1000	Misc. Storage
Refrigerated Storage				
Covered Outside Storage				
Outside Storage Yard				

Table 22: Cultural Exchange Center Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center

Location: Cultural Exchange Center				
Location: Cultural Exchange Ctr	Projected Needs	Priority	Area(sf)	Assumptions
Outreach				
Visitor Center				
Community Room/Conference Center				
Storefront or Kiosk				
Museum, Aquarium, or Science Center (access to a location not controlled by ONMS)				
Parking				
Staff	6		1800	6 cars @ 200 sf per car *1.5 circulation
ONMS Vehicles or Equipment				
Enclosed Garage				
Visitors	104		31200	104 cars @ 200 sf per car *1.5 circulation (Public space sf / 100 = # of parking spaces)
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Dockside parking				
Technology				
I2				
Satellite				
DSL Internet	yes			
Videoconferencing	yes			
GIS				
Signage				
Informational & Directional				
Other Requirements				
Retail				
Support & Circulation	n/a		5575	25% of total floor area

Table 22: Cultural Exchange Center Requirements contd.

- (1) Light Blue = highest priority
- (2) Medium Blue = second highest priority
- (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center



Outdoor Event / Photo Source: Unknown

Partnering Opportunities

- Office of Hawaiian Affairs, Hawaii Tourism Authority

Access and Parking

- Private Vehicles
Provide adequate parking for both public and staff. Parking for six (6) staff and up to one-hundred (100) visiting public.
- Public transportation
Will depend upon the location selected.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff.

- Boats
Vessel support is not required.

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support Cultural Exchange Center activities. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for Cultural Exchange Center facilities (leased, owned, or in partnership with University of Hawai'i) including vessels support facilities.
- Implement the capital improvements to procure and establish the Cultural Exchange Center facilities.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Cultural Exchange Center

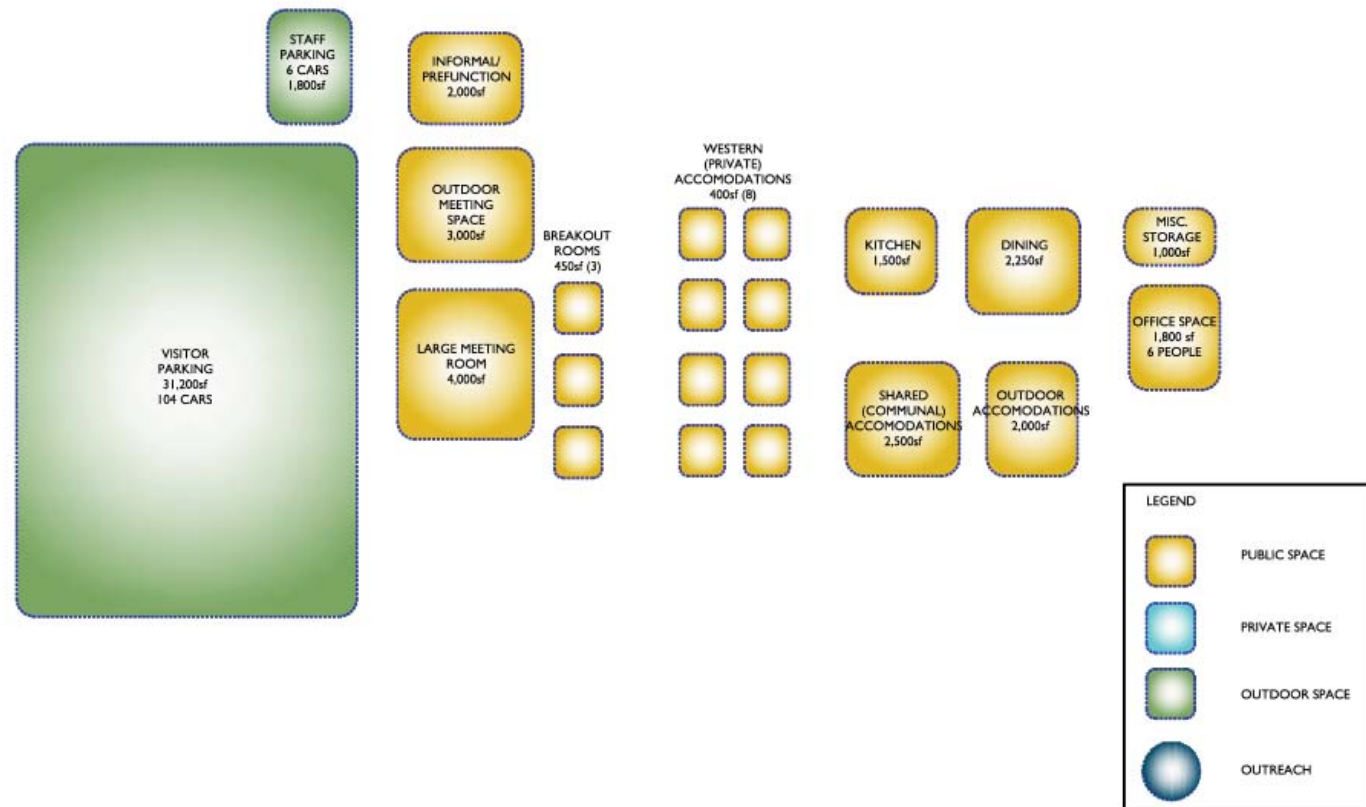


Figure 20: Cultural Exchange Center Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

North Shore, O'ahu

Vision

An ONMS visitor center on the North Shore of O'ahu will provide opportunities to educate the high number of visitors and Hawai'i residents who visit the area to learn about the marine environment and protecting special places. The North Shore of O'ahu, in particular Ka'ena Point, provides a habitat similar to those found in the Northwestern Hawaiian islands. The Hawaiian Islands Humpback Whale National Marine Sanctuary encompasses the North Shore of O'ahu from Haleiwa to Kahana Bay. Additional opportunities include interpretation of protected species such as the green sea turtles at Laniākea and the huge winter swells that attract visitors and surfers during the winter months. The Center will help NOAA and the OMNSP achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.



Ka'ena Point, North Shore, O'ahu / Photo Source: Unknown



North Shore, O'ahu / Photo Source: Unknown

Facility Requirements

- Administrative
 - Office space for four (4) staff.
 - Office space for partners – Office space for two (2) partner agency staff.
- Education
 - Classroom – Classroom for forty (40) people.
 - Outdoor Activity Space with water access for groups.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

- Research
 - Wet Laboratory to accommodate up to thirty (30) students.
- Operations
 - No requirement.
- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.
 - Refrigerated storage
 - Covered outside storage for rescue equipment.
 - Outside storage yard
- Outreach
 - Visitor Center with retail component.
 - Conference Center for thirty-five (35) people.
- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – Thirty-five (35) parking spaces for visitors.
- Vessel support
 - No requirement.



Humpback Whale / Photo Source: Dave Glickman

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

Location: North Shore Proposed				
Location: North Shore Proposed	Projected Needs	Priority	Area (sf)	Assumptions
Administrative				
Office Space for ONMS Staff	4 people	1	1200	200 sf per person *1.5 circ.
Conference/Media Center				
Office Space for Partners	2 people	1	600	200 sf per person *1.5 circ.
Education				
Classroom	yes	3	1200	40 sf per person
Outdoor Activity Space	water access for groups	1	1200	
Research				
Wet Laboratory	30 people	2	1200	
Dry Laboratory				
Operations				
Dive Locker				
Dive Chamber				
Holding tanks				
Quarantine Facility				
Greenhouse				
Enforcement				
Secure Storage				
Storage				
Dry Storage	250 sf	1	250	given
Refrigerated Storage	freezer	2	60	assumption
Covered Outside Storage	rescue equipment (200 sf)	3	200	given
Outside Storage Yard	200 sf	2	200	given
Outreach				
Visitor Center	2000 sf (half Hilo)	1	2000	given
Community Room/Conference	35 people	1	788	15 sf per person * 1.5 circulation
Storefront or Kiosk				
Museum, Aquarium, or Science				
(access to a location not controlled by ONMS)				

Table 23: North Shore, O'ahu Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

Location: North Shore Proposed				
Location: North Shore Proposed	Projected Needs	Priority	Area (sf)	Assumptions
Parking				
Staff	4 spaces	1	1200	200 sf/per car *1.5
ONMS Vehicles or Equipment	small bus	1	600	400 sf/per small van *1.5
Enclosed Garage				
Visitors	parking for 35 visitors	1	10500	200 sf/per car *1.5
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Technology				
I2		1		
Satellite		1		
High Speed Internet		1		
Videoconferencing		1		
GIS				
Signage				
Informational & Directional	directional - arrival -	1		

Table 23: North Shore, O'ahu Requirements contd.

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

Partnering Opportunities

- Other NOAA offices

Access and Parking

- Private Vehicles
Provide adequate parking for both public and staff.
Parking for four (4) staff and up to thirty-five (35) visiting public.
- Public transportation
In City and County of Honolulu is provided by "The Bus."
The Bus provides frequent service throughout O'ahu.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff.
- Boats
Vessel support is planned as part of Pacific Regional Center, Marine Science and Storage Facility.

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support North Shore visitor center activities.
- This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for North Shore visitor center facilities (leased or owned).
- Implement the capital improvements to procure and establish the North Shore visitor center facilities.



North Shore, O'ahu / Photo Source: Unknown

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - North Shore, O'ahu

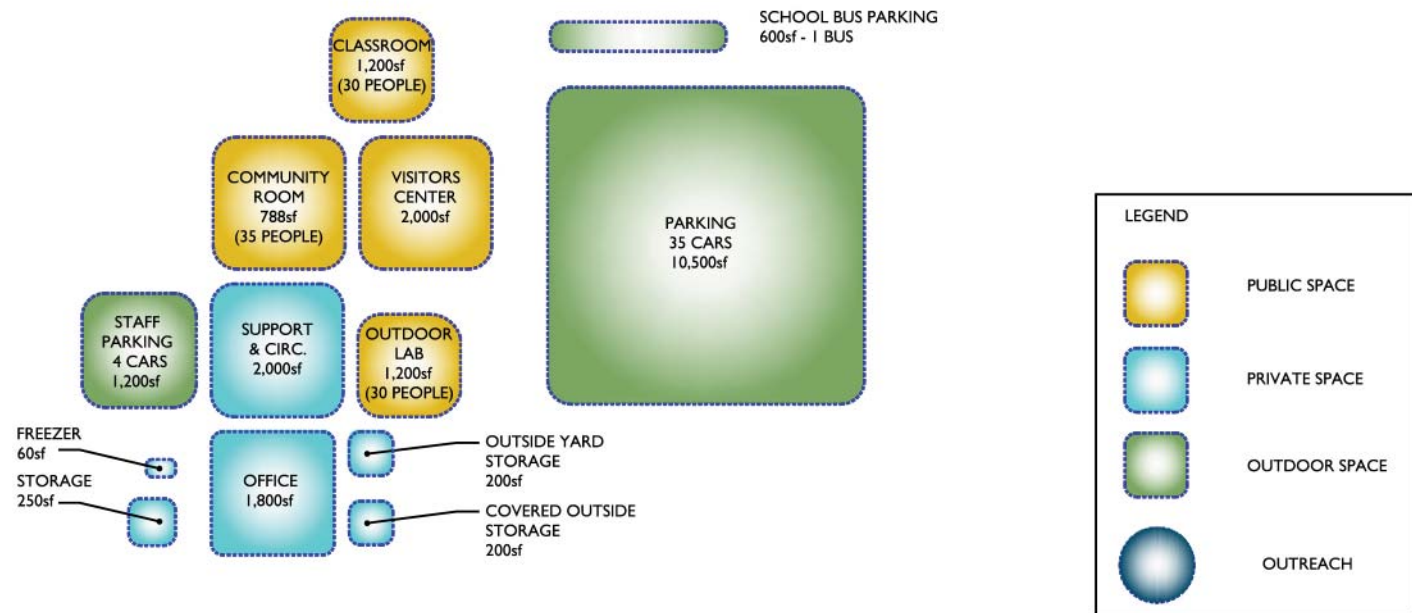


Figure 21: North Shore, O'ahu Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

Lāhaina Visitor Center

Vision

A new ONMS visitor center housing exhibits about Hawai'i's marine environment would provide an excellent opportunity for outreach to visitors about the HIHWNMS and PMNM. With its whaling history, high tourism, and easy viewing of humpback whales during the winter, Lāhaina / Kā'anapali is the number one tourist destination on Maui with approximately 3.3 million visitors a year, but it is situated 25 miles from the existing main sanctuary facility in Kīhei. The new center will help NOAA and the ONMS achieve their respective goals and missions. The vision of this center can be realized by partnering with other NOAA offices and City, County, or State offices.



Lāhaina / Photo Source: www.hawaiianphotos.net

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

Facility Requirements

- Administrative
 - Office space for three (3) staff and one office specifically for volunteers.
 - Office space for partners – Office space for one (1) partner agency staff.
- Education
 - No requirement.
- Research
 - No requirement.
- Operations
 - No requirement.
- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.
- Outreach
 - Visitor Center with retail component.
 - Conference Center for seventy-five (75) people.

- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – Seventy-five (75) parking spaces for visitors.
- Vessel support
 - No requirement.



Lāhaina / Photo Source: ONMS

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

Lahaina Visitor Center					
		Projected Needs	Priority	Area (sf)	Assumptions
Administrative					
Office Space for ONMS Staff		3 people	3	900	200 sf per person *1.5 circ.
Conference/Media Center					
Office Space for Partners		1 partner	3	300	200 sf per person *1.5 circ.
Education					
Classroom					
Outdoor Activity Space					
Research					
Wet Laboratory					
Dry Laboratory					
Operations					
Dive Locker					
Dive Chamber					
Holding tanks					
Quarantine Facility					
Greenhouse					
Enforcement					
Secure Storage					
Storage					
Dry Storage		500 sf	3	500	given
Refrigerated Storage					
Covered Outside Storage					
Outside Storage Yard					
Outreach					
Visitor Center		2000 sf (half hilo)	3	2000	given
Community Room/Conference Center		75 people - flexible	3	900	15 sf per person *1.5 circ.
Storefront or Kiosk					
Museum, Aquarium, or Science Center (access to a location not controlled by ONMS)					

Table 24: Lāhaina Visitor Center

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

Lahaina Visitor Center					
		Projected Needs	Priority	Area (sf)	Assumptions
Parking					
Staff		4 spaces	3	1200	200 sf per car *1.5 circ.
ONMS Vehicles or Equipment					
Enclosed Garage					
Visitors		size for 75 people	3	8700	200 sf per *1.5 circ.
Waterfront					
Dock for Large Vessels					
Dock for Small Boats					
Storage					
Maintenance facilities					
Utilities					
Technology					
I2			3		
Satellite			3		
High Speed Internet			3		
Videoconferencing			3		
GIS					
Signage					
Informational & Directional		directional - arrival -	3		
Other Requirements					
Retail					
Support & Circulation		n/a		1250	

Table 24: Lāhaina Visitor Center contd.

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

Partnering Opportunities

- Other NOAA offices

Access and Parking

- Private Vehicles
Provide adequate parking for both public and staff.
Parking for four (4) staff and up to thirty-five (35) visiting public.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff.

Recommendations

- Develop an acquisition strategy for procurement of the facilities required to support North Shore Visitor Center activities.
- This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site for North Shore Visitor Center facilities (leased or owned).
- Implement the capital improvements to procure and establish the North Shore Visitor Center facilities.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Lāhaina Visitor Center

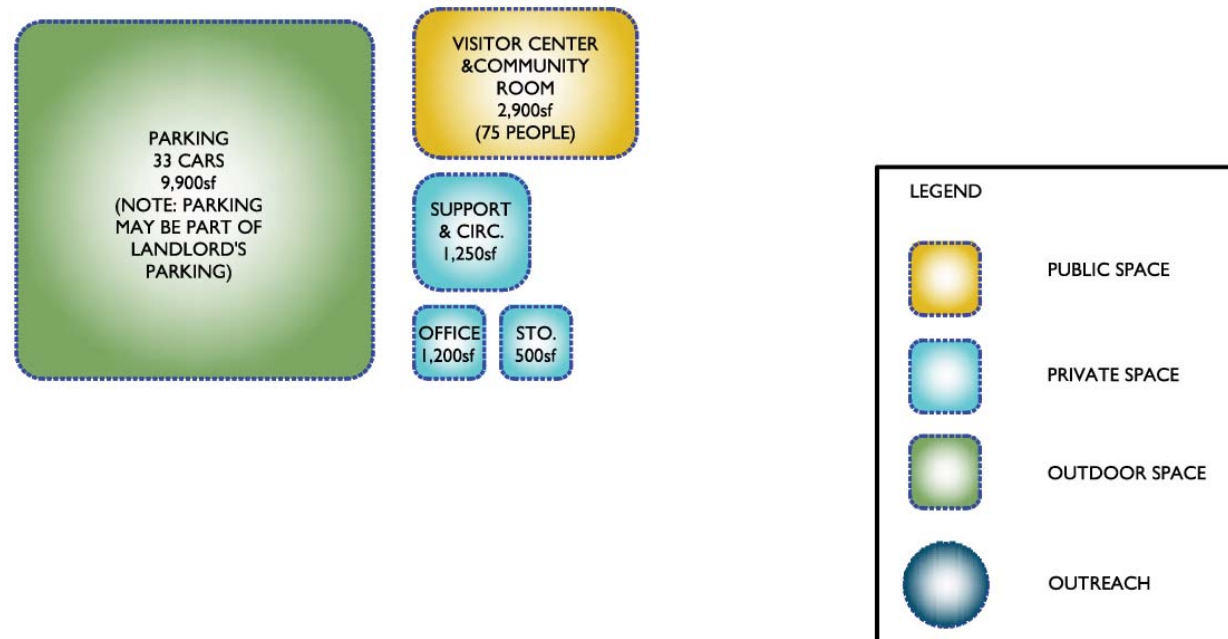


Figure 22: Lāhaina Visitor Center Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Moloka'i Leadership Institute

Moloka'i Leadership Institute

Vision

The vision of the Moloka'i Leadership Institute is to provide a leadership training academy for natural resource conservation practitioners, and to examine the close connection of the local population with the natural environment. The objective is to serve as a forum for participants to acquire knowledge, skills, and tools necessary to develop leadership skills that foster successful partnership and collaborative efforts. The Center will help NOAA and the ONMS achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.

Facility Requirements

- Administrative
 - Office space for two (2) staff.
 - Office space for partners – Office space for one (1) partner agency staff.
- Education
 - No requirement
- Research
 - No requirement

- Operations
 - No requirement.
- Enforcement
 - No requirement.
- Storage
 - Dry storage – Dry storage, appropriate to support office functions.



Moloka'i / Photo Source: Irena S. www.flickr.com

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Moloka'i Leadership Institute

- Outreach
 - Visitor Center with retail component.
 - Conference Center for fifty (50) people.
- Parking
 - Staff – Parking for staff vehicles.
 - Visitors – Fifty (50) parking spaces for visitors.
- Vessel support
 - No requirement.

Partnering Opportunities

- Other NOAA offices
- University of Hawai'i

Access and Parking

- Private Vehicles
Provide adequate parking for both public and staff.
Parking for four (4) staff and up to fifty (50) visiting public.
- Bikes
Bike racks should be provided along with a shower and changing facility for staff.



Moloka'i / Photo Source: www.hiren.info

Recommendations

- Develop an acquisition strategy for procurement of the facilities.
- This master plan is the first step in that this plan identifies the needs and requirements for these facilities.
- Select and acquire a site (leased or owned).
- Implement the capital improvements to procure and establish the facility.

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Moloka'i Leadership Institute

Location: Moloka'i Leadership Institute					
	Projected Needs	Priority	Area (sf)	Assumptions	
Administrative			900		
Office Space for ONMS Staff	2 people	3	600	200 sf per person *1.5 circ.	
Conference/Media Center					
Office Space for Partners	1 partner	3	300	200 sf per person *1.5 circ.	
Education					
Classroom					
Outdoor Activity Space					
Research					
Wet Laboratory					
Dry Laboratory					
Operations					
Dive Locker					
Dive Chamber					
Holding tanks					
Quarantine Facility					
Greenhouse					
Enforcement					
Secure Storage					
Storage					
Dry Storage	400 sf	3	400	given	
Refrigerated Storage					
Covered Outside Storage					
Outside Storage Yard					

Table 25: Moloka'i leadership Institute Requirements

(1) Light Blue = highest priority

(2) Medium Blue = second highest priority

(3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Moloka'i Leadership Institute

Location: Moloka'I Leadership Institute				
	Projected Needs	Priority	Area (sf)	Assumptions
Outreach				
Visitors Center	1000 sf	3	1000	given
Community Room/Conference	50 people	3	1125	15 sf per person * 1.5 circ.
Storefront or Kiosk				
Museum, Aquarium, or Science (access to a location not controlled by ONMS)				
Parking				
Staff	4 spaces	3	1200	200 sf/per car *1.5
ONMS Vehicles or Equipment				
Enclosed Garage				
Visitors	parking for 50 visitors	3	10500	25 cars @ 200 sf/per car *1.5
Waterfront				
Dock for Large Vessels				
Dock for Small Boats				
Storage				
Maintenance facilities				
Utilities				
Technology				
I2		3		
Satellite		3		
High Speed Internet		3		
Videoconferencing		3		
GIS				
Signage				
Informational & Directional	directional - arrival - informational	3		

Table 25: Moloka'i leadership Institute Requirements contd.

- (1) Light Blue = highest priority
- (2) Medium Blue = second highest priority
- (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Moloka'i Leadership Institute

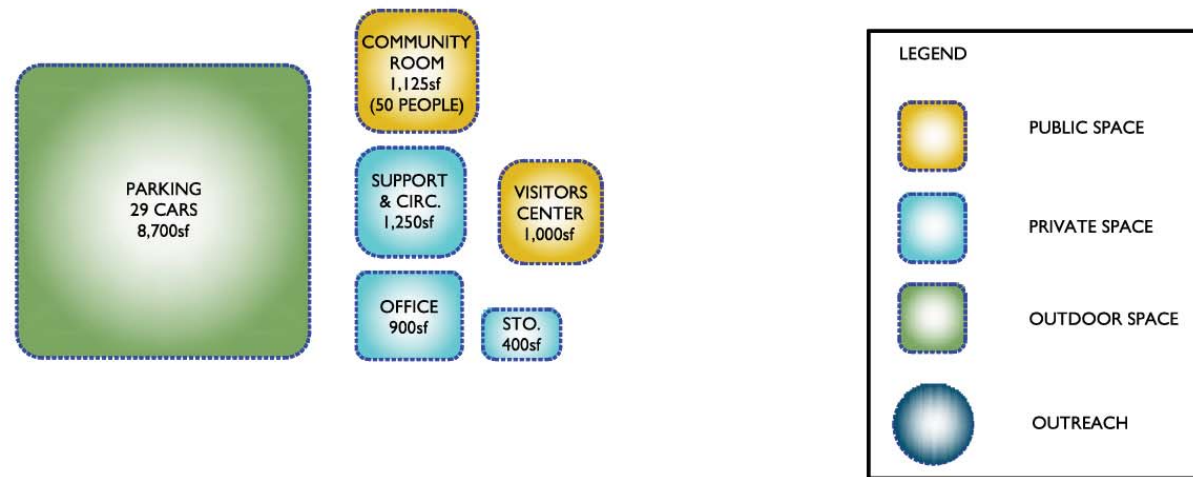


Figure 23: Moloka'i Leadership Institute Concept Diagram

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

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DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Territorial Science Center

Territorial Science Center

Vision

The Territorial Science Center would serve as a marine laboratory capable of supporting quality research by local agencies and visiting scientists. The new Territorial Science Center could be utilized by all agencies that have an interest in marine conservation efforts. The Marine Laboratory will also serve as a research base that could attract scientists who might not otherwise have considered American Samoa, due to a lack of local facilities. The Center will help NOAA and the OMNSP achieve their respective goals and missions. The vision of this Center can be realized by partnering with other NOAA offices and City, County, or State offices.

Space Requirements

- Administrative
 - No requirement.
- Education
 - No requirement.
- Research
 - Wet laboratory
 - Dry laboratory
- Storage
 - Dry Storage - Dry storage, appropriate to support functions and education outreach material storage.

- Parking
 - ONMS vehicles - Parking for two (2) government vehicles.
 - Visitors - Eighty (80) parking spaces for visitors.
 - Private Vehicles - The FBNMS office should provide adequate parking for both public and staff. Parking for four (4) staff and sixteen (16) visiting public is required.
 - Public transportation in American Samoa is provided by The American Samoa Bus Association.
 - Bikes - Bike racks should be provided along with a shower and changing facility for staff at FBNMS facility.

Partnering Opportunities

- U.S. Fish and Wildlife Service - Rose Atoll Marine National Monument
- National Park Service - National Park of American Samoa



Fagatele Bay, Tutuila, American Samoa / Photo Source: NOAA ONMS

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Territorial Science Center

Location: Territorial Science Center				
Location: Samoa	Projected	Priority	Area (sf)	Assumptions
Administrative			0	
Office Space for ONMS Staff				Included in American Samoa facility
Conference/Media Center				Included in American Samoa facility
Office Space for Partners				Included in American Samoa facility
Education				
Classroom				Included in American Samoa facility
Outdoor Activity Space				Included in American Samoa facility
Research				
Wet Laboratory	cp	2	1200	assumed 1200sf
Dry Laboratory	yes	2	1200	assumed 1200sf
Operations				
Dive Locker				Included in American Samoa facility
Dive Chamber				Included in American Samoa facility
Holding tanks				Included in American Samoa facility
Quarantine Facility				Included in American Samoa facility
Greenhouse				Included in American Samoa facility
Enforcement				
Secure Storage				Located elsewhere on island
Storage				
Dry Storage	major need	2	600	assumed
Refrigerated Storage		2	200	assumed
Covered Outside Storage		2	600	assumed
Outside Storage Yard		2	600	assumed

Table 26: Territorial Science Center Requirements

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

New Concepts - Territorial Science Center

Location: Territorial Science Center				
Location: Samoa	Projected	Priority	Area (sf)	Assumptions
Outreach			0	
Visitors Center / Store				Included in American Samoa facility
Community Room/Conference Center				Included in American Samoa facility
Storefront or Kiosk				Included in American Samoa facility
Museum, Aquarium, or Science Center				Included in American Samoa facility
(access to a location not controlled by ONMS)				Included in American Samoa facility
off site location				Included in American Samoa facility
Signage				Included in American Samoa facility
Parking			1800	
Staff		2	1200	4 cars @ 200 sf per car *1.5 circulation
ONMS Vehicles or Equipment		2	600	2 cars @ 200 sf per car *1.5 circulation
Enclosed Garage				
Visitors		2	0	52 cars @ 200 sf per car *1.5 circulation
Waterfront				
Dock for Large Vessels				Included in American Samoa facility
Dock for Small Boats				Included in American Samoa facility
Storage				Included in American Samoa facility
Maintenance facilities				Included in American Samoa facility
Utilities				Included in American Samoa facility
Dockside parking				Included in American Samoa facility
Technology				
I2		2		
Satellite		2		
DSL Internet		2		
Videoconferencing		2		
GIS		2		
Signage				
Informational & roadside -				
Other Requirements				
Would prefer direct access to marine water - e.g. location	Would prefer marine lab to be based on water front			
Retail				
Support & Circulation			1600	

Table 26: Territorial Science Center Requirements contd.

- (1) Light Blue = highest priority
 (2) Medium Blue = second highest priority
 (3) Dark Blue = third highest priority

DETAILED FACILITY REQUIREMENTS AND ANALYSIS

Territorial Science Center

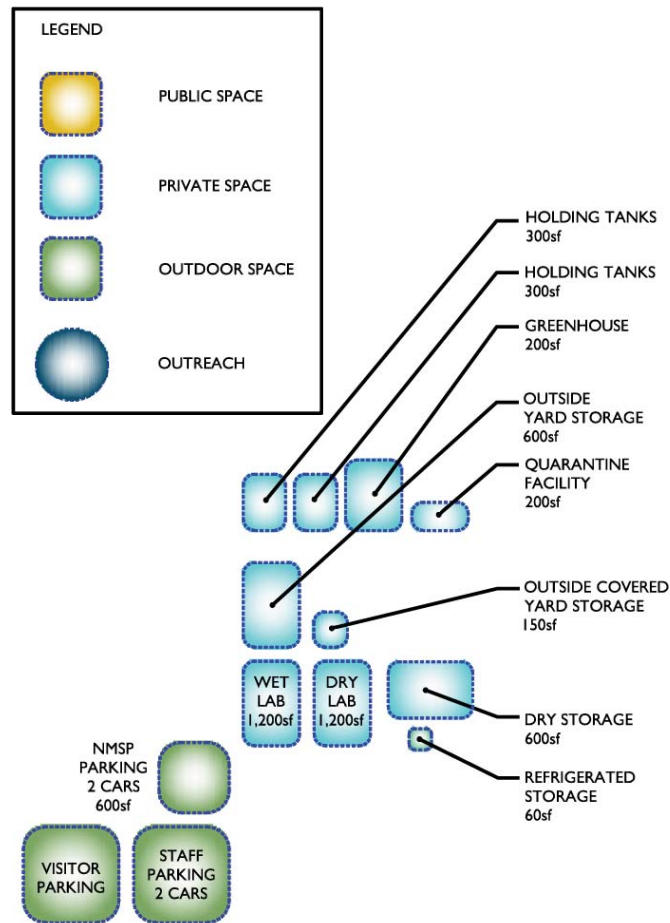


Figure 24: Territorial Science Center Concept Diagram

Access and Parking

- Private Vehicles - The FBNMS office should provide adequate parking for both public and staff. Parking for two (2) staff, two (2) ONMS vehicles, and two (2) visiting public is required. Public transportation in American Samoa is provided by The American Samoa Bus Association.
- Bikes - Bike racks should be provided along with a shower

Recommendations

- Develop an acquisition strategy for the procurement of facilities required to support the Territorial Science Center. This master plan is the first step in that this plan identifies the needs and requirements for these facilities.

6 | BUDGET ANALYSIS

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Photo Source: Stan Butler, NMFS

BUDGET ANALYSIS

Introduction

The master plan cost estimate is developed in accordance with the master plan developed by Ferraro Choi And Associates Ltd. The estimates are calculated in 2008 dollars and a matrix that projects costs out for ten years is provided. Costs are escalated at an assumed 10% per annum in 2009 and declining 1 % per annum to a minimum of 5% per annum in 2014.

The estimate contains costs develops using R.S. means database 2008 adjusted for locations in Hawai'i (i.e. Hilo, Kona, Maui, Honolulu, and Līhu'e) and American Samoa. The quantities for the estimate are based upon known building areas and assume complete interior construction and or renovation including plumbing, Heating Ventilating and Air Conditioning (HVAC), fire sprinkler, electrical and telecommunication infrastructure systems for all buildings described in the master plan.

Allowances have been made for exhibits in the visitor centers.

Information technology systems are not included in this estimate.

In addition to the construction costs, the project soft costs (costs the owner will incur above the beyond the actual

construction costs) were calculated and added to the matrix. These included the Architect and Engineering Fees (8% to 12%) and an allowance for Fixtures, Furnishings, and Equipment (\$25 per square foot of area). Owner internal costs, such as management, supervision and relocation are not included.

Planning estimates are, by their nature, order-of-magnitude estimates. It can be estimated on per-square-foot, linear-foot, cubic-yard, kilowatt, etc., basis. The available data is minimal and only an allowance can be made for various segments of the estimate.

Degree of Accuracy: because this estimate is a rough order-of-magnitude estimate, the degree of accuracy is generally plus one-hundred (100) or minus fifty percent (50%).¹ This range could be wider if the design criteria are not well defined.

¹ *Project Management Body of Knowledge (PMBOK), Third Edition, Page 161*

BUDGET ANALYSIS

Recommended Projects

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total	Escalation									
		Building	Site	Exhibits	Land	Rent	Today	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A	HILO MOKUPAPAPA DISCOVERY CENTER (NEW)																
	A1	OFFICE SPACE FOR NMSP STAFF	577,357	134,170		Excl.	NA	711,528	782,680	853,122	921,371	985,867	1,045,019	1,097,270	1,152,134	1,209,741	1,270,228
	A2	DRY STORAGE	45,853	10,828		Excl.	NA	56,681	62,349	67,961	73,397	78,535	83,247	87,410	91,780	96,369	101,188
	A3	OUTSIDE STORAGE YARD	44,066	7,627		Excl.	NA	51,693	56,862	61,980	66,938	71,624	75,921	79,717	83,703	87,888	92,283
	A4	NMSP VEHICLE/EQUIPMENT PARKING	38,981	3,898		Excl.	NA	42,880	47,168	51,413	55,526	59,412	62,977	66,126	69,432	72,904	76,549
	A5	LARGE VESSEL DOCK	1,326,218	128,385		Excl.	NA	1,454,602	1,600,063	1,744,068	1,883,594	2,015,445	2,136,372	2,243,191	2,355,350	2,473,118	2,596,774
	A6	WATERFRONT STORAGE	101,326	23,637		Excl.	NA	124,962	137,458	149,830	161,816	173,143	183,532	192,708	202,344	212,461	223,084
	A7	DOCKSIDE PARKING		490,543		Excl.	NA	490,543	539,597	588,161	635,214	679,679	720,460	756,483	794,307	834,022	875,723
			\$2,133,802	\$799,087		Excl.	NA	\$2,932,889	\$3,226,178	\$3,516,534	\$3,797,856	\$4,063,706	\$4,307,529	\$4,522,905	\$4,749,050	\$4,986,503	\$5,235,828
							A&E Fees	\$330,000	\$363,000	\$395,670	\$427,324	\$457,236	\$484,670	\$508,904	\$534,349	\$561,067	\$589,120
							Allowances for FF&E	\$50,000	\$55,000	\$59,950	\$64,746	\$69,278	\$73,435	\$77,107	\$80,962	\$85,010	\$89,261
							Total	\$3,312,889	\$3,644,178	\$3,972,154	\$4,289,926	\$4,590,221	\$4,865,634	\$5,108,916	\$5,364,361	\$5,632,579	\$5,914,208
B	KONA NATURAL ENERGY LAB (NEW)																
	B1	OFFICE SPACE FOR NMSP STAFF	583,211	135,543		Excl.	NA	718,754	790,630	861,786	930,729	995,880	1,055,633	1,108,415	1,163,836	1,222,027	1,283,129
	B2	WET LABORATORY	366,336	86,454		Excl.	NA	452,790	498,069	542,895	586,327	627,370	665,012	698,263	733,176	769,835	808,326
	B3	SUPPORT & CIRCULATION	410,535	96,050		Excl.	NA	506,586	557,244	607,396	655,988	701,907	744,021	781,222	820,283	861,298	904,363
	B4	DRY STORAGE	57,250	13,457		Excl.	NA	70,707	77,778	84,778	91,560	97,970	103,848	109,040	114,492	120,217	126,228
	B5	COVERED OUTSIDE STORAGE	143,749	33,372		Excl.	NA	177,122	194,834	212,369	229,359	245,414	260,138	273,145	286,803	301,143	316,200
	B6	VISITORS CENTER	288,575	217,492	598,491	Excl.	NA	1,104,558	1,215,014	1,324,365	1,430,314	1,530,436	1,622,263	1,703,376	1,788,544	1,877,972	1,971,870
	B7	COMMUNITY ROOM/CONFERENCE CTR	551,727	128,313		Excl.	NA	680,040	748,044	815,368	880,598	942,239	998,774	1,048,712	1,101,148	1,156,206	1,214,016
	B8	DIVE CENTER	200,992	47,683		Excl.	NA	248,675	273,542	298,161	322,014	344,555	365,228	383,490	402,664	422,798	443,937
	B9	SECURE STORAGE	29,557	7,047		Excl.	NA	36,605	40,265	43,889	47,400	50,718	53,761	56,449	59,272	62,235	65,347
C	KIHEI, MAUI SANCTUARY (NEW/R&R)																
	C1	RENOVATE EXISTING OFFICE SPACE	409,786	102,446		Excl.	NA	512,232	563,456	614,167	663,300	709,731	752,315	789,930	829,427	870,898	914,443
	C2	OFFICE SPACE FOR NMSP STAFF	2,035,212	477,548		Excl.	NA	2,512,760	2,764,036	3,012,799	3,253,823	3,481,591	3,690,486	3,875,011	4,068,761	4,272,199	4,485,809
	C3	OFFICE SPACE FOR PARTNERS	591,411	137,435		Excl.	NA	728,846	801,730	873,886	943,797	1,009,863	1,070,455	1,123,977	1,180,176	1,239,185	1,301,144
	C4	OUTDOOR ACTIVITY SPACE	321,230	36,898		Excl.	NA	358,129	393,941	429,396	463,748	496,210	525,983	552,282	579,896	608,891	639,335
	C5	WET LABORATORY	432,359	102,881		Excl.	NA	535,239	588,763	641,752	693,092	741,609	786,105	825,410	866,681	910,015	955,516
	C6	DORMITORY	240,894	56,751		Excl.	NA	297,645	327,409	356,876	385,426	412,406	437,150	459,008	481,958	506,056	531,359
	C7	SECURE STORAGE	14,759	12,372		Excl.	NA	27,131	29,844	32,530	35,132	37,592	39,847	41,840	43,932	46,128	48,434
	C8	COVERED OUTSIDE STORAGE	100,635	23,422		Excl.	NA	124,057	136,463	148,745	160,644	171,889	182,203	191,313	200,878	210,922	221,468
	C9	COVERED OUTSIDE STORAGE YARD	46,955	11,088		Excl.	NA	58,042	63,846	69,593	75,160	80,421	85,246	89,509	93,984	98,683	103,618
	WATERFRONT STORAGE																
	B14	WATERFRONT STORAGE	99,265	23,106		Excl.	NA	122,371	134,608	146,723	158,461	169,553	179,726	188,712	198,148	208,055	218,458
	B15	WATERFRONT PARKING		39,549		Excl.	NA	39,549	43,504	47,420	51,213	54,798	58,086	60,991	64,040	67,242	70,604
			\$3,246,918	\$1,290,696	\$598,491	Excl.	NA	\$5,136,104	\$5,649,715	\$6,158,189	\$6,650,844	\$7,116,404	\$7,543,388	\$7,920,557	\$8,316,585	\$8,732,414	\$9,169,035
							A&E Fees	\$500,000	\$550,000	\$599,500	\$647,460	\$692,782	\$734,349	\$771,067	\$809,620	\$850,101	\$892,606
							Allowances for FF&E	\$100,000	\$110,000	\$119,900	\$129,492	\$138,556	\$146,870	\$154,213	\$161,924	\$170,020	\$178,521
							Total	\$5,736,104	\$6,309,715	\$6,877,589	\$7,427,796	\$7,947,742	\$8,424,607	\$8,845,837	\$9,288,129	\$9,752,535	\$10,240,162
	WATERFRONT STORAGE																
	C10	OUTSIDE STORAGE	29,866	25,872		Excl.	NA	55,738	61,312	66,830	72,176	77,228	81,862	85,955	90,253	94,766	99,504
	C11	RESTROOM/SHOWER	50,659	12,231		Excl.	NA	62,890	69,178	75,405	81,437	87,138	92,366	96,984	101,833	106,925	112,271
	C12	VISITORS CENTER	1,300,028	494,643	3,646,400	Excl.	NA	5,441,071	5,985,178	6,523,844	7,045,751	7,538,954	7,991,291	8,390,856	8,810,399	9,250,918	9,713,464
	C13	VISITORS PARKING		2,005,520		Excl.	NA	2,005,520	2,206,072	2,404,618	2,596,988	2,778,777	2,945,503	3,092,779	3,247,418	3,409,788	3,580,278
	C14	NMSP VEHICLE/EQUIPMENT PARKING		55,391		Excl.	NA	55,391	60,930	66,413	71,726	76,747	81,352	85,420	89,691	94,175	98,884
	C15	SMALL BOAT DOCK (22FT)	298,875	29,887		Excl.	NA	328,762	361,638	394,186	425,720	455,521	482,852	506,995	532,345	558,962	586,910
	C16	SMALL BOAT DOCK (36FT)	406,730	40,673		Excl.	NA	447,403	492,143	536,436	579,351	619,905	657,100	689,955	724,452	760,675	798,709
	C17	COVERED BOAT STORAGE	100,635	23,422		Excl.	NA	124,057	136,463	148,745	160,644	171,889	182,203	191,313	200,878	210,922	221,468
	C18	MARINE RESCUE STORAGE	58,040	13,642		Excl.	NA	71,682	78,850	85,946	92,822	99,320	105,279	110,543	116,070	121,873	127,967
	C19	WATERFRONT STORAGE	100,635	23,422		Excl.	NA	124,057	136,463	148,745	160,644	171,889	182,203	191,313	200,878	210,922	221,468
			\$6,538,708	\$3,685,543	\$3,646,400	Excl.	NA	\$13,870,651	\$15,257,716	\$16,630,910	\$17,961,383	\$19,218,680	\$20,371,800	\$21,390,390	\$22,459,910	\$23,582,905	\$24,762,051
							A&E Fees	\$1,110,000	\$1,221,000	\$1,330,890	\$1,437,361	\$1,537,976	\$1,630,255	\$1,711,768	\$1,797,356	\$1,887,224	\$1,981,585
							Allowances for FF&E	\$260,000	\$286,000	\$311,740	\$336,679	\$360,247	\$381,862	\$400,955	\$421,002	\$442,052	\$464,155
							Total	\$15,240,651	\$16,764,716	\$18,273,540	\$19,735,423	\$21,116,903	\$22,383,917	\$23,503,113	\$24,678,268	\$25,912,182	\$27,207,791

BUDGET ANALYSIS

Recommended Projects

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total	Escalation									
		Building	Site	Exhibits	Land	Rent		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
D HAWAII KAI SANCTUARY (LEASED)	D1 DRY STORAGE																
		18,056	4,514		Excl.	Excl.	22,570	24,827	27,062	29,227	31,273	33,149	34,806	36,547	38,374	40,293	42,308
		\$18,056	\$4,514		Excl.	Excl.	\$22,570	\$24,827	\$27,062	\$29,227	\$31,273	\$33,149	\$34,806	\$36,547	\$38,374	\$40,293	\$42,308
						A&E Fees	\$3,500	\$3,850	\$4,197	\$4,532	\$4,849	\$5,140	\$5,397	\$5,667	\$5,951	\$6,248	\$6,561
						Allowances for FF&E											
						Total	\$26,070	\$28,677	\$31,258	\$33,759	\$36,122	\$38,289	\$40,204	\$42,214	\$44,325	\$46,541	\$48,868
E NOAA PACIFIC REGION CENTER																	
F KAUAI SANCTUARY OFFICE (NEW)	F1 OFFICE SPACE FOR NMSP STAFF	2,177,231	511,750		Excl.	NA	2,688,981	2,957,879	3,224,088	3,482,015	3,725,756	3,949,302	4,146,767	4,354,105	4,571,810	4,800,401	5,040,421
	F2 CLASSROOM	612,398	142,247		Excl.	NA	754,646	830,110	904,820	977,206	1,045,610	1,108,347	1,163,764	1,221,952	1,283,050	1,347,202	1,414,562
	F3 WET LABORATORY	748,458	176,262		Excl.	NA	924,720	1,017,192	1,108,740	1,197,439	1,281,260	1,358,135	1,426,042	1,497,344	1,572,211	1,650,822	1,733,363
	F4 DIVE CENTER	289,666	68,347		Excl.	NA	358,013	393,814	429,257	463,598	496,050	525,813	552,103	579,709	608,694	639,129	671,085
	F5 SECURE STORAGE	26,186	6,275		Excl.	NA	32,461	35,707	38,921	42,035	44,977	47,676	50,060	52,563	55,191	57,950	60,848
	F6 DRY STORAGE	48,963	11,562		Excl.	NA	60,526	66,578	72,570	78,376	83,862	88,894	93,338	98,005	102,906	108,051	113,453
	F7 REFRIGERATED STORAGE	53,317	13,058		Excl.	NA	66,375	73,012	79,584	85,950	91,967	97,485	102,359	107,477	112,851	118,493	124,418
	F8 OUTSIDE STORAGE YARD	47,114	5,448		Excl.	NA	52,562	57,818	63,021	68,063	72,828	77,197	81,057	85,110	89,365	93,834	98,525
	F9 VISITORS CENTER	1,760,192	1,669,984	5,064,444	Excl.	NA	8,494,621	9,344,083	10,185,050	10,999,854	11,769,844	12,476,035	13,099,837	13,754,828	14,442,570	15,164,698	15,922,933
	F10 COMMUNITY ROOM/CONFERENCE CENTER	1,765,257	405,140		Excl.	NA	2,170,396	2,387,436	2,602,305	2,816,490	3,007,224	3,187,657	3,347,040	3,514,392	3,690,112	3,874,618	4,068,348
	F11 STAFF PARKING		313,721		Excl.	NA	313,721	345,093	376,151	406,243	434,680	460,761	483,799	507,989	533,388	560,058	588,061
	F12 NMSP VEHICLE/EQUIPMENT PARKING		20,915		Excl.	NA	20,915	23,006	25,077	27,083	28,979	30,717	32,253	33,866	35,559	37,337	39,204
	F13 VISITORS PARKING		1,673,177		Excl.	NA	1,673,177	1,840,494	2,006,139	2,166,630	2,318,294	2,457,391	2,580,261	2,709,274	2,844,738	2,986,975	3,136,323
	F14 BUS PARKING		111,513		Excl.	NA	111,513	122,665	133,704	144,401	154,509	163,779	171,968	180,567	189,595	199,075	209,029
	F15 LARGE VESSELS DOCK	1,415,512	141,551		Excl.	NA	1,557,063	1,712,770	1,866,919	2,016,272	2,157,411	2,286,856	2,401,199	2,521,259	2,647,322	2,779,688	2,918,672
	F16 SMALL BOATS DOCK	423,712	42,371		Excl.	NA	466,083	512,691	558,833	603,540	645,788	684,535	718,762	754,700	792,435	832,057	873,659
	F17 WATERFRONT STORAGE	104,940	24,426		Excl.	NA	129,366	142,302	155,110	167,518	179,245	189,999	199,499	209,474	219,948	230,945	242,493
	F18 MAINTENANCE FACILITY	259,430	60,788		Excl.	NA	320,218	352,239	383,941	414,656	443,682	470,303	493,818	518,509	544,434	571,656	600,239
	F19 DOCKSIDE PARKING		313,721		Excl.	NA	313,721	345,093	376,151	406,243	434,680	460,761	483,799	507,989	533,388	560,058	588,061
		\$9,732,375	\$5,712,256	\$5,064,444	Excl.	NA	\$20,509,076	\$22,559,983	\$24,590,382	\$26,557,612	\$28,416,645	\$30,121,644	\$31,627,726	\$33,209,112	\$34,869,568	\$36,613,046	\$38,443,699
						A&E Fees	\$1,700,000	\$1,870,000	\$2,038,300	\$2,201,364	\$2,355,459	\$2,496,787	\$2,621,626	\$2,752,708	\$2,890,343	\$3,034,860	\$3,186,603
						Allowances for FF&E	\$320,000	\$352,000	\$383,680	\$414,374	\$443,381	\$469,983	\$493,483	\$518,157	\$544,065	\$571,268	\$599,831
						Total	\$22,529,076	\$24,781,983	\$27,012,362	\$29,173,351	\$31,215,485	\$33,088,414	\$34,742,835	\$36,479,977	\$38,303,976	\$40,219,175	\$42,230,133
G AMERICAN SAMOA SANCTUARY (NEW)	G1 OFFICE SPACE FOR NMSP STAFF	394,274	91,623		Excl.	NA	485,897	534,487	582,591	629,198	673,242	713,636	749,318	786,784	826,123	867,430	910,801
	G2 CONFERENCE/MEDIA CENTER	692,092	160,000		Excl.	NA	852,093	937,302	1,021,659	1,103,392	1,180,629	1,251,467	1,314,040	1,379,742	1,448,730	1,521,166	1,597,224
	G3 WET LABORATORY	288,239	68,587		Excl.	NA	356,826	392,509	427,835	462,061	494,406	524,070	550,274	577,787	606,677	637,010	668,861
	G4 DRY LABORATORY	288,239	68,587		Excl.	NA	356,826	392,509	427,835	462,061	494,406	524,070	550,274	577,787	606,677	637,010	668,861
	G5 DIVE CENTER	185,214	43,699		Excl.	NA	228,913	251,804	274,467	296,424	317,174	336,204	353,014	370,665	389,198	408,658	429,091
	G6 DRY STORAGE	96,948	22,501		Excl.	NA	119,449	131,393	143,219	154,676	165,504	175,434	184,206	193,416	203,087	213,241	223,903
	G7 REFRIGERATED STORAGE	34,130	8,359		Excl.	NA	42,489	46,738	50,944	55,020	58,871	62,403	65,524	68,800	72,240	75,852	79,644
	G8 SUPPORT & CIRCULATION TO OFFICE	530,638	123,399		Excl.	NA	654,037	719,440	784,190	846,925	906,210	960,583	1,008,612	1,059,042	1,111,995	1,167,594	1,225,974
	G9 OUTSIDE COVERED YARD STORAGE	31,342	7,401		Excl.	NA	38,743	42,617	46,453	50,169	53,681	56,902	59,747	62,734	65,871	69,164	72,623
	G10 NMSP VEHICLE/EQUIPMENT PARKING		26,740		Excl.	NA	26,740	29,414	32,062	34,627	37,050	39,273	41,237	43,299	45,464	47,737	50,124
	G11 STAFF PARKING		53,481		Excl.	NA	53,481	58,829	64,123	69,253	74,101	78,547	82,474	86,598	90,928	95,474	100,248
	G12 HOLDING TANKS (In 2 No.)	119,116	28,911		Excl.	NA	148,026	162,829	177,484	191,682	205,100	217,406	228,277	239,690	251,675	264,259	277,472
	G13 GREENHOUSE	54,464	13,037		Excl.	NA	67,502	74,252	80,935	87,409	93,528	99,140	104,097	109,302	114,767	120,505	126,530
	G14 QUARANTINE FACILITY	113,675	27,261		Excl.	NA	140,936	155,030	168,983	182,501	195,276	206,993	217,342	228,210	239,620	251,601	264,181
	G15 OUTSIDE YARD STORAGE	30,977	5,788		Excl.	NA	35,885	39,474	43,026	46,468	49,721	52,705	55,340	58,107	61,012	64,063	67,266
	G16 VISITORS CENTER	872,010	808,372	2,430,933	Excl.	NA	4,111,316	4,522,447	4,929,467	5,323,825	5,696,493	6,038,282	6,340,196	6,657,206	6,990,066	7,339,570	7,706,548
	G17 CLASSROOM	663,917	152,956		Excl.	NA	816,873	898,560	979,431	1,057,785	1,131,830	1,199,740	1,259,727	1,322,713	1,388,849	1,458,292	1,531,206
	G18 COMMUNITY SPACE	687,184	158,773		Excl.	NA	845,957	930,553	1,014,303	1,095,447	1,172,129	1,242,456	1,304,579	1,369,808	1,438,298	1,510,213	1,585,724
	G19 SUPPORT & CIRCULATION TO VISITOR	530,638	123,399		Excl.	NA	654,037	719,440	784,190	846,925	906,210	960,583	1,008,612	1,059,042	1,111,995	1,167,594	1,225,974
	G20 OUTDOOR ACTIVITY SPACE	214,154	24,599		Excl.	NA	238,752	262,628	286,264	309,156	330,807	350,655	368,188	386,597	405,927	426,224	447,535
	G21 VISITORS PARKING		696,202		Excl.	NA	696,202	765,822	834,746	901,526	966,633	1,022,510	1,073,636	1,127,318	1,183,684	1,242,868	1,305,011
	G22 LARGE VESSELS DOCK	905,812	90,581		Excl.	NA	996,393	1,096,033	1,194,675	1,290,249	1,380,567	1,463,401	1,536,571	1,613,400	1,694,070	1,778,773	1,867,712
	G23 SMALL BOATS DOCK	271,153	27,115		Excl.	NA	298,269	328,095	357,624	386,234	413,270	438,066	459,970	482,968	507,117	532,473	559,096
	G24 WATERFRONT STORAGE	67,152	15,630		Excl.	NA	82,782	91,060	99,256	107,196	114,700	121,582	127,661	134,044	140,746	147,783	155,172
	G25 MAINTENANCE FACILITY	165,986	38,892		Excl.	NA	204,878	225,366	245,649	265,301	283,872	300,905	315,950	331,747	348,335	365,751	384,039
	G26 DOCKSIDE PARKING		200,552		Excl.	NA	200,552	220,607	240,462	259,699	277,878	294,550	309,278	324,742	340,979	358,028	375,929
		\$7,236,476	\$3,086,446	\$2,430,933	Excl.	NA	\$12,753,854	\$14,029,240	\$15,291,871	\$16,515,221	\$17,671,287	\$18,731,564	\$19,668,142	\$20,651,549	\$21,684,127	\$22,768,333	\$23,906,749
						A&E Fees	\$1,050,000	\$1,155,000	\$1,258,950	\$1,359,666	\$1,454,843	\$1,542,133	\$1,619,240	\$1,700,202	\$1,785,212	\$1,874,473	\$1,968,196
						Allowances for FF&E	\$360,000	\$396,000	\$431,640	\$466,171	\$498,803	\$528,731	\$555,168	\$582,926	\$612,073	\$642,676	\$674,810
						Total	\$14,163,854	\$15,580,240	\$16,982,461	\$18,341,058	\$19,624,932	\$20,802,428	\$21,842,550	\$22,934,677	\$24,081,411	\$25,285,482	\$26,549,756

BUDGET ANALYSIS

Recommended Projects

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total	Escalation											
		Building	Site	Exhibits	Land	Rent	Today	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
H	MARINE MAMMAL RESEARCH CENTER (NEW)																		
	H1	OFFICE SPACE FOR NMSP STAFF	3,372,659	785,864		Excl.	NA	4,158,523	4,574,376	4,986,070	5,384,955	5,761,902	6,107,616	6,412,997	6,733,647	7,070,329	7,423,846	7,795,038	
	H2	CLASSROOM	665,207	154,147		Excl.	NA	819,355	901,290	982,406	1,060,999	1,135,269	1,203,385	1,263,554	1,326,732	1,393,068	1,462,722	1,535,858	
	H3	WET LABORATORY	432,359	102,881		Excl.	NA	535,239	588,763	641,752	693,092	741,609	786,105	825,410	866,681	910,015	955,516	1,003,292	
	H4	DRY LABORATORY	432,359	102,881		Excl.	NA	535,239	588,763	641,752	693,092	741,609	786,105	825,410	866,681	910,015	955,516	1,003,292	
	H5	DRY STORAGE	59,089	13,904		Excl.	NA	72,993	80,292	87,519	94,520	101,137	107,205	112,565	118,193	124,103	130,308	136,824	
	H6	REFRIGERATED STORAGE	137,660	33,547		Excl.	NA	171,207	188,328	205,277	221,700	237,219	251,452	264,024	277,225	291,087	305,641	320,923	
	H7	COVERED OUTSIDE STORAGE	145,740	33,830		Excl.	NA	179,571	197,528	215,305	232,530	248,807	263,735	276,922	290,768	305,306	320,572	336,600	
	H8	OUTSIDE STORAGE YARD	58,342	6,946		Excl.	NA	65,288	71,817	78,280	84,543	90,461	95,888	100,683	105,717	111,003	116,553	122,380	
	H9	SUPPORT & CIRCULATION	644,987	150,394		Excl.	NA	795,382	874,920	953,663	1,029,956	1,102,053	1,168,176	1,226,585	1,287,914	1,352,310	1,419,925	1,490,921	
	H10	STAFF PARKING		200,552		Excl.	NA	200,552	220,607	240,462	259,699	277,878	294,550	309,278	324,742	340,979	358,028	375,929	
	H11	NMSP VEHICLE/EQUIPMENT PARKING		40,110		Excl.	NA	40,110	44,121	48,092	51,940	55,576	58,910	61,856	64,948	68,196	71,606	75,186	
	H12	ENCLOSED GARAGE	78,473	18,316		Excl.	NA	96,789	106,468	116,050	125,334	134,107	142,153	149,261	156,724	164,560	172,788	181,428	
	H13	VISITORS PARKING		1,042,870		Excl.	NA	1,042,870	1,147,157	1,250,401	1,350,434	1,444,964	1,531,662	1,608,245	1,688,657	1,773,090	1,861,745	1,954,832	
	H14	SMALL BOATS DOCK	406,730	40,673		Excl.	NA	447,403	492,143	536,436	579,351	619,905	657,100	689,955	724,452	760,675	798,709	838,644	
	H15	WATERFRONT STORAGE	121,408	28,181		Excl.	NA	149,589	164,548	179,357	193,706	207,265	219,701	230,686	242,221	254,332	267,048	280,401	
	H16	DOCKSIDE PARKING		100,276		Excl.	NA	100,276	110,304	120,231	129,849	138,939	147,275	154,639	162,371	170,489	179,014	187,965	
			\$6,555,014	\$2,855,373		Excl.	NA	\$9,410,387	\$10,351,426	\$11,283,054	\$12,185,698	\$13,038,697	\$13,821,019	\$14,512,070	\$15,237,674	\$15,999,557	\$16,799,535	\$17,639,512	
								A&E Fees	\$800,000	\$880,000	\$959,200	\$1,035,936	\$1,108,452	\$1,174,959	\$1,233,707	\$1,295,392	\$1,360,161	\$1,428,170	\$1,499,578
								Allowances for FF&E	\$250,000	\$275,000	\$299,750	\$323,730	\$346,391	\$367,175	\$385,533	\$404,810	\$425,050	\$446,303	\$468,618
								Total	\$10,460,387	\$11,506,426	\$12,542,004	\$13,545,364	\$14,493,540	\$15,363,152	\$16,131,310	\$16,937,875	\$17,784,769	\$18,674,008	\$19,607,708
J	HAWAII ECO-DISCOVERY (LEASED)																		
	J1	OFFICE SPACE FOR NMSP STAFF	160,182	40,045		Excl.	Excl.	200,227	220,250	240,072	259,278	277,427	294,073	308,777	324,215	340,426	357,447	375,320	
	J2	CLASSROOM	137,753	34,438		Excl.	Excl.	172,192	189,411	206,458	222,974	238,582	252,897	265,542	278,819	292,760	307,398	322,768	
	J3	OUTDOOR ACTIVITY SPACE	53,539	13,385		Excl.	Excl.	66,923	73,615	80,241	86,660	92,726	98,290	103,204	108,365	113,783	119,472	125,446	
	J4	VISITORS CENTER	296,653	1,213,666	4,558,010	Excl.	Excl.	6,068,329	6,675,162	7,275,926	7,858,000	8,408,060	8,912,544	9,358,171	9,826,080	10,317,384	10,833,253	11,374,915	
	J5	DRY STORAGE	16,999	4,250		Excl.	Excl.	21,249	23,374	25,478	27,516	29,442	31,208	32,769	34,407	36,128	37,934	39,831	
	J6	COMMUNITY ROOM/CONFERENCE CTR	374,408	93,602		Excl.	Excl.	468,010	514,811	561,144	606,035	648,458	687,365	721,734	757,820	795,711	835,497	877,272	
	J7	SUPPORT & CIRCULATION	449,724	112,431		Excl.	Excl.	562,155	618,370	674,023	727,945	778,901	825,635	866,917	910,263	955,776	1,003,565	1,053,743	
	J8	STAFF PARKING																	
	J9	VISITORS PARKING																	
			\$1,489,257	\$1,511,817	\$4,558,010	Excl.	Excl.	\$7,559,084	\$8,314,992	\$9,063,342	\$9,788,409	\$10,473,598	\$11,102,013	\$11,657,114	\$12,239,970	\$12,851,968	\$13,494,567	\$14,169,295	
								A&E Fees	\$650,000	\$715,000	\$779,350	\$841,698	\$900,617	\$954,654	\$1,002,387	\$1,052,506	\$1,105,131	\$1,160,388	\$1,218,407
								Allowances for FF&E	\$410,000	\$451,000	\$491,590	\$530,917	\$568,081	\$602,166	\$632,275	\$663,888	\$697,083	\$731,937	\$768,534
								Total	\$8,619,084	\$9,480,992	\$10,334,282	\$11,161,024	\$11,942,296	\$12,658,834	\$13,291,775	\$13,956,364	\$14,654,182	\$15,386,891	\$16,156,236
K	CHILDREN'S MARINE DISCOVERY CENTER (NEW)																		
	K1	OFFICE SPACE FOR NMSP STAFF	287,501	67,495		Excl.	NA	354,996	390,496	425,640	459,692	491,870	521,382	547,451	574,824	603,565	633,743	665,431	
	K2	CLASSROOM	493,819	114,694		Excl.	NA	608,513	669,364	729,607	787,975	843,134	893,722	938,408	985,328	1,034,594	1,086,324	1,140,640	
	K3	EXHIBITION SPACE	1,730,848	1,673,830	5,110,484	Excl.	NA	8,515,162	9,366,678	10,209,679	11,026,454	11,798,305	12,506,204	13,131,514	13,788,090	14,477,494	15,201,369	15,961,437	
	K4	OUTDOOR ACTIVITY SPACE	43,220	4,964		Excl.	NA	48,185	53,003	57,773	62,395	66,763	70,769	74,307	78,022	81,923	86,020	90,321	
	K5	DRY STORAGE	192,531	44,482		Excl.	NA	237,013	260,715	284,179	306,913	328,397	348,101	365,506	383,781	402,970	423,119	444,275	
	K6	STAFF PARKING		33,729		Excl.	NA	33,729	37,102	40,441	43,677	46,734	49,538	52,015	54,616	57,346	60,214	63,224	
	K7	VISITORS PARKING		1,180,522		Excl.	NA	1,180,522	1,298,574	1,415,446	1,528,681	1,635,689	1,733,830	1,820,522	1,911,548	2,007,125	2,107,482	2,212,856	
	K8	SUPPORT & CIRCULATION	867,578	201,198		Excl.	NA	1,068,776	1,175,653	1,281,462	1,383,979	1,480,858	1,569,709	1,648,194	1,730,604	1,817,134	1,907,991	2,003,391	
			\$3,615,497	\$3,320,914	\$5,110,484	Excl.	NA	\$12,046,896	\$13,251,585	\$14,444,228	\$15,599,766	\$16,691,750	\$17,693,255	\$18,577,917	\$19,506,813	\$20,482,154	\$21,506,262	\$22,581,575	
								A&E Fees	\$1,050,000	\$1,155,000	\$1,258,950	\$1,359,666	\$1,454,843	\$1,542,133	\$1,619,240	\$1,700,202	\$1,785,212	\$1,874,473	\$1,968,196
								Allowances for FF&E	\$170,000	\$187,000	\$203,830	\$220,136	\$235,546	\$249,679	\$262,163	\$275,271	\$289,034	\$303,486	\$318,660
								Total	\$13,266,896	\$14,593,585	\$15,907,008	\$17,179,568	\$18,382,138	\$19,485,067	\$20,459,320	\$21,482,286	\$22,556,400	\$23,684,220	\$24,868,431

BUDGET ANALYSIS

Recommended Projects

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total	Escalation										
		Building	Site	Exhibits	Land	Rent	Today	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
L	CULTURAL EXCHANGE CENTER (NEW)																	
	L1	OFFICE SPACE FOR NSMP STAFF	864,648	200,535		Excl.	NA.	1,065,183	1,171,701	1,277,154	1,379,327	1,475,879	1,564,432	1,642,654	1,724,786	1,811,026	1,901,577	1,996,656
	L2	WESTERN (PRIVATE) ACCOMMODATIONS (In 8 No.)	2,642,077	655,310		Excl.	NA.	3,297,387	3,627,126	3,953,567	4,269,853	4,568,742	4,842,867	5,085,010	5,339,261	5,606,224	5,886,535	6,180,862
	L3	COMMUNAL ACCOMMODATIONS	1,071,578	246,190		Excl.	NA.	1,317,768	1,449,545	1,580,004	1,706,405	1,825,853	1,935,404	2,032,174	2,133,783	2,240,472	2,352,496	2,470,121
	L4	OUTDOOR ACCOMMODATIONS (In 10 No.)	478,026	118,638		Excl.	NA.	596,664	656,330	715,400	772,632	826,716	876,319	920,135	966,142	1,014,449	1,065,171	1,118,430
	L5	KITCHEN	853,518	200,357		Excl.	NA.	1,053,875	1,159,262	1,263,596	1,364,683	1,460,211	1,547,824	1,625,215	1,706,476	1,791,800	1,881,390	1,975,459
	L6	DINING	1,037,488	239,838		Excl.	NA.	1,277,325	1,405,058	1,531,513	1,654,034	1,769,816	1,876,005	1,969,805	2,068,296	2,171,711	2,280,296	2,394,311
	L7	LARGE MEETING ROOM	1,751,661	403,188		Excl.	NA.	2,154,849	2,370,333	2,583,663	2,790,357	2,985,681	3,164,822	3,323,063	3,489,217	3,663,677	3,846,861	4,039,204
	L8	BREAKOUT ROOM (In 3 No.)	789,576	193,487		Excl.	NA.	983,063	1,081,369	1,178,692	1,272,988	1,362,097	1,443,823	1,516,014	1,591,815	1,671,405	1,754,976	1,842,724
	L9	OUTDOOR MEETING SPACE	1,367,226	315,761		Excl.	NA.	1,682,987	1,851,286	2,017,902	2,179,334	2,331,887	2,471,800	2,595,390	2,725,160	2,861,418	3,004,489	3,154,713
	L10	INFORMAL SPACE (PRE-FUNCTION)	939,729	217,569		Excl.	NA.	1,157,298	1,273,028	1,387,600	1,498,608	1,603,511	1,699,721	1,784,707	1,873,943	1,967,640	2,066,022	2,169,323
	L11	DRY STORAGE	228,896	52,883		Excl.	NA.	281,778	309,956	337,852	364,881	390,422	413,847	434,540	456,267	479,080	503,034	528,186
	L12	STAFF PARKING		120,331		Excl.	NA.	120,331	132,364	144,277	155,819	166,727	176,730	185,567	194,845	204,587	214,817	225,558
	L13	VISITORS PARKING		2,085,741		Excl.	NA.	2,085,741	2,294,315	2,500,803	2,700,867	2,889,928	3,063,324	3,216,490	3,377,314	3,546,180	3,723,489	3,909,663
			\$12,024,423	\$5,049,826		Excl.	NA.	\$17,074,248	\$18,781,673	\$20,472,024	\$22,109,786	\$23,657,471	\$25,076,919	\$26,330,765	\$27,647,303	\$29,029,668	\$30,481,152	\$32,005,209
							A&E Fees	\$1,500,000	\$1,650,000	\$1,798,500	\$1,942,380	\$2,078,347	\$2,203,047	\$2,313,200	\$2,428,860	\$2,550,303	\$2,677,818	\$2,811,709
							Allowances for FF&E	\$600,000	\$660,000	\$719,400	\$776,952	\$831,339	\$881,219	\$925,280	\$971,544	\$1,020,121	\$1,071,127	\$1,124,684
							Total	\$19,174,248	\$21,091,673	\$22,989,924	\$24,829,118	\$26,567,156	\$28,161,185	\$29,569,245	\$31,047,707	\$32,600,092	\$34,230,097	\$35,941,602
M	NORTH SHORE SANCTUARY (NEW)																	
	M1	OFFICE SPACE FOR NSMP STAFF	765,889	177,147		Excl.	NA.	943,036	1,037,339	1,130,700	1,221,156	1,306,637	1,385,035	1,454,287	1,527,001	1,603,351	1,683,518	1,767,694
	M2	CLASSROOM	538,394	125,048		Excl.	NA.	663,442	729,786	795,467	859,105	919,242	974,396	1,023,116	1,074,272	1,127,986	1,184,385	1,243,604
	M3	OUTDOOR ACTIVITY SPACE	70,671	8,118		Excl.	NA.	78,788	86,667	94,467	102,025	109,166	115,716	121,502	127,577	133,956	140,654	147,686
	M4	WET LABORATORY	658,002	154,950		Excl.	NA.	812,952	894,247	974,729	1,052,708	1,126,397	1,193,981	1,253,680	1,316,364	1,382,182	1,451,291	1,523,856
	M5	DRY STORAGE	64,036	15,014		Excl.	NA.	79,051	86,956	94,782	102,364	109,530	116,101	121,906	128,002	134,402	141,122	148,178
	M6	REFRIGERATED STORAGE	46,905	11,488		Excl.	NA.	58,393	64,232	70,013	75,614	80,907	85,762	90,050	94,552	99,280	104,244	109,456
	M7	COVERED OUTSIDE STORAGE	53,229	12,511		Excl.	NA.	65,740	72,314	78,822	85,128	91,087	96,552	101,380	106,449	111,771	117,360	123,228
	M8	OUTSIDE STORAGE YARD	15,448	2,388		Excl.	NA.	17,836	19,619	21,385	23,096	24,712	26,195	27,505	28,880	30,324	31,840	33,432
	M9	VISITORS CENTER	843,736	752,106	2,228,355	Excl.	NA.	3,824,198	4,206,618	4,585,213	4,952,030	5,298,672	5,616,593	5,897,422	6,192,293	6,501,908	6,827,004	7,168,354
	M10	COMMUNITY ROOM/CONFERENCE	386,948	90,466		Excl.	NA.	477,414	525,155	572,419	618,213	661,488	701,177	736,236	773,048	811,700	852,285	894,899
	M11	STAFF PARKING		73,536		Excl.	NA.	73,536	80,889	88,169	95,223	101,888	108,002	113,402	119,072	125,026	131,277	137,841
	M12	NSMP VEHICLE/EQUIPMENT PARKING		49,024		Excl.	NA.	49,024	53,926	58,780	63,482	67,926	72,001	75,601	79,381	83,350	87,518	91,894
	M13	VISITORS PARKING		643,438		Excl.	NA.	643,438	707,781	771,482	833,200	891,524	945,016	992,266	1,041,880	1,093,974	1,148,672	1,206,106
			\$3,443,258	\$2,115,233	\$2,228,355	Excl.	NA.	\$7,786,846	\$8,565,531	\$9,336,428	\$10,083,343	\$10,789,177	\$11,436,527	\$12,008,354	\$12,608,771	\$13,239,210	\$13,901,170	\$14,596,229
							A&E Fees	\$670,000	\$737,000	\$803,330	\$867,596	\$928,328	\$984,028	\$1,033,229	\$1,084,891	\$1,139,135	\$1,196,092	\$1,255,897
							Allowances for FF&E	\$150,000	\$165,000	\$179,850	\$194,238	\$207,835	\$220,305	\$231,320	\$242,886	\$255,030	\$267,782	\$281,171
							Total	\$8,606,846	\$9,467,531	\$10,319,608	\$11,145,177	\$11,925,339	\$12,640,860	\$13,272,903	\$13,936,548	\$14,633,375	\$15,365,044	\$16,133,296
N	LAHAINA VISITOR CENTER (LEASED)																	
	N1	OFFICE SPACE FOR NSMP STAFF	129,331	32,333		Excl.	Excl.	161,664	177,831	193,835	209,342	223,996	237,436	249,308	261,773	274,862	288,605	303,035
	N2	SUPPORT & CIRCULATION	184,008	46,002		Excl.	Excl.	230,010	253,011	275,782	297,845	318,694	337,816	354,706	372,442	391,064	410,617	431,148
	N3	DRY STORAGE	10,672	2,668		Excl.	Excl.	13,341	14,675	15,995	17,275	18,484	19,593	20,573	21,602	22,682	23,816	25,007
	N4	VISITORS CENTER	159,937	653,345	2,453,442	Excl.	Excl.	3,266,723	3,593,395	3,916,801	4,230,145	4,526,255	4,797,830	5,037,722	5,289,608	5,554,088	5,831,793	6,123,383
	N5	COMMUNITY ROOM/CONFERENCE CENTER	90,690	22,672		Excl.	Excl.	113,362	124,698	135,921	146,795	157,071	166,495	174,820	183,561	192,739	202,375	212,494
	N6	STAFF PARKING																
	N7	VISITORS PARKING																
			\$574,638	\$757,020	\$2,453,442	Excl.	Excl.	\$3,785,100	\$4,163,610	\$4,538,335	\$4,901,402	\$5,244,500	\$5,559,170	\$5,837,129	\$6,128,985	\$6,435,434	\$6,757,206	\$7,095,066
							A&E Fees	\$360,000	\$396,000	\$431,640	\$466,171	\$498,803	\$528,731	\$555,168	\$582,926	\$612,073	\$642,676	\$674,810
							Allowances for FF&E	\$150,000	\$165,000	\$179,850	\$194,238	\$207,835	\$220,305	\$231,320	\$242,886	\$255,030	\$267,782	\$281,171
							Total	\$4,295,100	\$4,724,610	\$5,149,825	\$5,561,811	\$5,951,138	\$6,308,206	\$6,623,617	\$6,954,797	\$7,302,537	\$7,667,664	\$8,051,047

BUDGET ANALYSIS

Recommended Projects

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total	Escalation										
		Building	Site	Exhibits	Land	Rent	Today	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
P	MOLOKAI LEADERSHIP INSTITUTE (NEW)																	
	P1	OFFICE SPACE FOR NMSP STAFF	191,472	191,472		Excl.	NA	382,944	421,239	459,150	495,882	530,594	562,430	590,551	620,079	651,083	683,637	717,819
	P2	VISITORS CENTER	250,000	1,213,666	-	Excl.	Excl.	1,463,666	1,610,032	1,754,935	1,895,330	2,028,003	2,149,683	2,257,168	2,370,026	2,488,527	2,612,954	2,743,601
	P3	DRY STORAGE	20,000	16,009		Excl.	NA	36,009	39,610	43,175	46,629	49,893	52,886	55,531	58,307	61,223	64,284	67,498
	P4	COMMUNITY ROOM/CONFERENCE	386,948	96,737		Excl.	NA	483,685	532,054	579,938	626,334	670,177	710,388	745,907	783,202	822,362	863,480	906,655
	P5	STAFF PARKING		73,536		Excl.	NA	73,536	80,889	88,169	95,223	101,888	108,002	113,402	119,072	125,026	131,277	137,841
	P6	NMSP VEHICLE/EQUIPMENT PARKING		49,024		Excl.	NA	49,024	53,926	58,780	63,482	67,926	72,001	75,601	79,381	83,350	87,518	91,894
	P7	VISITORS PARKING		643,438		Excl.	NA	643,438	707,781	771,482	833,200	891,524	945,016	992,266	1,041,880	1,093,974	1,148,672	1,206,106
			\$3,443,258	\$2,115,233	\$2,228,355	Excl.	NA	\$3,132,301	\$3,445,532	\$3,755,629	\$4,056,080	\$4,340,005	\$4,600,406	\$4,830,426	\$5,071,947	\$5,325,545	\$5,591,822	\$5,871,413
							A&E Fees	\$670,000	\$737,000	\$803,330	\$867,596	\$928,328	\$984,028	\$1,033,229	\$1,084,891	\$1,139,135	\$1,196,092	\$1,255,897
							Allowances for FF&E	\$150,000	\$165,000	\$179,850	\$194,238	\$207,835	\$220,305	\$231,320	\$242,886	\$255,030	\$267,782	\$281,171
						Total	\$3,952,301	\$4,347,532	\$4,738,809	\$5,117,914	\$5,476,168	\$5,804,738	\$6,094,975	\$6,399,724	\$6,719,710	\$7,055,696	\$7,408,480	
Q	TERRITORIAL SCIENCE CENTER																	
	Q1	WET LABORATORY	576,478	72,060		Excl.	NA	648,538	713,392	777,597	839,805	898,591	952,507	1,000,132	1,050,139	1,102,646	1,157,778	1,215,667
	Q2	DRY LABORATORY	576,478	72,060		Excl.	NA	648,538	713,392	777,597	839,805	898,591	952,507	1,000,132	1,050,139	1,102,646	1,157,778	1,215,667
	Q3	DRY STORAGE	96,948	22,501		Excl.	NA	119,449	131,394	143,219	154,677	165,504	175,434	184,206	193,416	203,087	213,242	223,904
	Q4	REFRIGERATED STORAGE	34,130	8,533		Excl.	NA	42,663	46,929	51,152	55,245	59,112	62,658	65,791	69,081	72,535	76,162	79,970
	Q5	OUTSIDE COVERED YARD STORAGE	31,342	7,835		Excl.	NA	39,177	43,095	46,973	50,731	54,282	57,539	60,416	63,437	66,609	69,939	73,436
	Q6	NMSP VEHICLE/EQUIPMENT PARKING		26,740		Excl.	NA	26,740	29,414	32,062	34,627	37,050	39,273	41,237	43,299	45,464	47,737	50,124
	Q7	STAFF PARKING		53,481		Excl.	NA	53,481	58,829	64,123	69,253	74,101	78,547	82,474	86,598	90,928	95,474	100,248
	Q8	GREENHOUSE		13,616		Excl.	NA	68,081	74,889	81,629	88,159	94,330	99,990	104,989	110,239	115,751	121,538	127,615
	Q9	QUARANTINE FACILITY	113,675	28,419		Excl.	NA	142,094	156,303	170,371	184,000	196,880	208,693	219,128	230,084	241,588	253,668	266,351
	Q10	OUTSIDE YARD STORAGE	30,097	7,524		Excl.	NA	37,622	41,384	45,108	48,717	52,127	55,255	58,017	60,918	63,964	67,163	70,521
	Q11	VISITORS PARKING		696,202		Excl.	NA	696,202	765,822	834,746	901,526	964,633	1,022,510	1,073,636	1,127,318	1,183,684	1,242,868	1,305,011
			\$1,513,613	\$1,008,970		Excl.	Excl.	\$2,522,584	\$2,774,842	\$3,024,578	\$3,266,544	\$3,495,202	\$3,704,914	\$3,890,160	\$4,084,668	\$4,288,901	\$4,503,346	\$4,728,514
							A&E Fees	\$1,050,000	\$1,155,000	\$1,258,950	\$1,359,666	\$1,454,843	\$1,542,133	\$1,619,240	\$1,700,202	\$1,785,212	\$1,874,473	\$1,968,196
							Allowances for FF&E	\$360,000	\$396,000	\$431,640	\$466,171	\$498,803	\$528,731	\$555,168	\$582,926	\$612,073	\$642,676	\$674,810
						Total	\$3,932,584	\$4,325,842	\$4,715,168	\$5,092,381	\$5,448,848	\$5,775,779	\$6,064,568	\$6,367,796	\$6,686,186	\$7,020,495	\$7,371,520	
Sub-Total (Option A)																		
		\$56,608,421	\$30,188,725	\$26,090,560	Excl.	Excl./NA	\$112,887,705	\$124,176,476	\$135,352,359	\$146,180,547	\$156,413,186	\$165,797,977	\$174,087,876	\$182,792,270	\$191,931,883	\$201,528,477	\$211,604,901	
						Total for A&E Fees	\$9,723,500	\$10,695,850	\$11,658,477	\$12,591,155	\$13,472,535	\$14,280,888	\$14,994,932	\$15,744,679	\$16,531,912	\$17,358,508	\$18,226,434	
						Total for Allowance for FF&E	\$2,820,000	\$3,102,000	\$3,381,180	\$3,651,674	\$3,907,292	\$4,141,729	\$4,348,816	\$4,566,256	\$4,794,569	\$5,034,298	\$5,286,012	
	Grand Total (Option A - New Building for Kauai Sanctuary Office and American Samoa Sanctuary)						\$125,431,205	\$137,974,326	\$150,392,015	\$162,423,376	\$173,793,013	\$184,220,594	\$193,431,623	\$203,103,204	\$213,258,365	\$223,921,283	\$235,117,347	
Sub-Total (Option B)																		
		\$47,027,843	\$25,110,935	\$26,090,560	Excl.	Excl./NA	\$98,229,338	\$108,052,271	\$117,776,976	\$127,199,134	\$136,103,073	\$144,269,258	\$151,482,721	\$159,056,857	\$167,009,700	\$175,360,184	\$184,128,194	
						Total for A&E Fees	\$8,563,500	\$9,419,850	\$10,267,637	\$11,089,047	\$11,865,281	\$12,577,198	\$13,206,057	\$13,866,360	\$14,559,678	\$15,287,662	\$16,052,045	
						Total for Allowance for FF&E	\$2,820,000	\$3,102,000	\$3,381,180	\$3,651,674	\$3,907,292	\$4,141,729	\$4,348,816	\$4,566,256	\$4,794,569	\$5,034,298	\$5,286,012	
	Grand Total (Option B - Leased for Kauai Sanctuary Office and American Samoa Sanctuary)						\$109,612,838	\$120,574,121	\$131,425,792	\$141,939,856	\$151,875,646	\$160,988,184	\$169,037,594	\$177,489,473	\$186,363,947	\$195,682,144	\$205,466,252	

BUDGET ANALYSIS

Recommended Projects- Option B

Rates current at June 2008

Zone	Level	Total Cost (with margins & mark-ups)					Grand Total		Escalation									
		Building	Site	Exhibits	Land	Rent	Today	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
A KAUAI SANCTUARY OFFICE (LEASED)																		
A1	OFFICE SPACE FOR NMSP STAFF	401,625	100,406		Excl.	Excl.	502,031	552,234	601,935	650,090	695,596	737,332	774,199	812,909	853,554	896,232	941,043	
A2	CLASSROOM	172,944	43,236		Excl.	Excl.	216,179	237,797	259,199	279,935	299,530	317,502	333,377	350,046	367,549	385,926	405,222	
A3	WET LABORATORY	269,935	67,484		Excl.	Excl.	337,419	371,160	404,565	436,930	467,515	495,566	520,344	546,362	573,680	602,364	632,482	
A4	DIVE CENTER	64,854	16,213		Excl.	Excl.	81,067	89,174	97,200	104,976	112,324	119,063	125,017	131,267	137,831	144,722	151,958	
A5	SECURE STORAGE	3,292	823		Excl.	Excl.	4,115	4,526	4,934	5,328	5,701	6,043	6,346	6,663	6,996	7,346	7,713	
A6	DRY STORAGE	7,029	1,757		Excl.	Excl.	8,787	9,665	10,535	11,378	12,175	12,905	13,550	14,228	14,939	15,686	16,471	
A7	REFRIGERATED STORAGE	30,423	7,606		Excl.	Excl.	38,029	41,831	45,596	49,244	52,691	55,852	58,645	61,577	64,656	67,889	71,283	
A8	OUTSIDE STORAGE YARD	47,114	11,778		Excl.	Excl.	58,892	64,781	70,612	76,261	81,599	86,495	90,820	95,361	100,129	105,135	110,392	
A9	VISITORS CENTER	590,948	1,413,848	5,064,444	Excl.	Excl.	7,069,240	7,776,164	8,476,019	9,154,101	9,794,888	10,382,581	10,901,710	11,446,796	12,019,135	12,620,092	13,251,097	
A10	COMMUNITY ROOM/CONFERENCE CENTR	590,948	147,737		Excl.	Excl.	738,685	812,554	885,684	956,538	1,023,496	1,084,906	1,139,151	1,196,109	1,255,914	1,318,710	1,384,645	
A11	STAFF PARKING																	
A12	NMSP VEHICLE/EQUIPMENT PARKING																	
A13	VISITORS PARKING																	
A14	BUS PARKING																	
A15	LARGE VESSELS DOCK	1,415,512	353,878		Excl.	Excl.	1,769,390	1,946,329	2,121,499	2,291,219	2,451,604	2,598,700	2,728,635	2,865,067	3,008,320	3,158,736	3,316,673	
A16	SMALL BOATS DOCK	423,712	105,928		Excl.	Excl.	529,640	582,604	635,038	685,841	733,850	777,881	816,775	857,613	900,494	945,519	992,795	
A17	WATERFRONT STORAGE	17,064	4,266		Excl.	Excl.	21,330	23,463	25,575	27,621	29,555	31,328	32,894	34,539	36,266	38,079	39,983	
A18	MAINTENANCE FACILITY	83,361	20,840		Excl.	Excl.	104,201	114,621	124,937	134,932	144,377	153,040	160,692	168,726	177,163	186,021	195,322	
A19	DOCKSIDE PARKING																	
		\$4,118,760	\$2,295,801	\$5,064,444		Excl.	\$11,479,005	\$12,626,906	\$13,763,328	\$14,864,394	\$15,904,901	\$16,859,195	\$17,702,155	\$18,587,263	\$19,516,626	\$20,492,457	\$21,517,080	
							A&E Fees	\$980,000	\$1,078,000	\$1,175,020	\$1,269,022	\$1,357,853	\$1,439,324	\$1,511,291	\$1,586,855	\$1,666,198	\$1,749,508	
							Allowances of FF&E	\$320,000	\$352,000	\$383,680	\$414,374	\$443,381	\$469,983	\$493,483	\$518,157	\$544,065	\$571,268	
							Total	\$12,779,005	\$14,056,906	\$15,322,028	\$16,547,790	\$17,706,135	\$18,768,503	\$19,706,928	\$20,692,275	\$21,726,888	\$22,813,233	\$23,953,895
B AMERICAN SAMOA SANCTRY (LEASED)																		
B1	OFFICE SPACE FOR NMSP STAFF	85,430	21,357		Excl.	Excl.	106,787	117,466	128,038	138,281	147,961	156,838	164,680	172,914	181,560	190,638	200,170	
B2	CONFERENCE/MEDIA CENTER	229,636	57,409		Excl.	Excl.	287,045	315,750	344,167	371,701	397,720	421,583	442,662	464,795	488,035	512,437	538,059	
B3	WET LABORATORY	106,498	26,625		Excl.	Excl.	133,123	146,435	159,614	172,383	184,450	195,517	205,293	215,557	226,335	237,652	249,535	
B4	DRY LABORATORY	106,498	26,625		Excl.	Excl.	133,123	146,435	159,614	172,383	184,450	195,517	205,293	215,557	226,335	237,652	249,535	
B5	DIVE CENTER	41,413	10,353		Excl.	Excl.	51,766	56,942	62,067	67,033	71,725	76,028	79,830	83,821	88,012	92,413	97,034	
B6	DRY STORAGE	16,033	4,008		Excl.	Excl.	20,041	22,045	24,029	25,951	27,768	29,434	30,905	32,451	34,073	35,777	37,566	
B7	REFRIGERATED STORAGE	19,482	4,871		Excl.	Excl.	24,353	26,788	29,199	31,535	33,742	35,767	37,555	39,433	41,405	43,475	45,649	
B8	SUPPORT & CIRCULATION TO OFFICE	192,623	48,156		Excl.	Excl.	240,778	264,856	288,693	311,788	333,614	353,630	371,312	389,878	409,371	429,840	451,332	
B9	OUTSIDE COVERED YARD STORAGE	4,515	1,129		Excl.	Excl.	5,643	6,208	6,766	7,308	7,819	8,288	8,703	9,138	9,595	10,074	10,578	
B10	NMSP VEHICLE/EQUIPMENT PARKING																	
B11	STAFF PARKING																	
B12	HOLDING TANKS (In 2 No.)	17,364	4,341		Excl.	Excl.	21,705	23,875	26,024	28,106	30,073	31,878	33,472	35,145	36,902	38,748	40,685	
B13	GREENHOUSE	54,464	13,616		Excl.	Excl.	68,081	74,889	81,629	88,159	94,330	99,990	104,989	110,239	115,751	121,538	127,615	
B14	QUARANTINE FACILITY	25,467	6,367		Excl.	Excl.	31,834	35,017	38,169	41,222	44,108	46,754	49,092	51,546	54,124	56,830	59,671	
B15	OUTSIDE YARD STORAGE	30,097	7,524		Excl.	Excl.	37,622	41,384	45,108	48,717	52,127	55,255	58,017	60,918	63,964	67,163	70,521	
B16	VISITORS CENTER	283,030	678,491	2,430,933	Excl.	Excl.	3,392,454	3,731,699	4,067,552	4,392,957	4,700,463	4,982,491	5,231,616	5,493,197	5,767,856	6,056,249	6,359,062	
B17	CLASSROOM	207,063	51,766		Excl.	Excl.	258,829	284,712	310,336	335,625	360,142	384,149	407,149	429,107	449,062	468,065	485,168	
B18	COMMUNITY SPACE	201,854	50,646		Excl.	Excl.	252,518	277,550	302,529	326,731	349,603	370,579	389,108	408,563	428,991	450,441	472,963	
B19	SUPPORT & CIRCULATION TO VISITOR	192,623	48,156		Excl.	Excl.	240,778	264,856	288,693	311,788	333,614	353,630	371,312	389,878	409,371	429,840	451,332	
B20	OUTDOOR ACTIVITY SPACE	214,154	53,538		Excl.	Excl.	267,692	294,461	320,963	346,640	370,905	393,159	412,817	433,458	455,130	477,887	501,781	
B21	VISITORS PARKING																	
B22	LARGE VESSELS DOCK	905,812	226,453		Excl.	Excl.	1,132,265	1,245,491	1,357,586	1,466,193	1,568,826	1,662,956	1,746,103	1,833,409	1,925,079	2,021,333	2,122,400	
B23	SMALL BOATS DOCK	271,153	67,788		Excl.	Excl.	338,942	372,836	406,391	438,902	469,625	497,803	522,693	548,828	576,269	605,082	635,337	
B24	WATERFRONT STORAGE	10,939	2,735		Excl.	Excl.	13,674	15,041	16,395	17,707	18,946	20,083	21,087	22,141	23,249	24,411	25,632	
B25	MAINTENANCE FACILITY	53,365	13,341		Excl.	Excl.	66,706	73,377	79,980	86,379	92,425	97,971	102,869	108,013	113,414	119,084	125,038	
B26	DOCKSIDE PARKING																	
		\$3,269,512	\$1,425,111	\$2,430,933	Excl.	Excl.	\$7,125,557	\$7,838,113	\$8,543,543	\$9,227,026	\$9,872,918	\$10,465,293	\$10,988,558	\$11,537,986	\$12,114,885	\$12,720,629	\$13,356,661	
							A&E Fees	\$610,000	\$671,000	\$731,390	\$789,901	\$845,194	\$895,906	\$940,701	\$987,736	\$1,037,123	\$1,088,979	
							Allowances of FF&E	\$360,000	\$396,000	\$431,640	\$466,171	\$498,803	\$528,731	\$555,168	\$582,926	\$612,073	\$642,676	
							Total	\$8,095,557	\$8,905,113	\$9,706,573	\$10,483,099	\$11,216,916	\$11,889,930	\$12,484,427	\$13,108,648	\$13,764,081	\$14,452,285	

BUDGET ANALYSIS

Recommended Projects- Option B

B22	LARGE VESSELS DOCK	905,812	226,453		Excl.	Excl.	1,132,265	1
B23	SMALL BOATS DOCK	271,153	67,788		Excl.	Excl.	338,942	
B24	WATERFRONT STORAGE	10,939	2,735		Excl.	Excl.	13,674	
B25	MAINTENANCE FACILITY	53,365	13,341		Excl.	Excl.	66,706	
B26	DOCKSIDE PARKING							
		\$3,269,512	\$1,425,111	\$2,430,933	Excl.	Excl.	\$7,125,557	\$7
				A&E Fees			\$610,000	\$
				Allowances of FF&E			\$360,000	\$
				Total			\$8,095,557	\$8

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Photo Source: James Watt Oceanstock

Master Planning Process

Introduction

The Master Plan is a guideline for decision-making to help achieve the goals of the user. It is intended to set the context for the ONMS facilities by addressing the physical assessment of the current facilities throughout the Pacific Islands Region, and identifying its future needs. The Master Plan explores how the facilities of the ONMS can support and contribute to NOAA's vision and mission.

Methodology

The master planning process consists of two basic parts: fact-finding and development of the Master Plan.

Part I: Fact-Finding

The planning team conducted a Project Kick-off meeting that distributed questionnaires to the NOAA project team members. The information from these questionnaires provided the starting point for the first group Visioning Session (Workshop #1) with the core committee (consisting of NOAA representatives from HIHWNMS, PMNM, ONMS Headquarters, and PIR) to discuss goals, "big-picture" issues, programs, facility needs, relationships, and other subjects that will influence the master plan. The information gathered in this Visioning Session provided an understanding of the current and future direction of the ONMS, the programmatic needs, and projected growth. The planning consultant team toured the ONMS facilities on each island except American

Samoa.

Following the Visioning Session (Workshop #1) the planning team prepared an Initial Findings Report which was presented at the second Visioning Session (Workshop #2) for review, comment, and further development. With the help of the planning consultant team, both Visioning Sessions were structured to be group-working sessions that allowed for input from all core committee members. This second round of fact-finding and review uncovered additional information and refined some of the initial data. Specialty sub-consultants provided studies such as historic facilities analysis.

Part II: Development of the Master Plan

The Initial Findings Report contains suggested alternatives that were developed in the first Visioning Session. The planning consultant team and core committee members reviewed these alternatives during the second Visioning Session. Based on discussions, the planning consultant team selected the preferred alternatives and overlaid the information provided by the sub-consultants. Exhibits have been developed to illustrate the recommendations and the result is a Preliminary Master Plan.

During the next Master Planning Session, the core committee

APPENDICES

Master Planning Process

members and planning consultant team will review and critique the preliminary master plan. Following this review, the planning consultant team will refine the preliminary master plan, layering on additional detail to produce the final master plan.

An advance copy of the final Master Plan will be provided to the core committee for their review and approval. The planning consultant team will incorporate the committee's comments and present the final master plan.

Potential Stakeholders and Partners

Partners are vital to the success of the many programs of the ONMS. Their input and involvement are important to consider in the Master Plan. There are a number of stakeholders and partners that have already made a significant contribution to ONMS programs and whose current functions and future needs should be considered in the planning process. Their involvement will vary.

Following is a list of stakeholders. This list is not all-inclusive.

Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS)

The HIHWNMS is one of 13 national marine sanctuaries created under the U.S. Marine Protection, Research

and Sanctuaries Act. The sanctuary's goal is to promote comprehensive and coordinated management, research, education, and long-term monitoring for the endangered humpback whale and its habitat. The sanctuary focuses its efforts on a variety of issues, including supporting the work of marine researchers, coordinating and participating in community outreach projects, developing educational displays, and working cooperatively with local organizations, agencies and volunteers to address resource protection and public awareness. The sanctuary is managed through a partnership between the State of Hawai'i and NOAA, which strives to cultivate and heighten awareness, by developing programs in marine research and education. The sanctuary has offices on O'ahu, Maui, Kaua'i, and Kona.

Papahānaumokuākea Marine National Monument

The Monument is the single largest conservation area under the U.S. flag, and one of the largest marine conservation areas in the world. It encompasses 139,797 square miles of the Pacific Ocean (105,564 square nautical miles), an area larger than all the country's national parks combined. Papahānaumokuākea is also of great cultural importance to Native Hawaiians with significant cultural sites found on the islands of Nihoa and Mokumanamana. The monument is managed by the Department of the Interior's U.S. Fish and Wildlife Service and the Commerce Department's National Oceanic and Atmospheric Administration, in close

Master Planning Process

coordination with the State of Hawai'i.

NOAA – Office of National Marine Sanctuaries Pacific Island Region

Two areas in Hawai'i and one in American Samoa have been set aside to help preserve this special natural and cultural heritage. NOAA's National Marine Sanctuary Program Pacific Island Regional Office manages these marine protected areas in partnership with the State of Hawai'i (Department of Land and Natural Resources) and the Territory of American Samoa Department of Commerce.

Office of National Marine Sanctuaries

The mission of NOAA's Office of National Marine Sanctuaries is to serve as the trustee for the nation's system of marine protected areas; to conserve, protect, and enhance their biodiversity, ecological integrity, and cultural legacy.

NOAA Fisheries: Office for Law Enforcement (OLE)

The office is dedicated to the enforcement of laws that protect and conserve our nation's living marine resources and their natural habitat. NOAA Fisheries special agents and enforcement officers have specified authority to enforce over 37 statutes, as well as numerous treaties related to the conservation and protection of marine resources and other matters of concern to NOAA. To effectively enforce these statutes, OLE operates six divisional offices and 59 field

offices across the U.S. and overseas.

NOAA – National Ocean Service

As one of five NOAA Line Offices, NOAA's National Ocean Service (NOS) works to observe, understand, and manage our nation's coastal and marine resources. NOS measures and predicts coastal and ocean phenomena, protects large areas of the oceans, works to ensure safe navigation, and provides tools and information to protect and restore coastal and marine resources. NOS's eight program offices and two staff offices manage and preserve our nation's oceans and coasts.

NOAA - Office of the Chief Administrative Officer

Provides protective, logistical, and facilities management services required for the efficient accomplishment of the Department of Commerce missions. NOAA OCAO manages real property, space, personal property, and motor vehicles; operates stores, warehousing, equipment rental, and a hazardous waste management facility, as well as provides professional safety, industrial hygiene, radiation safety, fire prevention, environmental protection, facilities engineering, and space design.

State of Hawai'i – Department of Land and Natural Resources (DLNR)

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Master Planning Process

U.S. Fish and Wildlife Service Potential partners:

- Kaho'olawe Island Reserve Commission
- National Energy Lab of Hawai'i Authority
- National Park Service
- NOAA - National Marine Fisheries Service
- NOAA – National Weather Service
- NOAA – National Wildlife Service
- NOAA – Pacific Islands Fisheries Service Center
Protected Species Division
- University of Hawai'i – School of Ocean and Earth
Science and Technology (SOEST)
- University of Hawai'i – Hawai'i Institute Marine Biology
(HIMB)
- U.S. Coast Guard

Schedule of Events

Step 1: October 12, 2007

Kickoff Meeting with OMNS PIR core committee and
consultant team

Step 2: September 26 – October 17, 2007

Site Visit / fact-finding and site tours

Step 3: November 7, 2007

Issue Initial Findings Report with fact-finding information for
review

Step 4: December 3 & 4, 2007

Workshop No.1 fact-finding

Step 5: April 29 & 30, 2008

Workshop No. 2 fact-finding and alternatives

Step 6: June 18, 2008

Issue Draft Master Plan and PowerPoint for review

Step 7: July 10, 2008

Workshop No.3. Present Draft Master Plan and Cost
Estimate to Regional and National HQ

Step 8: 20 November 2008

Refine and finalize Master Plan and action plan

Step 9: 10 December 2008

Present final Master Plan

Influences and Considerations

NOAA's Strategic Plan

The ONMS is contained within and coordinates closely with the National Ocean Service (NOS), and its parent organization, the National Oceanic and Atmospheric Administration (NOAA), within the Department of Commerce. The ONMS's goals and objectives are aligned to mesh with the goals and priorities of both NOAA and NOS.

NOAA's strategic plan for FY05 to FY10 (New Priorities for the 21st Century) outlines four mission goals and five cross-cutting priorities. The ONMS falls under the first mission goal: Protect, restore, and manage the use of coastal and ocean resources through an ecosystem approach to management. The ONMS also clearly supports five of the six cross-cutting priorities:

- Developing, valuing, and sustaining a world-class workforce,
- Integrating global environmental observations and data management,
- Ensuring sound, state-of-the-art research,
- Promoting environmental literacy; and
- Exercising international leadership.⁴

Congressional Authorization

The National Marine Sanctuaries Act authorizes the Office of National Marine Sanctuaries to designate and manage sanctuaries, and promulgate sanctuary regulations to protect sanctuary resources.⁵

The Hawaiian Islands Humpback Whale National Marine Sanctuary was congressionally designated by the Hawaiian Islands National Marine Sanctuary Act (HINMSA) on November 4, 1992 (Subtitle C of Public Law 102-587, the Oceans Act of 1992). On Friday, March 28, 1997, the final regulations were published in the Federal Register (62 FR 14799), and they and the final management plan became effective on June 2, 1997.⁶

On June 15, 2006, President George W. Bush issued Presidential Proclamation 8031 establishing the Northwestern Hawaiian Islands Marine National Monument under the authority of the Antiquities Act of 1906 (16 U.S.C. 431). The Monument includes a number of preexisting Federal conservation areas: the Northwestern Hawaiian

⁴ *National Marine Sanctuaries Strategic Plan 2005 - 2015, Page 1.*

⁵ *National Marine Sanctuaries Strategic Plan 2005 - 2015, Preface.*

⁶ *National Marine Sanctuaries, Hawaiian Island Humpback Whale Sanctuary Management Plan, August 2002, Page 7.*

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Influences and Considerations

Islands Coral Reef Ecosystem Reserve, managed by the Department of Commerce through the National Oceanic and Atmospheric Administration (NOAA); and Midway Atoll National Wildlife Refuge, Hawaiian Islands National Wildlife Refuge, and Battle of Midway National Memorial, managed by the Department of the Interior through the United States Fish and Wildlife Service (FWS). These areas remain in place within the Monument, subject to their applicable laws and regulations in addition to the provisions of the Proclamation.⁷

FR Part 222, Subpart J--Fagatele Bay National Marine Sanctuary Sec. 922.100 Scope of regulations. The provisions of this Subpart J apply only to the area of the Territory of American Samoa within the boundary of the Fagatele Bay National Marine Sanctuary (Sanctuary). Neither the provisions of this Subpart J nor any permit issued under their authority shall be construed to relieve a person from any other requirements imposed by statute or regulation of the Territory of American Samoa or of the United States. In addition, no statute or regulation of the Territory of American Samoa shall be construed to relieve a person from the restrictions, conditions, and requirements contained in this Subpart J.⁸

Facilities Sustainability

Under a 1999 Presidential Executive Order 13123 “promoting Federal Leadership in Energy management” and through programs fostered within many of its key agencies, the federal government has committed to building green. The Armed Services (Army, Navy and Air Force) and the General Services Administration (GSA), together with the Department of the Interior are using the LEED Green Building Rating System M as the standard for renovating and constructing new facilities. At present, several dozen LEED registered projects are under design or construction.⁹

Executive Order 13123 sets goals for agencies as follows:

- Reduce its greenhouse gas emissions attributed to facility energy use by thirty percent (30%) by 2010 compared to such emission levels in 1990, through the use of life-cycle cost-effective measures.
- Reduce energy consumption per gross square foot of facilities (excluding industrial and laboratory facilities), thirty percent (30%) by 2005 and thirty-five percent (35%) by 2010 relative to 1985, through the use of life-cycle

⁷ *Papahānaumokuākea Marine National Monument, Draft Monument Management Plan, Page Es-1.*

⁸ <http://fagatellebay.noaa.gov/html/management.html>

⁹ *United States Green Building Council, Tool Kit for State and Local Government, November 2002 Page 6.*

Influences and Considerations

cost-effective measures.

- Reduce industrial and laboratory facility energy consumption per square foot, per unit of production, or per other unit as applicable, twenty percent (20%) by 2005 and twenty-five percent (25%) by 2010 relative to 1990, through the use of life-cycle cost-effective measures.
- In support of the Million Solar Roofs Program, install 2,000 solar energy systems at federal facilities by the end of 2000, and 20,000 such systems by 2010.
- Reduce the use of petroleum within federal facilities through the use of life-cycle cost-effective measures such as switching to natural gas or renewable energy sources; by eliminating unnecessary fuel use; or by improving facility efficiency.
- Reduce total source energy use and associated greenhouse gas and other air emissions as measured at the source (note: EO 13123 defines “source energy” as the energy that is used at a site and consumed in producing and delivering energy to a site).
- Reduce water consumption and associated energy use in facilities to meet the water conservation goals set by the Department of Energy, using Energy Savings Performance Contracting (ESPC) and other financing mechanisms where possible.¹⁰

Part 4 of EO 13123 is titled “Promoting Federal Leadership in Energy Management.” It includes many detailed

requirements that affect facility projects and operations:

- Sustainable Building Design: Agencies shall apply the sustainable design principles developed by DoD and GSA in consultation with DOE and EPA, to the siting, design, and construction of new facilities. Agencies shall optimize life-cycle costs, pollution, and other environmental and energy costs associated with the construction, life-cycle operation, and decommissioning of the facility. Agencies shall consider using ESPC or utility energy-efficiency service contracts to aid them in constructing sustainably designed buildings.¹¹
- Under a 2007 Presidential Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.” Federal agencies are ordered to increase energy efficiency by thirty percent (30%) by 2015.¹²
- In February 2006, the Department of Commerce became

¹⁰ Federal Register, Part IV The President, Executive order 13123 – Greening the Government Through Energy Efficient management, June 8, 1999, page 30851.

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Influences and Considerations

signatory party to Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU). With this Memorandum of Understanding (MOU), signatory agencies commit to federal leadership in the design, construction, and operation of high-performance and sustainable buildings. A major element of this strategy is the implementation of common strategies for planning, acquiring, siting, designing, building, operating, and maintaining high performance and sustainable buildings. The signatory agencies will also coordinate with complementary efforts in the private and public sectors.

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LEED is an acronym that stands for Leadership for Energy and Environment Design established by the US Green Building Council. LEED addresses the issue of sustainable design, or designing our buildings and campuses in a way that reflects environmental stewardship. LEED design tenets are in keeping with the mission of ONMS to protect our national resources. The Master Plan recommends that improvements to the existing buildings and campus be made in accordance with LEED practices. The ONMS desires to achieve LEED Certification with the undertaking of this project.

There are four levels of attainment:

- LEED Platinum
- LEED Gold

- LEED Silver
- LEED Certified

The LEED Green Building Rating System for New Commercial Construction and major Renovation (LEED –NC) provides a set of performance standards for certifying the design and construction phases of commercial, institutional buildings, and high-rise residential buildings. The specific credits in the rating system provide guidelines for the design and construction of buildings of all sizes in both the public and private sectors. The intent of LEED-NC is to assist in the creation of high performance healthful, durable, affordable and environmentally sound commercial and institutional buildings.

LEED-NC addresses:

- Sustainable Sites
- Water Efficiency

¹¹ *Federal Register, Part IV The President, Executive order 13123 – Greening the Government Through Energy Efficient Management, June 8, 1999, page 30855.*

¹² *Office of the Federal Environmental Executive, Fact Sheet, Executive order 13423, page 1.*

¹³ *Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU), Page 1.*

Influences and Considerations

- Energy & Atmosphere
- Material & Resources
- Indoor Environmental Quality
- Innovation in Design¹⁴

ONMS and LEED

The implementation of the Master Plan is an opportunity for the Office of National Marine Sanctuaries to follow the protocols of LEED, implement LEED where possible and seek LEED certification where feasible. This, in turn, will enhance the environmental leadership image of the ONMS and NOAA and foster continuity in design of ONMS facilities.

Facility Historic Designations

The facilities located at Kīhei are not presently on the National Historic Register. Both the “Blue Building” and the Masonry Education Center are historic in that they are both more than fifty (50) years old. The Blue Building was constructed in 1941/1942 as a U.S. Navy degaussing facility. The Masonry Education Center building was constructed in 1954.

¹⁴ *United States Green Building Council, LEED-NC Reference Guide, V2.2 First Edition, October 2005, Page 14.*

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Visioning Workshop Meeting Notes



MEETING MINUTES

DATE: Friday, 12 October 2007, 9:00am to 11:00am HST
LOCATION: Teleconference
NOAA
NMFS Sanctuarie, Hawai'i Kai, Hawai'i
NMFS Sanctuaries, Silver Springs, Maryland
OCAO RPFLO, Seattle, Washington

AE Contractor
Ferraaro Choi Associates, Honolulu, Hawai'i
Facility Programming, San Antonio, Texas
Transystems, Houston, Texas
Kick-off Meeting
NOAA Sanctuaries Master Plan

MEETING:
PROJECT:

The following minutes summarize issues discussed during the meeting and are not meant to be a literal transcript. If these minutes do not reflect your understanding of the proceedings, please notify Ferraro Choi immediately.

ATTENDANCE LIST:

<u>NOAA</u>	
Allen Tom	Sanctuaries, Regional Advisor allen.tom@noaa.gov
Ted Lillestolen	Sanctuaries, Deputy Director ted.lillestolen@noaa.gov
Chris Ostrom	Sanctuaries, Project Manager chris.ostrom@noaa.gov
CDR David Rathbun	Hawaiian Islands Humpback Whale Sanctuary
Paul Wong	david.j.rathbun@noaa.gov
Andy Collins	Sanctuaries, Program Specialist paul.b.wong@noaa.gov
Naiomi McIntosh	Sanctuaries, Program Specialist andy.collins@noaa.gov
	Hawaiian Islands Humpback Whale Superintendent
Sean Corson	naomi.mcintosh@noaa.gov
	Sanctuaries, Physical Scientist & Acting Superintendent PNMM
Dan Strand	sean.corson@noaa.gov
Tino Escalona	OCAO, Support Service Supervisor daniel.r.strandy@noaa.gov
	OCAO, Project Manager tino.escalona@noaa.gov
<u>Ferraro Choi Associates</u>	
Joe Ferraro, AIA	Principal Architect joef@ferrarochoi.com
Christopher Walling	Senior Architect christopher@ferrarochoi.com
<u>Facility Programming</u>	
Doug Lowe	Principal Architect douglowe@facilityprogramming.com
Hiro Mishima	Facility Programmer hiromishima@facilityprogramming.com

Meeting Minutes

FERRARO CHOI And Associates Ltd 733 Bishop Street, Suite 2620 Honolulu, Hawaii 96813-4016 Telephone: (808)-533-8880 Fax: (808)-599-3769

Visioning Workshop Meeting Notes



MEETING MINUTES

Transystems

David Campbell Principal Architect dgcampbell@transystems.com

PURPOSE OF MEETING:

To provide introductions of NOAA personnel to A/E contractor personnel, establish communication protocol, review AE contractor statement of work, review proposed work plan, identify sanctuaries mission and vision for A/E contractors and review Questionnaire and Advance Information Request.

PREVIOUS MINUTES:

No previous meeting.

*The Master Plan is Sanctuaries strategic document
that allows Sanctuaries to begin dialogue with outside stakeholders*
– Ted Lillestolen

Visioning Workshop

- Schedule
 - o Tentatively scheduled for 30 & 31 October 2007
 - o NOAA sanctuaries to review and advise on availability of staff for these dates.
 - o Congressional Continuing Resolution is still in effect and dampening funding for travel.
 - o Alternative date is week of 3 December 2007
- Purpose
 - o Develop common understanding of expectations and goals of facilities master planning process and outcomes.
 - o Develop Sanctuaries vision
 - Where does Sanctuaries want to be in the future in terms of facilities?
 - What resources and partnerships are necessary to achieve this vision.
 - o Identify site specific conditions
 - Facility managers may provide presentation at vision workshop.
 - Identify common activities.

Roles and Responsibilities

- NOAA – Paul Wong will be lead for Sanctuaries
- AE Contractor
 - o Ferraro Choi Associates, Prime Contractor
 - Principal consultant and prime author of facilities master plan
 - o Facility Planning
 - Workshop facilitator and contributor to master plan
 - o Transystems
 - Continuity for facility master plan

Questionnaire

Meeting Minutes

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Visioning Workshop Meeting Notes



MEETING MINUTES

- Intended for NOAA staff
- Purpose is to develop and elicit vision for sanctuary's future facilities
- Sanctuaries staff who will be tasked to respond to the questionnaire need to be identified
- Public engagement
 - Interface with public
 - Identify external groups to consult
 - Questionnaire process may be expanded at a later date to include outside third parties, such as County Government and/or Native Hawaiian groups.

Cultural Element

- Cultural elements need to be introduced into potential projects at master planning phase
- Identify cultural practitioners and/or groups for consultation at Visioning Workshop.

Site Visits

- Delay site visits until after visioning workshops

Process

- Vision workshop is to include internal sanctuaries staff to develop NOAA's vision.
- Master plan meeting No. 2
 - Report of initial findings by A/E consultant.
 - Outside groups can be invited to participate.
- Master plan meeting No. 3 & 4
 - Present revised and refined master plan concepts
- Scale of master plan product
 - Final deliverable may vary depending on information available
 - For example, an identified need for a future facility may be described in general terms – i.e. a 5,000 sf facility on North Shore of O'ahu that provides particular educational opportunities.
 - An existing facility, such as the facility in Kihei may have greater detail.
- The AE contractor's deliverable, i.e the master plan document, is to be a snapshot of the known requirements of Sanctuaries at this time. It can and should be updated in the future as the new information is received and situations change. Any updates will not be a part of the current contractor effort.
- If desired by Sanctuaries, market analysis of current or proposed NOAA facilities and/or locations can be added to the AE contractors Statement of Work. Presently these effort are not part of the AE contractor's current scope and the Master Plan document will not include a market analysis of current or proposed NOAA locations.

1. Next Meeting- Visioning Workshop dates to be determined.

Meeting Minutes

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DATE: Friday, 7 December 2007, 10:00am to 11:00am HST
LOCATION: Teleconference
NOAA
NMFS Sanctuaries, Hawai'i Kai, Hawai'i
NMFS Sanctuaries, Silver Springs, Maryland
OCAO RPFLO, Seattle, Washington
AE Contractor
Ferraaro Choi Associates, Honolulu, Hawai'i
Facility Programming, San Antonio, Texas
TranSystems, Houston, Texas
Visioning Workshop Preparation
NOAA Sanctuaries Master Plan

MEETING:
PROJECT:

The following minutes summarize issues discussed during the meeting and are not meant to be a literal transcript. If these minutes do not reflect your understanding of the proceedings, please notify Ferraro Choi immediately.

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Doug Lowe	Principal Architect douglowe@facilityprogramming.com

PURPOSE OF MEETING:

To prepare for upcoming master plan visioning workshop.

PREVIOUS MINUTES:

Master plan kick-off meeting

Meeting Minutes

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APPENDICES

Second Master Planning Workshop Notes



MEETING MINUTES

Visioning Workshop

- Preparation teleconference
 - o Ted Lillestolen requested this conference call to refresh and re-invigorate the group prior to next week's visioning workshop.
- Schedule
 - o Scheduled for 11 & 12 December 2007
- Agenda
 - o Revise to start at 9:00am on Tuesday – NOAA all hands meeting 8:30am to 9:00am Tuesday (AE team is welcome to attend).
 - o Add future locations to agenda – i.e. Guam
- Participation & Facilitation
 - o Sanctuaries has designated a principle for each location
 - Each principal is prepared to speak about the existing site, program and future needs.
 - o Doug Lowe will provide overall facilitation of the workshop.
 - o Christopher Walling will function as timekeeper.
- Next Meeting- Visioning Workshop 11 & 12 December 2007

Third Master Planning Workshop Notes



MEETING MINUTES

DATE: December 11, 2007
 LOCATION: PIR Hawaii Kai Office
 MEETING: NOAA/NOS/NMSP/PIR Master Plan Vision Workshop
 PROJECT: NOAA/NOS/NMSP/PIR Master Plan

The following minutes summarize issues discussed during the meeting and are not meant to be a literal transcript. If these minutes do not reflect your understanding of the proceedings, please notify Ferraro Choi immediately.

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Kevin Grant*	NOAA/NMSP/PMNM	kevin.grant@noaa.gov

*attended only the 12 December workshop

PURPOSE OF MEETING:

Purpose of the facilities master plan is defined and document PIR vision for facilities for the next 20-year period.

A. Background Information:

1. PIR Sanctuaries has three major sanctuaries with multiple locations:

- a) HIHWS – Naomi McIntosh
 - (1) Maui – focuses on ocean/resource protection
 - (2) Kauai – focuses on ocean/resource protection
 - (3) Honolulu – both ocean/resource protection and regional office
 - (4) Honolulu – State of Hawaii DLNR
 - (5) Currently has a ten-year facilities plan

APPENDICES

Third Master Planning Workshop Notes

- (6) Existing locations have been chosen for the relationship to HIHWS areas
- (7) Vessels for sanctuaries
- b) PNMM – ‘Aulani Wilhelm
 - (1) PNMM is actually far away from Honolulu and Mainland
- (2) Interface with public
 - (a) Hilo Discovery Center – Mokuapapa
 - (b) Maui – potential public interface location
- (3) Staging for field trips to PNMM
- c) American Samoa
- 2. Cross pollination of ideas and vision between locations
 - a) PNMM to HIHWS
 - b) Sanctuaries to partners
 - c) Challenge in Hawaii is the lack of space
 - (1) Partners have no space available either
- 3. Funding
 - a) Master plan is intended to inform capital improvement budget requests
 - b) New facilities will need funding for additional staffing and for maintenance
- B. Analysis of needs by location:
 - 1. Hawaii Kai Corporate Plaza
 - a) Presently 35 staff housed – space is maxed out
 - b) Staff is growing, especially PNMM
 - (1) PNMM has 4/5 staff in a satellite office across the street
 - (2) Need additional office space for PNMM staff today (+16 staff today)
 - (3) Need additional office space for PNMM partner staff
 - c) Does not need a learning center; however, presently a concept to transform lobby into an active learning space is being discussed.
 - d) Existing conference room is multi-purpose
 - (1) Used for education and outreach
 - (2) Used also for public meetings
 - e) Need for field/research staging area
 - f) Need for these items prior to completion of PRC project
 - g) Parking at Hawaii Kai is favorable because it is no charge
 - 2. Oahu
 - a) Need for dock side storage – addressed in PRC Ford Island project
 - b) Need for small boat storage – addressed in PRC Ford Island project
 - (1) NMSP PIT is taking delivery of a 33M boat on 21 Dec 2007. This is in addition to the PRC small boat requirements.
 - 3. North Shore, Oahu
 - a) Need for a facility to function as a visitor nexus and provide access to the public.
 - b) Location is indeterminate
 - c) Partnership with another agency or non-profit is desirable.
 - d) Humpback whale season correlates with big wave season which generates tourist traffic to the North Shore.

Third Master Planning Workshop Notes

- e) Need for outreach to resident community and students.
 - f) Ideally the North Shore facility would be a ½ size Hilo Discovery Center
 - (1) Room for kids to visit
 - (2) Space for exhibits and handouts
 - (3) Staffed
 - (4) Potential for surfing theme
 - (a) Partnership with NWS for science behind the big waves.
 - (b) Partnership with PIFSC PSD for marine animal protected species.
 - g) Question as to how to obtain maintenance and operating funding.
 - h) PNMM – opportunity for interpretation of Keana Point ecological area.
 - (1) Keana Point is the closest ecological area to PNMM
 - (2) Opportunity for volunteer generation, especially with restoration and invasive species.
 - i) Better ability to respond to reports of strandings and/or incidents
 - j) Noted that a mobile or portable facility – bud – does not provide an adequate sense of place/community or permanence.
4. Mobile of portable facility – the whale bus
- a) Used for outreach and education – taking NOAA to the community – schools.
 - b) Could be used throughout Oahu and neighbor islands.
5. Lihue
- a) Kauai has a strong and supportive resident community
 - b) Existing presence at Kilauea Wildlife refuge – signage not a facility
 - (1) FWS is looking to relocate visitor center to Kilauea town and shuttle visitors to wildlife refuge.
 - (2) FWS is expanding Hanalei refuge overlook –opportunity for increased interpretation signage/exhibits.
- c) Lihue office was established in 2001 in rented office space.
- d) Vision for Kauai
- (1) Ocean / beach front location for educational opportunity
 - (a) Preference for location at Nawiliwili Harbor.
- e) Mobile outreach activity
- (1) Kauai residents need the ability for NOAA to come to their community.
- f) Training and workshop facilities.
- g) Displays – both static and virtual.
- h) PIR has a larger vision for Kauai
- (1) Regional office to support PNMM.
 - (2) Staging for PNMM
 - (3) Increase HI-HWS
 - (4) Potential to add discovery center similar to Mokuapapa is Hilo.
 - (5) Combined ocean education with cultural outreach.
 - (6) Remotely Operated vehicle to be launched from Barking Sands for surveillance of PNMM.
 - (7) PSD – monk seal issues, need to respond to reports on Kauai.
- i) Outdoor activity
- (1) Chiefess Kamaka'ole Middle School in Lihue as example of outdoor activity space.
6. Maui
- a) Kihei
 - (1) NOAA owns this site
 - (a) Site is old NESDES site
 - (b) Blue house is used for office
 - (i) Blue house is grandfathered to exceed the shoreline setback

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Third Master Planning Workshop Notes

- (c) New building is not yet completed
 - (i) Intended for use for meetings/education and outreach
- (d) Existing education center to be transformed to visitor center when new building is completed.
- (e) Fishpond is maintained by non-profit fishpond association
- (f) Visitors
 - (i) 7000 keiki (school children) visited in 2007
 - (ii) 9000 visitor in 2005
- (g) Existing PAC requests
 - (i) Funding to complete multi-purpose building
 - (ii) Repair/Restore/Remodel Blue House and add dorm space
 - (iii) Remodel visitor center
- (2) Small boats
 - (a) For marine operations support
 - (b) Currently a 22ft Seacat is used.
 - (c) New 41 ft boat is planned
 - (d) Permanent slip space and pier facilities required.
- (3) Humpback Whale Research center.
 - (a) Potential to attract visiting scientists
 - (i) Needs to have accommodations – dorms – for visiting science personal.
 - (b) Diving support
 - (c) Small wet lab
 - (d) Location to be determined.
- (4) Need for cultural environmental humpback whale learning center
 - (a) Location will need to be determined.
- b) Lihaina
 - (1) Need for presence
 - (2) A private landowner has expressed interest in hosting visitor center.
 - (3) Location preferred for humpback whale research
- c) Molokai
 - (1) need for outreach – “whale van” or “ocean van”
 - (2) Previous successful; program with digital bus from Maui
 - (3) Molokai Ranch Visitor Center – co-location opportunity
- d) Lanai
 - (1) Exhibits and/or signage
 - (2) Opportunity at resort? Manele Bay
 - (3) Outreach focus
 - (a) Office of Law Enforcement
 - (b) Research
- 7. Hawaii Island
 - a) Kona
 - (1) Present office is one staff in room at NELHA.
 - (2) Need to determine if staying at NELHA or moving to new location.
 - b) Need for small boat
 - (1) Currently only have an inflatable zodiac that must be accompanied by a boat when operated on the ocean.
 - c) Outreach
 - (1) Watersports community – enforcement issues
 - (2) School children

Third Master Planning Workshop Notes



MEETING MINUTES

- (3) Partnership with resort hotels
- d) Vision for Kona
 - (1) OLE presence
 - (a) Enforcement boat
 - (2) Facility close to harbor
 - (3) Education resources & staff
 - (4) Response staff – PSD incidents and reports
 - (5) Research and response boat
 - (6) Co-location with State DLNR?
 - (7) Partnering opportunities with DLNR
 - (a) Aquatic environments
 - (b) Boating division
 - (c) Enforcement
 - (8) Partnering opportunities with National Park Service
 - (a) Pu'uohala Heiau National Historic Site
 - (b) Kaloko-Honokohau National Historic Park
 - (c) Kealahou State Historic Park
 - (d) Pu'uohoua O Honaunau National Historic Park
 - (e) These locations are opportunities for interpretation and education signage.
- e) Hawi
 - (1) New wildlife center started by Linda Elliot – non-profit
- f) Hilo Discovery Center – Mokupapapa
 - (1) PNMM visitor's center
 - (2) Installing wet lab in 2008
 - (a) Provides facilities for visiting researchers
 - (b) Provide facilities for school children
 - (3) Currently increasing educational space
 - (4) Currently gaps in exhibits
 - (a) Science in PNMM
 - (b) Marine heritage
 - (5) Obtaining a new mini van currently
 - (6) Future Vision
 - (a) Access to ocean – satellite location at ocean
 - (b) Use of boat for education activities – seasonal
 - (c) Additional outreach to community
 - (i) Mobile entity with lab space “digital” or “ocean” bus
 - (d) Increase to HIIHWS along Hamakua coast
 - (e) Partnering with National Park Service at Volcano National Park
 - (i) PNMM has started this effort
 - (f) PNMM presence on Kona side of Hawaii
 - (g) UH Hilo – provide PSD – monk seal response
 - (h) Example is 'Imola Astronomy Visitor Center
 - (i) Charges \$15 per person
 - (ii) Disappointment expressed in interpretation by some users
 - (i) Need to improvise signage
 - (i) Standardization of signage within sanctuaries
 - (ii) Large Hawaiian culture presence
 - (iii) Large number of Hawaiian language immersion schools in Hilo

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Third Master Planning Workshop Notes



MEETING MINUTES

- g) American Samoa – Fagatele Bay
 - (1) Office in Fagatogo
 - (2) Visitor Center created in convention center
 - (3) Needs/Vision
 - (a) Administration office
 - (b) Education & Outreach
 - (c) Airport Kiosk
 - (d) Research
 - (e) Operations: small boat
 - (f) NMFS Enforcement
 - (g) Potential to co-locate with marine laboratory
- 8. Boats
 - a) See chart from Paul Wong
 - (1) SRV – proposed 100 ft. support boat
 - (a) Research
 - (b) Enforcement
 - (2) Needs support facility in main islands – PRC?

2nd day of NOAA/NOS/NMSP/PIR Master Plan Vision Workshop – December 12, 2007:

- A. General Discussion:
 - 1. New visions – ‘Aulani Wilhelm
 - a) Identified a need/vision to develop a keiki learning center.
 - (1) Example
 - (a) Palo Alto children’s museum – a small example geared specifically to keiki
 - (b) San Francisco Exploratorium
 - (c) Please touch me museum – Chicago airport or Philadelphia??
 - b) Oceania peoples workshop/conference think tank facility. (or policy institute) including conference center with accommodations.
 - (1) Example Queen Liliuokalani Children’s Centers (QLCC) facilities – upscale adults camps – Maori style.
 - (a) Puunaluu
 - (b) Kona – near old airport
 - c) Overall environmental ecological visitor experience – Paul Wong
 - (1) Opportunity to present overall vice the components (i.e.: a national park, wildlife refuge or sanctuary).
 - (2) Perhaps location should be central to tourist/visitor/resident traffic.
 - (3) Could use live video of ecological sites such as locations in PNMM and broadcast on web and at physical visitor center (Ala Moana Shopping Center).

DATE: April 30, 2008
LOCATION: Department of Transportation – Airports Division Office
MEETING: NOAA Sanctuaries
PROJECT: NOAA Sanctuaries

The following minutes summarize issues discussed during the meeting and are not meant to be a literal transcript. If these minutes do not reflect your understanding of the proceedings, please notify Ferraro Choi immediately.

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PURPOSE OF MEETING:

1. Jeff Chang (JC): Normally, there is a submittal and contract award for vendors such as AdWalls. However, this is different.
2. Matt Stout (MS): Kiosks – accessed and services remotely and serviced locally.
3. JC: Work with districts and not property management first.
4. JC: Displays on baggage claim conveyor.
5. Jimmy Koshino (JK): Screen savers on flat screens – PowerPoint/Handouts
6. USDA: has a similar program of what can be taken in and out. Hawaiian Airlines has a video of Humpback Whale Sanctuaries.
7. NOAA: Write-up what is wanted.
 - a. Jimmy would like to see an entire masterplan.
 - b. Paul and Linda will put it together for Jimmy and Jeff.
8. JC: Thought to start in Honolulu. Not paying money to avoid the vendor process.
9. JK: Would not be able to provide servicing, but can supply utilities. Wifi (shaka net) would be arranged with airport commercial vendor.

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Fifth Master Planning Workshop Notes



MEETING MINUTES

DATE: June 2, 2008
 LOCATION: PIR Hawaii Kai Office
 MEETING: NOAA/NOS/NMSP/PIR Master Plan – Day 2
 PROJECT: NOAA/NOS/NMSP/PIR Master Plan

The following minutes summarize issues discussed during the meeting and are not meant to be a literal transcript. If these minutes do not reflect your understanding of the proceedings, please notify Ferraro Choi immediately.

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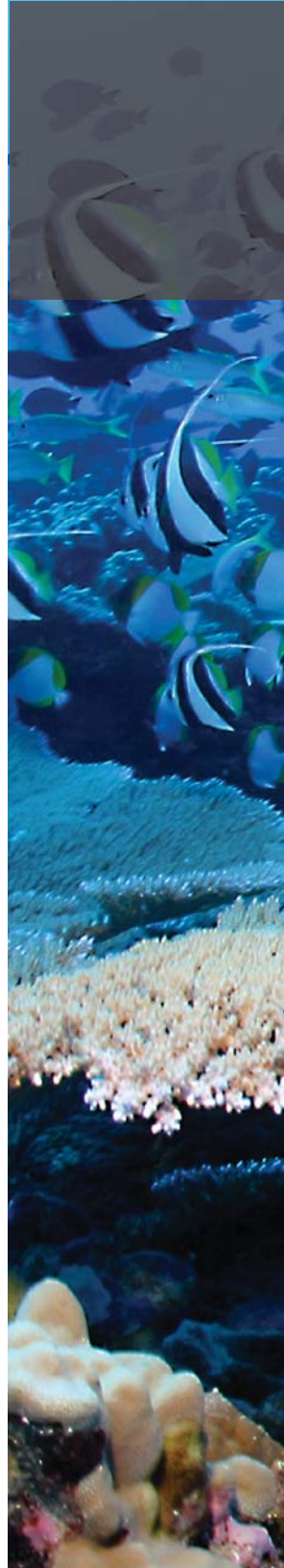
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PURPOSE OF MEETING:

1. The follow up meeting (3rd group meeting) will occur on July 10 at 9:00 am. This will be a 1 day meeting at Hawaii Kai
2. The following sites were discussed
 - a. Lihue, Kauai
 - i. Large, fast boat – seasonal needs (April – November)
 - ii. Smaller boat and truck.
 - iii. Lihue is commercial center on Kauai – i.e. best location
 - iv. Monument & Sanctuary together

- v. Long range: move to larger facility:
 1. Build

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8| BIBLIOGRAPHY



Table of Contents

Bibliography

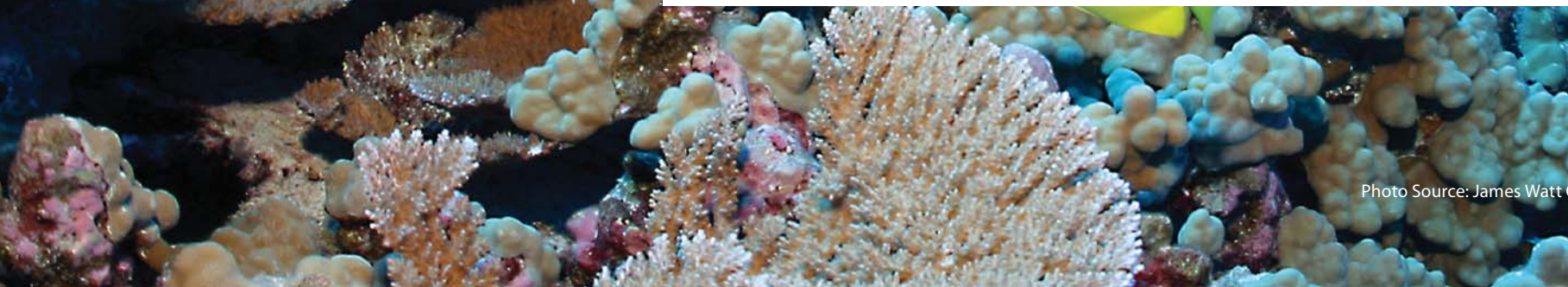


Photo Source: James Watt C

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