FAGATELE BAY NATIONAL MARINE SANCTUARY



SUMMARY GUIDE to the SANCTUARY MANAGEMENT PLAN



New species of anemonefish (Amphiprion pacificus) in Fagatele Bay. Photo By: Doug Fenner

What is the Management Plan?

The management plan is a road map for sanctuary management that serves to: 1) guide site management toward achievement of the sanctuary's goals using the best means available; and 2) inform sanctuary constituents about the sanctuary, its regulations, and management actions planned for the next 5 to 10 years. The management plan describes the sanctuary's goals and guiding principles, regulations and boundaries, guides future activities, outlines staffing and budget needs, and sets priorities and performance measures for resource protection, research and education programs.

The management plan is combined with a final environmental impact statement (FEIS). The FEIS evaluates the potential environmental, cultural and socioeconomic impacts of the sanctuary actions.

The Office of National Marine Sanctuaries has developed the final management plan and a final environmental impact statement based on comments received during the public comment period on the draft management plan / FEIS.

For information on how to get a copy of the Management Plan please refer to the back cover of this guide.

New Sanctuary Management Plan Available

The NOAA Office of National Marine Sanctuaries has updated the management plan for the Fagatele Bay National Marine Sanctuary. To help you understand the sanctuary's new management plan and your opportunity to help support it, this summary provides brief descriptions of sanctuary actions and revised sanctuary regulations.

The Office of National Marine Sanctuaries and Public Participation

National marine sanctuaries are special areas of the marine environment set aside for long-term protection and conservation, and are part of our nation's legacy to future generations.

The Office of National Marine Sanctuaries has managed these special areas since passage of Title III of the Marine Protection, Research, and Sanctuaries Act of 1972, now called the National Marine Sanctuaries Act. For more than 35 years, the sanctuary system has engaged the public in helping to create new sanctuaries, develop resource protection strategies, address complex resource management issues and more recently, review and update sanctuary management plans. Marine areas managed within the National Marine Sanctuary System are shown in the map below.



NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

http://fagatelebay.noaa.gov

An Introduction to Fagatele Bay National Marine Sanctuary (FBNMS)

Any introduction to the sanctuary would be incomplete without also introducing Samoan culture. The ONMS co-manages the sanctuary with the American Samoa Government and works closely with communities adjacent to the sanctuary, all within the context of Samoan cultural traditions and practices. *Fa'a-Samoa*, the Samoan way of life, is highlighted in the textbox on page 4 of this summary guide.

The sanctuary was designated in 1986, "to protect and preserve an example of a pristine tropical marine habitat and coral reef terrace ecosystem of exceptional biological productivity". The American Samoa territory is composed of five volcanic islands (Tutuila, Aunu'u, Ofu, Olosega, and Ta'u) and two small remote coral atolls (Rose Atoll and Swains Island). Fagatele Bay is located along the southwestern coast of Tutuila Island and is the smallest and most remote of the national marine sanctuaries as well as the only one in the Southern Hemisphere. FBNMS encompasses 0.25 square miles of reef flat, shallow reef, and steep slopes plunging down to 600 feet within a naturally protected bay surrounded by steep cliffs.



Fagatele Bay. Photo: Doug Fenner



Fagatele Bay Trail Sign. Photo: NOAA - Kevin Grant

Why was the Sanctuary's Management Plan Reviewed?

The sanctuary's new management plan represents a needed revision of the original 1984 management plan under which the sanctuary used to operate. The Office of National Marine Sanctuaries is required to review sanctuary management plans to meet the requirements of the National Marine Sanctuaries Act.

Since the sanctuary's 1986 designation, significant innovations in science, technology, and marine resource management techniques have been made, while challenging new resource management issues have emerged. Many of the activities in the original management plan have been accomplished and help demonstrate the value the sanctuary provides to the community. In addition to updating the sanctuary's outdated 1984 management plan, the review process provided a vehicle for the sanctuaries office to integrate new tools and practices into site management.

How Was the Management Plan Developed?

The sanctuary management plan review process is based on three fundamental steps: (1) public scoping, which includes a formal comment period and public meetings to identify a broad range of issues and concerns related to management of the sanctuary; (2) analysis and prioritization of the issues raised during scoping, followed by development of action plans; and (3) preparation of the draft and final management plans and relevant National Environmental Policy Act (NEPA) documentation, such as an EIS or Environmental Assessment.

To help raise public awareness about the sanctuary in preparation for public scoping, in 2007 the sanctuary released a condition report, and in 2008 released an updated state of the sanctuary report. These reports provide information about significant sanctuary accomplishments to date, a summary of sanctuary resources, pressures on those resources, and current and emerging sanctuary resource management issues. In addition, in December 2008, sanctuary staff developed informational fact sheets, in both English and Samoan, to inform people about the sanctuary and its management plan review process, and how

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the public could become involved. Sanctuary staff also conducted management plan related outreach through newspaper articles, radio spots, and interviews on radio and TV talk shows.

NOAA held public scoping from February 9 to March 27, 2009. Members of the public provided comments at three public scoping meetings on the island of Tutuila, as well as written comments submitted via letter, fax, and e-mail. Public scoping, together with numerous community meetings, sanctuary advisory council meetings, collaborations with the Territorial Co-manager (ASDOC), communications with the Governor of American Samoa, and the results of the NOAA National Centers for Coastal Ocean Science biogeographic assessment of archipelago-wide coral reef habitat, provided input on the proposed sanctuary actions and alternatives analyzed in the draft management plan / DEIS. Sanctuary staff also consulted with Fono leaders, local *matai* (chiefs), and federal and territorial government agencies regarding the new draft management plan / DEIS.

The original public comment period for the Draft Management Plan/DEIS lasted 78 days, opening on October 21, 2011, and closing on January 6, 2012. In response to feedback from the Fagatele Bay Sanctuary Advisory Council and members of the public, and to honor a request from Congressman Faleomavaega Eni Hunkin, NOAA re-opened the public comment period for an additional 45 days beginning January 25, 2012. The public comment period on the Draft Management Plan/Environmental Impact Statement closed on March 9, 2012. In total, this action was open for public comment for 123 days.



Flags flying at Sanctuary events. Photo: NOAA – Kevin Grant

Fa'a-Samoa – The Samoan Way

While American Samoa is the place where the sanctuary is physically located, fa'a-Samoa is the cultural context for all sanctuary activities and functions. Fa'a-Samoa is the traditional Samoan lifestyle, or way of life. It is the foundation of Polynesia's oldest culture dating back some 3,000 years. It places great importance on the dignity and achievements of the group rather than on individual achievements. The traditional communal lifestyle revolves around the aiga, or family. Aiga are headed by leading matai (chief) or Sa'o, who manage the communal economy, protect and distribute family lands, are responsible for the welfare of all in their aiga, and represent the family in councils.

The ONMS and Fagatele Bay sanctuary place a high value on partnerships with sanctuary communities and maintain great respect for *fa'a-Samoa*. In American Samoa, the sanctuary-*matai* relationship is critical to the success of this partnership. The American Samoa Department of Commerce and Office of Samoan Affairs help facilitate the sanctuary's community consultations in a manner that is culturally appropriate and respectful of *fa'a-Samoa*. This work includes consultations with *saofa'iga ale nuu* (village council meeting) and individual *matai*.

Changes Made Based Upon Public Comment

Responses to public comments have been developed by NOAA and can be found as an appendix in the FEIS. A number of changes have been made to the document in response to public comments. Below is a summary of boundary and regulatory changes made:

Boundary Changes

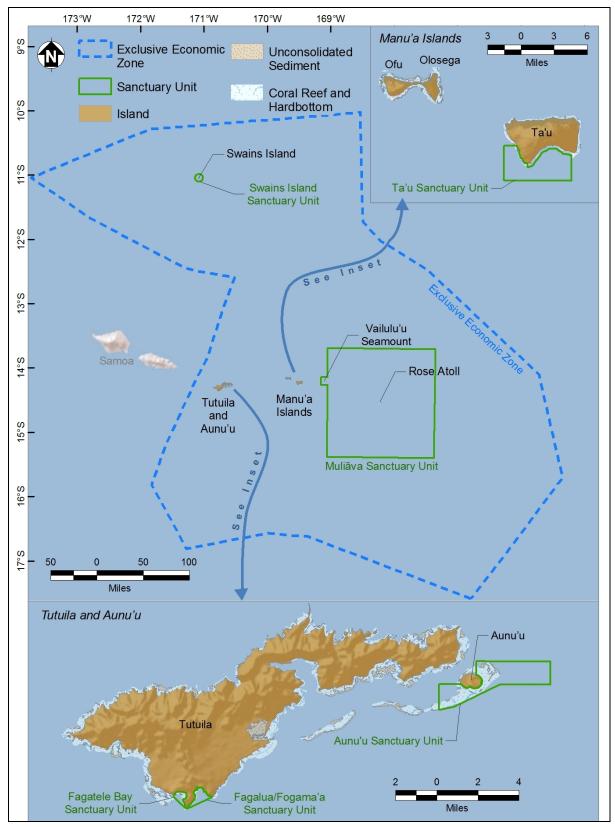
- 1. Swains new boundary to exclude area around the two existing channels
 - a. Excluded areas go 0.5 km in either direction, along shoreline, from channel and go out 0.5 km
 - b. Overall boundary is still 0-3nmi around the entire island

Regulatory Changes

- 1. Name changed to "National Marine Sanctuary of American Samoa"
- 2. Changed name "Larsen Bay" to "Fagalua/Fogama'a"
- 3. Removed unit-specific Hook-and-line fishing only regulation at Fagalua/Fogama'a
- 4. Changed Aunu'u Research Zone from complete no-take to allowing trolling/surface fishing
- 5. Removed the prohibition on take of marine plants, crown-of-thorns starfish, and live shells except alili.
- 6. Removed unit-specific sustenance fishing only regulation for Swains
- 7. All discharge prohibited within 12 nmi. of Rose Atoll



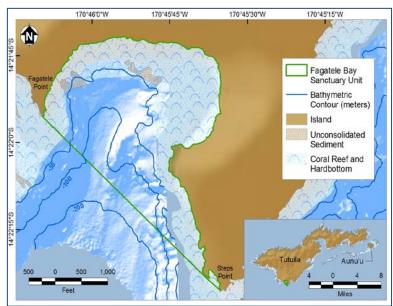
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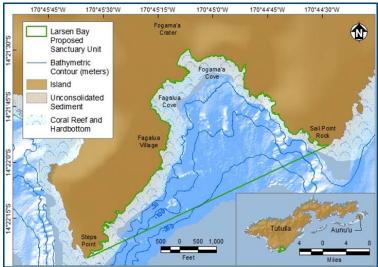
Samoan Archipelago with Sanctuary Units Identified

Fagatele Bay Unit

Fagatele Bay contains 0.25 square miles of bay area off the southwest coast of Tutuila Island. Fagatele Bay was designated a sanctuary in 1986 to protect its extensive coral reef ecosystem. Fagatele Bay is thought to support the greatest diversity of marine life in the National Marine Sanctuary System. Based on surveys of Tutuila's coral reefs, there are 168 species of corals in Fagatele Bay that are thought to be the centerpiece of a community of more than 1,400 species of algae and other invertebrates and 271 species of fish. The cultural significance of Fagatele Bay lies in its connection with a historic coastal village that occupied its shores from prehistoric times through the 1950s. The Fagatele Bay unit is entirely no take.



Fagatele Bay Unit



Fagalua / Fogama'a Unit

Fagalua / Fogama'a Unit

This sanctuary unit encompasses approximately 0.46 square miles of bay area on the southwest shore of Tutuila, just east of Fagatele Bay, from Steps Point across to Sail Rock. The importance of the relationship between this bay and the surrounding environment is comparable to Fagatele Bay, with both bays having high coral coverage, as well as many different types of coral and fish species. Because of this similarity, this unit provides a replicate habitat for increased protection, scientific research and overall increased resilience of coral reef ecosystems. The ecological importance of this unit is comparable to Fagatele Bay, with both bays constituting a regional hotspot for coral cover, as well as coral and fish species richness. Within this unit Fagalua Bay is the site of two turtle images carved in a boulder and prehistoric *fale* foundations and may contain buried archeological deposits.

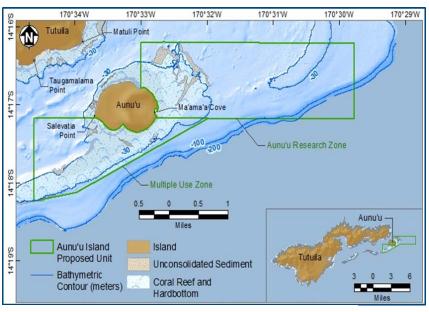
The Sanctuary Advisory Council

The sanctuary advisory council was established in 2005 to provide advice and recommendations to the sanctuary superintendent on protection and management of the sanctuary. The advisory council plays a critical role in management plan review and was instrumental in providing guidance on the future direction of the sanctuary.

To assist in the development of this management plan the advisory council established three working groups consisting of sanctuary staff, members of the advisory council, and members of the public. The Site Selection Working Group made recommendations about which of nine marine areas the public had proposed as potential new sanctuary units should be considered for sanctuary designation. The Education Working Group developed education and outreach programs and presentations to teach relevant stakeholders about the value of marine conservation in American Samoa. The Research & Monitoring Working Group developed a detailed sanctuary science needs assessment that helped guide the development of the Marine Conservation Science Action Plan, and will be crucial in the development of the Sanctuary Science Plan.

Aunu'u Unit

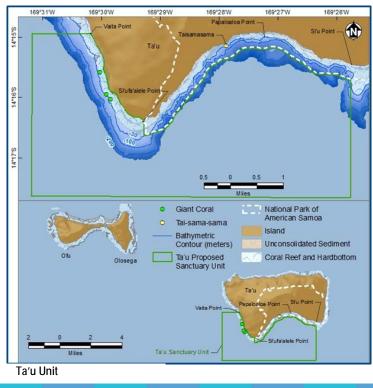
Aunu'u is a small, volcanic island approximately 1.2 miles southeast of Tutuila with a land area of 0.58 square miles. A total of 5.8 square miles of reef and offshore waters around Aunu'u Island have been included in the sanctuary, with 3.9 square miles designated a no-take research zone, and 1.9 square miles multiple-use zone. Based on limited survey data, there is moderate coral cover and number of species compared to all of American Samoa, and Aunu'u has been identified as having unique fish community within American Samoa. The area surrounding Aunu'u Island consists of marine habitats of varying depth including shallow water reefs to deep waters. Ceramics and potsherds indicate that people were on the island as long as 2000 years ago, although not much is known about the settlements at that time. Aunu'u is the site of two maritime heritage resources dating to the 1800s, though a comprehensive survey of the island has not been conducted. A notification system will be implemented to assist in managing resources in the Aunu'u unit.





Ta'u Unit

Ta'u Island, part of the Manu'a Island group, is located 70.0 miles east of Tutuila and 6.9 miles southeast of Olosega. The Ta'u unit is approximately 14.6 square miles and includes both nearshore and deep waters from Si'ufa'alele Point south along the western coast, and includes deep waters beginning ¼ mile offshore, adjacent to the nearshore waters of the NPAS, along the southern coast between Si'ufa'alele Point and Si'u Point. Massive Porites coral heads occur in the shallow waters just offshore of Afuli Cove along the island's southwestern coast. These huge colonies are among the oldest and largest known corals in the world and merit protection. The western side of Ta'u's southern coast is a regional hotspot for coral and fish diversity and possesses a distinct coral community. The sanctuary serves as a deep water buffer zone for the marine areas of the National Park of American Samoa, as well as adding near shore and reef protection around the Porites coral heads.





Western waters offshore from Ta'u are home to some of the world's largest Porites coral heads. Photo: NOAA Coral Reef Ecosystem Division

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Swains Unit

Swains Island is a privately owned low-lying coral atoll located about 200 miles northwest of Tutuila. It is approximately 1.5 mi in diameter, with approximately 1.0 square mile of highly vegetated sand and coral with a maximum elevation of 1.8 m (6 feet) above sea level. Swains Island has a high amount of coral cover and many different types of corals. Coral disease is low at Swains Island. Swains Island is characterized by large schools of predators, mostly barracudas, jacks and snappers. Overall, there are high amounts of large fish around Swains Island. Archeological surveys have not been conducted at Swains Island, but it likely holds prehistoric sites and buried archeological artifacts. This sanctuary unit includes 52.25 square miles of territorial waters within a 3 nm circle of the island, excluding the area around two existing channels to the island.

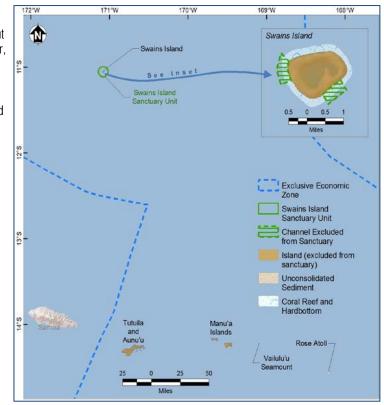


Coral reef at Swains. Photo: NOAA – Kerry Grimshaw

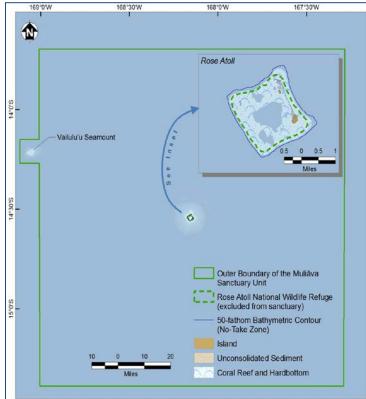
Muliāva Unit

Rose Atoll is approximately 150 miles east of Pago Pago Harbor. It is the easternmost Samoan island and the southernmost point of the United States. One of the smallest atolls in the world, Rose Atoll consists of about .03 square miles of land and 2.5 square miles of lagoon surrounded by a narrow barrier reef. Rose Atoll is a distinct environment within the archipelago. It is an area with large numbers of fish and has a unique coral community, positioned upstream in the South Equatorial Current relative to the rest of the Samoan Archipelago. Rose Atoll supports the highest densities of giant clam in the Samoan archipelago, and is the primary site for green turtle nesting in American Samoa There are also a number of maritime heritage resources at Muliava.

The Muliāva unit consists of include 13,448 square miles of marine waters of the Rose Atoll Marine National Monument and the submerged volcanic cone known as the Vailulu'u Seamount which has a diverse biological community that includes polychaetes, crinoids, octocorals, sponges, and cutthroat eels. Scientists speculate that the volcanic cone within the crater of the seamount will breach the sea surface within decades, forming a new island.



Swains Island Unit



Muliāva Unit

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Location-specific regulations for each of the sanctuary units							
UNIT-SPECIFIC REGULATIONS	SANCTUARY UNIT						
	Fagatele	Muliāva	Larsen	Aunu'u		Ta'u	Swains
				Multi-Use	Research	Idu	Swallis
Prohibit all harvest (No-take)	Х						
Prohibit all harvest except trolling/surface fishing					Х		
Prohibit all discharge within 12 nmi. of Rose Atoll		Х					
Manage harvest through village notification				Х			

Revised Regulations and Sanctuary Units

NOAA has changed the name of the Fagatele Bay National Marine Sanctuary to the National Marine Sanctuary of American Samoa, and added five additional discrete geographical areas to the sanctuary. NOAA is also promulgating regulations that apply to these new areas and in some instances prohibit fishing and restrict certain uses of these areas.

Sanctuary Regulations

Many of these regulations parallel existing territorial or federal regulations. Of the prohibited gear, 1) poisons, electrical charges, and explosives, 2) drift gill nets, and 3) scuba-assisted spearfishing are currently prohibited in territorial and federal waters. Of the prohibited species, the take of 1) live hard coral and wild live rock and 2) precious corals are currently prohibited in territorial waters shallower than 60 feet. The take of 3) marine mammals and 4) sea turtles is prohibited throughout American Samoa through both territorial and federal regulations.

Sanctuary-Wide Regulations – All Sites

- Prohibit anchoring and use mooring buoys when available
- Prohibit release of introduced species
- Prohibit abandoning structures or materials
- Prohibit deserting a vessel
- Prohibit leaving harmful materials on abandoned vessel
- Must display dive flag when diving from a vessel
- · Prohibit exceeding 3 knots when operating a vessel 200 feet from dive flag
- Prohibit operating a vessel in a manner that causes the vessel to strike or damage sanctuary resources
- Prohibit sand mining, dredging, filling, dynamiting ,or disturbing seabed
- Prohibit removing, damaging, or tampering with historical and cultural resources
- Prohibit littering or discharge of some material (see regulations for details)
- Prohibit ensnaring, entrapping or fishing for sea turtles or marine mammals
- Prohibit defacing or removing any sanctuary signs or markers

Sanctuary-Wide Regulations – All Units (with the Exception of Muliāva)¹

- Prohibit the gathering, taking, breaking, cutting, damaging, destroying, or possessing live coral, wild rock, bottom formation, or giant clam
- Prohibit possessing or using a seine, trammel net, or any type of fixed net
- Prohibit the possession or use of poisons, electrical charges, explosives, or similarly destructive fishing methods
- Prohibit SCUBA-assisted spear fishing
 - ¹ No fishing regulations are being proposed for the Muliāva unit at this time as ONMS awaits NMFS action on the Western Pacific Fishery Management Council recommendations through the fishery management process.

Action Plans

Action plans are designed to directly address current priority resource management issues and guide management of the sanctuary over the next 5 to 10 years. The action plans identify and organize the wide variety of management tools sanctuary staff will employ toward this end.

Cultural Heritage & Community Engagement Action Plan

The primary objective of this action plan is to promote stewardship through active engagement of sanctuary communities while incorporating Samoan culture and protecting cultural heritage and maritime heritage resources.

The cultural heritage of American Samoa, including the archeological and historical resources associated with coastal and marine areas and seafaring activities and traditions, has developed over the past 3,000 years, and is reflected in Samoan traditions and lifestyles (*fa'a-Samoa*). Fostering traditional Samoan stewardship ethics through strategies and activities within this action plan will improve understanding and protection of maritime heritage resources and maintain healthy coastal and marine ecosystems. These activities include developing a cultural heritage outreach and preservation program that integrates *fa'a Samoa* into the strategies and activities of all action plans, developing volunteer programs that engage local communities and visitors to protect, understand and connect with the sanctuary's unique qualities, and inventorying and assessing maritime heritage resources within the sanctuary to protect, understand and highlight their importance to the past and living Samoan culture.

Marine Conservation Science Action Plan

The primary objective of this action plan is to improve ecosystem-based management by providing a strong foundation of science and increasing knowledge of sanctuary marine ecosystems.

Protecting and conserving biological and cultural resources of exceptional marine ecosystems is the mission of the ONMS. Accomplishing this mission requires a rigorous, objective, scientific foundation for understanding ecosystem structure and function, evaluating the status of sanctuary resources, understanding socioeconomic impacts of management actions, and implementing effective, sustainable, and adaptive management strategies. This action plan establishes the framework to achieve these goals through the assessment of baseline ecological conditions, development of a formal science program, and focusing on the link between conservation science and management. As much of the sanctuary resources are difficult to access, this action plan also includes strategies to communicate scientific findings to create a well-informed and engaged public, thus increasing the overall enjoyment and value of the sanctuary.

Climate Change Action Plan

The primary objective of this action plan is to minimize and mitigate the impact from climate change events on coastal and marine ecosystems in sanctuary units.

Coastal and marine resources are vulnerable to several potential climate change events including, but not limited to, rising sea levels, increasing sea and air temperatures, intensifying storms, changing rainfall patterns, ocean currents, and acidifying oceans. The extent of the impact from climate change events will be determined by the rate of climate change and the resources' resilience to change. Efforts described in this action plan aim to understand and characterize climate change drivers and impacts in the sanctuary, "green" sanctuary operations and seek ONMS Climate Smart certification, identify habitats vulnerable and resilient to climate change, conduct and prioritize climate change research and monitoring, and promote public awareness about climate change.

Operations and Administration Action Plan

The primary objective of this action plan is to outline the means and level of support necessary to successfully achieve sanctuary goals and implement the strategies and activities detailed in the other action plans.

Adequate human resources and physical infrastructure are required to conduct effective and well-planned operations and to support sanctuary management. This action plan describes day-to-day operational and administrative activities, and the manner in which budget and staffing are organized to efficiently implement sanctuary programs in American Samoa. Important issues include operating budgets for all sanctuary initiatives, human resource capacity building to accomplish goals and objectives, vessel maintenance and operations, permitting and activity tracking within the sanctuary, and meeting sanctuary needs for office, field and visitor facilities.

Ocean Literacy Action Plan

The primary objective of this action plan is to cultivate an informed public and enhance ocean stewardship by increasing public awareness, understanding, and appreciation of sanctuary resources in American Samoa.

Ocean literacy is "the understanding of the ocean's influence on you and your influence on the ocean". Effective local ocean literacy encourages public involvement in resource protection, increases knowledge about American Samoa's marine resources, creates an informed public, and helps nurture future marine science and resource management professionals. Efforts within this action plan aim to improve sanctuary awareness through the development and operation of the sanctuary visitor center, bringing the place to the people through outreach to local communities and development of interactive classroom tools and technologies, increasing enjoyment and understanding within the sanctuary through signage, and outreach materials in both English and Samoan, and supporting formal and informal education opportunities that encourage ocean stewardship.

Resource Protection and Enforcement Action Plan

The primary objective of this action plan is to reduce existing and potential resource threats and to prevent adverse impacts to the ecosystem.

By including the broad mandate "to protect, and where appropriate, restore and enhance natural habitats, populations, and ecological processes," the NMSA highlights its purpose to provide holistic protection of biodiversity in sanctuaries. This action plan presents strategies aiming to protect, biodiversity, maintaining ecological integrity, and allowing for sustainable use of sanctuary resources that are compatible with the primary goal of resource protection. Strategies address threats from introduced species that can permanently alter ecosystem balance, marine debris that can kill species and destroy habitat, harmful human activities that can damage habitat and degrade water quality, as well as developing appropriate and effective enforcement and outreach mechanisms to ensure overall compliance with sanctuary regulations.

Partnerships & Interagency Cooperation Action Plan

The primary objective of this action plan is to foster and facilitate cooperation and coordination of planning and management actions.

Fully and successfully carrying out the sanctuary mission and achieving ocean conservation in American Samoa necessitates sanctuary partnerships with local and federal agencies. By consistently working together to achieve management goals of the sanctuary in American Samoa, success can be reached as agency coordination: (1) maximizes limited resources, (2) minimizes the risks of working in isolation, (3) fosters stewardship that takes ecosystem effects into account, (4) achieves greater stakeholder involvement, and (5) builds strong community support for ecosystem conservation. This action plan focuses on strengthening or developing partnerships through formal and informal mechanisms.

Program Evaluation Action Plan

The primary objective of this action plan is to effectively and efficiently incorporate performance measurement into sanctuary operations to determine the degree to which management actions are achieving sanctuary goals.

As part of an effort to improve overall management of sanctuaries, ongoing and routine performance evaluation is a priority for the ONMS. Both site-specific and programmatic efforts are under way to better understand the ONMS's ability to meet stated objectives and to address the issues identified in this management plan. This action plan provides for improved performance, accountability, and identifying solutions to management issues for each of the other action plans through a systematic evaluation process.

Obtain Your Copy of the Management Plan

The public is invited to obtain a copy of the management plan / Environmental Impact Statement through any of the following means.

- 1. Visit our website http://fagatelebay.noaa.gov
- 2. Visit the sanctuary office:

American Samoa Department of Commerce – Fagatele Bay National Marine Sanctuary A.P. Lutali Executive Office Building, 2nd Floor Pago Pago, American Samoa

- 3. Available at the Feleti Barstow public library and American Samoa Community College library
- 4. Contact us via email (Fagatelebay@noaa.gov) or phone (684-633-5155) & provide us with the following information:
 - a. Your full name, title & affiliation (if applicable),
 - b. Your complete mailing address
 - c. Indicate whether you would like a hard copy or a CD-ROM.

