

# AMERICAN SAMOA MARINE CONSERVATION PLAN

Prepared in accordance with Section 204  
of the Magnuson-Stevens Fisheries Conservation and Management Act



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## I. INTRODUCTION

American Samoa is an unincorporated U.S. territory and the only US territory in the south Pacific. It is approximately 4,200 km south of Hawai'i, in the central South Pacific Ocean. It is geologically part of the Samoa Archipelago, a remote chain of 13 islands of varying sizes and an atoll, located 14° south of the equator near the International Date Line. The archipelago is divided into two political entities: the Independent Samoa and American Samoa. The Independent Samoa has two relatively large islands (Upolu and Savaii) and eight islets. American Samoa is comprised of five volcanic islands (Tutuila, Aunu'u, Ofu, Olosega, and Ta'u), one low-island (Swains Island) and a coral atoll (Rose Atoll). The five volcanic islands that are part of the American Samoa territory are very steep with mountainous terrain and high sea cliffs and of various sizes. Tutuila Island, the largest (137 km<sup>2</sup>) and most populated island, is the most eroded with the most extensive shelf area and has banks and barrier reefs. Aunu'u is a small island very close to Tutuila. Ofu and Olosega (together as 13 km<sup>2</sup>) are twin volcanic islands separated by a strait which is a shallow and narrow break in the reef flat. Tau is the easternmost island (45 km<sup>2</sup>) with a more steeply sloping bathymetry.

American Samoa has a population of around 55,000 and a growth rate of 3.7%, one of the highest in the world. For approximately three thousand years, the Samoans have relied on the ocean for their sustenance with a culture that revolves around fishing. Fishing activities constitute an integral part of the 'fa'asamoa' or the Samoan culture and fisheries resources are used in cultural ceremonies. For instance, ceremonies on chiefly position entitlements use fish during these cultural events. 'Atule' fishing is a community activity tinged with legends and the distribution of the catch follows traditional protocols.

The fisheries in American Samoa can be broadly categorized in terms of habitat and target species as pelagic fisheries, bottomfishing in mesophotic reefs and the nearshore coral reef fisheries. Fisheries is either subsistence (fishing from shore and mostly for personal consumption) or commercial (may use a boat and catch mostly sold). Bottomfishing is actually a combination of mesophotic reef fishing and/or pelagic fishing (trolling). The coral reef fishery involves gleaning, spearfishing (free dive from shore or boat-based), rod and reel using nylon lines and metal hooks, bamboo pole, throw nets and gillnets. Fisheries development is of great importance to the food security and economic stability of the territory.

Climate change, land-based pollution and fishing are the three main threats to the fisheries resources in the territory. Climate change is a global phenomenon predicted to lead to general adverse changes in productivity, coral reef habitat loss, and decline in fisheries. Sedimentation and debris are the major land-based pollution sources. Both are products of unsustainable land use brought about by an increasing population. Sedimentation is a serious threat because it impacts nearshore fish recruitment from degradation of these habitats. Fishing has been identified as a major factor that has led to the decline in the number of sharks and other big fish which are slow to recover to any level of fishing. Economically important nearshore invertebrates such as giant clams and sea urchins have also declined based on anecdotes.

Research and initiatives towards sustainable management of the fisheries in American Samoa derive funds from federal sources (e.g. the NOAA Coral Reef Conservation Program, Fish and Wildlife Service) and commercial fishing excise tax. However, the 1996 Magnuson-Stevens Fishery Conservation and Management Act also provides American Samoa with the ability to receive funds from foreign fishing agreements with distant-water fishing nations. Section 204(e) of the Act states that fees collected under a foreign fishing agreement (referred to in the Act as a Pacific Insular Area Fishery Agreement or PIAFA) allowing foreign fishing in the EEZ around American Samoa will be deposited into the treasury of the American Samoa Government. In the case of fishing violations occurring within the EEZ, fines or penalties imposed under the Act, including sums collected from the sale of property seized, will also be deposited into the American Samoa's treasury. Furthermore, the Magnuson-Stevens Act declares that a PIAFA permitting foreign vessels to fish in the EEZ surrounding American Samoa can be negotiated only with the concurrence of, and in consultation with, the Governor of American Samoa. No PIAFA will be entered into if it is determined by the Governor that the agreement will adversely affect the fishing activities of the indigenous people of the islands.

The Magnuson-Stevens Act specifies that the amounts deposited in the treasury are available, without appropriation or fiscal year limitation, for the purpose of conducting marine conservation projects. Proposed marine conservation projects must be detailed in a 3-year marine conservation plan. This document is American Samoa's marine conservation plan (MCP) describing how the American Samoa Government proposes to allocate funds obtained under a PIAFA or collected from fisheries violations for the period 2015-2018. The MCP has been developed in accordance with guidelines provided by the Western Pacific Regional Fishery Management Council (WPRFMC) and National Marine Fisheries Service (NMFS) and is consistent with the requirements of the Magnuson-Stevens Act. The plan sets forth objectives that cover a broad range of fishery conservation and management issues and initiatives. The projects listed are designed to help achieve these objectives.

## II. OBJECTIVES OF THE AMERICAN SAMOA ARCHIPELAGO FISHERY ECOSYSTEM PLAN AND PELAGIC FISHERIES ECOSYSTEM PLAN

Objective 1: To maintain biologically diverse and productive marine ecosystems and foster the long-term sustainable use of marine resources in an ecologically and culturally sensitive manner through the use of a science-based ecosystem approach to resource management.

Objective 2: To provide flexible and adaptive management systems that can rapidly address new scientific information and changes in environmental conditions or human use patterns.

Objective 3: To improve public and government awareness and understanding of the marine environment in order to reduce unsustainable human impacts and foster support for responsible stewardship.

Objective 4: To encourage and provide for the sustained and substantive participation of local communities in the exploration, development, conservation, and management of marine resources.

Objective 5: To minimize fishery bycatch and waste to the extent practicable.

Objective 6: To manage and co-manage protected species, protected habitats, and protected areas.

Objective 7: To promote the safety of human life at sea.

Objective 8: To encourage and support appropriate compliance and enforcement with all applicable local and federal fishery regulations.

Objective 9: To increase collaboration with domestic and foreign regional fishery management and other governmental and non-governmental organizations, communities, and the public at large to successfully manage marine ecosystems.

Objective 10: To improve the quantity and quality of available information to support marine ecosystem management.

### III. MARINE CONSERVATION PLAN OBJECTIVES AND PROJECTS

The following are the objectives of the identified priority projects of the American Samoa Marine Conservation Plan. The objectives are consistent with the Magnusson-Stevens Fisheries Conservation and Management Act. Each objective has a list of prioritized projects and each project has an evaluative criterion that measures how it addresses the objective.

#### Objective 1: Maximize social and economic benefits through sustainable fisheries development

Project	Priority Level
<p>1. Development of fishing technologies and boat design and construction.</p> <p>Evaluative Criterion: New vessels operating in the territory that replace the aging <i>alia</i> fleet. These vessels would be able to increase fishing operations equipped with bottomfishing, trolling, and longline gear, capable of storing ice, and having various fishing and navigation technologies to improve efficiency and safety at sea. New or modified vessels in the domestic large vessel longline fleet capable of conducting diversified operations.</p>	High
<p>2. Training for fishermen (e.g. boat design, construction, repair and maintenance, fish handling)</p> <p>Evaluative Criterion: Trained fishermen will be able to fish more effectively and safely, increased fish catches and produce better quality fish.</p>	Medium
<p>3. Enhancement of fishing infrastructures (e.g. docks, ramps, moorings, ice machine, fish storage and processing facilities)</p> <p>Evaluative Criterion: Improved and additional fishing infrastructures that provide benefits to the fishermen.</p>	High
<p>4. Promotion of sport fishing tournaments</p> <p>Evaluative Criterion: Sustained international sport fishing tournaments held in the Territory to increase the profile of the Territory as a fishing destination recognition of fishing as part of the <i>fa'asamoa</i> or Samoan way of life</p>	High

<p>5. Design, manufacture and deployment of Fish Aggregation Devices (FADs)</p> <p>Evaluative Criterion: Deployment of FADs on a regular basis to enhance fishing opportunities and promote safety at sea.</p>	High
<p>6. Development of mariculture and development of broodstocks</p> <p>Evaluative Criterion: Mariculture and development of broodstocks (e.g. giant clams, sea urchins) not only promote other forms of fisheries but also enhances sustainable fisheries of exploited species from the wild.</p>	High

**Objective 2: Support quality scientific research to assess and manage fisheries**

<b>Project</b>	<b>Priority Level</b>
<p>1. Fisheries data collection</p> <p>Evaluative Criterion: Collection of quality fisheries data to support science-based fisheries management.</p>	High
<p>2. Basic research on the biology of fish and invertebrates targeted by various fisheries</p> <p>Evaluative Criterion: Collection of basic information on the biology of target species to support science-based fisheries management policies.</p>	High
<p>3. Marine spatial planning and technological support</p> <p>Evaluative Criterion: Conducting marine spatial planning to support data-intensive, multi-layered, and multi-use coastal management.</p>	High

**Objective 3: Promote an ecosystem approach in fisheries management, reduce waste in fisheries and minimize interactions between fisheries and protected species**

<b>Project</b>	<b>Priority Level</b>
<p>1. Research on the biology of marine mammals and capacity to deal with strandings</p> <p>Evaluative Criterion: The conduct of research of basic biological data gain a better understanding on local marine mammal populations, threats, and potential for minimizing interactions between fisheries and protected species.</p>	Medium
<p>2. Research on the biology of marine turtles</p> <p>Evaluative Criterion: The conduct of research to gather basic marine turtle biological data to gain a better understanding of local populations and impacts.</p>	Medium
<p>3. Coral reef monitoring, habitat assessment and rehabilitation</p> <p>Evaluative Criterion: Habitat status assessment and monitoring and if necessary a rehabilitation program are in place towards sustainable harvest of goods and services from this biologically diverse ecosystem.</p>	High
<p>4. Decreasing marine debris and trash</p> <p>Evaluative Criterion: Establishment of programs and projects that support the prevention and collection of marine debris to support ecosystem-approach to fisheries management.</p>	High
<p>5. Research and monitoring of red tides</p> <p>Evaluative Criterion: Research and monitoring of red tides to support an ecosystem-approach to fisheries management.</p>	High



**Objective 4: Recognize the importance of island culture and traditional fishing in managing fishery resources and foster opportunities for participation**

<b>Project</b>	<b>Priority Level</b>
<p>1. Promoting traditional fishing practices</p> <p>Evaluative Criterion: Promotion of traditional fishing practices in recognition and preservation of cultural practices and traditional knowledge as part of fisheries management.</p>	High
<p>2. Supporting ‘palolo’ and ‘atule’ surveys</p> <p>Evaluative Criterion: ‘Palolo’ and ‘atule’ surveys to document traditional fishing and cultural practices towards an integrated Territorial creel survey program.</p>	High

**Objective 5: Promote education and outreach activities and regional collaboration regarding fisheries conservation**

<b>Project</b>	<b>Priority Level</b>
<p>1. Development of high school marine fisheries resource management courses and workshops</p> <p>Evaluative Criterion: Development of courses and workshops targeting youth groups to ensure that future generations of resource users are better-informed of managed fisheries.</p>	High
<p>2. Training for local staff and scholarships in marine biology and fisheries and related-courses</p> <p>Evaluative Criterion: Relevant training for staff involved in fisheries management to enhance local capacity in understanding and implementing research and fisheries regulations.</p>	High
<p>3. Development of education materials on species of concern, coral reefs and fisheries</p>	High

Evaluative Criterion: Development of education materials to support education and outreach for fisheries management.	
<p>4. Enhancing regional cooperation with regional agencies and partners through scientific research and meetings</p> <p>Evaluative Criterion: Regional scientific research and meetings to provide platforms for regional collaboration in coastal resource management.</p>	High

Objective 6: Encourage development of technologies and methods to achieve the most effective level of enforcement and to ensure safety at sea

Project	Priority Level
<p>1. Enforcement and surveillance capabilities especially for marine protected areas</p> <p>Evaluative Criterion: Increased effective and efficient enforcement and surveillance strategies to enhance the implementation of fisheries regulations.</p>	High

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