GCCA+
THE GLOBAL CLIMATE CHANGE ALLIANCE PLUS INITIATIVE

Funded by the European Union

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENT CONSERVATION

MARINE SPATIAL PLANNING

FIRST PHASE NATIONAL CONSULTATIONS REPORT

SAMOA
17TH AUGUST 2021 TO 4TH MARCH 2022

SUNGO
The Samoa Umbrella for Non-Governmental Orginasations Inc

MARINE SPATIAL PLANNING SAMOA

WAITT INSTITUTE

IUCN

CONSERVATION INTERNATIONAL

Table of Contents

List of Figures

List of Tables

List of Acronyms

ARS	Artificial Reefs Samoa
CBFMP	Community-based Fisheries Management Areas
CBFMP	Community-based Fisheries Management Programme
CCT	Consultation Core Team
CI	Conservation International Foundation
CSO	Community Society Organisation
EEZ	Exclusive Economic Zone
IUCN	International Union for Conservation of Nature
LMAs	Locally Managed Areas
MAF	Ministry of Agriculture and Fisheries
MCG	Matareva Coral Garden
MESV	Marine Ecosystem Service Valuation
MNRE	Ministry of Natural Resources and Environment
MPAs	Marine Protected Areas
MSP	Marine Spatial Planning
MWCSD	Ministry of Women, Community Service and Development
MWTI	Ministry of Works, Transport and Infrastructures
NTZ	No-Take Zone
NGCO	Non-Government Conservation Organisation
NGO	Non-Government Organisations
OLSSI	O Le Siosiomaga Society Incorporated
OMAs	Ocean Management Areas
PPNP	Puipui Pu'e National Park
PUMA	Planning Urban Management Unit, Division of the MWTI
SCS	Samoa Conservation Society
SIGFA	Samoa International Game Fishing Association
SOS	Samoa Ocean Strategy 2020-2030
SPA	Samoa Port Authority

SSC	Samoa Shipping Corporation
SSS	Samoa Shipping Service
SUMAs	Special and/or Unique Marine Areas
SUNGO	Samoa Umbrella for Non-Government Organisations
TFA	Troppo Fishing Adventure

Recommended citation:

Mulipola A.P, Strickland D, Satoa M. Iene F and Selu F (2022) Marine Spatial Planning First Phase National Consultations Report. IUCN, Suva.

Foreword

Samoa has the sovereign authority of a large ocean 40 times bigger than its land territory. The Economic Exclusive Zone is 120,000 km²and it contains many marine ecosystems, including coral reefs, mangroves, seagrasses, seamounts and deep trenches. The coastal and marine resources and biodiversity provides our country, government, villages and families many real benefits. For many years, our people have depended largely on marine resources for sustenance and livelihood.

However, we have witnessed significant demands on our marine resources in various ways. Many of our marine resources, significantly the coastal species, have been dramatically declining from overexploitation, use of unsustainable fishing practices and natural and anthropogenic impacts.

Our Government has developed and launched an Ocean policy 2020-2030 to promote sustainable management of our ocean for the next ten years. The Government has prioritised this strategy and shows our firm commitment to international and regional obligations that enable sustainable ocean management.

The Ocean policy highlights integrated strategic solutions to promote sustainable management of Samoa's ocean. One of the solutions is the Marine Spatial Planning process to spatially define our ocean for development, management and conservation purposes.

In developing an MSP, a first national stakeholder consultation process solicited views and valuable information was conducted for about ten weeks. This Marine Spatial Planning First Phase National Consultations Report summarises the key ocean uses, challenges and potential solutions shared by the national stakeholders.

The sharing and integration of traditional knowledge and scientific understandings aim toward building a more holistic spatial Ocean Plan relevant to Samoa. Through this integrated and participatory planning, we aim to balance the economic, ecological and social objectives in Samoa's ocean and sustainably manage the EEZ for current and future generations.

I want to acknowledge and thank the community and sectoral stakeholders for sharing their knowledge and invaluable information. Finally, I recognise and acknowledge the support rendered by the donor and technical partners and those involved in collecting vital information from stakeholders for developing a spatial Ocean Plan for Samoa.

Faafetai

Seumaloisalafai Afele Faiilagi
Chairman
MSP Support Working Group

Acknowledgement

This report would like to acknowledge the work of the Government of Samoa, particularly the Samoa Ocean Strategy National Steering Committee and its Working Groups. Acknowledgement is due for the work and support of the MSP Support Working Group. The invaluable support of the European Union's Global Climate Change Alliance (GCCA+) Initiative and the Conservation International Foundation's (CI) are gratefully appreciated. The continuous technical assistance for the project rendered by the International Union of Conservation of Nature (IUCN), Waitt Institute, and the Waitt Foundation are greatly valued.

Special thanks and appreciation to the MSP Consultation Core Team members, without whose immense and tireless effort, the first public MSP consultation process would not have been completed. The Ocean Planning consultation team comprises staff from government ministries and corporations, Conservation International (Samoa) and Samoa Umbrella for Non-government Organisations (SUNGO) and is listed in the report. The support from Samoa Shipping Corporation, Samoa Tourism Authority, Ministry of Agriculture and Fisheries, Ministry of Works, Infrastructures and Transport, and the Ministry of Natural Resources are gratefully acknowledged for allowing their staff to be part of the Ocean Planning Consultation Core Team.

To the staff of SUNGO and the Conservation International (Samoa) organisations, we would like to thank and acknowledge their immense support and participation throughout the planning phase and the successful implementation of community and national stakeholder consultations. To all the *Pulenu'u* and *Sui Tamaita'i*, village focal points, special thanks for their support in ensuring the village representatives attended the consultation process, including the Reverend ministers and their congregations, for agreeing to host the consultation workshops.

Finally, our deepest and heartfelt thanks and sincere appreciation to all the participants of community and sectoral consultations for sharing their knowledge and valuable information that form the basis of this report.

1. Executive summary

A national-level Marine Spatial Plan (MSP) is one of the 13 key strategies in the Samoa Ocean Strategy (SOS) 2020-2030. The SOS aims to use the MSP process to support ecosystem-based adaptation while strengthening community engagement in actions that enhance resilience to the impacts of climate change. As part of the MSP process, national stakeholder consultations were conducted to solicit views and gather relevant information for developing a spatial Ocean Plan for Samoa.

The first round of national consultations for ocean planning (MSP) was conducted for community stakeholders from 17 August to 12 November 2021 by the MSP national consultation team. The sectoral national consultations were conducted from the 1st to the 4th of March 2022. The MSP team includes Government officials and representatives from Samoan Umbrella for Non-Government Organisations (SUNGO), the Conservation International (Samoa) office, and the Project Coordinator.

This report presents synthesised results from non-spatial responses and spatial data drawn on maps shared by the community and sectoral representatives who attended the national consultations. The main findings and outputs are highlighted as follows:

- A total of 45 consultation workshops were conducted in which 185 coastal village communities and four key sectors, namely the Tourism, Fisheries Government ministries and organisations, and Non-Government and Civil Society Organisations, were engaged and consulted for guidance on an MSP for Samoa.
- The consultation meetings engaged 2,597 representatives from village communities and key national sectors. Approximately 54% of participants engaged are male, and 46% are female representatives. The youth representatives aged 15 to 29 accounted for 14% of the attendees.
- About 80% of communities members and most sector stakeholders fully agreed to the principle of ocean planning to conserve marine resources, improve economic development and provide for future generations.
- For spatial management of coastal ocean space, 38% of village groups reported that their village had established management areas in the form of village-based fish reserves as "no-take" MPAs, and the village's entire coastal areas are locally managed. The MSP process for Samoa will fully support the existing community-based management areas.
- In the context of MSP, 89 coastal sites were identified and recommended for potential future protected and managed areas to sustain coastal marine ecosystems and biodiversity.
- A total of 49 ocean sites are recommended for potential future marine protected areas, with 27 locations on Upolu Island and 21 on the big island of Savaii.
- A total of 41 coastal sites with mangrove habitats are recommended for potential future management and conservation areas, 23 sites on Upolu and 18 sites are situated on Savaii.
- Sectoral representatives generally supported the MSP process and placement of offshore areas for management and conservation purposes. However, some representatives of the Fisheries sector, in particular, the operators of the class >15m large fishing vessels, have expressed concern and opposition due to the loss of fishing areas and impacts on the viability of their fishing businesses if offshore Offshore Management Areas (OMAs) are established through an adopted Ocean Plan.
- Subsistence and artisanal fishing for coastal marine species are the two highest fishing ocean activities identified by 96%, and 78% of all community representatives attended. About 32% of community groups reported that some villagers had undertaken commercial inshore fishing and 7% commercial offshore fishing.
- About 69% of community groups consulted viewed climate change as the highest environmental challenge that will impact the sustainability of the ocean and its natural resources.
- Other significant marine environmental challenges are seaweed/algae overgrowth on reefs and land-based pollution identified by 37% of community stakeholders. Coral depletion (29%) and

crown of thorns (COT) (20%) are the other main concerns recognised by village groups as affecting the sustainability of the marine environment and the preservation of biological diversity.

- Unsustainable fishing practices were identified by 45% of community stakeholders and the majority of sectoral stakeholders that adversely impact the sustainability of the marine resources, damaging the marine environment and affecting livelihoods.
- The use of unsustainable fishing methods such as traditional plant-derived poison (*ava niukini)*, underwater torches (*lama moliuila)*, smashing corals to catch sheltering fishes (*tuiga*), fishing nets and SCUBA may be attributed to overexploitation of many coastal fishery resources as recognised by 36% of community members. Subsequently, these restricted activities may cause fewer fish and shellfish (34%) caught in many village coastal areas.
- Illegal fishing done by fishers from other villages was the primary concern to the sustainability of fisheries and marine biodiversity in village coastal marine species, as highlighted by 34% of community stakeholders. Similarly, IUU fishing activities conducted by unlicensed foreign fishing vessels and some domestic fishing vessels too were emphasised by all the sectors, especially the Fisheries sector, as a significant concern for the sustainability of offshore fisheries and marine biodiversity.
- Though many villages have imposed some management regime either legally or traditionally, there is a need for village communities to develop village bylaws and strengthen enforcement and compliance to ensure people adhere to these measures.
- The lack of funding and resources were recognised by 67% and 63% respectively of communities as the primary factors why no effective management regimes have been instituted to manage coastal areas and resources. The same challenges were identified across the sector as the fundamental limitations for minimum efforts to address ocean sustainability.
- Almost half of the village groups consulted, and all the sectors' representatives identified the lack of government support as a limiting reason for either absent or weak local and national conservation and management efforts in some village coastal areas and most offshore areas.
- Support needed from the Government and key partners as identified by the consultation process includes subsidies, rebates, enabling policies and alternatives to compensate for the loss of fishing areas, economic opportunities and seafood security because of the placement of future OMAs. Alternative support by ways of fish farming, FADs and equipment to improve fish catches, reducing fishing costs and interactions with species of special interests.
- Enforcement and compliance were commented on throughout the consultations regarding the established types of OMAs and related restricted and allowable uses and activities under each ocean management area. The current absence of a patrol vessel to monitor, control, and surveillance of the EEZ and in-placed OMAs is a critical concern for enforcement and compliance.

2. Background

The Samoa Ocean Strategy was officially launched in 2020, and it contains a comprehensive set of solutions to guide the governance of Samoa's entire marine space for the next ten years. Marine spatial planning (MSP) is among the Integrated Management Solutions highlighted in the policy to achieve ocean sustainability.

MSP is a practical way to create and establish a more rational organisation and management of ocean uses within the Economic Exclusive Zone (EEZ) and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way

The vision of Samoa's MSP aligns with the Ocean Strategy 2020-2030 is for Samoa's ocean to remain healthy and abundant through integrated management, robust coordination, and respectful use and stewardship that supports social and economic opportunities for Samoans. A national marine spatial planning was one of the identified strategic actions to progress and achieve the following vision:

"Ecologically sustainable social and economic development of Samoa's ocean for the benefit of all Samoans"

Samoa's ocean management objectives follow and are aligned with the purposes of the SOS and are to

1. Ensure sustainable socio-economic development and use
2. Ensure food security
3. Conserve biodiversity
4. Minimise conflicts between users
5. Build climate change resilience and adaptation, and
6. Protect and rehabilitate the environment.

Ehler and Douvere (2009) defined the characteristics of effective Ocean Planning (MSP) as

- **Ecosystem-based**, balancing ecological, economic and social goals and objectives toward sustainable development
- **Integrated**, across sectors and agencies and among levels of government
- **Place-based** or **area-based**
- **Adaptive**, capable of learning from experience
- **Strategic and anticipatory**, focused on long term
- **Participatory**, stakeholders are actively involved in the process

An effective Ocean Plan Ocean planning (MSP) has clear economic, social, and ecological benefits. Suppose the MSP is designed and implemented effectively. In that case, it streamlines a potentially complicated process of managing multiple uses in the ocean, resolving conflicts between users and assisting in setting priorities for each ocean area (Ehler and Dover (2009).

MSP is an effective tool in providing an integrated framework for ocean management. However, it does not replace single-sector legislation or national plans and, in particular, will complement inshore management practices, including using village-based fish reserves as a 'no-take' marine protected area and locally managed areas, district-wide MPA and village-based mangrove protected areas. The final ocean plan for Samoa will include areas identified for development, and protection, areas where specific uses will be limited, and other services will be expanded and promoted.

2.1 The need for Marine Spatial Planning

Samoa's total land area is about 2,380 km², and its reef area is about 490 km² or 49,000 ha (Ah Leong & Sapatu 2009; Tiitii *et al.* 2014). Although Samoa's a small land area, the country has sovereign authority over large ocean spaces, estimated at over 120,000 km² within its Exclusive Economic Zone. The ocean spaces are about 40 times larger than the total landmass spread over four inhabited islands of Savaii, Upolu, Manono and Apolima, and five uninhabited islands. Samoa has the smallest EEZ in the Pacific, bordered by American Samoa to the east, Tokelau to the north, Wallis and Futuna to the west, and the south by Tonga.

Over 79% of Samoa's population is rural, with the majority residing on the coast, and that puts pressure on the coastal marine resources, ocean and their habitats.

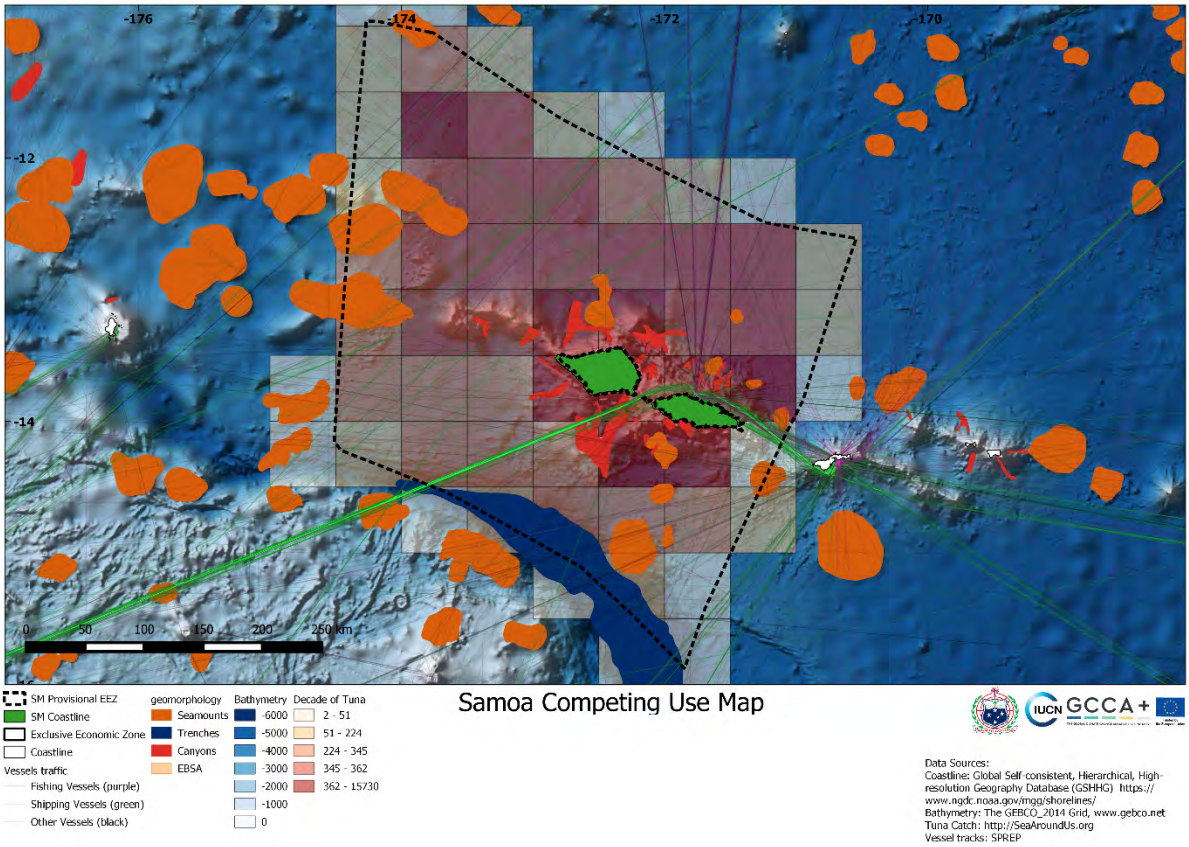


Figure 1. The map shows the competing uses of Samoa's ocean areas.

Samoa's ocean areas and resources are the foundation for people's livelihoods and food security and contribute significantly to the country's economy (MNRE 2015). Samoa's ocean spaces are utilised for domestic and international activities, including inshore and offshore fisheries, shipping and transportation, tourism, and submarine communication and data cables, as well as the potential for future activities such as mariculture and deep-sea mining extraction. These activities create a demanding ocean area that may experience conflicts between users and activities. Figure 1 shows the map of Samoa's competing uses through commercial tuna fish catches and vessel traffic. Figure 2 illustrates submarine communication and data cables laid on seabeds from land-based telecommunication stations in other countries to Samoa.

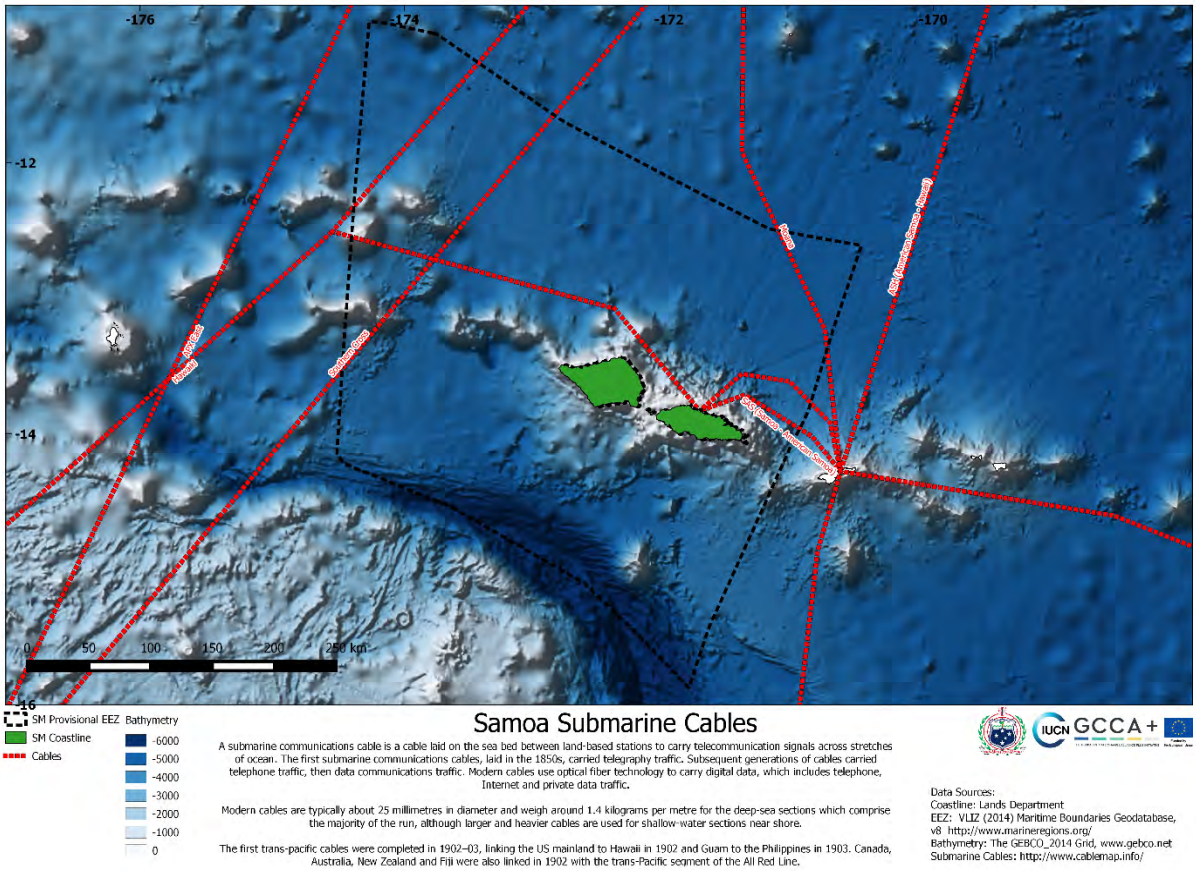


Figure 2. Submarine communication cables from other countries to Samoa

2.2 Marine Management Programs

The management of Samoa's ocean and coastal resources is directed by multiple sectoral strategies and policies implemented by different ministries and agencies. However, legal frameworks exist nationally and locally that directly or indirectly influence the use and management of the ocean and its resources.

In the context of spatial management in the marine environment, designated No-Take Marine Protected Areas (MPAs) and Community-based Fisheries Management Areas (CBFMA) exist in Samoa. The Fisheries Management Act (2016) provides the legal framework for developing and managing fisheries resources. The establishment of CBFMAs or village-owned fish reserves and locally managed areas are permitted in the Acts with control under the Ministry of Agriculture and Fisheries (MAF). The district-wide marine and mangrove protected areas are entitled to the National Parks and Reserves Act (1974)[1] and Lands Survey and Environment Act (1989)[2]. The MPAs are administered by the Ministry of Natural resources and Environment (MNRE).

Currently, two district-wide marine protected areas encompass all coastal marine areas of villages in the Aleipata and Safata traditional districts and 18 village mangrove protected areas. There are 18 currently active village-managed mangrove protected areas on Upolu Island and four on Savaii Island.

[1]National Parks & Reserves Act enables the creation of various types of protected areas for the benefit of the people of Samoa. Part 2 provides for the establishment of national parks and Part 3 provides for the creation of reserves.

[2] Part VIII of LSE (1989) applies to all Samoa, including all waters of the EEZ. Div 4 of part 8 provide specific provision in preparation of Management Plans for national parks, reserves, coastal zones, etc. A formalised management plan is an enforceable instrustment under s.18 of LSE Act (Rose, J. 2021)

A total of approximately 450 hectares of mangrove habitats are under protection and managed by village communities. Village communities manage 442.06 ha in Upolu and 7.065 ha in Savaii. (DEC mangrove database, 2022)

The Community-based Fishery Management Programme (CBFMP), currently implemented by the Fisheries Division of MAF, is an approach to assist coastal communities in sustainably managing and developing their adjacent marine resources and environment as designated in the Fisheries Management Act 2016. Within each CBFMP, a village-owned fish habitat reserve is established as a 'no-take' protected area. The village's entire coastal marine space, from shore to 100m beyond the outer reef, is locally managed through a village management plan. Currently, 101 active community-based fish reserves are no-take marine protected areas, 51 in Upolu and 46 in Savaii, respectively and four on Manono Island (Taua per. comm.). Although these fish reserves are smaller in size, because of their proximity to one another, they form a network of sanctuary around the islands of Samoa (King *et al.* 2001).

The boundaries of inshore waters adjacent to coastal villages have not been defined. However, all coastal villages in Samoa have de facto control of coastal areas adjacent to their village and can devise fisheries management plans and establish protected areas enforceable under national laws. Figure 3 demonstrates village-based fishery habitat reserves, marine protected areas, conservation areas, key biodiversity areas and marine reserves.

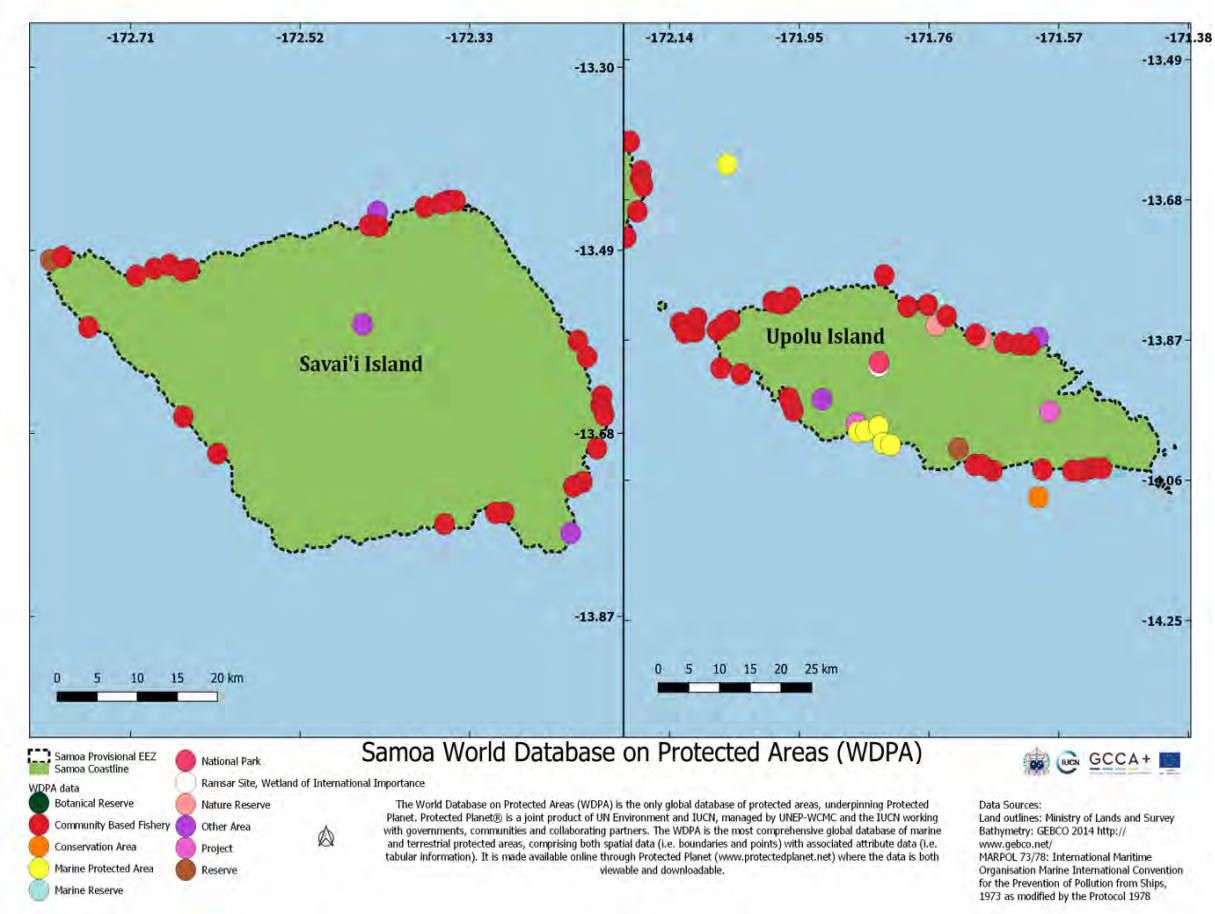


Figure 3. The locations of the existing protected areas in Samoa as characterized by conservation types.

For the offshore areas, the Tuna Management and Development of 2017-2021 stipulated the harvest strategy as management tools aligning to regional obligations and defined 50 nautical miles

surrounding the islands as management fishing areas reserved for the local fishing fleets, especially of vessels less than 15 meters in length. A shark sanctuary[3] was instituted for the entire EEZ in 2019 with governance by the MNRE.

3. Introducing Marine Spatial Planning in Samoa

The National Ocean Strategy was made a political priority when declared as a voluntary commitment toward Sustainable Development Goal (SDG) 14: Life Below Water at the United Nations, Our Ocean Conference, New York in 2017. In the same year, the Samoan Government declared the strategy a commitment and made a priority development and conservation issue during the Pacific Island Forum meeting. The binding SDG14 commitment to ocean protection is 10% and is the main goal also for the national MSP project. However, the 30% protection is a commitment is now the ensuing target Samoa to achieve, as highlighted in the SOS 2020-2030.

The Samoa Ocean Strategy 2020-2030 (SOS) provides a pathway for ocean governance in Samoa over the next ten years. Implementing a Marine Spatial Plan (MSP) for Samoa's ocean is one of the solutions to guide ocean management through the next decade. The Government of Samoa (GoS), in partnership with the International Union for Conservation of Nature's Oceania Regional Office (IUCN ORO), with funding support from the European Union's Global Climate Change Alliance (GCCA+) Initiative, is working collaboratively to support Ecosystem-based Adaptation (EbA) by implementing a national-scale Marine Spatial Plan objective.

Marine spatial planning (MSP), or Ocean Planning, is a practical way of spatially organising the human use of marine areas to balance the demands of human activities with the need to maintain the health of the ecosystems on which those activities depend. The MSP Initiative is focused on planning for and managing the sustainable and long-term use and health of Samoa's ocean.

MNRE, IUCN and SUNGO are partners in the MSP project. The MSP project is led by the MNRE and collaborates with other relevant Ministries and government agencies with shared ocean mandates. SUNGO is contracted under the project to deliver the first round of national consultations with community stakeholders. The Conservation International Foundation (CI) is a technical partner for the project. The Waitt Foundation has agreements with the Government of Samoa via the MNRE. The CI and the Foundation will fund the second round of consultations on the MSP project.

The implementing partners agreed to develop a framework, endorsed by the MSP-Support Working Group, to guide efforts to promote stakeholder awareness, solicit relevant information and engagement, and communicate key messages of the Marine Spatial Planning project efficiently and effectively.

The first round of stakeholder consultations was scheduled to implement the community consultation first, followed by the sectoral national consultations. The planned community consultations were conducted through districts where all the district villages were aggregated at a central location. The

[3] Marine Wildflife Protection Regulation 2009 (Ammendment regulation 2018) - provide protections specifically for marine mammals, turtles, sharks and breeding aggregations. The 2018 amendment also added a National Marine Sanctuary.

meetings with sectors were performed similarly to the community consultation for invited participants congregating at main venues.

4. Ocean planning (MSP) consultation team

The consultation team included Government ministries and corporations officials, Samoan Umbrella for Non-Government Organisations (SUNGO), Conservation International (Samoa) representatives, and the MSP Project Coordinator. The Ocean planning (MSP) team members for the national consultations are listed in Appendix 13.1. Figure 3 shows some core team members engaged in delivering community and sectoral national consultation.

The MSP Support Working Group endorsed the national stakeholder consultations plan for the first rounds of consultation in its meeting on 14 July 2021. In the same session, committee members were asked for representatives from their organisation to be part of the Ocean planning core team to conduct consultations with stakeholders on sustainable ocean planning.

Figure 4. Ocean Planning Consultation Core Team (CCT) for community and national sectoral consultations.

4.1 Building the MSP Core Consultation Team (CCT)

The nationwide consultation is a shared effort supported by the MSP project, the Conservation International Foundation (CI), and Blue Prosperity Coalition (BPC). The consultation team comprises team leaders, government ministries officials, and SUNGO and CI/BPC staff members. The consultation team consists of 15 people at most who support community stakeholder consultations.

Core members of the MSP SWG from Government ministries and corporations were invited for consultation training. The training on consultation approach and methods and essential GIS tools was held on 25 June 2021, with nineteen participants attending the training. The IUCN-ORO technical team supported the training activity virtually.

Two pilot consultation exercises were held for Savaii on 20 July 2021 and 25 July 2021 for Upolu. The training was to prepare the core team on the proper tools, information, methods and approach and familiarise them with the program for the MSP nationwide consultation.

The GIS practitioner members of the MSP Team were specifically trained on the SeaSketch application by the Waitt Institute technical staff on several occasions. The SeaSketch tool demonstration was held on 15 June 2021.

Several other training sessions on the application were held later to enhance further the skills of the team members responsible for entering data into the system while out in the field. There were also progress updates meetings with the Waitt Institute and IUCN technical team using data from the consultation pilot discussing data use and analysis procedures and the generated products and output. The consultation team used the tool to record information and feedback from community consultations during pilots and community and sectoral consultations.

5. Consultations schedule plan

The strategy for the first public ocean planning consultation with community stakeholders was based on the distribution of the electoral and traditional political districts. For districts that have fewer villages, two or three districts were combined for a consultation meeting held at a central location. The map of Samoa with traditional and electoral districts and villages is shown in Figure 5. Most of the representatives invited to attend the first round of MSP community consultations were from villages along the coast. They had the authority to make decisions relating to managing the ocean spaces adjacent to their villages.

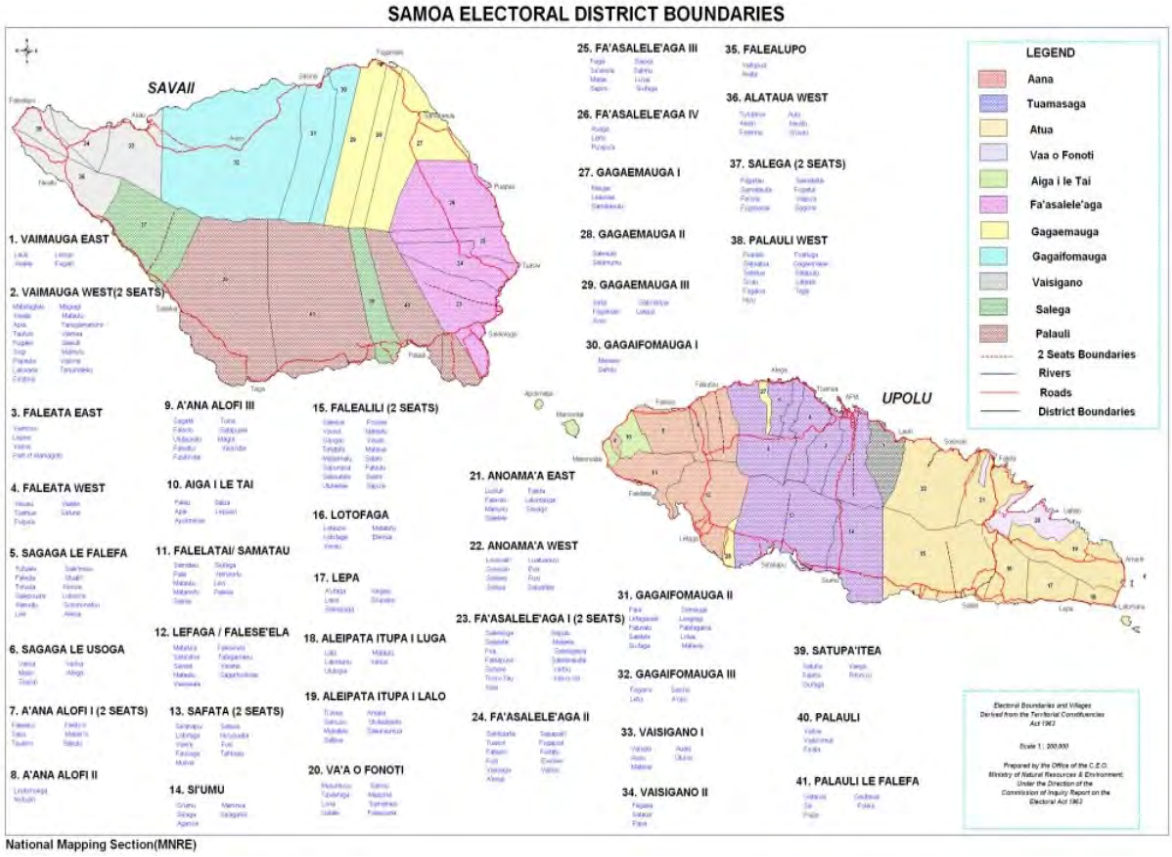


Figure 5. The map of Samoa with electoral districts used for the phase 1 MSP community consultations

The MSP national consultation was initially scheduled to start in the second quarter of 2021. However, because of the State of Emergency lockdown for the covid-19 pandemic, it was then postponed to begin in August 2021. The national stakeholder consultations with communities commenced on 17 August and concluded on 2 November 2021. The community consultations took ten weeks to complete. The national community consultations took about three months and a half to complete. Further covid-19 lockdown in earlier 2022 resulted in the dialogues with key sectors to be deferred from the 1st to the 4th March 2022. The schedule for national consultation with the community and sectoral stakeholders is summarised in Table 1 and Table 2.

Table 1. Summary of the consultation meetings conducted and the numbers of community participants who attended community consultation workshops

Date	District	Male	Female	Youth	Total
17-Aug-2021	Aleipata Itupa-i-Lalo	46	26	9	72
18-Aug-2021	Aleipata Itupa-i-Luga	42	57	11	99
19-Aug-2021	Lepā & Lotofaga	31	41	14	72
20-Aug-2021	Falealili 2	26	27	7	53
23-Aug-2021	Falealili 1	29	42	4	71
24-Aug-2021	Siumu	39	30	4	69
25-Aug-2021	Safata 2	28	25	14	53
26-Aug-2021	Safata 1	40	32	7	72
28 July 2021 (pilot)	Lefaga & Faleseela	15	20	3	35
30-Aug-2021	Samatau & Falelatai	30	6	1	36
31-Aug-2021	Manono Island	26	36	7	62
01-Sep-2021	Aiga-ile-tai	36	56	16	92
02-Sep-2021	Aana 4	53	26	10	79
03-Sep-2021	Aana 1,2,&3	26	22	6	48
07-Sep-2021	Sagaga 4	33	20	2	53
08-Sep-2021	Sagaga 1,2 & 3	26	45	6	71
09-Sep-2021	Faleata 3 & 4	33	10	8	43
10-Sep-2021	Faleata 1 & 2	20	46	7	66
14-Sep-2021	Vaa-o-Fonoti	37	33	10	70
15-Sep-2021	Anoama'a 1	31	27	17	58
16-Sep-2021	Anoamaa 2	31	25	6	56
20-Sep-2021	Vaimauga 1	25	36	3	61
21-Sep-2021	Vaimauga 4 & 5	19	9	5	28
22-Sep-2021	Vaimauga 2 & 3	20	26	1	46
25 July 2021 (pilot)	Faasaleleaga 4	38	32	11	70
04-Oct-2021	Faasaleleaga 2	40	22	5	62
05-Oct-2021	Faasaleleaga 3	43	19	8	62
06-Oct-2021	Faasaleleaga 5	46	30	7	76
07-Oct-2021	Gagaemauga 1	32	27	9	59
19-Oct-2021	Gaga'emauga 2	38	41	14	79
20-Oct-2021	Gagaifomauga 1	28	15	6	43
21-Oct-2021	Gagaifomauga 2	39	21	3	60
22-Oct-2021	Gagaifomauga 3	42	23	12	65
26-Oct-2021	Vaisigano 1 & 2	36	18	8	54
27-Oct-2021	Falealupo & Alataua-sisifo	30	26	6	56
28-Oct-2021	Salega 1 & 2	38	20	5	58

29-Oct-2021	Palauli 1	46	24	11	70
09-Nov-2021	Palauli 2	19	26	6	45
10-Nov-2021	Satup'aitea	55	38	8	93
11-Nov-2021	Palauli 3	25	28	11	53
12-Nov-2021	Fa'asaleleaga 1	16	27	9	43
	Total	**1,353**	**1,160**	**317**	**2,513**

Table 2. Summary of the sectoral consultation meetings on sustainable ocean planning.

Date	District	Male	Female	Youth	Total
1-March-2022	Tourism sector	9	8	1	17
2-March-2022	Fisheries sector	20	13	4	33
3-March-2022	Government Ministries & Organisations	12	8	13	20
4-March-2022	Non-Government Organisations & Civil Society Organisations	10	4	0	14
	Total	**51**	**33**	**18**	**84**

6. Consultation Methods

6.1 Setting the Scene

Each community consultation started with a Setting the Scene part of the consultation program. This part included the formal welcoming of participants, followed by an opening prayer by the invited reverend of the host villages. An audience member was appointed to say the opening prayer for the sectoral consultations. A keynote address by the ACEO of MNRE highlighted the commitment of Samoa's government to ocean sustainability followed after the opening prayer. And then the formal introduction of the MSP team.

The central part of the program started with a presentation delivered by the MSP consultation team to introduce the MSP concept, present the MSP process overview and highlight the consultation process's objectives. A short MSP video in Samoan is shown to complement the presentation and further generate the understanding of participants on the MSP process.

The IUCN Technical team and MNRE Mapping Unit provided detailed paper maps of each village's coastal area to raise awareness and knowledge of the ocean boundaries and inshore habitats. The paper and SeaSketch maps were used to record spatial feedback on ocean uses, restricted activities and challenges and solutions to address challenges identified by stakeholders.

Separate survey questionnaires (Appendices 13.4 & 13.5) were created containing guiding questions that were used to record non-spatial feedback and opinions shared by stakeholders. The following questions were asked of the village and sectoral representatives and used as points of discussion:

1. Please identify the current activities you know of occurring/performing in the ocean areas?
2. Which activities do you believe should be restricted in the oceans?
3. Which activities do you agree with or consider expanding in the oceans?
4. What challenges do you face when managing the ocean?
5. What would be the best solutions to address the challenges and problems identified?

In community consultations, participants were grouped into their villages for discussion. Each village group (Figure 6) is made up of representatives of different sectors of the communities from the traditional chiefs (matai), women, men and the youth. The youth group is categorised as aged between 15 to 29 years old. Similarly, participants in the sectoral consultations were grouped by type of operation, nature of activities, and locations of where the operations are based.

Figure 6. Village groups engaged in discussions

After group consultations, each group reported the results of their discussions through a prepared presentation (Figure 7). The final session included the next steps for the MSP road maps. Field reports attached in Annexe 15 summarise the key results of village and sector groups during consultation meetings.

Figure 7. Village presenters presenting outcomes of their discussions

The consultation team recorded all conversations, views and outcomes from the meetings on the SeaSketch tool, and the group prepared presentations that form the basis for this report.

6.2 Consultation objectives

The development stages of an Ocean Plan for Samoa were accordingly to different consultation phases, which align with the process of MSP. These phases of consultations have specific objectives. The main focus of the first segment of the national stakeholder consultations included the introduction of the MSP concept and soliciting and collecting relevant inputs from stakeholders guiding the development of a spatial ocean plan for Samoa.

6.3 Consultation Operation Protocols

The consultation team followed the standards in the operational plan when they were out in the field. Team Leaders were responsible for ensuring the team members adhere to these rules. No breaches of the standards stipulated in the operational plan were reported or breached.

The formal protocol before entering a village, in particular, the host village as the central venue of the district consultation, was to seek consent from the village through the Ministry of Women, Community and Social Development. The existing official communication structure with each community channel via the Village *Pulenu'u* or *Sui Tamaita'i* is the focal point for the village. Letter of invitation was hand-delivered to the village focal contact advising about the MSP community consultation, the central venue and requesting representatives from various community sectors to attend the consultation dialogue.

6.4 Team preparations and logistics

The Consultation Coordinating Unit (CCU) met several times to plan and coordinate the consultation activities with villages before the team was deployed to carry out the first engagement with communities. Apart from the team members having undertaken training before consultation methods and approaches, the CCU met to finalise logistics and other arrangements before deployment for the consultation on 17 August 2021.

SUNGO liaised with MWCSD to source consent from the host villages and informed *Pulenu'u* and *Sui Tamaita'i* of each village about the MSP consultation process. SUNGO was also responsible for logistics and arrangements for travels and accommodations throughout the duration of the community consultation process.

The first review meeting after two weeks of consultation was held on 27 August 2021. The meeting reviewed the consultation process and the logistic arrangements and confirmed the schedule of talks with communities for the weeks ahead.

6.5 Consultation coordination unit

Members of the CCU were the Managers of collaborating partners supporting the MSP consultation process and senior staff of the CI and MNRE, plus the local project coordinator (LPC). They were

responsible for ALL aspects of the consultation and were consulted regarding issues arising in the field. The supervisors were also responsible for communications with the *MSP Support Working Group (SWG)*.

The CCU provided the coordination role and operational support for the consultation teams and ensured coordination of consultation activities as required. The Unit also communicated daily briefings from the CCT leader, advice on revisions to consultation, travel plans, and safety and security issues. The leaders of the CCT are listed below.

Coordinators name	**Contact number and email**
Fuimaono Vaitoto Ofoia Chief Executive Officer Samoa Umbrella of Non-Government Organisations Office	7524322 CEO@sungo.ws
Seumalo Afele Faiilagi Assistant Chief Executive Officer Ministry of Natural Resources and Environment	7591723 afele.faiilagi@mnre.gov.ws
Leausalilo Leilani Duffy-Iosefa Director Conservation International Foundation (Samoa)	7592992 lduffy-iosefa@conservation.org

6.6 Standard meeting agenda and key messages

The CCU held several planning and coordination meetings before, during and after the first phase of MSP national stakeholder consultations.

6.6.1 Community consultation meetings

The Consultation Planning Unit team held several pre-consultation meetings, face-to-face or virtually, to design and plan the first round of national consultations for marine spatial planning. The following sections summarise the main outcomes of the pre-consultation during the consultation process and the post-consultation meetings.

a) Pre-consultation meetings

- *25 February 2021* – the MSP Project Coordinator met with Conservation International (Samoa) officials to discuss potential collaboration between CI and the MSP project on implementing and supporting the MSP national consultation process. It was agreed that CI will be a supporting partner for delivering the stakeholder consultation outputs of the MSP project and will be engaged in the MSP national stakeholder consultation process.

- *26 February 2021* – MSP Project coordination, IUCN-ORO and CI (Samoa) met to confirm the collaborative partnership between the MSP and CI in support of the MSP national stakeholder consultation process.

- *23 March 2021* – Second collaboration meeting with CI to discuss and confirm what component of the national consultation is to be financially supported by them. It was agreed that CI would be responsible for funding supporting the second phase of the MSP national stakeholder consultations. Moreover, it was also decided and agreed to promote the 30% of ocean areas demarcated as complete protection rather than the 10% protection as the original key target of the MSP project.

- *21 May 2021* – drafting guiding questions for the community consultation questionnaire and information recording sheet, planning pilot consultation exercises, pre-consultation awareness and planning the consultation program with a relevant approach and method for consulting community stakeholders.

- *26 May 2021* – confirming the primary objectives for consultations, refining the consultation program and informing the team on the partnership with CI in delivering the MSP national consultations, particularly the second phase.

- *4 June 2021* – discussing suitable options for maps needed in the field (electronic or paper maps), further work on guiding questions and translating MSP informational sheets into Samoan. Identify core consultation team members, tools and resources useful for consultations. The CCT programmed the pre-consultation awareness campaign and planned a preparation training workshop. The budget and logistics for community consultations were discussed and arranged.

- *18 June 2021* – progress updates on consultation program, tools and resources requirements, and team preparation. GIs training program and date. The meeting was finalising consultation pilot exercises and confirmed core team members for the first round of the consultation process.

- *26 July 2021* – Review pilot consultation in Savaii and finalise the Upolu consultation pilot exercise plan. Allocation of the team for facilitators, scribers and SeaSketch persons.

b) During community consultation meetings

- 27 August 2021 – first meeting after two weeks of consultations to review the delivery of the consultation output, logistics arrangement, and the feedback and information solicited so far. The implementation of the consultations was satisfactory so far; however, some minor issues with the accommodation and travelling needed adjustment for the safety of the CCT.
- *Review meetings after each district consultation* – The CCT held review meetings daily after each district community consultation. These meetings reviewed information received and what needs verification from stakeholders within the vicinity of the consulted communities. The meeting also discussed and planned for the community meeting the next day.

6.6.2 Sectoral consultation meetings

The consultation planning team held four virtual and face-to-face meetings before the sectoral consultation. The outcomes of these meetings are summarised in the paragraphs below.

a) Pre-consultation meetings

- *18 November 2021* – planning sectoral consultations and agreed to hold sectoral consultation workshops in mid-January 2022 when returning from the holiday break. LPC and IUCN to design survey questions and a draft programme.

- *12 January 2022* – Confirm the sectoral consultation method and approach. Review the draft sectoral consultation program and guiding questions. The meeting decided to give time for members to review and provide comments on specific questions relevant to each key sector to be consulted. The meeting agreed on consultation to be done by sector. The CCU identified four key

sectors and invited representatives from the fisheries, tourism, NGO/CSOs, government ministries, and corporations to participate in the ocean planning talks.

- *21 January 2022* – Brief agreed outcomes of the meeting are as follows:
  - Waitt Institute (Madeline) to prepare a 15-minute presentation on SeaSketch in Agenda 4
  - IUCN Technical Team presentation on the support data and use of paper-based maps under Agenda 4
  - Time allocation for the half-day event can be stretched to accommodate content, all agenda items as well as logistics on the day
  - Revised Questionnaire to be integrated into the SeaSketch Tool and the team to provide comments and final feedback. LPC to translate the survey questions into Samoan.
  - The Legacy version of SeaSketch will be used to display results from the inputs on the day on the wall for the plenary session
  - Each table is to be allocated a laptop/tablet to access the survey via the SeaSketch tool along with paper-based maps and support documents
  - The SeaSketch tool is to be used with paper-based maps during the collection phase to allow for preference
  - IUCN team (John Kaitu'u) to send shapefiles to Madeline Berger with supplementary information such as SUMA, Bioregions, Bathymetry and other important morphological and oceanography features of Samoa's ocean spaces.

- *25 January 2022* –Meeting outcomes are briefly summarised as follows:
  - *Sectoral consultation agenda*
    The cleaned latest version of the agenda is uploaded on Google Drive and provides the link for members to access and improve the structure of the agenda, in particular on which item and time are relevant to present outcomes (spatial) maps from community consultation.

  - *Spatial maps of community consultations results for sectoral consultations*
    The Technical teams showed several examples of spatial maps. Subsistence and commercial fishing areas overlaid with reef-associated SUMAs and specific sites on coastal areas are used for sand mining, aquaculture, tourism, fishing, and potential future MPAs. The spatial sample maps presented to the sectoral consultations and the agenda be concluded for endorsement at the CCU meeting.

  - *Other matter*
    Danita of CI raised about the legal consultation for MSP. As there will be a legal implication of the MSP, it is vital to consult the legal people. Hans agreed that there should be a separate consultation with the legal sector, and it will be considered.

- *8 February 2022* – The agenda is reviewed, and finalised the draft agenda and questionnaires for the sectoral consultation, confirming the dates, venues, list of invitees and the draft budget to be sent off to IUCN. The outcomes are summarised below.

  - *Review draft and confirm Agenda for Sectoral consultations*
    Because of the Covid-19 lockdown, the sectoral consultations are rescheduled for the 1st week of March (1st March – 4th March). Integrate Agenda item 3 with Agenda Item 2, i.e. to incorporate present findings from the first round of public consultations in the first presentation and add the saved 15 minutes to Agenda item 5 and revise allocated time for each agenda item. Mulipola incorporates changes.

  - *Review Draft and finalise questionnaire for each sector.*

There were a few changes to the wording and translation of the survey questionnaire, and some questions were removed. Align the questionnaire with the scales used by each sector, especially for Tourism and Fisheries and the scales they use for their operations. The LPC, Mulipola, to incorporate changes into the draft questionnaire and circulate it to partners.

- *Confirm Dates and venues for each sector's consultations*
  Confirmed dates for sectoral consultations are 1st to 4th March 2022. Venues: Le Lava hotel for the 3rd and 4th March 2022 meetings, and Tanoa Tusitala hotels for the 1st and 2nd March 2022 meetings. Request Tanoa hotel for partitions to pin up resource maps and extra consultation information.

- *Finalise the list of invitees and letter of invitation for each sector consultation.*
  Fatu and Mulipola are working on putting together and contacting invitees for the compiled list. Confirm the list of final invitees from each sector by next week after SOE is reviewed.

- *Discuss the option for a way forward for sectoral consultations in case of covid-19 SOE restrictions continue on the current level 2 or level 3*
  i. Two options for the way forward for sectoral consultations are as follow:
     Big groups should be split into two consultations, especially for Tourism and Fisheries sectors OR Select Key Reps to represent each sector to make up 30 (SOE restriction for public gathering), for instance: 10 Savaii reps, 10 Upolu reps and 10 of MSP team.

  ii. Option for the way forward of sectoral consultations in the event of the SOE level 3 (no mass gathering)
     Virtual meetings and distributing questionnaires to sectoral reps for feedback. However, there is a concern about the fill-in and completion of the SeaSketch and drawing polygons of issues identified by stakeholders on SeaSketch and paper maps. Internet access for most of the village-based Fisheries and Tourism sector reps for virtual consultation meetings

b) Post sectoral consultation meetings

A daily debriefing meeting was held after each sectoral consultation. The first debriefing was held with the IUCN marine programme, technical team and the MSP CCT to discuss issues raised in the Tourism sector meeting. The point of maps was presented as it was difficult to draw polygons of ocean activities, challenges and solutions identified on paper maps as operators were grouped based on operation scales, but their businesses are located in different coastal parts of the country. This grouping methodology caused difficult for SeaSketch team members to draw and clearly show polygons, as the tourism activities identified were all in different parts of the ocean space. For the subsequent consultations, group sector participants according to where they are based and their activities and shared similar areas of the ocean.

No more significant issues were raised during the debriefing meetings throughout the remaining Fisheries, Government and NGO/CSO consultation workshops. The last debriefing meeting held on 19 April 2022 between the CCT and the Waitt Foundation and IUCN technical teams discussed lessons learnt from the national consultation process to improve the questionnaire design and the SeaSketch platform.

6.7 SeaSketch Tool Analysis

a) What is the SeaSketch tool

SeaSketch is a collaborative, web-based tool developed by the McClintock Lab at the University of California, Santa Barbara, to support multi-stakeholder planning and management processes, specifically focusing on marine and coastal resource management. The tool was launched in 2013 and has been used by dozens of organizations worldwide to support diverse marine spatial planning and conservation projects. The application is compatible with all desktop devices and can be used by anyone with an internet connection.

SeaSketch is intended to democratize planning efforts by exposing authoritative datasets through a publicly accessible web interface, alongside tools that non-technical stakeholders may use to contribute information (such as where and how ocean space is used and valued), sketch and evaluate spatial plans (such as prospective ocean zones), and share ideas in the public and private forum.

b) How is data gathered and analysed using the SeaSketch tool?

One feature of SeaSketch is the ability to create surveys that collect spatial data on how a respondent uses and/or values ocean space. Surveys can be built to include both spatial (drawing on the map) questions and non-spatial questions (i.e. choosing from a drop-down menu). The surveys can be customized to users' needs and contain skip logic that allows different questions to populate the form based on responses to earlier questions. The output from these surveys are 1) A .csv containing a list of respondents and all non-spatial data attributed to that response and 2) A shapefile containing data collected from the drawing questions, with one .shp file per spatial question on the survey.

Separate surveys were created for community and sectoral consultations during the Samoa MSP Process. Survey data was analyzed with other spatial datasets (such as habitat or bathymetry layers) to sketch and evaluate zones. One might, for example, examine the amount of overlap between a prospective zone and existing human uses.

6.8 Awareness campaign

A pre-consultation awareness campaign was started a month before the beginning of phase 1 national consultations to raise the awareness of community and sectoral stakeholders on the MSP concept and the planned national consultation process. A short video on MSP in Samoan was aired and broadcast on local TV channels. The Conservation International Foundation/ Blue Prosperity Coalition (Samoa) and the MSP project agreed to collaborate on supporting the awareness campaign by funding the reruns of existing MPA advertisements developed by the CI/BPC and the MNRE projects. The Fisheries Division, MAF, was asked to re-run some of their community fish reserves and marine protected areas advertisements supported by the said collaboration. Several short radio skits about *Faasao* or marine protected areas were aired regularly on local radio channels.

7. General Findings

7.1 Consultation Participation Results

7.1.1 Village participants

A total of 2,513 individuals representing 185 coastal villages in 52 geopolitical districts were consulted during the first round of national community consultations for sustainable ocean planning. A total of 41 district consultations took place from 17 August to 22 September 2021 for Upolu, including Manono Island and Savaii, from 16 October to 12 November 2021. Community representatives by district and villages who attended meetings are summarised in Appendix 13.2. The results from the two pilot consultations are also included in the spatial ocean planning analysis.

Figure 8. Some of the community and sector representatives participated in the MSP consultations

Male participants accounted for 53%, and females represented 47% of those who attended the national community consultations. The youth attendees aged 15 to 29 denoted 13% of the participants who participated in the talks. Figure 8 displays some community representatives who attended district community consultation workshops. The total participants by gender are visually represented in Figure 9.

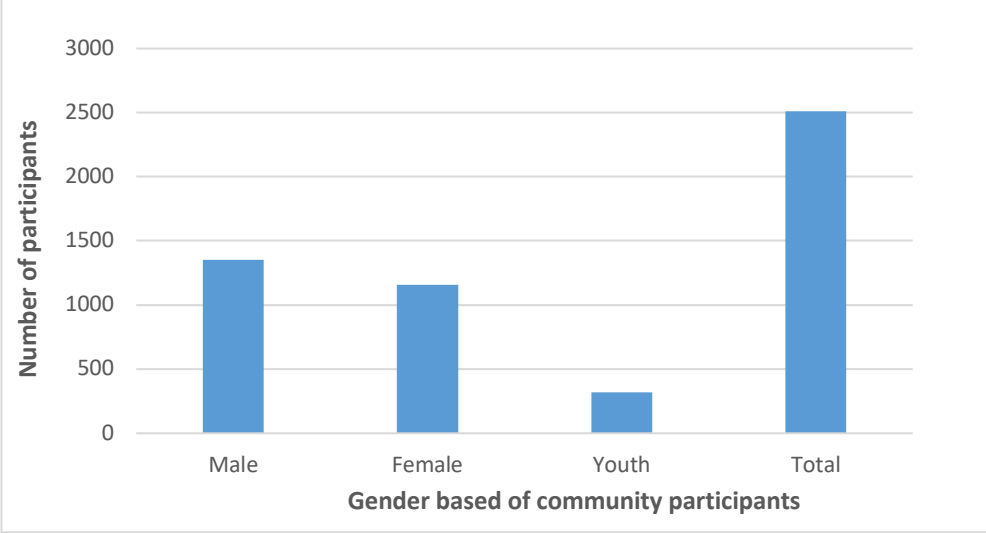


Figure 9. The overall community representatives by gender attended the national community consultations from 17 August to 12 November 2021.

a) Age distribution of village participants

Figure 10 illustrates the overall age distributions of community representatives attending the ocean planning consultations from 17 August to 12 November 2021. The 50-59 and 40-49 years represented 21% and 27%, respectively and were the dominant age groups of participants who attended. The age groups of 30-39 and 60-69 years olds accounted for 15% and 18% each. The youth group aged between 15 and 29 years indicated 13% of all the representatives, and 5% characterised the 70+ age group.

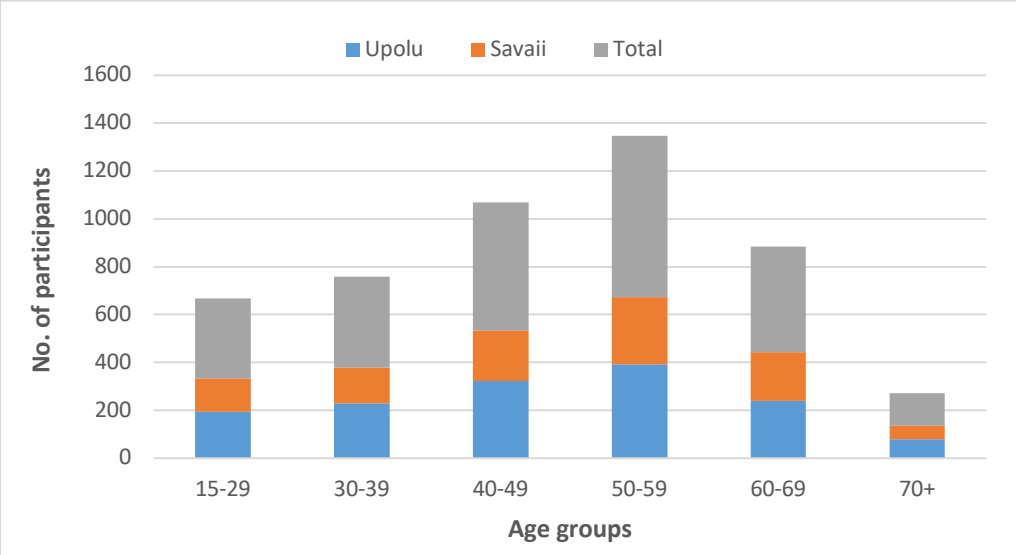


Figure 10. Chart showing the age distributions of participants who attended community consultations

b) Support for the MSP process

After each consultation workshop, participants evaluated the programme to determine how well they understood the MSP process. Four key questions with a choice of answers were used for the assessment relevant to the MSP process. The post-consultation evaluation form is attached as Appendix 13.7.

Around 80% of village representatives who attended the consultations expressed support for protecting their ocean through a spatial ocean plan to manage coastal marine areas sustainably. Significantly increase management efforts from the current 1% protection through village managed and protected areas to achieve the set 30% ocean protection and management target as envisioned by Samoa Ocean Strategy 2020-2030. The overview perspectives of community representatives based on critical questions about Samoa's marine spatial planning process are summarised in the following bullet points.

i. *What do you think of ocean planning for Samoa? What are your reasons?*
   - About 36.3% answered that it is a programme to promote the sustainable management of Samoa's ocean space.

ii. *Do you know the purpose of Marine Spatial Planning for Ocean Management Areas for Samoa?*
   - About 73.5% expressed that the objective of the MSP is to determine the relevant and applicable Ocean Management Areas to manage Samoa's entire ocean.

iii. *Partners to support Ocean planning is vital. What kind of support is Samoa's MSP needed?*
   - Approximately 55.7% of respondents indicated that communities thus need support from the government and international and local organizations to help sustainably enhance and strengthen their capacity and knowledge in managing their ocean and marine resources.

iv. *Is managing, conserving and protecting your ocean important to you?*
   - More than 80% of respondents indicated that protecting and managing the coastal marine ocean through the MSP will enhance the resilience of marine ecosystems and increase marine resource sustainability.

7.1.2 Sectoral participants

Eighty-four (84) representatives from key sectors participated in sectoral consultations from 1st to 4th March 2022. The key sectors are Tourism, Fisheries, Government ministries/organisations and NGOs/CSOs. The total number of sector representatives by gender and age is summarised in Appendix 13.1.

The sector-based participants who attended the ocean planning consultation from the 1st to the 4th of March 2022 are shown in Figure 11. About 63% of the sectoral attendees were male participants, and 37% were females. The youth group aged between 15 to 29 years old accounted for 22% of the total participants. Closer to 40% of the entire participants represented the Fisheries sector, 24% were from Government ministries and agencies, 20% were from the Tourism sector, and 17% represented the NGO/CSO sector. More than 50% of the sectoral representatives who attended the four consultations were between the ages of 40 to 59 years old.

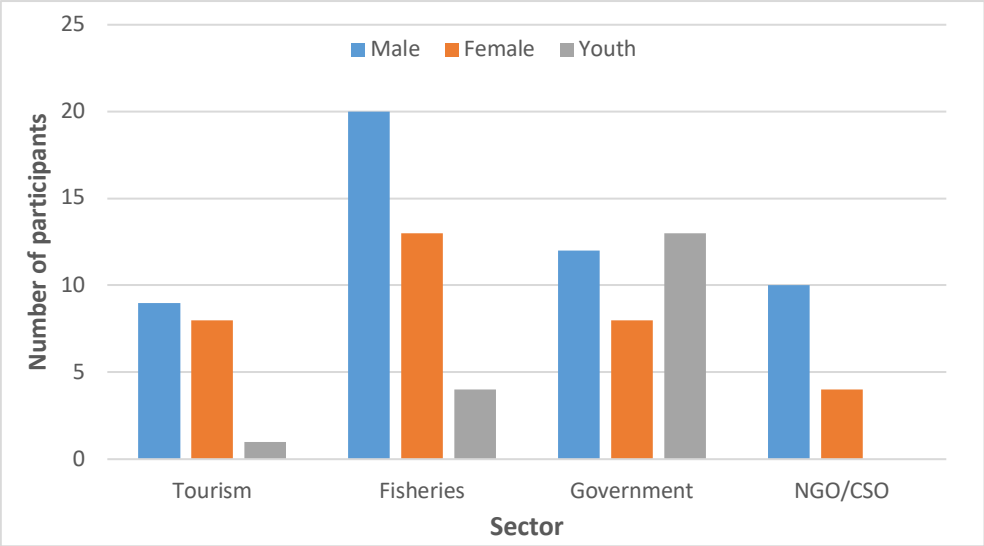


Figure 11. The sector-based participants by genders that joined consultations from 1st- 4th March 2022

7.2 Community Consultation Results (non-spatial)

7.2.1 Ocean Uses and Activities

The non-spatial responses and feedback shared by community stakeholders during consultations plus results of group presentations while reporting back sessions are present in this section as ocean uses and activities identified in village coastal marine spaces. The aggregated outcomes of community ocean uses and activities are summarised in the visual representation in Figure 12.

During each district consultation, community groups consisting of *matai*, untitled men, women, and youth discuss and identify activities presently occurring within their coastal and offshore waters and how they the ocean spaces. The non-spatial feedback and information shared were recorded using the Survey Questionnaire with spatial feedback and replies drawn on paper maps and SeaSketch maps by the scribers.

For fishing activities, subsistence fishing was the primary activity identified by 96% of village groups as the regular event where people fish for sustenance. The second highest activity reported by 78% of village respondents was artisanal fishing, where part of the catches was sold within the villages and local markets, and the rest were for family consumption. However, fulltime commercial fishing for coastal species to supply local markets was reported by 32% of village groups.

Tourism and inshore commercial fishing activities were the highest economic activities recognised by 32% of village groups consulted. Commercial fishing for tuna, other pelagics and deepwater species to supply local markets and exports were reported by 15% of village groups as another economic activity occurred in offshore areas.

Fishing was considered the highest and most regular ocean activity, thus indicating the prominence of coastal subsistence fishery for home consumption and the inshore (artisanal) commercial fishery, which supplies local markets by providing food and income security for many Samoan households. Gillet (2014) noted that subsistence fishing in Samoa utilises about 500 coastal fish species. Recent estimates of the minimum net value of Samoa's coastal fisheries is about SAT$98.12 million (US$ 38.95 million), consisting of a subsistence fishery value of SAT$48.12 million and SAT$50 million of coastal commercial harvest (Ram-Bidesi. *et al.,* 2021)

Village beachfront accommodations in the forms of traditional *fale*, hotels and resorts were the main tourism activities identified and reported by village stakeholders. Surfing, kayaking, boating, and visiting coastal cultural and conservation areas were identified as tourism-based additional activities.

Mining sand was the main extraction activity reported by 58% of community groups, primarily for subsistence family works. The commercial extraction of sand was identified by 12% of village participants. However, a significant level of commercial sand mining for commercial purposes was reported by village participants from the Faleata east and west districts. The large-scale sand mining was associated with companies in the Vaitele industrial zone that manufactured building bricks and sold sand and aggregates for construction.

For coastal activities, 9% of community groups reported dumping litter and disposed wastes at sea. Other activities identified were land reclamation (5%) along the shoreline and sewage disposed of (4%) directly into the coastal waters. Wharves for domestic ferries and marine transportations were reported mainly by villages in the Apia and Manono areas.

Currently, in Samoa, village-based no-take fish reserves and marine and mangrove protected areas exist as spatial management of the coastal marine environment. About 38% of community groups reported that their villages had established fish reserves during community consultations. Moreover, 36% of village groups mentioned that their entire coastal ocean spaces are locally managed through village management plans and by-laws or traditional management regimes (29%). Stock enhancement and habitat recovery efforts were reported by 24% of village groups as culturing *Tridacnidae* giant clams (*faisua*) for stock enhancement reasons and 13% of villages placing mangroves under protection and replanting additional mangrove trees.

About 69% of community respondents said swimming in the sea was their main social activity. Additionally, 12% of village groups reported catching palolo worm (*Eunice viridis*), a traditional delicacy and soaking pandanus leaves for weaving cultural Samoan fine mats and coconut husks for sinnets (*afa*) were some other cultural uses of the ocean.

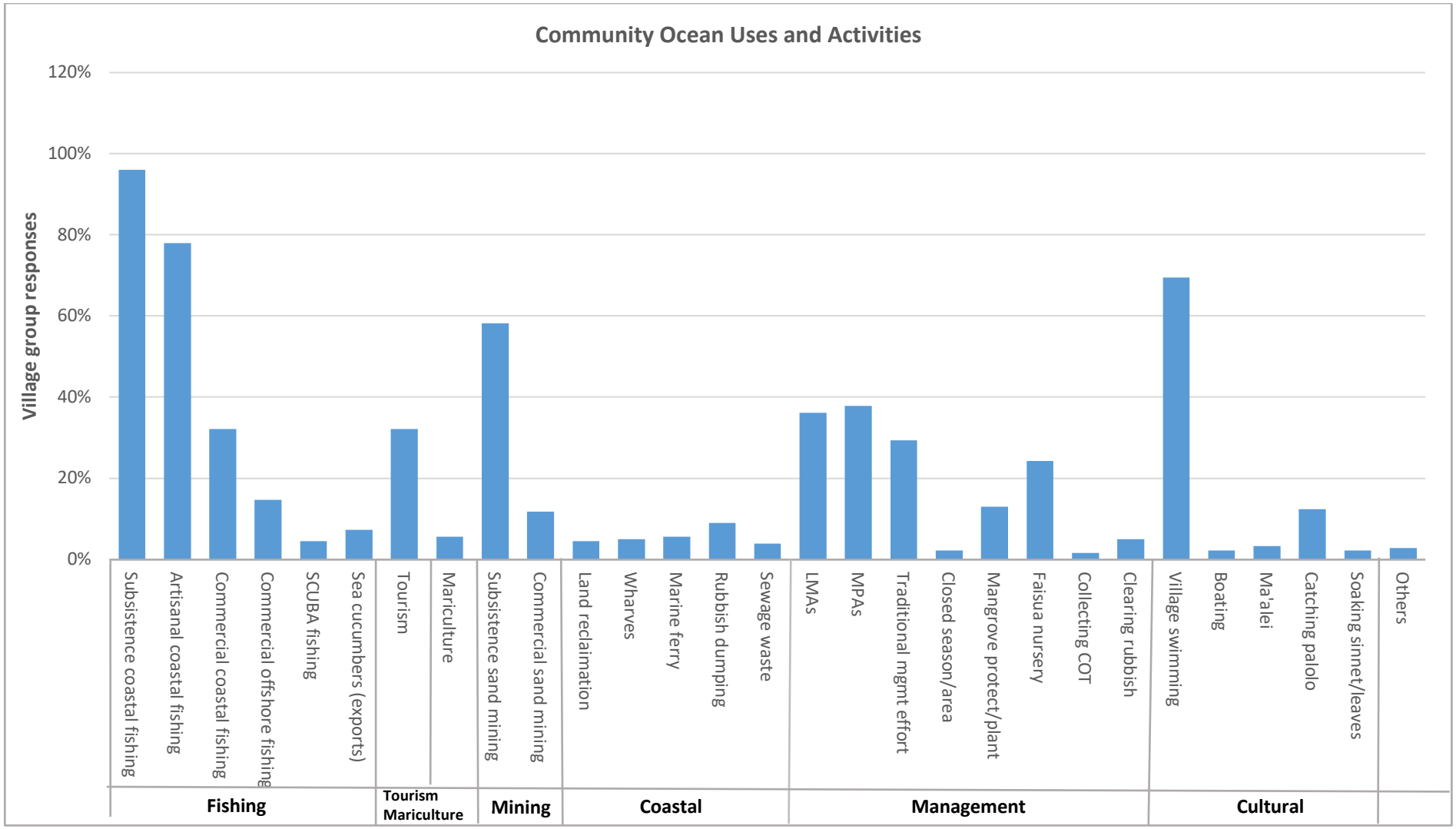


Figure 12. Ocean activities identified by village groups during the national community consultations, 17 August to 12 November 2021

7.2.2 Challenges including Restricted Activities

Figure 13 presents the challenges, including restricted activities identified by communities during the first nation community consultations on ocean planning. Village groups of chiefs, women, men and youth identified restricted activities needing concerns and solutions to address them.

As recognised by 69% of village groups who attended the consultation meetings, climate change is viewed as the most dramatic challenge that will significantly affect the ocean and its resources. Moreover, 36% of village group respondents raised concern that the seaweed (*Sargassum*) overgrowing on the reefs and destabilising reef ecosystems is the second-highest recorded problem. This problem has been reported by villagers causing extensive areas of the reefs to deplete live corals. Paeniu *et al.* (2015) stated that 75% of the reefs in Samoa are at risk

Overexploitation and the loss of biodiversity viewing as fewer fish and shellfish species in coastal areas were highlighted by 36% and 34% respectively of village groups as adversely impacting people's livelihoods. Coral reef depletion and degradation of reef environments were the main concern for the sustainability of coastal marine ecosystems as identified by 29% of village respondents. Crown of thorns, *Acanthaster planci* (*alamea*) was reported by 20% of village groups that infest their reefs and impact coral reef sustainability and resilience.

Land-based pollutions from poorly managed developments, poor farming systems, farming chemicals, waste runoffs from animal farms and industrial wastes discharging directly into the seas were among the highest environmental challenges affecting coastal areas. Similarly, dumping garbage into the sea was also identified and testified by 17% of all village groups as another restricted activity is still practised by some village communities.

Sand mining for subsistence and commercial purposes was reported by 9% and 7% of village groups. Mining of sand and aggregates was reported by 15% of village groups as the central concern for causing high siltation and turbidity, attributing to the loss of many bivalves and mollusc fishery species in coastal areas. The large scale commercial sand mining by brick-making and construction industries was identified by village representatives from Faleata's west and east districts as the leading cause of the loss of coastal marine habitats and many shellfish species in their coastal areas. These environmental and biodiversity adverse impacts were due to the ocean's high level of siltation and turbidity due to extensive sand extraction activities. Soil erosions, runoffs and debris carried down by rivers during floodings were also identified by 18% of groups as other contributors to lagoon and reef turbidity and siltation.

For fishing activities, the use of unsustainable practices and methods was acknowledged by 45% of village groups as the highest environmental challenge. The use of *ava niukini* (traditional plant-derived poison), *tu'iga* (smashing corals to capture sheltering fish*)* and *lama-moliuila* (underwater torches) was recognised as the leading poor and damaging fishing practices used for fishing. Overfishing of many coastal species, which links to fewer fish and shellfish caught in coastal areas, was identified by 36% and 34% of community groups during consultations.

Fishers from other areas fishing in village coastal areas were also a concern recognised by 34% of village groups. The issue of defined ocean boundary areas between village communities was raised by many as a way to manage their waters and restrict fishers from other villages and illegal activities taking place in their marine space. To set conservation regulations, a village must have traditional, de facto or legal control over its adjacent waters (King *et al.,* 1998). In Samoa, villages have defacto control of adjacent fishing areas and can devise fisheries by-laws enforceable under national law. The Village Fono Act (1990) legally recognises the rules that villages created and imposed by villages, for

example, village fishery bylaws to protect and manage fishery resources in inshore marine spaces adjacent to the coastal villages.

For coastal ocean management, community members recognised that the lack of funding (67%) and resources (capacity and infrastructures) (63%) were the highest main challenges limiting village efforts to manage their coastal marine areas and resources sustainably. In addition, 47% of village groups have identified the lacking of government support efforts and the lack of awareness and training programmes (27%) restricting their endeavours to implement relevant regimes for the sustainable management of coastal marine environments and resources. It was recognised by 25% of village stakeholders that the lack of village commitment and leadership was the other critical, challenging factor of why management efforts are absent.

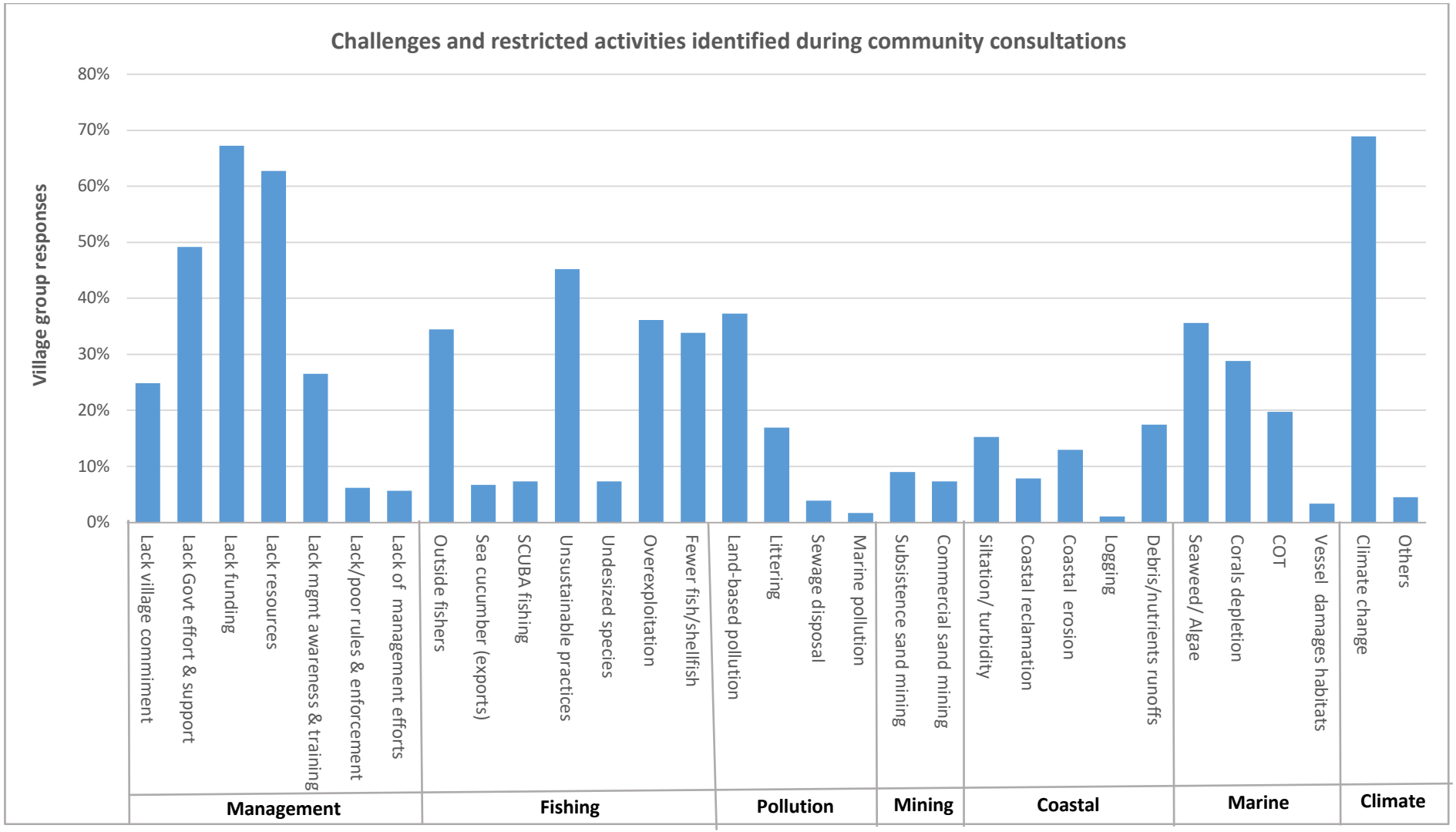


Figure 13. Chart showing the challenges and restricted activities identified by village groups during the Upolu community consultations

7.2.3 Solutions proposed by Communities to Address Challenges

Figure 14 presents the solutions identified and recommended by community stakeholders based on non-spatial responses from the survey and their findings presented during group reporting back sessions.

Seeking support from the Government and partners for funding and resources (capacity and infrastructures) were the highest solutions identified by 60% and 54% of village groups to assist communities in managing their ocean space.

Although many villages have imposed their own rules as a traditional management effort to manage their marine areas, strengthening these rules and having active enforcement was recognised by 44% of respondents as a practical approach to sustainable ocean management. The need for training and awareness on resources management programmes was identified by 40% of village groups to improve and enhance their knowledge of relevant measures for sustainable resources management.

.

During consultations, the setting up of habitat fish reserves and locally managing the entire village coastal were the primary solutions identified by 34% of village groups. Protecting mangrove habitats in village coastal areas was identified by 26% of village groups as significantly crucial to the sustainable management of fisheries and the coastal environment. There were 12% of groups acknowledged the protection of offshore special and unique marine areas for ocean sustainability, and 5% would expand their current coastal MPAs under marine spatial planning.

Community conservation measures proposed include the prohibitions on the use of destructive and non-selective practices such as traditional plant-based poison (*ava-niukini*), underwater torches (*lama-moliuila*), pounding and breaking corals (*tu'iga*) and SCUBA gear for fishing. These prohibitions were the major solutions categorised by 24% of the village group respondents to address unsustainable practices and overfishing. About 10% of village groups suggested banning fishers from other villages from fishing in their marine areas. During dialogues with village groups, they frequently referred to fishers from elsewhere using unsustainable fishing practices, causing overfishing and fewer fish caught in their coastal zones.

For extraction, fewer group respondents proposed banning sand mining altogether but recommended controlling them with an effective permit system for subsistence (5%) and commercial (7%). However, in regions where large scale sand mining occurs, such as the Faleata east and west districts, such activity is controlled and regulated via a quota allocation system as strongly proposed by village participants from the Faleata region.

Furthermore, most village participants have indicated that the loss of many inshore bivalves, molluscs, fish species and marine habitats is attributed to adverse impacts from coastal development activities. Imposing effective local and national mitigation solutions in the form of a proper permit system and effective monitoring will address the issues of high levels of siltation/turbidity (3%) in the sea, regulate coastal land reclamation (5%) and prevent further erosion (5%) of the shoreline.

Several activities were proposed as community management and conservation measures to be undertaken by villages to address marine environment concerns identified during the meetings. Some of the most common activities offered were the replanting of live corals (23%), collecting and

destroying *Acanthaster planci,* Crown-of-thorns (10%) and clearing or stopping littering at sea (19%) as critical solutions identified.

Stopping logging and having village reforestation programs were recommended by 26% of village groups as the main resolutions to combat soil erosion and debris/nutrients runoffs through rivers during heavy rains and flooding. Increasing sea level rising due to climate change and stopping coastal erosions, 12% of village groups proposed that constructing coastal seawalls is the viable solution. About 14% of group respondents recognised that preventing or reducing the burning of plastic-based rubbish thus contributes to mitigating the climate change situation.

Village groups were asked to propose and share ideas to address the key challenges they faced in managing their ocean space. Roughly 60% of group respondents suggested requesting the government and critical partners for funding, and 54% need resource assistance addressing the lack of funds and resources to support and implement management actions for their ocean. Around 44% of community group respondents recommended strengthening village rule/by-laws and enforcement efforts to mitigate restricted activities and use of unsustainable practices that impact the sustainability of many inshore species. Forty percent of village representatives also recognised the need for good awareness and offered training to broaden their resource management knowledge.

For enhanced and effective ocean sustainability, 34% of village respondents proposed the spatial management of the coastal marine environment by establishing marine protected areas, and 26% recommended placing mangrove habitats under management and conservation.

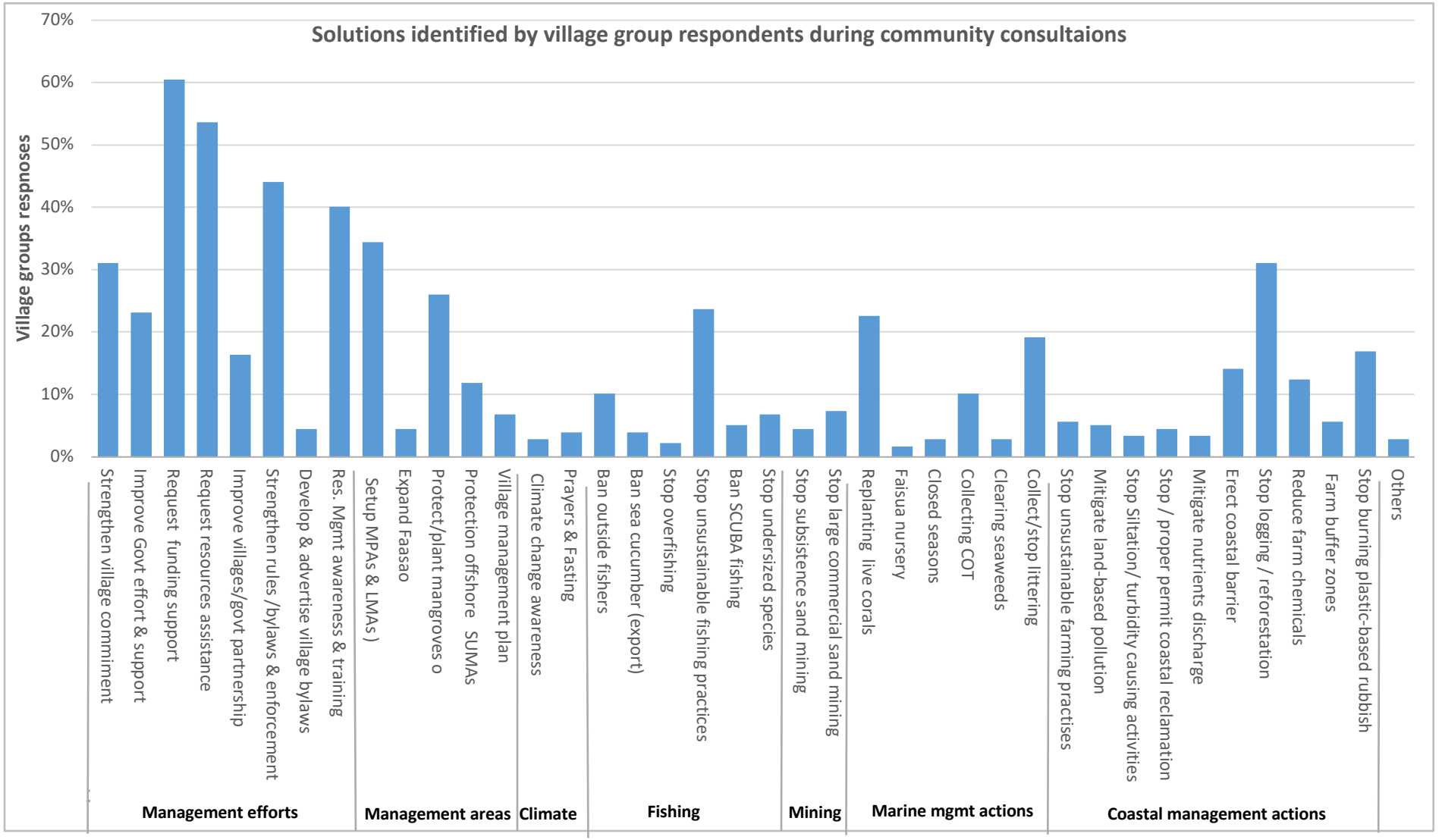


Figure 14. Solutions suggested by village groups to address concerns identified during community consultations from 17 August to 12 November 2021

7.3 Sectoral Consultation Feedback (non-spatial)

The national consultations with sectoral stakeholders were held from the 1st to the 4th of March 2022. Sets of guiding questions specific to each sector were used to solicit relevant information and data for developing a marine spatial plan for Samoa. The representatives of all sectors consulted shared and identified arrays of essential ocean use, challenges and restricted activities, and solutions. These general non-spatial responses received from sectoral stakeholders are captured and summarised in this section under the headings of ocean uses and activities, challenges and restricted activities, recommended solutions to address challenges, roles by government and key partners supporting the solutions and lastly, the sectoral views on OMAs.

7.3.1 Ocean Uses and Activities:

a) Tourism Sector

Two major tourism stakeholders attended the ocean planning consultation on the 1st March 2022: the oceanfront resort and hotel representatives and the family-based beach fale or backpacker accommodation group. Feedback and views received from these major groups are correspondingly summarised in Table 14.1 in Appendix 14

The main ocean use and activities shared by the Tourism sector were typically tourist water-based activities such as leisure swimming, snorkelling, surfing, kayaking, boating and SCUBA diving. Some oceanfront resorts provide recreational and game fishing activities for their guests. Most operations offered tours, including visiting cultural and traditional sites near the coast or the ocean.

The oceanfront resorts and hotels generally have a capacity of 50-100 guests, while the beach fale or backpacker operation ranges from 15 to 30 people. Most coastal-situated tourism businesses usually utilise the adjacent surrounding inshore areas for their operations and water-based activities. In some cases, their areas of operations included managed and protected areas.

b) Fisheries sector

Similarly, two defined types of offshore commercial fishery operations had representatives attend the consultation on ocean planning on the 2nd of March 2022. The two classes are the below 15m in length fishing vessel operators and those operated large fishing vessels class above 15m in length. The representative of the fishing export company, AEFP, also operated >15m fishing vessels that fish locally and in other countries' EEZs also attended.

Accordingly to the Tuna Development and Management Plan 2017-2021, the operational area for the domestic fleet <15m class is within the 50 nautical miles surrounding the islands. The 50 nautical miles areas reserved for the <15m class is based primarily on the safety capacity limitation of the alia fleet. However, during good weather days, they fished beyond 50 nautical miles. The >15m class fishing vessels were operating beyond the 50 nautical miles to the boundaries of the EEZ.

The <15m fishing vessels, principally the aluminium double hull catamaran alia, employ longline, trolling, and hand and line fishing methods to harvest tuna and other pelagic and deepwater species. The >15m fishing vessels use the longline multiple hooks method as the principal fishing practice.

The summary of fisheries specific vital issues relating to the use and ocean activities as well as their areas of fishing and scale of operations shared by the sector is presented correspondingly by the type of fishing operation in Table 14.2 attached in Appendix 14.

c) Government Ministries/Organisations

Nine government ministries and organisations had representatives attending the ocean planning consultation on the 3rd of March 2022. The central mandates and focuses of government ministries and organisations that participated ranged from:

- Marine transportation and development
- Conservation, Education and Advocacy
- Fisheries development and management
- Ocean/marine advocacy
- Scientific research and survey
- Weather and climate monitoring

The area and how each agency involved in the ocean of Samoa are generally summed in the following:

- SSC: Using the ocean for vessel operations, marine transportation and development
- NUS: Educating and training future seafarers to work on local and foreign vessels (shipping company)
- PUMA Division, MWTI: Issuing permits and monitoring coastal development, including sand/coastal mining and coastal land reclamation
- Maritime Division, MWTI: Registering and monitoring the adherence of Samoan registered and licensed vessels operating in the EEZ
- Fisheries Division, MAF: Research, assessment and exploration of fishery resources for development and management options.
- MNRE (Meteorology): Monitoring of weather, climate and sea surface temperature
- MFAT: Monitoring and reporting on Samoa's commitments to ocean sustainability as per the objectives of international Treaties and Conventions, etc. They are negotiating Samoa's EEZ boundaries with neighbouring countries.
- SROS: Some coastal marine/ocean space research, including mangroves, beaches and others

Table 14.3 in Appendix 14 summarises the overall feedback and information shared and received from the sector about their ocean uses and areas of operations. Including also are their opinions on the synergies between ministries and strategic partners that would benefit the growth of MSP in Samoa's ocean.

d) Non-Government Organisations/Civil Society Organisations

Five NGOs and four community societies and groups were represented in the MSP consultation on the 4th of March 2022. Their overall ocean-related activities are generally categorised in the following areas:

- Conservation, Education and Advocacy
- Sustainable recreational and game fishing
- Ecosystem restoration
- Conservation of national parks
- Promotion of sustainable 0cean development and management.

The summary of the organisational focus and type of activities, as well as the ocean-related projects they delivered, are listed in Table 14.4 in Appendix 14.

7.3.2 Challenges and Restricted Activities:

The major challenge issues identified by the sectoral representatives based on the non-spatial information gathered during the sectoral consultations are summarised below. Nonetheless, the most common challenges shared and recognised across the sectors are summarised jointly in the following bullet points, while the sector-specific challenges are summarized in the corresponding tables.

The challenges identified and shared by the sectors consulted are as follows:

- The lack of commitment and support from local village communities, who share the surrounding environment with the sectors. The nearby villages don't often work collaboratively with sectors to maintain the health and cleanliness of their shared marine environment.
- Lack of support effort from the government in the forms of funding, technical knowledge and information to support sector development and conservation projects and actions on ocean and resources management.
- Lack of resources (capacity and infrastructures) to support sector developments and their efforts to manage the oceans and marine biodiversity better.
- Using unsustainable fishing methods negatively impacts the ocean and its resources, especially the coastal ecosystems where sector developments depend.
- The overexploitation of marine resources is caused by extensive fishing, illegal fishing, and unsustainable fishing practices.
- The restricted size of the EEZ and the high number of competing users causes a dramatic decline in harvest, gear sabotage and conflict among offshore fishers.
- Unsustainable fishing and farming practices impact the marine environment's sustainability and biodiversity. The destructive nature of methods and discharging of soil and agrochemicals into the lagoon cause degradation of may many inshore ecosystems and biological resources.
- Unsustainable coastal development due to poor planning and lack of expertise damaged the marine environment and biodiversity. Often it disrupts progress and costly operation, particularly in the tourism and fisheries sectors.
- High operational costs due to high fuel, gear, tools, and needed items affect the sustainability of the sector's development.
- All sectors consider climate change the main concern for now and into the future, which will significantly impact their operation.
- Land-based pollution adversely affects the ocean and its resources, subsequently impacting the marine environment's sustainability and operations.

Some sector-specific challenges issues and restricted activities are summarised in Table 14.5 attached in Appendix 14.

7.3.3 Solutions to address Challenges:

The strategic solutions identified and proposed during the sectoral consultations on ocean planning are mostly sector-specific. However, the solutions shared generally fall in the following key areas:

- Better collaboration and partnership between sectors, the government, village communities, and key partners to support, develop, and implement ocean management measures.
- Effective and transparent dialogues and engagement between the Government and stakeholders ensure priorities for ocean sustainable management are progressed.
- Improve government support in funding and resources to assist sector's development and their effort to manage their ocean spaces.
- Aligning current policies to avoid contradiction and developing enabling policies and guidelines to progress sustainable development and management of the ocean and its biological resources.
- Use relevant technologies to ensure the sector's operations, the ocean, and resources are sustainably maintained and managed.
- Effective monitoring and enforcement of current and future management regimes to ensure compliance.
- Establishment of potential protected and conservation areas and understanding of the cost and benefits to the sectors
- Innovative awareness and education programmes for the sectors, fishers, villagers, and the general public to be motivated and feel ownership of managing the ocean
- Government to assist in subsidies, equipment, tools and other alternatives, ensuring that development by sectors is maintained economically.

The summary of sector-specific solutions shared and proposed by the sectoral representatives during the consultations is attached in Table 14.6 of Appendix 14.

7.3.4 Government roles:

The sectors offered views on how the government and key partners could support the implementation of identified solutions to address the challenges faced by their sectors that impact sustainable ocean management. The summary of the opinions shared by each sector is presented in Table 14.7, attached in Appendix 14.

Across the sectors, they shared arrays of views on the roles of the government and key partners in supporting the solutions each sector has identified to address the challenges they face in managing their ocean space. Most of the suggestions recommended were focused on the following areas; funding support and other assistance, awareness and information, capacity building, monitoring and enforcement, information access, regular dialogue and effective collaboration, and stakeholder encouragement and participation.

All the sectors have expressed the need for funding and resource support for their effort in implementing conservation activities to manage and protect the ocean. Furthermore, they need assistance like technical expertise, enabling policies, subsidies, rebates and other supports to implement and deal with the levels and impacts of an adopted spatial Ocean Plan. The assistance will help sectors sustain their operations and activities during hard times and deal with the loss of incomes due to the loss of areas of operation because of the established protected areas.

Education and training are crucial elements for the government and key partners to provide as part of the MSP process to improve stakeholders' understanding and compliance levels. Likewise, an improved partnership and collaboration with the government and key partners, as well as encouraging effective dialogue and participation with stakeholders, are some fundamental factors that would strengthen the growth of MSP in Samoa's ocean.

The sectors further suggested for the government and key partners to work together and actively support stakeholders in strengthening the monitoring, controlling and enforcing of rules and procedures of a recognised MSP for Samoa. Finally, to maximise benefits generated from harvesting resources in limited offshore areas, the government should explore alternatives such as negotiating fishing access with other countries, extending EEZ boundaries, deploying fish aggregating devices, and supporting scientific research on tools and methods.

7.3.5 MPA perspectives & support

During the sectoral consultations, participants shared their views on important and valuable areas in their ocean space. Table 14.8, attached in Appendix 14, summarises the overall opinions of sectoral delegates on the need for Marine Protected Areas to safeguard Samoa's ocean and ensure its sustainability for now and future generations. Including also are the recommendations supporting the placement of marine protected or managed areas and the challenges for monitoring these protected areas.

The tourism sector supported the MSP process and showed support for placing marine protected areas as ecological rehabilitation zones to recover the degraded coastal and lagoon environment and biodiversity. However, they would like to partner with nearby communities to support conservation areas to be established to protect ecosystem services that are fundamentally important to the tourism sector. Moreover, they would also like to be aware of the costs and benefits of MPAs to the industry. Some beachfront tourism operators would like to set up reserves in coastal areas in front of or adjacent to their property if allowable by national and traditional laws.

The placement of OMAs to protect crucial areas where residential stocks are found is supported by representatives of class <15m fishing vessels of the Fisheries sector. Bottomfish species like snappers mostly occupy seamounts, and other geomorphological important areas and these sites have been identified and characterised as SUMAs that dotted the offshore part of the EEZ. The protection of SUMAs will protect many important species that will supply species to the coastal areas.

The >15 m class generally opposed the setting up of largescale ocean management areas offshore. Their principal concerns were: the loss of fishing areas meaning fewer catches and will impact the sustainability of their commercial fishing operations. Accordingly, this class have used the entire EEZ for fishing, and the placement of largescale protected zones will dramatically reduce their operational areas and result in a further reduction of catches in an industry that has already experienced declining fish catches over the years. They recommended moving the 30% protected areas to the coastal region, inspite of the total coastal area being less than 1% of entire Samoa's EEZ. However, they would like to engage and in dialogue with the Government during the process of designing future offshore MPAs.

Alternatively, exploring subsidy options to compensate for the loss of income when 30% protected areas are established. The sector encourages the government to engage them regularly in discussion when determining the types and conditions of OMAs to be placed. The sector also recommended space out the OMAs offshore rather than confining them in one place.

The sector raised concern about the monitoring and enforcing of the adopted OMAs given the lack of resources, a patrol boat and funding to support any monitoring, controlling and surveillance of the OMAs.

The government sector strongly supported the establishment of offshore and inshore OMAs to protect and preserve Samoa's ocean and its biological resources for now and into the future. The sector

recognises that Samoa's ocean is degraded and heavily exploited, particularly in the coastal areas. They supported managing the marine environment and its resources through ocean planning to rehabilitate the sea and its resources. The sector also articulated that the government has already declared the 30% protection as a commitment to ocean sustainability. Therefore all stakeholders must support the MSP process and the placement of OMAs to manage Samoa's ocean sustainably.

Similarly, most of the NGO/CSO sector supported the MSP process and the placement of OMAs in the coastal and offshore areas. The sectoral groups voiced support for the protection of offshore SUMAs through the future established OMAs to protect and preserve marine biodiversity and the environment.

8. Spatial findings

8.1 Community Stakeholders Consultations Results

8.1.1 Ocean Activities Identified during Community consultations

a) Visual representation of Community Ocean Uses and Activities

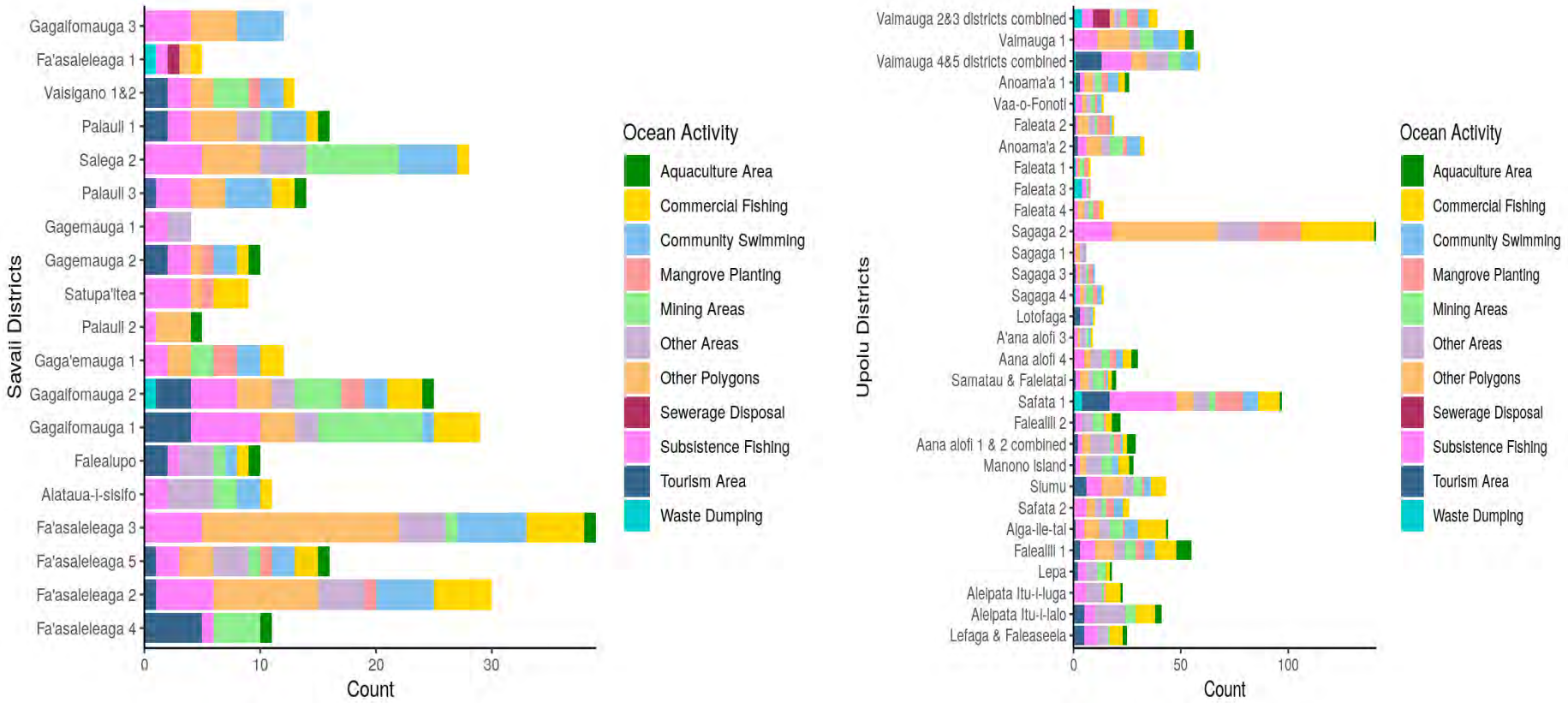


Figure 15. Ocean use activities by districts identified by community stakeholders during consultations from 17 August to 12 November 2021

The above graph (Figure 15) represents the vital ocean use and activities carried out by villages in their respective district. The visual graphical representation captured the aggregate spatial responses from community stakeholders on the main activities they utilised in the ocean. Subsistence fishing, community swimming and sand mining were the dominant activities in coastal inshore areas of almost every district of Samoa.

b) Maps of Ocean Activities Identified By Village Group during Community consultations

Subsistence fishing for family sustenance, commercial (including artisanal) fishing for income, community swimming and subsistence sand mining were the main activities of the coastal ocean as identified and reported by almost all the community groups during consultations. Sites in which these activities occurred were spatially identified and marked on maps of village coastal areas. Examples of ocean uses and activities identified by villages within their district's coastal ocean spaces are illustrated in Figures 16 and 17.

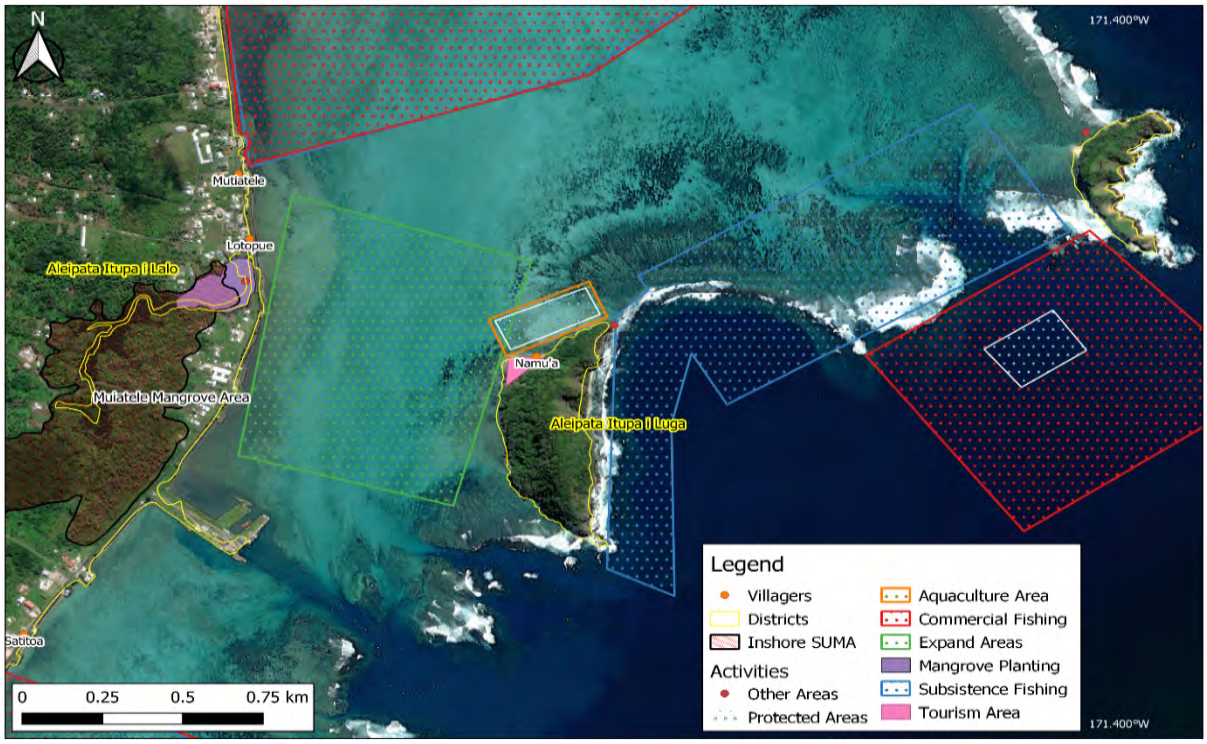


Figure 16. Map of ocean activities identified by communities of the Aleipata-i-lalo district during consultations on 17 August 2021.

areas of ocean activities for district maps were built from both the spatial responses (drawing on the map) questions and non-spatial questions (i.e. choosing from a drop-down menu or providing narrative responses).

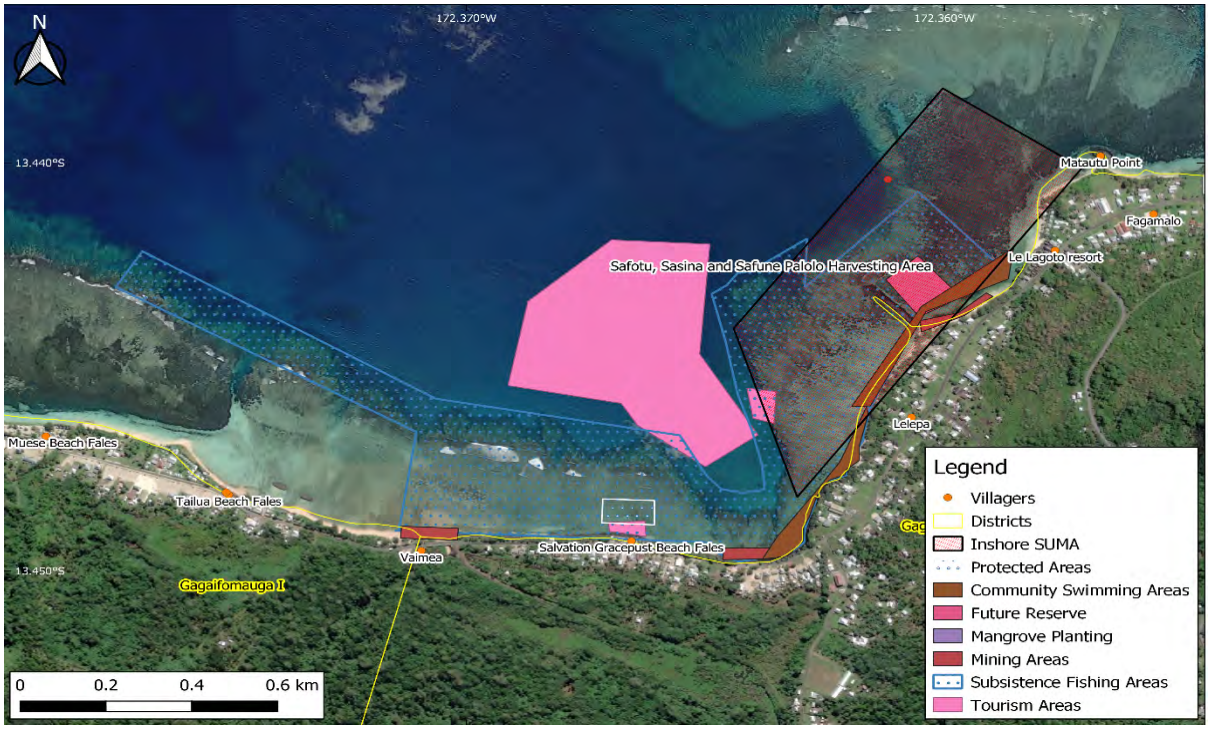


Figure 17. Map of ocean activities by communities of the Gaga'emauga 3 district

i) Subsistence Fishing Areas

Subsistence fishing for consumption was the primary and regular ocean activity in coastal areas, as identified by 96% of village groups. A total area of 279.606 km² was determined based on spatial responses of sites drawn on maps where subsistence fishing activities took place.

Figure 18 displays the overview maps of coastal marine areas identified for subsistence fishing. The heat maps overlaid with reef-associated Special and Unique Marine Areas (SUMA) areas show the concentration of areas for subsistence fishing based on the recorded responses and not the intensity of fishing in the space.

Subsistence fishing for inshore species was the primary activity identified by communities as the regular event occurring in their coastal marine spaces, according to the non-spatial feedback received during the community consultations. Subsistence fishing, as a frequent and highest ocean activity, thus indicates an important role it provides in securing many households in Samoa seafood for consumption. According to Tiitii *et al*. (2018), an average of 25% of households that participated in fishing fished for mixed consumption and sales from 1999 to 2009. Gillet (2009) estimated the total contribution of subsistence fishing to the GDP of Samoa as approximately 20 million USD in the year 2008.

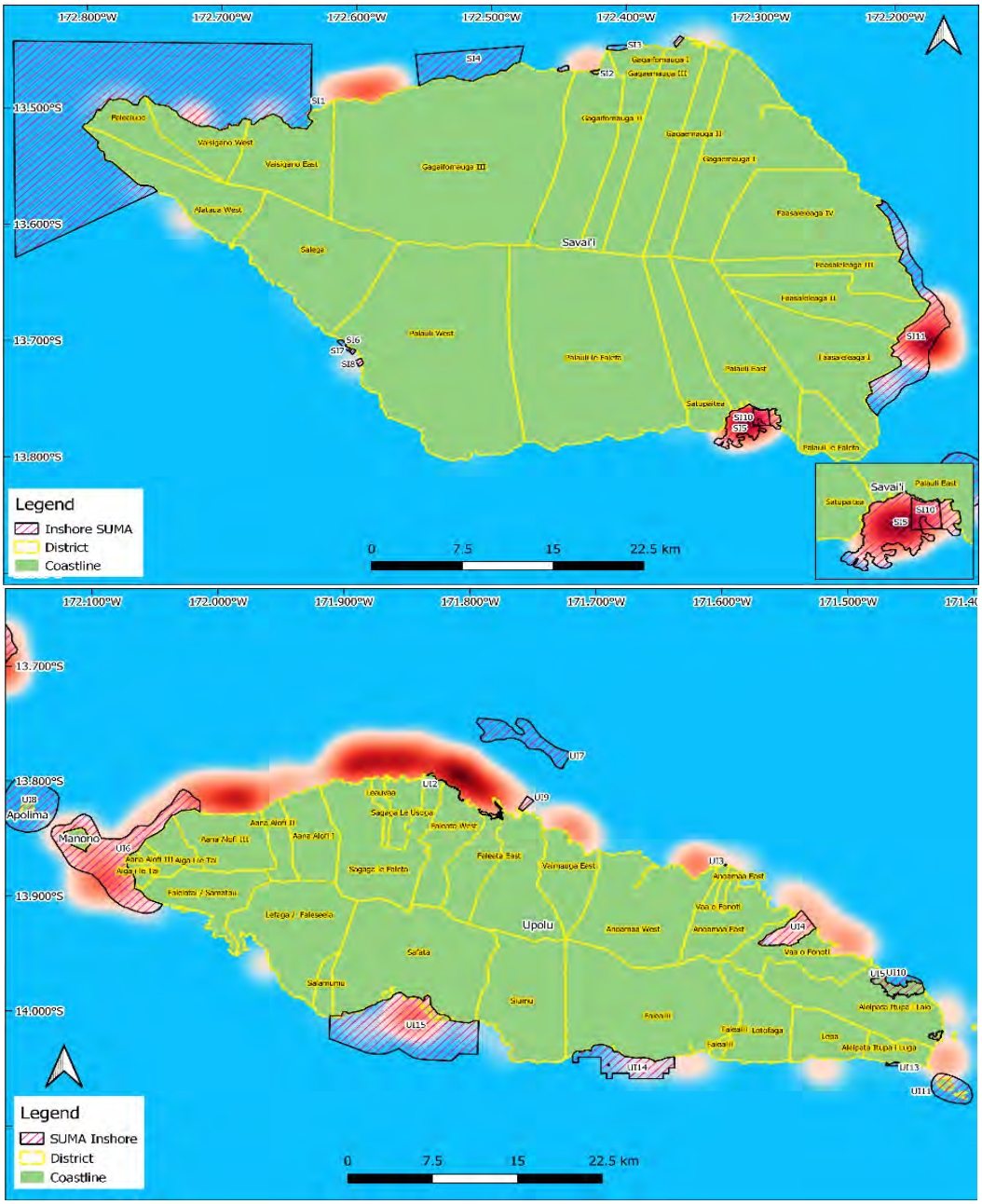


Figure 18. The maps show the concentration of areas for subsistence fishing overlaid with inshore SUMAs.

ii) Commercial Fishing

Similarly, the heat map in Figure 19 illustrates the concentration of areas for artisanal and commercial inshore fishings overlaid with reefs-associated and offshore SUMAs and not the intensity of the commercial fishery in the ocean spaces. A total area of 3482.5 km² was identified as a commercial fishing area for coastal villages. About 78% of village group respondents reported artisanally harvesting coastal fish species, selling them within the village and at local markets, and retaining some for consumption. Around 32% of village participants reported fishing commercially full-time. Some village stakeholders (15%) reported conducting commercial fishing offshore, with some reported fishing as far as 20km from shore.

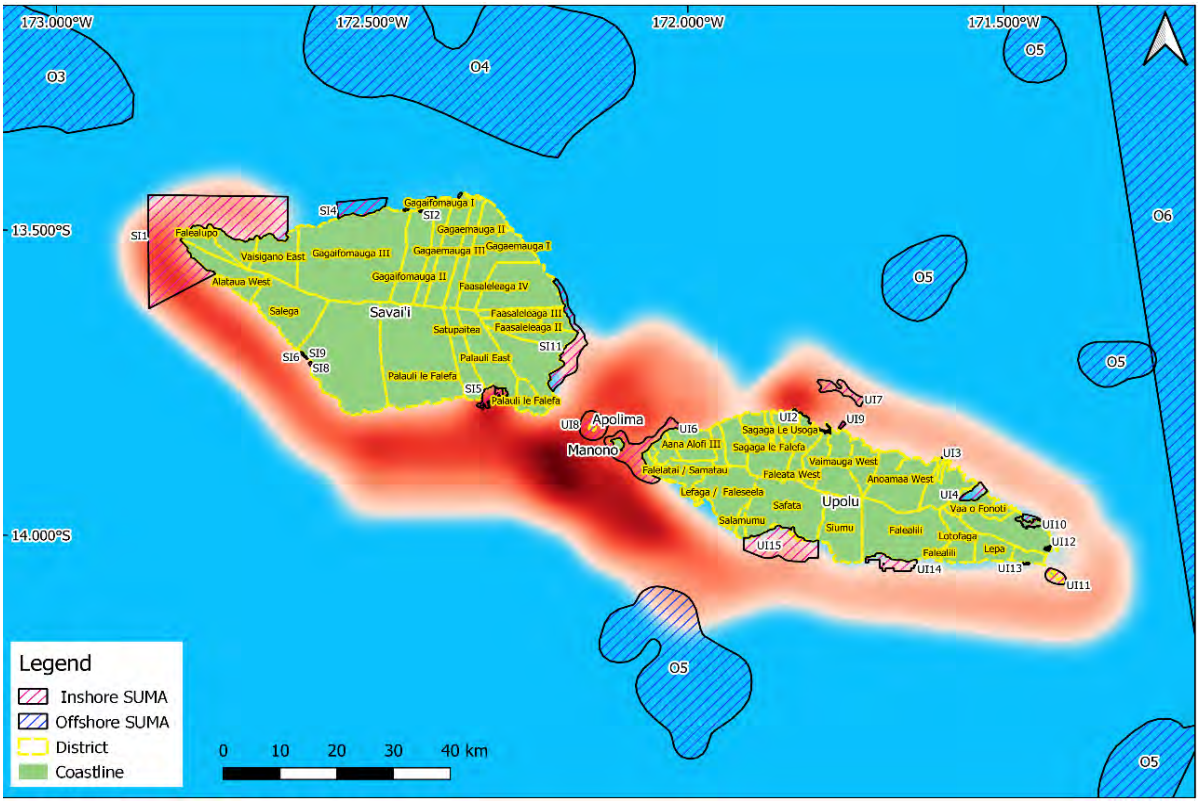


Figure 19. Heat map of concentrated areas of commercial fishing activities by coastal villages overlaid with inshore and offshore SUMAs

iii) Aquaculture Areas

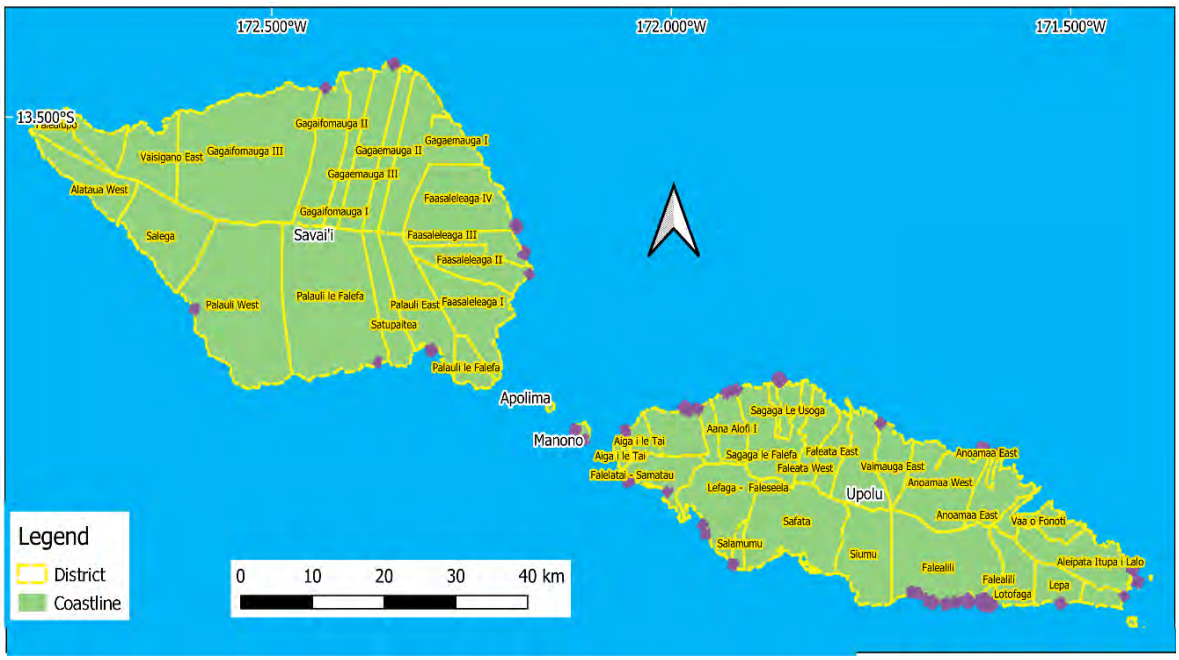


Figure 20. The map shows village communities' overview of coastal areas for aquaculture activities.

Figure 20 captured the areas within the inshore spaces where aquaculture activities occurred. The areas for aquaculture activities were identified by village groups mainly based on locations where giant clams (*Tridacna* spp*)*, locally known as *faisua,* were cultured for stock enhancement purposes. Most of the *faisua* species were placed in village fish reserves, as 26% of village group respondents claimed. About 6% of village groups reported that other species like sea grape (*Caulerpa racemosa*), trochus (*Trochus niloticus*) and tilapia fish (*Oreochromis niloticus*) are farmed in coastal areas of some villages.

iv) Community Swimming Areas

Figure 21. The overview of coastal locations for community swimming.

Community swimming at sea is one of the leading social activities in the inshore marine areas of coastal villages. Almost 70% of village stakeholders who attended the community consultation workshops identified villagers using the sea for leisure swimming. The map above denotes the overview of coastal locations where community people are taking swimming as a social activity within their coastal areas.

v) Mining (Sand) Areas

The map in Figure 22 shows the sites where sands from the beaches and the lagoon are mined as identified by village participants. Subsistence sand mining for mostly family construction works was the main extraction activity identified by 58% of village groups. Commercial sand mining was reported by 12% of village stakeholders. The community representatives of the Faleata and Vaisigano districts identified several large scale commercial sand mining operations in coastal beaches and lagoon areas of the Vaisigano river mouth and the lagoonal regions of Faleata west and east districts. The large scale commercial sand mining operations are associated with construction companies and brick-making industries located in Vaitele industrial areas.

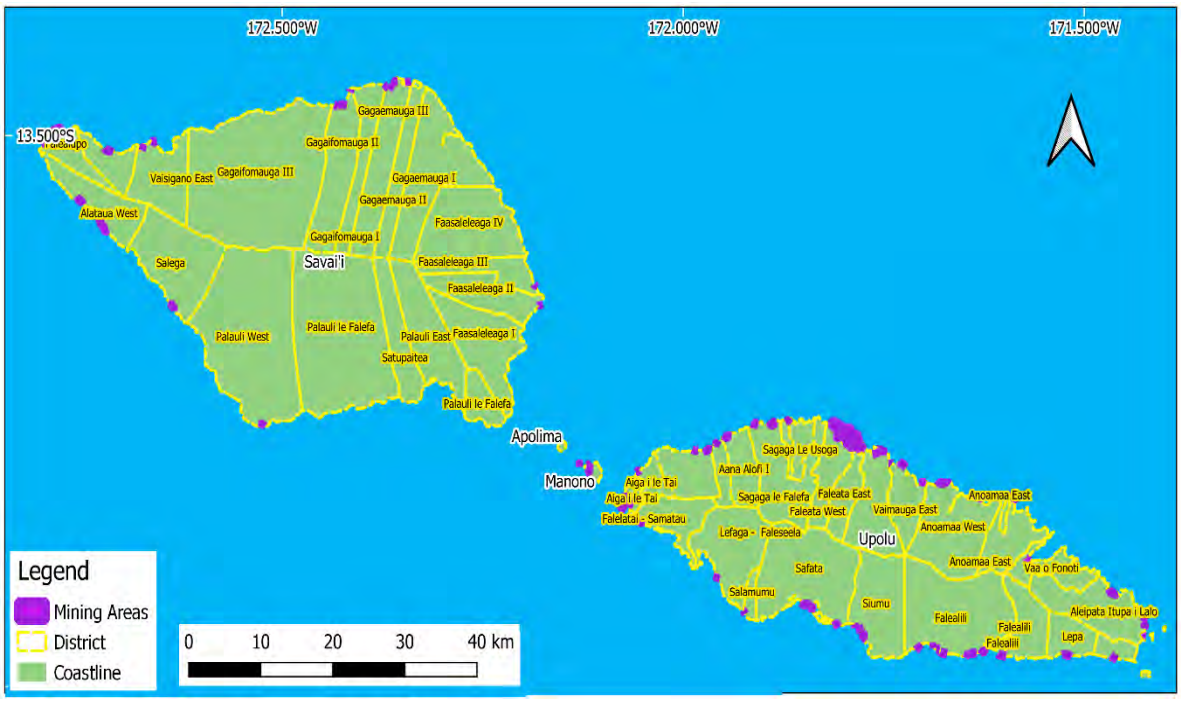


Figure 22. Overview of subsistence and commercial sand mining sites identified by village stakeholders

i) Tourism Areas

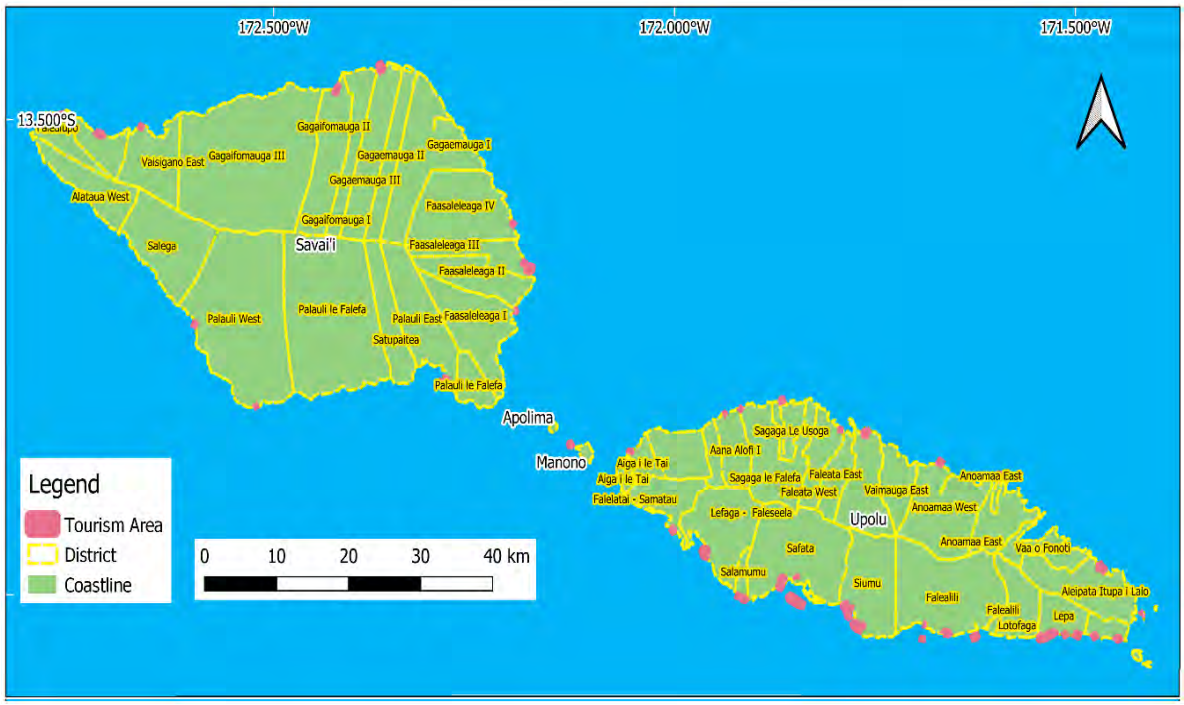


Figure 23. Overview of coastal-based locations of restricted tourism activities

32% of village groups identified and reported tourism activities during community consultations as the second main economic activity besides fishing. Tourism's main activity ranges from beachfront backpacker accommodation such as traditional *fale* to resorts and hotels. Additional tourism-

related activities reported by village groups are swimming, surfing, snorkelling, kayaking and visiting coastal cultural sites. Figure 23 indicates the locations of tourism activities like beach fales and oceanfront resorts situated along the coast where tourists utilised the sandy beaches and the clear lagoon water for leisure swimming and other related events.

ii) Protected Areas

Figure 24 presents the overview of management areas currently in place to manage village inshore marine spaces identified by village stakeholders during the MSP consultation process. The types of key management activities presently applied by coastal villages to sustainably manage and protect their coastal areas and inshore resources are 'no-take' village-based fish reserves, village locally managed areas and mangrove protected habitats.

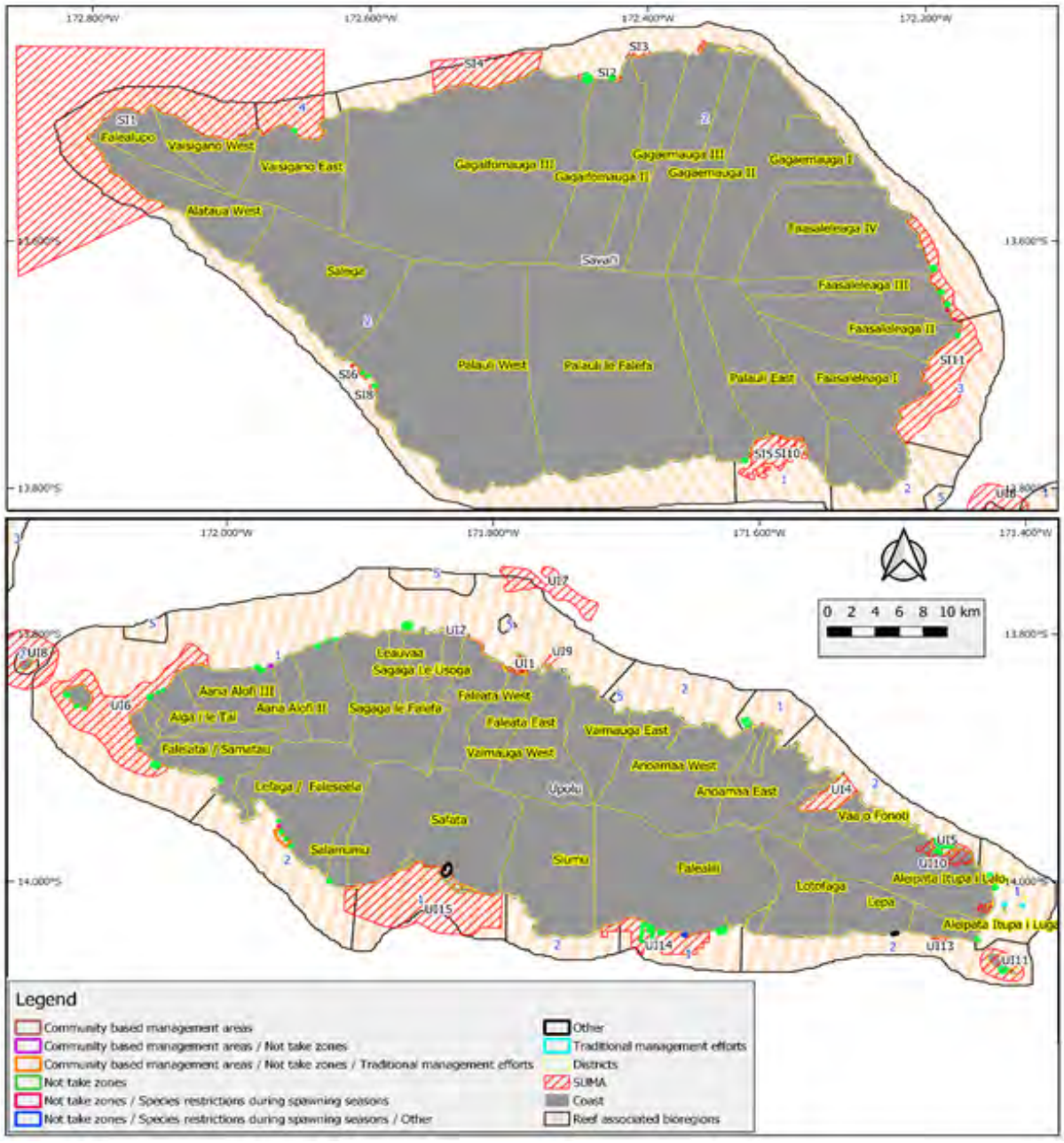


Figure 24. Overview of existing protected areas in coastal marine space as reported by community stakeholders overlaid with reef-associated SUMAs

Protecting a part of the village coastal area as a 'no-take' fish habitat reserve and placing the entire village coastal areas under local management were the highest ocean management efforts identified by 38% and 36% of village groups. About 13% of stakeholders reportedly plant additional mangrove trees and place mangrove habitats in their coastal areas under local village protection and management.

Based on the responses from village groups, there are 54 protected areas identified that are currently existed within Samoa's coastal inshore regions. The types of ocean management and conservation areas that presently exist are listed in Table 3.

Based on spatial responses and polygons drawn on maps, the 'No-take Zone' Fish reserve was the primary ocean management area type existing at present, accounting for 67% of all the existing OMAs managing Samoa's coastal ocean space. The locally managed area type represented 15% of existing OMAs, and this management area regime is governed through a village management plan and bylaws. Placing restrictions on species during spawning or closing specific areas for fishing following traditional beliefs represented 11% of the coastal management areas. Traditional village rules as management regimes accounted for about 4% of the existing coastal ocean management areas.

Table 3. Summary of Ocean management area types existed in community coastal marine spaces as reported by village stakeholders

Existing OMA Type	Island	District	Village
Community-Based Management Areas (15%)	Upolu	Aleipata Itu-i-luga	Ulutogia
			Lalomanu
		Falealili 1	Malaemalu
			Vaovai, Falealili
			Saleilua
			Poutasi
		Lefaga & Faleaseela	Gagaifolevao
		Aana alofi 4	Fasitootai
Not Take Zones Fish reserve (67%)	Savaii	Fa'asaleleaga 3	Fatausi
		Fa'asaleleaga 4	Malae
			Salimu
			Luua
			Siufaga
			Sapini
		Fa'asaleleaga 5	Lano
	Upolu	Lefaga & Faleaseela	Savaia
			Gagaifolevao
		Aleipata Itu-i-lalo	Mutiatele
			Tiavea
			Amaile, Samusu
			Tiavea
			Saleaumua
			Utufaalalafa
		Aleipata Itu-i-luga	Ulutogia
			Lalomanu
		Falealili 1	Matautu Falealii
			Tafatafa
			Vaovai, Falealili
		Falealili 2	Salesatele
			Sapunaoa
		Safata 1	Salamumu

		Samatau & Falelatai	Samatau
			Matautu Falelatai
		Aiga-ile-tai	Salua-uta
			Lepuiai uta
			Lalovi Mulifanua
			Vailuutai
			Faleasiu
			Fasitootai
		Sagaga 2	Tuanai
		Vaa-o-Fonoti:	Salesatele
		Anoama'a 1	Saoluafata
	Manono	Aiga-ile-tai	Faleu-tai
			Apai-tai
Species restrictions during spawning seasons (11%)	Savaii	Fa'asaleleaga 4	Siufaga
			Sapini
	Upolu	Lefaga & Faleaseela	Savaia
			Gagaifolevao
		Falealili 1	Tafatafa
		Aleipata Itu-i-lalo	Mutiatele
Traditional management effort (4%)	Upolu	Lefaga & Faleaseela	Gagaifolevao
		Aleipata Itu-i-lalo	Mutiatele
Other management areas (6%)	Upolu	Lepa	Saleapaga
		Falealili 1	Tafatafa
		Safata 2	Vaiee

8.1.2 Restricted Activities Challenges facing ocean management

a) Visual representations of Restricted Activities by District identified during community consultation

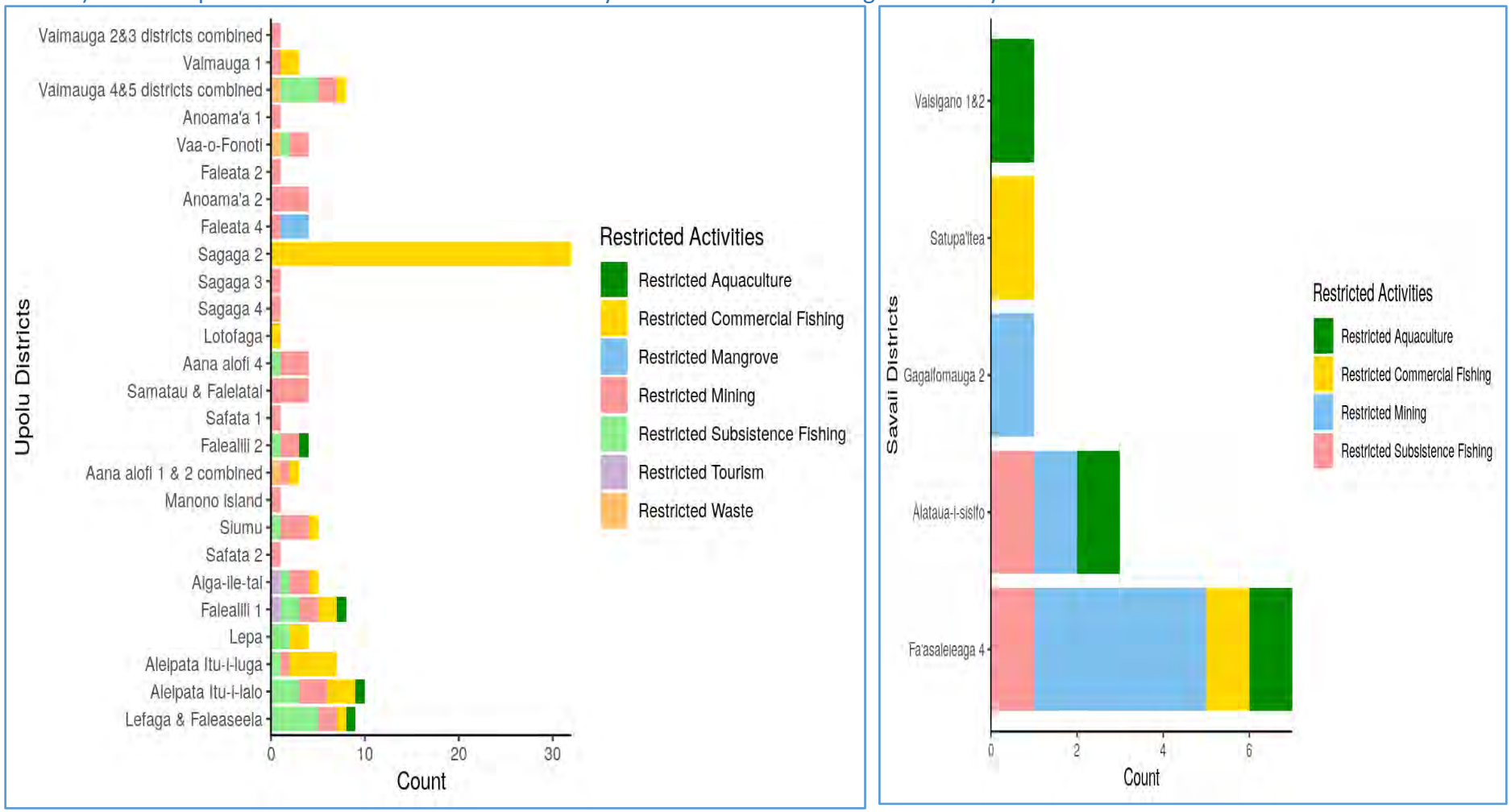


Figure 25. Identified illegal activities by districts during community consultations from 17 August to 12 November 2021

Figure 25 shows the district's aggregated spatial responses from community stakeholders regarding restricted activities in village coastal ocean spaces. Sand mining was the primary illegal activity throughout the Upolu Island districts. The second restricted activity noted throughout the districts was commercial and subsistence fishing, and these activities related to fishers from other villages fishing subsistently and commercially in the coastal waters of the villages concerned. These outside fisher groups were reported using illegal fishing methods and practices such as SCUBA gear, underwater torches (*lama moli-uila*) and other unlawful methods to harvest coastal fishery species. Additionally, there was illegal commercial fishing of sea cucumber (*Holothuroidea*) species for exports reported by community groups consulted.

b) Maps of Restricted Activities Highlighted By Village Groups:

i) Restricted Aquaculture Areas

Figure 26. The map indicates areas identified by village stakeholders to restrict aquaculture activities

About 6% of community groups reported having done some aquaculture activities within their coastal marine areas. However, 26% of villages reported having cultured *faisua* within their reserves mainly for stock enhancement purposes. However, there are sites in coastal marine areas of four districts on Upolu island and three districts on Savaii island that restrict aquaculture activities to address mariculture problems raised during consultations. The map indicates areas identified by village stakeholders to restrict aquaculture/mariculture activities.

ii) Restricted Commercial Fishing Areas

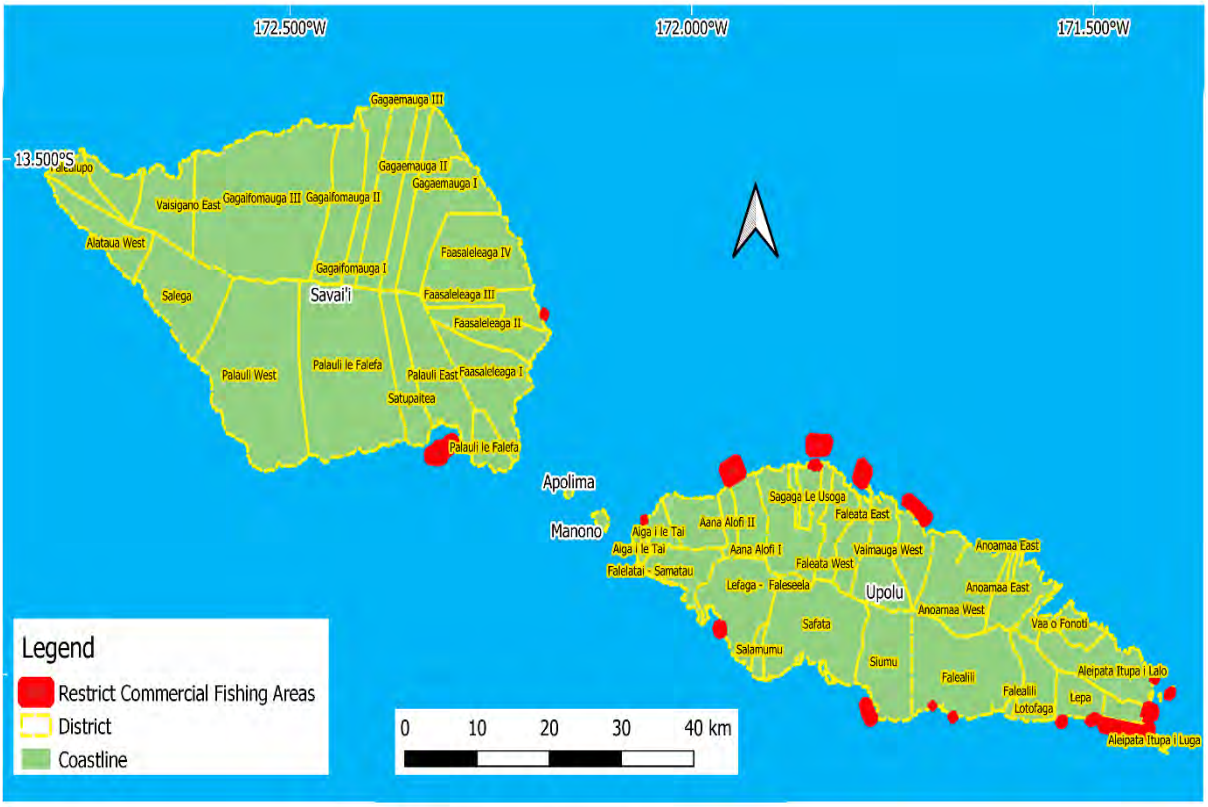


Figure 27. The overview map of sites identified by community groups to ban inshore commercial fishing activities.

During consultations, 34% of village groups raised concerns about fishers from other villages fishing in their coastal waters, with 7% reporting commercially harvesting *holothurian* species for exports and 7% using SCUBA gears for fishing. As testified by some village participants, most fishers from other areas were using motorised fishing *alia* to access outer reef areas far from village coastal shores fishing for coastal species to sell commercially. The map (Figure 27) above captured the spatial responses, indicating sites where restricted commercial fishing activities occurred.

iii) Restricted Subsistence Fishing Areas

Subsistence fishing was the primary ocean activity identified by community stakeholders during consultation. However, many village groups have raised concerns about fishers from other villages fishing in their coastal ocean space. As a result, most of these village groups have expressed their intention to restrict fishers from different villages of subsistence fishing in their inshore areas. Moreover, some fishers from other villages and within their community use unsustainable fishing practices and methods to harvest fish and shellfish.

The map below shows village sites that recommended restricting subsistence fishing by fishers from other villages and using unsustainable fishing practices and methods in their coastal marine areas.

Figure 28. The overview map of locations where subsistence fishing activities are restricted

iv) Restricted Tourism Areas

Many villages have utilised their coastal marine areas for family-based tourism activities like beach fales and beachfront resorts. However, few village communities recognise that restricting tourism developments will improve the sustainability of the ocean and inshore resources within their coastal marine areas. The overview map (Figure 29) below highlights coastal areas where village communities would restrict tourism activity developments.

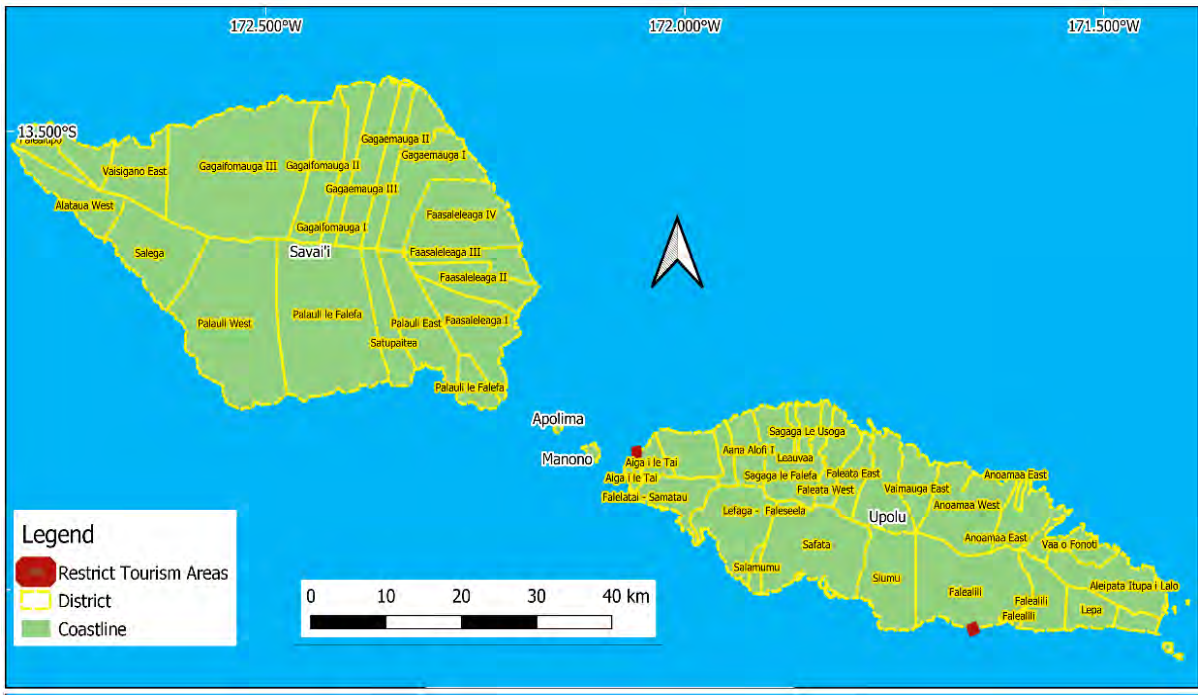


Figure 29. Maps show sites where tourism activities will be restricted as identified during community

v) Restricted Mining (Sand) Areas

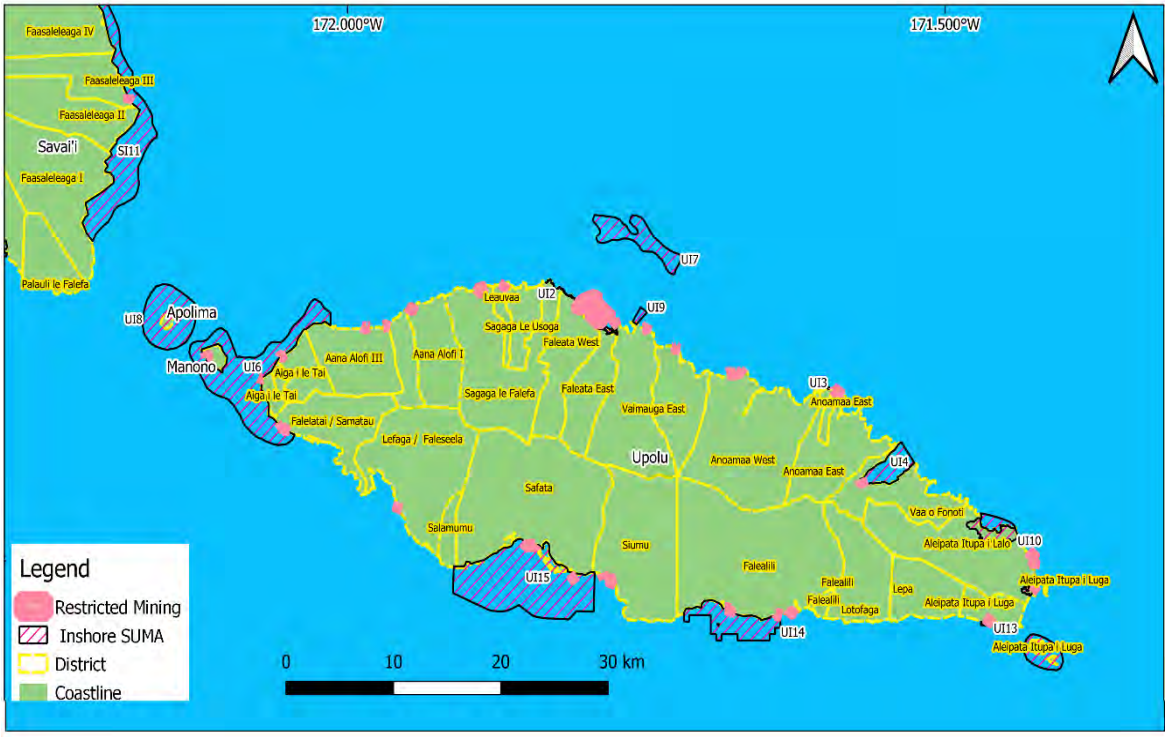


Figure 30. The overview map overlaid with reef-associated SUMAs showed that sand mining sites, especially commercial mining activities, are restricted.

For sand extraction (Figure 30), restricting or having a proper and effective permit or quota system for commercial sand mining was proposed by 7% of village stakeholders. Most large-scale commercial sand mining is conducted by construction and brick-making industries and was the main environmental concern identified by village stakeholders from villages of the Faleata east and west districts. They claimed that the high level of sand mining within their lagoonal areas causes high siltation and turbidity in their coastal areas and contributes significantly to the loss of many shellfish and fish species and habitats. These communities identified the construction and brick-making companies located within the Vaitele industrial areas as responsible for dredging up sand from within their lagoonal areas.

There was subsistence sand mining by some villages mainly for family work, as reported by 7% of village groups consulted. Other families have mined sand at a small scale commercially for manufacturing brick blocks for building. However, 5% of village groups proposed restricting subsistence sand mining or a proper and effective license and quota system. The map above showed areas where village stakeholders suggested limiting sand mining from their coastal zones.

The map Figure 31 below shows areas within the lagoons of coastal villages in Faleata's west and east districts where sands are mined on large scales by construction companies situated within the Vaitele industrial region. The blue colour bordered areas are the sections identified and recommended by village stakeholders to limit or restrict largescale sand extractions and should be effectively controlled using an allowable quota system.

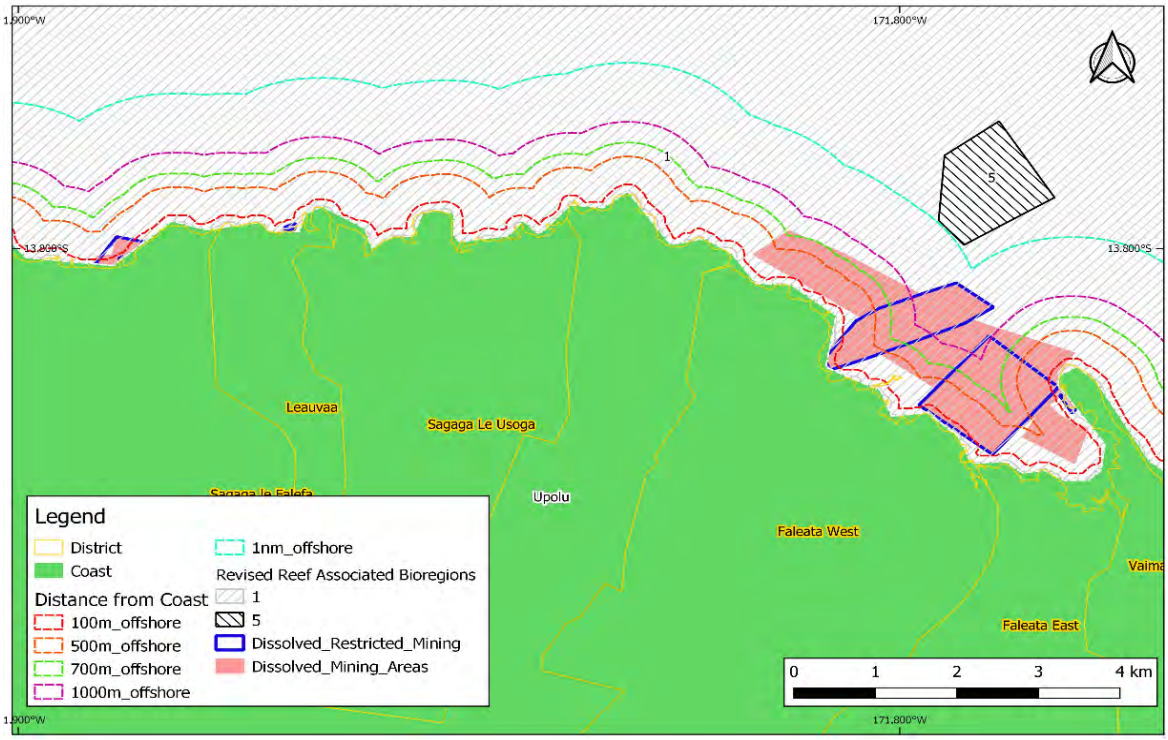


Figure 31. Large scale sand mining and dredging by commercial construction businesses situated in Vaitele industrial zone.

vi) Restricted Waste Dumping

19% of village groups suggested we stop littering and waste dumping at sea as a solution to address waste disposal to the ocean by villagers. During consultations, some village participants raised littering and dumping plastics and delayed biodegradable wastes are impacting ocean sustainability. The map (Figure 32) below indicates sites identified by village groups to restrict waste dumping in the coastal marine space.

Figure 32. Sites identified by village stakeholders to restrict and ban dumping wastes and littering in the sea.

8.1.3 Solutions Suggested to Address Concerns Identified

a) Existing Protected Areas and Potential Future Protected Areas Identified during Community Consultations

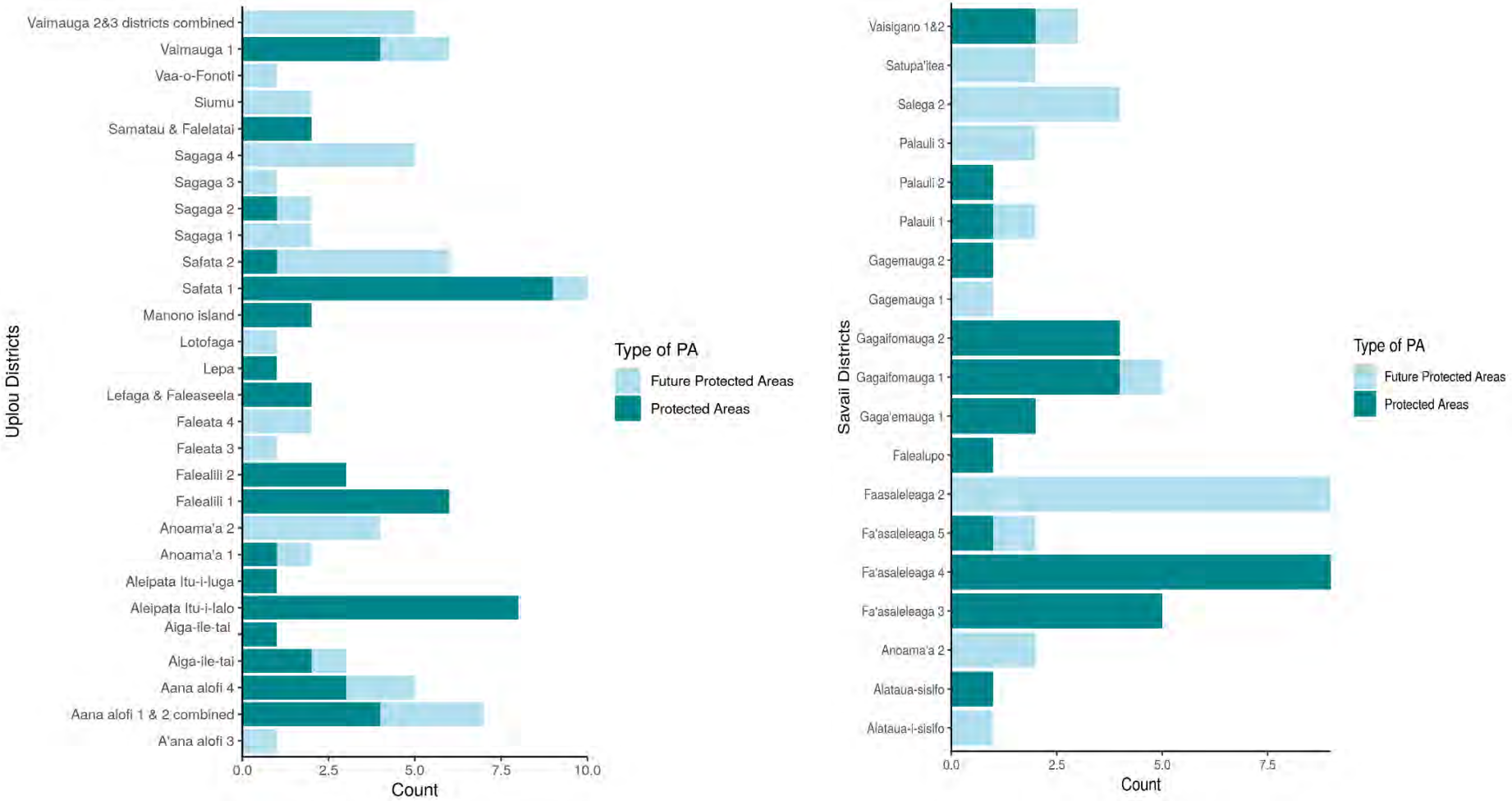


Figure 33. Protected and future protected areas by districts identified by village groups during community consultations.

The graph (Figure 33) displays the combined results by the district of MPAs currently existing and potential future MPAs proposed by village stakeholders during the first public national consultations on ocean planning. Spatial feedback was graphically presented and mapped individually to highlight the strategic types of ocean management areas to be considered under the MSP process for managing village coastal areas to achieve Samoa's commitment to good ocean governance.

b) Spatial maps of Solutions Suggested By Village Groups

i) Potential Future Reserve (Protected) Areas

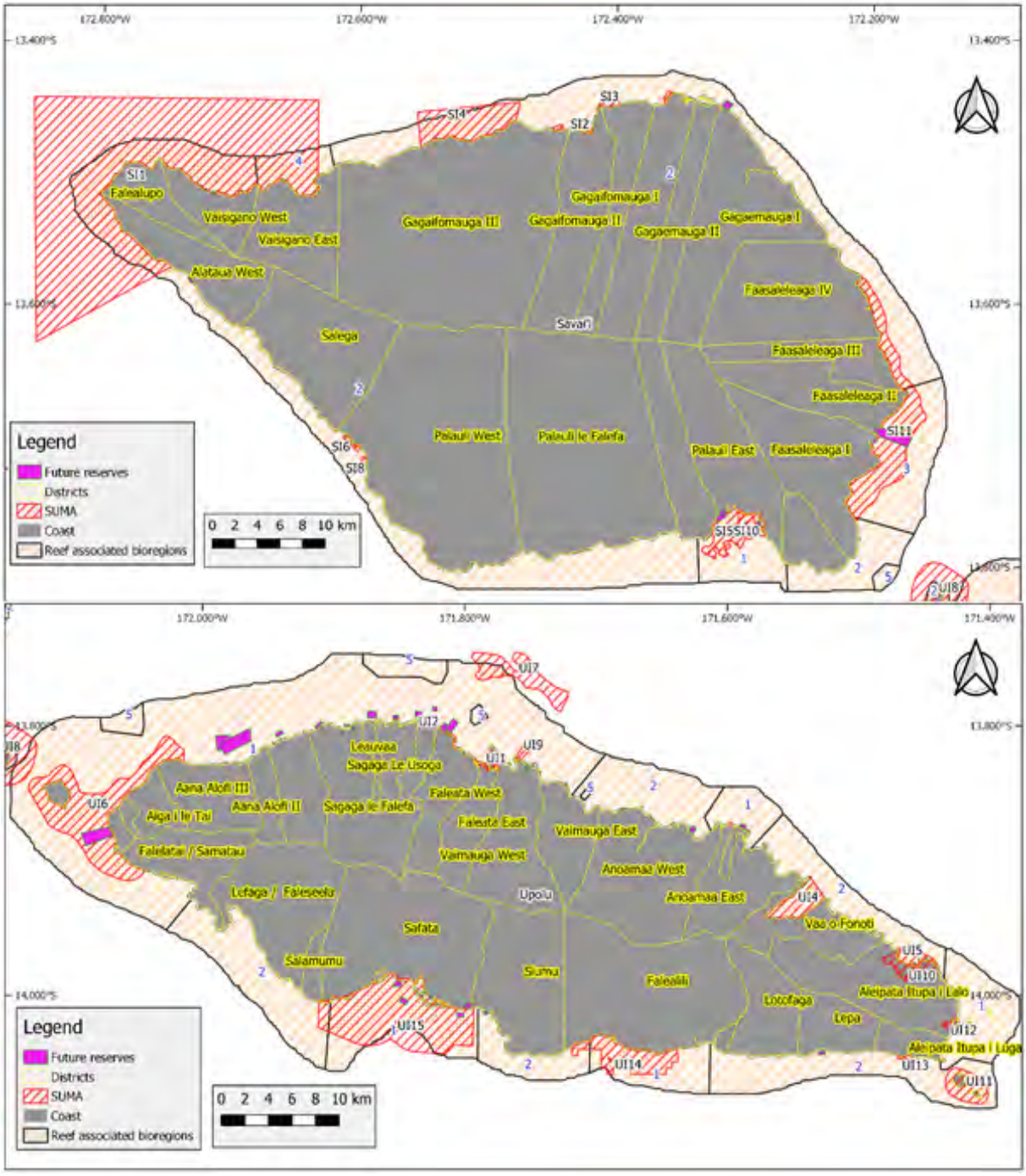


Figure 34. Overview maps of coastal sites on Savaii and Upolu Islands for potential future protected and managed areas overlaid with reef-associated SUMAs

Community stakeholders have identified 49 coastal marine areas for potential future marine protected and managed sites through the ocean spatial planning process based on responses to the survey questionnaires, and spatial data are drawn on maps and village group results presentations. About 56% of the sites are located on Upolu Island, while the remaining locations are on Savaii Island. No potential future sites were identified for Manono Island as all the villages currently have 'no-take' fish reserves. Furthermore, as potential sites are the existing fish reserve, some communities desired to enlarge the area sizes to encompass other vital inshore areas that need protection and management.

About 34% of the village groups recommended the placement of marine protected areas as an essential solution through the ocean planning process for coastal ecosystems and resource sustainability. Approximately 5% of the village groups proposed to expand the areas of their existing 'no take' fish reserves to encompass other vital parts of their coastal areas for protection.

The map in Figure 34 shows sites for potential future marine protected and village-managed areas. The map highlights the locations of future candidate reserves as identified by community stakeholders during consultations.

ii) Mangrove Planting Areas

Figure 35. An overview map of sites identified by village groups for future mangrove protection and replanting.

Similarly, community stakeholders have identified 41 coastal sites with mangrove habitats for potential future protected areas. Of the total sites, 18 are on Savaii Island, and 23 are on Upolu Island. About 26% of village groups recommended the management and protection of mangrove habitats occurred within their coastal areas.

Accordingly, mangroves are fundamental influences on nearshore fisheries production, and they may also function as nursery and feeding habitats for many coastal marine fish and shellfish species. Protecting and managing these critical coastal marine habitats are significant to the sustainability of inshore marine species and may contribute to addressing climate change. Bidesi *et al.* (2014) reported that Samoa's current level of mangrove areas has declined. The above map (Figure 35) shows areas identified by village participants for mangrove replanting and mangrove protected areas.

iii) Sewerage Disposal Areas

Stop littering and disposing of wastes in coastal marine areas were recommended by 19% of village stakeholders as solutions to alleviate the problem with litter, especially the plastic-based items adversely impacting the sustainability of marine ecosystems and biodiversity. Furthermore, stopping logging and for villages to have reforestation programmes were suggested by 31% of village groups to contribute to the sustainability and management of the coastal marine environment.

Figure 36. An overview map shows areas recommended by community stakeholders to restrict littering and waste disposal at sea.

8.2 Sectoral Consultations Results

Spatial information and ocean planning feedback was received during the sectoral consultations. The information was translated into spatial maps that captured the areas of use and activities, challenges and restricted activities, as well as solutions proposed to address the constraints shared by stakeholders of each sector.

The spatial data and information on ocean areas of uses received are mostly site-specific, with others overlapping. The spatial maps generated reflect that site-specific areas are overlapped. The following sections below highlight the major collective views shared, identified and proposed by sectoral stakeholders during consultation meetings from the 1st to 4th March 2022.

8.2.1 Ocean Activities Identified by Sectors (spatial maps)

Multiple uses of the ocean for different activities have been identified by key sectors consulted during ocean planning consultations conducted from the 1st to the 4th of March 2022. The feedback and datasets received and recorded regarding ocean uses and activities by sectors are captured and spatially mapped, as shown below.

a) Tourism sector area of uses

The areas of coastal ocean used by small, medium and large scales tourism operations as shared by participants are presented in Figure 37. Included are the blow-ups of a specific site for each tourism operation and the ocean areas utilised for their operation and water-based activities.

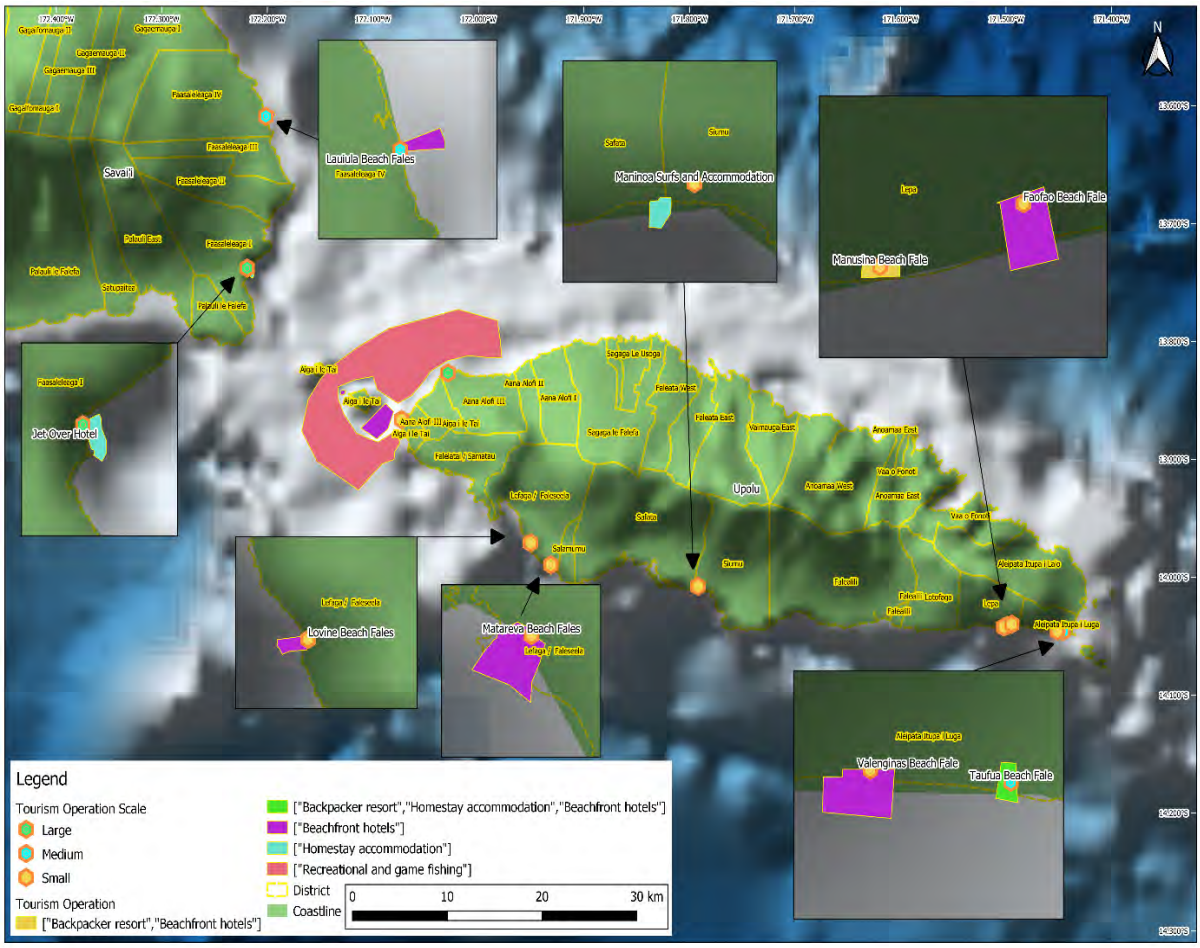


Figure 37. Areas of ocean uses and activities identified by participants of the Tourism sector

Most use areas are site-specific and confined chiefly within the inshore ocean spaces. The scale of regions of use also links directly to the level of the operations. Small tourism operations that may offer lesser water-based activities tend to utilise less ocean area. The large-scale tourism operations that may provide a range of water-based activities are likely to use extensive ocean areas.

The areas of oceans (pink coloured) 128.535 km² that covered the western end of Upolu, including Manono island to the northwest side into the A'ana district, indicate the areas for tourism operations identified by both the Sheraton hotel Mulifanua and the Le Vasa resort at Manono-uta. These areas

are used for water-based activities such as kayaking, boating, snorkelling, surfing, sailing, SCUBA diving and game and recreational fishing.

Small and medium-scale operations are dominantly utilising the beach and lagoonal water within the properties' proximity for picnicking, sports activities, snorkelling and leisure swimming. Other ocean uses and activities identified by participants of the tourism sector are summarised in the sectoral consultation non-spatial results section.

b) Fisheries sector area of uses

The maps shown and discussed in this section captured the spatial feedback received and information shared by Fishing industry representatives during the ocean planning consultation workshop held on the 2nd of March 2022. Based on the spatial responses received from the sector, the Fisheries sector operates within the entire EEZ of Samoa. The number of maps presented and discussed in this section specifically captured feedback and information shared by different representatives of the Fisheries sector who attended the MSP consultation.

The two main types of commercial fishers who attended the workshop were the operators of the fishing vessels class <15 m and >15 m in boat length. The commercial tuna fishery is currently managed by defining zones for the two categories to operate. The 50 nautical miles surrounding the islands are reserved for the class <15m fishing vessels. The >15m fishing vessels are allowed to use beyond the 50 nautical miles to the EEZ borders.

i) Tuna commercial fisheries

The map in Figure 38 shows the areas of fishing operations identified by the commercial tuna fishing representatives. The local-based commercial tuna fishing industry operates two vessel classes within the entire EEZ of Samoa, using longline and trolling fishing practices to harvest tuna and other pelagic species.

The circular-shaped area surrounding the islands includes pocket areas where FADs are deployed, indicating the operational areas for mostly the <15 m fishing vessel class. The operational areas for most of the class <15m commercial fishing vessels are within the 50 nautical miles surrounding the islands, which are reserved only for domestic alia fishers (Tuna Management and Development Plan 2017-2021). However, on some good weather days, domestic alia fishers can be ventured beyond 50 nautical miles. Additionally, an area surrounding the island of Upolu was identified by the commercial alia fishers where the skipjack tuna (*Katsuwonus pelamis*) and bottomfish species are fished.

The >15m fishing vessel category operated up to the boundaries throughout the EEZ. The tuna commercial fishing operational areas are also shared by handline and dropline commercial fisheries harvesting deepwater and bottom fish species. Furthermore, the domestic tuna and locally licensed foreign fishing vessels have overlapped fishing areas. Often during good weather days, the small alia fishing vessels can be fished beyond the regions reserved for <15 fishing vessels class, and likewise, the >15m vessels are reported fishing within the reserved 50 nautical miles.

Six biophysically special, unique marine areas (SUMAs) are characterised and identified within the offshore regions of Samoa's EEZ (Ram-Bidesi *et al*., 2021). Some of these sites encompass geomorphological features that are favourable to supporting high biodiversity. Some of the characteristics of these areas create upwelling and downwelling that are rich in nutrients and food, attracting many fish and marine species. Commercial tuna and deepwater fishers target some of these rich SUMA areas for fishing.

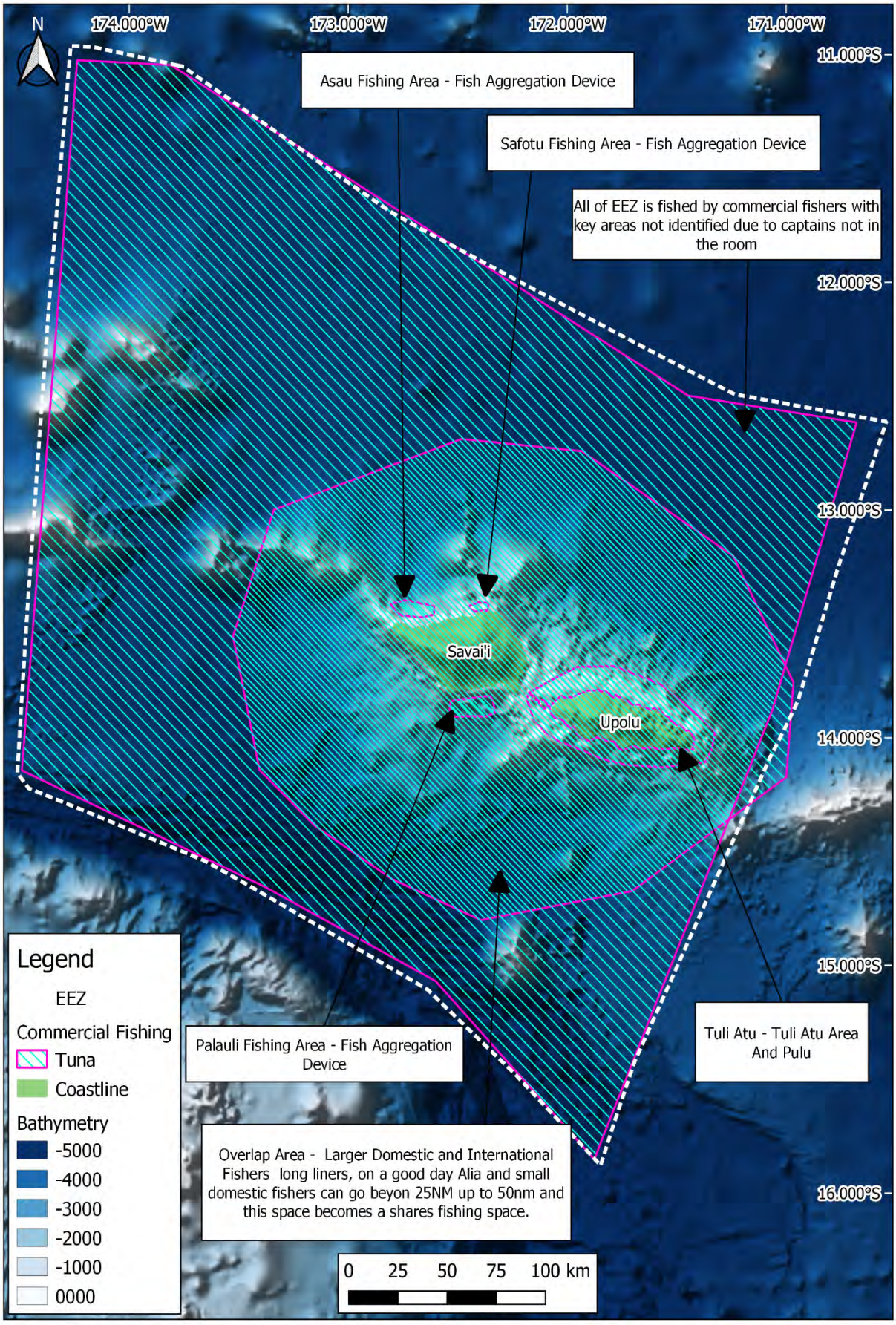


Figure 38. Operational areas for commercial tuna and bottom fishing activities.

Figure 39 captured mixed feedback and information shared by operators of the fishing vessel class <15 meters which are fished for tuna and deepwater fish species. The fishing areas are overlapped, and these operators can either fish for both species or shift to deepwater fishing when the tuna species are offseason. The oval-shaped operational areas for mainly the *alia* commercial fishing boats include some offshore special and unique marine areas (SUMAs) that are the main habitats for some of the highly valued deepwater snapper fish species.

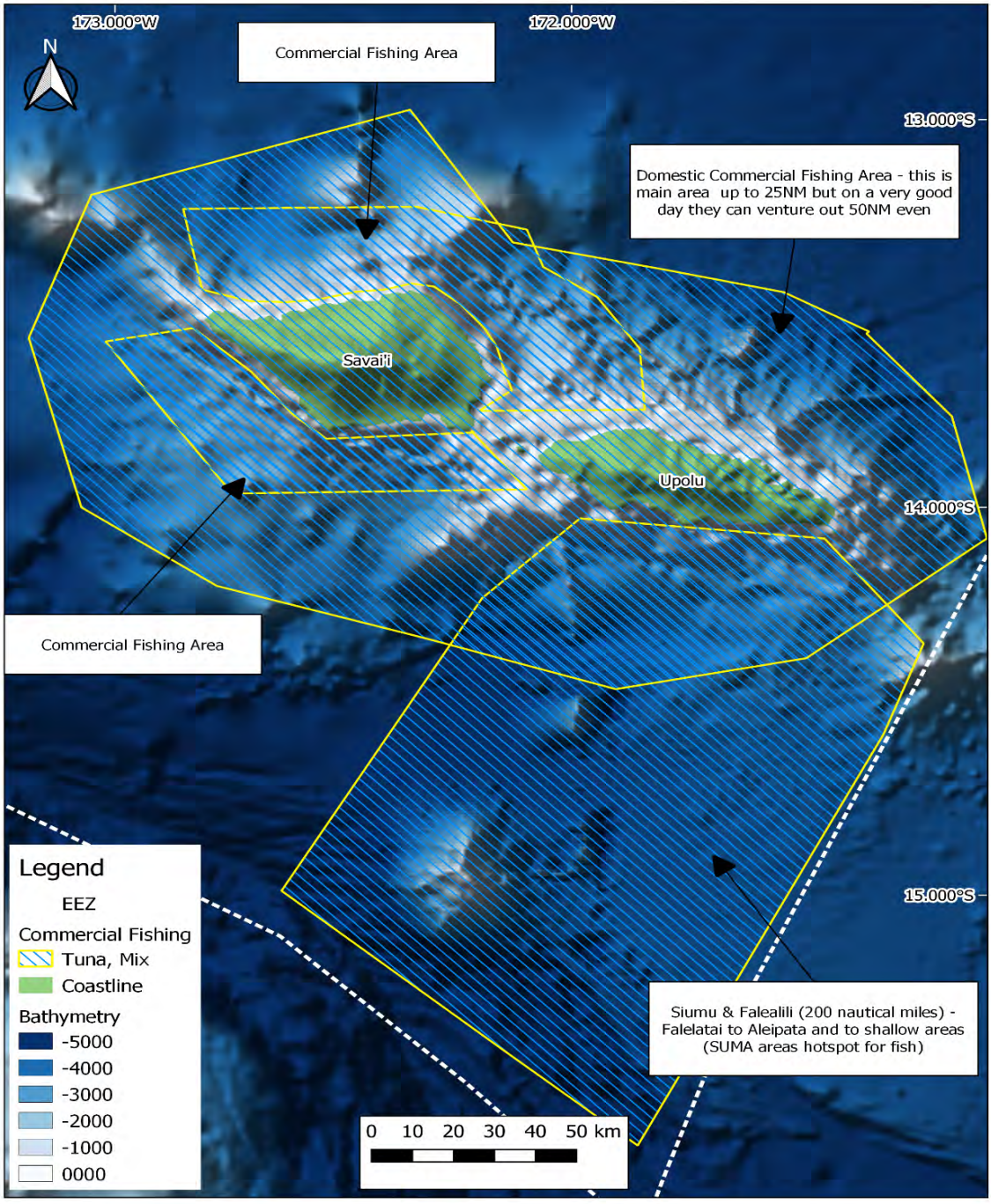


Figure 39. Fishing areas identified by different commercial fishing operators.

The oval-shaped fishing areas included the SUMA submarine ridge that forms the westward extension of Savai'i Island, known as the Stearns Bank, consisting of the Tuapi'o and Si'usi'u Seamounts. These

seamounts are part of the Samoan Hotspot Trail on the Pacific Plate (Kendall and Poti, 2011; Koppers *et al*., 2008, Ram-Bidesi *et al.,* 2022).

Within the identified fishing area is the SUMA of a cluster of submarine ridges and guyots to the north of the island of Savai'i. The SUMA include the Agavale Seamount, which makes up half of the site and the Taumatau Seamount which is relatively round and regular, with smooth edges. The area is very productive in marine biodiversity, therefore being a target site for commercial fishing for bottomfish species.

Part of the areas for fishing that run southward of the EEZ includes two western seamounts near the boundary with American Samoa, and the chain of seamounts has the Uo Mamae seamount that runs southward to the edge of the Tonga trench. The seamounts are rich in deepwater fish species, and tuna species aggregate near seamounts to feed on nutrients brought by the upwelling of cold currents. Accordingly, commercial fishers from the Siumu and Falealili districts fished and reached these areas, especially during good weather days.

ii) Mixed commercial fishing activities

Figure 40 map recorded the general feedback by participants of the Fisheries sector on fishing areas for varied fishing activities. The areas of operations for trolling for skipjack (*Katsuwonus pelamis*) and yellowfin (*Thunnus albacares*) tuna species are overlapped 319.763 km² with fishing for nearshore demersal and deepwater species. Additionally, fishing alia boats are sometimes utilised by inshore commercial fishing operators for *lama* (night spearfishing) in coastal areas. Commercial *lama* fishing is associated with a group of fishers who used alia boats to access distanced hotspot coastal areas, night diving spearfish for inshore species and often used SCUBA gears for fishing.

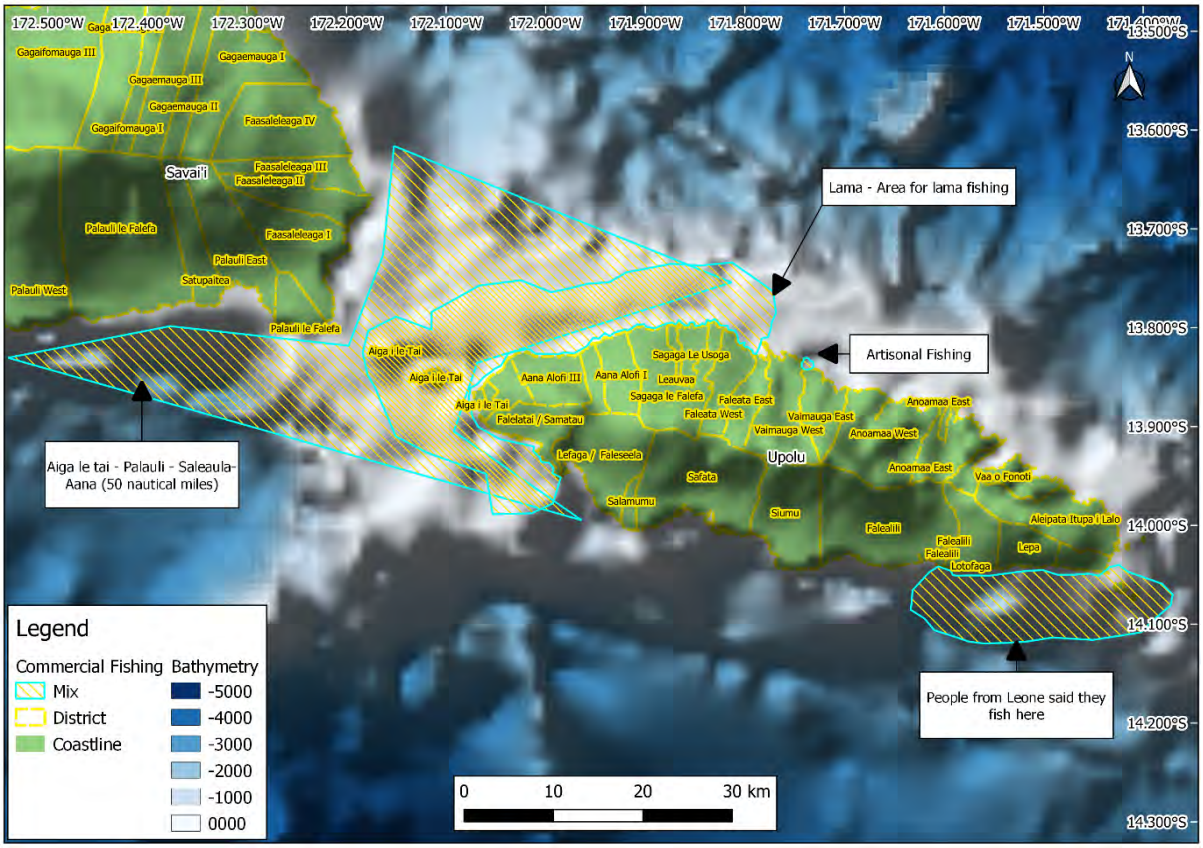


Figure 40. Fishing areas for mixed fishing activities commercially targeting diverse fish species.

c) Government sector area of uses

During the sectoral consultation with the government, individual ministries and organisations shared relevant information on their ocean-related functions, roles and operations. These specific roles and operations are captured in spatial maps highlighted in this section.

i) Monitored sand mining

The MWTI (PUMA) and MNRE have shared responsibilities in processing and granting permission for extraction and mining sand and aggregates from the sea. They also monitor these activities, ensuring that people and companies comply with stipulated terms and conditions of the permits and that their mining activities are not adversely impacting the coastlines. Figure 41 map specifies areas with zoom shots on the islands of Savaii and Upolu where these government stakeholders conducted sand mining monitoring operations.

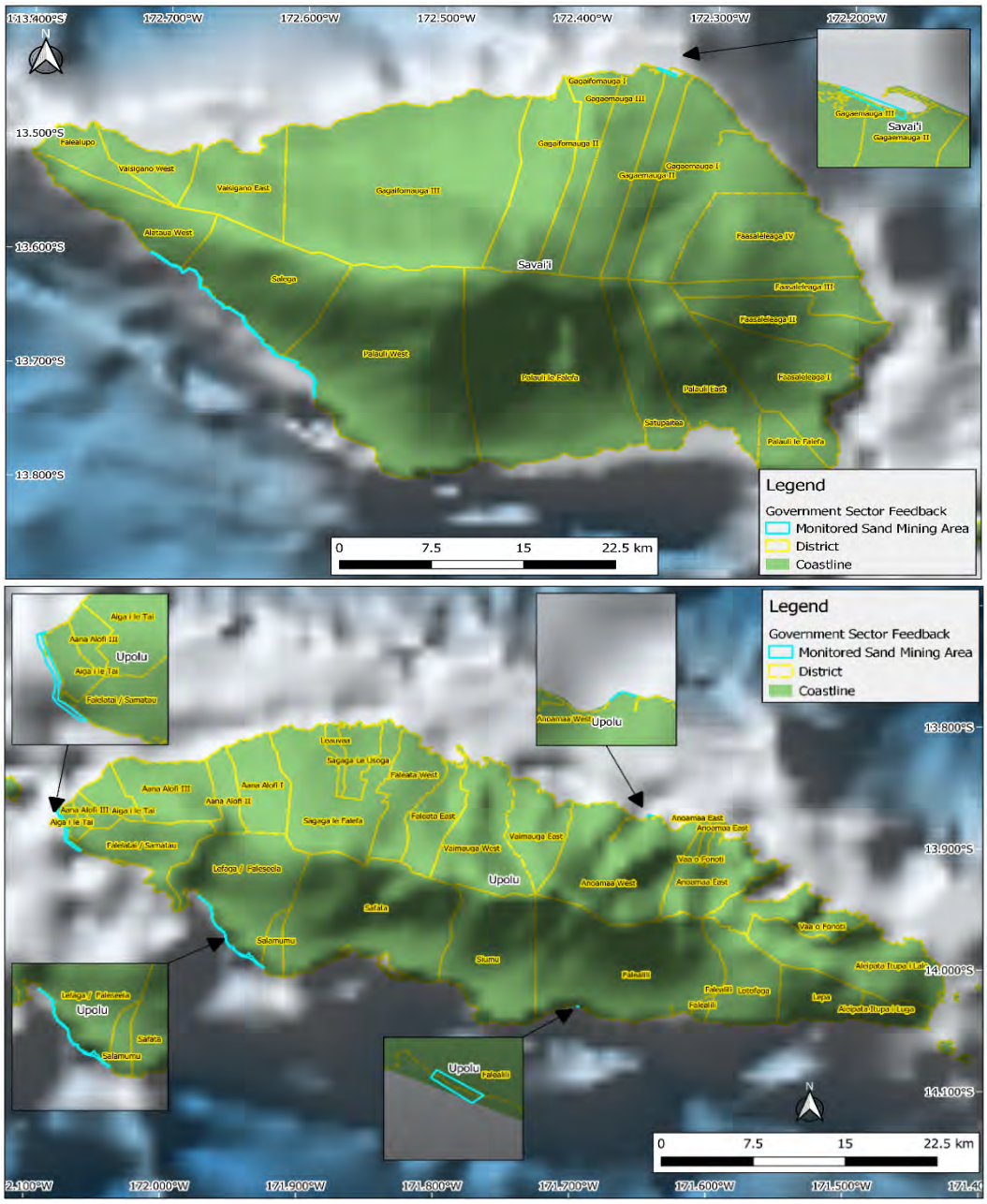


Figure 41. The map shows sand mining areas monitored by Government ministries.

ii) Maritime Vessels Operational & Training Areas

The squared area in Figure 42a map shows the areas (pink coloured outline) identified as the operational areas by the Samoa Port Authority. Generally, the incoming and outgoing international and domestic vessels and ships offloading and berthing at the Apia main ports, Salelologa, Asau and Aleipata ports are monitored and managed.

The adjacent map in Figure 42b illustrates areas (light blue and pink colours) identified as the operational areas of the Samoa Shipping Corporation. The soft blue colour areas are the local routes for the SSC vessels domestically servicing the islands of Savaii and Upolu and internationally to American Samoa. The pink colour polygon denotes the northern international routes to Tokelau.

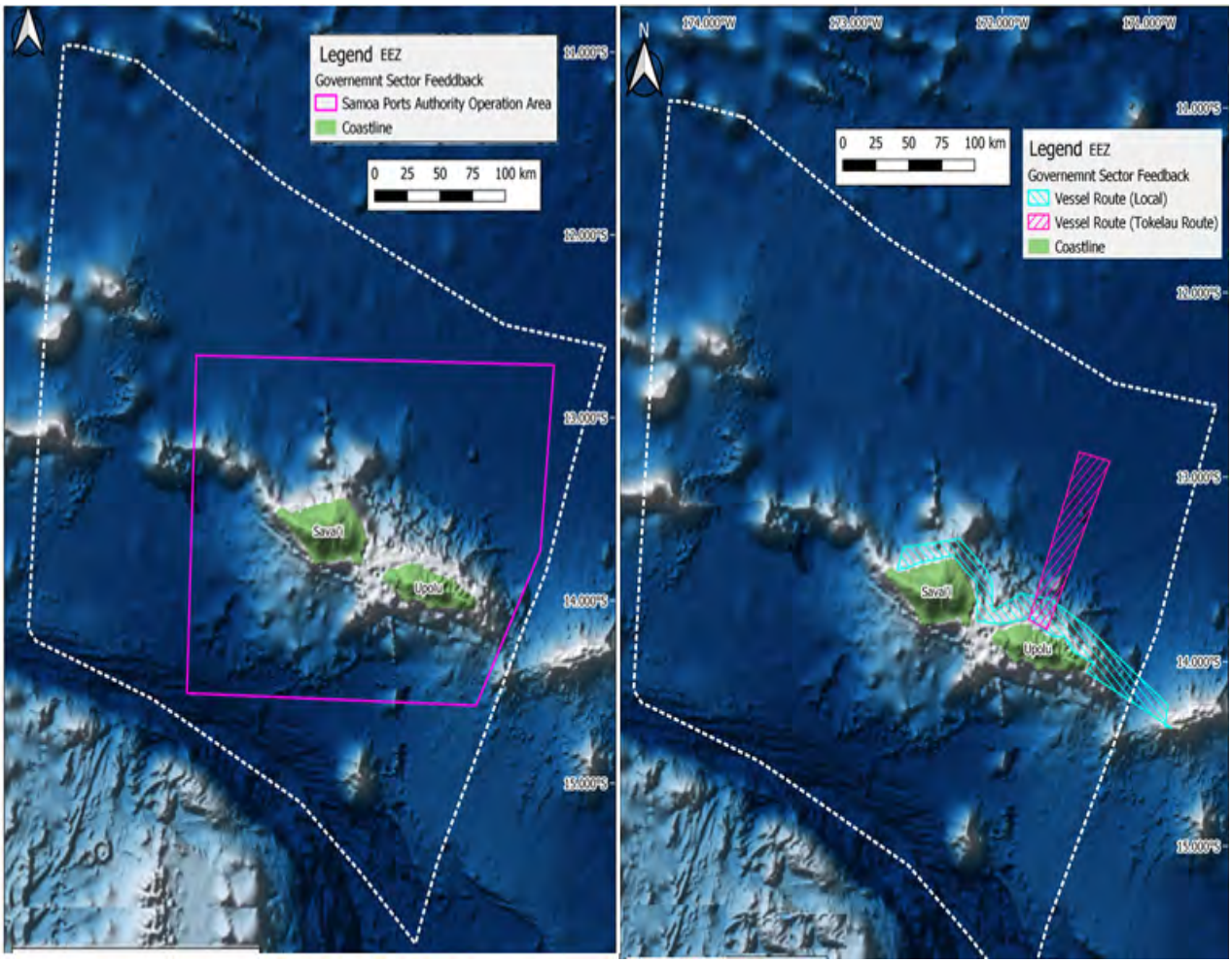


Figure 42a. Operational ocean areas identified by the Samoa Port Authority and Figure 42b. Samoa Shipping Service delegate.

Figure 43 map showed the area of operations identified by the NUS School of Maritime during the sectoral consultation on 3rd March 2022. The School of Maritime is located in the Mulinu'u peninsula, closer to the Apia capital. The marked areas outlined in the blue rectangular indicated the maritime training exercise grounds for future sailors and seafarers. Regularly the school used the SSC ferries shuttling passengers and cargoes utilising the area between Savaii and Upolu Islands for training. The training exercise ground also overlaps with the operations areas as routes for domestic ferries operated by SSC and international incoming and outgoing ships in and from ports monitored by SPA.

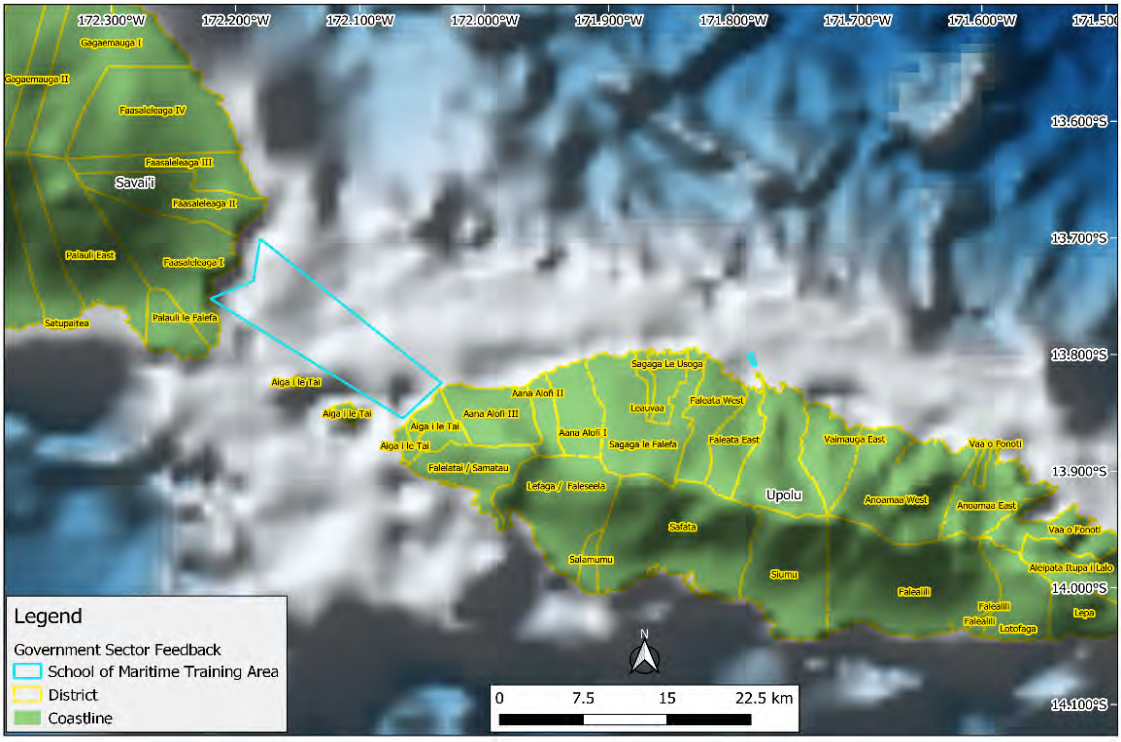


Figure 43. Marine area used by the NUS for maritime training of future sailors and seafarers.

d) Non-government & Civil Society Organisations (NGOs/CSOs)

The sector has shared multiple uses and activities, mainly in the coastal marine spaces. The spatial maps below captured the feedback and data shared by representatives of the sector on ocean use and activities that occurred in specific coastal sites.

i) Coral restoration

Two organizations represented in the sectoral consultation with the NGO/CSO sector were the Artificial Reefs Samoa and the Matareva Coral Garden group. Both groups are involved in coral reef restoration activities in coastal areas as a solution to restore and improve the health of the reef ecosystems in specific locations depleted in corals. Feedback and information shared by the two organisations showed the areas of coral restoration activities. The map zoom scale slots showed the physical and environmental characteristics of the two sites.

The Figure 44 map reveals the sites where the ARS has conducted coral restoration activities. The two coral replanting events in Amaile (0.232 km²) and Satitoa (0.142 km²) sites support community management efforts to improve and rehabilitate corals within the village-based fish reserves. The coral restoration activity near the Taumeasina resort (0.009 km²) is an effort by the group to enhance and restore corals for tourism and education purposes. Additionally, restoring corals in the vicinity will improve the health of the reef ecosystem and sustain marine biodiversity.

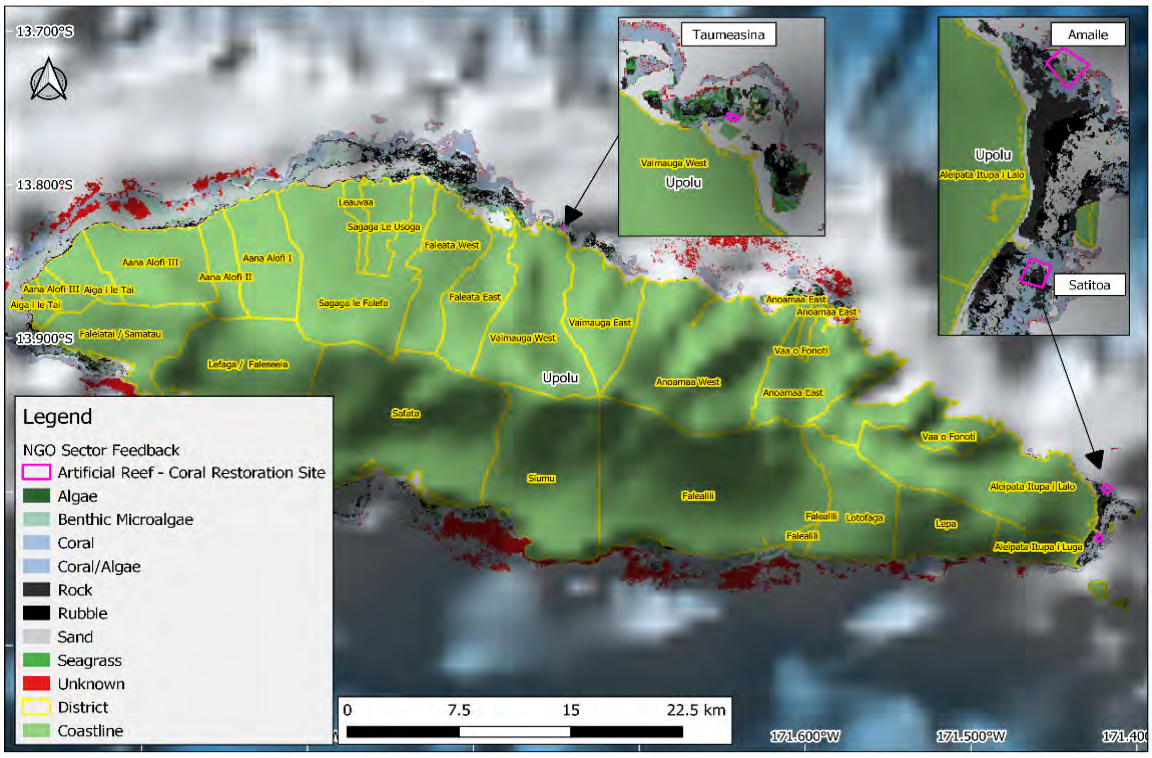


Figure 44. Sites of coral restoration activities carried out by the Artificial Reefs Samoa organisation.

The map in Figure 45 shows sites where the Matareva Coral Garden group has done coral restoration activities in an area of 0.057 km². Similarly, the restoration event supported the Matautu, Lefaga village community-based marine protected area (0.004 km²) to restore and improve the health of coral ecosystems within the village's coastal ocean space.

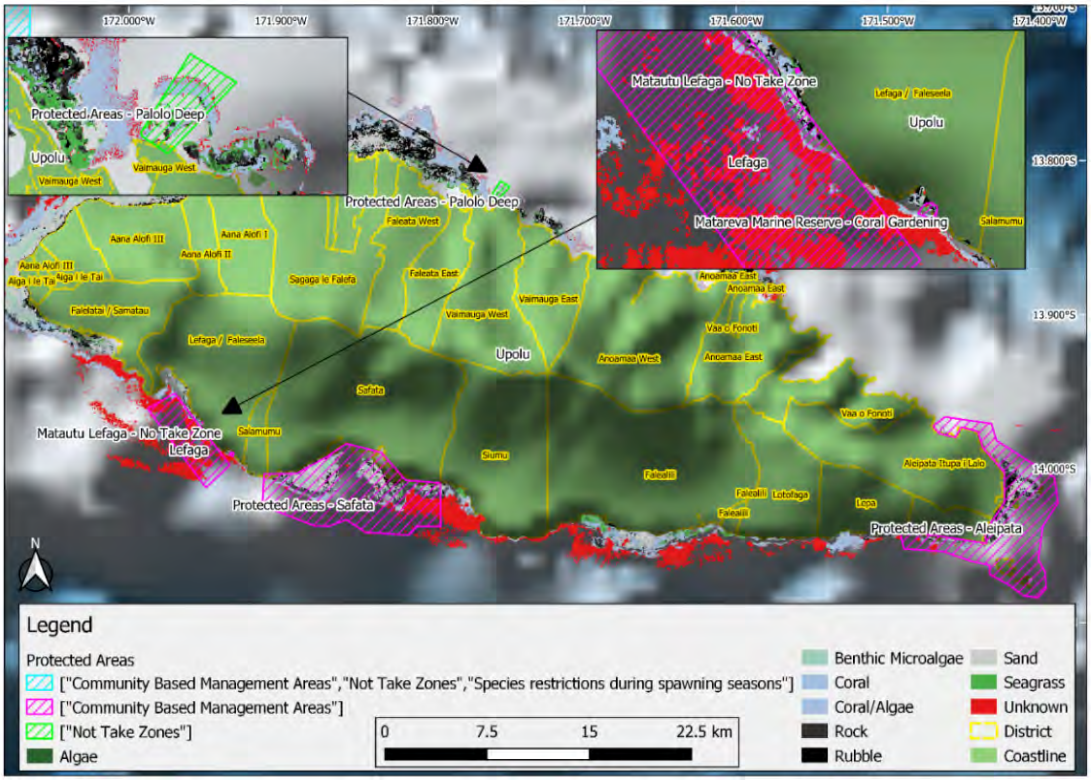


Figure 45. Sites of coral restoration activities carried out by the Matareva coral garden group.

ii) Game and Recreational Fishing Activities

Two representatives from local organisations that organised international and local game fishing and provided recreational fishing activities participated in the MSP consultation. SIGFA organised and managed fishing tournaments for international tourists and locals, and their operation area covered the coastal and offshore regions of the EEZ. The recreational fishing tours have mostly occurred within the inshore and nearshore areas. The areas of operations (74.225 km²) utilised by both groups are generally overlapped and are represented in the map in Figure 46.

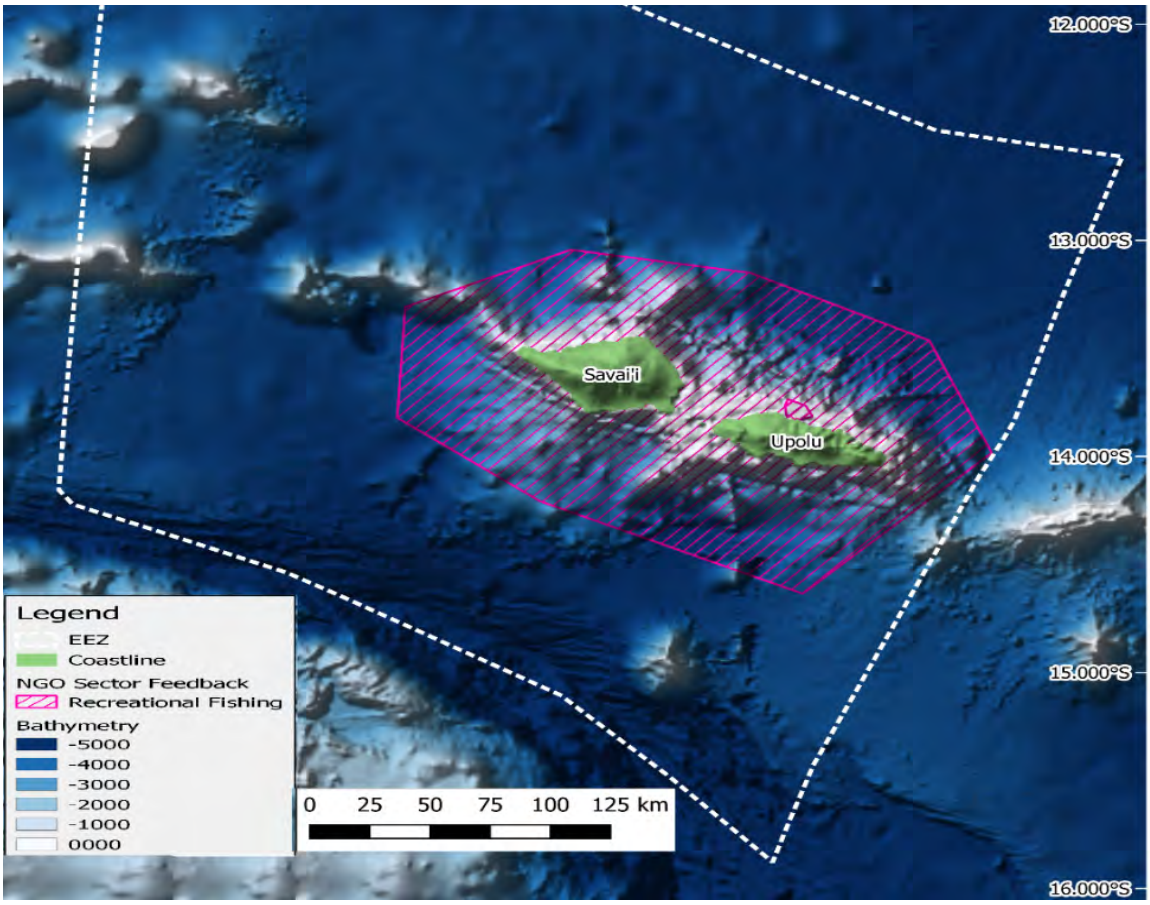


Figure 46. Areas for the game and recreational fishing activities.

iii) Mangrove Conservation: Advocacy, Education and Awareness

Advocacy and Education, including awareness for the general public about managing and conserving marine ecosystems such as mangrove and coral reef habitats, are some of the projects implemented by local conservation organisations. Two local conservation NGOs, namely Ole Si'osi'omaga Society (OLSSI) and Samoa Conservation Society (SCS), participated in the ocean planning consultation on the 4th of March 2022. Representatives shared information about their advocacy and education activities to raise awareness of communities and the general public about ecosystem management sustainability aimed at the Vaiusu and Sa'anapu/Sataoa mangrove areas (Figure 47).

The Vaiusu bay mangrove is the largest mangrove area in Samoa and the largest in Eastern Polynesian. However, it is the most degraded and disruptive mangrove area in Samoa because of its location in the urban area. The mangrove area starts from the Mulinu'u peninsula west of Apia,

extends via Fugalei and ends in Vaiusu bay. It has an area of about 86.41 hectares (Ram-Bidesi *et al.,* 2014).

The Sa'anapu/Sataoa is the second largest mangrove habitat in the southern part of Upolu and has an area of about 82.63 hectares (Malaki, 2010; Ram-Bidesi *et al.,* 2014).

Although the two NGOs indicated their advocacy and awareness activities for the large mangrove areas in Samoa, all the mangrove habitats in Samoa are also included. The two NGOs have worked in advocacy, awareness and education projects, enhancing the understanding of the general public about the conservation and management of mangrove habitats within Samoa.

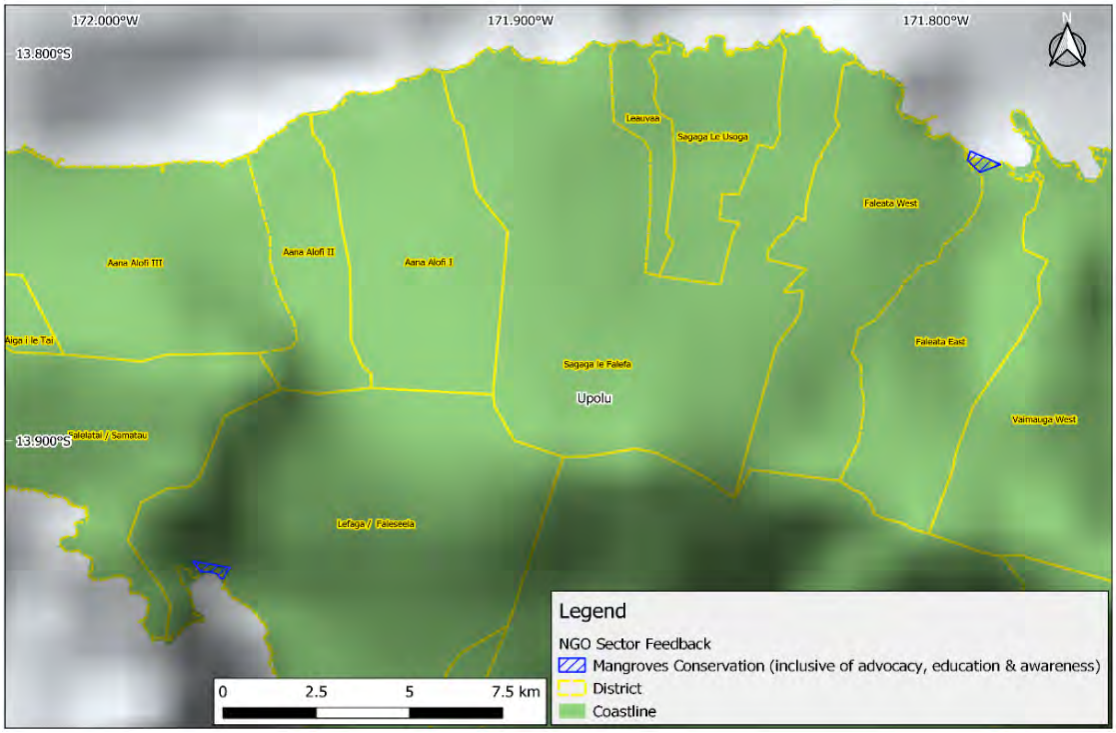


Figure 47. Mangrove sites where some NGOs are conducting advocacy, education and awareness activities.

iv) CSO Area of operation

Two CSOs participated in the MSP consultation on the 4th of March 2022, namely the Tama o le Sami (TOS) and Puipui Pu'e Pupu National Park societies. The representatives from the TOS society in Savaii shared information about their areas of operation and activities, usually carried out within the inshore areas of their village and nearby villages. These activities occurred in their community, from fishing to managing mangrove habitats. The map (Figure 48) revealed the area of ocean space used by the TOS for economic and subsistence activities. Additionally, the TOS society proposed that the mapped area (221.780 km²) be considered for management under an adopted MSP, particularly the coastal areas of their village of Salelavalu.

Several community-based fish habitat reserves already exist within the areas suggested by the TOS for management. Moreover, some of the village communities of the Fa'asaleleaga 1, Fa'asaleleaga 2 and Fa'asaleleaga 3 districts have recommended areas of their coastal ocean spaces for potential future protected areas via the MSP process.

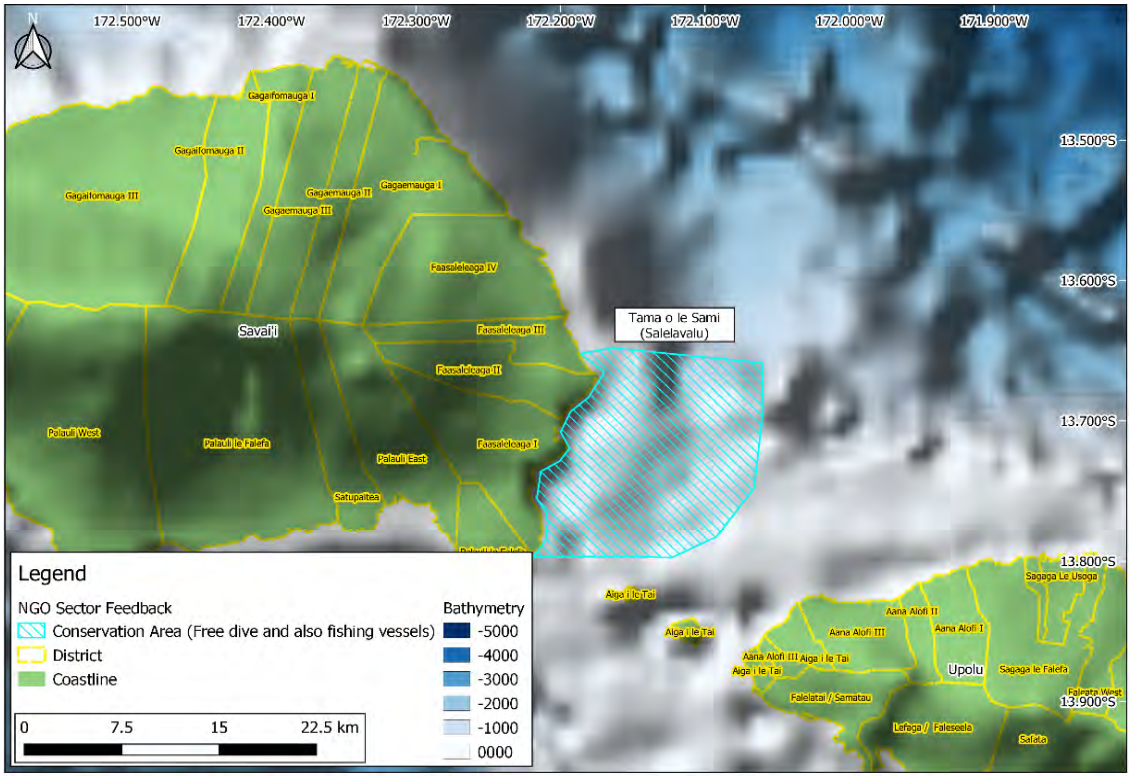


Figure 48. Areas of operations for fishing by the Tama o le Sami village society.

8.2.2 Restricted Activities and Challenges Identified by Sectors

Figure 49 map underlined the main challenges and restricted activities shared across all sectors concerning the EEZ's illegal, unreported and unregulated activities. Some of these IUU activities are insufficiently monitored and enforced due to the lack of resources and infrastructure. IUU fishing activities in the EEZ of Samoa are monitored and executed via a Regional Vessel Monitoring System, but not all illegal actions by some foreign and domestic fishing vessels are fully observed.

Similarly, illegal activities that may occur within the EEZ, such as drug smuggling, dumping rubbish into the sea, oil spills, and transhipping illicit cargoes, are also not effectively monitored. The main concern expressed by sectors is the absence of a patrol boat to monitor, control and surveillance of IUU in the EEZ.

The shortage of tuna availability, in particular, closer to the islands, is a significant challenge faced by smaller commercial fishing boats, which forces them to fish beyond 50 nautical miles and outside of their safety capability, risking the loss of lives and assets.

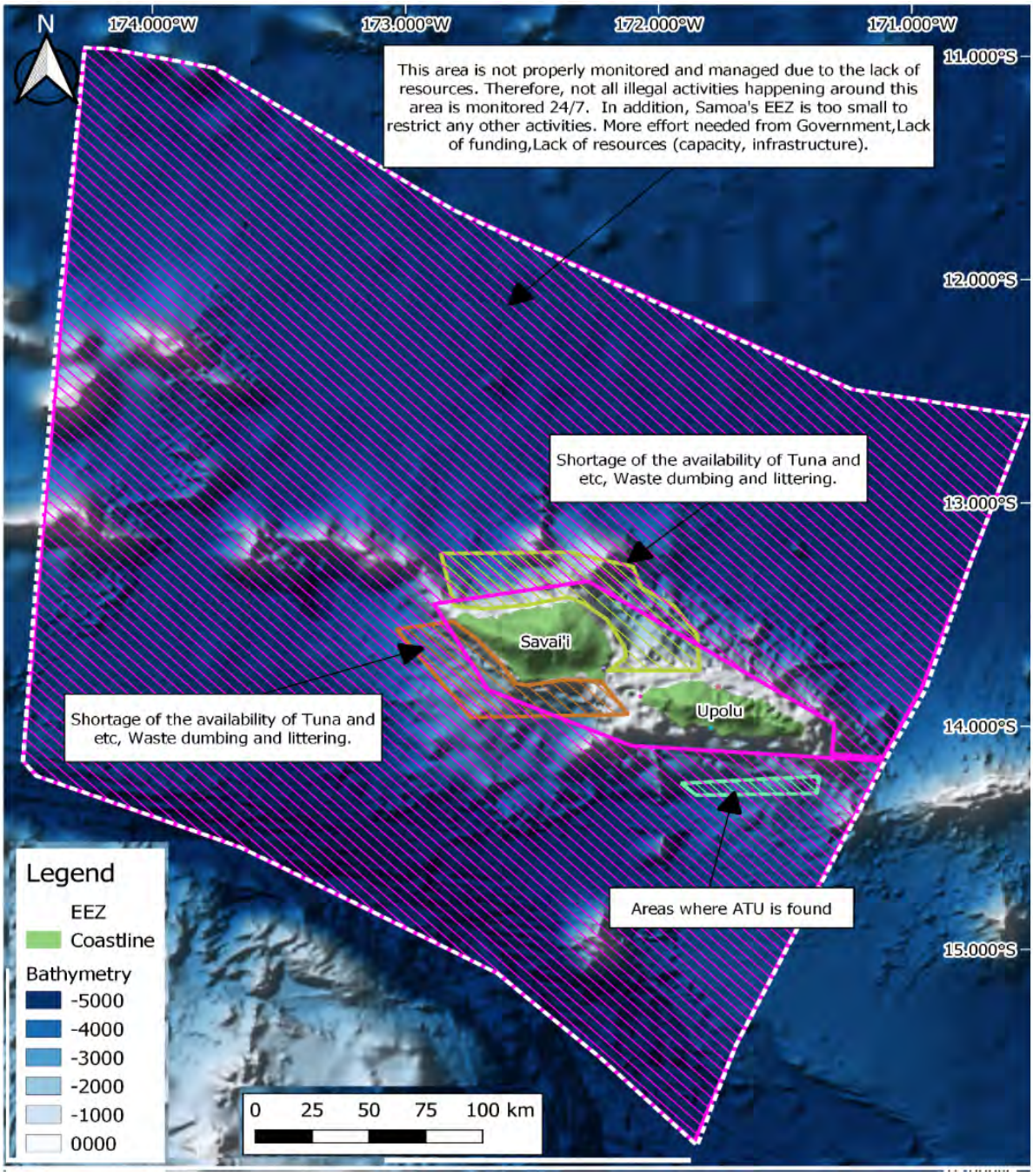


Figure 49. Challenges and restricted activities identified by representatives across sectors.

All the sectors considered the ocean spaces (Figure 50) north of Upolu Island the most challenging due to the number of marine vessels and ships using them. These are the major routes and lanes for the incoming and outgoing merchant, cargo, passenger, yachts and fishing vessels to the main port of Apia.

Capturing on the maps are some challenging areas identified by the Tourism sector relating to land reclamation activities that affect the coastal environment. Additionally, some resorts would like to manage ocean areas in front of their properties because the land ownership and support from neighbouring communities prove challenging.

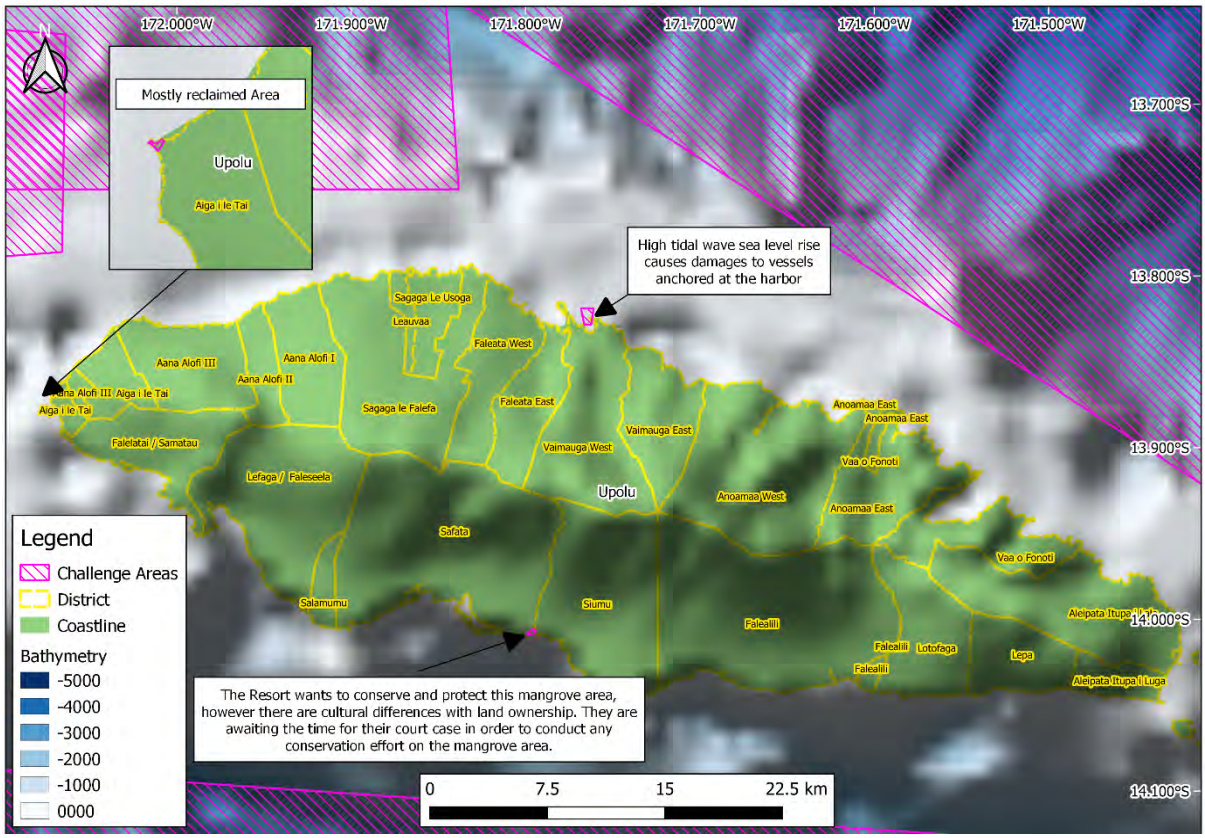


Figure 50. Challenge and restricted areas identified across the sectors, especially in the Tourism and the Fisheries Sectors.

8.2.3 Solutions identified and Recommended by Sectors

Solutions identified and recommended from each sector based on the non-spatial responses shared by each sector are summarised in the previous section under Sectoral consultation results. However, the spatial feedback and data conveyed by the representatives of the respective sector are portrayed in spatial maps highlighted in this report section.

a) Protected Areas

Figure 51 indicates the areas proposed by the tourism operators from Savaii to be considered public or community to private partnerships for potential future conservation and protected areas through ocean planning. The Jet Over hotel operator proposed the area in light blue from the Salelologa wharf to Fa'asalelega 3 district t including the entire inshore to the near offshore areas for management. The blow-ups showed the protected areas in the light blue coloured proposed by the Jet Over hotel rep and the pink coloured proposed MPA by Lauiula beach fale resort representative.

As mentioned in previous sections, the significant proposed conservation area overlapped with some existing village-based fish reserves and proposed future reserved areas recommended by community stakeholders for management and protection via the MSP area. The large conservation area presented by the Jet Over resort (light blue) overlaps with no-take fish reserves in coastal spaces of six community villages from Fa'asaleleaga 1 to Fa'asaleleaga 3 districts. The Lauiula proposed conservation area (pink) is overlapped with the Lano village-based fish reserve.

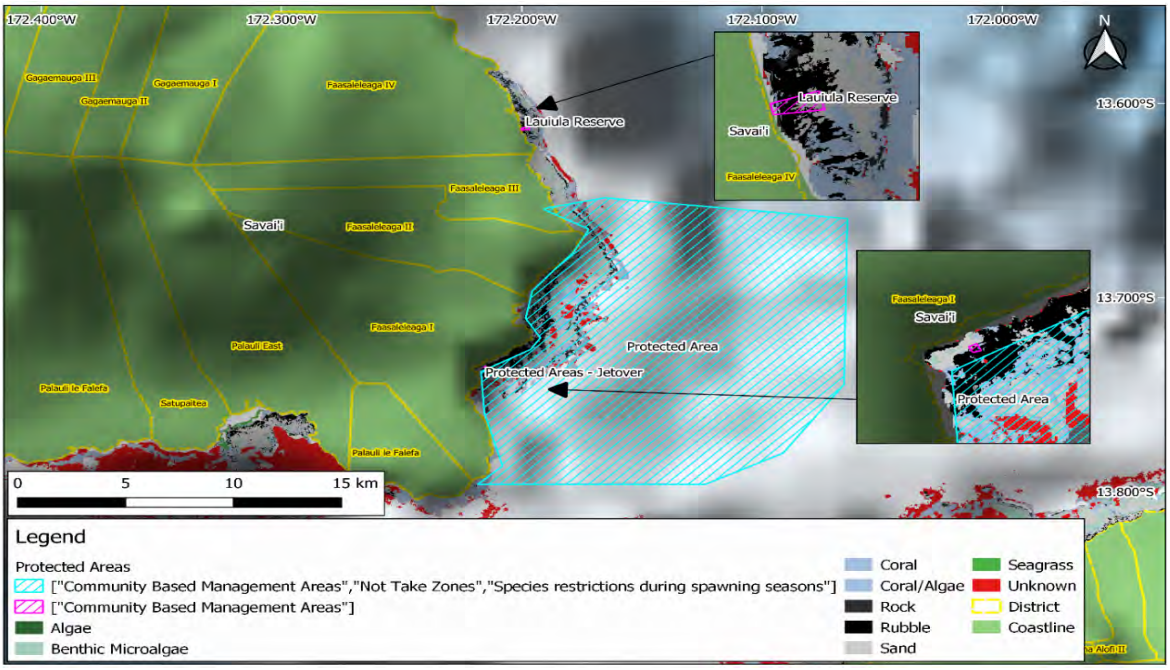


Figure 51. Potential future marine protected areas proposed by representatives of the Tourism sector from Savaii Island.

The map in Figure 52 highlights the coastal areas in Upolu recommended by the sectors for potential future marine protected areas. However, the highlighted sites are already under some protection and management. The Palolo Deep is a national marine park set up and governed by MNRE. Similarly, the district-wide protected areas at Aleipata situated on the eastern Upolu and Safata located in southern Upolu were established by MNRE in collaboration with communities. There are several village-based fish reserves encompassing both district MPAs. The map also shows the Matareva coral restoration site, which shares the same area along the coast with the Matautu village-based fish reserves.

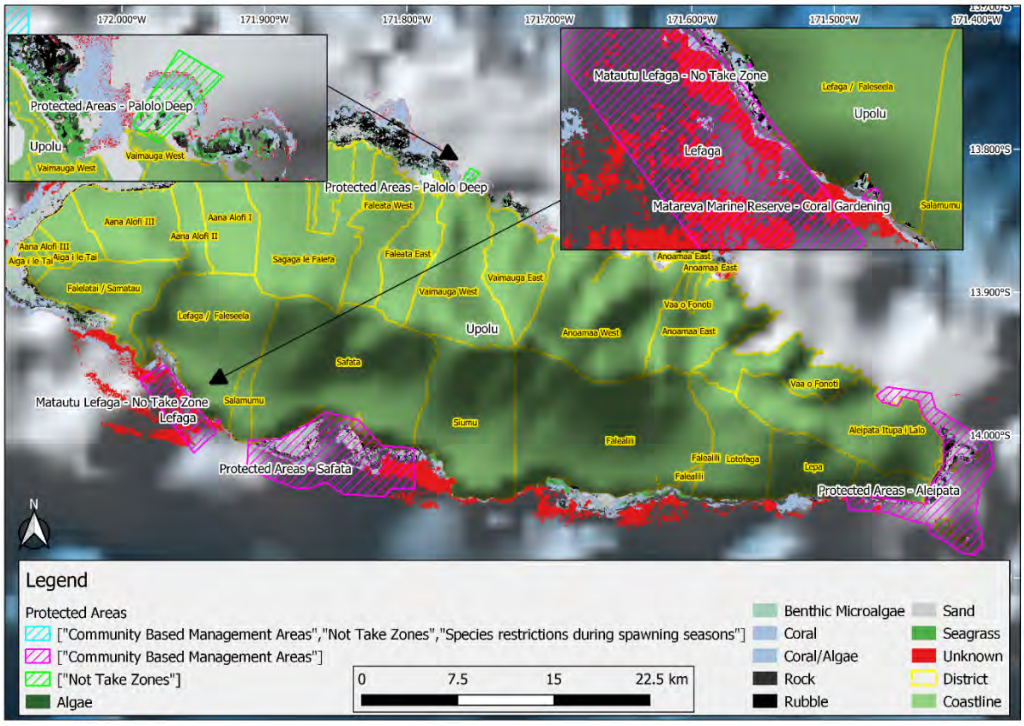


Figure 52. Potential marine areas in Upolu recommended for future protected and managed areas.

b) Expanded areas for commercial fishing

Figure 53 recorded the spatial feedback from participants of all the sectors on activities that should be expanded or further developed in the coastal marine spaces on Savaii Island.

The maps specify expanded activities recommended by the Fisheries sector, such as deploying FADs, handline fishing, and non-artisanal fishing. Installing fish aggregating devices (FAD) helps improve fish catches and reduces the time and effort of searching for fish. Deploying FADs via government assistance is crucial for the fisheries and the tourism sector to support the establishment of offshore OMAs through the MSP process.

Handline fishing is a particular standard fishing method used by many local fishers to harvest specific fish species, and it has fewer by-catches. The fishing practice has a minimal adverse impact on the marine environment and biodiversity. Likewise, non-artisanal fishing activities are recommended for expansion to provide seafood for family consumption. The ecosystem restoration efforts suggested across the sectors like live coral and mangrove replantings will help improve the health of coral and mangrove ecosystems and benefits the associated biodiversity.

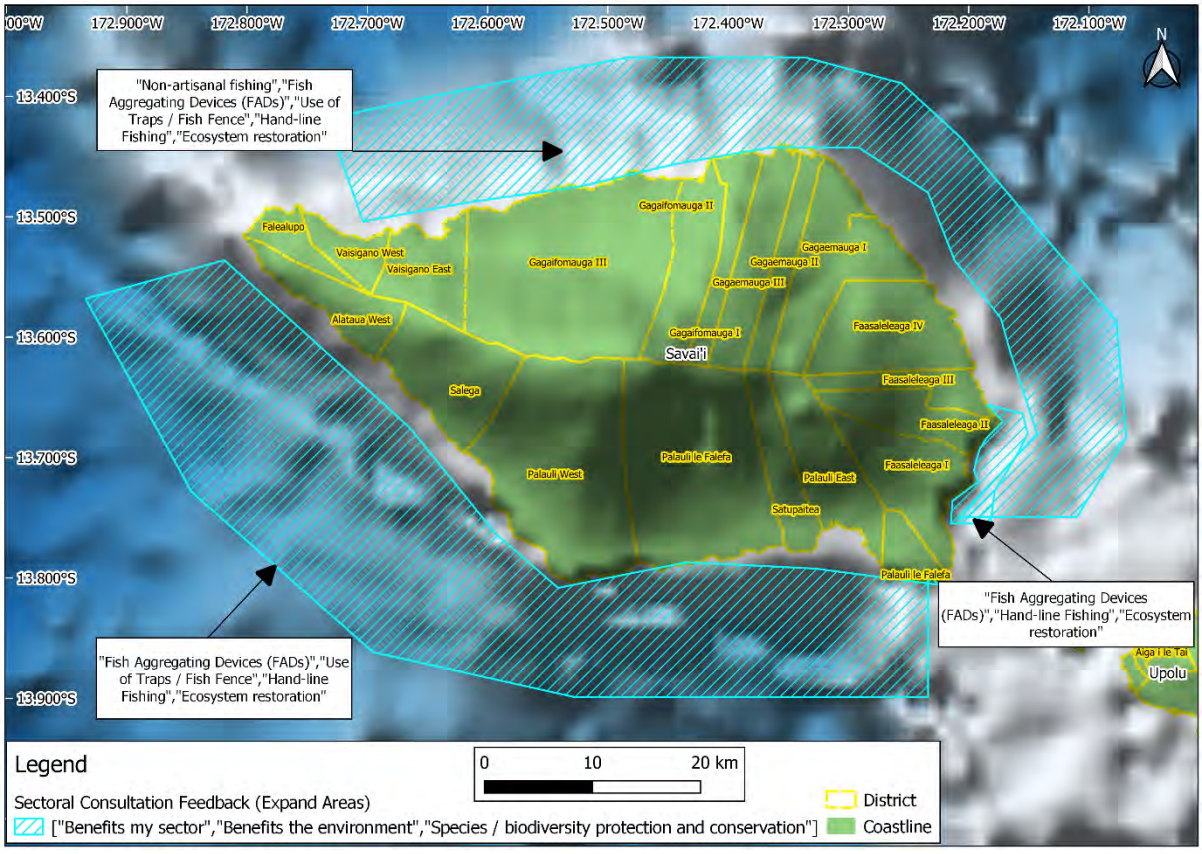


Figure 53. Areas for fishing activities to be expanded as identified by the Savaii participants of the Fisheries sector.

Similarly, Figure 54 also captured feedback from all sectors on activities that need to expand around Upolu Island's ocean spaces, such as non-artisanal fishing and ecosystem restoration. The SSC and SPA reported they submerged some old ships and wrecked machines into the ocean after removing toxic materials and chemicals and consulted with relevant ministries. The light blue-coloured area on the eastern side of Upolu showed where both agencies sank the old ships. The submerged ships/machines could act as artificial reefs, creating heterogeneous environments that support more

organisms and potentially increase species biodiversity in the area. Accordingly, the sunken ships and machines could support several algal species that act as food sources for fishes and other marine species and subsequently increase biodiversity.

The blow shot of the southeastern Aleipata region showed sites for live corals replanting to restore and improve the health of coral reef ecosystems. The pink-coloured area on the south Upolu is the coral reef restoration carried out by the Matareva coral garden group. Expanded activities mentioned and discussed in this and previous sections are recommended by all the sectors as promoted efforts to restore, modify and improve the health of marine ecosystems and biodiversities.

With many reefs in Samoa having been degraded and destroyed by unsustainable fishing, reclamation and development activities and also being bleached because of climate change, the coral replanting, deploying artificial fish houses and sinking bulk and heavy materials might be the few ways remaining to restore coral reef ecosystems and effectively increase biodiversity. However, artificial modification efforts must implement with great caution, considering their adverse effects on the marine environment and biodiversity if all the toxic chemicals and materials are not properly removed.

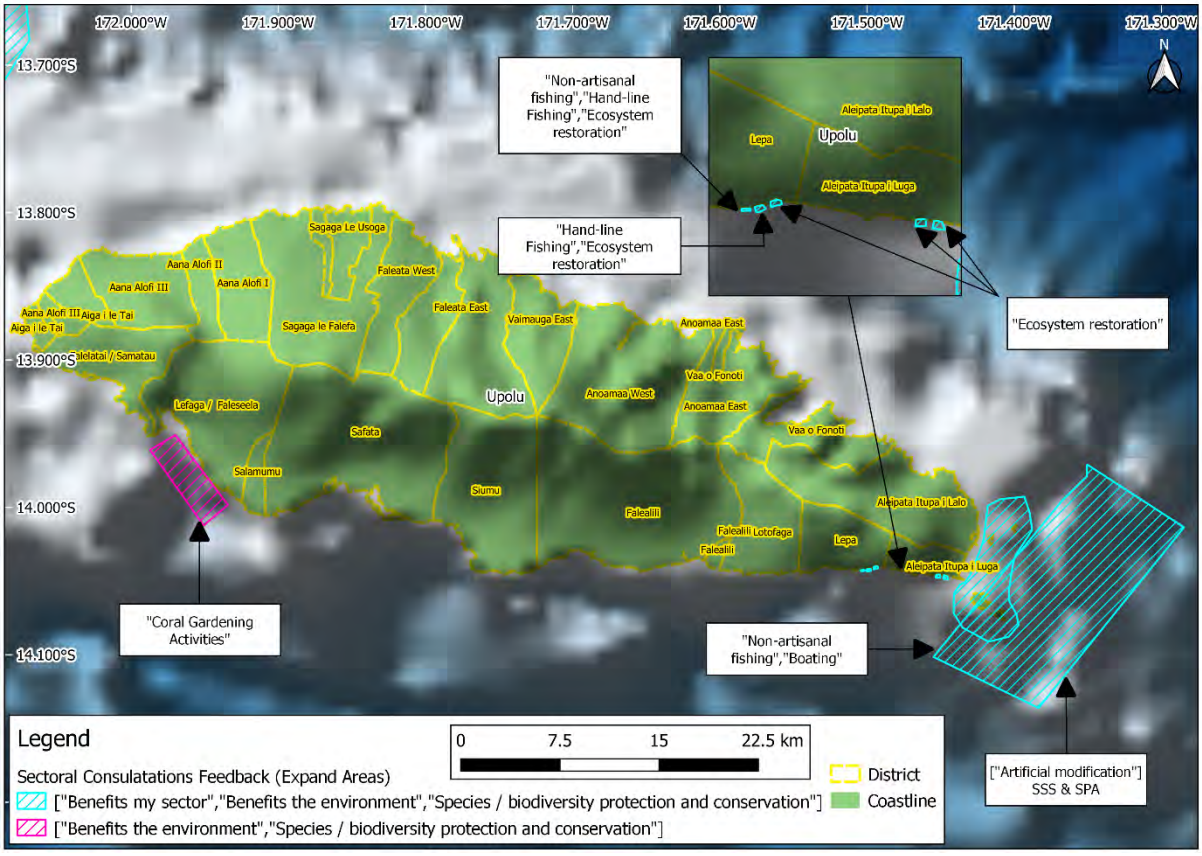


Figure 54. Activities that need to be expanded within the identified fishing areas in Upolu.

9. Recommendations arising from Consultations

The main challenges to managing the ocean as identified by stakeholders have highlighted the seriousness of the current situation faced by our marine environment and biodiversity. Overfishing, unsustainable fishing practices, damaging pollution, habitat destruction and other impacts of human activities in the sea and from land are causing increasing damage to coastal and marine environments.

Although there are current management systems to sustain the productivity, biological diversity and ecosystem services of marine ecosystems, it is unparalleled to the current rate of degradation and exploitation of the marine environment and biodiversity. The costs of this failure consequently impact the marine environment and resources and could jeopardize many benefits we can get from the sea. Many ecosystem goods and services we benefit from the sea, such as coastal protection, flood management, carbon sequestration and waste assimilation, will be compromised and at risk. Therefore, it is critical to managing these threats through a spatial Ocean Plan to manage our ocean sustainably for now and into the future. MPAs can help ensure continuity, and those service benefits are maintained by protecting the health of the sea and the marine ecosystems (Kenchington *et al.*, 2003).

The Ocean Plan thus provide a framework through the public consultation process to identify approaches and measures to improve the health of our ocean and achieve the economic, social and ecological objectives. Key outcomes from the national consultations have recommended coastal and offshore sites for potential future marine protected and managed areas to maintain and protect our ocean and sustain biodiversity.

9.1 Potential Future Coastal Ocean Management Areas

In the context of marine spatial planning, 89 coastal sites were identified and recommended by community stakeholders for potential future marine areas for management and protection by way of the marine spatial planning process. Forty-eight (48) of the sites are recommended for possible future MPAs, with 27 locations on Upolu Island and 21 on the big island of Savaii. A total of 41 sites identified during the community consultations have mangrove habitats and are recommended for potential future conservation and management areas.

Based on the MSP consultations' outcomes, most villages have indicated their coastal areas have suffered greatly from human activity impacts and are also prone to the effects of natural disasters. Many village groups reported their coastal resources to have declined dramatically due to overfishing, unsustainable and destructive fishing methods, and environmental disturbances. Placing coastal MPAs, including a well-connected network of fish reserves, will enhance the degraded coastal marine environment and resources and contribute to achieving the 30% protection commitment for Samoa's ocean. According to King *et al. (*2001), though these inshore no-take MPAs are smaller in size, their proximity forms an effective network of a large marine sanctuary around the coastal areas of the islands.

Some of these villages have been previously established 'no-take' fish reserves under the MAF Community-based Fisheries Management Programme. However, most of these village-based fish reserves no longer exist. During the community consultations, some village stakeholders have requested through the marine spatial planning process for re-establishing village-based marine protected areas. Nonetheless, several inshore marine protected areas are presently in place that is managed by communities.

Accordingly, the 'No-take' Marine Protected Areas (MPAs) are considered the best conservation tools available to protect marine species and habitats and conserve marine biodiversity (Ceccarelli DM *et al.,* 2017). Kenchington *et al.* (2003) articulated some known values of inshore and offshore No-take MPAs, which are also applicable should MPAs be established as part of the adopted Ocean Plan for Samoa. The values are reducing human pressure and helping protect the ecosystem services our marine environment provides. They represent our best chance to increase the sustainable quality of food, preserve species populations, biodiversity, and habitat and give species and habitats a buffer to withstand and recover from the large-scale, pervasive and unpredictable effects of climate change.

The potential future sites for management and protection purposes recommended for placement through the national ocean spatial planning process are listed in Table 4, characterized by typology.

9.2 Offshore Potential Future Ocean Management Areas

About 11% of the community groups consulted have indicated support for the placement of ocean management areas in the offshore region, including the protection and management of offshore-based SUMAs, especially the sites closer to the islands. Nevertheless, their major concern was the difficulty of monitoring offshore largescale ocean management areas.

From the outcomes of the sectoral consultations, almost all the stakeholders supported the MSP process and the setting up of offshore and inshore MPAs to protect marine species and habitats and conserve marine biodiversity. However, some of the Fisheries sector stakeholders opposed the idea of placing OMAs offshore. They recommended shifting most of the 30% protection commitment to the coastal region of the EEZ. However, the entire coastal marine spaces of Samoa are slightly less than 1% overall relative to the whole offshore areas. Any candidate OMAs to be established under an adopted spatial Ocean Plan for Samoa and to achieve the 30% protection commitment must derive from the offshore areas. The sectoral stakeholder perspectives on MPAs have been summarised in the sectoral consultation non-spatial results section.

Overall, most supported placement of offshore OMAs but need to space out than congregating in only some places. Although no specific OMAs were spatially identified and defined by the sectoral stakeholders for the protection or management of the ocean, they have demonstrated their support for MPAs via the marine spatial planning process by some willing to engage with communities in the setting up of protected areas. Furthermore, any OMAs to be established under the MSP should consider their concerns when defining the uses to restricted or limited and other uses to be allowed and expanded.

9.3 Other recommendations

Most of the solutions proposed as recommendations to address challenges and restricted activities impacting the sustainability of our ocean are summarised in previous sections. The following bullet points highlight the other general commendations separate from MPAs as suggested by the community and sectoral stakeholders.

- Better collaboration between the government, key partners, and communities/sectors in designing, developing and implementing conservation and management measures such as OMAs imposed through the MSP.

- Strengthen government and key partner's support efforts helping communities and sectors on conservation and management projects and actions to improve the health and sustainability of the Ocean and marine biodiversity.

- Need government and partner's support for the loss from impacts of adopted conservation and management measures of the Ocean Plan. Deploying offshore FADs, rebates and subsidies on gears, fuels, reserved EEZ for local fishers, and other assistance to compensate for the loss of catches and fishing areas for commercial and recreational fishers.

- An effective scientific research and sampling programme be used to assess and monitor the impacts of the MSP and especially the in-placed OMAs.

- Strengthening Monitoring and Enforcement capability and exploring the cost of the M&E ensure it will not impact sectors and communities negatively. Effective M&E will ensure that ocean users adhere to management areas and imposed conditions.

- Provide regular effective awareness and training for communities and sectors on the MSP and terms applied for each type of protected and managed area.

- Zoning specific inshore areas or areas beyond the reefs for largescale commercial sand mining by industries and control of mining activities through a quota allocation system annually.

- Protecting coastal marine areas with extensive damages and undertaking recovery actions in areas allocated for coastal OMA sites that are seriously depleted corals and habitat degradation. The protection and recovery of these sites can improve their resilience and self-repair from other stresses like increased sea temperature (bleaching) and strong waves.

- All stakeholders and partners to collaborate in executing, controlling and recovery activities to improve the status of the coastal ocean and ecosystem restoration by replanting live corals and mangrove seedlings, clearing and collecting programmes for marine rubbish and seaweeds, and other management works. For instance, communities and oceanfront tourism businesses collaborate in public to private partnerships to utilise areas around their operations to engage guests in replanting live corals to restore reef ecosystems.

- When designing OMAs for coastal and offshore regions of the EEZ, it is essential to consider the protection of critical sites for the reproduction and growth of species. Species settlement and growth spillover recruitment effect will improve stocks and biodiversity in other areas. About 30-50% of offshore species are less mobile and do not travel far, and they can be protected by LSMPAs (Ceccarelli *et al.,* 2017).

- Encourage village communities to expand or relocate their existing no-take fish reserves and potential future MPAs to include areas with biological representatives of different ecosystems and species in coastal zones that need protection and management for immediate recovery.

- Suppose offshore OMAs are set up under the adopted Ocean Plan to encourage stakeholder compliance and adherence to restrictions, particularly in the communities, fisheries, and tourism sectors. In that case, it is recommended to provide alternatives to address the concern of loss of fishing areas by providing more FADs and tools to reduce the interaction of fishing with marine species of special interest.

Table 4. Potential future protected sites identified by community stakeholders during consultation from 17 August to 12 November 2021.

Island	District	Villages	Marine Protected Area	Mangrove Protected Area/Replanting		Island	District	Villages	Marine Protected Area	Mangrove Protected Area/Replanting
Upolu	Aleipata Itupa-i-Lalo	Malaemalu		X		**Savaii**	Fa'asaleleaga 1	Saletagaloa/Foua	X	
	Lotofaga	Aufaga	X					Salogā	X	
	Falealili 1	Vaovai		X			Fa'asaleleaga 2	Salelavalu	X	X
								Iva	X	
	Siumu	Siumu Sisifo	X	X				Lalomalava	X	
		Siumu Sasae		X				Safua	X	
		Maninoa		X			Fa'asaleleaga 3	Safotulafai		X
	Safata 2	Mulivai Safata	X					Fatausi		X
		Fusi Safata	X					Fogapoa		X
		Vaiee	X				Fa'asaleleaga 5	Saipipi		X
	Safata 1	Lotofagā	X					Lano		X
		Sataoa		X			Gaga'emauga 2	Safa'i		X
	Falelata	Siufaga		X				Sato'alepai		X
		Matautu		X				Fagamalo		X
	Aiga-ile-tai	Faleu	X					Lelepa	X	
	Aana alofi 2	Fasitoouta	X				Gagaifomauga 1	Salei'a		X
	A'ana alofi 3	Nofoalii	X					Manase		X
	Aana alofi 4	Fasitootai		X			Gagaifomauga 2	Samauga	X	
		Faleatiu	X					Lefagaoali'i		X
		Satapuala	X					Fatuvalu	X	X
	Sagaga 4	Utualii	X				Gagaifomauga 3	Aopo	X	
		Salepoua'e & Lotoso'a	X				Vaisigano 2	Auala	X	
		Alamutu		X				Vaisala	X	
	Sagaga 1	Faleula	X	X				Sataua		X
	Sagaga 2	Afega	X					Papa Sataua	X	
		Tuana'i		X			Salega 1 & 2	Vaipu'a	X	
	Sagaga 3	Leauvaa	X					Fagafau	X	
	Faleata 1	Lepea/Vaitoloa		X				Fogasavai'i	X	
	Faleata 3	Vaitele	X	X				Fogatuli	X	

	Faleata 4	Toamua	X	X			Palauli 1	Siutu		X
	Faleata 4	Puipaa	X	X				Taga	X	
	Vaa-o-Fonoti	Uafato Fagaloa	X				Palauli 2	Puleia	X	
	Anoama’a 2	Faleapuna	X				Palauli 3	Vailoa	X	
		Fusi, Saoluafata		X				Vaito’omuli		X
	Anoama'a 1	Luatuanuu	X					Fa’ala	X	
		Eva	X				Satupa’itea	Pitonuū		X
		Salelesi	X	X				Moasula		X
	Vaimauga 1	Vailele	X					Vaegā		
		Letogo	X	X						
		Moata’a		X						
		Vaiala		X						
	Vaimauga 2 & 3	Vaipuna	X	X						
	Vaimauga 4 & Vaiala	Sogi/Saleufi/Fugalei		X						

10. Lesson learnt from the implementation of the National Consultation

10.1 Gaps and recommendations during the implementation of consultations

Several areas have been noted during the implementation of the first round of community consultations for ocean planning that need improvement before the next phase of national talks. The following bullet points list the lesson learned and gaps that arise.

- The covid-19 pandemic created several delays in the delivery of the phase 1 national consultation output due to the SOE lockdown restrictions, which prevent mass gatherings like the consultations with communities and national stakeholders from happening as initially planned. It is recommended that other options be explored like sending questionnaires via internet means or distributing hard copies to be completed by stakeholders to solicit relevant information for the development of the Ocean Plan

- The availability of the SeaSketch tool helps capture and record the shared information from stakeholders promptly and speed up the analysis of non-spatial responses and spatial data. The tool helps fast-track the data analysis and develop spatial maps for the synthesised report. Further entering data into the SeaSketch tool was easy and quick as it corresponds well with the questionnaire developed and used in soliciting stakeholder information.

  However, it is recommended to include an allocated SeaSketch time (~hour) after consultations daily to ensure all data collected are immediately entered and uploaded before the end of the day to enhance the accuracy of data capture and minimise delays and potential data loss

- During the national consultation, there was a lack of collaboration and commitment from some Government Ministries and organisations with specialised knowledge to support the MSP process and the CCT. The unavailability of members has caused insufficient information channelled to participants on specific issues that arise during consultations. Moreover, work commitments have created a shortage of team personnel to service and engage with many village groups at some district consultations.

  Ministries and Organisations with ocean-shared mandates are recommended to support and collaborate in the second phase of the MSP process to achieve SOS objectives for the governance and sustainability of Samoa's entire ocean. Furthermore, ministries must allow dedicated and committed staff members to support the national consultation process throughout the planned timeframe.

- Some venues selected to host community consultation workshops were not adequately suitable for hosting many people attending the workshops and did not have the proper facilities to cater for such gatherings.

  It is recommended to take pre-consultation site visits to unfamiliar sites to ensure venue location and space are fit for purpose. Hiring PA systems from venues to minimise equipment lugged daily was also recommended. This option will improve comfort and safety for team travel, reduces setup

time upon arrival, and allows the team to focus more on content, engagement with the community, and capturing information.

- Communications with village focal points were not very clear and understood. During some consultations, the participants had minimal knowledge of the reason why they participated in the consultations. Some instance, Reverend Ministers were poorly informed of their role and the objectives of the consultation during the invitational process.

  The poor and disproportionately attendance by some village communities due to the failure of *Pulenuu* and *Sui Tamaita'i*, as village contact points, to appraise their communities and help select the relevant members and numbers to attend the consultations. Moreover, the invitation shared to inform the community about the workshop is sometimes very late.

  Proper and clear communication, information on the subject and objectives must reach village *Pulenu'u,* and *Sui Tamaita'i* well was recommended to facilitate a better selection of village sector reps to attend consultation meetings. Furthermore, a sufficient pre-consultation awareness program must be broadcasted sufficiently in advance to inform village people about the MSP process, and its objective before they attend the MSP process.

- The accommodations arranged for the CCT to stay away from home were generally satisfactory. However, in some cases, the places selected were not ideal and comfortable for the team's week-long stays away from home and for the team to work and review the day's consultation. It is suggested that future accommodations be selected considering the duration of stays and be conducive for team meetings with available facilities supporting entering data gathered from consultations.

- The printed MSP informational materials in Samoan and other related topics were not fully integrated into the phase-1 community consultations. The distribution of materials was discontinued as infographics distributed were discarded at the end of community consultations. The printed infographic materials and summary reports on the Ocean planning process, SUMAs, Bioregions, and MESV were available for the sectoral consultations.

  It is recommended for the Team to be more creative and intentional in how the supporting resources like pamphlets and infographics are integrated into the consultation programmes. Part of this is an in-depth discussion at a retreat when designing workshop layout and content.

- Clear Lines of Communication must be shared with the whole CCT team and ensure it is well understood beforehand. This line of commands ensures the flow of information is in an appropriate and timely manner and avoids misunderstanding. This communication measure ensures that everyone's role and input are respected.

- Like clear lines of communication, the Team must be clear of their roles and responsibilities. Where appropriate, these roles must rotate to team members to reduce "repetitive fatigue-ness". For urgent matters, it is recommendable to circulate a names and contacts list of key MSP management contacts.

- The consultation programme should include some ice-breakers (fun bits) to break throughout the day better to manage the communities' and team's energy levels.

- Presentations in general; colours, font size, and images need to be appropriately selected to ensure presentations are visible to the audience, especially since most venues in the villages are open buildings with little control over light. Furthermore, the presenters must be careful of repetitiveness in materials and presentations.

- For safety, when travelling long distances and throughout the entire week, at least two possible drivers per vehicle to ensure drivers are well-rested when at the wheel. In particular, the team commuted daily back and forth from Apia to the outer host villages for consultations.

- Although there were debriefing meetings to review the day's work, it is suggested to have debriefing meetings after any community or sector consultations to evaluate the team's performances and determine if specific information shared by community representatives needs verification before the team moves onward to the next district.

10.2 Planning

The effective collaboration amongst all the partners has been attributed to better planning, coordination and implementation of the phase-1 community and sectoral consultation process. The professional teamwork between the local-based and the overseas-based members of the consultation core team has been able to plan and develop consultation programs, agendas, questionnaires schedules, logistics and informed information. IUCN, with its technical team and the Waitt Foundation and Waitt Institute professionals, have collaborated efficiently with the local team to deliver a well-planned MSP national consultation programme.

However, the Covid-19 national lockdowns have created problems in the planning and scheduling since the first round of consultations started. Because of the covid-19 lockdowns, the roll-out date for phase one was deferred from March 2021 to August 2021. Similarly, the covid-19 lockdown in earlier 2020 saw the sectoral consultation delayed from Dec 2021 to March 2022.

Securing the longterm commitment for members of the CCT from other government ministries and organisations to conduct and support the MSP national consultations process is an additional constraint due to their work commitments.

10.3 Logistics

Planning and arranging logistics, including accommodations and travels, were generally satisfactory but average in some cases. The arrangement of logistics in the future must consider the duration the team will be away from home and consider places that offer an environment that allows for team meetings, discussions and planning for tasks. For travelling, the safety of CCT must be regarded when planning whether to commute to venues far from the main headquarters in Apia. Furthermore, two dedicated drivers must be allocated when shuttling the team to and fro to consultation venues and headquarters.

10.4 Communication

Communications of some aspects of the consultation process did not filter down to members of the CCT during the implementation of community consultations. In some cases, the team do not know the locations of venues, changes in consultation programmes, whether to be accommodated overnight or commuting from Apia and changes in meal value limits from time to time at hotel stayed.

Therefore, clear lines of communication must be shared with the whole CCT team and ensure it is well understood beforehand. This strategy provides the flow of information in an appropriate and timely manner and avoids misunderstanding.

Like clear lines of communication, the Team must be clear of their roles and responsibilities. Where appropriate, these roles must rotate to team members to reduce "repetitive fatigue-ness". For urgent matters, it is recommendable to circulate a names and contacts list of key MSP management contacts.

10.5 Field reports

Ten field reports for community consultations and the sectoral consultation report summarises feedback collected during weekly ocean planning consultation workshops. The field reports briefly summarise the consultation method and agenda program and the shared non-spatial information received from the community and sectoral stakeholders. The field reports are attached to this main report as Annexes 15.1 to 15.11

10.6 Organisation/Team

The commitment of members of the Team from other Ministries is very important to ensure their engagement during the entire national consultation process. It is vital to engage professional staff from relevant Ministries and organisations as they have the knowledge and wealth of information to provide brief stakeholders on related issues raised during the consultation process.

Alternatively, securing and guaranteeing the total commitment of a CCT throughout the consultation process, the project needs to look at recruiting and training temporary personnel. The temporary personnel will work uninterrupted with staff from the MNRE (Mapping unit, MET, DEC), CI and SUNGO to deliver the consultations outputs.

For preparing the CCT, 16 staff from 5 government ministries and organisations and two from Conservation International have been trained on the MSP consultation methodology. In addition, several have attended the pilot consultation exercises. Nevertheless, only four government ministries and corporations have released staff members supporting the entire first round of MSP national consultations. Staff members from MAF, MWIT, STA and SSC have helped the entire community consultation process from 17 August to 12 November 2021 and the national sectoral consultations from 1 to 4 March 2022.

10.7 Approach

The approach and method used for consultations with community stakeholders were culturally relevant and appropriate. For welcoming guests from different district villages, the CCT is traditionally greeted using the Ava ceremony. Subsequently, the official welcome for the MSP community consultation programme started with an opening prayer followed by an official remark to welcome the participants. An invited reverend from the host village offered the opening prayer. The programme was designed specifically to maximise dialogue and consultation duration with stakeholders, hence the absence of the time-consuming traditional *Ava* ceremony.

Excluding the actual *Ava* ceremony during the opening ceremony helps afford more time for plenary sessions and group consultations to retrieve more valuable data than spending substantial time on

the traditional ceremony and prolonging the programme. The approach was endorsed by the planning team and implemented in every district consultation with respect to the Samoan tradition and culture.

After each consultation, community stakeholders were formally acknowledged and thanked for their participation and for sharing valuable information. An opportunity was also extended to a representative of the participants for any last word. This opportunity also for the host village to present their traditional *Ava,* if any, for a meeting completed successfully. As the Samoan saying is, " *Ua sili ofe le seuga ina ua a'e fa'atamasoali'iga",* meaning a task or a hopeful mission is accomplished.

11. Conclusion and Next Steps

The first public consultations on ocean spatial planning provide a framework for the national stakeholders to provide relevant and worthwhile information and views to guide the development of an Ocean Plan. The spatial ocean planning (MSP) tool to be adopted will apply to managing Samoa's ocean now and in the future. An adopted plan will not replace the existing ocean management regimes in place but will supplement measures to improve the sustainability of the ocean and the protection of the marine environment and marine biodiversity.

During the first round of MSP national consultations, a full array of non-spatial and spatial information shared by the community and sectoral stakeholders on ocean uses, challenges and possible solutions were collected. It was evident from the feedback that community and sectoral stakeholders significantly utilised the sea for economic, development, management and social and cultural activities. Coastal fishing and offshore fishing were the main economic and social activities for many community households and sectoral businesses generating incomes and providing sustenance for households. The coastal and marine resources and biodiversity through commercial and subsistence fishing activities offer tangible and measurable benefits to families, businesses and the government.

Tourism and recreational activities were the second main economic activities for community and business operators. The stakeholders identified that tourism and recreational activities depend significantly on the ocean's health and ecosystems, such as lovely beaches and clear, clean waters. Other vital uses and activities identified range from mining sand for subsistence and commercial works, community swimming and the undertaking of management activities such as fish reserves and mangrove protected areas and replanting to preserve biodiversity and conserve the marine environment.

Utilising the ocean, its resources and biodiversity for the benefit of stakeholders has created many challenges that adversely impacted the ocean, marine environment and biodiversity. Key results from the national consultation process revealed that Samoa's ocean confronts many environmental, biodiversity, land-based, coastal and marine development challenges. Climate change was viewed by stakeholders as the most significant dramatic challenge to be faced by the ocean. Seaweed overgrowth on many coastal coral reef areas has been recognised to cause the depletion of reefs, fewer fish and the loss of marine habitats. The extensive use of unsustainable fishing practices and methods by coastal communities resulted in the overexploitation of lots of fishery species. Subsequently, extensive use of destructive fishing practices degraded marine ecosystems such as coral reefs. Coastal and marine development is also noted to have caused a high level of siltation and turbidity of the ocean and led to the loss of many shore bivalve and mollusc fishery species. Land-based pollution in the form of agrochemical, farmed animal wastes and soil runoffs discharged directly into the seas, causing seaweed overgrowth and degrading the inshore marine environment.

The <15m class fishing vessel operators complained of restricting their activities within the 50 nautical miles surrounding the island despite its safety issues. Furthermore, they considered that the >15m fishing vessel class harvested most of the tuna before moving into their fishing zone. The main challenge considered by the <15m vessel class that will risk the sustainability and viability of operations are the small size of the 50 nautical miles reserved zone and fewer fish available within the area.

Major challenges faced by our marine environment and biodiversity, as identified by the national stakeholders, attested to the fact that effective conservation and management efforts are needed to improve the ocean's health. More than 80% of community stakeholders who participated in the MSP national consultation process supported the sustainable management and protection of Samoa's ocean via the MSP approach. Most sectoral representatives also backed the MSP process and the ocean management by placing OMAs despite some significant concerns. In spatial ocean planning, 91 inshore sites have been proposed for potential future management and conservation purposes. However, some representatives of the >15m class fishing vessels showed opposition to the placement of OMAs offshore and desire to move all OMAs to the inshore areas.

Any government decision to establish offshore OMAs under the MSP must consider the current challenges faced by the commercial offshore fishers and other sectors. The Fisheries sector viewed the placement of offshore OMAs as jeopardising the sustainability and vulnerability of their operations because of the loss of fishing areas.

In light of all the information and opinions shared by stakeholders during the national consultation process for ocean planning, it is concluded that there is a critical need to strengthen the management of our ocean. Presently, only 1% of Samoa's ocean is protected. These protected areas are community-based fish reserves, district-wide inshore MPAs, marine key biodiversity areas, and mangrove protected areas. However, it is essential to elevate the local management effort through a spatial Ocean Plan, ensuring the health of our ocean will be improved and biological diversity and the marine environment will be sustainably managed and protected for the future.

Finally, the next step in the marine spatial plan development stage is the development of draft spatial maps based on the outputs of the first round of consultations. The draft spatial maps will be the basis of a zero-draft Ocean Plan to be considered and reviewed by the general public during the second round of MSP national consultations. It is envisaged to roll out the second national consultation from September 2022 to solicit feedback on the Zero-draft MSP map and finalise the Ocean Plan. An outcome of the second round of public consultation will be a spatial Ocean plan that includes potential locations for OMAs, areas identified for development, areas for protection, areas where specific uses will be limited, and other uses will be expanded and promoted. The final phase for the development of an Ocean Plan for Samoa will be the third national consultation process that involves educating the general public about the Plan and generating their awareness of what types of OMAs to be placed and what uses are allowed, and what activities are restricted or banned within each ocean management area.

12. References

1. Ceccarelli D.M. & Fernandes, L (2017) . *The value of offshore marine protected areas for open habitats and species.* Report to MACBIO project. Suva: GIZ, IUCN, SPREP.

2. Ceccarelli D, Davey K and L Fernandes 2018. *Developing a Marine Spatial Plan: a toolkit for the Pacific*. MACBIO (SPREP/IUCN/BMU): Suva, Fiji.

3. Ceccarelli DM, Wendt H, Kaitu'u J, Mulipola A, Satoa M and Chinnamma R (2020). *Biophysically special, unique marine areas of Samoa*. GCCA+ (The EU, MNRE, IUCN), Suva Fiji.

4. Ceccarelli DM, Wendt H., Kaitu'u J., Bhurrah, M., Mulipola A., and Chinnamma R. (2021). *Marine Bioregions of Samoa*. GCCA+ (The EU, MNRE, IUCN), Suva Fiji.

5. Charles Ehler and Fanny Douvere (2009). *Step by step toward Marine Spatial Planning. Intergovernmental Oceanographic Commission Manual and Guides* No.53, ICAM Dossier No. 6.

6. Ehler, Charles, and Fanny Douvere. 2009. "*Marine Spatial Planning: A Step-by-Step Approach toward Ecosystem-Based Management*.Pdf." Intergovernmental Oceanographic Commission and Man and the Biosphere Programme, IOC Manual and Guides No.53. http://unesdoc.unesco.org/images/0018/001865/186559e.pdf.

7. Gillett, R. (2014). *Pacific Perspectives 2014. Pacific perspectives on Fisheries and Sustainable Development.* UNESCAP, UN.

8. Kenchington, R., Ward, T., & Hegerl, E. (2003). *Benefits of Marine Protected Areas.*

9. King, M., Faasili, U., & Mulipola, A. (2001). *Community-based Management of Subsistence Fisheries in Samoa.* Apia: Ministry of Agriculture Forestry Fisheries & Meteorology.

10. Malaki, I. (2006). *Mangroves of Samoa: Status and Conservation*. Ministry of Natural Resources and Environment. 40pp.

11. Ministry of Natural Resources and Environment. (2015). *Samoa's National Biodiversity Strategy Action Plan 2015- 2020.* Apia: Ministry of Natural Resources and Environment.

12. Ram-Bidesi, V., Siamomua-Momoemausu, M., & M. Faletutulu (2014). *Valuation of mangroves of Safata district,* Samoa report. Ministry of Natural Resources and Environment.

13. Ram-Bidesi, V., Mulipola, A., Wendt, H., Reddy, C., Kaitu'u, J. & Gauna, M. (2021). *Samoa Marine Ecosystem Service Valuation*. GCCA+ (The EU, MNRE, IUCN), Suva, Fiji. 155 pp.

14. Rose, J (2021). *Law and Policy Review: in support of the Marine Spatial Planning in Samoa*. GCCA+ (The EU, MNRE, IUCN), Suva, Fiji. 140 pp.

15. Tiitii, U., Sharple, P., & J. Ah Leong (2014). *Samoa Socio-economic Fishing Survey Report*. Ministry of Agriculture and Fisheries, Fisheries Division, Apia.

16. Paeniu, L., Lese, V., & Combes, J. D. (2015). *Coastal Protection: Best Practices for the Pacific.* USP, Suva: Pacific Centre for Environment and Sustainable Development (PACE -SD).

13 Appendices

13.1 Members of the MSP National Consultation Core Team

List of members of the MSP Consultation Core Team (CCT) that supported and conducted Community Consultations from 17th August to 12th November 2021

Name	Position	Ministry/Organisation
Fuimaono Vaitolo Ofoia	Chief Executive Officer	SUNGO
Seumalo Afele Faiilagi	ACEO (DEC)	MNRE
Leilani Duffy-Iosefa	Chief Executive Officer	Conservation International (CI)
Danita Strickland	Marine Programme Manager	Conservation International (CI)
Fatutolo Iene	Marine Conservation Officer	MNRE (DEC)
Fimareti Selu	Marine Conservation Officer	MNRE (DEC)
Fini Male	Terrestrial Conservation Assistant	MNRE (DEC)
Henry Letaulau	Senior Mapping Officer	MNRE (Mapping)
Lleyton Tepa	Mapping Assistant Officer	MNRE (Mapping)
Justin Alatimu	Mapping Officer	MNRE (Mapping)
Seumanufagai Malae	Driver/Cultural personnel	MNRE (Corporate Service)
Mata'ia Tauvae Su'a	Senior Fisheries Officer	MAF (Fisheries Division)
Malaeulu Mamoe Gie	Fisheries Officer	MAF (Fisheries Division)
Agelu Mua	Fisheries Assistant	MAF (Fisheries Division)
Julie David	Senior Strategic Planning & Development Officer	MWTI (PUMA)
Malaea Mariner	Senior Strategic Planning Officer	MWTI (PUMA)
Solomona Matagi	Safety Officer	Samoa Shipping Corporation
Marita Ah Sam	Principal Planning Officer	Samoa Tourism Authority
Faleafaga Tony Tipama'a	EC Board & Consultant	SUNGO & Samoa Conservation Society
Figota Manuele	EC Board member	SUNGO
Leilani Atoa	Finance Officer	SUNGO
Tiaremoana Saio	A/Research Officer	SUNGO
Iairo Wongling Tala	Research Officer	SUNGO
Atonio P. Mulipola	Local Project Coordinator	MSP Project

List of members for the CCT who supported and conducted the Sectoral Consultations from 1st to 4th March 2022.

Name	Position	Ministry/Organisation
Seumalo Afele Faiilagi	Assistant Chief Executive Officer	MNRE (DEC)
Mulipola Atonio P.	Local Project Coordinator	MSP Project
Danita Strickland	Marine Programme Manager	Conservation International (CI)
Maryanne Lesa	Intern	Conservation International (CI)
Maria Satoa	Principal Marine Conservation Officer	MNRE (DEC)
Fatutolo Iene	Marine Conservation Officer	MNRE (DEC)
Fimareti Selu	Marine Conservation Officer	MNRE (DEC)
Henry Letaulau	Senior Mapping Officer	MNRE (Mapping)
Lleyton Tepa	Mapping Assistant Officer	MNRE (Mapping)
Justin Alatimu	Mapping Officer	MNRE (Mapping)
Taua Auatalavou Tauaefa	Principal Fisheries Officer	MAF (Fisheries)
Su'a Sapeti Tiitii	Principal Fisheries Officer	MAF (Fisheries)
Lorian Finau	Principal Fisheries Officer	MAF (Fisheries)
Malaea Mariner	Senior Strategic Planning Officer	MWTI (PUMA)
Solomona Matagi	Safety Officer	Samoa Shipping Corporation

13.2 The numbers of community and sectoral participants by gender

Island	District	Male	Female	Youth	Total
Upolu	Aleipata Itupa-i-Lalo	46	26	9	72
Upolu	Aleipata Itupa-i-Luga	42	57	11	99
Upolu	Lepa & Lotofaga	31	41	14	72
Upolu	Falealili 2	26	27	7	53
Upolu	Falealili 1	29	42	4	71
Upolu	Siumu	39	30	4	69
Upolu	Safata 2	28	25	14	53
Upolu	Safata 1	40	32	7	72
Upolu	Lefaga & Faleseela	15	20	3	35
Upolu	Samatau & Falelatai	30	6	1	36
Manono	Manono Island	26	36	7	62
Upolu	Aiga-ile-tai	36	56	16	92
Upolu	Aana 4	53	26	10	79
Upolu	Aana 1,2,&3	26	22	6	48
Upolu	Sagaga 4	33	20	2	53
Upolu	Sagaga 1,2,& 3	26	45	6	71
Upolu	Faleata 3 & 4	33	10	8	43
Upolu	Faleata 1 & 2	20	46	7	66
Upolu	Vaa-o-Fonoti	37	33	10	70
Upolu	Anoama'a 1	31	27	17	58
Upolu	Anoamaa 2	31	25	6	56
Upolu	Vaimauga 1	25	36	3	61
Upolu	Vaimauga 2 & 3	20	26	1	46
Upolu	Vaimauga 4 & 5	19	9	5	28
Savaii	Fa'asaleleaga 1	16	27	9	43
Savaii	Faasaleleaga 2	40	22	5	62
Savaii	Faasaleleaga 3	43	19	8	62
Savaii	Faasaleleaga 4	38	32	11	70
Savaii	Faasaleleaga 5	46	30	7	76
Savaii	Gagaemauga 1	32	27	9	59
Savaii	Gaga'emauga 2	38	41	14	79
Savaii	Gagaifomauga 1	28	15	6	43
Savaii	Gagaifomauga 2	39	21	3	60
Savaii	Gagaifomauga 3	42	23	12	65
Savaii	Vaisigano 1&2	36	18	8	54
Savaii	Falealupo & Alataua-sisifo	30	26	6	56
Savaii	Salega 1&2	38	20	5	58
Savaii	Palauli 1	46	24	11	70
Savaii	Palauli 2	19	26	6	45
Savaii	Satup'aitea	55	38	8	93
Savaii	Palauli 3	25	28	11	53
	TOTAL	***1,353***	***1,160***	***317***	***2,513***

Sector	**Male**	**Female**	**Youth**	**Total**
Tourism	9	8	1	17
Fisheries	20	13	4	33
Government	12	8	13	20
NGO/CSO	10	4	0	14
TOTAL	***51***	***33***	***18***	***84***

13.3 MSP Community consultation agenda programme

Taimi ***Time***	**Polokalame & galuega faatino /** ***Program & activities***	**Tagata e faatinoina le galuega/folasaga/** ***Person responsible***
9:00-9:30 am	Faafeiloa'iga & faailoa le auva'a a le MSP / *Official opening* • Upu faafetailoa'I & Fa'ailoa le Auva'a a le MSP / *Welcoming* • Tatalo amata / *Opening prayer* • Saunoaga autu / *Opening remarks* • Fa'agasologa o le Soalaupulega / *Overview of program*	Fuimaono Vaitolo, SUNGO rep Faafeagaiga a le nu'u / *Villiage Pastor* Seumalo Afele, ACEO Mulipola Atonio (PC)
9:30 -9:40 am	Malu taeao & pu'e ata o sui auai o le Soalaupulega *Morning tea & group photos*	
9:40-10:00 am	Folasia le faamoemoe / *MSP process & objectives* *La'asaga mo le fatufatuga o se Fuafuaga Autasi mo Ogasami Faasao Faapitoa* (*Presentation on MSP process & objectives; Showing MSP video)*)	Mulipola Atonio (Project coordinator)
10:00-10:20 am	Fesili ma tali / *Q&As*	
10:30 -1:00 pm	Soalaupulega a vaega eseese / *Group sessions – village representatives break out for their group discussions.*	Mo faapotopotoga taitasi, e moomia ona filifili se: Failautusi, Ta'ita'i/Faatonu, Fofogaina le folasaga *Each village group is to select a leader, scribe and presenter(s)*
1.00 – 2:30 pm	Folasaga mai Vaega ta'itasi / *Village group presentations*	Sui o vaega ta'itasi /*Village group presenters*
2:30 -2:40 pm	La'asaga agai i luma / *Next steps*	Mulipola
2:40- 3:00 pm	Tapunia o le Soalaupulega / *Closing* • Upu faafetai / *Word of thanks* • Fetalaiga a le Itumalo / *Village respond* • Tatalo faai'u / *Closing prayer*	Sui o le SUNGO Sui o le Itumalo/nu'u Faifeau/sui o le nu'u

13.4 MSP Community Consultation Questionnaire Sheet

Are you taking this survey for somebody else?

- Yes/No

SeaSketch Respondent

Village:

1. How many people are represented in this response: *What activities do you do in your ocean space? | Oa ni galuega o faatinoina i totonu o la outou gataifale poo ni auala foi o faaaogaina ai e le afioaga le gataifale?*

Dropdown Menu

A. Fishing for commercial use
B. Fishing for subsistence
C. Tourism activities
D. Sewerage disposal
E. Mining
F. Waste dumping grounds
G. Aquaculture
H. Mangrove planting

I. Community leisure Swimming

Others:_____

Please indicate on the map?

1.a Do you own a vessel? ☐ Yes ☐ No

If so, what type of craft or vessel is used to conduct these activities in the 3 above?

A. Canoe
B. Fiberglass Boat
C. Fishing Vessel
D. Barge
E. Ship
F. Traditional vessel

Others:_____

1.b What activities from the question above do you think should be restricted in the ocean space? What is your justification for restricting these activities? (Please indicate and label clearly on the base maps provided)

A. Costly
B. Damaging to the marine environments
C. Species extinction/endangerment

Others: _____

1.c What activities from the question above would you like to see expand/grow within your ocean space? What is your justification for expanding these activities? (Please indicate and label clearly on the base maps provided)

D. Costly
E. Damaging to the marine environments
F. Species extinction/endangerment

Others: _____

**please note q's 1.a 1.b and 1.c are to be repeated for every single activity identified in Q1.*

2. Are there any form of marine protection in your community? Yes No

If yes, select the type(s) of protection present in your community (Please indicate and label clearly on the base maps provided):

A. Community Based Management Areas

B. Not Take Zones

C. Species restrictions during spawning seasons

D. Traditional management efforts

Others:_____

(Sub-features Stakeholder responsibility/ involvement, Government involvement)

2.a What challenges (circle) do you face in managing your marine spaces within your communities and at different scales (Please indicate and label clearly where necessary on base maps provided):

A. Lack of commitment from the community
B. Lack of effort from the Government
C. Lack of funding
D. Lack of resources (capacity, infrastructure)
E. Exploitation of marine resources
F. Poor/unsustainable fishing methods
G. Unsustainable farming practices
H. Land-based pollution
I. Climate change

Others:_____

2.b Suggest some solutions to the challenges you have listed above and how you want governments/stakeholders or other partners to be involved.

**please note q's 2.a and 2.b are to be repeated for every single activity identified in Q1.*

3. Please indicate any other important areas you use and value in your ocean space. These might include cultural sites, essential ecosystems, or areas important to other activities. There also might include degraded areas in need of better management or areas you've noticed specific problems. These could also be places where important species have been viewed.

please drop a marker on the map and as many as necessary

13.5 MSP Sectoral Consultation Questionnaire Sheet

1. Which Sector do you represent? / *O ai le Vaega o lo'o e auai ai*?

   - Tourism /*Turisi*
   - Commercial fisheries / *Faigafaiva faapisinisi*
   - NGO's/CSO's / *Faalapotopotoga tumaoti / Sosaiete a le nu'u*
   - Government / *Malo*

2. Is this a group or individual response? / *O e tali mo se Vaega po'o mo oe lava*?
   - Individual/group / *Mo a'u/Se vaega*

3. If the group responds, please indicate the number of participants represented in the recording? / *Afai o se Vaega, faamolemole faailoa mai pe to'afia tagata e aofia i lenei pepa-tali*?
   - Numeric input or range / *Aofaiga o tagata*

Tourism / Turisi

1. What type of tourism activity do you carry out in Samoa's ocean space? / *O le ā le ituaiga o atina'e faaturisi o lo'o e faia i le sami o Samoa.*

   (Multiple-choice menu, enable multiple checking options please) /

   A. backpacker resort/beach fale / *Fale nofo tumatafaga mo turisi*

   B. homestay accommodation / *Faletalimalo fa'aāiga*

   C. beachfront hotels/resorts / *Faletalimalo tetele tumatafaga*

   D. diving, surfing / *Maūlu ma Fa'ase'ega*

   E. recreational and game fishing / *Faigafaiva fa'atafaoga/fa'atauvaga*

Others: _____

   Please indicate on the map clearly where you conduct activities within your area of operation. Please label clearly each entry to distinguish between activities. (Multiple polygon or point entry) / *Faamolemole, fa'ailoa mai i luga o le fa'afanua ia vaega o le sami o lo'o faatino ai au gaioiga mo lau atina'e? Faamolemole, ia tusia manino mai gaioiga eseese ina ia iloa lelei galuega ta'itasi. (Ata eseese)*

2. Is your tourism operation considered? / *O le a se telē o lau atina'e faaturisi*:

   A. Large (>100 guests) / *Telē (sili atu ma le 100 tagata)*

   B. Medium (50-100 guests) / *Feoloolo (50-100 tagata)*

   C. Small (<50 guests) / *Laititi (lalo o le 50 tagata)*

3. Is there any form, shape or value of MSP (SUMAs, KBAs, MPAs, Bioregions, fish reserves, Cultural sites) existing in your current area of operation? / *E iai ni vaega taua (Ogasami faapitoa, Nofoaga autu mo meaola, Ogasami fa'asao a nu'u, Ogasami fa'alenatura, Nofoaga fa'aleaganu'u) i le sami o lo'o e fa'aaogaina i lau atina'e?*

   Yes/No Ioe/Leai

   If "yes", please provide examples: */ Afai o le "ioe", faamolemole faailoa mai se fa'ata'ita'iga*:

   A. Community Based Management Areas ? / *Ogasami o loo pulea e nu'u ma afioaga*

B. Not Take Zones / *Ogasami fa'asao*

C. Species restrictions during spawning seasons / *Nofoaga puipuia o loo tautuufua ma fanafanau ai meaola*

D. Key Biodiversity Areas / *Nofoaga autu o meaola*

E. Traditional management efforts / *Puipuiga ma pulega faaleaganu'u*

F. Cultural sites / *Nofoaga ma talatu'u fa'aleaganu'u*

Others/Isi:_____

4. Are there any activities currently located within your respective area of operation that should be restricted? / *E iai ni gaioiga po'o ni atina'e o lo'o fa'atino i le sami o loo e fa'aaogaina i lau atina'e e ao ona faaitiitia?*

Yes/*Ioe* No/*Leai*

a) What is your justification for restricting these activities? (Please indicate and label clearly on SeaSketch or base maps provided) / *O le a sou manatu mo le faaitiitia o nei gaioiga?* (*Fa'ailoa ma tusia manino mai i luga o le pepa faafanu'a ipo'o fa'afanua i le seasketch)*:

A. Costly / *Taugata*

B. Damaging to the marine environments / *Fa'aleagaina ai le si'osi'omaga o le sami*

C. Species extinction/endangerment / *Fa'aumatia/Lamatia o meaola o le sami*

Others/ Nisi:_____

5. What challenges (select) does your sector face in managing your marine space? (Please indicate and label clearly where necessary on base maps provided): / *O ā ni lu'itau ma fa'afitauli o lo'o feagai ma le Vaega (sector) i le pulea tatau ma le puipui o vaega o le sami* (*Fa'ailoa ma tusia manino mai i luga o le faafanu'a ia li'utau)*:

A Lack of commitment from community / *Vaivai le lagolago mai a nu'u ma afioaga*

B Lack of effort from Government / *Le lava se lagolago ma i le Malo*

C Lack of funding / *Le lava tupe*

D Lack of resources (capacity, infrastructure) / *Utiuti le silafia, agava'a ma meafaigaluega*

E Exploitation of marine resources / *Soona fa'aaogaina punaoa o le sami*

F Poor/unsustainable fishing methods / *Faigafaiva ma metotia le talafeagai*

G Unsustainable farming practices / *Faiga faatoaga le talafeagai*

H Land based pollution / *O'ona mai gaioiga mai galuega i laufanua*

I Climate change / *Suiga o le tau*

Others/Isi:_____

6. What are some solutions your sector has taken or proposed to address the challenges above? / O *ā ni fofo ma ni fautuaga e tali atu ma foia ai lu'itau ma fa'afitauli ua taua,*

a) Identify what role governments or relevant/key stakeholders would play in supporting these solutions? / *Faailoa ma pe faapefea ona fesoasoani le Malo po'o pa'aga autu e lagolagosua i le faatinoga o fofo ma tali ua faailoa mai?*

7. Are there any activities currently located within your area of operation that should be expanded or further developed? / *E iai ni gaioiga o loo fa'atino i ogasami o loo fa'aaogaina i lau atinae e ao ona faalautele pe atina'e fa'aauau?*

   a) What is your justification for expanding these activities? (Please indicate and label clearly on the base maps provided) / *O le a sau mau i mafuaga e ao ai ona faaluteleina pe atina'e pea nei gaioiga?*

      A. Costly / *Taugata*

      B. Damaging to the marine environments / *Fa'aleagaina ai le si'osi'omaga o le sami*

      C. Species extinction/endangerment / *Fa'aumatia/Lamatia o meaola o le sami*

      Others/*Nisi*:_____

      (Open-ended text entry. Limit characters please)

8. Please indicate any other important areas that you use and value in your area of operation. / *Faamolemole, faailoa mai nisi vaega o le sami e taua ia te oe ma o lo'o e fa'aogaina mo lau atina'e.*

   These might include cultural sites, important ecosystems, or areas important to other activities. There may also include activities within Samoa's ocean space that complement each other or conflict and need better management. These could also be places where important species have been viewed.

   O nisi o nei vaega o le sami e aofia ai nofoaga e taua faaleaganu'u, siosiomaga faalenatura, poo ni nofoaga e taua mo nisi gaioiga ma atina'e. E aofia fo'i i nei vaega ia ogasami ua tulaga fa'aletonu ma ma'aleale, faapea ogasami o lo'o iai ni meaola e taua.

   Please indicate clearly on the map. Be sure to label clearly to allow distinction / *Faamolemole, faailoga ma maka i luga o faafanua ina ia manino lelei ogasami/nofoaga eseese.*

<u>Fisheries</u>

1. What type of fishing activity do you carry out in Samoa's ocean space? *O ā ituaiga o faigafaiva o lo'o e fa'atinoina i totonu o le sami a Samoa?*

   A. Commercial / *Fa'apisinisi*

   B. Semi-Commercial / *Faigafaiva faapisinisi faavaitaimi*

   C. Other (specify) / *Nisi* (*fa'ailoa mai*)

Please indicate on the map clearly where you conduct activities within your ocean space. Please label clearly each entry to distinguish between activities. (Multiple polygons or point entry). *Faamolemole, faailoa mai i luga o le fa'afanua po'o gafea o lo'o fa'atino ai au faigafaiva i totonu o le sami a Samoa. Ia maka lelei ina ia manino vaega t'aitasi o lo'o fa'atino ai faigafaiva eseese. (Tele ata-tusia poo itu ulufale)*

2. Is there any form, shape or value of MSP (SUMAs, KBAs, MPAs, Bioregions, fish reserves, cultural sites) existing in your current area of operation? / *E iai ni vaega taua (Ogasami faapitoa, Nofoaga autu mo meaola, Ogasami fa'asao a nu'u, Ogasami fa'alenatura, Nofoaga fa'aleaganu'u) o lo'o i ogasami o loo fa'aaogaina i lau atina'e?*

   Yes/ *Ioe* No/*Leai*

   If "yes", please provide examples: */ Afai o le "ioe", faamolemole faailoa mai se fa'ata'ita'iga*:

   A. Community Based Management Areas? / *Ogasami o loo pulea e nu'u ma afioaga*

   B. Not Take Zones / *Ogasami fa'asao*

C. Species restrictions during spawning seasons / *Nofoaga puipuia o loo tautuufua ma fanafanau ai meaola*

D. Key Biodiversity Areas / *Nofoaga autu o meaola*

E. Traditional management efforts / *Puipuiga ma pulega faaleaganu'u*

F. Cultural sites / *Nofoaga e taua fa'aleaganu'u*

Others/Isi:_____

3. In what space do your areas of operation take place? / *O gafea o le sami o loo fa'atino ai lau atina'e?*

- Inshore / *Gataifale*
- Offshore / *Tuā-a'au & sami loloto*
- Both / *Vaega uma*

4. What is the scale of your operation? / *O le a se telē faatatau o lau atina'e i tulaga tau fagotaga?*

- Community / *Lotoifale*
- National / *Faaleatunuu*
- Regional / *Faaitulagi*

5. What species of fisheries does your operation specialise in? / *O a ituaiga o i'a/figota o loo lilifa iai fagotaga a lau atina'e*?

A. Tuna / *I'a o apakoa, pikiai, asiasi ma le atu*

B. Deepwater/bottomfish / *I'a-alalo*

C. Mix / *Fefiloi*

D. Crustacean (crabs & lobsters) / *Pa'a ma ula*

E. Giant clams / *Faisua*

F. Sea cucumbers (sandfish, teatfish, pricklyfish, etc.) / *Fugafuga, mama'o, susuvalu, isi*

G. Others (open-ended, text entry. Limit characters please) / *Isi ituaiga*

Please indicate on the maps provided where you predominantly fish for the species identified above. *Fa'ailoa mai i le fa'a fanua vaega e matele iai au fagotaga e pei ona taua.*

6. Does your sector record catch data? / *E faamaumauina e lau atina'e ni faamaumauga*?

Yes/*Ioe* No /*Leai*

If Yes, please explain? / *Afai o le Ioe, faamolemole faamatala mai?*

7. Are there any activities currently located within your area of operation that should be restricted? / *E iai ni gaioiga o loo faatinoina i ogasami o loo fa'atino ai lau atina'e e ao ona faaitiitia?*

Yes/*Ioe* No/*Leai*

a) What is your justification for restricting these activities? (Please indicate and label clearly on SeaSketch or base maps provided) / *O le ā ni mafuaga e ao ai ona faaitiiti nei gaioiga? (Faailoa ma maka manino i luga o faafanua – pepa & seasketch)*

- Costly / *Taugatā*
- Damaging to the marine environments / *Fa'aleagaina ai le si'osi'omaga o le sami*
- Species extinction/endangerment / *Fa'aumatia/lamatia o meaola o le sami*

- Others/*Nisi*:_____

8. What challenges (select) does your sector face in managing your marine area of operation? (Please indicate and label clearly where necessary on base maps provided): / *O ā ni fa'afitauli o lo'o feagai ma atina'e faafaigafaiva i le pulea tatau ma le puipui o vaega o le sami o lo'o fa'atino ai nei atina'e* (*Fa'ailoa ma tusia manino mai i luga o le faafanu'a ia lu'itau)*:

   A. Lack of commitment from community / *Vaivai le lagolago mai a nu'u ma afioaga*
   B. Lack of effort from Government / *Le lava se lagolago ma i le Malo*
   C. Lack of funding / *Le lava tupe*
   D. Lack of resources (capacity, infrastructure) / *Utiuti le silafia, agava'a ma meafaigaluega*
   E. Exploitation of marine resources / *Soona fa'aaogaina punaoa o le sami*
   F. Poor/unsustainable fishing methods / *Faigafaiva ma metotia le talafeagai*
   G. Unsustainable farming practices / *Faiga faatoaga le talafeagai*
   H. Land-based pollution / *O'ona mai gaioiga mai galuega i laufainua*
   I. Climate change / *Suiga o le tau*

   Others/*Isi*:_____

9. What are some solutions your sector has taken or proposed to address the challenges above? / *O ā ni fofo o loo faatinoina e le tou Vaega e tali atu ma foia ai faafitauli ua taua i luga?*

   a) Identify what role governments or relevant/key stakeholders would play in supporting these solutions? / *Faailoa mai pe faapefea ona fesoasoani le Malo po'o pa'aga autu e lagolagosua i le faatainoina o fofo ma tali ua faailoa mai?*

10. Are there any activities currently located within your area of operation that should be expanded or further developed? / *E iai ni gaioiga o loo faia i le sami o loo fa'aaogaina e le tou vaega (sector) e ao ona faalauteleina pe atina'e fa'aauau?*

    Yes/*Ioe* No/*Leai*

   a) What is your justification for expanding these activities? (Please indicate and label clearly on the base maps provided) *O le se mafuaga e ao ai ona fa'alauteleina nei gaioiga?*

      A. Benefits my sector / *Manuia ai le Vaega (sector)*
      B. Benefits the environment / *Manuia ai siosiomaga o le sami*
      C. Species/biodiversity protection and conservation / *Fa'asao ma puipuia ai meaola o le sami*
      D. Others/*Nisi*:_____

      (Open-ended text entry. Limit characters please)

Please indicate any other important areas that you use and value in your ocean space. / *Faamolemole, faailoa mai nisi vaega o le sami e taua ia te oe ma o lo'o e fa'aogaina.*

These might include cultural sites, important ecosystems, or areas important to other activities. There may also include activities within Samoa's ocean space that complement each other or are conflicting and in need of better management. These could also be places where important species have been viewed. / *O nisi o nei vaega o le sami e aofia ai nofoaga e taua faaleaganu'u, siosiomaga faalenatura, poo ni nofoaga e taua mo nisi gaioiga ma atina'e. E aofia fo'i i nei vaega ia ogasami ua tulaga fa'aletonu ma ma'aleale, faapea ogasami o lo'o iai ni meaola e taua.*

Please indicate clearly on the map. Be sure to label clearly to allow distinction / *Faamolemole, faailoga ma maka i luga o faafanua ina ia manino lelei ogasami/nofoaga eseese.*

NGO/CSO

Name of organisation: / *Igoa o le Faalapotopotoga (NGOs) /Sosaiete (CSOs)*

1. What type of activity does your NGO/CSO carry out in Samoa's ocean space? / *O a ni gaioiga/poloketi o loo faatino e le Fa'alapotopotoga/Sosaiete e aofia ai le sami a Samoa?*

   A. Conservation + Education/Advocacy / *Faasao + Faalauiloa/Fautuaga*
      i. Mangroves / *Togātoga*
      ii. Seagrass / *Vaovao, limu*
      iii. coral reefs / *Amu ma a'au*
      iv. others to be specified / *Isi*

   B. Capacity Building / *A'oa'oga e siitia ai agava'a & silafia*
   C. Community engagement / *Galuega faalotoifale*

   Please indicate on the map relevant project activities across your sector's ocean space. (Please label clearly each entry to distinguish between activities) / *Faamolemole, faailoa mai i luga o le fa'afanua galuega faapoloketi i le sami o loo faia e le tou Faalapotopotoga/Sosaiete.*

2. What is the scale of your project? / *O le a le telē o le tou poloketi?*

   - Community / *Faalotoifale*
   - National / *Atunu'u*
   - Regional / *Faaitulagi*
   - International / *Faava-o-malo*

3. Are there any existing activities currently located within your area of operation that encompasses MSP (SUMAs, MPAs, Village fish reserves, KBAs & Cultural sites)? / *O iai ni gaioiga/poloketi o loo faatino i le sami o loo fa'atino ai le tou poloketi o loo iai i vaega taua (Ogasami faapitoa, Nofoaga autu mo meaola, Ogasami fa'asao a nu'u, Ogasami fa'alenatura, Nofoaga fa'aleaganu'u)?*

   Yes/*Ioe* No/*Leai*

   If Yes, please explain? / *Afai o le Ioe, faamolemole faamatala mai?*

4. Are there any activities currently located within your sector's area of operation that should be restricted? / *E iai ni gaioiga o loo faatinoina i ogasami o loo fa'aaoga i tou poloketi e ao ona faaitiitia?*

   Yes/*Ioe* No/*Leai*

   a) What is your justification for restricting these activities? (Please indicate and label clearly on SeaSketch or base maps provided) / *O le se mafuaga e ao ai ona faaitiitia nei gaioiga? (Faamolemole, faailoa mai ma maka lelei i luga o le faafanua)*

      A. Costly / *Taugatā*
      B. Damaging to the marine environments / *Fa'atamaia ai le siosiomaga o le sami*
      C. Species extinction/endangerment / *Fa'aumatia ma lamatia ai meaola o le sami*
      D. Others/*Isi*:_____

5. What challenges (select) does your sector face in managing your marine area of operation? (Please indicate and label clearly where necessary on base maps provided): *O a ni lu'itau o feagai ma le tou Vaega (sector) i le pulea tatauina o le sami? (Faamolemole, faailoa mai ma maka manino nei lu'itau i luga o faafanua)*

A. More commitment needed from communities / *Moomia le lagolago malosi mai nu'u*
B. More effort needed from Government / *Moomia le lagolagosua mai le Malo*
C. Lack of funding / *Le lava tupe*
D. Lack of resources (capacity, infrastructure) / *Le lava meafaigaluega & silafia*
E. Exploitation of marine resources / *Soona fa'aaogaina o punaoa o le sami*
F. Poor/unsustainable fishing methods / *Metotia fa'afaigafaiva le talafeagai*
G. Unsustainable farming practices / *Auala le talafeagai mo faatoaga*
H. Land-based pollution / *O'ona mai galuega i laufanua*
I. Climate change / *Suiga o le tau*

Others/*Is*i:_____

6. What are some solutions your sector has taken or proposed to address the challenges above? / *O a ni fofo ua faatino e le tou vaega e tali atu ma foia ai faafitauli ua taua i luga?*

a) Identify what role governments or relevant/key stakeholders would play in supporting these solutions? / *Faailoa ma pe faapefea ona fesoasoani le Malo po'o pa'aga autu e lagolagosua i le faatainoina o fofo ma tali ua faailoa mai?*

7. Are there any activities currently located within your sector's marine area of operation that should be expanded or further developed? / *O iai ni gaioiga poo ni poloketi o lo'o fa'atino e le tou vaega e ao ona faalautele pe fa'aauau pea?*

Yes/*Ioe* No/*Leai*

8. What is your justification for expanding these activities? (Please indicate and label clearly on the base maps provided) *O a ni mafuaga e ao ai ona faalauteleina pe atina'e pea nei gaioiga/poloketi?*

A. Benefits my sector / *Manuia ai le Vaega (sector)*
B. Benefits the environment / *Lelei mo le siosiomaga o le sami*
C. Species/biodiversity protection and conservation / *Puipui ma fa'asaoina ai meaola*
D. Others/*Isi*: _____

(Open-ended text entry. Limit characters please)

9. Please indicate any other important areas that you use and value in your ocean space. / *Faamolemole, faailoa mai nisi vaega o le sami e taua ia te oe ma o lo'o fa'aogaina mo poloketi.*

These might include cultural sites, important ecosystems, or areas important to other activities. There may also include activities within Samoa's ocean space that complement each other or are conflicting and in need of better management. These could also be places where important species have been viewed. / *O nisi o neo vaega o le sami e aofia ai nofoaga e taua faaleaganu'u, siosiomaga faalenatura, poo ni nofoaga e taua mo nisi gaioiga ma atina'e. E aofia fo'i i nei vaega ia ogasami ua tulaga fa'aletonu ma ma'aleale, faapea ogasami o lo'o iai ni meaola e taua.*

Please indicate clearly on the map. Be sure to label clearly to allow distinction / *Faamolemole, faailoga ma maka i luga o faafanua ina ia manino lelei ogasami/nofoaga eseese.*

Government

Name of Ministry/Department:

1. What is your Ministry's primary focus on Samoa's ocean space?

   A. Conservation + Education/Advocacy
   B. Law enforcement and regulations
   C. Infrastructure and utilities
   D. Development and Transport
   E. Research & Survey
   F. Surveillance, Monitoring and Control
   (Please review according to key ministries)

   Please state your ministries/department's mandate if possible

2. Is your ministry involved in any shape, form or value of MSP (SUMAs, CBMA, Fish reserves, KBAs, Cultural sites, etc) within Samoa's ocean space? / *O a'afia le tou matagaluega/faalapotopotoga i ni taumafaiga (Ogasami faapitoa, Nofoaga autu mo meaola, Ogasami fa'asao a nu'u, Ogasami fa'alenatura, Nofoaga fa'aleaganu'u) mo le pulea tatau ma le puipui o le sami?*

   Yes/*Ioe* No/*Leai*

   If Yes, please specify? / *Afai e Ioe, faamolemole faailoa mai nei taumafaiga/gaioiga?*

3. Are there any synergies between your ministry and partner organisations, departments and stakeholders that would benefit the growth of MSP within Samoa's ocean space? / *O iai ni so'otaga i le va o le tou matagaluega/fa'alapotopotoga ma isi matagaluega e unaia ai le (MSP) pulea tatau ma le puipuia o le sami a Samoa*

   Yes/*Ioe* No/*Leai*

   If yes, please specify? / *Afai e Ioe, faamolemole faailoa mai nei so'otaga?*

4. Are there any activities currently located within your sector's marine areas of operation that should be restricted? / *E iai ni gaioiga o loo faatino i ogasami o loo faatino ai tiute/galuega a le Matagaluega/Faalapotopotogae e tatau ona faaitiitia?*

   Yes/*Ioe* No/*Leai*

   a) What is your justification for restricting these activities? (Please indicate and label clearly on SeaSketch or base maps provided) / *O le a se mafuaga e ao ai ona faaitiitia nei gaioiga? (Faamolemole, faailoa ma maka manino mai i luga o faafanua)*

      A. Costly / *Taugatā*
      B. Damaging to the marine environments / *Fa'aleagaina ai le siosiomaga o le sami*
      C. Species extinction/endangerment / *Fa'aumatia/Lamatia ai meaola o le sami*
      D. Others/*Isi*: _____

5. What challenges (select) does your sector face in managing your marine space? (Please indicate and label clearly where necessary on base maps provided) /*O a ni lu'itau o feagai ma le tou Vaega (sector) i le pulea tatauina o le sami? (Faamolemole, faailoa mai ma maka manino nei lu'itau i luga o faafanua):*

   A. More commitment needed from communities / *Moomia le lagolago malosi mai a nu'u*
   B. More effort needed from Government / *Moomia le lagolagosua mai le Malo*
   C. Lack of funding / *Le lava tupe*

D. Lack of resources (capacity, infrastructure) / *Le lava meafaigaluega & silafia*
E. Exploitation of marine resources / *Soona fa'aaogaina o punaoa o le sami*
F. Poor/unsustainable fishing methods / *Metotia fa'afaigafaiva le talafeagai*
G. Unsustainable farming practices / *Auala le talafeagai mo faatoaga*
H. Land based pollution / *O'ona mai galuega i laufanua*
I. Climate change / *Suiga o le tau*

Others/*Is*i:_____

6. What are some solutions your sector has taken or proposed to address the challenges above? / *O a ni fofo e tali atu ma foia ai faafitauli ua taua i luga ua faatinoina e le tou matagaluega/faalapotopotoga?*

a) Identify what role partners ministries or relevant/key stakeholders would play in supporting these solutions? / *Faailoa mai pe faapefea ona lagolagosua mai isi Matagaluega po'o pa'aga autu i le faatainoina o fofo ma tali ua faailoa mai?*

7. Are there any activities currently located within your sector's ocean of operation that should be expanded or further developed? / *E iai nisi gaioiga o lo'o faatino i le sami o loo faia ai galuega ma tiute a le matagaluega/fa'alapotopotoga e ao ona faalautele pe atina'e fa'aauau pea?*

Yes/*Ioe* No/*Leai*

b) What is your justification for expanding these activities? (Please indicate and label clearly on base maps provided) / *O le a se mafuaga e ao ai ona fa'alauteleina pe fa'aauau nei gaioiga? (Faamolemole, faailoa ma maka manino mai i luga o faafanua)*

A. Benefits my ministry / *Manuia ai le Matagaluega*
B. Benefits the environment / *Manuia ai siosiomaga o le sami*
C. Species/biodiversity protection and conservation / *Fa'asao ma puipuia ai meaola o le sami*
D. Others / *Isi:* _____

(Open-ended text entry. Limit characters please)

8. Please indicate any other important areas that you use and value in your ocean space. / *Faamolemole, faailoa mai nisi vaega o le sami e taua ia te oe ma o lo'o fa'aogaina e le matagaluega/faalapotopotoga.*

These might include cultural sites, important ecosystems, or areas important to other activities. There may also include activities within Samoa's ocean space that complement each other or are conflicting and in need of better management. These could also be places where important species have been viewed. /

O nisi o nei vaega o le sami e aofia ai nofoaga e taua faaleaganu'u, siosiomaga faalenatura, poo ni nofoaga e taua mo nisi gaioiga ma atina'e. E aofia fo'i i nei vaega ia ogasami ua tulaga fa'aletonu ma ma'aleale, faapea ogasami o lo'o iai ni meaola e taua.

Please indicate clearly on the map. Be sure to label clearly to allow distinction / *Faamolemole, faailoga ma maka i luga o faafanua ina ia manino lelei ogasami/nofoaga eseese.*

13.6 Post-consultation Evaluation Form

Faailoa mai: ☐ Tama ☐ Teine

Nuu: _____ Tausaga:_____ Galuega:_____

1. O le a le uiga o Fuafuaga Autasi mo Sami o Samoa [Maka mai le tali talafeagai]
   a) Polokalame aua le va'aia gafataulimaina o sami o Samoa;
   e) Puipuia ai ma faasa ona toe fagota sami o Samoa;
   i) Polokalame mo le fa'aogaina o sami o Samoa mo atina'e.

2. O le a le uiga o le lenei Polokalame o Fuafuaga o Ogasami Faapitoa?
[Maka mai le tali talafeagai]

   a) E tutusa lava ma le Fuafuaga Autasi mo Sami o Samoa
   e) O le va'ava'aia lea o ituaiga o Ogasami poo Sone faapitoa mo le pulea tatau o le gataifale e moomia ina ia ausia sini autu o se Fuafuaga mo Ogasami Faapitoa mo Samoa (eg. apitaga puipuia, vaega mo fagotaga ale nu'u, ogasami faasao/fa'asa ona fa'aoga)
   i) E ave ai le faapitoa mo ogasami tetele o Samoa

3. E taua le faia oni pa'aga aua le lagolagoina o lenei polokalame o Fuafuaga Faapitoa mo Ogasami o Samoa? O a ituaiga pa'aga e tatau ona fai?
   a) Ioe, aua o pa'aga e aumaia tupe e fa'atino ai galuega o le polokalame;
   e) Leai e le manaomia ni pa'aga e lava a tupe a le malo e fa'atino ai galuega;
   i) Ioe e taua pa'aga, ese'ese e iai le malo, faalapotopotoga tumaoti mai fafo ma Samoa; o nu'u ma afioaga ona e taua lo latou sao i vaega tau tamaoaiga ma tomai faapitoa aemaise malamalama o tagata ile punaoa faanatura o latou sami ma gataifale (a'au);
   o) Vaega uma ua taua i luga

4. Lisi mai ni vaega ese'ese se fa o lo'o fa'aogaina ai e le tou nuu le gataifale ma le sami? (sa fa'ailoa i taimi o talanoaga)

1.
2
3.
4.

5. E taua ia te oe le fa'asaoina o le tou sami po'o le gataifale?
   a) Ioe - ia toe ola ai amu ma a'au aua le fa'ateleina o ia ma figota o le sami,

   e) Leai – ona e le fa'alagolago iai le matou aiga

6. O a ni fa'afitauli e te iloa e le tatau ona faia aua e faaleagaina ai le sami ma gataifale?

_____
_____

7. E iai se aoga o lenei polokalame ile Aso ia te oe?
   a) Ioe e) Leai

8. Fa'ailoa sou manatu ini vaega e tatau e le matou vaega ona tagai i ai, aua le fa'aleleia o lenei polokalame ma le auaunaga ile alualu luma?

_____
_____
_____

9. Sa fa'amalieina oe i lou auai mai i lenei polokalame, e tusa ai ma lou iloa o le fa'atauaina o puna'oa fa'anatura o le sami ma gataifale o le tou nuu?

a) Ioe e) leai

10 Afai ete fuaina lenei polokalame e tusa ma se fa'amamafa o le a se fa'ataua e te ave i lenei polokalame? Faailoa mai le 1 maualalo – 5 lelei atoa

1) E lelava le fa'alauiloa ou te le malamalama
2) E iai ni vaega ua tau malamalama iai ae tele lava e le manino
3) E leai sou manatu
4) E lelei le polokalame ua maua se malamamala ile Fuafuaga Autasi mo Sami o Samoa aemaise Fuafuaga Faapitoa mo Ogasami o Samoa
5) Ua matua lelei tele le polokalame ma ua matua malamalama uma i vaega sa fa'ailoa – Fuafuaga Autasi mo Sami o Samoa aemaise Fuafuaga Faapitoa mo Ogasami o Samoa

Fa'afetai Lava Mo Lou Taimi

13.7 Results of the MSP Post-consultation Evaluation

Questions	Perspectives	Respondents
1. What do you think of ocean planning for Samoa? What are your reasons?	a) A program is promoting the sustainable management of Samoa's ocean space.	36.3%
	b) Protect and ban the fishing of Samoa's marine waters	15.2%
	c) A program to promote our ocean for developments	30.0%
2. Do you know the purpose of Marine Spatial Planning for Ocean Management Areas for Samoa?	a) Same as Ocean planning for Samoa	6.6%
	b) Determining the relevant types of OMAs to sustainable manage Samoa's ocean space	73.5%
	c) Prioritise the larger sections of Samoa's ocean space	2.5%
3. Partners to support Ocean planning is very important. What kind of support is Samoa's MSP needed?	a) Yes, partners will provide funding supports to implement Samoa's Ocean Plan activities.	18.9%
	b) No, we don't need partners, as our Government does have sufficient funds to support the activities of the ocean plan	1.3%
	c) We need support from the government and international and local organizations to help us villagers and enhance our capacity and knowledge on how best to manage our ocean and marine resources sustainably.	55.7%
	d) All of the above	6.3%
4. Is managing, conserving and protecting your ocean important to you?	a) Yes. Protecting and managing the coastal marine ocean will enhance and improve reef ecosystems, which will result in increasing fish and shellfish species.	80.5%
	b) No, we do not depend and rely on the ocean for sustenance or income.	0.58%

14. Appendix Information

Appendix to Sectoral Consultation Feedback (Non-spatial) Summaries

Table 14.1. Ocean uses and activities non-spatial feedback and shared by representatives of the Tourism sector

Activities/Focus	Oceanfront Resorts & Hotels	Beach fale/Backpackers
1. What type of tourism activity do you carry out in Samoa's ocean space?	• Leisure and relaxation swimming • Sunbathing, picnic and leisure sports activities on the beach • Other ocean-related activities such as kayaking, boating, snorkelling, surfing, sailing and SCUBA diving • Recreation and game fishing tournaments	• Seven reps of beach fales accommodation properties • One rep of beach fale accommodations & surf
2. Is your tourism operation considered?	• Le Vasa resort: Peak times, Medium (50-100 guests), Mostly Small (Less than 50 guests). • Sheraton hotel: Capacity is over 100 guests • Jet Over hotel (Savaii): Capacity is over 100 guests • Sekisup Tours: Can take up to 5 people at a time travelling all over Samoa and its islands	• Most beach fale accommodations have a capacity ranging from 15-30 people
3. Is there any form, shape or value of MSP (SUMAs, KBAs, MPAs, Bioregions, fish reserves, Cultural sites) existing in your current area of operation?	• Le Vasa resort: *Tulatala* (Mavaega nai le Tai) cultural site, but no MPA or ocean reserve • Sheraton hotel: no Reserve/MPA in our immediate ocean space • Jet Over hotel (Savaii): A Community Fish Reserve that was adjacent to the hotel and sometimes extended to the wharf, but it is a small part of the operation • Sekisup Tours: There are some reserves where we take people for tours around the islands, but we usually avoid those areas	• There are community-based fish reserves (no-take zones), village locally managed areas, MPAs, and KBAs closers/adjacent to some of the marine spaces used by guests of the beach fales.

Table 14.2. Non-spatial feedback shared by the Fisheries on ocean uses and activities.

Activities/Focus	Vessel Class: >15 meters in length	Vessel Class: <15 meters in length
1. What type of fishing activity do you carry out in Samoa's ocean space?	• Commercial offshore fishing beyond the 50 nautical miles surrounding the island that is reserved for fishing vessels class <15 m length • Fishing activities mostly longline for large tuna species like Yellowfin, Albacore, Bigeye and other pelagic species.	• Commercial offshore fishing confine within the 50 nautical miles due to the limited capacity of the *alia* fishing boats,15 m
2. Are there any forms of marine protection in your operation?	• No, not in the areas we fish. However, most of the participants were not aware of the shark sanctuary imposed in the EEZ banning the harvesting of all shark species.	• Yes, shark sanctuary; however, the policy contradicts with TDMP that allows catching sharks but bringing carcasses

3. In what space do your areas of operation take place?	• All areas beyond the 50 nautical miles of Samoa's EEZ • Locally based foreign licensed can fish in Samoa's EEZ and other countries ' EEZs • Fishing trips can be from 3 or more months	• Primarily within 20-50 miles from their base. • Sometimes fished beyond the 50 miles but compromised the safety of the crews and assets • Fishing trip: average at 1 to 3 days
4. What is the scale of your operation?	• Five reps of commercial fishers operating fishing vessels above 15 meters in length, • Three represented local fishing companies • One operating an export venture • Two operating local-based international fishing Vessels	Alia fishing vessel owners (<15m length) • 6Six reps of Savaii commercial offshore fishers • Eight reps of rural-based alia owners • Six reps of Apia-based alia owners

Table 14.3. Ocean areas for operations and uses and ocean-related mandates by the Government sector

Questions	**Mandates and Focus**
1. What is your Ministry's primary focus on Samoa's ocean space?	• SSC, SSS & SPA: Development and Maritime transport • NUS: Conservation + Education/Advocacy • MWTI (Maritime Division & PUMA): Development and Transport • MAF (Fisheries): Exploration, Development and Management of fisheries resources. • MNRE (Meteorology): Weather and Climate Monitoring • MFAT: Advocacy work for Ocean/Marine • SROS: Scientific Research & Survey needs across all sectors of the Government
2. State your ministries/ department's mandate if possible.	• SSC, SSS & SPA: Using the ocean for transportation and development • NUS: train seafarers to work on local and foreign vessels (shipping company) • MWTI (PUMA): issuing a permit and monitoring development, including sand/coastal mining and reclamation • MWTI (Maritime): responsible for registering and rules for local and Samoan flagged vessels • MAF (Fisheries): Research, assessment and exploration of fishery resources for development and management. • MNRE (Meteorology): Monitoring of weather, climate and sea surface and temperature • MFAT: engage in monitoring and reporting on Samoa's many commitments at the international level regarding Conventions and Treaties. Presently engage in negotiation of Samoa's EEZ boundaries with neighbouring countries. • SROS: Apart from research/survey functions, they are expanding the capacity of their resources to increase support for more coastal marine/ocean space research, including mangroves, beaches and others
3. Areas and where your ministry is involved within Samoa's ocean space	• SSC, SSS & SPA: Using ocean and managing vessel operations on the ocean for transportation and development • NUS: train seafarers to work on local and foreign vessels (shipping company) • MWTI (PUMA): issuing a permit and monitoring development, including sand/coastal mining and coastal land reclamation • MWTI (Maritime): responsible for registering and rules for vessels • MAF (Fisheries): Research, assessment and exploration of fishery resources for development and management options. • MNRE (Meteorology): Monitoring of weather, climate and sea surface temperature

	• MFAT: Monitoring and reporting on Samoa's commitments to ocean sustainability as per the objectives of international Treaties and Conventions, etc. They are negotiating Samoa's EEZ boundaries with neighbouring countries. • SROS: Some coastal marine/ocean space research, including mangroves, beaches and others
4. Synergies between ministry and partner organisations /stakeholders that would benefit the growth of MSP in Samoa's ocean	• SSC, SSS & SPA: Using the sea and managing vessel operations for transportation and development • NUS: Collaborate with other ministries and stakeholders on issues pertinent to the oil spill, discharged ballast waters, and vessel sewage disposal. • MWTI (PUMA): Collaborate with MNRE on granting permits and monitoring sand mining and other marine and coastal development activities. • MWTI (Maritime): Work in partnership with related ministries and other stakeholders on managing marine pollution and vessels to ensure compliance with national and international policies and regimes for a safe maritime environment. • MAF (Fisheries): Work in collaboration with MNRE and other related ministries and community stakeholders to ensure ocean sustainability and security of fishery resources by setting up no-take fish reserves, locally managed areas, village bylaws and village management plans. • MNRE (Meteorology): collaborate with all ministries, advising them of the weather situation and events of high sea surface temperatures that may cause coral bleaching. • MFAT: Negotiating Samoa's EEZ boundaries and fishing opportunities with neighbouring countries as a chance to set up future OMAs and divert fishing efforts elsewhere away from our EEZ. • SROS: To conduct future research and surveys to monitor the impacts of established OMAs.

Table 14.4. Summary of ocean uses and activities/projects by NGO/CSO sector

Activities & Focus	**Non-Government Organisation**	**Civil Society Organisations**
1. What type of activity does your NGO/CSO carry out in Samoa's ocean space?	• OLSSI – Conservation + Education/Advocacy • SCS - Conservation + Education/Advocacy • SIGFA – Sustainable Game fishing • TPA – Sustainable Recreational fishing • CI - Conservation + Education/Advocacy	• MCG – Coral reef replanting & training • ARS – Coral reef replanting, training & education • PNP – Conservation of a national park • TOS – Civil society to promote ocean development and conservation
What is the scale of your project?	• OLSSI – National • SCS - National • SIGFA – National • TPA – National • CI – Nationa/Regional/Global	• MCG – Community/national • ARS – Community/national • PNP – Community • TOS – Community

Table 14.5. Specific challenges and restricted activities identified by respective sector

Sector	**Sector-specific challenges and restricted activities**
Tourism	• Unsustainable fishing methods are damaging the reefs and beaches fronting their resort. Their operation is dependent on the health status of these ecosystem services.

	• Perceived poor collaboration between the sector and the Government is negatively impacting developments that directly affect the health and sustainable use of the ocean • Coastal area reclamation causes significant soil erosion and causing property damage. • Rubbish is disposed of along roadsides, on beaches and along adjacent reefs to business locations • Ineffective monitoring and enforcement of policies and guidelines on coastal development • Lack of awareness of surrounding environment (ocean & land) and existing development policies and guidelines • Lack of Government support efforts in mitigating impacts of climate change and sea level rising
Fisheries	• Promises to help with technology in reporting never materialised. • Licensing and registration fees subsidies should be extended during hardship time from the covid-19 • High interaction of dolphins, whales and turtles ruining equipment and increasing operational cost • Operational costs for fishing are growing with petrol and equipment costs, and operations become non-viable. • Not enough FADs to improve catches and reduce fishing costs • Low catch rates due to fewer fish and too many fishers • Big overseas vessels mainly damage the marine environment and take all the fish before migratory species reach our EEZ, especially the reserved fishing zones for smaller alia fishing vessels. • Very small EEZ to operate within, and it becomes so congested from too many commercial fishing vessels of the domestic fishing fleet. • Contradicting conservation/ development policies, e.g. Shark sanctuary policies, completely banned sharks' fishing while another allows sharks to be harvested as long as they bring a certain amount of carcasses back to ports. • Illegal, Unregulated and Unreported fishing activities
Government Ministries and Organisations	• Degraded marine environment, like Coral depletion, destruction of mangrove habitats, seaweed overgrowth on reefs, coral bleaching from high sea temperature and other environmental impacts. • Retaining Specialised Capacity/expertise – challenging to retain a local trained and capable workforce because of lucrative opportunities from developed countries • Poor multi-sectoral coordination- poor coordination and collaboration amongst stakeholders create an overlap, duplication, and costly and disruptive progress. • Competing International/Local interests - competing interests between ocean/marine partners, e.g. those invested in development for advanced economic opportunities and those in the conservation sector for protection.

Non-government and Civil Society Organisations	• Coral depletion • Lack of awareness of care for the marine environment • Lack of collaboration among NGO/CSOs and effort to push marine protection within communities. • Set up by-laws regarding marine reserves and protection. • Training tourism operators & communities on how to plant corals as a recreational activity. • Lack of awareness and training programmes sharing knowledge with the local community on environmental marine conservation • Lack of ocean management and conservation reserves to protect the marine environment and preserve biodiversity

Table 14.6. Sector-specific solutions based on non-spatial responses are recommended for improving ocean management

Sector	Solutions identified by representatives of each sector
Tourism	• Collaboration programme with surrounding communities support them on waste/rubbish management • Better collaboration between the Tourism sector (oceanfront businesses) and Government ensures developments are correctly done • Alternative development options to reclamation, i.e. building on stilts for a safe and sustainable marine environment & people's livelihoods. • Better engagement between Government/CSOs with specialised expertise and local businesses to ensure awareness of the surrounding environment they are operating within • Need innovative awareness and education programmes for fishers and communities that provide hands-on experience to drive Mindset/Behavioural change • Improve Government support effort (funds & resources) assisting businesses to build seawalls and establishing of MPAs • improved partnership with Government, a collaboration more about Monitoring, *not* Policing • An integrated approach to economically viable green tourism. • Set up by-laws within villages to stop poor and unstable fishing methods. • Strengthen commitment from communities and leaders to engage in setting up marine and support by operators to set up management and conservation areas to protect the marine environment and preserve biodiversity • Placement of marine management and conservation areas at coastal and offshore, but need to understand their impacts on the tourism sector
Fisheries ***Fishing vessel>15 meters length***	• Government need to support the industry more given the % of GDP they contribute • Need subsidies on equipment/petrol or other operational costs • MAF and MNRE need to discuss the policies on Shark to align the two items and avoid confusing the consumers, especially the suppliers who are not prosecuted • There is a need for awareness and appreciation between local fishers/ Alia owners and large commercial fishers regarding operational costs to support each other rather than the equipment being damaged at sea.
Fishing vessel <15 meters in length	• Introduction of marine studies to early educational level (Primary schools) • Stop littering in any marine area. • Proposing and requesting to Government and key partners for funding infrastructure and capacity.

	• The government needs to extend the fishing area for local people; the area is too small, beyond 50 nautical miles take up most of the ocean capacity • Provide awareness & training to enhance the knowledge and capacity of fishers regarding the ocean • Strengthen catch and effort monitoring and sampling programmes • To institute enough equipment and systems for monitoring the protection of the marine environment • Allow <15m vessels to fish beyond the 50 nautical miles as larger vessels have a more considerable portion of the EEZ to fish, and they catch all the fish before reaching the 50 miles inbound zone. However, this will contravene the sea safety regulation. • Reserve the entire EEZ for the local fishing fleet and should not license foreign locally based vessels • Need equipment and methods to reduce cetacean interactions and mortality • Need more fish aggregation devices (FADs) installed around Samoa to fish in. • Need subsidies as rebates for fuel, fishing gears and bait to help commercial fishers sustain economically viable operations. • Communities and fisheries stakeholders to work together • Establish reserves (OMAs) at the places where the fish are found, especially the shallow places offshore (SUMA areas) • Government to provide subsidies via fuel and gear rebates • Regulate total allowable efforts and catches • Effective consultation amongst stakeholders to guide developing policies.
Government Ministries & Organisations	• The current project that is now processed to counter the issue of climate change (Breakwater, seawall) • Proper regulations and tools used on the discharge of Bilge and Water ballast • Capacity Building • Enforcement & Monitoring • Encourage funding Proposal • Awareness & Educational Programs • Better engineering (soft and hard solutions) • Strengthen integrated management of oceans by all stakeholders • Establish ocean managed areas • Emission control to avoid toxic gases and enforce ballast water transfer, e.g. foreign species • Ongoing open and transparent dialogue between all concerned ensuring priorities/values of the two are aligned and complementary rather than competing with each other

Non-Government Organisations and Civil Society Organisations	• Need innovative awareness and education that is strategically placed to drive behavioural change • Potential of artificial coral reefs to fill in the gaps for dead zones (expertise is available locally) to address the machinery waste that is being dumped at sea • With more stringent licensing for international fishing vessels, we are witnessing deplorable conduct out there in the open • Recreational fishing can provide good data and can support offshore monitoring • All NGOs should work together to push marine protection within communities. • Placement of OMAs for Protection of Special Unique Marine Areas. • Proposed to the Government for funding, resources and capacity building and infrastructure. • Develop village by-laws and strengthen enforcement of infringements regarding marine reserves and protection. • Provide training for tourism operators, guests & communities on how to plant corals as a recreational activity. • Sharing knowledge to enhance local community awareness of environmental marine conservation • Encourage locals not to step on corals during the catching palolo season but use canoes and kayaks as means to access palolo sites • Signboards to denote conservation areas for reference to the general public • Use Beach fale and resort sites along the coasts as training locations for marine environment conservation. • Coral gardening is a tool & everyone should work together to improve the health of reef ecosystems by engaging in replanting live corals or setting up artificial reefs • All village-based and national marine reserves & tourism operators must engage and have coral gardens

Table 14.7. Key roles for the Government to support the implementation of proposed solutions

Sector	**Government/key stakeholder's roles in supporting solutions**
Tourism	• Government/CSOs can provide the expertise to work closely with the sector to help Tourism build more robust and sustainably. • The Tourism sector wants an improved partnership with Government, an association that is more about Monitoring, *not* Policing • Government/CSO to work closely with the Sector to develop, understand and integrate proven green alternatives to activities, development and services. • Government to support the Sector financially, especially during hard times like covid, which impacts businesses and people greatly • Proposals should be submitted to the government, so they know the issues that are happening around the resorts • Need to be more awareness programs for local fisheries because they need more training for local villages who exploit the sea and do not use unsustainable methods that damage reefs in front of resorts/fales that are important for tourism operations. • Funding, awareness programs, infrastructure, and related supports could improve the community and tourists' care for the ocean. • Supported bylaws are set up by villages that protect and manage the ocean and ecosystem services that tourism depends on.

Fisheries	• Government need to support the industry more given the % of GDP they contribute. • Need subsidies on equipment/petrol or other operational costs to help sustain ventures and ensure the viability of operations • MAF and MNRE need to align the shark policy and other policies and plans that could be confusing to consumers and complicate fishing operations • There is a need for awareness and appreciation between local fishers/ Alia owners and large commercial fishers regarding operational costs, so there is support for each other rather than the equipment being damaged out at sea • Through the funding and awareness programs of OMAs, building the infrastructure needed by marines reserves and providing sustainable ways for fishing activities. • Government should expand borders for our EEZ to have more areas to fish and provide for our families. • The government needs to extend the fishing area by negotiating fishing rights or licenses for locals to fish in other country's EEZs • Scientific research is needed to avoid or reduce cetacean's interaction with fishing gear. • Needing Government and partner's support for funding infrastructure and capacity.
Government	• The government funds and supports projects being proposed by (SSC, SSS, and SPA) • Government ministries and organisations to collaborate on all matters of ocean sustainability and governance • By enforcement of laws and regulations already in place • Provide a platform for improved collaboration and dialogue between stakeholders and partners • improve access to information/services
NGOs/CSOs	• Funding support for conservation efforts done by local NGOs/CSOs • Technical Capacity • Provide platforms for multi-sector/multi-partner engagement • Be transparent in sharing information and building awareness • Funding support for local NGOs management plans and marine reserves and provide awareness programs for the community. • Initiative plan to encourage and mobilise coastal tourism operations to engage in fish reserves and manage them • Oceanfront resorts conduct training and awareness programs for local villages in partnership with the government. • Government to provide funding and incorporate coral gardening into Education

Table 14.8. Overview of sector's perspectives on MPAs under the MSP process.

Sector	Opinion	Concerns	Recommendations
Hotels and Resort	● To understand the costs/benefits of MPAs to the Tourism sector	● Generally, support the MSP process and the establishment of MPAs.	• Support the placement of relevant protected and management areas • Le Vasa needs to set up a reserved area in the marine space fronting their resort.

Beach fale & backpackers	● Support MPAs as coastal reserves to protect and improve the health of coral reefs and related inshore ecosystems, which are vital ecosystems to the tourism sector	• Land reclamation and fishing activities have been done closer to tourism properties. Ownership of sand needs to segregate from the Government to property owners.	● Most have expressed support for establishing no-take reserves, including areas in front of their operations. ● Some have wanted to set up reserves of their own.
Commercial fisheries **fishing vessel >15m**	● All are mostly opposed to the idea of offshore MPAs, let alone large-scale MPAs located in the offshore area. However, the sector would like to engage and in dialogue with the Government during the designing of future offshore MPAs.	● Loss of fishing grounds, therefore loss of income ● 2 members 100% oppose the setting up of offshore MPAs ● EEZ is already small, and we are using the whole of EEZ ● Loss of employment for those we cater for ● We can hardly manage, monitor and enforce existing activities; how are we going to manage OMAs offshore, and where are the resources going to come from, especially since we do not have any patrol boat. - Even with Nafanua, we struggled to get it out to help us when needed due to a lack of petrol	• Move OMAs for 30% protection to inshore space • Explore alternatives to subsidise for any loss of income (etc) if a 30% is put in place • Explore the potential for seasonal closing. • Engaged effectively in how they can ensure they are not impacted negatively or, if so, at the most minimal impact. • Engage in discussions and regularly consult on the typology of OMAs and conditions applied if protected areas are established. • Explore the cost of M&E and how it will be supported to ensure proper commitment and adherence. • Need to look into the impacts of climate change on Samoa's fishery and look into how they can address the impacts • Not to concentrate the 30% protection in a confined spot but to spread it out the EEZ.
Fishing vessels<15m (alia)	• Most support the establishment of reserves (OMAs) at places where the resident fish stocks are found, especially the shallow places offshore (SUMA areas)	• Fewer fish, as indicated by lower catches • Bigger fishing vessels have fished the open space of the EEZ or beyond the 50 nautical miles hence lesser fish caught by smaller vessels	• Placement of OMAs should include offshore SUMAs vital for the protected marine habitats and preservation of biodiversity. • Placement of a variety of OMAs that could allow sustainable fishing. • Govt to ensure effective compliance to established OMAs and applied conditions

Government ministries & organisations	• The SOS is a declared Voluntary Commitment to SDG14 for Samoa and is now completed, inclusive of a 30% ocean protection goal. Samoa needs to deliver this commitment • Most recognised the current status of Samoa's ocean, particularly in most coastal areas and inshore ecosystems, which have been heavily degraded and resources have been heavily exploited.	• The inability of coastal marine ecosystems to provide services on coastal protection, food security social and economic benefits for Samoans • The health of our ocean is a paramount concern as the ocean and its resources, as many ecosystems and species, will be at grave risk	• Support the establishment of OMAs to fulfil Samoa's 30% protection of marine space commitment • Most government stakeholders supported the placement of relevant OMA types in offshore and inshore areas to manage Samoa's entire ocean sustainably.
NGOs/CSOs	The majority of NGO/CSO representatives supported the MSP process and the placement of OMAs both in the coastal and offshore areas. Including in any OMAs to be established at the offshore SUMAs to protect and preserve biodiversity and the marine environment.		

15. Annexes: Community and Sectoral Consultations Field Reports

15.1 Field report: MSP Community Consultations. Aleipata-i-Lalo, Aleipata-i-Luga, Lepa & Lotofaga, and Falealili-2 districts. 17-20 August 2021

15.2 Field report: MSP Community Consultations. Falealili-2, Siumu, Safata-2 and Safata 1 districts. 23-26 August 2021.

15.3 Community Consultations. Falelata & Samatau, Manono Island, Aiga-ile-tai, A'ana-4, A'ana 1, 2, & 3 districts. 30 August to 3 September 2021.

15.4 Field report: MSP Community Consultations. Sagaga-4, Sagaga 1, 2, & 3, Faleata 3 & 4, and Faleata 1 & 2 districts. 7-10 September 2021.

15.5 Field report: MSP Community Consultations. Vaa-o-Fonoti. Anoama'a-2 and Anoama'a-2 districts. 13-16 September 2021.

15.6 Field report: MSP Community Consultations. Vaimauga-1, Vaimauga 3 & 4, and Vaimauga 2 & 3 districts. 20-22 September 2021.

15.7 Field report: MSP Community Consultations. Fa'asaleleaga2, Fa'asaleleaga-3, Fa'asaleleaga 4 & 5, and Gaga'emauga-1 districts. 4-7 October 2021.

15.8 Field report: MSP Community Consultations. Gaga'emauga 2, Gagaifomauga-1, Gaga'emauga-2, and Gaga'emauga-3 districts. 12-20 October 2021.

15.9 Field report: MSP Community Consultations. Vaisigano 1 & 2, Falealupo & Alataua, Sagaga 1 & 2, and Palauli1 districts. 26-29 October 2021

15.10 Field report : MSP Community Consultations. Palau.i-2, Satupa'itea, Palauli-2, Palauli-3, and Fa'asaleleaga-1 districts. 10-12 November 2021

15.11 MSP Sectoral Consultations Summary Report. 1-4 March 2022.

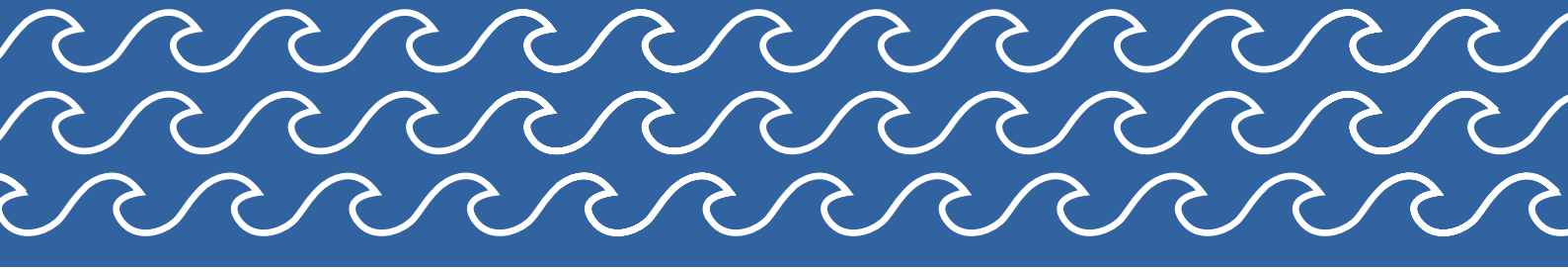
Atonio P. Mulipola
Project Coordinator, Marine Spatial Planning Project

Danita Strickland
Marine Programme Manager, Conservtion International (Samoa)

Maria Satoa
Principal Marine Conservation Officer, DEC, Ministry of Natural Resources and Environment

Fatutolo Iene
Senior Marine Conservation Officer, DEC, Ministry of Natural Resources and Environment

Fimareti Selu
Marine Conservation Officer, DEC, Ministry of Natural Resources and Environment



MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES

This publication has been produced (created and maintained) with the financial support of the European Union. Its contents are the sole responsibility of IUCN and do not necessarily reflect the views of the European Union.