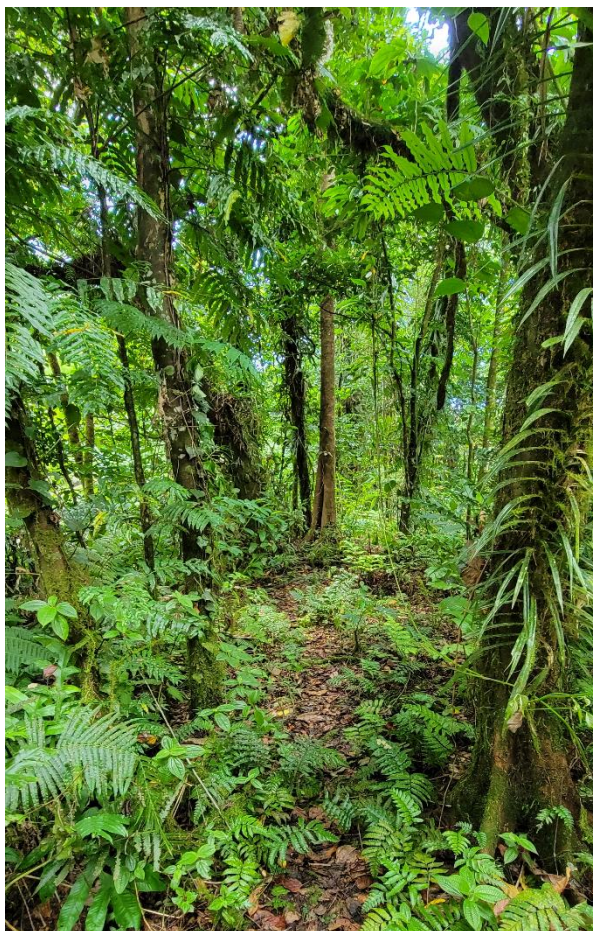


Magiagi Rainforest Conservation Area Management Plan 2024-2029



The trail to the *Fale o le Fe'e* in intact lowland rainforest

Prepared by Seiuli Ioane Etuale and Samoa Conservation Society

April 2024



**SAMOA CONSERVATION
SOCIETY**
**SOSAIETE FAASAO
O SAMOA**

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The remains of the *Fale o le Fe'e* ancient monument. Photo by James Atherton.

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Acronyms

BMP	Best Management Practices
CA	Conservation Area
EIA	Environmental Impact Assessment
EPC	Electric Power Corporation
FD	Forestry Division
KBA	Key Biodiversity Area
MP	Management Plan
MCA	Magiagi Conservation Area
MFV	Manumea Friendly Village
MNRE	Ministry of Natural Resources and Environment
MOA	Memorandum of Agreement
NGO	Non Governmental Organisation
NUS	National University of Samoa
PC	Project Coordinator
RCA	Rainforest Conservation Area
SCS	Samoa Conservation Society
STA	Samoa Tourism Authority
SPREP	Secretariat of the Pacific Regional Environment Programme
SWA	Samoa Water Authority
WMP	Watershed Management Plan
WRD	Water Resource Division

Executive Summary

The Magiagi leaders, *Pulega a Ali'i ma faipule* wish to dedicate a part of their land to establish a Rainforest Conservation Area (RCA). Their vision is for the protection and preservation of their natural and cultural resources to benefit current and future generations. The Management Plan (MP), identifies key values of the Conservation Area (CA) and a set of objectives and strategies are developed to restore, protect and safeguard those values.

With the steady increase of population dependence on natural resources and the threats of climate change, conservation of critical habitats and the unique native ecology of Magiagi is an urgent responsibility that can no longer be delayed. The CA management plan includes three broad concepts: (1) Protection and preservation of key important values in natural and cultural resources; (2) Management of threats and drivers of threats to those key values; (3) The empowerment of the local community residents through awareness raising and capacity building programmes, employment opportunities, alternative income generation, inclusion in decision making and conservation activities are the desired long term benefit strategies of the conservation area.

The rules and guiding principles of the Conservation Area are informed by environmental legislation and cultural norms and practices. Resource harvest restrictions and prohibition of certain development practices, sustainable agriculture guidelines, bans and limits to hunting and freshwater fishing are set with consequential actions for noncompliance.



The EPC penstock and access road to the *Fale o le Fe'e* ancient monument within the Magiagi CA. Photo by James Atherton.

1. Introduction

This Management Plan is for the establishment of the Magiagi Conservation Area (MCA) for a five year period, 2024-2029. The plan contains objectives and strategies constructed from numerous stakeholder discussions, scientific studies and reviews and technical assessments conducted between July 2023 and March 2024. Development of the plan involved stakeholder consultations, awareness programmes and initial conservation actions including baseline surveys, community trainings and policy discussions for the new Conservation Area. The preparation of this plan was made possible by funding from the New Zealand High Commission Apia.

Magiagi is located on the central north coast of Upolu Island in the district of Tuamasaga in Samoa around 9km inland from Apia (Figure 1). The majority of the residents reside at Magiagi-tai but the proposed Conservation Area is located at Magiagi-uta (Table 1). The village's ecosystems and geophysical features directly impact the Vaisigano Watershed which includes the Fale o le Fe'e in the valley and upland forest areas. The CA is within the Apia Catchment Key Biodiversity (KBA) and Vaisigano river catchment, Apia's largest watershed and the source of most of Apia's water supply and some of its power supply (Figure 2).

Besides its geophysical and biological importance, there are also economic opportunities as well as cultural values at this site. Among those is the Temple of the god *Fe'e* or *Fale o le Fe'e*. The Magiagi community is committed to conserving its biodiversity as well as preserving and possibly restoring the historic sites and cultural values of Magiagi. The CA work includes in its plan, capacity building in entrepreneurship, alternative generation through ecotourism, sustainable agriculture and potential employment for village members or groups.

On December 2, 2023 the Magiagi *Ali'i ma Faipule* approved the concept for the establishment of the Conservation Area and the management plan was formally approved by the *Ali'i ma Faipule* on April 20, 2024 (see Annex 1). Over 114ha of native forest including the river and tributaries above the Fale o le Fe'e are included in the Conservation Area (Figure 3).

Table 1. Magiagi Population

Magiagi Tai	Population	Magiagi Uta	Total Population
Females	929	163	1092 (50.25)
Males	893	188	1081 (49.75%)
Total	1822	351	2173
15-64 years	1,074	203	1277 (59%)

The CA is located on the eastern branch of the Vaisigano Water Catchment Area therefore its geophysical and biodiversity directly impact the quality of Apia's main watershed. In addition to the geophysical and biological importance, there are also economic opportunities as well as cultural values present. Among those is the temple of the ancient god *Fe'e* "*Fale o le Fe'e*". The CA project is committed to preserving this historic site for its traditional value as well as supports ecotourism to benefit the village. The *Ali'i ma Faipule* of Magiagi decided to keep the *Fale o le Fe'e* in its current condition but open it up for regulated tourism, managed by the village. Local tour guides can be trained by the Samoa Tourism Authority (STA) while Samoa Conservation Society (SCS) in collaboration with MNRE and partners will continue to assist in conservation solutions and

seeking funding. Potential partners are the Samoa Tourism Authority and possibly the National University of Samoa (NUS).

Figure 1. Location of Magiagi Conservation Area and Fale o le Fe'e monument



Figure 2. Location of Magiagi Conservation Area in the Vaisigano catchment and Apia KBA

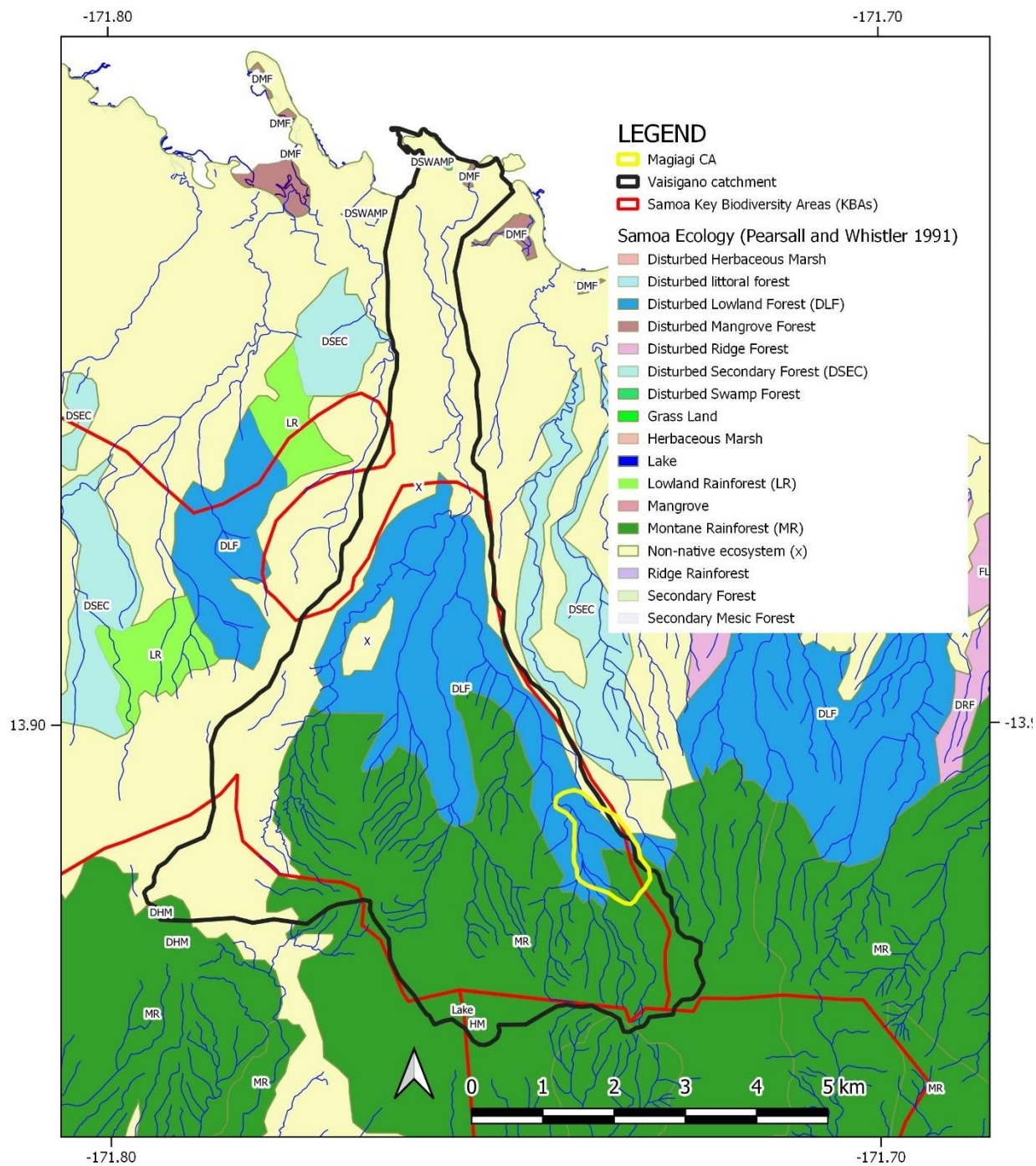
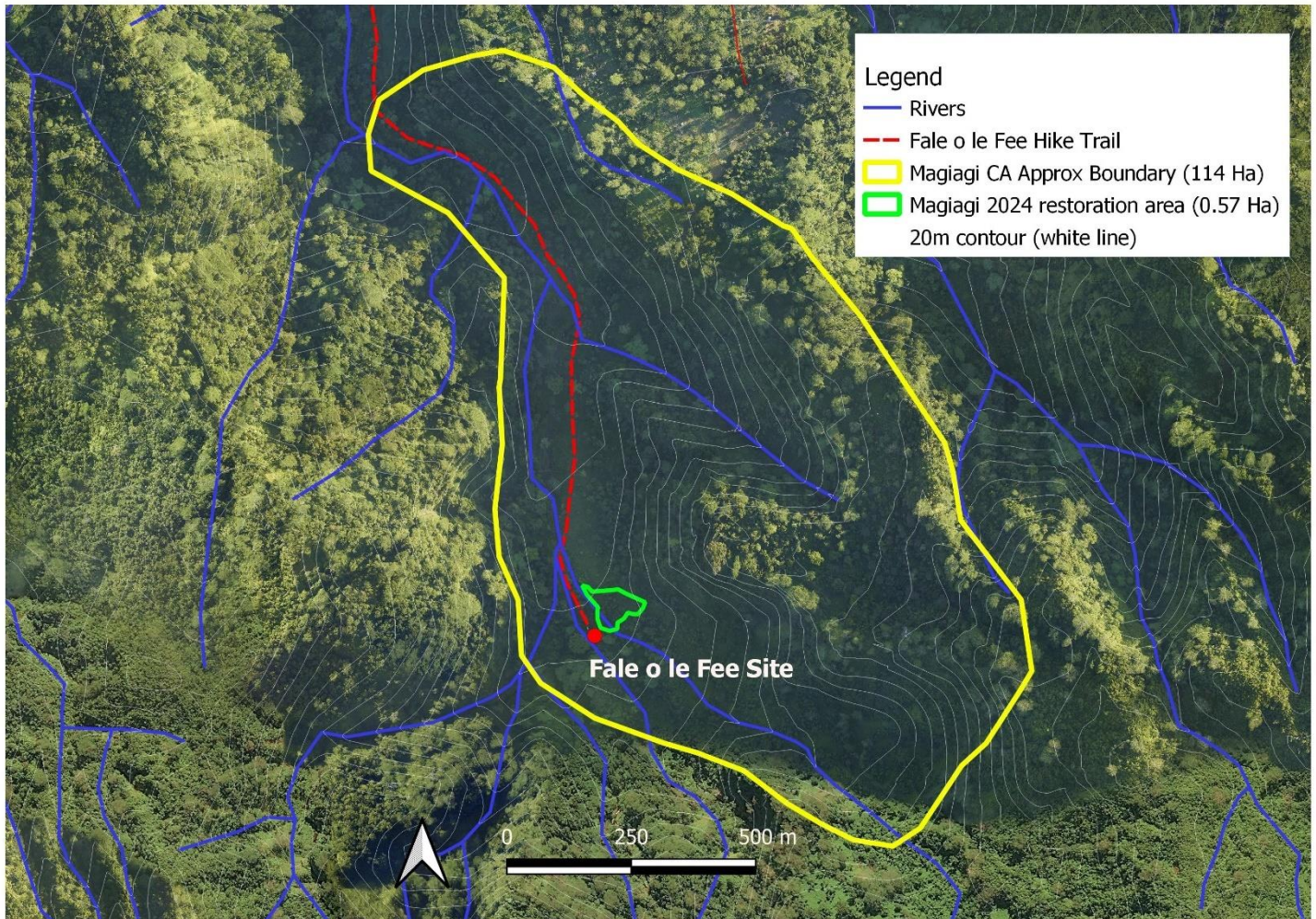


Figure 3. Magiagi Conservation Area Boundary Map



Approval to proceed with the establishment of the CA was given on December 2, 2023. The Pulenu'u and secretary of the village committee then worked with the SCS team to develop the CA boundary and the rules of the CA. One hundred and fourteen hectares (280 acres) of lowland forested area including the rivers and the Fale o le Fe'e is are to be protected under the rules discussed and approved by the village and partners.

Important geophysical and biological, economic and cultural values:

- Municipal water supply
- Hydropower
- Native Flora and Fauna
- Geological volcanic features
- Endemic & rare birds, eg Manumea (*Didunculus strigirostris*) and Tai'o (*Pseudobulweria rostrata*)
- Fale o le Fe'e (Temple of the Octopus)

The plan recognizes three broad stakeholders and interest groups whose collective goal is to sustainably manage the natural resources of the CA: (1) the interest of the government of Samoa as stated in its laws and policies; (2) the individual interests of the landowners; (3) and the community interests and collective concerns

and responsibilities. The plan mediates between the three stakeholder groups by developing mutually agreed rules that promote sustainability.

1.1 Purpose

The purpose of the Magiagi Conservation Area is for the conservation of the rainforest of Magiagi and reconnecting Magiagi people with their natural and historical heritage. This Management Plan describes the vision, targets, threats, objectives and proposed strategies for conserving the forest and biodiversity within the designated CA. The plan will also serve as a Best Management Practice (BMP) manual for all activities in the CA including workplans, monitoring schedules, maintenance, restoration projects and capacity building.

The overall goal of the Management Plan aims at improving decision making at local settings regarding sustainable management policies in the CA, by fostering working partnerships between the Magiagi CA and donors, government agencies and the technical community in incorporating existing management recommendations from past Environmental Impact Assessments (EIA), feasibility studies, Water resource and Watershed Management Plans (WMP), biodiversity baseline surveys, hydropower emission offset strategies forest restoration plans, ecotourism plans to create a cohesive integrated action based strategy for Magiagi CA. Equally important, effective conservation in a country with strong connections to its culture and traditional values requires the collection and application of traditional knowledge to support sustainable resource management policies and safeguard historical sites and customs for future generations. Such wisdom is an integral part of Samoan everyday life therefore an important management tool.

Conservation involves the maintenance of the ecological components of soil, water, fauna and flora, the ecological processes including water flow, carbon cycles, connectivity between land and sea including species movements as well as the ecosystem services including all the human benefits provided by the Conservation Area.

1.2 Process

The management planning process was conducted over a 9 month period. It began with numerous discussions with partners in mid 2023 and with a Magiagi village consultation on December 2 2023. Project goals, objectives, benefits and opportunities were presented to *Ali'i ma Faipule* for discussions and approval. A consultant was hired to write the Management Plan and coordinate consultations and initial conservation activities.

The Management Plan ensures compliance with four main pieces of legislation: (1) Lands, surveys and Environment Act 1989, (2) Water Resources Management Act 2008, (3) The Forest Management Act 2011, (4) Waste Management Act 2010.

A review of data from the 2021 baseline forest status surveys for Vaisigano Catchment (Schuster 2021) and the 2013 Vaisigano Management Plan (MNRE&IWRM, 2013) provided the biodiversity composition, geophysical and socio-economic data to aid with the technical evaluation. Approval to begin surveys for the MP and implementation of initial conservation activities was granted on December 2 2023. A draft MP was then prepared and presented to the village development committee at numerous meetings between January and April 2024. The current phase of the project was concluded with an opening ceremony to officially recognize the Magiagi Conservation Area, and the handing over of the project to Magiagi. A formal "Agreement to Conserve" was signed by the Magiagi Ali'i ma Faipule on April 20, 2024.

Annexes are also provided of key documents.

1. Letter of agreement by Village Council
2. Consultation participant lists

1.3 Legislative and Policy Context

The rules and conditions for the Magiagi CA are based on Samoa's environmental laws and Magiagi village rules. There are a number of passed laws that contain provisions for environmental protection and preparation of management plans for the conservation of protected areas. The existing legislations such as the *the Land Survey and Environment Act 1989* contains a provision for the conservation and protection of the environment, the establishment of National Parks and other forms of protected areas. *The Forest Management Act 2011* for sustainable management of forests, the *Water Resource Management Act 2008* for water usage and watershed management and the *Waste Management Act 2010* for land protection from pollution and hazardous waste. The last appropriate piece of legislation is the *Village Fono Act 1990* which allows communal land to be set aside for conservation. Furthermore, the *fa'asamoa* contains rules that guide community policies including the protection of maual resources and the land. Therefore the CA rules are set with careful consideration of traditions as well as compliance with Samoa's laws.

2. Site Description

2.1 General Description

As noted, Magiagi is located on the north central of Upolu in the Apia Urban Area of the district of Tuamasaga (refer Figures 1 to 3). Magiagi lands cover a part of the eastern and parts of the middle branches of the Vaisigano Watershed within the Apia Catchment Key Biodiversity Area (Figure 2). This site is considered an important area for conservation of native biodiversity. Its abundance of consumable water is key to urban Apia residents and business. Natural disasters and developments in both lowland and montane forests upriver directly impact water qualities and communities downstream. There had been numerous flooding events over the years resulting in property damages or loss, infrastructure damages and injuries at times. Evidently, the Magiagi CA will not only benefit Magiagi residents, but also the those who reside in the Vasigano watershed area.

The CA is also culturally significant since it is the location of the temple of the god Fe'e or the Fale o le Fe'e. The temple rocks are scattered and overgrown with weeds and small trees. Invasive weeds and trees such as the pulu mamoe (*Castilla elastica*), tamaligi (*Albizia chinensis* and *Falcataria molucana*), cinnamon (*Cinnamomum verum*), pulu vao (*Funtumia elastica*) and fue lautetele (*Merremia peltata*) are all established in the area.

Generally, Magiagi is known as a single village, however the census bureau recognizes Magiagi-tai the northern urban part and Magiagi-uta the southern more forested part. Magiagi-Tai is 100% residential in a much smaller area of 1.202 km² with a population of 1,822 while Magiagi-Uta has 351 residents with an area of 22.5 km². The conservation area is located in the non-residential part of Magiagi-Uta. Remnants of old plantations are present but steep ridges, rough terrain, and difficult accessibility makes farming challenging. Livestock were once on site but watershed requirements eventually persuaded ranches to relocate. According to the village committee, all lands included in the conservation area belong to the community as a whole and not to individuals.

There had been multiple studies and catchment activities at Magiagi because of its abundant water resource and catchment capabilities. Over the years, the Samoa Water Authority (SWA) has implemented multiple watershed activities to safeguard water quality for public consumption. The Electric Power Corporation (EPC) has also been extracting water for its hydro power supply for many years. There have also been a number of baseline studies to determine forest health and biodiversity status conducted by MNRE's Forest Division (FD) and Water resource division (WRD). The FD have planted many native trees in restoration areas alongside the trail over the past 10 years.

In December 2023, the village agreed to the conservation of their forest and requested the boundaries to be expanded to include the rivers around the Fale o le Fe'e. One hundred and fourteen hectares is the official size agreed to for the CA including some of Forestry Division (FD) restoration areas, but it may be enlarged in the future.

2.2 Geographical features

The topography of the MCA is mostly rugged river valleys, ridges and tributaries of the Vaisigano river catchment's eastern most branch (Figure 2). The upper part of the watershed where the conservation is located is formed by an upland volcanic plateau that runs in north-south direction. The elevation ranges between 200m at lowland and approximately 600m at the highest point an ideal elevation for all bird habitats and nesting including sea birds and migratory bird populations. The general aspect of the area is hilly to mountainous.

2.2.1 Geological features

The geological formations of Magiagi are similar to the rest of the eastern branch of the Vaisigano catchment area (Figure 4). The geology is dominated by Salani volcanics estimated to be around 750,000 years old, and Fagaloa volcanics estimated at 3 million years old (Kear and Wood 1959). This is relatively old rock (for Samoa) and is highly weathered and with deep canyons.

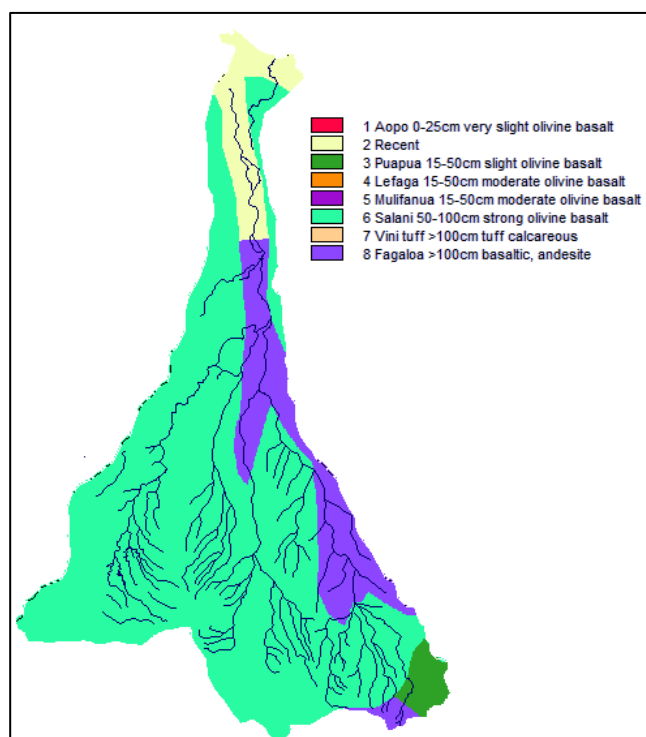


Figure 4 – Geological Formation Map

2.3 Biodiversity

2.3.1 Vegetation

The specific forest vegetation of Magiagi is separated into 3 types, lowlands, foothills, and uplands (Schuster 2021- see Figure 2). The lowland forest occurs at altitudes up to around 200 metres elevation, the foothill forest occurs between 200m and 500m altitude; and the upland forest occurs above 500m. The lowlands and foothill include the Fale o le Fee consists primarily of secondary growth as a result of farming, cattle ranching and clearings for road and pipelines. Species such as the Ficus, Tree ferns, mosses epiphytes, and lichens are common. The upper land 500m and above has higher biodiversity value because it is still relatively densely forested and is in the transition zone between lowland and montane rainforest. Despite disturbances caused by cyclones, agricultural and developmental activities, the area still has remnants of large native trees surviving. Existing population of native tree species include but not limited to Tava (*Pometia pinnata*), Laga'ali (*Aglaia samoensis*), Maota (*Dysoxylum maota*), Niu Vao (*Clinostigma warburgii*) as well as the ecologically critical "keystone species" Aoa or banyan trees (*Ficus prolixa* and *Ficus obliqua*) which are homes to many epiphytic plants and animals and provide fruit all year round for pigeons and doves.

One hundred and thirty three (133) angiosperms and eighty five ferns and fern allies (Schuster, Whistler, & Tuilemafua 1997) were identified in and around this site. Around 16 invasive species have been identified with some native to Samoa and the majority being alien invasive species. Epiphytes, ferns and moss are abundant on site but have not been properly identified and documented.

The following list taken from the Baseline Forest Status Survey for Vaisigano Catchment includes common species in the lowland, foothills and upland forest of Magiagi (Schuster 2021).

Table 2 – Common plant species of Magiagi CA

Common Species of lowland forest	Common Species of foothill forest	Common Species of upland forest
- Asi toa (<i>Syzygium inophylloides</i>) - Atone (<i>Myristica inutilis</i>) - Falaga (<i>Barringtonia samoensis</i>) - Filimoto (<i>Flacourtia rukam</i>) - Gatae (<i>Erythrina variegata</i>) - Ifi (<i>Inocarpus fagifer</i>) - Ifilele (<i>Instia bijuga</i>) - Lagaali (<i>Aglaia samoensis</i>) - Laupata (<i>Macaranga harveyana</i>) - Mafoa (<i>Canarium harveyi</i>) - Magaui (<i>Garuga floribunda</i>) - Malili (<i>Terminalia richii</i>) - Mamalava (<i>Planchonella samoensis</i>) - Maota (<i>Dysoxylum maota</i>) - Momolea (<i>Cyrtandra richii</i>) - O'a (<i>Bischofia javanica</i>)	- Aoa (<i>Ficus obliqua</i> and <i>Ficus prolixa</i>) - Atone (<i>Myristica inutilis</i>) - Gasu (<i>Palaquim stehlinii</i>) - Lagaali (<i>Aglaia samoensis</i>) - Magele (<i>Trema orientalis</i>) - Malili (<i>Terminalia richii</i>) - Mamala fanua (<i>Homalanthus nutans</i>) - Mamalava (<i>Planchonella samoensis</i>) - Masame (<i>Glochidon ramiflorum</i>) - Mosooi (<i>Cananga odorata</i>) - Salato (<i>Dendrocnide harveyi</i>) - Tamaligi (<i>Falcataria mollucana</i>) - Tamanu (<i>Calophyllum neo-ebudicum</i>) - Tava (<i>Pometia pinnata</i>) - Tavai (<i>Rhus taitensis</i>)	- Aoa (<i>Ficus obliqua</i>) - Mamalava (<i>Planchonella samoensis</i>) - Maota mea (<i>Dysoxylum huntii</i>) - Salato (<i>Dendrocnide harveyi</i>) - Siapatua (<i>Elaeocarpus grandis</i>) - Taputo'i (<i>Alectryon samoensis</i>) - Vivao (<i>Reynoldsia pleiosperma</i>)

Common Species of lowland forest	Common Species of foothill forest	Common Species of upland forest
- Poumuli (<i>Flueggia flexuosa</i>) - Pualulu (<i>Fagraea berteriana</i>) - Talie (<i>Terminalia catappa</i>) - Tamanu (<i>Calophyllum neoebudicum</i>) - Tava (<i>Pometia pinnata</i>) - Tavai (<i>Rhus taitensis</i>)		

2.3.2 Birds

Twenty seven bird species are found at the MCA. Of the twenty seven, four are seabirds including the rare Taio, or Tahiti petrel (*Pseudobulweria rostrata*). Both the Tooth-billed Pigeon or Manumea (*Didunculus strigirostris*) which is Critically Endangered and the Endangered Ma'oma'o (*Gymnomyza samoensis*) are present both at the Fale ole Fee area and Magiagi upland sites. Thus it can be concluded that the native bird population for the area continues to be protected and in healthy condition. The presence of both these endangered birds justifies the need for protection of critical habitats from human threats as well as enhancing the resilience of the forest through sustainable preventative interventions.

The Imperial Pigeon or Lupe (*Ducula Pacifica*) was routinely hunted by villagers during the months of August to October but has been banned altogether. According to the secretary of the village committee, Magiagi village now prohibits the hunting of any native bird or wildlife in the CA and guns are not allowed in the CA.

Table 3. Bird list of Magiagi Rainforest Area (Schuster 2021 and personal observations)

Common name	Scientific names	Conservation Status	Habitat/range	Fale o le Fee area	Upper catchment
Introduced birds					
Common Myna/ maina fanua	<i>Acridotheres tristis</i>	Inv	Open areas/low to mid altitude	y	n
Jungle Myna/ maina vao	<i>Acridotheres fuscus</i>	Inv	Open areas	y	n
Red-vented Bulbul/ manu palagi	<i>Pycnonotus cafer</i>	Inv	Open areas	y	n
Feral Pigeon/ lupe palagi	<i>Columba livia</i>	Inv	Open areas	n	n
Native birds					
Pacific Imperial Pigeon /lupe	<i>Ducula pacifica</i>	Vu	Mature forest	y	y
White-throated Pigeon/ fiaui	<i>Columba vitiensis</i>	Vu	Mature forest	y	n
White-rumped Swiftlet/ pe'ape'a	<i>Aerodramus spodiopygius</i>	LC	Caves/open areas/mature	y	y
Wattled honeyeater/ iao	<i>Foulehaio carunculata</i>	LC	Open areas	y	y
Tooth-billed Pigeon/ manumea	<i>Didunculus strigirostris</i>	CR	Mature forest	y	y

Common name	Scientific names	Conservation Status	Habitat/range	Fale o le Fee area	Upper catchment
Scarlet Robin/ tolaiula	<i>Petroica pusilla</i>	Vu	Mid-high altitude	y	y
Samoan Whistler/ vasavasa	<i>Pachycephala flavifrons</i>	NT	montane	y	y
Samoan Triller/ miti	<i>Lalage sharpei</i>	NT	montane	n	y
Samoan Starling/ fuia	<i>Aplonis atrifusca</i>	LC	Open area	y	y
Samoan Broadbill/tolaifatu	<i>Myiagra albiventris</i>	NT	undergrowth	y	y
Samoan Fantail/se'u	<i>Rhipidura nebulosa</i>	LC	Open areas	y	y
Red-headed parrotfinch/Manu ai pa'u laau	<i>Erythrura cyaneovirens</i>	Vu	Mature forest	n	y
Crimson-crowned Fruit-dove /manutagi	<i>Ptilinopus porphyraceus</i>	Vu	Mature forest	y	y
Purple Swampphen/ manuali'i	<i>Porphyrio melanotus</i>	NT	Swampy areas	y	n
Polynesian Triller/ miti tai	<i>Lalage maculosa</i>	LC	Open areas	y	y
Polynesian Starling/ fuia vao	<i>Aplonis tabuensis</i>	NT	Forest areas	n	y
Ma'o/ ma'oma'o	<i>Gymnomyza samoensis</i>	En	Forest and open areas	y	y
Many-coloured Fruit-dove/manuma	<i>Ptilinopus perousii</i>	Vu	Mature forest	y	y
Flat-billed Kingfisher/ tiotala	<i>Todirhamphus recurvirostris</i>	LC	Open areas	y	y
Cardinal honeyeater/ segasegamau'u	<i>Myzomela cardinalis</i>	LC	Open areas	y	y
Blue-crowned Lory/ segavao	<i>Vini australis</i>	Nt	Forest and open areas	y	y
Barn Owl/ lulu	<i>Tyto alba</i>	LC	Open areas	y	n
Banded Rail/ve'a	<i>Gallirallus philippensis</i>	LC	Open areas	y	y
Friendly Ground-dove/tuaimao	<i>Gallicolumba stairi</i>	Vu	Mature forest	n	y
Seabirds					
White Tern/ Manusina	<i>Gygis alba</i>	LC	Forest tree tops	y	y

Common name	Scientific names	Conservation Status	Habitat/range	Fale o le Fee area	Upper catchment
White-tailed Tropic-bird/tava'e	<i>Phaethon lepturus</i>	LC	Forest tree tops	y	y
Brown Noddy/gogo	<i>Anous stolidus</i>	LC	Forest tree tops	y	y
Tahiti Petrel/ta'i'o	<i>Pseudobulweria rostrata</i>	NT	Burrows in the ground	y	?
Totals				27	24
Key: Cr: critically Endangered; En -endangered Vu: vulnerable; NT: near threatened; Inv -Invasive species					

2.3.3 Significant Species

Table 4 contains the list of the known 7 significant species found at the Magiagi CA, including those classified as threatened on the IUCN Red List 2022 and species that are important for ecological reasons.

Table 4 – Significant Species of Magiagi

Scientific Name	Samoan and English Common Names	Taxonomic Group	Reason for Inclusion
<i>Balaka samoensis</i>	Maniuniu	Plants (Palms)	IUCN Endangered
<i>Clinostigma samoensis</i>	Niu vao (Samoan bush Palm)	Plants (Palms)	IUCN Endangered
<i>Columba vitiensis</i>	Fiaui (White throated pigeon)	Birds	Locally Endangered
<i>Ducula pacifica</i>	Lupe (Pacific pigeon)	Birds	Locally endangered
<i>Ficus prolixa</i> and <i>F.obliqua</i>	Aoa (Banyan tree)	Plants	Keystone species (ecologically critical)
<i>Pteropus samoensis</i>	Pe'a vao (Samoan flying fox)	Flying foxes (Mammals)	IUCN near threatened Endangered in Samoa
<i>Gymnomyza samoensis</i>	Ma'oma'o (Mao)	Birds	IUCN Endangered

2.4 Key Threats

The two categories of threats in Magiagi are, “naturally occurring” and “human induced”. These threats are systemic in nature therefore cannot be treated in isolation. A systematic approach is required to provide long term integrated solutions. Threats are further divided into two main types “direct or the problem” and “indirect or drivers” of the problem.

Habitat loss

There is a significant human induced threat since this site has been of interest for outside actors i.e., local residents, SWA, MNRE, EPC and others for years. Both watershed and hydro power related activities have permanently altered some parts of the natural environment. A major hydroelectric power and flood protection scheme is planned around 2km downstream from the project site at Alaoa and will flood part of the eastern branch of the Vaisigano river. Although flooding will not impact the project site, the movement of fresh water biodiversity such as fish, eels and shrimps etc will be impeded up the river by the dam.

All these human influenced threats as well as natural disasters are exacerbated by the effects of climate change. And due to its water catchment capabilities, a growing population, a crowded Magiagi-Tai, land usage

is expected to increase and demand on resources will continue to rise. The need for sound comprehensive management to control the impacts could not be any more important.

Quite a large area of forest was cleared when the EPC water intake and the service road to the Fale o le Fe'e were built. Trees were felled to make way for the road and pipelines. This permanent clearing is kept clear of trees and shrubs and invasive weeds during routine maintenance. Fortunately, there are no plans to expand the pipeline or the service road in the foreseeable future according to EPC.

Farming and Cattle ranching is the most common type of clearing on village lands. It can be very small, for a household plantation to acres for cattle ranches. Based on field observations and according to Magiagi Committee accounts, cattle ranches have been removed permanently from the conservation as part of watershed protection control. The new CA rules prohibit unsustainable land developments by residents as well as safeguard the forest from outside users. Magiagi village rules already laid the groundwork for a sustainable and more environmentally beneficial maintenance plan. A good monitoring system involving the authorities of Magiagi village is recommended.

Overharvest of native fauna and flora

Hunting of Lupe or Imperial pigeons, flying foxes is common in Samoa for food, sport and handicraft making. The hunted birds and flying fox species include the Lupe or Pacific Imperial Pigeon, (*Ducula pacifica*), Fiaui or White-throated Pigeon, (*Columba vitiensis*) and Pe'a vao or Samoan flying fox (*Pteropus samoensis*) - all protected under national law (Protection of Wildlife Regulations 2004). Wild pigs hunting pose a lesser threat to the environment. Freshwater fishing poses a danger of overharvesting of prawns and eels.

Natural disasters

Natural disasters such as cyclones, floods, forest fire, earthquakes and related phenomena such as tsunami are well recognized as major drivers of ecosystem change in the Pacific. Samoa is no exception and is particularly prone to cyclones with Apia experiencing approximately ten tropical cyclones per decade. The Magiagi forests, like all areas in Samoa, have been impacted by many cyclones over the years including Cyclones Ofa 1989, Val 1990, Evan in 2012.

Natural disasters and Acts of God cannot be stopped or delayed but we can implement control measures to minimize negative impacts. The conservation area aims at implementing projects that *restore the integrity* of ecosystem. The resilience and resistance abilities of the ecosystem depend on its internal strength and health. Replanting in degraded areas, reduction or elimination of pollutants, educating people and industries, and changing lifestyles will restore the integrity of the ecosystems of Magiagi Conservation Area.

Invasive Species

As elsewhere in Samoa, invasive species are a major threat to the native biodiversity in the Magiagi CA. This is a serious concern in places like Samoa where people live a subsistence lifestyle and in total control of their forests and natural resources. Logging, clearing and natural disasters such as cyclones or flooding clear down old growth triggering regeneration of invasive plants. This regeneration is a succession where native trees and invasive plants compete for space and sunlight. With the fast-growing characteristics of invasive plants, native populations are usually stifled as a result. The secondary forest will eventually emerge after a few years when

native trees are tall enough to shade out invasive weeds and shrubs. A lot of native species are outcompeted unless there is a management intervention.

Invasive vines such as fue saina (*Mikania micrantha*) and fue lautetele (*Merremia peltata*) are common in the lower part of the CA, while the tinamoni (*Cinnamomum verum*), ali'i o le po (*Cestrum nocturnum*) and Koster's curse (*Clidemia hirta*) dominate the upper areas. This is usually followed by the fast-growing pulu mamoe (*Castilla elastica*), fa'apasi (*Spathodea campanula*) and tamaligi (*Albizzia*) species.

Magiagi CA adopted the native plants habitat restoration as an effective way to manage invasive weeds and plants. Some of Magiagi CA's most disturbed areas have been restored under the MNRE's Forestry Division restoration programme and SCS recently replanted 1,000 native seedlings in areas dominated by *Merremia peltata*. It is proven that areas planted with fast growing native species quickly shade out weeds. If the right species are planted at the right place and right density, weeds can be suppressed within 2 years.

In addition to invasive plants are rats (Polynesian rat and Ship rat), cats, and myna birds (Jungle and Common mynas) dogs, feral and domestic pigs. All of these species can either degrade native ecosystems or outcompete or even kill native species. Therefore, an integrated invasive species management regime is recommended in disturbed areas dominated by invasive plants and animals.

Future invasive species management strategies for Magiagi CA will be built upon existing management recommendations in other conservation areas that are showing success eg the Malololelei CA rat management project led by the Samoa Conservation Society in partnership with MNRE on 56 Ha.

Table 5. Invasive trees and weeds

Species name	Samoan name	Classification	Location
<i>Albizia chinensis</i>	Tamaligi uliuli	Invasive tree	All
<i>Cestrum nocturnum</i>	Teine o le po	Invasive vine	All
<i>Castilla elastica</i>	Pulu mamoe	Invasive tree	lowland
<i>Cinnamomum verum</i>	Tinamoni	Invasive tree	Upland
<i>Falcataria molucana</i>	Tamaligi paepae	Invasive tree	All
<i>Funtumia elastica</i>	Pulu vao	Invasive tree	Lowland
<i>Hyptis pectinata</i>	Vaomigi	Invasive weed	All/roadside
<i>Leucaena leucocephala</i>	Fuapepe/lusina	Invasive tree	Lowland
<i>Merremia peltata</i>	Fue lautetele	Invasive vine	Secondary
<i>Mikania micrantha</i>	Fue saina	Invasive vine	All
<i>Spathodea campanulata</i>	Faapasi	Invasive tree	All

Table 6. Drivers of Threats

Indirect threats (or Drivers)	Direct Threats-(Problem)	Nature Values Impacted
Commercial need for electricity Commercial need for water Municipal need for dam Local need of agriculture Local need for cattle ranches	Forest Clearing & Soil erosion Flooding Riparian habitat loss Lowland deforestation	Forest health & native habitats & species population Rare & endemic wildlife Abundant water Undisturbed soil Pristine environments

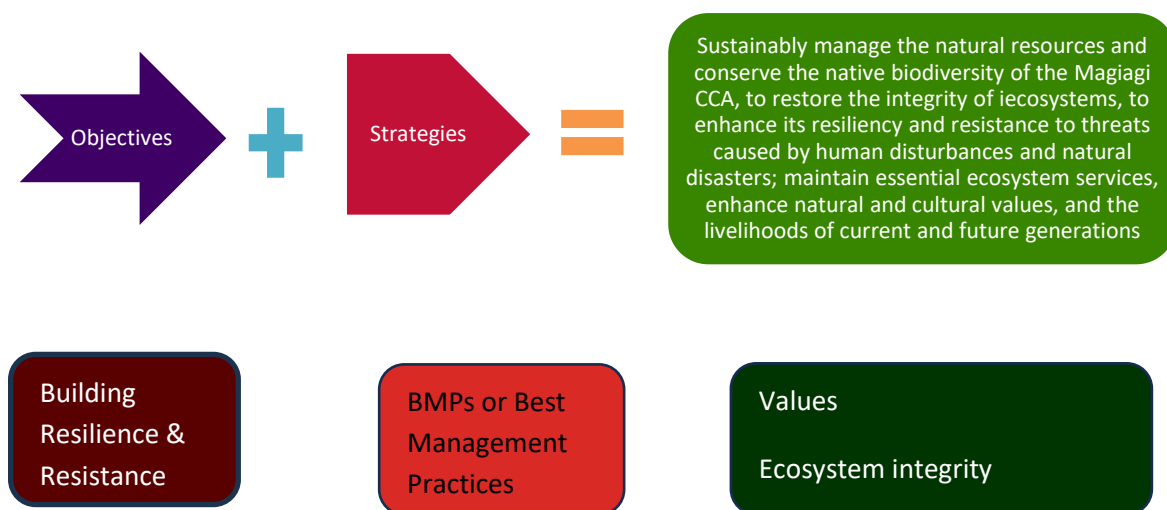
Indirect threats (or Drivers)	Direct Threats-(Problem)	Nature Values Impacted
Population growth and need for housing		
Clearings caused by human disturbance Natural disaster disturbance Human introduction, direct (live animals and plants) and indirect - unintentional	Invasive Species	Native populations Ecosystems and species extinction Ecotourism values Transformation of natural sites
Sport hunting Income from selling feathers for handicrafts	Hunting	Lupe, Manumea, Pe'a vao, other native birds
International greenhouse emissions and global warming issues	Increasing and intensifying cyclones, tsunamis, rising sea levels, earthquakes	Environment, community, food supplies, infrastructure, livelihood

3 - Management Context

The management plan follows a logical process and hierarchy down from a clear identification of the important **values** of the CA, a long-term **vision** to maintain and enhance those values, a set of intermediate **objectives** that are milestones on the way to achieving the vision as well as the **strategy** that outlines the actions and steps to be taken along the way. Finally, a set of CA **rules** established and enforced by the CA management committee for the use of the natural resources in the CA supports the strategies.

The relationship and flow between all these elements can be illustrated diagrammatically as in Figure 5 below. This diagram illustrates the trajectory of the management of Magiagi Conservation Area. The values have been combined in one concept, **ecosystem integrity**. Building a **resilient** ecosystem that is healthy and fit to bounce back from catastrophic threats is the overarching objective. Equally important is the ability of an ecosystem to absorb, defend itself or **resist** threats. Enhancing the **resiliency** and **resistance** of Magiagi Conservation Area is the basis for objectives while implementing **best management practices** to adapt is the driver of strategies.

Figure 5: Conceptual Model of Conservation Processes

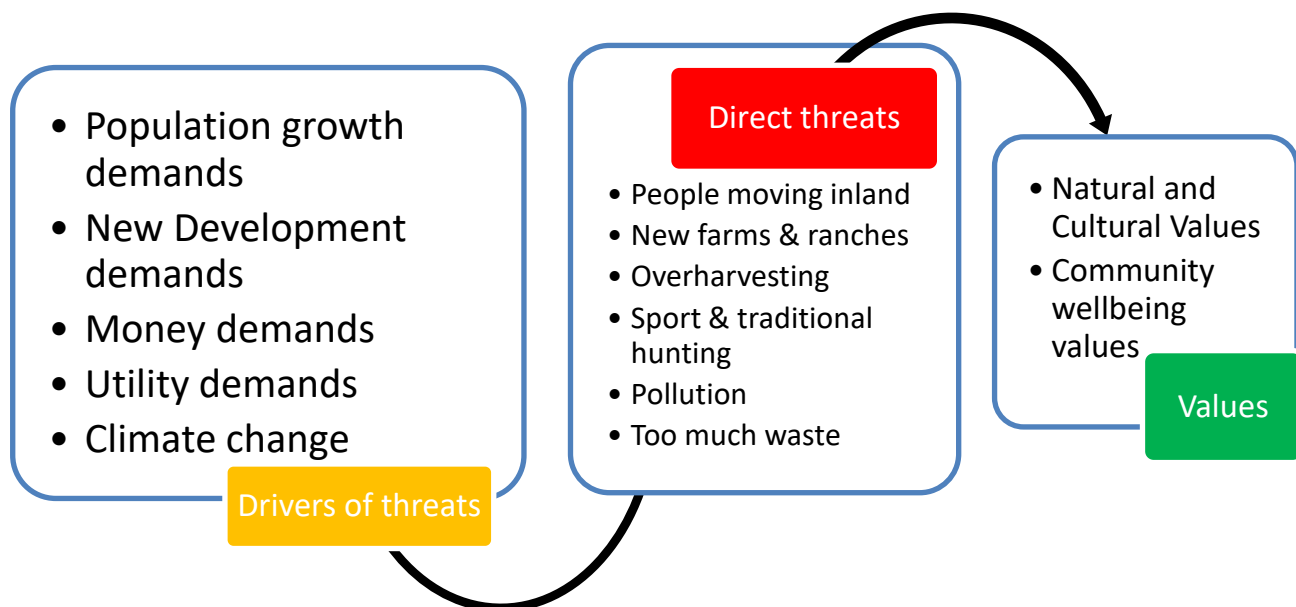


3.1- CA Values

Values Management should be a balancing act. As shown in the flow in Figure 6. The following are considered the values, or important features of the Magiagi CA, as identified by community groups and advisers. Increased threats result in decreased values, and decreased values means dirty water, polluted air, hotter temperatures, flooded roads, contaminated soil, scarce food, less fish and overall low quality of life for human and animals alike. Levelling the scale **should be** the minimum outcome any conservation efforts aspire to.

- **Biological values**- the unique flora and fauna and ecosystems of the CA.
- **Geophysical values**- the unique geology, land form and soils, and the streams and water supply. Vaisigano river and tributaries, Salani and Fagaloa volcanics and river rocks known as “salefu” that are regularly collected for umu.
- **Cultural values**- the unique cultural practices, legends, archaeological sites and aesthetic values. The Fale o le Fe’e archaeological site
- **Economic values**- supporting the livelihoods of local people – from harvesting natural resources for subsistence
 - Ecotourism income for village
 - Income earned from funded conservation field work
 - Employment
- **Capacity building values**
 - Learning opportunities through project implementation
 - Hands on site training
 - Ability to attend workshops and trainings

Figure 6 – Drivers and threats to values



3.2 - Vision Statement

English: Sustainably manage the natural resources and conserve the native biodiversity of the Magiagi CA: to restore the integrity of its ecosystems, to enhance its resiliency and resistance to threats caused by human disturbances and natural disasters; for the maintenance of essential ecosystem services, the enhancement of the natural and cultural values, and the livelihoods of current and future generations.

Samoan: Ia fa'aauuuina le puleaina tatau o alaga-oa fa'alenuma atoa ai ma le faasaoina ma le puipuia o le ola fa'alenuma o meaola i laufanua ma vaomatua o Magiagi: ia toe fa'afo'i le malosia o le siosiomaga i lona tulaga sa iai, ina ia faaitiitia ai a'afiaga mai matagi malosia atoa ai ma atina'e a tagata; ia toe totoina o vaomatua ma le fa'aleleia o nofoaga taua fa'ale aganuu aemaise o le tulaga i le soifua manuia o auga tupulaga mo nei ma le lumanai.

3.3- Guiding Principles

A number of guiding principles have been identified that guide the implementation of the management plan.

- All Magiagi residents are stakeholders in the management of the CA
- All residents of Magiagi and visitors to the CA have responsibilities for the management of the CA.
- All actions and developments in the Magiagi CA should adhere to the management plan.
- The Government of Samoa and non-government organizations (NGOs) and other partners will help build the capacity of Magiagi CA to implement the management plan.
- Management of the Magiagi CA shall be supervised by the Magiagi CA Management Committee which will have the legal authority to conduct its role.
- The CA management committee will have the power to set all rules and fines in the CA.
- The CA management committee shall have transparent and accountable processes as well as established mechanisms for grievances and dealing with disputes.
- The Magiagi CA will be managed in an *adaptive management* approach, whereby management strategies, actions, rules and fines will be revised as required based on changing circumstances or new information.

3.4 - Management Objectives

Management objectives are the milestones, intermediate results or **desired changes** that are necessary to achieve the vision. The objectives specify the desired changes in the factors (direct and indirect threats and opportunities) that need to be achieved in the short and medium-term. A good objective meets the criteria of being results oriented, measurable, time limited, specific, and practical.

Two main types of objectives have been identified for Magiagi: a conservation objective and a human well-being (or socio-economic) objective, reflecting the close inter-relationships between environmental conservation, improving livelihoods and maintaining culture and traditions (Table 7).

Table 7. Management Objectives for the Magiagi CA

Conservation Objective	Community wellbeing Objective
Conserve critical habitats and restore ecosystem integrity to rebuild its resistance to human and natural threats	Empower community groups and individuals through capacity building, identify sustainable alternative income generating activities, start ecotourism and create jobs

4 - Management Strategies

A strategy is a **set of actions** with a common focus that work together to achieve project objectives and to deal with threats. Implementation of many of the strategies can commence immediately. Six strategies have been identified for the achievement of CA objectives and to manage current and anticipated future threats, including climate change. Critical habitat conservation, invasive species management, significant species conservation and recovery, tree planting, capacity building and alternative income generation schemes.

A major assumption in these strategies is that by dealing with current threats to the Magiagi will restore the integrity of ecosystems which will enhance the resiliency and resistance of the CA to combat future threats from natural disasters and human influenced. Many strategies can influence multiple objectives and strategies - for example, increasing environmental awareness helps achieve all objectives and contributes to all strategies while dealing with invasive species promotes site and species conservation.

4.1- Forest Protection & Restoration

The principal threats to the sustainable land management status of these forests over the next 30 years and more are:

1. Deforestation (moderate threat).
2. Forest degradation (significant threat).
3. Continuation of non-forest area (significant threat)

4.2- Conservation of threatened Species

The project aims to conserve all native species in the CA. However, some species have been identified as specific targets because of their rarity or threat including the native bush palm, (niu vao) the forest honey eater, (Ma'oma'o), the native pigeons (Manumea, Lupe, Fiaui) and flying foxes (Pe'a).

Magiagi Forest contains some of Samoa's endemic and threatened bird species. Cyclones, flooding and increased warming temperature have caused major damages to the flora which directly impact their habitats. Conserving these species must include forest restoration, biodiversity conservation and protection from hunting and unsustainable developments.

Samoa has laws banning the hunting of native birds (pigeons in particular) and flying foxes but there is little effort to enforce these laws. Village authorities (*Ali'i ma faipule*) and *tapus* (bans) are sometimes the best way to enforce conservation policies. *The Animal Ordinance 1960* and the *Protection of Wildlife Regulations 2024* contains regulations and restriction of the use or exploitation of threatened species. Much greater effort needs to be placed on raising awareness of these laws and why they are important and should be adhered to.

It is also recommended that keystone species (species that are fundamental to the ecological integrity of native ecosystems) are also protected, either under national law, or CA bylaws. Such species include the large banyan or Aoa trees (*Ficus prolixa* & *Ficus obliqua*) as they are the home for many native species of plants and animals including important food sources for native birds as well as pigeons, fruit doves and flying foxes which are critical for the pollination and dispersal of native seeds. Magiagi village has sets of rules that supports conservation and are incorporated into CA rules.

The recommended immediate actions for the conservation of target species are:

- Develop and agree on the rules for the management of target species indicating harvesting rules and hunting bans or hunting seasons for particular species.

4.3- Management of Invasive Species

Invasive species are a major threat to the native biodiversity in the project site and the most damaging invasive species should be managed in the CA. While it is not possible to manage all invasive species in the CA due to its large size, management of the plants with significant ecological impacts such as African rubber tree or Pulu vao (*Funtumia elastica*), Panama rubber or Pulu mamoe (*Castilla elastica*), African tulip or Fa'apasi (*Spathodea campanula*) and Tamaligi (*Albizzia*) species as well as rats, cats and feral pigs would be beneficial.

An effective way to manage invasive weeds is via habitat restoration. Areas planted with fast growing native species quickly shade out weeds. If the right species is planted and in the right density, weeds can be suppressed within 2 years.

The recommended immediate actions for managing invasive species are as below:

- Raise awareness on the impacts of invasive species and the importance of their management;
- Manage the spread of invasive plants by physical removal and restoration
- Replant plants native to the site; Work with Magiagi village, SCS and MNRE in initiating a rat, pigs and feral cats management project.

4.4- Forest Carbon, tree planting and forest restoration

In many degraded areas, tree planting and forest restoration are needed to reverse ecosystem decline and to bring back the native forest. Magiagi CA has a large deforested area due to municipal developments i.e. EPC penstock (pipeline) and access roads as well as old plantations and past livestock. Strategic replanting is needed and should be guided by conservation principles. Proper tree suitability, soil compatibility, spacing and species selection practices should be employed rather than focusing on filling the gaps. Magiagi CA encompasses varying elevations therefore attention to details is vital. Tree species selection should also be based on the appropriate "climate proof trees" that improve the resilience of the forest to climate change.

A forest restoration awareness programme should be initiated that includes empowering the community through knowledge of the benefits of trees, tree biology, tree identification, planting, and maintenance including proper pruning techniques. This project should be coordinated by a tree expert but implemented in conjunction with village groups.

4.5- Management of forest clearance activities

There has been a steady deterioration in the ecological value of the forest in Magiagi as a result of decades of low scale tree cutting mostly for farming. As a priority, the clearing of any further forest should cease and forest conservation should be promoted through education and awareness raising and restoration efforts. Such actions require political support and incentives to assist the development of improved land use management methods and continued monitoring by CA staff.

A full list of recommended actions to protect the forest are as follows:

- Ban any commercial logging;

- Raise awareness and educate villagers on the benefits of intact native forest (water catchment protection, wildlife, eco-cultural tourism, and other values);
- Support and integrate with local and regional political initiatives to stop the clearing of native forest and protect biodiversity values;
- Establish alternative income generating activities (e.g. ecotourism, forest carbon offset) and traditional gardening opportunities to offset the potential impact of the cessation of clearing.

The proposed rules related to infringements are shown in section 5. The recommended immediate actions to manage forest clearance activities in the CA are as below:

- No new gardens allowed in the CA;
- No commercial logging allowed in the CA;
- No resource harvesting for commercial or subsistence in the CA;
- No hunting, swimming or fishing;
- No unauthorized entry;
- Closed on Sundays.

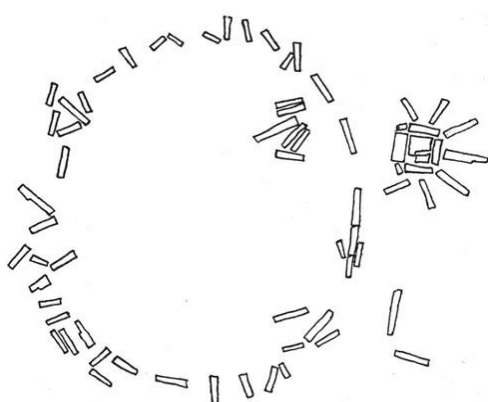
4.6 Development of Eco-tourism activities

Ecotourism development has long been promoted in Samoa as a form of sustainable and appropriate development in Samoa. Magiagi is home to the Fale o le Fe'e which is a temple of one of the ancient gods. Tourists, academics, archaeologists and environmental workers have been visiting the site for years. With a pristine forest, the presence of the native and endemic species such as the ma'oma'o and manumea and the Fale o le Fe'e, the site is a potential hot spot for ecotourism

The recommended immediate actions to improve the development of ecotourism in the CA are:

- Include the Fale o le Fe'e in the CA
- Restore or improve accessibility to the Fale o le Fe'e
- Remove invasive species and restore native plants
- Develop a costed strategy and workplan for the further development of the CA including trails, viewpoints, bird hides and signage.
- Develop promotional material to promote the CA amongst local and overseas visitors- e.g. website, facebook page, brochures etc.
- Conduct training and capacity building of local communities in sustainable ecotourism
- Seek guidance and professional assistance from Samoa Tourism Authority

Figure 7. Fale o le Fe'e in 1944 and 2024



4.7- Capacity building and improvement in environmental awareness and consciousness

The Magiagi CA community must be trained to implement this MP. Training will be needed in forest restoration, nursery development, tree planting as well as in site surveys, signage and trails development. SCS will facilitate the training in collaboration with MNRE and partners.

There is a general lack of public environmental awareness or appreciation of the critical values of native biodiversity and habitats in Samoa (as elsewhere in the Pacific), as well as the linkages and relationships between species and ecosystems, the threats to species and the steps needed to enhance natural heritage and thereby safeguard cultural heritage and promote sustainable development.

However, Samoa has a rich oral tradition which is the basis of decision makings and everyday life. The many legends and stories contain tapus, forbidden trees or animals and sacred lands that are to be left undeveloped. These legends and ancient wisdom were the laws of the land to most rural and illiterate community members. Unfortunately, this strong belief in the spirituality of nature gradually faded through generations especially with the presence of televisions and hand-held electronic devices. Restoring the integrity of customs and traditions and inclusion of traditional knowledge in management is a good way to reconnect people to the land and a motivation to conserve and protect. Delivering the conservation message in traditional terms will easily reach a nontechnical village population.

The recommended immediate actions to build capacity and improve environmental awareness in the Magiagi CA are to:

- Develop field hands-on awareness programmes to reconnect people to the environment.
- Develop specific awareness programmes that connect traditional values and environmental conservation principles.
- Develop environmental awareness programs that improve the community understanding of the values of Conservation and the importance of the CA rules.
 - For women's committee
 - For youth
 - For Magiagi elementary school
 - For churches
- Provide training for community members in CA management, forest conservation, restoration, identification of fauna and flora and implementation and monitoring of project activities.
- Develop awareness material on the project and on the value of the CA- such as posters, brochures, postcards for sale etc.
- Identify storytellers in the village and plan sharing sessions

5- CA Management Rules

5.1 - Rules of the Conservation Area

Not allowed

1. No visiting on Sunday
2. No Logging of any kind allowed in the CA

3. No activities allowed that will cause degradation to ecological, hydrological, geological, cultural or scenic features in the CA
4. No new gardens or livestock to be introduced to the CA
5. No harvest of native species protected under law in the CA (i.e. pigeons, flying foxes)
6. No hunting allowed in the CA
7. No swimming or fishing in the CA rivers
8. No taking of seedlings, medicinal plants, decorative plants, rock from the Fale o le Fee and river rocks.
9. No illegal dumping and no littering in the CA
10. No new plant or wildlife species to be introduced to Magiagi CA
11. No commercial activities such as tours, tour facilities, trails etc in the CA to be developed without the permission of the CA management committee

Allowed

1. Visitors to the Fale o le Fe'e by permission from the Alii and Faipule of Magiagi
2. Cars are allowed on the road and designated parking only
3. Collection of medicinal plants with permission from Alii and Faipule

Tulafono mo le Eleele Fa'asao o Magiagi

1. Tapunia i Aso Sa
2. Faasa le tatu'uina i lalo o la'au i totonu o le Fa'asao mo so'o se mafuaaga
3. Fa'asa ona faia ni atina'e po'o ni fuafuaga e fa'aono fa'aleagaina ai le laueleele, o punavai, le ola fa'anatura ma nofoaga taua fa'aleaganuu.
4. Fa'asa le faia o ni ma'umaga po'o lafu manu i totonu o le Faasao
5. Fa'asa ona fa'aaoga e tagata pe fa'atama'ia ola fa'alenua o lo'o puipuia i tulafono a le malo Samoa e pei o pe'a, lupe. manutagi ma isi manu Samoa.
6. Fa'asa tutuliga ma fanafanaga o so'o se ituaiga i totonu o le Fa'asao
7. Fa'asa ta'elega po'o fagotaga i totonu o vai o le Fa'asao.
8. Fa'asaina le ave'esea mai o ni la'au toto, la'au fai vai, la'au fai teu, ma'a o le Fale o le Fe'e ma ma'a vai
9. Fa'asa ona lafoa'i so'o se ituaiga o otaota i totonu o le Fa'asao
10. Fa'asa ona fa'aulufale mai ni la'au po'o manu e ese mai i manu ma la'au o Magiagi
11. E le fa'atagaina asiasiga, po'o se malaga fa'apisinis, poo le fausia foi o ni auala ma fale-talimalo i totonu o le fa'asao e aunoa ma le fa'atagana a Alii ma Faipule o Magiai.

Fa'atagaina

1. E fa'atagaina tagata asiasi mai i le Fale o le Fe'e i lalo o le fa'atagana a Ali'i ma Faipule
2. E fa'atagaina ta'avale i auala ma paka fa'atulagaina
3. E fa'atagaina ona ao la'au fai vai i lalo o aiaiga mai le Komiti

5.2- Rules for visitors to the Conservation Area

- All visitors must contact the village committee before planning a visit

- Visitors must respect Samoan customs including appropriate attire, no entry day such as Sundays, and respect no trespassing on sacred grounds and loud music or noises
- Respect all Conservation Rules

6. Summary of Conservation Actions

A summary of the recommended conservation actions, responsibilities, timing, priority and current status is shown in Table 8. Timing is grouped into immediate (for the next 12 months), and mid- term (within the next 12 to 24 months). Priority is considered high or medium. Phase 2 of the project is expected to start at the end of the current phase of the project in May 2024.

Table 8- Summary of recommended conservation actions, responsibilities, timing, priority and status

Strategy and Action	Responsibility	Timing	Priority	Status
1. Forest Conservation				
Develop and agree on the rules for the management of the CA	Community with support of SCS and partners	Immediate	High	Approved and endorsed
Develop a short trail with interpretive signage in the CA to explain the biodiversity in the CA	Community with support of SCS and partners	Immediate	High	Install in April 2024
Place signs in the CA explaining the management rules	SCS and Community	Immediate	High	Install in April 2024
2.Conservation of threatened species				
Develop and agree on the rules for the management of target species indicating harvesting rules and hunting bans or hunting seasons for particular species	Community with support of SCS and partners	Immediate	High	Approved and endorsed
Conduct monitoring for rare and threatened species such as Manumea, Ma'oma'o and Niu Vao	Community with support of SCS and MNRE	Immediate	High	Underway, ongoing
3. Management of invasive species				
Raise awareness on the impacts of invasive species and the importance of their management	SCS and partners	Immediate	High	Consultation and general awareness. Workshops Phase 2
Manage the spread of invasive weeds by physical removal and forest restoration	Community with support of SCS and partners	Immediate	High	1 acre of <i>Merremia peltata</i> and wild ginger replaced with 1,000 native seedlings
4. Forest Carbon, tree planting and forest restoration				
Develop a native tree nursery in the CA to propagate the relevant native trees for later planting out	Community with support of SCS and partners	Immediate	High	Phase 2
Implement restoration and weed management in degraded areas (i.e. planting with native trees)	Community with support of SCS and partners	Immediate	High	1 acre cleared and restored
5.Management of forest clearance activities				

Strategy and Action	Responsibility	Timing	Priority	Status
No new gardens allowed in the CA	Community	Immediate	High	Approved and endorsed
No commercial logging allowed in the CA	Community	Immediate	High	Approved and endorsed
Tree cutting and plant harvesting not allowed in the CA	Community	Immediate	High	Approved and endorsed
Encourage improved agroforestry techniques in the CA	Community with support of SCS and partners	Mid term	Medium	Phase 2
6. Development of ecotourism				
Develop a costed strategy and workplan for the sustainable development of Fale o le Fee	SCS, NUS and STA	Immediate	High	Consultation & site preparation completed Workplan in MP
Develop promotional material to promote the CA amongst visitors eg website, facebook page, brochures etc	SCS and partners	Mid term	Medium	Management Plan
Conduct training and capacity building of the community in sustainable ecotourism	SCS and STA	Mid term	Medium	Phase 2
7. Capacity building and improvement in environmental awareness and consciousness				
Provide training for community members in CA management, forest conservation, restoration, identification of fauna and flora and implementation and monitoring of project activities	SCS and partners	Immediate	High	Phase 2
Develop an environmental awareness program to improve the understanding by project communities of the values of the CA and on the importance of the CA rules	SCS and partners	Immediate	High	Consultations completed Phase 2
Develop awareness material on the project and on the value of the CA- such as posters, brochures, postcards for sale etc	SCS and partners	Immediate	High	Phase 2

7- Institutional arrangements

7.1 Magiagi CA Management Committee

A CA Management Committee needs to be appointed to oversee the management of the CA and set all CA rules. The committee should have representation of all the landowning communities in the CA and must also reflect traditional governance arrangements. Ideally all sectors of society including women and youth as well as

chiefs would be represented in the committee. The specific functions and implementing rules and regulations of the committee and the duties and responsibilities of committee members need to be determined, but the proposed roles of this committee are to:

- Endorse the CA management plan (now done)
- Supervise the implementation of the management plan with the support of project partners
- Make decisions on all management plan strategies, actions, rules, laws and fines in the CA
- Mediate, arbitrate and to decide in any complaints or grievances
- Manage funds raised for the implementation of all CA management activities

7.2 Partner roles

Government partners

The proposed roles of government partners to support the implementation of the management plan are shown in Table 9.

Table 9- Proposed roles for government and partners

PROJECT PARTNER	PROPOSED ROLE
MNRE	Provide support to the Magiagi CA Management Committee to develop and implement restoration plans and to monitor and manage biological resources in the CA and in particular to: • Assist with monitoring and management of biological resources in the CA • Conduct environmental awareness activities related to biological resources in the CA • Help the Magiagi CA Management Committee to liaise with other partners including donors, other government departments and NGOs
Samoa Tourism Authority	Provide support to the CA communities and the Magiagi CA Management Committee to manage and monitor tourism activities in the CAs and in particular to: • Assist with monitoring and management of tourism in the CA • Assist with capacity building for sound and sustainable tourism development in the CA • Help the Magiagi CA Management Committee to liaise with other partners including donors, other government departments and NGOs
National University of Samoa	Provide academic and research support in regards to the cultural and heritage sites of Magiagi (i.e. Fale o le fe'e)

Non-government partners

The Samoa Conservation Society considers Magiagi a key partner village in its Manumea Friendly Village (MFV) programme and will support the implementation of this management plan with technical advice and, wherever possible, funds. National and International NGO partners will also be requested to support the implementation of this plan. The Secretariat of the Pacific Regional Environment Programme (SPREP) is an intergovernmental organisation that could potentially provide technical assistance along with international NGOs such as Birdlife Pacific and Conservation International.

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Annex 1. Letter of endorsment of this management plan

Tusi Fa'amaonia o le Tatalaina Aloaia o le Fanua Fa'asao o Magiagi

O Alii ma Faipule o le afioaga o Magiagi, ua malilie 'autasi mo le puipua ma le faasaoina o le ola fa'anatura o le si'osi'omaga o Magiagi, faapea ana tū ma aganu'u taua, mo le lumana'i o tupulaga ma fanau . Ua fa'atūina fo'i e le afio'aga se Fa'asao o le Vaomatua, e fa'asaoina ai le ola fa'anutra o le vaomatua ma le fa'aleaganu'u i le vaega maualuga o le Apovai o Vaisigano, ma ona ele'ele ma laufanua e pulea fa'aleaganu'u. O lenei Vaomatua Fa'asao e tusa ma le 114 heta po'o le 280 eka lona tele, e aofia ai le puipua o punūvai taua, palapala, vaomatua, ola fa'anatura fa'apea le talatu'u o le Fale o le Fe'e. O lenei Vaomatua Faasa'o, e mafai ona fa'aopopo lona telē, pe a finagalo i ai Alii ma Faipule o Magiagi.

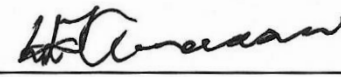
O lenei Tai'ala ua tusia e fa'amatala ai le tofā mamao, sini autu, a'afiaga, fuafuaga autū, faapea galuega ta'iala ma tulafono mo le fa'asaoina ma le fa'aauauina o le mata'itūina o le ola fa'anatura o le vaomatua i lenei Fanua Fa'asao. O le Fa'asao e aofia ai le puipua ma le mataitūina o vaega esese e aofia ai le palapala, suavai, faapea meaola ma la'au, o vaega esese o le faatumauiina ma le mauaina pea o le ola fa'anatura e aofia ai le le suavai, pua'ina pea o le kasa kaponi, so'otaga o le sami ma le laueleele, ma le fegasoloai ai o meaola taitasi aemaise galuega fa'anatura mole manuia o tagata ese'ese e maua mai le faanua fa'asao. O nisi fuafuaga o le a tapena mulimuli mai mo le fa'agasologa o le Ta'iala.

O lenei Tusi Ta'iala, e umia e le Pule mamalu a Ali'i ma Faipule o le afio'aga o Magiagi. O galuega faatino ma tagata asiasi mai i le vaomatua fa'asao, e auala uma atu i le Pulenu'u ma le komiti fa'afoe. Ua i ai Tulafono e ao ona mulimulita'ia, e aofia ai le fa'asā ona fagina o manulele, fa'apea fa'atoaga ma lafumanu i totonu o le fanua faasao.

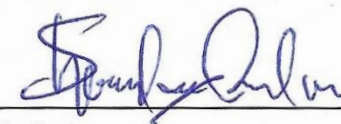
Ua i ai le talitonuga ma le malamalama'aga o matou o Alii ma Faipule o Magiagi, ua fa'amaonia ai ma tatalaina aloa'ia ai lenei Fanua Fa'asao faapea le Tusi Ta'iala o le Vaomatua Faasao o Magiagi i lona faagaioiga.

Ua fa'amauiina ma faamaonia i lenei aso, Aso Toonai 20 Aperila, 2024.

Luafau Aimaasu
Pulenu'u o Magiagi



Sootagamalii Auelua
Failautusi o le Komiti Fa'afoe a Magiagi



Annex 2. Meeting Attendance Lists

Magiagi village meeting on Dec 2, 2023



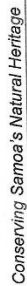
Magiagi Village Meeting 2 December 2023

Name/Suafa	Organisation/Village	M/F	Telephone
Nona William M	Mamaseu	M	7666678
Tamara Peta Amasau	Magiagi	M	7786978
Lesteria Fautasi	M	M	7658700
Saopamoa A. A. A. A.	M	M	7161181
Taetunga Fautasi	—	F	
Taetunga Fautasi	Magiagi	M	7227133
Maupapa Fautasi	Magiagi	M	7227084
Maupapa Fautasi	Magiagi	M	789980
Maupapa Fautasi	Magiagi	M	7765581
Tauvave Sapa			
Maupapa Fautasi			
Tiahi Finafina	Magiagi	M	7521244

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E: conserve Samoa@gmail.com

W: <http://samoaconservationsociety.wordpress.com>

CA Opening Attendance Sheet (April 20, 2024)



Magagi Village Meeting 20 April 2024

Name/Suafa	Organisation/Village	M/F	Telephone
Luatani. T. A. Luatani	Magagi		7280137
Saotaniqamali Ahehua	✓	M	1101181
Sidana	✓	✓	N/A
Matafute. A. Lufu	Magagi		7733737
Tafilipapa Taa	Magagi		
Melani Tanyesi	✓		7548592
Matin. T. Fogarai	Magagi		7237403
Motumotu - Tafili	Magagi		7792446
Karekareli W. Tanyesi	✓	M	
Tafilipapa Taa	SCS	M	7572919
Chas. Taulagia			

Samoa Conservation Society/Sosaite Fa'asao o Samoa, Box 2035, Apia, Samoa
 E: conservsamoa@gmail.com
 W: <http://samoaconservationsociety.wordpress.com>

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Name/Suafa	Organisation/Village	M/F	Telephone
Hosini Alatala	Magagi		
Atonio Ekaroma	Magagi		
Faamiga Sapi	Magagi		
Salefaafofina Sones	SCS	F	2370616787

Samoa Conservation Society/Sosaite Fa'asao o Samoa, Box 2035, Apia, Samoa
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 W: <http://samoaconservationsociety.wordpress.com>

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