

ECOSYSTEM-BASED MANAGEMENT PLAN

2016-2020

Vanua Raviravi, Vuya District, Bua Province, Fiji



Healthy people, processes and systems

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ENDORSEMENT

On this day, **September 22, 2016** at Nabouwalu Village in the District of Vuya, Bua Province, Vanua Levu, in the Republic of Fiji Islands, we, the traditional leaders of Vanua Raviravi, endorse this management plan, and urge the people of Vuya to make every effort to ensure its effective implementation.

Ratu Semi Ramatai
Turaga na Buli Raviravi

Akuila Qio - Tu Wairiki

Alipate Radrodro - Buli Namulomulo

Buli Qereqere

Jone Caka - Tunimata (for Yadua)

Komai Rokowaqa

Chairman
Raviravi Resource Management Committee



Participants at the second ecosystem-based management workshop in Navave village. ©WCS

ACKNOWLEDGEMENTS

The Raviravi Resource Management Committee wishes to recognize the vision and leadership of Ratu Semi Ramatai the Buli Raviravi, his predecessor and elder brother Ratu Tevita Ramatai and the leaders of the Vanua Raviravi, and celebrate their commitment to sustainable management of Raviravi's precious ecosystems for the benefit of present and future generations.

The people of have given freely their time and expertise to support the conservation and sustainable use of the district's natural resources. They continue to ensure that their management decisions are informed by the best available knowledge. Their ongoing commitment and support is gratefully acknowledged.

The adoption of this management plan is a significant milestone for ecosystem-based management at a local, national and regional level. It is made possible by the contributions of a diverse range of stakeholders, including:

- Wildlife Conservation Society
- Bua Provincial Office
- Fiji Locally Managed Marine Area Network
- Department of Environment
- Department of Fisheries
- Department of Forestry
- Ministry of Agriculture (Land Use Department)
- Ministry of Health
- Fiji Environmental Law Association
- iTaukei Land Trust Board
- iTaukei Lands and Fisheries Commission
- Wetlands International-Oceania
- Bureau of Statistics
- John D. and Catherine T. MacArthur Foundation
- David and Lucile Packard Foundation
- Tiffany Foundation
- Flora Family Foundation

The continuation and further expansion of partnerships is essential to achieving our aims. The Raviravi Resource Management Committee is committed to leading this process and would like to thank its leaders, communities and wider partners for efforts towards shared goals.

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1.0 INTRODUCTION

This management plan seeks to enhance the ecological value and resilience of terrestrial, freshwater, estuarine, coastal and marine ecosystems in the District of Vuya, with a focus on Vanua Raviravi and their customary fishing grounds (*qoliqoli*). Local communities are central to the sustainable management of these ecosystems and the plan aims to help them to address current and forthcoming challenges, including those related to climate change impacts. The planning process has been informed by scientific studies, as well as local and traditional ecological knowledge. It is anticipated that the plan will be reviewed and amended periodically to reflect monitoring results and evolving management priorities (Figure 1.1).

The management plan has been prepared on behalf of the Vanua Raviravi and the communities within. This is also a guide for the governing body that will oversee the implementation, compliance and enforcement of the current plan.

This plan is the outcome of consultations with communities from the villages of Nabouwalu, Namulomulo, Wairiki and Yadua Island, which make up the Vanua Raviravi. It reflects the outcomes of the three workshops undertaken in 2013, with the final consultations held between 2014 to 2016.

The first management support workshop held on 11-12 June, 2013 focused on the following topics:

- Ecosystem processors
- Development within Bua Province
- Resource mapping
- Vision and targets
- Conceptual modelling



Figure 1.1 The cycle of adaptive management

A second workshop held in Navave village on 28-30 April, 2014 had the following objectives:

- Review and confirm existing and proposed protected areas, and add any additional terrestrial, freshwater, and marine areas;
- Identify potential strategies to address threats and related to climate change impacts; and
- Undertake a social network analysis survey.

The final workshop held in Vuya village on the 9-11 July 2014 by which the covered topics include:

- Community involvement in ecosystem-based management;
- Refining and agreement of *tabu* areas and rules; and
- Develop a structure for Vuya Resource Management Committee.

The key components of this management plan are:

- A **description of the management area**, including the district and customary fishing ground boundaries, demographics, habitat descriptions, resource tenure, resource use and protected area boundaries;
- Discussion on **habitat management issues** for terrestrial, freshwater, estuarine, coastal and marine ecosystems, including habitat descriptions covering flora and fauna, endemic and endangered species and species of cultural and economic significance;
- A management **implementation plan**, including:
 - a discussion of **key threats** and **underlying causes** of those threats for each habitat;
 - **management rules** for each habitat, including national laws and community rules;
 - proposed **management activities** for each habitat;
 - **best practice** management recommendations for each habitat;
 - a description of key **management institutions** and **external stakeholders**;
 - an explanation of **management roles and processes**, including preparation, implementation, amendment and review of the management plan; and
 - an overview of **compliance and enforcement issues**.



Nabouwalu town where the government station and commercial services are located. ©WCS

2.0 ECOSYSTEM-BASED MANAGEMENT

2.1 Ecosystem-based management principles

This management plan seeks to encourage an integrated approach to the management of terrestrial, freshwater, estuarine, coastal and marine ecosystems. In particular, the plan reflects a community-driven, ecosystem-based management approach.

Ecosystem-based management is ‘an integrated approach to management that considers the entire ecosystem, including humans’¹. This aims to maintain ecosystems in a healthy, productive and resilient condition so that they can meet human needs into the future. For island communities, ecosystem resilience is particularly important for recovery from strong impacts related to climate change.

In particular, ecosystem-based management:

- emphasizes connectivity within and between systems, such as between land and sea (Figure 2.1);
- emphasizes the protection and restoration of ecosystem structure, function and key processes;
- focuses on a specific ecosystem and the range of activities affecting it; and
- Integrates ecological, social, economic, and institutional perspectives.

Use of land and resources by humans may result in significant alteration of ecosystem structure, function and processes, including connectivity within and between ecosystems (Figure 2.2). Modification of ecosystems may reduce their health, productivity and resilience, and must be managed to ensure ongoing availability of ecosystem services.

Ecosystem-based management has objectives and targets that:

- focus on maintaining the natural structure of ecosystems and their productivity;
- incorporate human use and values of ecosystems in management of resources;
- recognize that ecosystems are dynamic and constantly changing;
- are based on a shared vision of stakeholders; and
- are based on scientific and local knowledge, adapted by continual learning and monitoring.

Ecosystem-Based Management emphasizes connectivity within and between systems, such as between land and sea, with humans as a key component.

What is an Ecosystem?

An ecosystem includes all the plants, animals, microbes, soil, air, and water within a physical space and the interactions between them. Humans are a central part of both marine and terrestrial ecosystems.

The linkages within and between ecosystems arise from biological interactions (for example, seabirds hunting for marine fish to feed their offspring) and physical processes (for example, sediments transported downstream by river networks).

¹ *Scientific Consensus Statement on Marine Ecosystem-Based Management*

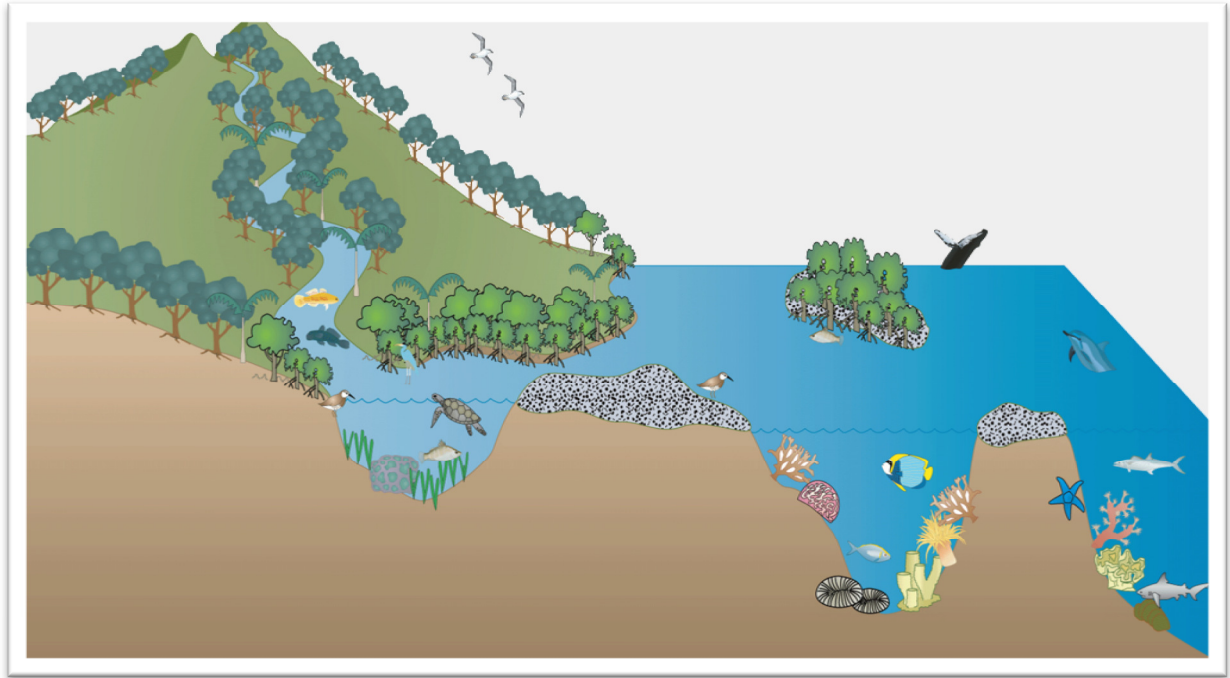


Figure 2.1 Diagram showing connectivity between terrestrial, freshwater, coastal and marine ecosystems.

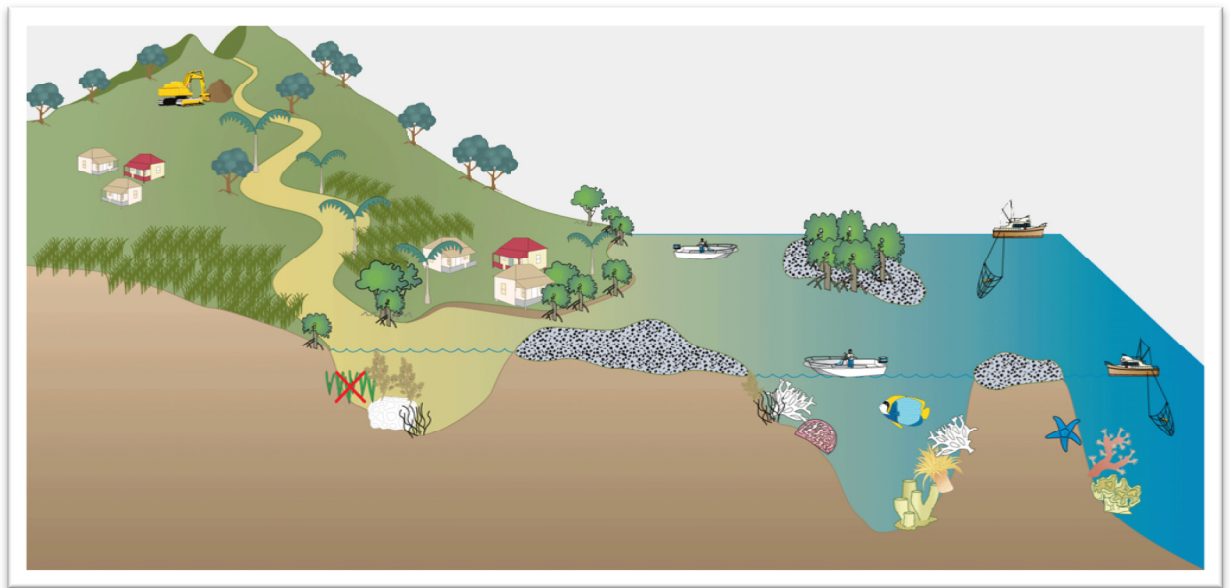


Figure 2.2 Diagram depicting interruption to ecosystem connectivity due to uncontrolled human activity.

2.2 Ecosystem-based management in Vanua Raviravi

Ecosystem-based management in Vanua Raviravi is community-driven and centres on a shared vision of *'healthy people, processes and systems'*.

The overarching goal of ecosystem-based management in Vanua Raviravi is *'preservation of the functional integrity of Vuya's ecosystems from the ridge to the reef, through community-based management'*.

During the community consultation and management planning workshops, communities realized the importance of the resources they have and the value of the connectivity between habitats and ecosystems. Participants identified five key messages that capture their approach to ridge to reef management:

- ***Inland and coastal communities need to manage their actions and resources together.***
Connectivity between ecosystems makes each habitat susceptible to degradation from factors arising in adjacent areas. For example, the health and resilience of coral reef ecosystems may be affected by clearing and burning in coastal catchments. Cooperation between inland and coastal communities is a central feature of ecosystem-based management in Vuya District.
- ***Ridge to reef management protects habitats for all stages of life.***
Many organisms move between habitats during phases of their lives. For example, key food fish species in Vuya move between marine, estuarine and freshwater ecosystems throughout their life cycle. Preserving ecosystem connectivity and the integrity of adjacent ecosystems has been identified as a priority for ecosystem-based management in Vuya District.
- ***Public health and livelihoods depend on environmental health.***
Ecosystem-based management enhances the long-term productivity of local ecosystems, providing a strong foundation for local livelihoods, food security and nutrition. Managing environmental threats (such as contamination of fresh water) promotes positive public health outcomes, including prevention of communicable disease.
- ***Successful ridge-to-reef management depends on broad stakeholder input.***
The effectiveness of government interventions in natural resource management issues is often undermined by fragmentation of responsibilities and jurisdiction between government agencies. Ecosystem-based management seeks to integrate management activities across sectoral boundaries and promote synergies between agencies, partner organisations and communities. This ensures that the concerns and priorities of a broad range of stakeholders are taken into account in management decisions, at the same time improving the quality of decision-making.
- ***Healthy ecosystems are the best defense against climate change impacts to livelihoods.***
Only intact, healthy ecosystems can provide the full range of benefits that humans want and need over long periods of time. By maintaining and restoring 'natural infrastructure' such as mangroves, coral reefs and watershed vegetation, communities in Vanua Raviravi and the wider Vuya District may reduce their vulnerability to the predicted effects of climate change such as extreme weather events, storm surges, rising sea levels and changing precipitation patterns.

3.0 SITE DESCRIPTION

3.1 Management Area Boundaries

Vuya District (*tikina*) in Bua Province on Vanua Levu in the Republic of Fiji is unique in that it has two fishing grounds within its district boundary, namely the Vuya and Raviravi *Qoliqoli*, under the traditional governance of Tui Vuya and Buli Raviravi, respectively. Tui Vuya governs over the traditional affairs of villages Navave and Vuya villages, whilst the Buli Raviravi oversees the villages of Nabouwalu, Namulomulo, Wairiki, and Yadua Island.

This management plan covers Raviravi lands and the adjacent customary fishing grounds (Figure 3.1). Historically, Raviravi is a chiefdom on its own in the Bua Province with its own customary fishing areas which extends seaward from the high water mark. The landward boundaries of the district are contiguous with the traditional boundaries of indigenous land-owning clans (*mataqali*), as recorded by the iTaukei Lands and Fisheries Commission.

A portion (approximately 26 km²) of Mount Navotuvotu is located in Vuya District. Mount Navotuvoto is one of Fiji's Key Biodiversity Areas (KBA) and has been identified by Fiji's National Protected Area Committee as a 'high priority area for conservation without any current management'².

The boundaries of the Vuya District customary fishing grounds as recorded by the iTaukei Land and Fisheries Commission, extend from the high water mark to the outer edge of the barrier reef adjacent to the boundaries of Solevu fishing grounds from the East, and from the high water mark to the adjacent fringing outer reef of Dama District to the West (Figure 3.1). The customary fishing grounds for Vanua Vuya covers 686 km² whilst Vanua Raviravi has a total of 75 km² and Yadua Island alone (included with Raviravi) has a total customary fishing ground of 1,981 km². In total Vuya District has a total of 2,744 km² of customary fishing grounds.

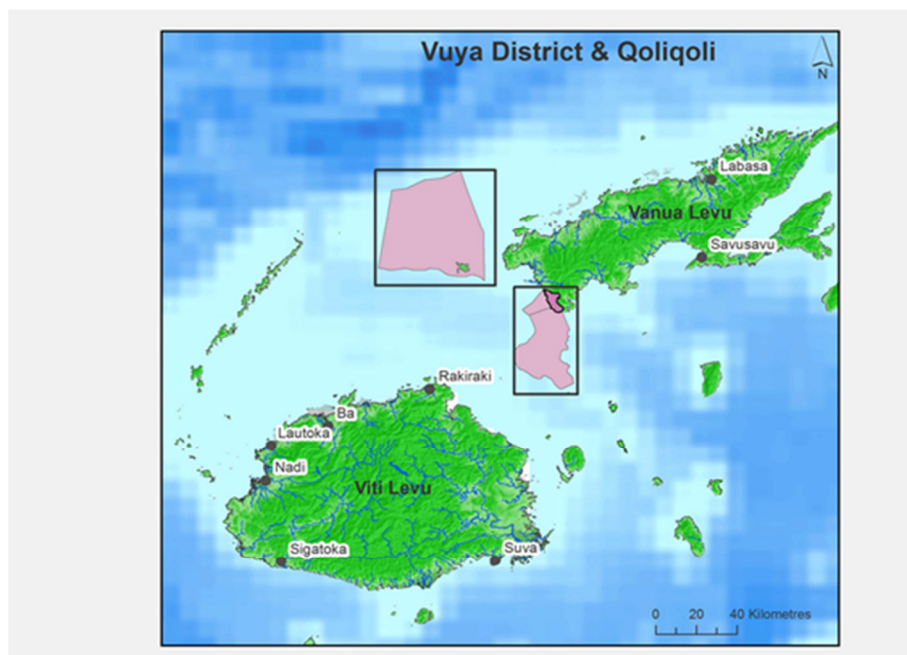


Figure 3.1 Vuya District (dark pink) in Bua Province with its traditional fishing ground boundaries.

² Fiji national Protected Areas Committee, outcomes report from provincial planning meeting, Sept 2010

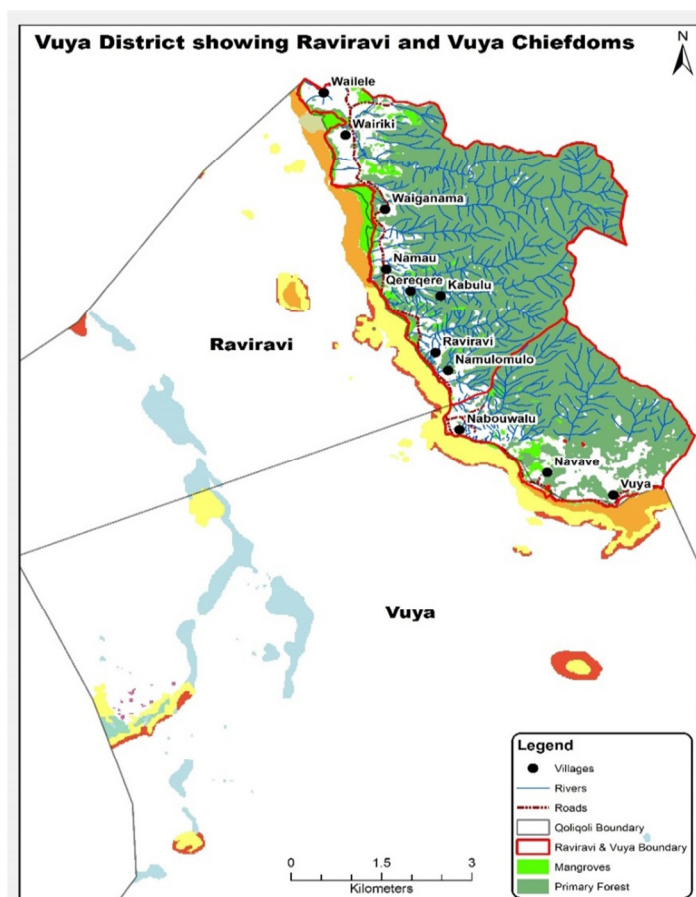


Figure 3.2 Traditional fishing ground and land boundaries of Vanua Raviravi and Vanua Vuya in Vuya District.

3.2 People and Resources

3.2.1 Demographics

There are 680 iTaukei people who reside in villages and settlements that are situated on the coast of Vanua Levu and on the island of Yadua, located 48 km from the Nabouwalu jetty (Table 3.1).

Table 3.1 Population of villages and settlements in Vanua Raviravi. Source: Bua Provincial Office (2016).

	<1	1 - 5	6-14	15-21	22-35	36-65	Over 66	Total
Nabouwalu	13	18	34	10	27	42	8	152
Wairiki	1	18	20	12	15	30	7	103
Waitovure & Qereqere Settlement	2	13	21	7	9	21	4	77
Namulomulo & Raviravi Settlement	7	25	38	10	46	45	5	176
Yadua	2	13	37	14	39	59	8	172
Total	25	87	150	53	136	197	32	680

3.2.1 Resource Tenure

Terrestrial Resources

The majority of the land in Vuya District is *iTaukei* (native) land (4663 ha, 94%), owned by the district's 24 landowning clans (Figure 3.2). Around 4.32 ha (0.09%) is freehold land and 25.4 ha (0.51%) is State Scheduled Land B with around 292.7 ha (5.9 %) of Unclassified Tenure.



Figure 3.3. Mataqali Boundaries in Vanua Raviravi

The *iTaukei Lands Act* recognises and maintains customary ownership of *iTaukei* lands, and provides a legal basis for traditional communal decision-making about land use and management of terrestrial resources³. Decisions about occupation, use and management of land are made primarily at the *mataqali* level, within traditional decision-making structures and processes. The *iTaukei Lands Trust Act* establishes the *iTaukei* Lands Trust Board (TLTB) and allows the TLTB to enter into leases and licences on behalf of *iTaukei* landowners. Leases and licences must only be granted with the consent of the majority of landowners. The use and management of *iTaukei*, freehold and crown land is subject to the national laws of Fiji, including legislation such as the *Forest Decree 1992* and the *Environment Management Act 2005*.

³ *iTaukei Lands Act* [Cap 133], s.3.

Freshwater resources

Under Fijian law, rivers and streams, and the land underneath them, belong to the government.⁴ Extraction of streambed resources, such as gravel, requires approval from the Department of Lands.⁵ The *Fisheries Act (1942)* recognises subsistence fishing rights for traditional resource owners within their customary freshwater fishing grounds.⁶ The Minister for Fisheries may declare restricted fishing areas within freshwater fishing grounds by publishing a notice in the government gazette.⁷ There are currently no gazetted freshwater restricted areas in Vuya district.

Coastal, estuarine and marine resources

Coastal land above the high tide mark may be *iTaukei* land, freehold land or crown land. Estuaries and coastal waters, and land below the high tide mark, belong to the government.⁸ Extraction of resources from land below the high tide mark requires approval from the Department of Lands.⁹ The *iTaukei Lands Act* recognises communities' rights of traditional access to resources, which includes their right to use mangroves for subsistence purposes.

The *Fisheries Act* recognises subsistence fishing rights for traditional resource owners within their customary estuarine and coastal fishing grounds, including mangrove areas.¹⁰ The boundaries of both Raviravi and Vuya customary fishing grounds, as mapped by the *iTaukei Lands and Fisheries Commission*, are marked on Figure 3.1 above. The *Fisheries Act*, as currently administered, does not recognise the traditional right of resource owners to control access to their customary fishing grounds and to establish and enforce strictly no-take fishing areas (*tabu*). The Minister for Fisheries may declare a restricted fishing area (marine reserve) by making or amending regulations and publishing them in the Government Gazette.¹¹ Currently there are no gazetted restricted marine areas in either of Vuya District's customary fishing ground.

Any person wishing to fish for trade or business must obtain a fishing licence from the Department of Fisheries. Licences are only granted with the written permission of the relevant chief, and may be granted subject to conditions, including conditions prohibiting fishing for trade or business in *tabu* areas. This is a legal method of restricting access to the customary fishing grounds and *tabu* areas for commercial activities. Resource users recognise the customary authority of the Buli Raviravi, to make decisions with the district Hierarchy Council (*Bose Vanua*), about the use and management of marine resources at the customary fishing ground level, including the establishment of community's marine protected areas (MPAs).

3.2.2 Resource Use

Discussions with representatives from different villages within Vanua Raviravi indicate that their main source of income is from farming, fishing and casual employment. Key agricultural crops harvested for subsistence and sale are cassava (*tavioka*), taro (*dalo*), taro leaves (*rourou*), bananas (*Tiaina*), plantains (*vudi*), kava (*yaqona*), elephant ear or arrow leaf (*dalo ni tana*), yams (*uvi*), edible hibiscus (*bele*), coconuts (*niu*), breadfruit (*uto*), pumpkin (*papukeni*), eggplant (*baigani*), and corn (*sila*).

⁴ *Deed of Cession 1874, Rivers and Streams Act* [Cap 136], s.2.

⁵ *Crown Lands Act* [Cap 132], s.10.

⁶ *Fisheries Act* [Cap 158], s.13.

⁷ *Fisheries Act* [Cap 158], s.9.

⁸ *Deed of Cession 1874*.

⁹ *Crown Lands Act* [Cap 132], s.10.

¹⁰ *Fisheries Act* [Cap 158], s.13.

¹¹ *Fisheries Act* [Cap 158], s.9.

Nabouwalu, the town centre of Bua Province is located within Vanua Raviravi. Most people use the fisheries resources for both subsistence and artisanal commercial use. Their artisanal commercial products can range from raw fish in bundles to parcelled fried fish and cassava which they sell to customers. Customers can range from ferry passengers and civil servants or private company workers and school children. The most common types of fishing gear used are nets, fishing lines, spear and snorkel, and gleaning. Targeted fishing areas include river tributaries, estuaries, and intertidal zones (at low tide). There is limited capacity for commercial fishing. The opening of the Integrated Port and pine chip mill at Wairiki in 2008 considerably increased pine plantation harvesting to date with vast areas of land yet to be replanted.

The impacts of climate change, a growing population, and increasing demand for goods and services underlie the threats and vulnerabilities identified by communities. Resource use patterns are generally linked to natural cycles (outlined in the more generalized resource use calendar in Figure 3.4). During nearly all months of the wet season, communities are reliant on multiple sources of terrestrial and marine resources for food, giving them more flexibility to adapt should a disturbance impact one of their preferred resources. However, they may be more vulnerable during dry season months when they depend on fewer species. Workshops have highlighted that communities have a significant preference for harvesting animals during spawning periods (when animals are breeding), which is likely to require additional management and regulation measures to ensure that enough of the breeding population is left to provide offspring to ensure local resource availability.

3.3 Habitats

3.3.1 Terrestrial Habitat

The district of Vuya is dominated by lowland rainforest that covers an area of approximately 29 km². Other vegetation types include agricultural land, coconut plantations, coastal forests, non-forest areas, pine plantations and a very low coverage of mangroves (<0.5 km²).¹²

Due to its high altitude and intactness, Uluivuya has been declared a catchment area, which provides the essential drinking water for the whole of Nabouwalu Town. The two sites of higher altitudes (Mt. Uluivuya and Mt. Navotuvotu) which are approximately 26 km² apart run through the same corridor and are both included in Fiji's Key Biodiversity Areas (KBAs), due to their abundant and diverse flora and fauna (Figure 3.4). Mt. Navotuvotu is the highest peak within the Province of Bua. The Mt. Navotuvotu and Mt. Kasi corridor is defined as a KBA in Fiji due to its importance for conservation. This corridor contains globally threatened species and has significance for biodiversity conservation. Approximately 26 km² of Mt. Navotuvotu falls within the Vuya District and is an area of high biodiversity. Mt. Navotuvotu KBA is known to contain two critically endangered trees on the IUCN Red-List, *Astronidium kasiense* and *Gardenia anapetes*.¹³

The forests and freshwater areas of the Mt. Navotuvotu KBA are under imminent threat from logging, mining and invasive species, with 59% of the Mt. Navotuvotu KBA currently allocated as logging concessions.¹³ Without management, there is a high risk that: (a) critically endangered plant species will be lost through direct clearing; (b) endemic and vulnerable freshwater fish species will be lost through direct and indirect effects of sedimentation; and (c) there will be irreconcilable damage to downstream coastal and marine ecosystems. Vuya District has a higher density and

¹² WCS/CEPF (2012) Strengthening Conservation and Management across the Mt. Navotuvotu – Mt. Kasi Corridor: Biodiversity Summary Report, Wildlife Conservation Society, Suva, Fiji

¹³ Jupiter S, Acton G, Caginitoba A, Koto K, Askew N, Wainiqolo G (2013) Strengthening conservation and management across the Mt. Navotuvotu-Mt. Kasi forest corridor: Final stakeholders report. Wildlife Conservation Society, Suva, Fiji, 18 pp.

abundance of pine forest plantations in which there is reduced biodiversity and incidence of rare or endemic species.

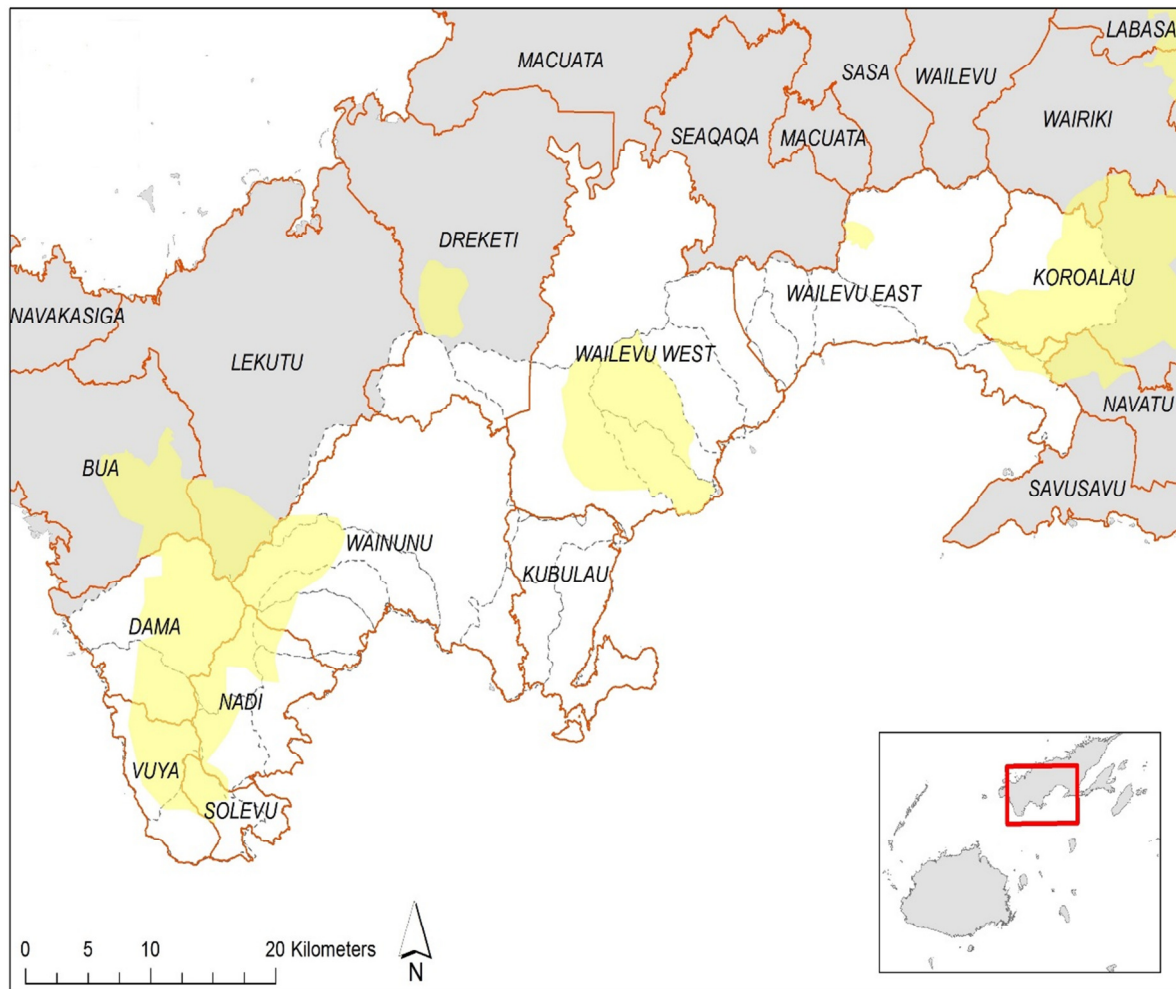


Figure 3.4 Key Biodiversity Areas in Vanua Levu (highlighted in yellow). The northern area covers part of Vanua Raviravi and forms a contiguous forest across seven districts in Bua Province.

3.3.2 Estuarine, coastal and marine habitats

Mangroves, Seagrass and Coral Reefs






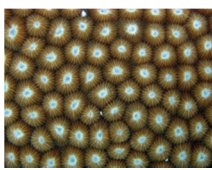


Estuarine, coastal and marine ecosystems are vital components of the marine environment. These ecosystems maintain key functions and processes such as: erosion control, storm surge protection, filtration of water as it flows from land to sea, regulating and recycling nutrients, and habitats for plants and animals. Seagrass beds, mangrove, mudflats and coral reefs form major habitat types within marine, estuarine and coastal environments.

The coastline of Vuya District extends approximately 19 km along Bua’s south-western coast, including one hectare of mangroves. The customary fishing grounds for Vuya covers an area of 686 km² and includes a diverse array of habitats such as intertidal fringing reefs, deep and shallow terraces with algae, reef flats and slopes dominated by corals, soft bottomed lagoon, and an outer barrier reef with pinnacles and passes.

Mangrove and seagrass systems in Vuya District have not yet been intensively surveyed, but they are likely to be similar to those in the nearby district of Kubulau. In Kubulau, three mangrove species have been recorded (*Bruguiera gymnorhiza*, *Rhizophora stylosa* and *Rhizophora. x selala*). Seagrass beds, if similar to Kubulau District, are likely to contain *Syringodium isoetifolium* as the dominant species in intertidal and shallow subtidal areas, with *Halodule* sp. found in certain areas.¹⁴

The Wildlife Conservation Society (WCS) conducted marine surveys in 2012, assessing 4 sites in Vuya customary fishing grounds. Hard coral cover (43%) dominated the reef system, with 21% algae and 5% dead corals (Figure 3.5). Results showed fish species richness within families monitored was greatest around the Vuya Passages on the offshore barrier reef (WCS, unpublished data). Although a complete biodiversity assessment was not done for Raviravi, 56 fish species were counted from the WCS target species list of reef habitats. The most abundant of these were non herbivores dominated by wrasses (*Thalassoma lunare*) and snappers (*Lutjanus bohar*, *L. gibbus*). Other functional groups of fish found were grazers and detritivores dominated by surgeonfish (*Ctenochaetus striatus*) and scrapers and small excavators dominated by parrotfish (*Chlorurus bleekeri* and *Scarus ghobban*).

Figure 3.5 Types of coral and percentage cover per type in Vuya and Raviravi customary fishing grounds.

Coral	Coral Cover
<i>Acropora</i>	 (31%)
<i>Porites</i>	 (27%)
<i>Pavona</i> , <i>Pocillopora</i> , <i>Montipora</i>	 (7%)  (6%)  (5%)
<i>Diploastrea</i> , <i>Millepora</i> , <i>Stylophora</i>	 (4%)  (3%)  (2%)

Threatened and endemic species

Information on diversity and abundance of threatened flora and fauna is limited for Raviravi. However, WCS survey protocols only target certain fish groups and these groups do not contain many endemic species in general. Therefore, there are likely to be considerably more endemic fish found in Vuya's *qoliqoli*. Blacktip (*Carcharhinus melanopterus*) and whitetip (*Triaenodon obesus*) reef sharks were spotted during dive surveys, as well as the endangered humphead wrasse (*Cheilinus undulatus*).

¹⁴ WCS (2009) *Ecosystem-Based Management Plan: Kubulau District, Vanua Levu, Fiji*. Wildlife Conservation Society, Suva, Fiji, 121 pp.

Economic and culturally important species

Coastal fisheries in Vuya District are centered largely on coral reef fish¹⁵, though fishers also collect mud crabs (*qari*), land crabs (*lairo*), mangrove crabs (*kuka*) and mud lobsters (*mana*) (A Caginitoba, pers. comm.). These are used for both subsistence and local scale commercial purposes. Mangroves are important as a source of fuel, either charcoal or firewood, and can be used as primary building material.

Threats to estuarine, coastal and marine habitats

Mangroves and seagrass meadows are directly threatened from inland activities. Threats to mangroves habitats include mangrove cutting, sedimentation, use of chemicals, deforestation and logging, and littering. Sedimentation is considered the biggest threat to seagrass meadows, followed by tropical cyclones, storms, and the use of chemicals. These threats equally affect coastal fringing reefs. Reefs are additionally impacted by overfishing, and Vuya residents have observed greater numbers of boats from other districts fishing on their reefs. Corals are also threatened by impacts from climate change, such as elevated sea surface temperatures which can cause the animals to become stressed and die. When the coral animals die, their hard skeleton structures that form the shape of the reefs can break down, causing loss of habitat for important food fish and invertebrates.



Nabouwalu jetty in Vuya District in Bua Province plays a major role in connecting Viti Levu and Vanua Levu. ©Sangeeta Mangubhai/WCS

¹⁵ Chaston Radway K, Manley M, Mangubhai S, Sokowaqanilotu E, Lalavanua W, Bogiva A, Caginitoba A, Delai T, Draniatu M, Dulunaqio S, Fox M, Koroiwaqa I, Naisilisili W, Rabukawaqa A, Ravonoloa K, Veibi T (2016) Impact of Tropical Cyclone Winston on Fisheries-Dependent Communities in Fiji. Report No. 03/16. Wildlife Conservation Society, Suva, Fiji. 103 pp.

4.0 IMPLEMENTATION PLAN

4.1 Overview

Through a range of consultations, planning and conceptual modelling, the communities of Vanua Raviravi have established management targets, identified threats to local ecosystems and root causes of these threats, and outlined strategies through which threats can be mitigated. They have established management rules and protected areas as key elements of implementation. This section summarises the targets, threats, management rules, management activities and best practice considerations for terrestrial, freshwater, coastal, estuarine and marine ecosystems across Vuya District.

4.2 Management of Terrestrial and Freshwater Ecosystems

4.2.1 Management Targets for Terrestrial and Freshwater Ecosystems

Recognising the links between land-based activities and freshwater systems, communities have identified management targets for terrestrial and freshwater ecosystems in Vanua Raviravi. These are:

- A clean and healthy **river** and water source;
- Protect and **restore riverbank**; and
- Increased abundance and biomass of **freshwater food fish** (Gudgeon and *Kuhlia repestris*) and **invertebrate** food species (prawns and eels)¹⁶.

Links between targets and threats were explored, identifying the following contributing factors and threat to the targets:

- unsustainable farming and logging practices;
- gravel extraction;
- unsustainable fishing methods;
- hanging culverts ;
- lack of understanding about the impacts of unsustainable farming practices;
- lack of planning, particularly in relation to farming, fishing, and waste disposal; and
- lack of awareness and/or enforcement of existing management rules.

The targets, threats, contributing factors and strategies to address these threats are listed in table 4.1. They are also illustrated graphically in Appendix 4 and provided a reference when drafting the following management rules and activities.

WCS (2013) *Management Planning Workshop* in November 2011. Wildlife Conservation Society, Suva, Fiji.

Table 4.1 Summary of terrestrial and freshwater ecosystem targets, threats, contributing factors and strategies.

Target	Threat	Contributing Factors	Strategies
Rivers <ul style="list-style-type: none"> • <i>Protect and restore riverbanks</i> • <i>A clean and healthy water source</i> 	<ul style="list-style-type: none"> • Farming and clearing next to rivers • Unsustainable logging and burning 	<ul style="list-style-type: none"> • Lack of understanding about ecological importance • Cultivating new farmlands • Need for money 	<ul style="list-style-type: none"> • Increase awareness on importance of rivers • Develop alternative sources of income • Encourage rotational cropping • Establish 100m buffer zone with no farming, animals, or tree cutting • Restore river banks • Establish forest protected areas
Freshwater Fish and Invertebrates <ul style="list-style-type: none"> • <i>Increase populations of food species</i> 	<ul style="list-style-type: none"> • Unsustainable fishing methods (use of chemicals, derris roots, small-sized nets) • Gravel and boulder extraction • Hanging road culverts • Pollution 	<ul style="list-style-type: none"> • Quick and easy fishing methods • Easy money • Road construction • No waste disposal facility • Pig pens near rivers • Lack of awareness of impacts of these activities 	<ul style="list-style-type: none"> • Increase awareness of environmental impacts of fishing practice and management rules • Utilize sustainable fishing techniques • Conduct EIA prior to extraction and consult DOE • Establish river buffer zones • Install fish ladders on hanging culverts • Adopt sustainable land-use practices • Establish proper waste management techniques (dig rubbish pits, build toilets, waste reduction '3R's') • Move pig pens away from river beds

4.2.2 Terrestrial and Freshwater Management Rules

Table 4.2 Management rules that apply generally to all land and streams in Vanua Raviravi.

Management Rules	Exception	National	District	Management Actions ¹⁷
LOGGING				
Logging operations must leave buffer strips beside rivers and streams: <ul style="list-style-type: none"> • 20m stream width: 30m buffer • 10-20m stream width: 20m buffer • 0-10m stream width: 10m buffer 	Bridges and stream crossings approved by Forest Department.	X ¹⁸		Monitor compliance with <i>Forest Harvesting Code of Practice</i> and notify Forest Department of breaches. Note: Stream width is measured from bank to bank. Buffer width is horizontal distance measured from stream bank.
Commercial logging must not commence without the consent of landowners and approval from the iTaukei Land Trust Board and Department of Forestry (following environmental impact assessment and approval from the Department of Environment)	None	X ¹⁹		Monitor new logging operations and report breaches to the iTaukei Land Trust Board and Forest Department.
Logging operations must comply with logging licence conditions and the <i>Forest Harvesting Code of Practice</i>.	None	X ²⁰		Monitor compliance with <i>Forest Harvesting Code of Practice</i> and notify Forest Department of breaches.
Rare or protected tree species must not be felled or taken.	None	X ²¹		Monitor compliance with <i>Forest Harvesting Code of Practice</i> and notify Forest Department of breaches.

¹⁷ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

¹⁸ *Forest Decree 1992, Fiji Forest Harvesting Code of Practice 2008.*

¹⁹ *Native Lands Trust Act, Forest Decree 1992 (and Environment Management Act 2005, Schedule 2, Part 1).*

²⁰ *Forest Decree 1992, Fiji Forest Harvesting Code of Practice 2008.*

²¹ *Fiji Forest Harvesting Code of Practice 2008 (see Appendix 1 for list of protected species).*

Management Rules	Exception	National	District ²²	Management Actions ²³
FARMING AND LIVESTOCK				
Clearing, burning and farming are prohibited within 10m of either side of any river within Vuya District	None		X	Raise awareness of rule. Monitor compliance. Report breaches to the <i>bose vanua</i> .
Agricultural leaseholders must not clear, burn or cultivate any land within 24 feet (7.2m) of a river or stream.	None	X ²⁴		Monitor compliance with lease conditions. Notify the iTaukei Land Trust Board of breaches.
Livestock and piggeries are prohibited within 30 m of river banks.	None		X	Raise awareness of rule. Monitor compliance. Report breaches to the <i>bose vanua</i> .
FISHING				
Introduction or farming of invasive fish species is prohibited.	Where tilapia are already kept in ponds that are sufficient distance from rivers/streams (outside floodplain).		X	Raise awareness of rule. Monitor compliance. Report breaches to the <i>bose vanua</i> .
Destructive fishing methods are prohibited: - Chemicals and poisons - Nets with mesh less than 50mm - Night Fishing	Hand nets with a mesh of 40 mm can be used for freshwater prawns.	X ²⁵		Raise awareness of rule. Monitor compliance. Report breaches to the <i>bose vanua</i> .
DEVELOPMENT AND WASTE				
No extraction of gravel from rivers without appropriate consideration of the environmental impacts	Development that is beneficial to us all and has received approval from the Department of Lands.	X ²⁶		Department of Environment ensure EIAs in compliance with Environmental Management Act (EMA)

District management rules were identified at the *Ecosystem-Based Management Planning Workshop* (Wairiki, 8-11 April, 2013).

²³ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

²⁴ *Native Land Trust (Leases and Licences) Regulations 1984, r.23, Fourth Schedule, cl.25. Conditions of lease for agricultural purposes.*

²⁵ *Fisheries Regulations r8 bans use of any derris or duva extract. Fisheries Regulations r16*

²⁶ *Crown Lands Act [Cap 132], s.10 states that material on the streambed belongs to the government and its extraction requires approval from Department of Lands. The Environmental Management Act states that an Environmental Impact Assessment is required for gravel extraction (under Schedule 2, Part 1) when it involves dredging or excavating a river bed.*

Management Rule	Exception	National	District ²⁷	Management Action ²⁸
Dumping of rubbish is prohibited	None	X ²⁹	X	Report commercial/industrial breaches to Department of Environment. Report other breaches to RMC.
Industrial or commercial development must not be undertaken without Environmental Impact Assessment.	None	X ³⁰		Report breaches to Department of Environment.

District management rules were identified at the *Ecosystem-Based Management Planning Workshop* (Wairiki, 8-11 April, 2013).

²⁸ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

²⁹ *Litter Decree 1991, s8.*

³⁰ *Environment Management Act 2005.*

4.2.3 Best Practice Consideration for Terrestrial and Freshwater Ecosystems

To maintain and restore the health, productivity and resilience freshwater and terrestrial ecosystems, a number of best practices were adopted by local communities (Table 4.3).

Table 4.3 Best practice recommendations for terrestrial and freshwater ecosystems.

RECOMMENDATION	REASON
FARMING	
Do not use fire to clear land for farming.	Burning reduces soil fertility, increases soil erosion and reduces downstream water quality.
Do not clear, burn or farm within 50 m of stream and river banks.	Broad riparian buffers reduce soil erosion and improve downstream water quality.
Do not allow clearing, burning, farming or grazing in drinking water catchments.	Clearing, burning and grazing reduces the quality and quantity of drinking water.
Use fertilisers and pesticides only as necessary, and always follow manufacturer's instructions.	Fertilisers cause algal growth and eutrophication. Many pesticides are toxic to people and animals.
Do not farm steep slopes. Use terrace and contour planting to control soil erosion.	Farming steep slopes increases soil erosion and reduces downstream water quality.
FORESTS AND WATER CATCHMENTS	
Do not allow clearing, burning, logging or grazing in old growth forests.	Old growth forests are home to many unique species, and may take centuries to fully recover.
Do not allow clearing, burning, logging or grazing within 100 metres of old growth forests.	Logging and grazing near old growth forest increases the risk of invasive species.
Do not allow logging within 100 m of a river or stream.	Broad riparian buffers reduce soil erosion and improve downstream water quality.
Do not allow logging in drinking water catchments.	Logging reduces the quality and quantity of drinking water.
Monitor logging operations and report breaches of logging code of practice or licence conditions.	Community monitoring ensures compliance with environmental protection rules.
Replant logged areas using local native species.	Restoring forests after logging helps to maintain water catchment health and biological diversity.
RIVERS AND RIPARIAN ZONES	
Restore degraded river banks and riparian zones by planting native trees and shrubs.	Riparian vegetation reduces erosion and provides food and shade for freshwater fauna.
Do not build crossings, weirs or other structures in a manner that prevents fish migration.	Migration up and down rivers is a vital part of the life cycle of many fishes, including food fish.
INVASIVE SPECIES	
Do not introduce invasive species.	Invasive species reduce agricultural productivity and threaten native plants and animals.

4.3 Management of Coastal and Marine Ecosystems

4.3.1 Management Targets for Coastal and Marine Ecosystem

Recognising the links between coastal and marine systems, communities developed one conceptual model for Coastal, Estuarine and Marine Ecosystems (Appendix 4 and Table 4.4). They identified the following management targets for coastal and marine ecosystems in Raviravi:

- Maintain or increase total area of mangroves;
- Maintain or increase abundance and biomass of invertebrate food species (including mud crab, land crab, snail and shrimp);
- Maintain or increase abundance and biomass of food fish; and
- Maintain or increase of abundance and biomass seaweed (*Nama*, *Caulerpa* sp.) and *Lumi*, *Gracilaria* sp.).

Links between targets and threats were explored, identifying the following contributing factors and underlying threat to targets:

- Mangrove clearing
- Poor waste management
- Overfishing

Lack of alternative income sources for communities was identified as an underlying driver of their over-exploitation of coastal and marine fisheries and mangroves.



Buli Raviravi Ratu Semi Ramatai (in white shirt) in discussion with his people about their ecosystem-based management plan. ©WCS

Table 4.4 Summary of coastal and marine ecosystem targets, threats, contributing factors and strategies.

Target and Goal(s)	Threat	Contributing Factors	Strategies
<p>Mangroves</p> <p><i>Protect and restore mangroves</i></p>	Unnecessary mangrove cutting	<ul style="list-style-type: none"> • Need for building materials and firewood • Need for money 	<ul style="list-style-type: none"> • Restrict cutting and plant mangroves • Increase awareness on importance of mangroves
<p>Invertebrates (mud crab, land crab, snail, shimp)</p> <p>Coral Reef Fish</p> <p>Seaweed</p> <p><i>(Nama, Caulerpa sp. and Lumi, Gracilaria sp.)</i></p> <p><i>Increase population of food species</i></p>	<p>Pollution</p> <p>Overfishing</p>	<ul style="list-style-type: none"> • Animals fenced next to rivers and beaches • No waste disposal facility • Some homes don't have toilets • Lack of awareness of impacts • Use of small nets <3 inch for fishing • Use of chemicals and derris roots for fishing • Night diving • Need for money 	<ul style="list-style-type: none"> • Move pig pens away from coastal areas • Build proper waste management facility (dig rubbish pits, install toilets, reduce waste) • Enforce and implement village by-laws • Establish village <i>tabu</i> areas • Ban the use of destructive fishing practices such as chemicals, derris roots and undersized nets • Discuss pollution issues with authorities (YMST, Bua PO, DOF) • Increase awareness of impacts of destructive fishing method, improper waste disposal, and importance of mangroves • Develop alternative sources of income projects

4.3.2 Management Rules for Coastal and Marine Ecosystems

The management rules that apply to all coastal and marine areas in Vanua Raviravi are shown in Table 4.5.

Table 4.5 Management rules that apply to all coastal and marine areas in Vanua Raviravi.

Management Rules	Exception	National	District	Management Actions ³¹
COASTAL FISHING AND CRABS				
Using a net in an estuary or within 100m of any river-mouth is prohibited.	Fishing with a hand net, wading net or cast net.	X ³²		Monitoring by fish wardens. Report breaches to Department of Fisheries.
Harvesting undersized fish and crabs is prohibited.		X ³³		Raise awareness of size limits (distribute tables and rulers). Monitoring by fish wardens.
Taking any of the protected species listed in Appendix 1 is prohibited.		X ³⁴		Report breaches to the Department of Environment.
MANGROVE CUTTING				
Cutting and clearing of mangroves is prohibited.	Harvesting approved by the <i>bose vanua</i> , Department of Forestry and Department of Lands.	X ³⁵	X	Monitor and report breaches to Forestry and Department of Lands.
PIGS AND LIVESTOCK				
Livestock and piggery are prohibited within 30 m of mangrove forest and coastal high tide mark.			X	Monitor. Report breaches to RRMC or directly to the Hierarchy Council
WASTE DISPOSAL				
Dumping of rubbish in estuaries, mangroves and on foreshores is prohibited		X ³⁶	X	Report breaches by commercial or industrial facilities to Department of Environment. Report other breaches to <i>bose vanua</i>

³¹ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

³² *Fisheries Regulations* r.7 (refer to Appendix 2 for definitions of net types).

³³ *Fisheries Regulations* rr. 18, 19, 21, 25B (See Appendix 3 for guidance on minimum catch sizes).

³⁴ *Fisheries Regulations, Endangered and Protected Species Act 2002*.

³⁵ Commercial use of mangroves is prohibited without a license: *Crown Lands Act* [Cap. 132], s.32. *Forest Decree 1992*, ss.9, 22. Customary rights to harvest timber for firewood and village construction are protected in *Forest Decree*.

³⁶ *Litter Decree 1991*, s8.

Management Rules	Exception	National	District ³⁷	Management Actions ³⁸
CUSTOMARY FISHING GROUNDS				
Night diving is prohibited	None		X	Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
Leaving nets overnight (or for a period more than 1 tide) is prohibited	None		X	Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
The use of long line fishing is prohibited	None		X	Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
Removing coral is prohibited	None		X	Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
The use of dynamite is prohibited	None	X ³⁹		Monitoring by fish wardens. Report breaches to Fisheries Department.
Use of <i>derris</i> roots (fish poison) prohibited	None	X ⁴⁰		Monitoring by fish wardens. Report breaches to Fisheries Department.
Use of snorkel or SCUBA and compressor for fishing is prohibited	Except for scientific survey, eco-tourism (diving) or a community project approved by the <i>bose vanua</i>	X ⁴¹		Monitoring by fish wardens. Report breaches to Fisheries Department.
Taking of undersized fish, smaller than their size limit is prohibited	None	X ⁴²		Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .

³⁷ District management rules were proposed at the *Ecosystem-Based Management Planning Workshop* (Daria, 24-26 November 2011), modified at the *Management Support Workshop* (Wairiki April 8-11 2013).

³⁸ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

³⁹ *Fisheries Act* (Cap 158) s 10(4). Fines up to FJD5,000 and mandatory jail term for all convictions

⁴⁰ *Fisheries Regulations* r8 bans use of any *derris* or *duva* extract for fishing in Fiji

⁴¹ Fisheries (Restrictions on use of Breathing Apparatus) Regulations 1997 r 4: anyone using or owning underwater breathing apparatus to catch fish is liable to a fine of \$400 and/or imprisonment for six months

⁴² Catching fish that have not yet reproduced reduces the productivity of the fishery (see Appendix 3 for guidance on fish catch size limits)

Nets with mesh size less than 50 mm are prohibited⁴³	None	X ⁴⁴		Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
Catching, eating or sale of humphead wrasse (<i>Varivoce</i>) is prohibited	None	X ⁴⁵		Monitoring by fish wardens. Report breaches to Fisheries Department.
Catching turtles and collection of turtle eggs is prohibited	None	X ⁴⁶		Monitoring by fish wardens. Report breaches to Fisheries Department.
Fishing for 'trade or business' without a fishing licence is prohibited	None	X ⁴⁷		Monitoring by fish wardens. Report breaches to Fisheries Department.
Breaching the conditions of a fishing license is prohibited	None	X ⁴⁸		Monitoring by fish wardens. Report breaches to Fisheries Department.
Taking any of the protected marine species listed in Appendix 1 is prohibited.	None	X ⁴⁹		Monitoring by fish wardens. Report breaches to Department of Environment.

⁴³ *Fisheries Regulations* r16 (hand nets with a mesh of 40mm can be used for freshwater prawns and nets with a mesh of 15mm can be used for sardines) – see Appendix 2 for net size limits

⁴⁴ *Fisheries Regulations* r16

⁴⁵ Endangered and Protected Species Act 2002

⁴⁶ The moratorium on taking of killing turtles contained in *Fisheries (Moratorium on Molesting, Taking or Killing of Turtles) Regulations 1997, 20A*, which expired on 31 December 2008, was extended until 31 December 2018.

⁴⁷ *Fisheries Act (Cap 158) s 5(3)*

⁴⁸ *Fisheries Act (Cap 158) s 5(3)*

⁴⁹ *Fisheries Regulations, Endangered and Protected Species Act 2002 (see Appendix 1 for protected species list).*

4.3.3 Best Practice Consideration for Coastal and Estuarine Ecosystems

To maintain and restore the health, productivity and resilience of coastal and estuarine ecosystems, the best practices is outlined in Table 4.6.

Table 4.6 Best practice recommendations for coastal and marine ecosystems.

RECOMMENDATION	RATIONALE
Coastal	
Limit harvesting of mangroves to ensure no net loss in mangrove area.	Mangroves are valuable as a fish hatchery, nursery, feeding ground and habitat.
Restore degraded mangrove areas by planting native mangrove species.	Mangroves reduce coastal erosion and provide valuable protection from storm surges.
If a coastal <i>tabu</i> is opened, do not use nets with a mesh size less than 75mm (except for small hand nets) and limit take to amount likely to have accumulated during closure.	Periodic harvesting can affect species abundance and diversity, wiping out any management gains through the <i>tabu</i> .
Houses and village structures (including jetties) should not be built within 30m of high tide mark without an environmental impact assessment. ⁵⁰	Building in the coastal zone could cause coastal erosion and result in pollution of marine waters.
Industrial or commercial development must not be undertaken without environmental impact assessment. ⁵¹	A wide range of environmental impacts may result from such development, for example coastal erosion or pollution and damage to natural ecosystems such as mangroves.
Marine	
Do not take fish or invertebrates that are gravid (e.g. large stomach fish, berried crustaceans).	Protecting gravid fish and crustaceans increases the productivity of the fishery.
Do not take fish in migratory 'bottlenecks' during peak migration seasons.	Targeting migrating fish in reef channels or estuaries reduces the productivity of the fishery.
Consider relocating giant clams to marine protected areas or <i>tabu</i> areas.	Protecting clams until they reach reproductive size will help local clam populations to recover.
Do not take sharks.	Sharks are apex predators at the top of the food chain and play a vital role in maintaining balanced marine ecosystems
Maintain spawning aggregations by protecting spawning sites, including reef channels.	Protecting spawning aggregation sites increases the productivity of the fishery.
Do not take fish or invertebrates smaller than the Recommended Catch Size Limits listed in Appendix 3.	Catching fish that have not yet reproduced reduces the productivity of the fishery.
If MPAs are opened, do not use nets with a mesh size less than 75 mm (except for small hand nets), limit take to amount likely to have accumulated during closure, leave the largest females to reseed the population, and shut down the harvest once the target has been reached.	Periodic harvesting can affect species abundance and diversity, wiping out any management gains through the <i>tabu</i> .

⁵⁰ *Environment Management Act, 2005*

⁵¹ *Environment Management Act, 2005*

4.3.4 Raviravi Marine Protected Areas

The Buli Raviravi and his people agreed to the management rules below. The Raviravi Resource Management Committee oversees the management of sites listed in Table 4.8 below.

Table 4.8 Raviravi qoliqoli tabu area names and management rules.

PROTECTED AREA NAME	MANAGEMENT RULE	EXCEPTION	MANAGEMENT RESPONSIBILITY
1. Yadua Taba	Closed for 5 years	Only opened with the consent of the Buli Raviravi via the advice of the RYMC	Raviravi Yaubula Management Committee (RYMC)
2. Dawa Reef	Closed for 5 years		
3. Namotu Levu Reef	Closed for 5 years		
4. Mangrove Area between Raviravi and Namau	Closed for spawning		

The locations of these protected sites within the Raviravi customary fishing grounds, is shown in Figure 4.4 below.

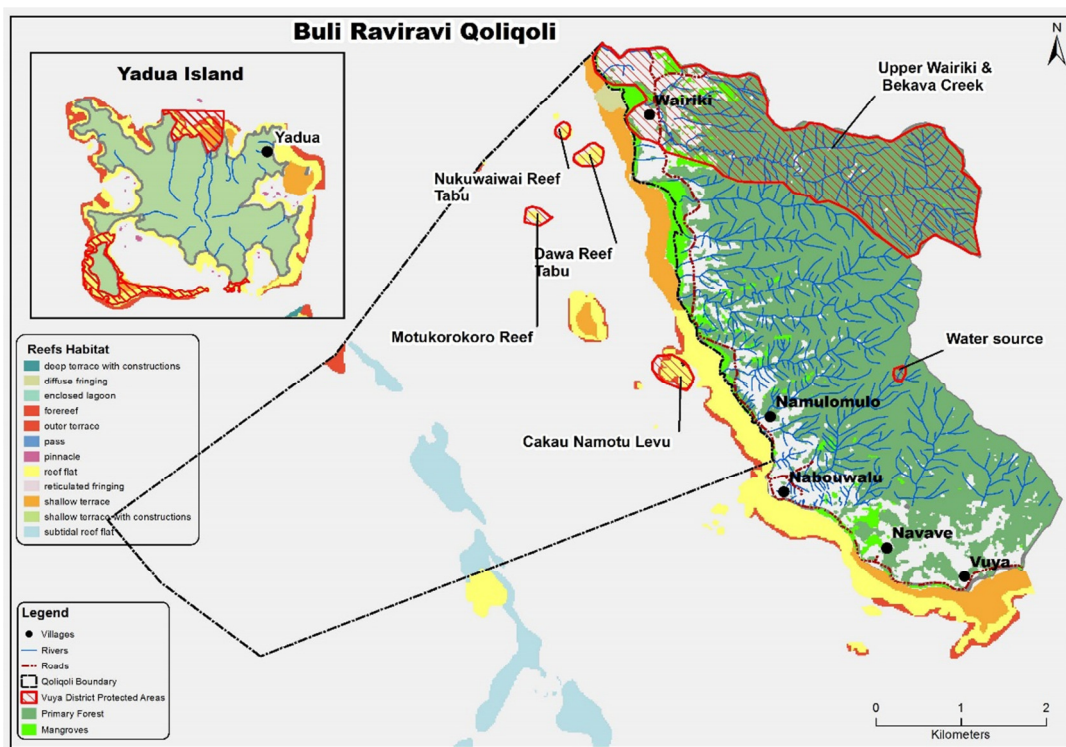


Figure 4.1 Protected areas and reef habitat types within the Raviravi customary fishing grounds (*qoliqoli*).

4.5 Management Activities

A list of management activities was identified by local communities to help guide the initial implementation of the Raviravi Ecosystem-Based Management Plan (Table 4.9). Annual activity plans will be further developed with the Vuya Resource Management Committee to help guide implementation, to ensure they achieve the targets identified and are adaptive to the needs of the people.

Table 4.9 Activities to progress implementation of the management plan.

ISSUE	ACTIVITY	IMPLEMENTATION	COMPLETED BY
Officially establish and bless the Tabu Areas and Management Plan	Arrange blessing/ launching ceremony	Turaga na Buli Raviravi	24 Aug 2016
Need to establish Village and District committees to implement and monitor the management plan	Organise briefings where they will plan and organise the first meeting of Village Yaubula Committees and nominate RRMC members. WCS will assist these committees in developing implementation plans.	Turaga ni mataqali	Sept 2016
Need to raise community awareness about the management plan	Distribute copies of the management plan and related poster/materials across Raviravi.	Raviravi Resource Management Committee (RRMC)	Sept 2016- Ongoing
Need effective monitoring and enforcement to implement the plan	Identify and put in place local mechanisms for monitoring terrestrial and freshwater rules, recording any breaches and feeding back to district hierarchy council.	RRMC, Bua Yaubula Management Support Team, WCS	Sept 2016- Ongoing
Need to demarcate protected areas	Create appropriate signboards and markers (buoys). Discuss and clarify protected area boundaries in village meetings.	RRMC and WCS	Feb 2017
Lack of awareness of sustainable fishing practices, marine protected areas and marine management rules	Education/training workshop on sustainable fishing practices (plus distribution of fish posters, MPA maps and management rules), involving local fishers, fish wardens and VRMC members.	WCS and Department of Fisheries	Sept 2016-On going
Lack of awareness of the impacts of logging and failure to comply with rules and laws	Education/training to build understanding and help apply principles of forest conservation. Circulate copies of the Fiji Forest Harvesting Code of Practice to those monitoring forest areas.	VRMC, Department of Forestry, WCS	Mar 2017
Need to change attitudes and practices in local communities	Undertake leadership training and community facilitator training in order to influence attitudes and changes in local practices. WCS will seek to identify funding for training and to support the RRMC in its application.	WCS, C Change	Sept 2016 - Ongoing

5.0 COMPLIANCE AND ENFORCEMENT

5.1 Promoting Compliance

The management rules set out in this management plan represent a synthesis of community rules and national laws relevant to ecosystem management. The community rules are based on extensive consultation across the district and have been endorsed by Bose Vanua o Vuya and the Bose Vanua o Raviravi. The national laws were created by the national parliament or by decree, and are legally binding on all people throughout Fiji.

There are two different Bose Vanua within Vuya District. Tui Vuya holds the chiefly title for the customary fishing ground of Vuya and Buli Raviravi the chiefly title responsible for the customary fishing ground of Raviravi. Both the two customary fishing grounds come under Vuya District.

In consultation with the Chiefly Hierarchy and the communities of the two separate customary fishing grounds, it was confirmed that the two highly recognized bodies will have separate chiefly meetings (Bose Vanua) for the two tribes. The Vuya Resource Management Committee will come under the chiefly meeting of Vuya (Bose Vanua ko Vuya) while the Raviravi Resource Management Committee will come under the Chiefly meeting of Raviravi (Bose Vanua ko Raviravi). There will be a joint committee chosen with representatives from the two different districts to act as a Steering Committee which should help oversee the implementation, enforcement and compliance of the both plans in synergy with each other (see Section 6).

5.2 Monitoring and Surveillance

The Vuya District Resource Management Steering Committee (VDRMSC) will be responsible for coordination between the two respective resource committees within each customary fishing ground. They will overlook the proper implementation of the plan of both tribes and address any challenging issues faced by the two resource management committees. These committees will be made up of chosen representatives from the two different tribes (*Vanua*) (See Section 6).

5.3 Enforcement

Enforcement of management rules will depend on the status of the rule; whether it is a National Law or a District rule. This has already been indicated on the management rule table in Section 4 of this management plan. Since the District of Vuya has two different Resource Management Committees, it would be appropriate for the two different committees to enforce and monitor the management rules according to their respective fishing grounds. The two different resource management committee within the district of Vuya will include the Raviravi Resource Management Committee, which will monitor the Raviravi fishing grounds, inclusive of the four villages of Nabouwalu, Namulomulo, Wairiki and Yadua.

5.3.1 Enforcement of National Law

The two resource management committees for Vuya District will receive support from Bua Yaubula Management Support Team (BYMST) to enforce the rules within this management plan, with technical support from WCS. Government officers and police are responsible for enforcing national laws. Courts may impose penalties for breaches of national laws, including fines and prison

sentences, and may make other orders, including cancellation of certain types of licence.⁵² In some cases, government agencies have the power to suspend or cancel licences⁵³ or issue binding orders and notices.⁵⁴ Members of the public, including resource owners, can improve law enforcement by monitoring and reporting breaches, and advocating for stricter enforcement by government.

Detaining or assaulting a person or taking their things without legal authority is a criminal offence. This means, for example, that it is illegal to seize a fishing vessel only because it was found fishing in a *tabu* area. If a community rule has been breached, it may be useful to investigate whether a national law has also been breached. For example, if a vessel is found fishing in a *tabu* area, investigate whether the vessel has been fishing for trade or business without a licence, using a prohibited fishing method (e.g. poison, dynamite, undersized nets) or taking legally protected fish (e.g. undersized fish).

COMMUNITY FISH WARDENS

Community fish wardens play a special role in enforcement of the *Fisheries Act*. Fish wardens who have been appointed by the Permanent Secretary for Fisheries have the legal power to:

- order a person to display their fishing licence, gear or catch;
- board and search fishing vessels; and
- if they reasonably suspect that an offence has been committed, take the offender, the vessel, gear and catch to the nearest police station or port.

Obstructing a fish warden from boarding and searching a vessel is a criminal offence.²

It is important to note that fish wardens only have the power to enforce the *Fisheries Act*. They do **not** have the legal power to enforce other legislation or community rules.

² *Fisheries Act*, s.7(2).

⁵² For example, fishing licences may be cancelled if the court finds the licence holder guilty of a fisheries offence: *Fisheries Act*, s 8.

⁵³ For example, the Conservator for Forests may revoke a logging licence if a breach has occurred or is likely to occur: *Forest Decree*, s 19.

⁵⁴ For example, the Director of Environment may issue a prohibition notice to prevent an immediate threat or risk to the environment: *Environment Management Act 2005*, s 21.

If a national law has been breached the following enforcement protocol will be followed:

1. Report the incident to the respective Resource Management Committee, providing as much detail as possible, including:
 - description of the incident;
 - location of the incident;
 - time and date of the incident;
 - name and contact details of the alleged offender;
 - registration number of the offender's vessel or vehicle;
 - names and contact details of any witnesses; and
 - photographs, video and/or physical evidence.
2. If the Resource Management committee believes that a law has been breached, they may report the breach to the police and/or relevant government agency. Relevant government agencies are identified in the management rule tables.
3. They must record the details of any report to the police and/or government agency, including the name and contact details of the officer who received the report.
4. Resource Management Committee must record the details of any action taken by the police or government agency (e.g. investigation, verbal warning, cancellation of licence, prosecution).
5. If the Resource Management Committee is dissatisfied with the response of the police or government agency, they may:
 - contact the relevant officer's supervisor;
 - report the lack of action to the *Bose Vanua*;
 - report the lack of action to partner organisations; and/or
 - report the lack of action to the media.

In any case, the Vuya Resource Management committee may also initiate the community-based enforcement protocol described in the following section 5.3.2.

5.3.2 Enforcement of Community Rules

Community-based rules must be enforced in a manner that does not breach national laws. It is a criminal offence to assault or detain a person or take their property without legal authority. This means, for example, that it is illegal to seize a vessel only because it was found fishing in a *tabu* area. If a community rule has been breached, the following enforcement protocol should be followed:

1. Report the breach to the two resource management committees, providing as much detail as possible, including:
 - description of the incident
 - location of the incident
 - time and date of the incident
 - name and contact details of the alleged offender

- registration number of the offender’s vessel or vehicle
 - names and contact details of any witnesses
 - photographs, video and/or physical evidence.
2. The Vuya Resource Management Steering Committee must attempt to contact the person alleged to have breached the rule, to inform them of the alleged breach and to ask them to explain their side of the story.
 3. If the Resource management Committee believes that a community rule has been breached, they must inform their respective *Bose Vanua* of the breach, and may recommend an enforcement response.
 4. If the *Bose Vanua* believes that a community rule has been breached, it may order such enforcement action(s) as it considers appropriate within the bounds of the law, including, but not limited to:
 - a verbal or written warning
 - taking the offender to task in a village meeting
 - ordering the offender to perform a community service
 - in the case of a licensed fishing vessel, placing the offender on notice that the Ai Sua Levu will not issue a letter of consent for them or their vessel for a fixed period.

Note: This enforcement protocol may also be used for breaches of national laws, especially in cases where the resource management committee (for both customary fishing grounds) considers the response of the police or relevant government agency to be inadequate.

6.0 MANAGEMENT INSTITUTIONS

6.1 Vanua Raviravi Hierarchy Council

Vuya district consists of two different tribes (*Vanua*), Vuya and Raviravi. The Raviravi Resource Management Committee (RRMC) will be responsible to the implementation, compliance and enforcement of the Raviravi District Ecosystem-Based Management Plan which includes the Raviravi customary fishing ground. Similarly, the Vuya Resource Management Committee (VRMC) will be responsible to the implementation, compliance and enforcement of the Vuya District Ecosystem-Based Management Plan which includes the Vuya customary fishing ground. Both plans are strongly linked and ensure the overall protection and wise management of the Vuya District. The two resource management committees will adhere to their various chiefly hierarchy council meetings (*Bose Vanua*), with RRMC under the Bose Vanua o Raviravi and VRMC under the Bose Vanua o Vuya. There will be a Vuya District Resource Management Steering Committee (VDRMSC) with representatives from the two *Vanua* to help oversee both management plans (Figure 6.1).

6.2 Vuya District Resource Management Steering Committee

The Vuya District Resource Management Steering Committee (VDRMSC) consists of representatives from villages within the Vanua Raviravi and Vanua Vuya. The Steering Committee's responsibility will be to provide advice to the two Chiefly Hierarchy meetings and play a supportive role to the two resource management committee for Vuya District (Figure 6.1).

6.3 Raviravi Resource Management Committee

The Qoliqoli Raviravi has introduced some management strategies for the sustainable use of resources. The approval of the *Bose Vanua ko Raviravi* has led to the setting up of a network of community protected areas that is inclusive of coastal, mangrove forest, seagrass bed and coral reef. A resource management committee will be established to help oversee the implementation of the management plan. Committee members will be from the two villages that belong to Vanua Raviravi. The purpose of the RRMC is to:

- coordinate **implementation** of the management activities in this management plan;
- **raise awareness** of the management rules and activities set out in this management plan;
- coordinate **enforcement** of the management rules set out in this management plan;
- assess proposed **resource use and development activities**, to ensure they are consistent with this management plan, national laws and ecosystem-based management principles;
- provide **information and advice** on resource management and alternative livelihoods;
- **organise training** on sustainable resource management and alternative livelihoods;
- **liaise with stakeholders**, including resource users, conservation partners and donors;
- transparently **manage and distribute funds** for resource management and other activities;
- **monitor and report** to resource owners and stakeholders on implementation of this plan.

6.4 Raviravi Qoliqoli Management Committee

The Raviravi *Qoliqoli* Management Committee has already been established. Their current task is to screen fisherman who are willing to pay a fishing licence levy to commercially fish within their customary fishing grounds. To avoid setting up numerous committees within a community, it would be appropriate to provide support for the current Raviravi *Qoliqoli* Management Committee in the implementation and enforcement of the Raviravi Ecosystem-Based Management Plan under the customary fishing grounds of Buli Raviravi.

6.5 Management and Communication Structure

Structural Roles and Responsibilities

Chiefly Hierarchy (Bose Vanua):

- Decision Making Body for each *vanua* and customary fishing ground

Resource Management Steering Committee:

A representative from each village within Vuya district will form the committee to:

- Monitor district plan and rules;
- Record proposed actions from the two resource management committees; and
- Provide advice to the two Chiefly Hierarchy Councils in alignment with their management plans

Resource Management Committee:

Members are chosen with representatives per clan to:

- Compliance, monitoring and enforcement;
- Gets directive from Bose Vanua;
- Carry out awareness within each customary fishing ground; and
- Fish Wardens to submit quarterly reports to RRMCM

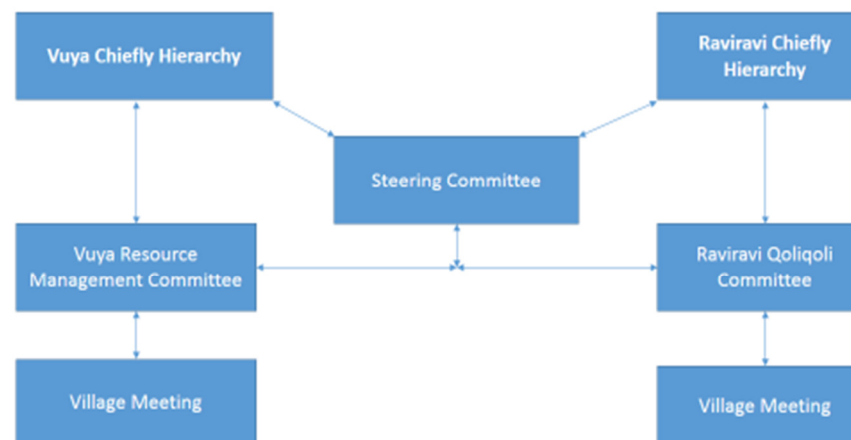


Figure 6.1 Structure of the Raviravi and Vuya Resource Management Committees, and their relationship to Vuya District Resource Management Steering Committee.

7.0 Management Rules and Processes

7.1 Implementation of the Management Plan

The VDRMSC bears the overall responsibility for implementation of this management plan. The committee is accountable to the two Hierarchy Councils (Bose Vanua) and the two resource management committees for timely and effective implementation of the plan, in collaboration with local communities, village leaders, civil society partners, government agencies and the private sector.

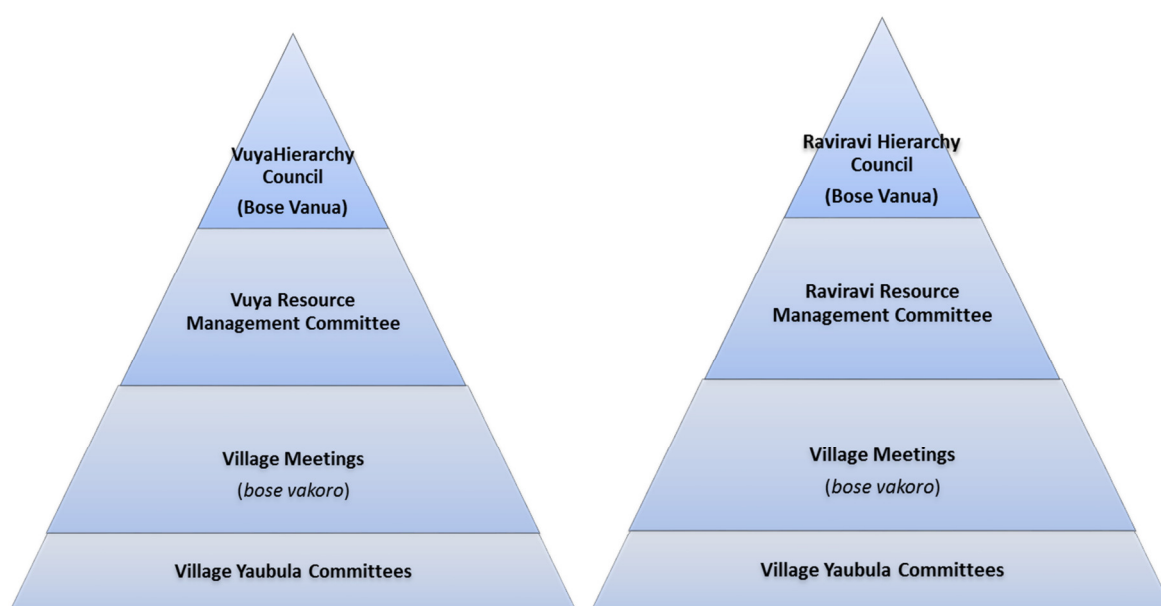


Figure 7.1 The relationships between the district Hierarchy Council, villages and clans, through which the management plan will be implemented.

7.1.1 Management Rules and Activities

The VDRMSC will be responsible for raising awareness of the management rules as set out in the plan. The two resource management committee will be responsible for monitoring, compliance and taking actions to ensure compliance and enforcement of the rules. Fish Wardens, who are also members of the RRMC, must work closely with RRMC and the Fisheries Office to ensure that fishers and other users comply with the Fisheries Act and respect the management efforts established by RRMC.

The VDRMSC is responsible for liaising with the stakeholder(s) identified for each management activity to ensure that the activity is completed in a timely and effective manner, especially those activities that affect and benefit both Vanua Raviravi and Vanua Vuya.

7.1.2 Sustainable Financing

This management plan aims to support long-term sustainable development in Vuya by maintaining the health and productivity of the district's ecosystems. It acknowledges that most village households rely on those ecosystems as their primary source of food and income. The communities' commitment to the management plan will depend to a large degree on how they perceive it to be affecting their income and quality of life. The VRMSC aspires to help identify new sources of income generation to support local sustainable development initiatives such as:

- scholarships for tertiary education;
- small grants and loans for sustainable microenterprise initiatives; and
- management and restoration of terrestrial, freshwater and marine ecosystems.

Professional, transparent accounting and reporting is needed to ensure efficient and equitable use of funds, and to support sustainable resource management and community development. Scoping is required to identify appropriate activities with income generating potential and business planning will be essential to realise any opportunities arising.

7.2 Amendments of the Management Plan

The process for amending this management plan varies depending on the nature of the amendment. For amendments to **district-level management rules** or any changes to the protected areas including their rules, the following process should be adhered to:

1. Any proposed amendments should be presented to the hierarchy council for consideration.
2. The RRMC or hierarchy council may wish to **consult** with resource owners and/or external stakeholders in relation to proposed amendments.
3. The hierarchy council may wish to consult with **resource owners**, a delegated sub-committee SRMC or partners in relation to any proposed amendments.
4. The hierarchy council may **reject** or **approve** proposed amendments.
5. If the hierarchy council **rejects** the amendment, they will:
 - a. post a **written notice** in the village hall in each village in the district; and
 - b. provide **written notice** to all relevant external stakeholders.
6. If the hierarchy council **approves** the amendment, they will:
 - a. explain the amendment in a **village meeting** in each village in the district.
 - b. post a **written notice** in the village hall in each village in the district;
 - c. provide **written notice** to all relevant external stakeholders; and
 - d. insert a copy of the written notice in each copy of this **management plan**.

Amendments may be made as necessary by the VDRMSC with approval from the hierarchy council, giving notification of changes to the two resource management committees, external and local communities and with regard to the following guidelines:

1. If the rules only apply to the land of a particular clan (*mataqali*) – a proposed amendment must be approved by head of that clan. The head of the clan must provide written notice of the amendment to the village chief.
2. The village chief must provide written notice of any amendment to their resource management committee who will raise it with the chiefly hierarchy and steering committee to file as a record.
3. Amendments will:
 - a. Be explained in a **village meeting** in each village in the district.
 - b. Outlined in a **written notice** in the village hall in each village in the district;
 - c. Outlined in **written notice** to all relevant external stakeholders; and

7.3 Review of management Plan

This management plan will be reviewed, and amended as necessary, at least every five (5) years. However, if a need arises to amend the plan before this time, then the early amendment can take place with the approval of the hierarchy council.

The review process must provide an opportunity for village representatives and other relevant stakeholders to comment on the content and implementation of the management plan. Copies of the amended management plan must be distributed to each village in the district and other relevant stakeholders.

8.0 EXTERNAL STAKEHOLDERS

A wide range of stakeholders can affect, or can be affected by, the use, conservation and management of land and natural resources in Vuya district. This section outlines those stakeholders engaged in the management planning process to date. With a strong commitment to partnership approaches, VDRMSC will engage more stakeholders across public, private and non-governmental sectors as it develops further and in the course of implementation.

Bua Provincial Council

Bua Provincial Council assisted the organisation and facilitation of community engagement in the processes of developing this management plan. Their continued support will be important to ensure future engagement of relevant stakeholders and synchronisation with other activities in the province. Bua Provincial Council Office also hosts a Provincial Conservation Officer, who can provide information and technical support for local conservation activities.

Bua Yaubula Management Support Team (BYMST)

BYMST works under the directive of the Bua Provincial Council. It is an informal network of partners from communities, government, non-government organisations and the private sector with a remit to monitor and provide advice on natural resource management issues at provincial level. Their support will be important as a means of providing materials and training for good practice and collaboration.

Department of Fisheries

The Department of Fisheries is responsible for promoting the sustainable use and management of fisheries resources. The Department bears statutory responsibility for administering and enforcing the *Fisheries Act*, including issuing fishing licences, declaring restricted fishing areas and responding to illegal fishing activities. The Department also provides fisheries extension and training services.

Department of Forestry

The Department of Forestry is responsible for promoting the sustainable use and management of forest resources. The Department bears statutory responsibility for administering and enforcing the *Forest Decree*, including issuing logging licences, declaring forest reserves and responding to illegal logging activities. The Department also provides forestry extension and training services.

Department of Agriculture and Land Use Planning

The Department of Agriculture seeks to promote a productive and sustainable agricultural sector. The Department provides extension services and advice in relation to farm management, soil and water conservation, sustainable farming methods, alternative livelihoods and rural microfinance.

Department of Environment

The Department of Environment is responsible for promoting environmental protection and sustainable natural resource use. The Department is responsible for administering and enforcing the *Environment Management Act 2005*, including provisions dealing with environmental impact assessment of development proposals (e.g. tourist resorts, forestry, and mining) and pollution control. The Department is also responsible for formulation and implementation of national environmental policies, including the National Biodiversity Strategy and Action Plan and Climate Change Policy.

Ministry of Tourism

The Ministry of Tourism is responsible for promoting tourism development, including sustainable tourism in rural areas. The Ministry provides advice and extension service for individuals and communities interested in developing local tourism enterprises, and provides marketing support for existing tourism enterprises.

Ministry of Health

The Ministry of Health is responsible for delivery of medical care (including rural health services), and public health programs (including disease control, health promotion and environmental health). The Ministry seeks to improve environmental health by monitoring pollution and promoting safe water supply and sanitation (including rural toilet upgrading). The Ministry, together with local authorities, is responsible for administering and enforcing the *Public Health Act* [Cap 111].

ITaukei Lands and Fisheries Commission

The iTaukei Lands and Fisheries Commission was established to register ownership of *iTaukei* lands and customary fishing grounds. The commission is empowered under the *iTaukei Lands Act* (formerly *Native Lands Act*) and *Fisheries Act* to resolve disputes in relation to *iTaukei* land and fishing rights, and is the custodian of the *iTaukei* land register and the register of customary fishing rights.

ITaukei Affairs Board

The *iTaukei* Affairs Board was established by the *iTaukei Affairs Act* and is responsible for the aspirations of *iTaukei* (indigenous Fijians) and acts as a repository for information pertaining to their good governance and wellbeing. The board develops, implements and monitors policies and programs to ensure the good governance and well-being of the *iTaukei*. The iTaukei Affairs Board

also employs a Provincial Conservation Officer for Bua, hosted in the Provincial Council Office. The Conservation Officer can provide information, advice and support to local conservation activities.

iTaukei Lands Trust Board

The iTaukei Lands Trust Board (TLTB, formerly Native Lands Trust Board) is empowered to grant leases over *iTaukei* land under the *iTaukei Lands Trust Act*. The TLTB must exercise its powers for the benefit of the landowners, and may issue *iTaukei* land leases subject to conditions. TLTB is responsible for ensuring compliance with lease conditions, and may cancel any land lease if the conditions of the lease are breached.

Police Force

The police are responsible for maintaining law and order, preserving the peace, protecting life and property, preventing and detecting crime, and enforcing all laws and regulations with which they are directly charged. Police have a general duty to prevent the commission of any offence,⁵⁵ and are specifically empowered to enforce the *Fisheries Act*⁵⁶ and the *Forest Decree*.⁵⁷ Official police force policy encourages the reporting of offences by members of the public. The nearest police stations to Vuya are located in Nabouwalu.

Wildlife Conservation Society

The Wildlife Conservation Society (WCS) is committed to the conservation of wild animals and wild places around the world. The WCS approach emphasises scientific research, capacity-building, strong partnerships and local engagement. The WCS Fiji Country Program works closely with communities in Vuya District to promote and support ecosystem-based management, by conducting scientific and social research and facilitating community-based management planning processes.

⁵⁵ *Criminal Procedure Code*, s.51.

⁵⁶ *Fisheries Act*, s.7, Power of inspection and detention.

⁵⁷ *Forest Decree*, ss.34-36, Power of inspection, Power of arrest, Power of seizure.

9.0 APPENDICES

APPENDIX 1 – PROTECTED SPECIES

APPENDIX 2 – NET SIZE LIMITS

APPENDIX 3 – RECOMMENDED FISH CATCH SIZE LIMITS

APPENDIX 4 – CONCEPTUAL MODELS

APPENDIX 5– LEGAL MECHANISMS FOR ESTABLISHING PROTECTED AREAS

APPENDIX 6 – USEFUL CONTACTS

APPENDIX 1 – PROTECTED SPECIES

The following species are legally protected throughout Fiji. Possessing, selling or exporting these species without a permit is a criminal offence.

PART 1 – PROTECTED MARINE AND FRESHWATER FAUNA

SCIENTIFIC NAME	COMMON NAME	FIJIAN NAME	LEGISLATION
FISH SPECIES			
<i>Bryaninops dianneae</i>	Species of goby		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Ecsenius fijiensis</i>	Species of blenny		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Mesopristes kneri</i>		Reve	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Plagiotremus laudandus flavus</i>	Species of blenny		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Plectranthias fijiensis</i>	Species of sea bass		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Rotuma lewisi</i>	Species of common wriggler		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Thamnaconus fijiensis</i>	Species of filefish		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Cheilinus undulates</i>	Humphead wrasse		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Epinephelus lanceolatus</i>	Giant Grouper		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Bathygobius petrophilus</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Hippocampus kuda</i>	Spotted seahorse		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lairdina hopletopus</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Meiacanthus bundoon</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Parmops echinatus</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Redigobius leveri</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Redigobius sp</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Siganus uspi</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
MARINE REPTILES			
<i>Cheloniidae spp.</i>	Green turtle		<i>Endangered and Protected Species Act 2002, s.3(a)</i>
<i>Dermochelys coriacea</i>	Leatherback turtle		<i>Endangered and Protected Species Act 2002, s.3(a)</i>
<i>Eretmochelys imbricate</i>	Hawksbill turtle		
<i>Caretta caretta</i>	Loggerhead turtle		
<i>Natator depressus</i>	Flatback turtle		
<i>Lepidochelys olivacea</i>	Olive Ridley turtle		

MARINE MAMMALS			
<i>Phocaena spp.</i>	Dolphin		<i>Fisheries Regulations, r.25</i>
<i>Delphis spp.</i>	Porpoise		<i>Fisheries Regulations, r.25</i>
MARINE INVERTEBRATES			
<i>Charonia tritonis</i>	Davui shell		<i>Fisheries Regulations, r.22</i>
<i>Cassis cornuta</i>	Giant helmet shell		<i>Fisheries Regulations, r.23</i>
CORALS			
<i>Antipatharia spp.</i>	Black corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
<i>Helioporidae spp.</i>	Blue corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
<i>Scleractinia spp.</i>	Stony corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
<i>Tubiporidae spp.</i>	Organ pipe corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
<i>Milleporidae spp.</i>	Fire corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
<i>Stylasteridae spp.</i>	Lace corals		<i>Endangered and Protected Species Act 2002, s.3(b)</i>
SEABIRDS			
<i>Fregata ariel</i>	Lesser frigatebird	Manumanunicagi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Nesofregetta albigularis</i>	Polynesian storm-petrel		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Phethon lepturus</i>	White-tailed tropicbird	Lawedua	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Procelsterna cernula</i>	Blue noddy		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Pseudobulweria macgillivrayi</i>	Fiji petrel	Kacau ni Gau	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Pseudobulweria rostrata</i>	Tahiti petrel	Kacau ni Taiti	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Puffinus inherminieri</i>	Audubon's shearwater		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sula dactylatra</i>	Masked booby	Toro	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sula leucogaster</i>	Brown booby	Toro	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sterna anaethetus</i>	Bridled tern		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sterna bergii</i>	Crested tern	Idre	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sterna fuscata</i>	Sooty tern		<i>Endangered and Protected Species Act 2002, s.3(d)</i>

PART 2 – PROTECTED TERRESTRIAL FAUNA

SCIENTIFIC NAME	COMMON NAME	FIJIAN NAME	LEGISLATION
MAMMALS			
<i>Emballonura semicaudata</i>	Polynesian sheath tailed bat		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Notopteris macdonaldi</i>	Fijian blossom bat		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Pteralopex acrodonta</i>	Taveuni flying fox		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Chaerophon bregullae</i>	Fijian mastiff bat		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
BIRDS			
<i>Clytorhynchus nigrogularis</i>	Black-faced shrikebill	Kiro	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Dendrocygna arcuata</i>	Wandering whistling-duck	Gadamu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Erythrura kleinschmidti</i>	Pink-billed parrotfinch	Sitibatitabua	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gallicolumba stairii</i>	Friendly ground-dove	Qilu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Lamprolia victoria</i>	Silktaill	Sisi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Mayornis versicolor</i>	Ogea monarch		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Myzomela chermesina</i>	Rotuma myzomela	Armea	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Nesoclopeus poecilopterus</i>	Barred-wing rail	Saca	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Poliolimnas cinereus</i>	White-browed crake		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Porzana tabuensis</i>	Spotless crake	Mo	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Trichocichla rufa</i>	Long-legged warbler	Manu Kalou	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Aerodramus spodiopygia</i>	White rumped swiftlet	Kakabacea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Anas superciliosa</i>	Pacific black duck	Ganiviti	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Aplonis tabuensis</i>	Polynesian starling	Vocea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ardea novaehollandiae</i>	White faced heron	Belomatavula	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Artamus mentalis</i>	Fiji woodswallow	Kiro	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Butorides striatus</i>	Mangrove heron	Gadamu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cacomantis pyrrophanus</i>	Fan tailed cuckoo	Sitibatitabua	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cettia ruficapilla</i>	Fiji bush warbler	Qilu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Clytorhynchus vitiensis</i>	Lesser shrikebill	Sisi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Columba vitiensis</i>	White throated pigeon		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ducala latrans</i>	Barking pigeon	Armea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cucula pacifica</i>	Pacific pigeon	Saca	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Egretta sacra</i>	Reef heron		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Erythrura pealii</i>	Fiji parrotfinch	Mo	<i>Endangered and Protected Species Act 2002, s.3(e)</i>

<i>Foulehaio carunculata</i>	Wattled honeyeater	Manu Kalou	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gallirallus philippensis</i>	Banded rail	Kakabacea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gymnomyza viridis</i>	Giant forest honeyeater	Ganiviti	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Halcyon chloris</i>	White collared kingfisher	Vocea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Hirundo tahitica</i>	Pacific swallow	Belomatavula	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lalage maculosa</i>	Polynesian triller	Kiro	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Mayrornis lesson</i>	Slaty monarch	Gadamu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Myiagra azureocapilla</i>	Blue crested broadbill	Batidamu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Myiagra vanikorensis</i>	Vanikoro broadbill	Matayalo	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Myzomela jugularis</i>	Orange breasted myzomela	Delakula	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Pachycephala pectoralis</i>	Golden whistler	Ketedromo	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Petroica multicolour</i>	Scarlet robin	Diriqwala	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Phigys solitaries</i>	Collared lorry	Kula	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ptilinopus layardi</i>	Whistling dove	Soqeda	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ptilinopus luteovirens</i>	Golden dove	Bunako	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ptilinopus perousii</i>	Many coloured fruit dove	Kuluvotu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ptilinopus porphyraceus</i>	Crimson crowned fruit dove	Kuluvotu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ptilinopus victor</i>	Orange dove	Bune	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Rhipidura personata</i>	Kadavu fantail		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Rhipidura spilodera</i>	Streaked fantail	Sasaira	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Turdus poliocephalus</i>	Island thrush	Tola	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Xanthotis provocator</i>	Kadavu honeyeater	Kikou	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Zosterops exploratory</i>	Fiji white eyes	Qiqi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Zosterops lateralis</i>	Silvereye	Qiqi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
REPTILES			
<i>Hemiphyllodactylus typus</i>	Indo pacific tree gecko		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Emoia Campbelli</i>	Montane tree skink		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Emoia mokosariniveikau</i>	Turquoise tree skink		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Emoia nigra</i>	Pacific black skink		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Leiolopisma alazon</i>	Lauan ground skink		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gehyra mutilate</i>	Stumped toed gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gehyra oceanica</i>	Oceanic gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gehyra vorax</i>	Giant forest gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Hemidactylus frenatus</i>	House gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>

<i>Hemidactylus garnotii</i>	Fox gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lepidodactylus gardineri</i>	Rotuman gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lepidodactylus lugubris</i>	Mourning gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lepidodactylus manni</i>	Mann's forest gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Nactus pelagicus</i>	Pacific slender toed gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyrtoblepharus eximius</i>	Pacific snake eyed gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia caeruleocauda</i>	Blue tailed gecko		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia concolor</i>	Green tree skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia cyanura</i>	Browntail copper striped skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia impar</i>	Bluetail copper striped skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia parkeri</i>	Fijian copper headed skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Emoia trossula</i>	Dandy skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lipinia noctua</i>	Moth skink		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ramphotyphlops flaviventer</i>	Flowerpot snake		<i>Endangered and Protected Species Act 2002, s.3(e)</i>
AMPHIBIANS			
<i>Platymantis vitiensis</i>	Fiji tree frog		<i>Endangered and Protected Species Act 2002, s.3(e)</i>

PART 3 – PROTECTED PLANTS

SCIENTIFIC NAME	COMMON NAME	FIJIAN NAME	LEGISLATION
PLANTS			
<i>Polyalthia angustifolia</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Agathis vitiensis</i>		Dakua / Dakua Makadre	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Kingiodendron platycarpum</i>		Moivi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Storckiella vitiensis</i>		Vesida	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Garcinia pseudoguttifera</i>		Bulu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Garcinia myrtiflora</i>		Laubu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Terminalia vitiensis</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Geissois ternate var 2</i>		Vuga	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Vupaniopsis leptobotrys</i>		Malawaci	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Weinmannia spiraeoides</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Weinmannia vitiensis</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Debeneria vitiensis</i>		Masiratu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Bischofia javanica</i>		Koka	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gonystylus punctatus</i>		Mavota	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Endiandra elaeocarpa</i>		Damabi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Hibiscus storckii</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Medinilla kandavuensis</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Astronidium floribundum</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Astronidium kasiense</i>		Rusila	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Acacia richii</i>		Qumu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Mimosaceae spec.div</i>		Vavai-loa	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Mimosaceae spec.div</i>		Vavai-vula	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Veitchia vitiensis</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Veitchia filifera</i>			<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Acmopyle sahniana</i>		Drautabua	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Dacrycarpus imbricatus</i>		Amunu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Decusscarpus vitiensis</i>		Dakua salusalu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Podocarpus neriifolius</i>		Kuasi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Dacrydium nidulum</i>		Yaka	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Turrillia ferruginea</i>		Kauceuti	<i>Endangered and Protected Species Act 2002, s.3(d)</i>

<i>Turrillia vitiensis</i>		Kauceuti	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Alphitonia zizyphoides</i>		Doi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gardenia vitiensis</i>		Ndrega, Meilango	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Mastixiodendron robustum</i>		Duvula	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gardenia vitiensis</i>		Ndrega meilago	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Santatum yasi</i>		Yasi	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Manikara spec.div</i>		Bausagali-damu	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Manikara spec.div.</i>		Bausagali-vula	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Planchonella garberi</i>		Sarosaro	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Planchonella umbonata</i>		Bauloa	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Sterculia vitiensis</i>		Waciwaci	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gmelina vitiensis</i>		Rosawa	<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Barringtonia asiatica</i>		Vutu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Boodia brackenridgei</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cordia subcordata</i>		Nawanawa	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Canarium harveyi var 1</i>		Kaunicina	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cynometra insularis</i>		Cibicibi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Intsia bijuga</i>		Vesi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gymnostoma vitiensis</i>		Velau	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Parinari insularum</i>		Sa	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Calophyllum inophyllum</i>		Dilo	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Calophyllum vitiensis</i>		Damanu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Lumnitzera littorea</i>		Sagali	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia capitanea</i>		Tiviloa	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia luteola</i>		Mbausomi tivi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia psilantha</i>		Mbausomi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia pterocarpa</i>		Tivi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia simulans</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Terminalia strigillosa.</i>		Tivi losi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Acsmithia vitiense</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geissois imthurnii</i>		Vure	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geissois stipularis</i>		Vure	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geissois superba</i>		Vure	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geissois ternate</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>

<i>Spiraeanthemum graeffei</i>		Katakata, Kutukutu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Spiraeanthemum serratum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Weinmannia exigua</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyathea micropelidota</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyathea plagiostegia</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cycas seemannii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Degeneria roseiflora</i>		Karawa yaranggele	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Endospermum robbianum</i>		Kauvula	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Ischaemum byrone</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Calophyllum amblyphyllum</i>		Ndamanu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Calophyllum leueocarpum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Garcinia adinantha</i>		Raumba, mbulumanga	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geniostoma calcicola</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geniostoma clavigerum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Geniostoma stipulare</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Neuburgia macroloba</i>		Vathea	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium degeneri</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium inflatum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium lepidotum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium palladiflorum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium saulae</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Astronidium sessile</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Medinilla deeora</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Medinilla kambikambi</i>		Kambikambi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Medinilla spectabilis</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Medinilla waterhousei</i>		Tangimauthia	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Vavaea amicorunt</i>		Cevua	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Xylocarpus granatum</i>		Dabi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Samanea saman</i>		Raintree	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Myristica castaneifolia</i>		Kaudamu	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cleistocalyx decussatus</i>		Yasimoli	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cleistocalyx eugenoides</i>		Yasiyasi	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Alsmiltia longipes</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Balaka longirostris</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>

<i>Balaka macrocarpa</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Balaka microcarpa</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Balaka seemannii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Calamus vitiensis</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Clinicistigma exorrhizum</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyphosperma tangs</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyphosperma trichospatdix</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gulubia microcarpa</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Neuveitchia storckii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Physokentia rosea</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Physeikentia thurstunii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Pritchardia thurstanii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Veitchia joannis</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Veichia pedionoma</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Veitchia petiolata</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Veitchia simulans</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Dacrydium nausoriense</i>		<i>Yaka, tangitangi</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Podocarpus affinis</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gardenia anapetes</i>		<i>Tirikiloki</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gardenia candida</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gardenia grieveri</i>		<i>Ndelandrega</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Gardenia hillii</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Guetcarda speciosa</i>		<i>Buabua</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Bruguiera gymnorhiza</i>		<i>Dogo</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Pometia pinnata</i>		<i>Dawa</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Palayuium hornei</i>		<i>Sacau</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Palayuium purphyreum</i>		<i>Bauvudi</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Trichospermum richii</i>		<i>Mako</i>	<i>Endangered and Protected Species Act 2002, s.3(e)</i>

APPENDIX 2 – NET SIZE LIMITS

NET TYPE	DEFINITION	NATIONAL
Hand net	'Hand net' means a net fixed on a frame or on two poles, which can be moved in all directions by one person, with a maximum width of 1.5 metres. ⁵⁸	No minimum mesh size ⁵⁹
Cast net	'Cast net' means a round net with weights around its edges, which is used by being cast over fish in such a way that it sinks to the bottom. ⁶⁰	30mm ⁶¹
Whitebait or sardine net	Must only be used for taking whitebait or sardines, and must not be more than 10.5 metres wide or 1.5 metres high. It is prohibited to join two such nets together.	30mm ⁶²
Wading net	'Wading net' means a net fixed on a frame or on two poles which can be moved in all directions by two persons, with a maximum width 4.3 metres. ⁶³	50mm ⁶⁴
Lawa-ni-busa	'Lawa-ni-busa' means a wading net used for taking needlefish (<i>busa</i>). The net must only be used for taking <i>busa</i> and must not be more than 4.3 metres wide. It is prohibited to join two such nets together.	-
Other nets	Any net that does not fall within the above definitions, including nets that exceed the listed size limits.	50mm ⁶⁵

Mesh measurement method: Measure the distance between two diagonally opposite corners of the mesh, when the net is wet and stretched.⁶⁶

⁵⁸ Fisheries Act, s.2.

⁵⁹ Fisheries Regulations, r.13.

⁶⁰ Fisheries Act, s.2.

⁶¹ Fisheries Regulations, r.14.

⁶² Fisheries Regulations, r.15.

⁶³ Fisheries Act, s.2.

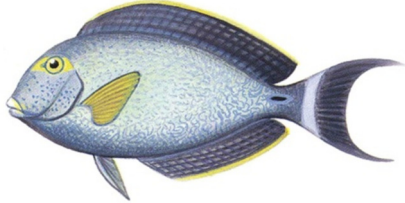
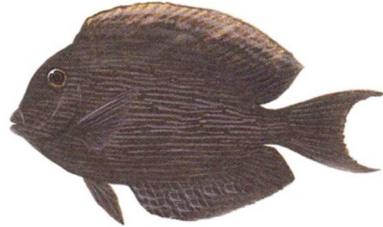
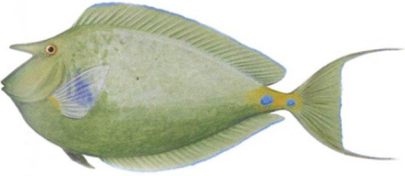
⁶⁴ Fisheries Regulations, r.16.



⁶⁵ Fisheries Regulations, r.16.

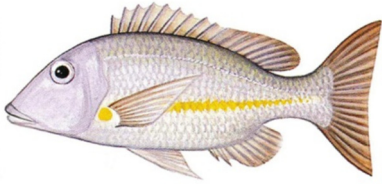
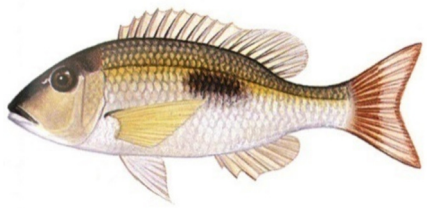
⁶⁶ Fisheries Regulations, r.12.



APPENDIX 3 – RECOMMENDED FISH CATCH SIZE LIMITS

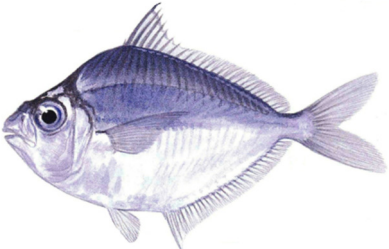

To maintain ecosystem health and productivity of fish stocks, the following size limits are recommended.

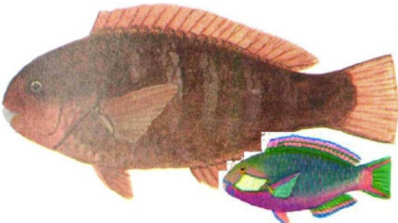


Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Acanthuridae	Surgeonfish, Tang	Balagi	25cm	2	 <p><i>Acanthurus xanthopterus</i> – Yellowfin Surgeonfish</p>
	<i>except</i> Lined Bristletooth (<i>Ctenochaetus striatus</i>)	Dridri	20cm	Modified from 2	 <p><i>Ctenochaetus striatus</i> – Lined Bristletooth</p>
	Unicornfish	Ta	30cm	1	 <p><i>Naso unicornis</i> – Bluespine Unicornfish</p>


Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Belonidae, Hemiramphidae	Garfish, Needlefish, Halfbeaks	Saku	30cm	1	<i>Tylosurus crocodilus</i> – Hound Needlefish
		Busa	30cm	1	<i>Hemiramphus far</i> – Black-barred Halfbeak <i>Belone</i>
Caragidae	Trevally	Saqa	30cm	1	 <i>Caranx melampygus</i> – Bluefin Trevally
		except Blue Trevally (<i>Carangoides ferdau</i>)	Vilu saqa	1	
Carcharhinidae, Sphyrnidae	Sharks, including Hammerhead Sharks	Qio	150cm	2	
Chanidae	Milkfish	Yawa	30cm	1	<i>Chanos chanos</i>
Haemulidae	Sweetlips	Sevaseva	25cm	2	 <i>Plectorhinchus chaetodonoides</i> – Many-spotted Sweetlips

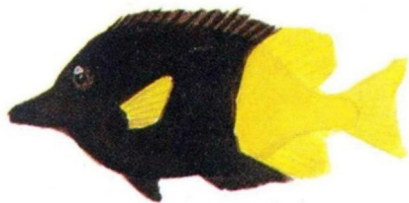
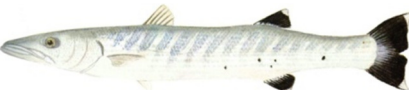

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)	
Labridae	Wrasse		25cm	2	<i>Chelinus chlorourus</i> – Floral Wrasse <i>Chelinus oxycephalus</i> – Snooty Wrasse	
	<i>except</i> Tuskfish (<i>Choerodon</i> spp.) <i>except</i> Humphead Wrasse (<i>Cheilinus undulatus</i>)	Labe Varivoce	30cm No take	2 4		
Lethrinidae	Emperors, Bream	Sabutu	25cm	2	 <i>Lethrinus obsoletus</i> – Orange-striped Emperor	
		Kabatia	25cm	2	 <i>Lethrinus harak</i> – Thumbprint Emperor	
		<i>except</i> Longface Emperor (<i>Lethrinus olivaceus</i>)	Doknivudi	38cm	2	
		<i>except</i> Sweetlip Emperor (<i>Lethrinus miniatus</i>) <i>except</i> Spangled Emperor (<i>Lethrinus nebulosus</i>)	Belenidawa Kawago	38cm 45cm	2 2	

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Lutjanidae	Snapper	Damu, Kake	30cm	1	 <p><i>Lutjanus argentimaculatus</i> – Mangrove Red Snapper</p>  <p><i>Lutjanus ehrenbergii</i> – Blackspot Snapper</p>
	<i>except</i> Yellowtail Blue Snapper (<i>Paracaesio xanthura</i>)		38cm	2	
	<i>except</i> Red Snapper (<i>Lutjanus bohar</i>)	Bati	No take	2	
	<i>except</i> Humpback Snapper (<i>Lutjanus gibbus</i>)	Sabutu damu	No take	2	
<i>except</i> Chinamanfish (<i>Symphorus nematophorus</i>)	Tevulu	No take	2		
	Jobfish	Utouto	38cm	2	<p><i>Aprion virescens</i> – Green Jobfish</p> <p><i>Aphareus furca</i> – Smalltooth Jobfish</p>
Gerreidae	Mojarra	Matu	10cm	1	<i>Gerres oyena</i> – Blacktip Silver Bidy

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Leiognathidae	Ponyfish	Kaikai	10cm	1	 <p><i>Leiognathus equulus</i> – Common Ponyfish <i>Photopecotralis bindus</i> – Orangefin Ponyfish <i>Gazza minuta</i> – Toothpony</p>
Muglidae	Mullet	Kanace	30cm	2	
Mullidae	Goatfish	Ki	15cm	1	 <p><i>Upeneus vittatus</i> – Yellowstriped Goatfish</p>
		Ose	15cm	1	<p><i>Parupeneus barberinus</i> – Dash-and-dot Goatfish</p>

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Scaridae	Parrotfish	Ulavi	25cm	2	 <p><i>Chlorurus bleekeri</i> – Bleeker's Parrotfish</p>  <p><i>Chlorurus sordidus</i> – Bulettehead Parrotfish</p>  <p><i>Bolbometopon muricatum</i> – Bumphead Parrotfish</p>
	<i>except</i> Bumphead Parrotfish (<i>Bolbometopon muricatum</i>)	Kalia	No take	5	
Scombridae	Spanish Mackerel	Walu	75cm	2	<i>Scomberomorus commerson</i>
	Wahoo	Wau	75cm	2	<i>Acanthocybium solandri</i>

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
	Indian Mackerel	Salala	20cm	1	<i>Rastrelliger kanagurta</i>
Serranidae	<p>Groupers</p> <p><i>except</i> Malabar Grouper (<i>Epinephelus malabaricus</i>)</p> <p><i>except</i> Orange Spotted Grouper (<i>Epinephelus coioides</i>)</p> <p><i>except</i> Blacksaddle Coral Grouper (<i>Plectropomus laevis</i>)</p> <p><i>except</i> Brown-Marbled Grouper (<i>Epinephelus fuscoguttatus</i>)</p> <p><i>except</i> Camouflage Grouper (<i>Epinephelus polyphkadion</i>)</p> <p><i>except</i> Giant Grouper (<i>Epinephelus lanceolatus</i>)</p>	<p>Kawakawa</p> <p>Kasala</p> <p>Kasalanitoga</p> <p>Batisai</p> <p>Delabulewa</p> <p>Kawakawa</p> <p>Kavu</p>	<p>38cm</p> <p>38cm</p> <p>50cm</p> <p>50cm</p> <p>50cm</p> <p>No take</p>	<p>2</p> <p>2, 3</p> <p>2, 3</p> <p>2</p> <p>2</p> <p>2</p> <p>4</p>	 <p><i>Plectropomus leopardus</i> – Leopard Coral Grouper</p>

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Siganidae	Rabbitfish	Nuqa	20cm	1	
	<i>except</i> Foxface Rabbitfish (<i>Siganus uspi</i>)		No take	4	<i>Siganus uspi</i> – Foxface Rabbitfish
Sphyraenidae	Barracuda	Ogo	30cm	2	 <i>Sphyraena barracuda</i> – Great Barracuda
		Silasila	30cm	2	 <i>Sphyraena forsteni</i> – Bigeye Barracuda
Portunidae	Swimming Crab (<i>Scylla serrata</i>)	Qari dina	14cm	3	
Trochidae	Trochus Shell (<i>Trochus niloticus</i>)	Sici	9cm (max. 12cm)	3	

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
	Beche-de-mer <i>except</i> Black Teatfish (<i>Holothuria whitmaei</i>) <i>except</i> White Teatfish (<i>Holothuria fuscogilva</i>) <i>except</i> Golden Sandfish (<i>Holothuria scabra</i> var <i>versicolor</i>) <i>except</i> Blackfish (<i>Actinopyga miliaris</i>) <i>except</i> Surf Redfish (<i>Actinopyga mauritiana</i>) <i>except</i> Curryfish (<i>Stichopus hermanni</i>) <i>except</i> Redfish (<i>Thelenota ananas</i>)	Sucuwalu, Dri	20cm 30cm 35cm 30cm 25cm 25cm 35cm 45cm	3 3 3 3 3 3 3	
Pteriidae	Pearl Oyster Shell (<i>Pinctada margaritifera</i>)	Civa	10cm	1	

Family	Common Name	Fijian Name	Minimum	Maximum	Source
Lutjanidae	Snapper except Smalltooth Jobfish (<i>Aphareus furca</i>) except Green Jobfish (<i>Aprion virescens</i>) except Yellowtail Blue Snapper (<i>Paracaesio xanthura</i>) except Red Snapper (<i>Lutjanus bohar</i>) except Humpback Snapper (<i>Lutjanus gibbus</i>) except Chinamanfish (<i>Symphorus nematophorus</i>)	Damu	30cm 38cm 38cm 38cm No take No take No take		1 2 2 2 2 2 2
	Jobfish		38cm		2
Mugilidae	Mullet	Kanace	30cm		2
Scaridae	Parrotfish	Ulavi	25cm		2
Scombridae	Spanish Mackerel	Walu	75cm		2
	Wahoo		75cm		2
Serranidae	Groupers except Malabar Grouper (<i>Epinephelus malabaricus</i>) except Orange Spotted Grouper (<i>Epinephelus coioides</i>) except Blacksaddle Coral Grouper (<i>Plectropomus laevis</i>) except Brown-Marbled Grouper (<i>Epinephelus fuscoguttatus</i>) except Camouflage Grouper (<i>Epinephelus polyphekadion</i>) except Giant Grouper (<i>Epinephelus lanceolatus</i>)	Kawakawa	38cm 38cm 38cm 50cm 50cm 50cm No take	- 100cm 100cm 80cm 70cm 70cm -	2 2, 3 2, 3 2 2 2 2

Family	Common Name	Fijian Name	Minimum	Maximum	Source
Sphyrnaeidae	Barracuda	Ogo	30cm		2
Sphyrnidae	Hammerheads		150cm	-	2
	Swimming Crab (<i>Scylla serrata</i>)	Qari dina	14cm	-	3
	Trocas Shell (<i>Trochus niloticus</i>)	Sici	9cm	12cm	3
	Beche-de-mer except Black Teatfish (<i>Holothuria whitmae</i>) except White Teatfish (<i>Holothuria fuscogilva</i>) except Golden Sandfish (<i>Holothuria scabra var versicolor</i>) except Blackfish (<i>Actinopyga miliaris</i>) except Surf Redfish (<i>Actinopyga mauritiana</i>) except Curryfish (<i>Stichopus hermanni</i>) except Redfish (<i>Thelenota ananas</i>)	Sucuwalu, Dri	20cm 30cm 35cm 30cm 25cm 25cm 35cm 45cm	-	3 3 3 3 3 3 3 3
	Pearl Oyster Shell (<i>Pinctade margaritifera</i>)	Civa	10cm	-	1

- Sources:**
1. Fisheries Act, Fisheries Regulations.
 2. Fish Size and Bag Limits for Queensland, Department of Primary Industries and Fisheries, Queensland, Australia (March 2009).
 3. Environmental Code, South Province, New Caledonia (2009).

It is an offence under the *Fisheries Regulations* to kill, take, sell or display for sale any of the following species if they are less than the minimum length listed below.⁶⁷

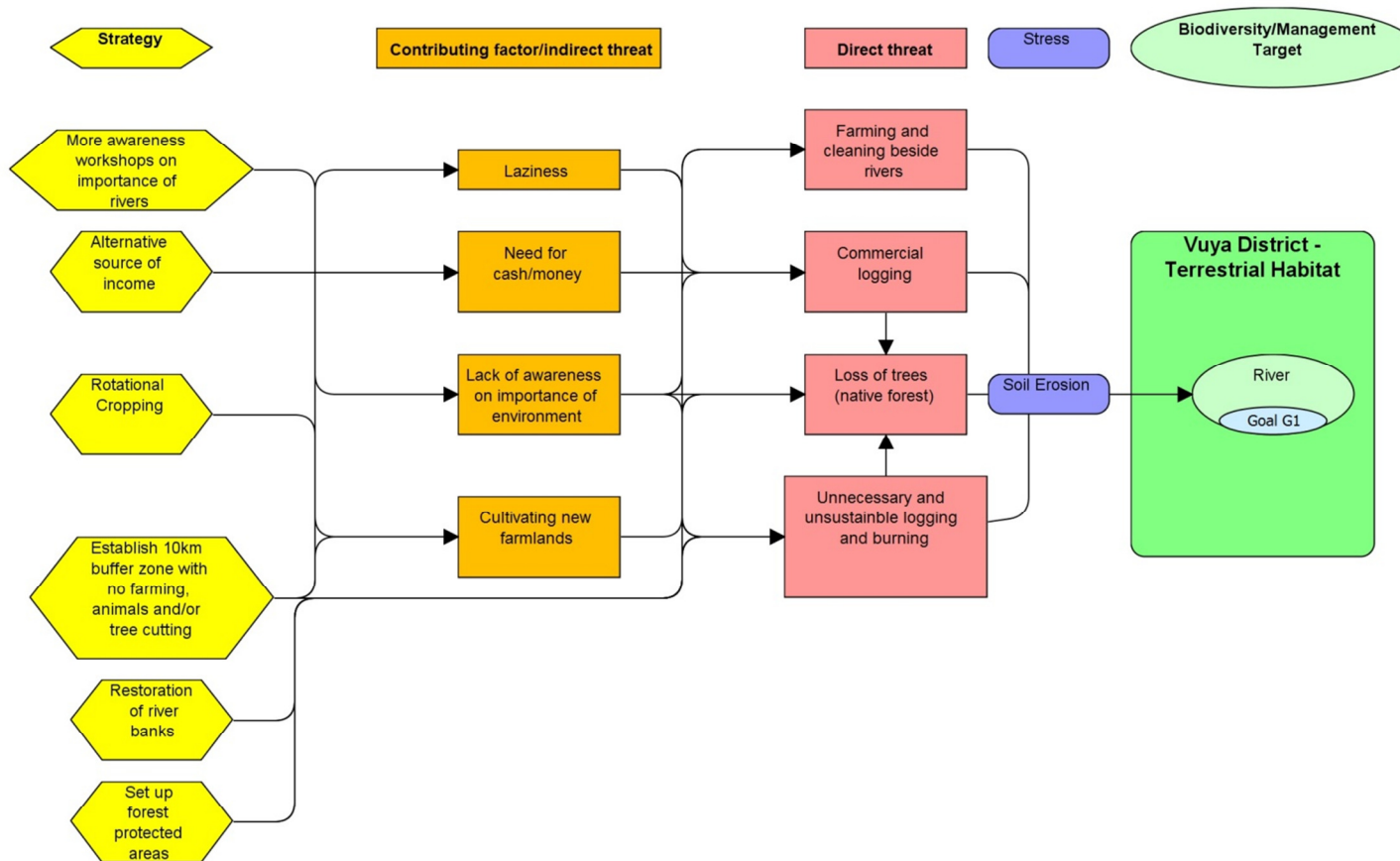
Fijian Name	Common Name	Genus	Minimum Length
Ogo	Barracuda	<i>Sphyrna</i>	300 mm
Saqa (excluding vilu saqa)	Crevally, Trevally, Pompano	<i>Caranx</i>	300 mm
Kanace	Grey Mullet	<i>Mugil</i>	200 mm
Ika Droka	Glassperch, Aholehole	<i>Dules</i>	150 mm
Nuqa	Ketang, Spinefoot Rabbitfish	<i>Siganus</i>	200 mm
Salala	Long-jawed Mackerel	<i>Rastrelliger</i>	200 mm
Saku Busa	Longtom, Garfish, Greengar	<i>Belone</i>	300 mm
Yawa	Milk Fish	<i>Chaos</i>	300 mm
Matu	Mojarra	<i>Gerres</i>	100 mm
Ulavi	Parrotfish	<i>Scarichthys</i>	250 mm
Kaikai	Pouter, Slimy, Soapy, Peperek	<i>Gazza</i>	100 mm
Donu, Kawakawa, Kavuu	Rock Cod, Grouper, Salmon Cod	<i>Serranus</i>	250 mm
Kawago, Dokonivudi, Musubi	Sea Bream, Pig-faced Bream	<i>Lethrinus</i>	250 mm
Kabatia, Kake	Small Sea Bream	<i>Lethrinus</i>	150 mm
Sabutu	Small Sea Bream	<i>Lethrinus</i>	200 mm
Balagi	Surgeon Fish	<i>Hepatus</i>	200 mm
Ki, Ose	Surmullet, Goatfish, Whiskercod	<i>Mulloidichthys, Pseudopeneus, Upeneus</i>	150 mm
Damu	Snapper	<i>Lutjanus</i>	300 mm
Ta	Unicorn-Fish, Leather jacket	<i>Naso</i>	300 mm
Qari dina	Swimming Crab	<i>Scylla serrata</i>	125 mm
Sici	Trocas shell	<i>Trochus niloticus</i>	90 mm
Civa	Pearl Oyster Shell	<i>Pinctade margaritifera</i>	100 mm
Sucuwalu, Dri	Beche-de-mer	<i>Holothuria scabra</i>	76 mm

Measurement method: (1) Fish: measure from the point of the snout to the middle of the tailfin when the fish is laid flat. (2) Trochus: measure across the whorl. (3) Pearl Oyster Shell: measure from the butt or hinge to the opposite lip

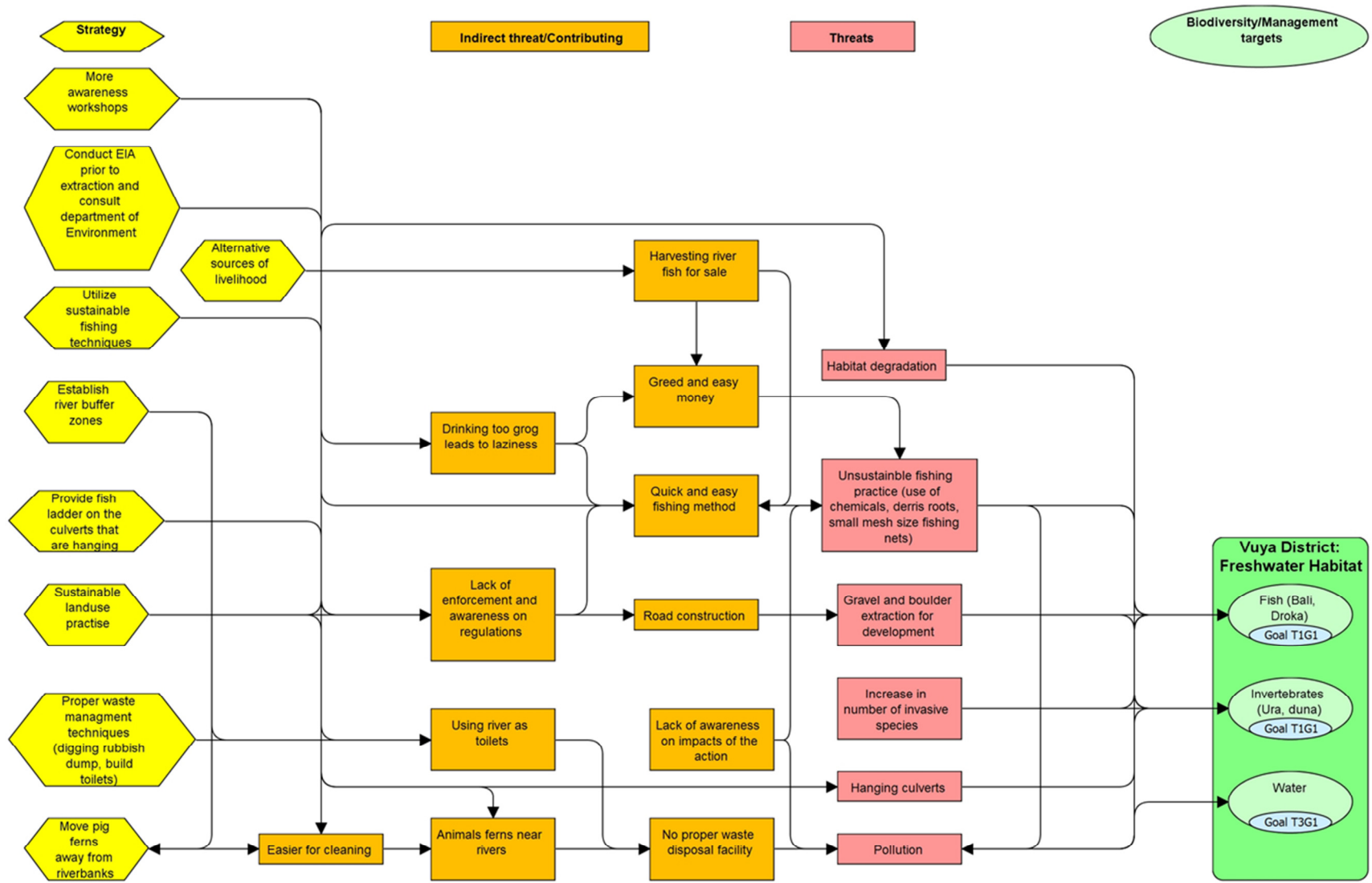
⁶⁷ *Fisheries Regulations*, rr.18, 19, 21, 25B.

APPENDIX 4 –THREAT DIAGRAMS

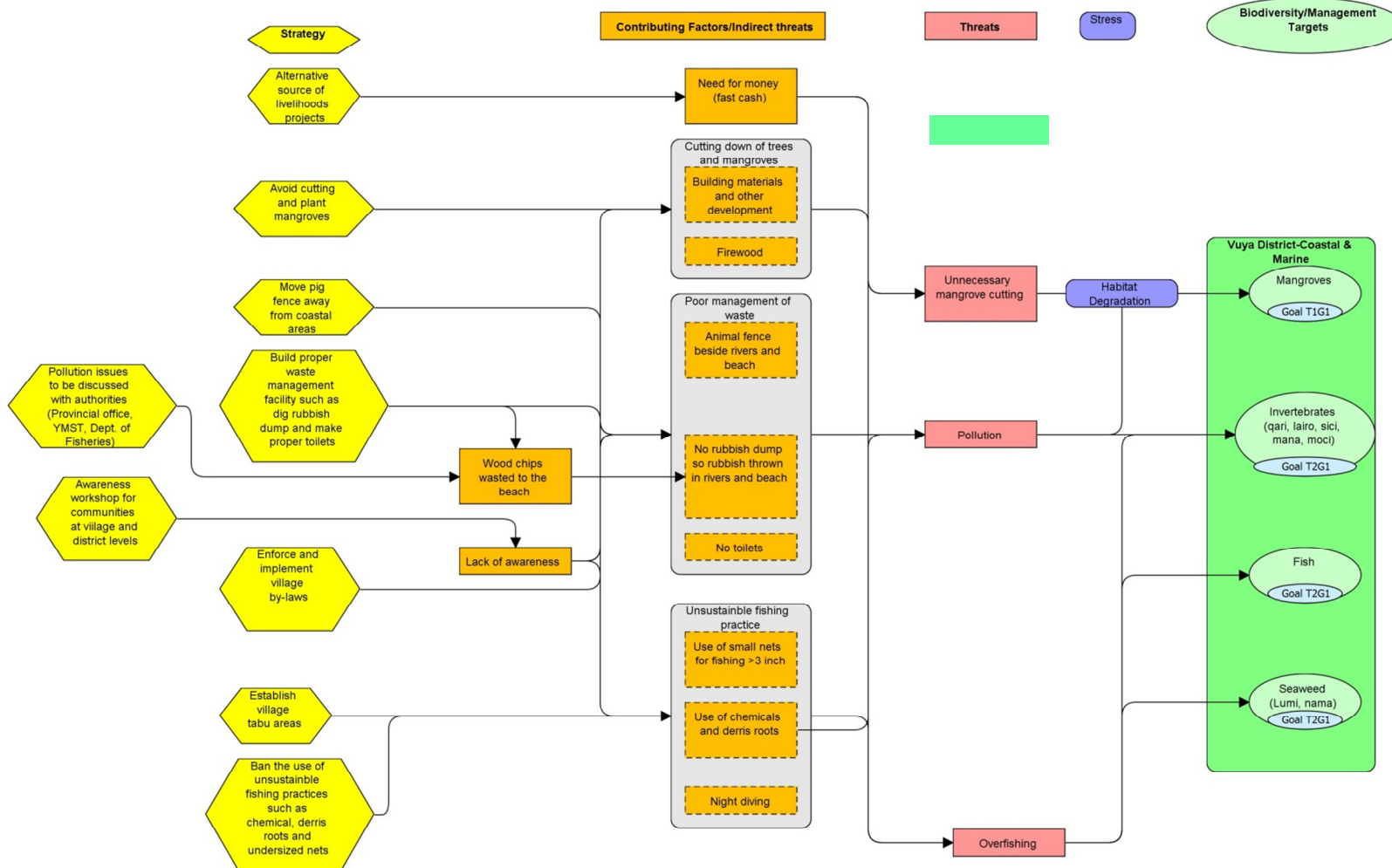
Terrestrial ecosystems



Freshwater Ecosystems



Coastal and marine ecosystems



APPENDIX 5 – LEGAL MECHANISMS FOR ESTABLISHING PROTECTED AREAS

1.0. LEGAL PROCESS FOR ESTABLISHING MARINE PROTECTED AREAS⁶⁸

There are two mechanisms available for legally protecting marine areas under the *Fisheries Act*:

1. restricted areas
2. fishing licence conditions.

The key features of these mechanisms, and the process for using them, are described below.

1.1. Restricted Areas

Key Features

The Minister for Fisheries can declare ‘restricted areas’, commonly known as marine reserves. Fishing in a restricted area without a permit is an offence. The penalty for fishing in a restricted area with a permit is \$500 and/or three months imprisonment.

Process

The Minister may create a restricted area by either (a) creating regulations specifically for the new restricted area; or (b) amending the existing list of restricted areas in the *Fisheries Regulations*.

In either case, the Minister must take the proposed regulations (or amendment) to Cabinet for approval. The members of Cabinet are the Prime Minister and Ministers. Cabinet meets regularly to make decisions on matters of national policy. If Cabinet approves the regulations (or amendment) the Minister will then publish the regulations in the Government Gazette.

Before the Cabinet meeting, an officer of the Department of Fisheries will prepare a written submission to be presented to Cabinet by the Minister. The Cabinet submission will include a brief description of the proposal, background, discussion and recommendations.

If resource owners want the Minister for Fisheries to declare a restricted area in their *qoliqoli*, the *turaga ni yavusa* should discuss the proposal with the Fisheries Department, and then submit a written proposal to the Minister, highlighting the conservation significance of the area, and providing evidence that establishment of the restricted area is supported by the *vanua*.

Only the Minister for Fisheries may remove or modify a restricted area. To remove or modify a restricted area, the Minister must revoke or amend the relevant regulations, following the same process for creating a restricted area.

1.2. Fishing Licence Conditions

Key Features

Any person who wants to fish for ‘trade or business’ must apply for a fishing licence (unless they are only fishing with a line from the shore or with a spear).

⁶⁸ There is currently an ongoing process exploring potential to develop an Offshore Fisheries Management Decree. Any such decree would be adopted into this management plan in relation to MPAs.

Fishing licences can include legally binding conditions. Licence conditions can be used to prohibit fishing in particular areas, including *tabu* areas.

Breaching licence conditions is an offence. The penalty for breaching a licence condition is \$500 and/or three months imprisonment.

Process

Fishing licences are issued by Fisheries Department licensing officers. Before issuing a fishing licence, the Fisheries Department will request a letter of consent from the *Turaga ni Yavusa*.

The *Turaga ni Yavusa* can use the letter of consent to ensure that *tabu* areas are included in the licence conditions. It is important to clearly define the rules of the *tabu* area(s) in the letter of consent, and attach a map that clearly and accurately illustrates the *tabu* boundaries.

Licences expire on 31 December each year. This means that a new letter of consent will be required each year, and provides an opportunity to modify the rules or boundaries of the *tabu* area(s).

2.0. LEGAL PROCESS FOR ESTABLISHING TERRESTRIAL PROTECTED AREAS

There are a number of mechanisms available for legally protecting terrestrial areas, including:

1. nature reserves
2. protected catchment areas
3. conservation leases.

The key features of these mechanisms, and the process for using them, are described below.

2.1. Nature Reserves

Key Features

The Minister for Forests may declare nature reserves. It is an offence to log, clear, burn, build, plant, graze, hunt or fish in a nature reserve (maximum penalty: \$10,000 fine or 2 years imprisonment).

Logging licences must not be issued in a declared nature reserve. Mining leases must not be issued in a declared nature reserve without the approval of the Conservator for Forests.

Process

The Minister for Forests may only declare a nature reserve on the recommendation of the Forestry Board. The Forestry Board is an advisory board, chaired by the Conservator for Forests. In the case of *iTaukei* land, the Minister must also obtain the consent of landowners and the iTaukei Land Trust Board (TLTB) before establishing a nature reserve.

If landowners want the Minister to declare a nature reserve on their land, the *turaga ni mataqali* should discuss the proposal with the NLTB and the Forest Department, and then prepare a written proposal to the Conservator for Forests, highlighting the conservation significance of the area, and providing evidence of support from NLTB and the *mataqali*.

In practice, the Department of Forestry has stated that they currently (as of 2014) are not adding additional nature reserves. In fact, they are potentially looking to de-list some of their existing forest reserves.

2.2. Protected Catchment Areas

Key Features

The Minister for Water may declare any area of land or water to be a water supply catchment area. It is an offence to commit any act which causes pollution of water within a declared catchment area (maximum penalty: \$100). Logging licences must not be issued in a declared catchment area. Mining leases must not be issued in a declared catchment area without the approval of the Commissioner for Water Supply.

Process

The Minister must publish notice of his/her intention to declare a protected catchment area in the Gazette. The notice must describe the proposed catchment area, and allow at least two months for any owner, lessee or licensee of the area to object in writing to the proposed declaration. The Minister must consider any such objections before making a decision about declaration of the area.

If landowners want the Minister to declare a water supply catchment area on their land, the *turaga ni mataqali* should discuss the proposal with TLTB and the Department of Water, and then prepare a written proposal to the Minister, highlighting the conservation significance of the area, and providing evidence of support from TLTB and the *mataqali*.

Establishment of a water catchment area requires a professional boundary survey. This process is prohibitively expensive for most communities, costing potentially hundreds of thousands of dollars. Boundary surveys are generally only undertaken by commercial agencies, such as Fiji Water Authority, who have brokered leases with landowners with the assistance of TLTB for protection of important water catchments for municipal water supply. In these cases, the Water Authority also pays a premium to the landowners for a 99 year lease based on the value of the forest stock, plus an annual rent payment.⁶⁹ Only the Minister for Water may remove a declared catchment area.

2.3. Conservation Leases

Key Features

The TLTB may issue leases over *iTaukei* land. Since development leases (for example, for logging or tourism development) cannot be issued over land that is already leased, leases can be used for conservation purposes if there is a lessee who is willing to pay to conserve a particular area (for example, Moody's Resort on Namenalala Island).

Process

The terms and conditions of *iTaukei* land leases are negotiated by TLTB on behalf of landowners. The consent of more than 50% of the relevant *mataqali* is required before TLTB will issue a lease. Lease payments are negotiated by NLTB based on standard payment criteria. If landowners have identified a lessee who is willing to enter into a conservation lease over part of their land, the *Turaga ni Mataqali* and the lessee should discuss the proposal with TLTB, highlighting the conservation significance of the area, and providing evidence of support from the *mataqali*.

If the lessee fails to make lease payments, or breaches the conditions of the lease, TLTB may terminate the lease.

⁶⁹ Vukikomoala K, Jupiter S, Erasito E, Chand K (2012) An analysis of international law, national legislation, judgements, and institutions as they interrelate with territories and areas conserved by indigenous peoples and local communities. Report No. 19 Fiji. Natural Justice and Kalpavriksh, Bangalore and Delhi 61 pp.

APPENDIX 6 – USEFUL CONTACTS

GOVERNMENT AGENCIES

iTaukei Lands Trust Board

Deputy General Manager – Operations
Mr Solomon Nata
Ph: 3312733
Email: snata@tltb.com.fj

iTaukei Lands and Fisheries Commission

Chairman, Ratu Vananalagi Vesikula
Ph: 3301001
Email: vananalagi.vesikula@govnet.fj

Ministry of Fisheries

Divisional Fisheries Officer Northern,
Mr Joji Vakawaletabua
Ph: 8812833

Fisheries Officer Bua, Tomasi Cama
Ph: 9966907

Department of Forestry

Conservator of Forests
Ministry of Forestry
Mr Elik Senivasa
Ph: 3301611
Email: eliki.senivasa@gmail.com

Forestry Extension Officer Bua (Dreketi)
Ph: 8518277

Department of Environment

Acting Director Environment,
Ms Eleni Tokaduadua
Ph: 3311699

Ministry of Agriculture

Principal Agriculture Officer Northern, Mr John Cox
Ph: 8812244
Email: jwcoxboss@yahoo.com

Acting Director, Land and Water Resources Management Division,
Mr Colin Simmons
Ph: 3383155/9904547
Email: csimmons@agriculture.gov.fj

Bua Provincial Office

Roko Tui Bua, Rupeni Kunaturaga
Ph: 8836027

Department of Tourism

Principal Tourism Officer, Mr Donald Mitchell
Ph: 3312788
Email: dmitchell.motfiji@gmail.com

National Trust of Fiji

Director, Ms Elizabeth Erasito
Ph: 3301807
Email: eerasito@nationaltrust.org

NON-GOVERNMENT ORGANISATIONS

Wildlife Conservation Society Fiji Country Program

Program Director, Dr Sangeeta Mangubhai
Ph: 3315174
Email: smangubhai@wcs.org

Fiji Locally Managed Marine Area Network

Amelia Raratabu
Ph: 3314593
Email: ameliapei26@gmail.com