

ECOSYSTEM-BASED MANAGEMENT PLAN 2016 -2020

Nadi District, Bua Province, Fiji



The future generation will be happy and prosperous, with plentiful resources

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NOTE: This management plan may be amended from time to time. To obtain a copy of the current management plan, please contact:

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ENDORSEMENT

On this day, Monday 19 August 2016, at Nasavu Village in the District of Nadi, Bua Province, Vanua Levu, in the Republic of Fiji Islands, we, the traditional leaders of Nadi, endorse this management plan, and urge the people of Nadi to make every effort to ensure its effective implementation.

Ratu Manasa Komainaua, Buli Navere

Turaga ni Yavusa Nadi, Nasolo

Turaga ni Yavusa Navuanui, Sawani

Turaga ni Yavusa Solevu, Nasawana

ACKNOWLEDGEMENTS

The Nadi Resource Management Committee wishes to recognize the vision and leadership of the chiefs of Nadi district and celebrate their commitment to sustainable management of Nadi's precious ecosystems for the benefit of present and future generations.

The people of Nadi 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:

- Nadi Resource Management Committee
- Bua Provincial Office
- Wildlife Conservation Society
- Fiji Locally Managed Marine Area Network
- Department of Environment
- Department of Fisheries
- Department of Forestry
- Ministry of Agriculture
- Ministry of Health
- Fiji Environmental Law Association
- iTaukei Land Trust Board
- iTaukei Lands and Fisheries Commission
- Wetlands International-Oceania
- Peace Corps
- 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 Nadi 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.

TABLE OF CONTENTS

ECOSYSTEM-BASED MANAGEMENT PLAN	1
ENDORSEMENT.....	3
ACKNOWLEDGEMENTS	4
1 INTRODUCTION.....	7
2 ECOSYSTEM-BASED MANAGEMENT	9
3 SITE DESCRIPTION	11
3.1 MANAGEMENT AREA BOUNDARIES	11
3.2 DEMOGRAPHICS	12
3.3 RESOURCE TENURE.....	12
3.4 RESOURCE USE.....	15
3.5 TERRESTRIAL HABITATS	15
3.5.1 Terrestrial Habitat Description.....	15
3.5.2 Terrestrial Plants	16
3.5.3 Threatened and Endemic Species.....	17
3.5.4 Economically and Culturally Important Resources.....	17
3.6 FRESHWATER HABITATS	17
3.6.1 Freshwater Fauna	17
3.6.2 Threatened and Endemic Species.....	18
3.6.3 Economically and Culturally Important Resources.....	18
3.7 ESTUARINE, COASTAL AND MARINE HABITATS	19
3.7.1 Flora and Fauna	19
3.7.1 Threatened and Endemic Species.....	20
3.7.2 Economic and Culturally Important Species.....	20
4.1 OVERVIEW	22
4.2 MANAGEMENT OF TERRESTRIAL AND FRESHWATER ECOSYSTEMS	22
4.2.1 MANAGEMENT TARGETS FOR TERRESTRIAL AND FRESHWATER ECOSYSTEMS	22
4.2.2 TERRESTRIAL AND FRESHWATER PROTECTED AREAS.....	23
4.2.3 MANAGEMENT RULES FOR TERRESTRIAL AND FRESHWATER ECOSYSTEMS.....	24
4.2.4 BEST MANAGEMENT PRACTICES FOR TERRESTRIAL AND FRESHWATER ECOSYSTEMS	27
4.3 MANAGEMENT OF COASTAL AND ESTUARINE ECOSYSTEMS	28
4.3.1 MANAGEMENT TARGETS FOR COASTAL AND ESTUARINE ECOSYSTEMS.....	28
4.3.2 MANAGEMENT RULES FOR COASTAL ESTUARINE ECOSYSTEMS	29
4.3.3 BEST PRACTICE CONSIDERATIONS FOR COASTAL AND ESTUARINE ECOSYSTEMS	31
4.4 MANAGEMENT OF MARINE ECOSYSTEMS.....	32
4.4.1 MANAGEMENT TARGETS FOR MARINE ECOSYSTEMS	32
4.4.2 MARINE PROTECTED AREAS.....	33
4.4.2 MANAGEMENT RULES FOR MARINE ECOSYSTEMS.....	34
4.4.3 BEST PRACTICE CONSIDERATIONS FOR MARINE ECOSYSTEMS.....	36
4.5 MANAGEMENT ACTIVITIES	37
5 COMPLIANCE AND ENFORCEMENT	38
5.1 PROMOTING COMPLIANCE	38
5.2 MONITORING AND SURVEILLANCE	38

5.3 ENFORCEMENT	39
5.3.1 ENFORCEMENT OF NATIONAL LAWS	40
5.3.2 ENFORCEMENT OF COMMUNITY RULES.....	42
6 MANAGEMENT INSTITUTIONS	43
6.1 NADI HIERARCHY COUNCIL.....	43
6.2 NADI RESOURCE MANAGEMENT COMMITTEE	43
7 MANAGEMENT ROLES AND PROCESSES	44
7.1 IMPLEMENTATION OF THE MANAGEMENT PLAN	44
7.1.1 MANAGEMENT RULES	45
7.1.2 MANAGEMENT ACTIVITIES	45
7.1.3 SUSTAINABLE FINANCING	45
7.2 AMENDMENT OF THE MANAGEMENT PLAN	46
7.2.1 DISTRICT-LEVEL MANAGEMENT RULES.....	46
7.2.2 VILLAGE-LEVEL MANAGEMENT RULES.....	47
7.2.3 OTHER AMENDMENTS	47
7.3 REVIEW OF THE MANAGEMENT PLAN	47
7.4 EXTERNAL STAKEHOLDERS	48
7.4.1 GOVERNMENT AGENCIES	48
7.4.2 NON GOVERNMENT ORGANISATIONS	49
8 APPENDICES.....	50
APPENDIX 1 – PROTECTED SPECIES.....	51
APPENDIX 2 – NET SIZE LIMITS.....	60
APPENDIX 3 – RECOMMENDED FISH CATCH SIZE LIMITS.....	61
APPENDIX 4 – TERRESTRIAL THREAT DIAGRAM.....	76
APPENDIX 5– COASTAL AND ESTUARINE THREAT DIAGRAM.....	77
APPENDIX 6– MARINE THREAT DIAGRAM	78
APPENDIX 7– LEGAL MECHANISMS FOR ESTABLISHING PROTECTED AREAS.....	79

1 INTRODUCTION

This management plan seeks to enhance the ecological value and resilience of terrestrial, freshwater, estuarine, coastal and marine ecosystems in the District of Nadi and adjacent coastal waters. Local communities are central to the sustainable management of these ecosystems and the plan aims to help them to address 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**).



Figure 1.1 The cycle of adaptive management.

The management plan has been prepared on behalf of the Nadi District and the communities within. This is also a guide for the Governing Body which will oversee the implementation, compliance and enforcement of the current plan. This management plan is the outcome of consultations with communities from the four different villages which make up the District of Nadi. The management plan reflects the outcomes of the workshops undertaken in 2013, with the final consultation held on the 8th – 9th of May, 2014 at Nasolo village.

The key components of this management plan are:

- a **description of the management area**, including 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; and
 - **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**.



What is an ecosystem?

An ecosystem includes all of 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).

Community members identify threats and strategies during the EBM planning workshop. ©WCS

2 ECOSYSTEM-BASED MANAGEMENT

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.²

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.³

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

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

² *Scientific Consensus Statement on Marine Ecosystem-Based Management*

³ Grieve and Short, WWF EBM Toolkit

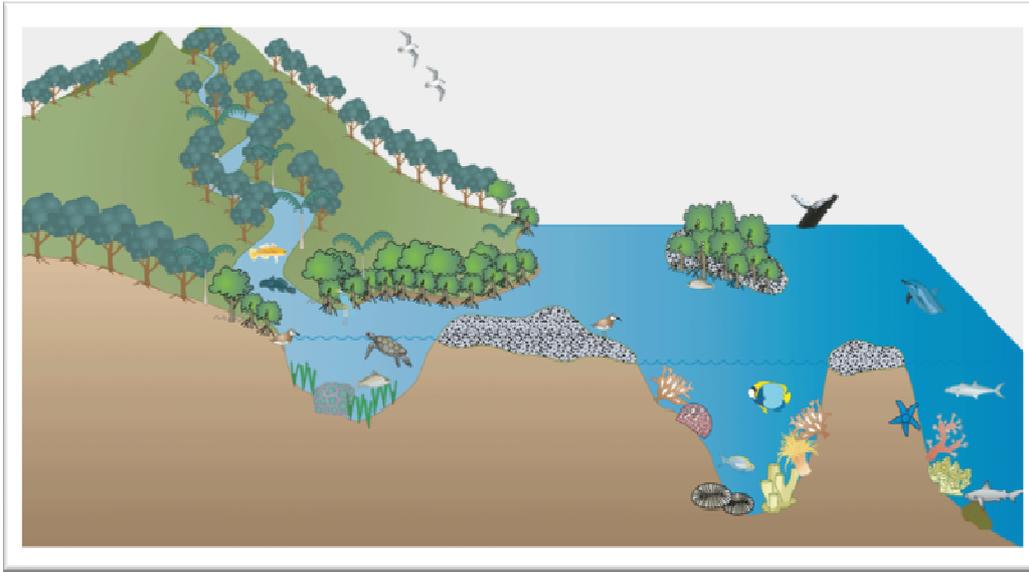


Figure 2.1 Schematic diagram of healthy connectivity between adjacent terrestrial, freshwater, coastal and marine ecosystems.

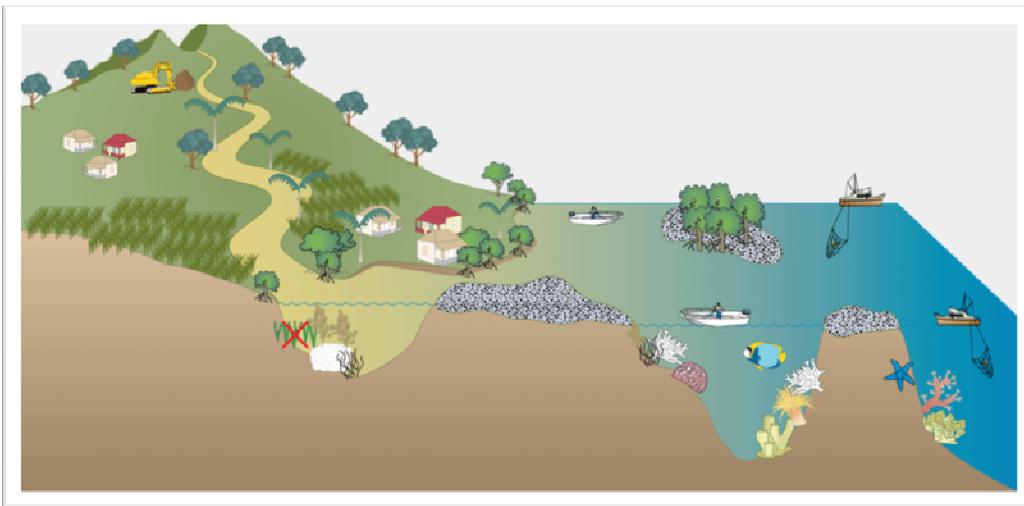


Figure 2.2 Schematic diagram depicting interruption to ecosystem connectivity due to uncontrolled human activity.

3 SITE DESCRIPTION

3.1 MANAGEMENT AREA BOUNDARIES

This management plan covers Nadi district lands and the adjacent customary fishing ground (*qoliqoli*). Nadi District (*tikina*) is an administrative unit of Bua Province, in southwest Vanua Levu. Vanua Levu is the second largest island in the Republic of Fiji (Figure 3.1). The seaward boundary of the District is 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. The total area of District land for Nadi is 83 km². The boundaries of the Nadi customary fishing ground, as recorded by the *iTaukei* Lands and Fisheries Commission, extend from the high water mark to the outer edge of the barrier reef adjacent to the boundaries from the adjacent Solevu (west) and Wainunu (east) customary fishing ground (Figure 3.2). The total area of the Customary fishing ground is 120.2 km².

Nadi is geographically a small district in the province of Bua, consisting of four villages – Nasavu, Nasolo, Nasawana and Sawani. Even though the district is small compared to others in Bua, there is still considerable coordination effort needed to ensure effective management implementation across terrestrial, coastal and marine areas.

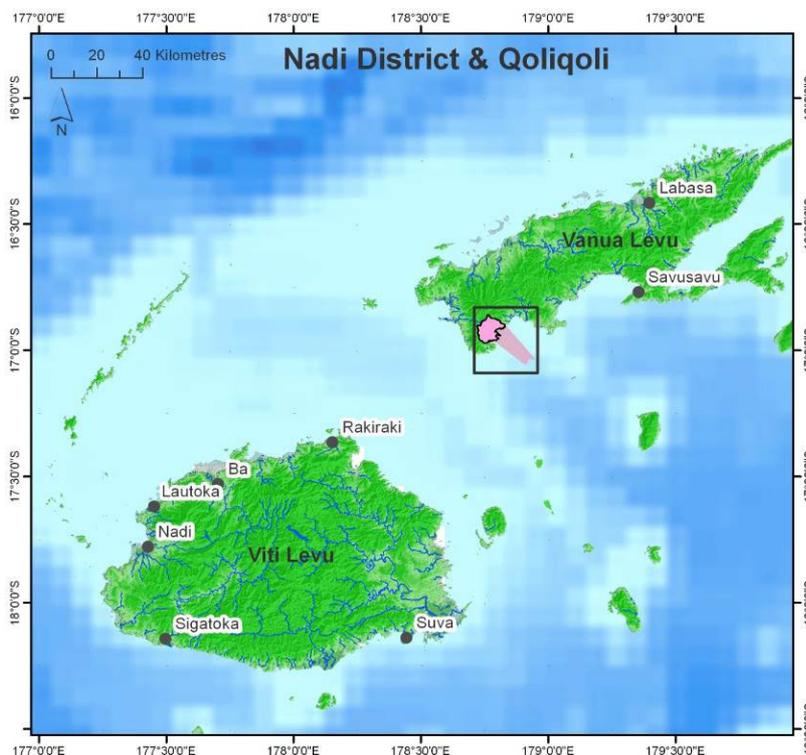


Figure 3.1. Nadi District land and customary fishing ground boundaries (inset).

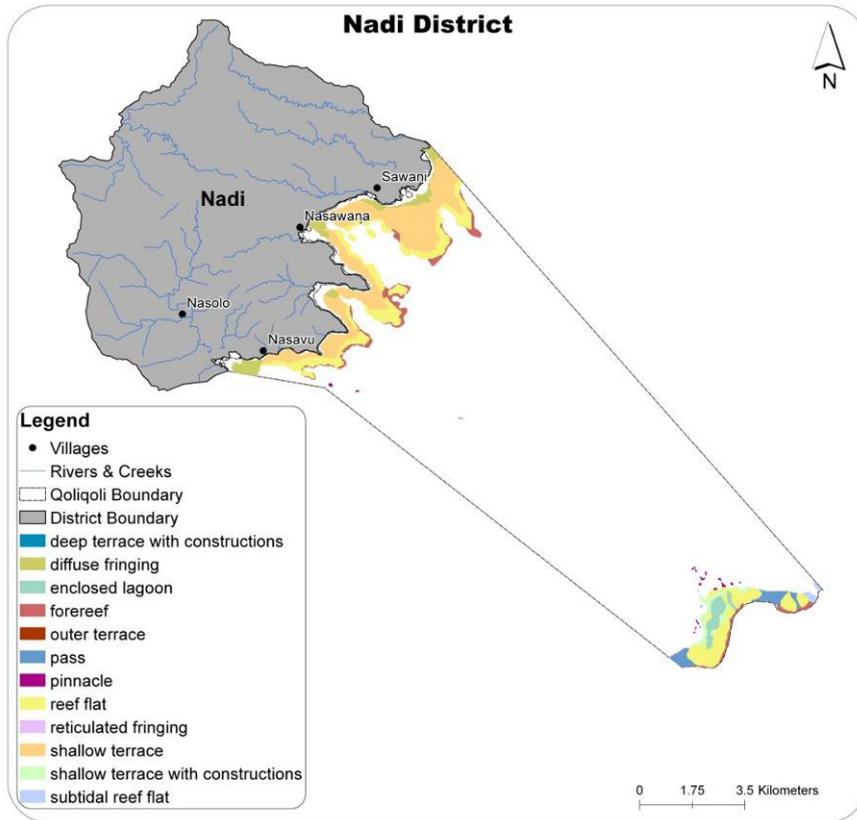


Figure 3.2. The types of habitat found in the customary fishing ground for Nadi District.

3.2 DEMOGRAPHICS

Each of the four villages in Nadi District has their own tribe. The total population of the four villages is about 1300 people (Table 1). The district is renowned for its ridges with thick intact forest and clean rivers, and highly fertile soils.

Table 3.1 Population of villages in Nadi District.

Village	Population	Households
Sawani	210	41
Nasawana	290	58
Nasavu	262	42
Nasolo	538	152
Total	1300	293

3.3 RESOURCE TENURE

Terrestrial resources

In Nadi, the majority of land is native (*iTaukei*) land (79.7 km², 96.7%), owned by the district's 22 landowning clans (*mataqali*). Around 2.6 km² (3%) is freehold land and 0.2 km² (0.3%) is crown land. Land ownership boundaries for each *mataqali*, mapped by the *iTaukei* Lands and Fisheries Commission, are marked on Figure 3.3.

Freshwater Resources

Under Fijian law, rivers and streams, and the land underneath them, belong to the government.⁵ Extraction of streambed resources, such as gravel, requires approval from the Department of Lands.⁶ The *Fisheries Act* recognizes subsistence fishing rights for traditional resource owners within their customary freshwater fishing grounds (*qoliqoli*).⁷ The Minister for Fisheries may declare restricted fishing areas within freshwater customary fishing grounds by publishing a notice in the government gazette.⁸ There are currently no gazetted freshwater restricted areas in Nadi 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.⁹ Extraction of resources from land below the high tide mark requires approval from the Department of Lands.¹⁰ The *iTaukei Lands Act* recognizes communities' traditional rights of access to resources, including mangroves for subsistence purposes.

The *Fisheries Act* recognizes subsistence fishing rights of traditional resource owners within their customary estuarine and coastal fishing grounds (*qoliqoli*), including mangrove areas.¹¹ The boundaries of the Nadi customary fishing grounds, as mapped by the *iTaukei Lands and Fisheries Commission*, are marked on Figure 3.3 above. The *Fisheries Act*, as currently administered, does not recognize 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.¹² There are currently no gazetted restricted marine areas in Nadi District.

Anyone wishing to fish for 'trade or business' must obtain a fishing license from the Department of Fisheries. Licenses are only granted with the written permission of the relevant chief, and may be granted subject to conditions, including conditions prohibiting fishing in no-take fishing areas. Resource owners in Nadi recognize the customary delegated authority of the Nadi Resource Management Committees to make decisions, which must be approved by the district Hierarchy Council (*Bose Vanua*), about the use and management of marine resources at the customary fishing grounds level, including the establishment of district Marine Protected Areas (MPAs). Decisions about additional management measures for village fishing grounds (*i kanakana*) can be made at the village level, including the establishment of a village *tabu* or MPA.

⁵ *Deed of Cession 1874, Rivers and Streams Act* [Cap 136], s.2.

⁶ *Crown Lands Act* [Cap 132], s.10.

⁷ *Fisheries Act* [Cap 158], s.13.

⁸ *Fisheries Act* [Cap 158], s.9.

⁹ *Deed of Cession 1874*.

¹⁰ *Crown Lands Act* [Cap 132], s.10.

¹¹ *Fisheries Act* [Cap 158], s.13.

¹² *Fisheries Act* [Cap 158], s.9.

3.4 RESOURCE USE

3.4.1 Income Generating Activities

Informal interviews with representatives from Nadi indicated that their main source of income is from farming, fishing and copra. The main crops sold to the market are dalo, cassava and kava. In addition to artisanal fishing, there is some harvesting of sea cucumbers, for sale to middle men or directly to exporters. This is evident in Sawani, where the village hall and the village church construction were funded by the sale of sea cucumbers.

The most common types of fishing gear employed are nets, fishing lines, spears and snorkels. Targeted fishing areas include river tributaries, estuaries, intertidal zones (at low tide) and reefs (high tide and at night). Gleaning at low tide of intertidal areas also occurs.

Common farming implements are hand tools such as shovels, forks and cane knives. Slash and burn shifting agriculture is regularly practiced. Copra production involves establishment and maintenance of coconut plantations, harvesting of mature coconuts and drying of coconut flesh (using the sun and/or wood fired dryers). Firewood for copra dryers is harvested locally. Because the drying of copra is a commercial activity, the use of mangroves for wood requires approval from the Department of Lands.¹³ Given a good proportion of households generate income from copra, the sustainable harvesting and management of coconut palms (*vuni niu*) is important in Nadi District.

3.4.2 Resource Vulnerability

The impacts of climate change, a growing population and increasing demand for goods and services underlie the threats and vulnerabilities identified by communities (see sections 4.2.2, 4.3.2 and 4.4.2). Resource use patterns are generally linked to natural cycles. During nearly all months of the wet season, communities are reliant on multiple sources of terrestrial and marine resources for food, giving them some flexibility to adapt should a disturbance impact one of their resources. However, communities may be more vulnerable during dry season months when resources may be scarce. Communities have a strong preference for harvesting animals during spawning periods, which is likely to require additional management and regulation measures.

3.5 TERRESTRIAL HABITATS

3.5.1 Terrestrial Habitat Description

The terrestrial habitats of Nadi include a mix of natural vegetation types – rain forest, mesic forest, wetlands and coastal vegetation, and human-modified vegetation types including: gardens and plantations, pasture (grasslands maintained by grazing), talasiga (grasslands maintained by burning) and secondary forest (at various stages of recovery following logging, clearing or burning). In Nadi, one species of rare shrub *Ixora myrtifolia* (Family: Rubiaceae) was recorded high in the forest or woods above Nadi at an elevation of 100-350 m. One species of tree *Macaranga membranacea* (Family: Euphorbiaceae) was also recorded in the vicinity of Nasau, Rukuruku Bay, woods above Nadi bay. Both plants are endemic to Vanua Levu.

Nadi is fortunate to be still heavily forested, with 60 km² (69%) considered primary forest. A significant proportion of the district's native forests falls within one of Fiji's Key Biodiversity Areas

¹³ *Crown Lands Act* [Cap 132], s.10.

and has been identified by Fiji's National Protected Area Committee as a 'high priority area for conservation without any current management'.¹⁴ Within the district 8 km² (10%) is classified as being under plantations dominated by dalo, kava and cassava crops.



High elevation forests in Nadi District. ©WCS

3.5.2 Terrestrial Plants

Although no surveys have been undertaken in Nadi, terrestrial vegetation and forests are likely to be similar to those in neighbouring district of Wainunu. Floristic surveys within riparian zones of Wainunu, in October 2010, found the following dominant species: *Atuna racemosa* (*makita*); *Gironniera celtidifolia* (*sisisi*); *Pometia pinnata* (*dawa*); *Ficus vitiensis* (*lolo*); *Cyathea* spp. (*balabala*); *Miscanthus floridulus* (*gasau*); *Inocarpus fagifer* (*ivi*); *Myristica castaneifolia* (*kaudamu*); and *Intsia bijuga* (*vesi*). Other large trees noted included: *Garcinia pseudoguttifera* (*bulu m*); *Bischofia javanica* (*koka*); *Dysoxylum lenticellare* (*malamala*); *Endospermum macrophyllum* (*kaukula*); *Serianthes melanesica* (*vaivai ni veikau*); and *Dillenia biflora* (*kuluva*).¹⁵

¹⁴ Fiji national Protected Areas Committee, outcomes report from provincial planning meeting, Sept 2010

¹⁵ Jupiter S, Jenkins A, Koto K, Ah Tong J, Bwebe T, Cakacaka A, Dulunaqio S, Fox M, Kuritani L, Mario S, Naisilisili W, Nand Y, Tukana A, Weeks R, Yakub N (2012) *Effects of alteration to catchments and streams on freshwater fish communities of Vanua Levu, Fiji*. Wildlife Conservation Society Fiji Country Program, Suva, Fiji

3.5.3 Threatened and Endemic Species¹⁶

Three known species of endemic trees that were found in forest surveys in Wainunu in October 2010: *Ficus vitiensis* (*lolo*); *M. castaneifolia* (*kaudamu*); and *E. macrophyllum* (*kauvula*). These species are likely to be found in Nadi, which shares a contingent forest area with Wainunu, although further research is required to validate their presence. In Nadi, one species of rare shrub *Ixora myrtifolia* (Family: Rubiaceae) was recorded high in the forest or woods above Nadi at an elevation of 100-350 m. One species of tree *Macaranga membranacea* (Family: Euphorbiaceae) was also recorded in the vicinity of Nasau, Rukuruku Bay, woods above Nadi bay. Both plants are endemic to Vanua Levu.

3.5.4 Economically and Culturally Important Resources

Culturally important hardwood species *I. bijuga* (*vesi*) and *F. gracilipes* (*buabua*), *A. macrophylla* (*dakua*) *C. leucocarpum* (*damanu*) *M. castaneifolia* (*kaudamu*) *Casuarina equisetifolia* (*cau*) *Alplutonia zizy- phoides* (*doi*) *E. macrophyllum* (*kauvula*) found in Wainunu, are also likely to also be present in Nadi. Key agricultural crops harvested for subsistence and sale are also likely to be similar to those found in Wainunu: cassava (*tavioka*), taro (*dalo*), taro leaves (*rourou*), bananas (*jaina*), plantains (*vudi*), kava (*yaqona*), *Xanthosoma sagittifolium* (*dalo ni tana*), yams (*uvi*), edible hibiscus (*bele*), coconuts (*niu*), breadfruit (*uto*), pumpkin (*papukeni*), eggplant (*baigan*), and corn (*sila*). These resources are largely cultivated in village gardens and plantations.¹⁷

3.6 FRESHWATER HABITATS

While Nadi has no major rivers, the district does have a network of creeks and streams which provide habitat for freshwater species. Data collected from similar freshwater ecosystems in the neighbouring district of Wainunu in 2010 found a range of tree species present throughout all size classes at most sites, suggesting minimal disturbance. This is likely to be similar across the majority of Nadi's primary forests. Small streams in Wainunu also had a high level of overhanging canopy cover (80-100%), which keep streams cool and provides shade for in-stream fish, plant and invertebrate communities. The streams sampled had hard bottoms and good water quality (i.e. low temperatures, low conductivity, and high dissolved oxygen concentrations).¹⁸

3.6.1 Freshwater Fauna

The forests in Nadi have similar characteristics of those in Wainunu. Their proximity to each other and the altitudes which these forests grow at guarantees similar species of fish to live in river surrounding these two forests. Fish likely to be observed within the Nadi catchments include *Vo* and *Bali*, *Duna*, *Ika Droka*, *Sakelo* and *Mataba*. There will also be the amphidromous species of Goby Family that lives in higher altitudes. This will be inclusive of *Stiphodon* species and *Stenogobius* species of freshwater fish.

¹⁶ See Appendix 1 for a full list of protected species in Fiji.

¹⁷ WCS (2011) *Socioeconomic Survey: Wainunu district*

¹⁸ Jupiter S, Jenkins A, Koto K, Ah Tong J, Bwebe T, Cakacaka A, Dulunaqio S, Fox M, Kuritani L, Mario S, Naisilisili W, Nand Y, Tukana A, Weeks R, Yakub N (2012) *Effects of alteration to catchments and streams on freshwater fish communities of Vanua Levu, Fiji*. Wildlife Conservation Society, Suva, Fiji, 17 pp

3.6.2 Threatened and Endemic Species

The six endemic species of fish found in Wainunu, and likely are also in Nadi including, *Glossogobius* sp., *Redogobius leveri* (Lever's goby), *Stenogobius* sp. 1 (Teardrop goby), *Stiphodon* sp. 1, *Stiphodon* sp. 2, and *Schismatogobius vitiensis* (Scaleless goby). This represents 55% of all of the known endemic freshwater fish species in Fiji.¹⁹



Nadi River, one of the cleanest rivers in Fiji. ©Kini Koto/WCS

3.6.3 Economically and Culturally Important Resources

A number of the key food fish species identified in Wainunu spend part of their life in the lower freshwater reaches, including snappers (*Lutjanus argentimaculatus*, *L. fulvus*), ponyfishes (*Leiognathus equillus*, *L. splendens*) and goatfishes (*Upeneus sulphureus*, *U. vittatus*). Other key food fish species range from nearshore marine waters to the mid-reaches of freshwater, including trevally (*Caranx papuensis*), mullet (*Liza melinoptera*, *L. subviridis*, *L. vaigiensis*) and tarpon (*Mega lops cyprinoids*). Mid-water reaches also support important food fish, such as the gudgeons (*Butis amboinensis*, *Giurus hoedti*, *Ophiocara porocephala*), flag tails (*Kuhlia munda*, *K. rupestris*, *K. marginata*), as well as populations of gobies that exhibit seasonally important migrations which have great economic value in Fiji (such as *Redigobius bikolanus*). A survey of households in Wainunu identified freshwater prawns (*ura*), shellfish (*sici*), mussels (*kai*), and fish (*ika* – flag tails, eels, gudgeons, gobies) as subsistence resources harvested from the freshwater habitats. A few respondents reported harvesting prawns for sale.²⁰ Whilst no citing of the non-native tilapia *Oreochromis mossembicus*; were recorded in Wainunu in 2010, anecdotal reports suggest they have entered local waterways and therefore may be present in Nadi District. This presents a risk to all of the food fish and invertebrate species mentioned above.

¹⁹ Jupiter S, Jenkins A, Koto K, Ah Tong J, Bwebe T, Cakacaka A, Dulunaqio S, Fox M, Kuritani L, Mario S, Naisilisili W, Nand Y, Tukana A, Weeks R, Yakub N (2012) *Effects of alteration to catchments and streams on freshwater fish communities of Vanua Levu, Fiji*.

²⁰ WCS (2011) *Socioeconomic Survey: Wainunu district*.

3.7 ESTUARINE, COASTAL AND MARINE HABITATS

Estuarine, coastal and marine habitats play an important role in maintaining key ecosystem functions, such as: trapping and filtering land-based pollutants; acting as nursery, breeding and feeding grounds for many marine and freshwater species; and providing protection to inland habitats and villages from unexpected events such as tropical cyclones, tidal waves, and tsunamis. The 120.2 km² within the Nadi *customary fishing ground* cover a diverse array of habitats (Figure 3.4), including diffuse intertidal fringing reefs and shallow terraces with sea grass and algae, reef flats and slopes dominated by corals, soft bottomed lagoon, and an outer barrier reef with pinnacles and passes. Nadi District's coastline is approximately 23.3 km in length along Bua's southwestern coast, and included 80 hectares of mangroves.

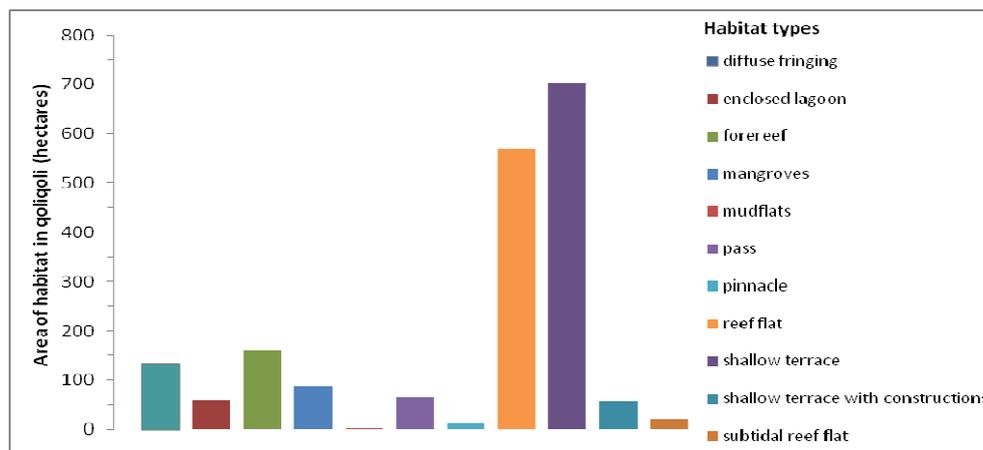


Figure 3.4 Marine habitats found in Nadi District's customary fishing ground area.

3.7.1 Flora and Fauna

The mangrove and seagrass habitats in Nadi District have not yet been extensively 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 *R. x selala*. *Syringodium isoetifolium* dominate seagrass beds in Kubulau and are likely to be found in Nadi District too.²¹

Of the 18 sites surveyed for fish in the *customary fishing grounds*, fish abundance and species richness within families monitored were greatest on the outer barrier back reef near Nadi Passage (154 fish, 55 species) and on reef flat on the southwestern corner of Nasawana Bay (139 fish, 54 species). Although complete biodiversity assessments were not done for Nadi, staff from the Wildlife Conservation Society counted 149 species from their target species list on reef habitats. The most abundant of these include grazers and detritivores (*Ctenochaetus striatus*, *Chlorurus bleekeri*, *Chlorurus sordidus*, *Siganus doliatus*, *Scarus ghobban*, *Scarus rivulatus*), butterflyfish (*Chaetodon baronessa*, *Chaetodon lunulatus*), several wrasse species (*Thalassoma Hardwicke*, *Halichoeres hortulanus*), snapper and bream (*Scolopsis bilineatus*, *Monotaxis grandoculis*, *Lutjanus gibbus*), and two goatfish species (*Parupeneus multifasciatus*, *Parupeneus barberinus*).

²¹ WCS (2009) *Ecosystem-Based Management Plan: Kubulau District, Vanua Levu, Fiji*. Wildlife Conservation Society, Suva, Fiji. 121 pp

Fringing reefs were dominated by *Acropora* and *Porites* corals, with considerable amounts of *Montipora*, *Pocillopora*, *Pavona*, *Echinopora*, *Favites*, *Fungia*, *Galaxea*, *Goniastrea*, *Merulina*, *Millepora*, *Platygyra* and *Turbinaria* corals. Offshore barrier reef habitats were dominated by *Acropora*, *Isopoda*, *Montipora*, *Pocillopora* and massive *Porites*, with considerable amounts of *Astreopora*, *Favia*, *Favites*, *Fungia*, *Galaxea*, *Goniastrea*, *Leptoria*, *Lobophyllia*, *Montastrea*, *Platygyra*, and *Pavona*.²²

3.7.1 Threatened and Endemic Species

The information on the diversity and abundance of threatened flora and fauna is limited for Nadi. The endemic rabbit fish (*Siganus uspi*) was sighted in coastal habitats during marine surveys in 2011. However, the Wildlife Conservation Society 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 Nadi's customary fishing ground. Blacktip (*Carcharhinus melanopterus*) and white tip (*Triaenodon obesus*) reef sharks were spotted during dive surveys, as well as the endangered humphead wrasse (*Cheilinus undulatus*).

3.7.2 Economic and Culturally Important Species

Coastal fisheries in Nadi are used mainly for subsistence. Although household surveys of resource use patterns have not been conducted for Nadi District, they are likely to be similar to communities in the district of Wainunu, who preferentially collect: reef fish, mud crab (*qari*), land crab (*lairo*), mangrove crab (*kuka*), mud lobster (*mana*), shrimps (*moci*), and other freshwater fish.²³

Mangroves are important as a source of fuel, either charcoal or firewood, and can be used as primary building material. Mangroves and seagrass meadows are directly threatened from inland activities. Threats to mangroves habitats include mangrove cutting, sedimentation, and use of chemicals, deforestation, 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 Nadi 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.

²² WCS (2011) *Reef Resilience Assessment Data: Nadi District*. Wildlife Conservation Society, Suva, Fiji.

²³ WCS (2012) *Ecosystem-Based Management Plan: Wainunu District, Vanua Levu, Fiji*. Wildlife Conservation Society, Suva, Fiji.



Women fishing at low tide in Nadi Bay with a fringe of mangroves in the background. ©WCS

4 IMPLEMENTATION PLAN

4.1 OVERVIEW

Through a range of participatory workshops and consultations the communities of Nadi have established management targets, identified threats to local ecosystems, root causes of these threats, and outlined strategies through which threats can be mitigated. They have established management rules and protected areas as their main approaches to address threats, and ensure the sustainable management of their natural resources for their long term well-being. This section summarizes the targets, threats, management rules, management activities and best practice considerations for terrestrial, freshwater, coastal, estuarine and marine ecosystems across Nadi.

4.2 MANAGEMENT OF TERRESTRIAL AND FRESHWATER ECOSYSTEMS

4.2.1 Management Targets for Terrestrial and Freshwater Ecosystems

Strategies to mitigate threats and manage terrestrial and freshwater ecosystems are presented in the following section of the management plan. The three management targets communities identified for terrestrial and freshwater ecosystems in Nadi were:

- Indigenous trees;
- Good quality drinking water;
- Freshwater fish and invertebrates.²⁴

These targets and threats are illustrated graphically in Appendix 4, 5, 6. Links between threats were explored, and communities identified the following shared contributing factors and underlying causes of these threats:

- lack of understanding about the impacts of unsustainable practices;
- lack of planning, particularly in relation to farming, fishing, use of trees and waste disposal;
- lack of awareness and/or enforcement of existing management rules; and
- increasing financial pressures and over-reliance on farming as the only source of income.



Vision for a healthy environment for the children of Nadi. ©WCS

²⁴Targets and threats were identified at the *Ecosystem-Based Management Planning Workshop* (Daria, 24-26 November 2011) and modified at the *Management Support Workshop* (Nasawana Village, 22 February 2013).

4.2.2 Terrestrial and Freshwater Protected Areas

Communities have identified one freshwater protected area, incorporating a small river, its tributaries and a surrounding buffer zone, and two terrestrial protected areas, to help conserve terrestrial and freshwater ecosystems in Nadi (Figure 4.1). Rules were discussed during extensive community consultations and are shown in Table 4.1.

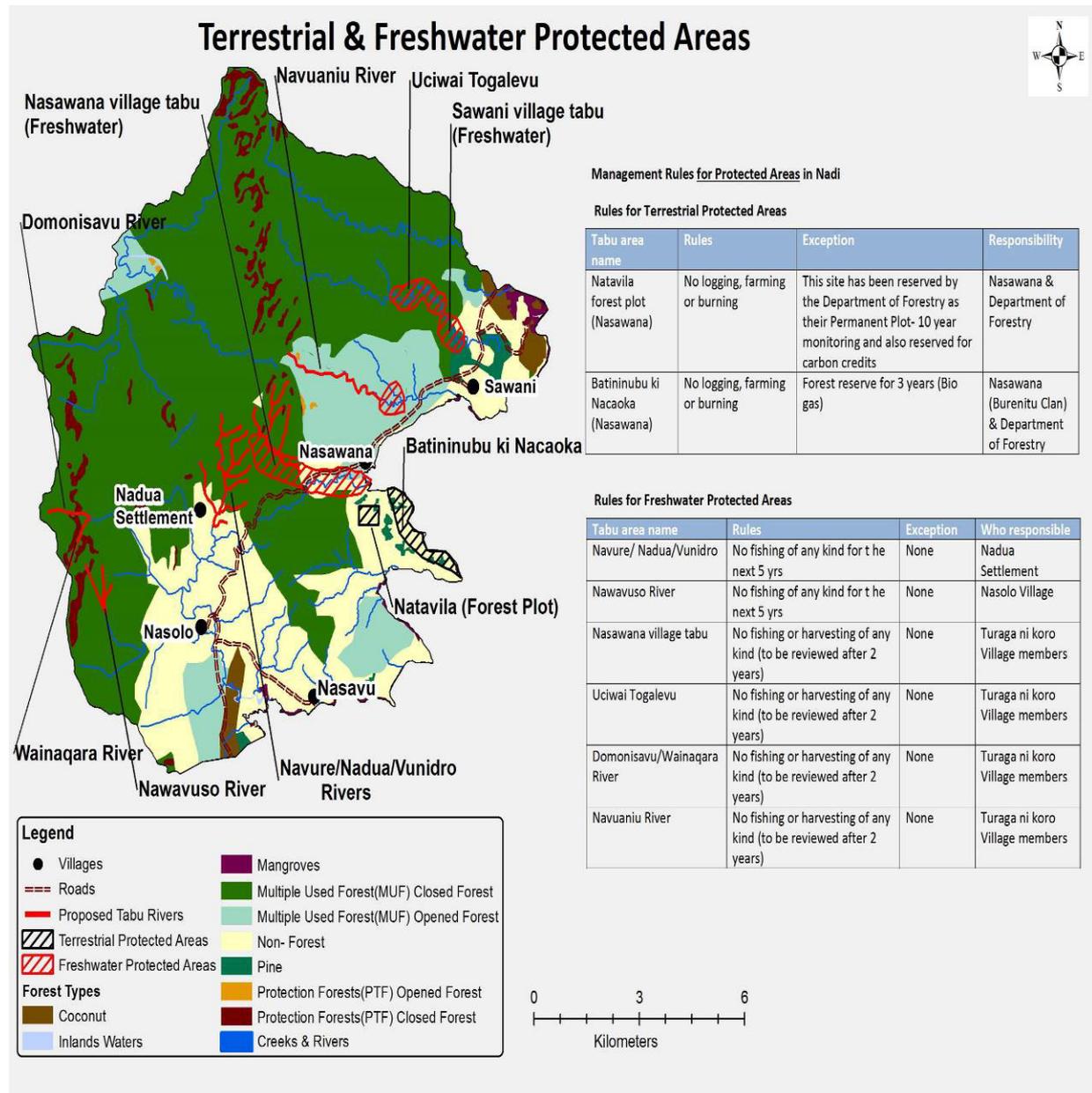


Figure 4.1 Terrestrial and freshwater protected areas in Nadi District, with management rules

4.2.3 Management Rules for Terrestrial and Freshwater Ecosystems

Communities have identified a range of management rules relating to local resources and ecosystems (Table 1). As well as rules to manage behaviours and address threats, this process highlighted existing rules and laws that were not being implemented. Existing management rules are outlined in this section.

Table 4.1 Management rules for terrestrial and freshwater ecosystems.

Management Rule	Exception	National	District	Management Action ²⁵
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 ²⁶		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 ²⁷		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 ²⁸		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 ²⁹		Monitor compliance with <i>Forest Harvesting Code of Practice</i> and notify Forest Department of breaches.

²⁵ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

²⁶ *Forest Decree, 1992, Fiji Forest Harvesting Code of Practice 2008.*

²⁷ *Native Lands Trust Act, Forest Decree 1992 (and Environment Management Act 2005, Schedule 2, Part 1).*

²⁸ *Forest Decree 1992, Fiji Forest Harvesting Code of Practice 2008.*

²⁹ *Fiji Forest Harvesting Code of Practice 2008 (see Appendix 1 for list of protected species).*

Management Rule	Exception	National	District	Management Action ³⁰
FARMING AND LIVESTOCK				
Clearing, burning and farming are prohibited within 10 m off river banks of the Makolei freshwater tabu.	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 30 meters of a river or stream.	Harvesting of crops planted on or before 1 June 2012	X ³¹		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				
Fish in freshwater must only be caught using a hand net, portable fish trap, spear or line and hook.	Shellfish	X ³²		Monitoring by fish warden Report breaches to Fisheries Department
Introduction or farming of invasive fish species (e.g. tilapia) is prohibited.	Where tilapia are already kept in ponds sufficient distance from rivers/streams.		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 3 inches - Night Fishing	Hand nets with a mesh of 40mm can be used for freshwater prawns.	X ³³		Raise awareness of rule. Monitor compliance. Report breaches to the Department of Fisheries and the <i>bose vanua</i> .
DEVELOPMENT AND WASTE				
Industrial or commercial development must not be undertaken without Environmental Impact	None	X ³⁴		Report breaches to Department of Environment.

³⁰ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

³¹ *Native Land Trust (Leases and Licences) Regulations 1984, r.23, Fourth Schedule, cl.25. Conditions of lease for agricultural purposes.*

³² *Fisheries Regulations r8 bans use of any derris or duva extract. Fisheries Regulations r16*

³³ *Fisheries Regulations r8 bans use of any derris or duva extract. Fisheries Regulations r16*

Assessment (EIA).				
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 ³⁵		Department of Environment ensure EIAs in compliance with Environmental Management Act (EMA)
Dumping of rubbish is prohibited	None	X ³⁶	X	Report commercial/industrial breaches to Department of Environment. Report other breaches to RMC.

³⁴ *Environment Management Act 2005.*

³⁵ *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.

³⁶ *Litter Decree 1991, s8.*

4.2.4 Best Management Practices for Terrestrial and Freshwater Ecosystems

To maintain and restore the health, productivity and resilience of freshwater and terrestrial ecosystems, rivers and riparian zones a number of best management practices have been adopted by local communities (Table 4.2-4.4).

Table 4.2 Best management practices for terrestrial and freshwater ecosystems, which includes water catchments.

RECOMMENDATION	RATIONALE
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 m of old growth forests.	Logging and grazing near old growth forest increases the risk of invasive species.
Do not allow logging within 100m 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 license 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.
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 fertilizers and pesticides only as necessary, and always follow manufacturer's instructions.	Fertilizers 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.

Table 4.3 Best management practices for rivers and riparian zones.

RECOMMENDATION	RATIONALE
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.

Table 4.4 Best management practices to minimize the introduction of invasive species.

RECOMMENDATION	RATIONALE
Do not introduce invasive species.	Invasive species reduce agricultural productivity and threaten native plants and animals.

4.3 MANAGEMENT OF COASTAL AND ESTUARINE ECOSYSTEMS

4.3.1 Management Targets for Coastal and Estuarine Ecosystems

Strategies to mitigate threats and manage coastal and estuarine ecosystems are presented in the following section of the management plan. The following management targets were identified for coastal and estuarine ecosystems in Nadi:

- Maintain or increase total **area of mangroves**.
- Maintain or increase abundance and biomass of **fish**.
- Maintain or increase abundance and biomass of **invertebrates**.

Participants also identified a number of key threats to the health and productivity of estuarine and coastal ecosystems in Nadi (Table 4.5). These targets and threats are illustrated graphically in Appendix 4.

Table 2.5 Threats to the health and productivity of estuarine and coastal ecosystem.

Threats to coastal/estuarine ecosystems	Contributing factors
Mangrove cutting	<ul style="list-style-type: none"> • Lack of awareness of the importance of mangrove ecosystems
Poor waste management	<ul style="list-style-type: none"> • Lack of community waste management systems • Livestock waste (pigs and cattle)
Over-exploitation of mangrove and estuarine fisheries Overfishing	<ul style="list-style-type: none"> • Over-harvesting of invertebrates • Lack of awareness of importance of mangroves as fish nurseries • Use of fine mesh nets • Increased demand with influx of new development (particularly new roads) • Increased need for money (linked to growth in population and paid-for goods and services)

4.3.2 Management Rules for Coastal Estuarine Ecosystems

Communities have identified a range of management rules relating to local resources and ecosystems they wish to adopt (Table 4.6). As well as rules to manage behaviours and address threats, this process highlighted existing rules and laws that were not being implemented. These management rules apply to all coastal and estuarine areas in Nadi (Table 4.6).

Table 4.6 Management rules for coastal and estuarine ecosystems.

Management Rule	Exception	National	District	Management Action ³⁷
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 ³⁸		Monitoring by fish wardens. Report breaches to Department of Fisheries.
Harvesting undersized fish and crabs is prohibited.		x ³⁹		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 ⁴⁰		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 ⁴¹	x	Monitor and report breaches to Departments of Forestry and Lands.
PIGS AND LIVESTOCK				
Livestock and piggery are prohibited within 30 m of mangrove forest and			x	Monitor. Report breaches to SRMC or directly to the

³⁷ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

³⁸ *Fisheries Regulations* r.7 (refer to Appendix 2 for definitions of net types).

³⁹ *Fisheries Regulations* r. 18, 19, 21, 25B (See Appendix 3 for guidance on minimum catch sizes).

⁴⁰ *Fisheries Regulations, Endangered and Protected Species Act 2002*.

⁴¹ 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*.

coastal high tide mark.				Hierarchy Council
WASTE DISPOSAL				
Dumping of rubbish in estuaries, mangroves and on foreshores is prohibited		* ⁴²	*	Report breaches by commercial or industrial facilities to Department of Environment. Report other breaches to bose vanua

⁴² Litter Decree 1991, s8.

4.3.3 Best Practice Considerations for Coastal and Estuarine Ecosystems

To maintain and restore the health, productivity and resilience of coastal and estuarine ecosystems, a number of best management practices have been adopted by local communities (Table 4.7).

Table 4.7 Best management practices for coastal and estuarine ecosystems.

RECOMMENDATION	RATIONALE
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. ⁴³	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. ⁴⁴	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.

⁴³ Environment Management Act, 2005

⁴⁴ Environment Management Act, 2005

4.4 MANAGEMENT OF MARINE ECOSYSTEMS

4.4.1 Management Targets for Marine ecosystems

Strategies to mitigate threats and manage marine ecosystems are presented in the following section of the management plan. The following management targets were identified for marine ecosystems in Nadi District: ⁴⁵

- Increase abundance and biomass of food fish and endangered fish species (including bumphead parrotfish, grouper, emperor and humphead wrasse);
- Increase invertebrate abundance and biomass, including clams and sea cucumbers;
- Maintain or improve abundance and diversity of coral species and enhance the health, productivity and resilience of coral reefs; and
- Maintain or improve abundance and diversity of lobsters.

Participants also identified key threats to the health and productivity of marine ecosystems in Nadi (Table 4.8). These targets and threats are illustrated graphically in Appendix 4 and provided a reference when identifying protected areas and drafting management rules and activities.

Table 4.8 Threats to the health and productivity of marine ecosystems.

Threats to marine ecosystems	Contributing factors
Overfishing	<ul style="list-style-type: none"> • Lack of awareness of community management rules
Destructive fishing practices including dynamite, <i>derris</i> root, compressor, night fishing and nets with undersize mesh	<ul style="list-style-type: none"> • Lack of awareness of impacts of overharvesting • Lack of alternative sources of protein • Lack of awareness and enforcement of national fisheries legislation • Increased need for money (linked to growth in population and paid-for goods and services) • Failure to comply with national laws on destructive fishing methods
Sedimentation from run-off	<ul style="list-style-type: none"> • Logging, farming and mining practices that contribute to soil erosion
Poaching	<ul style="list-style-type: none"> • Lack of enforcement and monitoring of <i>tabu</i> areas • Lack of equipment and boat for fish wardens

⁴⁵Management targets were initially proposed by community representatives at the *Ecosystem-Based Management Planning Workshop* (Daria Village, 24-26 November 2011). These were then modified at the *Management Support Workshop* (Nasawana Village, 23 February 2013) and consulted upon through the district hierarch council (in March and October 2013).

4.4.2 Marine Protected areas

Communities have identified ten *tabu* areas or marine protected areas (MPAs) to help conserve coastal and marine ecosystems in Nadi (Figure 4.1). Rules were discussed during extensive community consultations and are shown in Table 4.9.

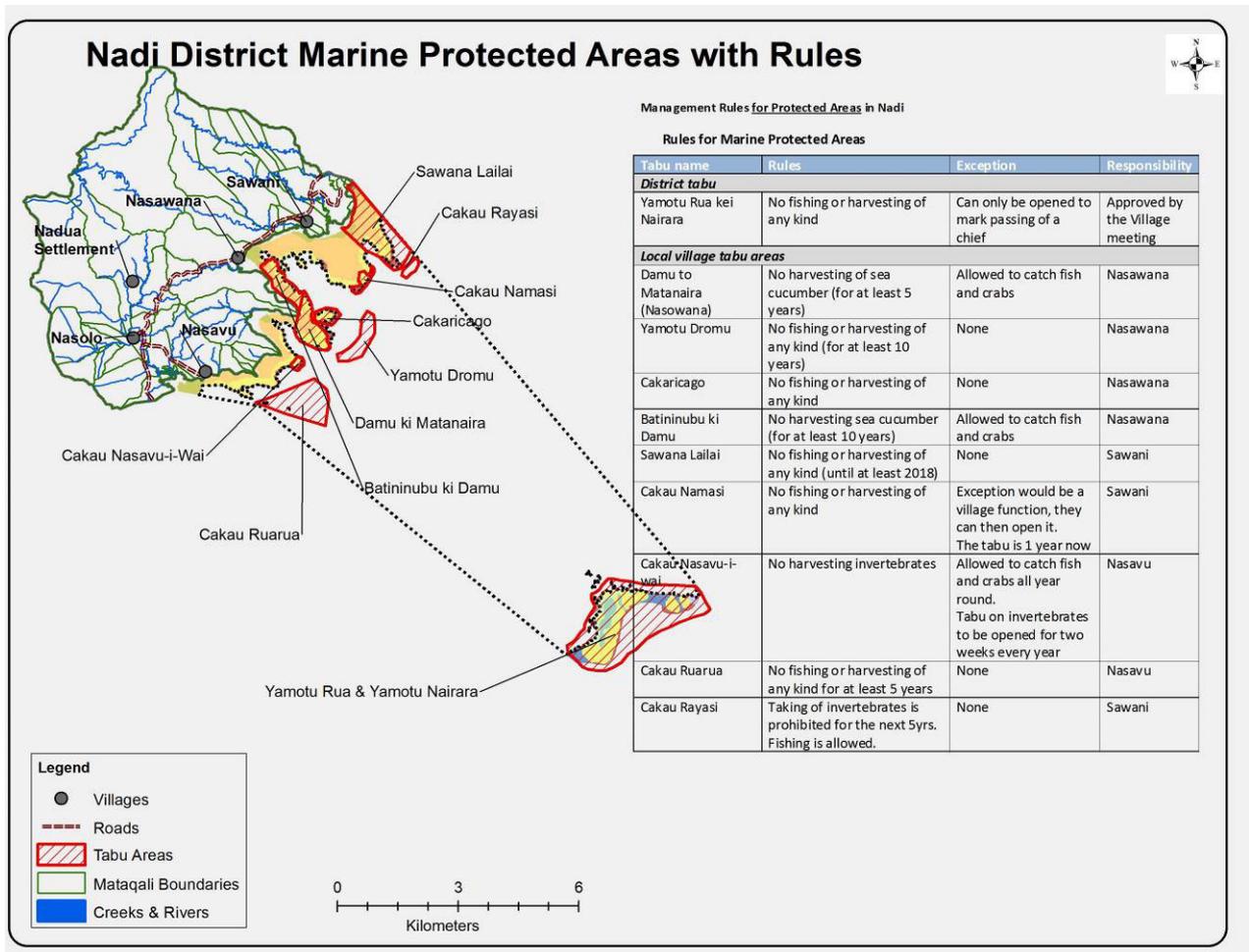


Figure 4.1 Marine Protected Areas in Nadi District, with management rules and responsibilities.

4.4.2 Management Rules for Marine Ecosystems

Communities have identified a range of management rules relating to marine ecosystems they wish to adopt (Table 4.9). As well as rules to manage behaviours and address threats, this process highlighted existing rules and laws that were not being implemented. These management rules apply to all marine areas in Nadi (Table 4.9).

Table 4.9: Management rules for marine ecosystems in Nadi District.

Management Rule	Exception	National	District ⁴⁶	Management Action ⁴⁷
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 ⁴⁸		Monitoring by fish wardens. Report breaches to Fisheries Department.
Use of <i>derris</i> roots (fish poison) prohibited	None	X ⁴⁹		Monitoring by fish wardens. Report breaches to Fisheries Department.
Use of snorkel or SCUBA and compressor for fishing is prohibited	Except for scientific survey and eco-tourism (diving) approved by the <i>bose vanua</i> Nadi and Buli Navere	X ⁵⁰		Monitoring by fish wardens. Report breaches to Fisheries Department.

⁴⁶ District management rules were proposed at the *Ecosystem-Based Management Planning Workshop* (Daria, 24-26 November 2011), modified at the *Management Support Workshop* (Nasawana, 23 February 2013) and consulted on through the Nadi hierarch council (*bose vanua* in March and October 2013).

⁴⁷ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

⁴⁸ *Fisheries Act* (Cap 158) s 10(4). Fines up to FJD5,000 and mandatory jail term for all convictions

⁴⁹ *Fisheries Regulations* r8 bans use of any *derris* or *duva* extract for fishing in Fiji

⁵⁰ *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

Management Rule	Exception	National	District ⁴⁶	Management Action ⁴⁷
Taking of undersized fish, smaller than their size limit is prohibited	None	X ⁵¹		Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> . Report breaches to Fisheries Department.
Nets with mesh size less than 50 mm are prohibited⁵²	None	X ⁵³		Monitoring by fish wardens. Report breaches to the <i>bose vanua</i> .
Catching, eating or sale of humphead wrasse is prohibited	None	X ⁵⁴		Monitoring by fish wardens. Report breaches to Fisheries Department.
Management Rule	Exception	National	District ⁵⁵	Management Action ⁵⁶
Catching turtles and collection of turtle eggs is prohibited	None	X ⁵⁷		Monitoring by fish wardens. Report breaches to Fisheries Department.
Fishing for 'trade or business' without a fishing licence is prohibited	None	X ⁵⁸		Monitoring by fish wardens. Report breaches to Fisheries Department.
Breaching the conditions of a fishing license is prohibited	None	X ⁵⁹		Monitoring by fish wardens. Report breaches to Fisheries Department.
Taking any of the protected marine species listed in Appendix 1 is prohibited.	None	X ⁶⁰		Monitoring by fish wardens. Report breaches to Department of Environment.

⁵¹ Catching fish that have not yet reproduced reduces the productivity of the fishery (see Appendix 3 for guidance on fish catch size limits)

⁵² *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

⁵³ *Fisheries Regulations* r16

⁵⁴ Endangered and Protected Species Act 2002

⁵⁵ District management rules were proposed at the *Ecosystem-Based Management Planning Workshop* (Daria, 24-26 November 2011), modified at the *Management Support Workshop* (Nasawana, 21 February 2013) and consulted on through the Solevu hierarch council (*bose vanua* in March and October 2013).

⁵⁶ See Section 5 for more detailed guidelines and protocols for monitoring and enforcement of management rules.

⁵⁷ The moratorium on taking of killing turtles contained in *Fisheries (Moratorium on Molesting, Taking or Killing of Turtles) Regulations 1997, r 20A*, which expired on 31 December 2008, was extended until 31 December 2018.

⁵⁸ *Fisheries Act (Cap 158) s 5(3)*

⁵⁹ *Fisheries Act (Cap 158) s 5(3)*

⁶⁰ *Fisheries Regulations, Endangered and Protected Species Act 2002 (see Appendix 1 for protected species list).*

4.4.3 Best Practice Considerations for Marine Ecosystems

To maintain and restore the health, productivity and resilience of marine ecosystems, a number of best practices have been adopted by local communities (Table 4.10).

Table 4.10 Best practice recommendations for marine ecosystems.

RECOMMENDATION	RATIONALE
Do not take fish or invertebrates that are gravid (e.g. large stomach fish, crustaceans with eggs underneath).	Protecting gravid fish and crustaceans increases the productivity of the fishery.
Maintain spawning aggregations by protecting spawning sites, including reef channels.	Protecting spawning aggregation sites increases the productivity of the fishery.
Do not take fish moving through river mouths and channels for spawning	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.
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 MPA.

4.5 MANAGEMENT ACTIVITIES

A list of management activities was identified by local communities to help guide the initial implementation of the Nadi Ecosystem-Based Management Plan (Table 4.11). Annual activity plans will be further developed with the Nadi Resource Management Committee to help guide implementation, to ensure they achieve the targets identified and are adaptive to the needs of the people.

Table 4.11 Activities to guide the initial implementation of the Nadi Ecosystem-Based Management Plan.

ISSUE	ACTIVITY	IMPLEMENTATION	TO BE COMPLETED BY
Officially establish and bless the Tabu Areas and management plan	Arrange blessing/ launching ceremony	Buli Navere and local leaders	22 Aug 2016
Need to establish Village and District committees to implement and monitor the management plan	Organise briefing at village meetings, where they will plan and organise the first meeting of Village Yaubula Committees and nominate NRMC members	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 Nadi	Nadi Resource Management Committee (NRMC)	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	NRMC, Bua Yaubula Management Support Team (BYMST), WCS	Sept 2016
Need to demarcate protected areas	Create appropriate signboards and markers (buoys). Discuss and clarify protected area boundaries in village meetings.	NRMC and WCS	Feb 2017
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	NRMC, Department Forestry 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 NRMC members	WCS and Department of Fisheries	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 NRMC in its application	WCS, cChange	Apr 2017

5 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 and have been endorsed by the Nadi Hierarchy Council (*Bose Vanua*). The national laws were created by the national parliament, and are legally binding on all people throughout Fiji.

The Nadi Resource Management Committee (NRMC) is responsible for coordinating activities to **raise awareness** of these management rules, and to **promote voluntary compliance** with the rules. NRMC is also aware of the need to **develop awareness and understanding** within local communities through their work.

In particular, NRMC is responsible for:

- distributing one copy of this **management plan** to **every village** in the district.
- distributing copies of the **management rules** to **every household** in the district.
- organising **meetings** to explain the management rules in **every village** in the district.
- organising **meetings** in **neighbouring districts** to explain the management rules.
- producing **flyers** and other materials to **raise awareness** of the management rules.

NRMC will emphasise the benefits of the rules, and highlight the communities' common interest in sustainable management of natural resources and ecosystems in the district. NRMC will work with chiefs, church leaders, government officers and other stakeholders to promote awareness of, and respect for, the management rules. The NRMC will take a leading role on delivering these tasks.⁶¹

5.2 MONITORING AND SURVEILLANCE

NRMC is responsible for coordinating monitoring and surveillance activities to identify breaches of the rules set out in this management plan. This task will be delegated to the Enforcement sub-committee⁶², which will be specifically responsible for:

- ensuring adequate training of community fish wardens;
- securing adequate resources and equipment for marine patrols;
- establishing a monitoring and surveillance program to identify breaches of management rules for terrestrial, freshwater and estuarine ecosystems; and
- ensuring adequate recording and reporting of breaches.

⁶¹ See section 6.2.1 for an outline of NRMC sub-committee, roles and functions.

⁶² See section 6.2.1 for an outline of NRMC sub-committee, roles and functions.

5.3 ENFORCEMENT

The options available for enforcement of management rules will depend on whether the rule is a community rule and/or a national law. The management rule tables in this management plan indicate whether each rule is a national law or a district community rule. For example, in the extract below:

- diving at night is prohibited by a community rule; and
- dynamite fishing is prohibited by a national law.

Table 5.1 Enforcement of management rules.

Management Rule	National	District	Management Action
Night diving prohibited		X ⁶³	Monitoring by fish wardens. Report breaches to NRMC.
Leaving nets overnight (or for a period more than 1 tide) is prohibited		X ⁶⁴	Monitoring by fish wardens. Report breaches to NRMC.
Fishing for shark is prohibited		X ⁶⁵	Monitoring by fish wardens. Report breaches to NRMC.
The use of dynamite is prohibited	X ⁶⁶		Monitoring by fish wardens. Report breaches to Fisheries Department.
Nets with mesh size less than 50mm are prohibited ⁶⁷	X ⁶⁸		Monitoring by fish wardens. Report breaches to NRMC.
Catching, eating or sale of humphead wrasse is prohibited	X ⁶⁹		Monitoring by fish wardens. Report breaches to Fisheries Department.

⁶³ Adopted from the Nasavu Workshop

⁶⁴ Adopted from the Nasawana workshop

⁶² Adopted from the Sawani workshop

⁶⁶ Fisheries Act (Cap 158) s 10(4). Fines up to FJD5, 000 and mandatory jail terms for all convictions.

⁶⁷ Fisheries Regulations r.16 (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.

⁶⁸ Fisheries Regulations r.16

⁶⁹ Endangered and Protected Species Act 2002.

5.3.1 Enforcement of National Laws

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.⁷⁰ In some cases, government agencies have the power to suspend or cancel licenses⁷¹ or issue binding orders and notices.⁷²

Members of the public, including resource owners, can improve law enforcement by monitoring and reporting breaches, and advocating for stricter enforcement by government. The NRMCM will play an important role by ensuring good communication amongst stakeholders about the rules within this management plan, and that all necessary protocols are followed when breaches are made.

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.

¹ *Fisheries Act*, s.7 (1).

² *Fisheries Act*, s.7 (2).

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 MPA. 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 MPA, investigate whether

⁷⁰ For example, fishing licences may be cancelled if the court finds the licence holder guilty of a fisheries offence: *Fisheries Act*, s 8.

⁷¹ 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.

⁷² 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.

the vessel has been fishing for trade or business without a license, using a prohibited fishing method (e.g. poison, dynamite, undersized nets) or taking legally protected fish (e.g. undersized fish).

If a national law has been breached, the following **enforcement protocol** should be followed:

1. Report the incident to the NRMC, 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. If NRMC believes that a law has been breached NRMC may report the breach to the police and/or relevant government agency. Relevant government agencies are identified in the management rule tables.
3. NRMC must record the details of any report that it makes to the police and/or government agency, including the name and contact details of the officer who received the report.
4. NRMC must record the details of any action taken by the police or government agency (e.g. investigation, verbal warning, cancellation of licence and prosecution).
5. If NRMC is dissatisfied with the response of the police or government agency, NRMC 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, NRMC may also initiate the community-based enforcement protocol described in the following section 5.3.2.

3.5.2 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 NRMC, 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. NRMC 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 NRMC believes that a community rule has been breached, WRMC must inform the *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 Tui Nadi 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 NRMC considers the response of the police or relevant government agency to be inadequate.

6 MANAGEMENT INSTITUTIONS

6.1 NADI HIERARCHY COUNCIL

The Nadi Hierarchy Council (*Bose Vanua*) consists of the District Chief (*Buli Navere*) and Tribal chiefs (*Turaga ni Yavusa*) of Nadi. The communities of Nadi recognise the traditional authority of the *Bose Vanua* to make decisions in relation to a wide range of matters affecting community life, including the use and management of natural resources. The *Bose Vanua* has formally endorsed this management plan, and entrusts the Nadi Resource Management Committee with primary responsibility for its implementation.

6.2 NADI RESOURCE MANAGEMENT COMMITTEE

The Nadi Resource Management Committee (NRMC) consists of at least one representative from each village, nominated by their village and appointed by the *Bose Vanua*. NRMC representatives may be appointed for a three year term, with the option of reappointment for a further three years. The position of chair of NRMC is a six year term. All terms begin from when the *Bose Vanua* approved the first draft Nadi Ecosystem-based Management Plan. No representative may serve on the committee for more than six years.

The purpose of the committee is to promote and support sustainable management of natural resources in Nadi district. The functions of the committee are:

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

7 MANAGEMENT ROLES AND PROCESSES

7.1 IMPLEMENTATION OF THE MANAGEMENT PLAN

The Nadi Resource Management Committee bears overall responsibility for implementation of this management plan. The committee is accountable to the Nadi Hierarchy Council (*Bose Vanua*) for timely and effective implementation of the plan, in collaboration with local communities (*vanua*), village leaders, civil society partners, government agencies and the private sector.

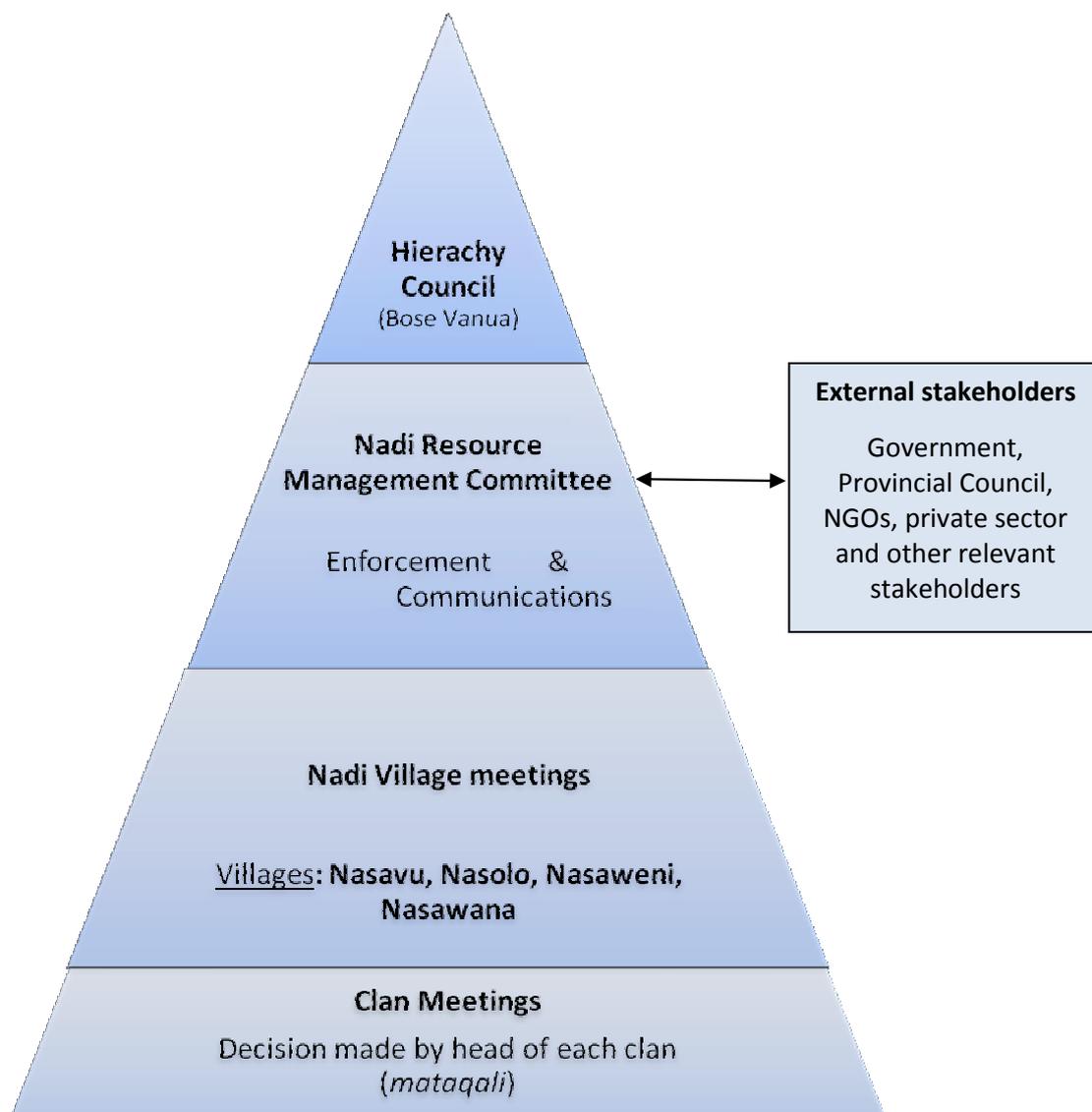


Figure 7.1 The relationships between NRMC the district Hierarchy Council, villages and clans.

7.1.1 Management Rules

The NRMC is responsible for raising awareness of the management rules set out in this plan, monitoring compliance with the rules and taking action to ensure enforcement of the rules. The management rules provide for certain decisions to be made by persons other than the NRMC. For example, certain village *tabu* areas may be opened by the relevant local Chiefs (*turaga-ni-yavusa*). In such cases, decision must be communicated to the NRMC as soon as practicable to ensure they are able to effectively monitor overall implementation of the management plan.

7.1.2 Management Activities

The Nadi Resource Management Committee is responsible for liaising with the responsible stakeholder(s) identified for each management activity to ensure that the activity is completed in a timely and effective manner.

7.1.3 Sustainable Financing

This management plan aims to support long-term sustainable development in Nadi 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.

Communities' commitment to the process will depend to a large degree on how they perceive it to be affecting their income and quality of life. As such, NRMC aspires to develop new sources of income generation linked to EBM activities with which 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 capitalize on any opportunities that arise.

7.2 AMENDMENT OF THE MANAGEMENT PLAN

From time to time, it may be necessary to amend the management plan to respond to issues, and maintain the values and objectives of the Nadi District Ecosystem Based Management Plan. These changes may need to occur, before the formal review period, every five years. The process for amending this management plan varies depending on the nature of the amendment, and is outlined below.

7.2.1 District-level Management Rules

For amendments to **district-level management rules** – that is, rules that apply throughout the district and to the District MPA:

1. The proposed amendment must be **submitted in writing** to the NRMC.
2. The NRMC Chair must **present** the proposed amendment to the *Bose Vanua*.
3. The *Bose Vanua* may instruct the NRMC to **consult** with resource owners and/or external stakeholders in relation to the amendment.
4. If the *Bose Vanua* instructs the NRMC to consult with **resource owners**, NRMC members must raise the proposed amendment at **village meetings** in every village in the district.
5. If the *Bose Vanua* instructs the NRMC to consult with **stakeholders**, NRMC must provide **written notice** to all relevant stakeholders, and allow a reasonable period for comment.
6. The NRMC Chair must report to the *Bose Vanua* on **consultation outcomes**.
7. The *Bose Vanua* may **reject** or **approve** the amendment.
8. If the *Bose Vanua* **rejects** the amendment, the NRMC must:
 - 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.
9. If the *Bose Vanua* **approves** the amendment, the NRMC must:
 - 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**.

7.2.2 Village-level Management Rules

For amendments to **village-level management rules** – that is, rules that only apply to a particular village, or to designated village *tabu* areas:

1. The proposed amendment must be **approved** by the village chief (*turaga ni yavusa*).
2. 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.
3. The village chief must provide written notice of any amendment to the Bose Vanua.
4. The WRMC must:
 - 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**.

7.2.3 Other Amendments

Other amendments may be made as necessary by the NRMC, with the approval of the *Bose Vanua*.

The NRMC must provide written notice to external stakeholders of any changes to the management plan, and insert a copy of the notice in each copy of the management plan, including the copy kept by each village.

7.3 REVIEW OF THE MANAGEMENT PLAN

This management plan will be reviewed, and amended as necessary, 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 NRMC. 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. The proposed amendments must be endorsed by the NRMC and the *Bose Vanua*. Copies of the amended management plan must be distributed to each village in the district and all members of the stakeholder consultative group.

7.4 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 Nadi district. This section outlines those stakeholders engaged in the management planning process to date. With a strong commitment to partnership approaches, WRMC will engage more stakeholders across public, private and non-governmental sectors as it develops further and in the course of implementation.

7.4.1 Government Agencies

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.

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 licence, 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 licence, 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].

I-Taukei 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.

I-Taukei 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*.

I-Taukei 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,⁷³ and are specifically empowered to enforce the *Fisheries Act*⁷⁴ and the *Forest Decree*.⁷⁵ Official police force policy encourages the reporting of offences by members of the public. The nearest police stations to Wainunu are located in Nabouwalu and Savusavu.

7.4.2 Non-Government Organisations

Wildlife Conservation Society

The Wildlife Conservation Society (WCS) is committed to the conservation of wild animals and wild places around the world, and the communities they sustain. The WCS approach emphasizes decision making based on scientific research, capacity-building, strong partnerships and local engagement. The WCS works closely with communities in Nadi District to promote and support ecosystem-based management, supports biological and social research that contributes to management, and facilitates community-based management planning processes.

⁷³ *Criminal Procedure Code*, s.51.

⁷⁴ *Fisheries Act*, s.7, Power of inspection and detention.

⁷⁵ *Forest Decree*, ss.34-36, Power of inspection, Power of arrest, Power of seizure.

8 APPENDICES

APPENDIX 1 – PROTECTED SPECIES	51
APPENDIX 2 – NET SIZE LIMITS	60
APPENDIX 3 – RECOMMENDED FISH CATCH SIZE LIMITS	61
APPENDIX 4 – TERRESTRIAL THREAT DIAGRAM	76
APPENDIX 5 – COASTAL AND ESTUARINE THREAT DIAGRAM	77
APPENDIX 6 – MARINE THREAT DIAGRAM	78
APPENDIX 7 – LEGAL MECHANISMS FOR ESTABLISHING PROTECTED AREAS	79
APPENDIX 8 – USEFUL CONTACTS	82

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 undulatus</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>Notopterus 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>	Silktail	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 lessoni</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 multicolor</i>	Scarlet robin	Diriqwala	<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Phigys solitarius</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>Hemiphyllodacrylus 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>Leiopisma alazon</i>	Lauan ground skink		<i>Endangered and Protected Species Act 2002, s.3(d)</i>
<i>Gehyra mutilata</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 superb</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, mbumumanga	<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 seemanii</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>Cyplhosperma tangs</i>			<i>Endangered and Protected Species Act 2002, s.3(e)</i>
<i>Cyplhosperma 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 grieviei</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. ⁷⁶	No minimum mesh size ⁷⁷
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. ⁷⁸	30mm ⁷⁹
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 ⁸⁰
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. ⁸¹	50mm ⁸²
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 ⁸³

Mesh measurement method: Measure the distance between two diagonally opposite corners of the mesh, when the net is wet and stretched.⁸⁴

⁷⁶ Fisheries Act, s.2.

⁷⁷ Fisheries Regulations, r.13.

⁷⁸ Fisheries Act, s.2.

⁷⁹ Fisheries Regulations, r.14.

⁸⁰ Fisheries Regulations, r.15.

⁸¹ Fisheries Act, s.2.

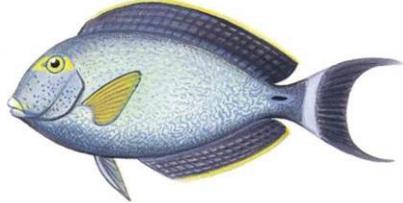
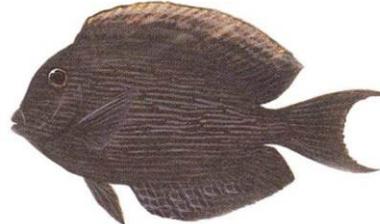
⁸² Fisheries Regulations, r.16.

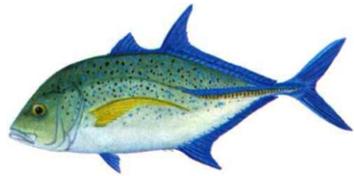
⁸³ Fisheries Regulations, r.16.

⁸⁴ 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.

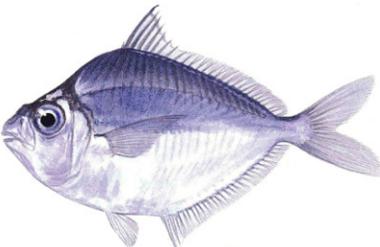
Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Acanthuridae	Surgeonfish, Tang	Balagi	25cm	2	 <p><i>Acanthurus xanthopterus</i> – Yellowfin Surgeonfish</p>
	<i>except Lined Bristletooth (Ctenochaetus striatus)</i>	Dridri	20cm	Modified from 2	 <p><i>Ctenochaetus striatus</i> – Lined Bristletooth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

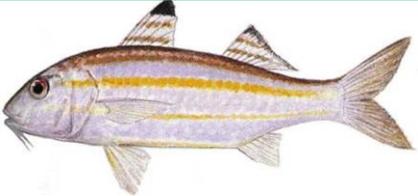
Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
	Unicornfish	Ta	30cm	1	 <p><i>Naso unicornis</i> – Bluespine Unicornfish</p>
Belonidae, Hemiramphidae	Garfish, Needlefish, Halfbeaks	Saku	30cm	1	<i>Tylosurus crocodilus</i> – Hound Needlefish
		Busa	30cm	1	<i>Hemiramphus far</i> – Black-barred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

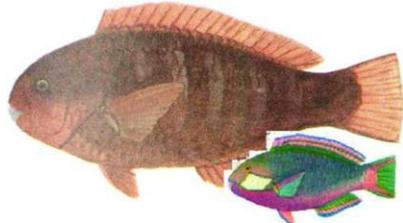
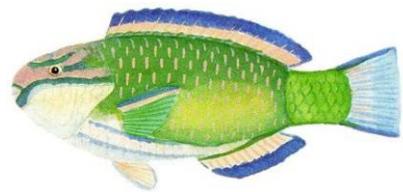
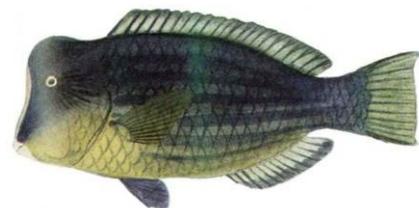
Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Haemulidae	Sweetlips	Sevaseva	25cm	2	 <p><i>Plectorhinchus chaetodonoides</i> – Many-spotted Sweetlips</p>
Labridae	Wrasse <i>except</i> Tuskfish (<i>Choerodon</i> spp.) <i>except</i> Humphead Wrasse (<i>Cheilinus undulatus</i>)	Labe Varivoce	25cm 30cm No take	2 2 4	<i>Chelinus chlorourus</i> – Floral Wrasse <i>Chelinus oxycephalus</i> – Snooty Wrasse

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)	
Lethrinidae	Emperors, Bream	Sabutu	25cm	2	<p><i>Lethrinus obsoletus</i> – Orange-striped Emperor</p> <p><i>Lethrinus harak</i> – Thumbprint Emperor</p>	
		Kabatia	25cm	2		
		except Longface Emperor (<i>Lethrinus olivaceus</i>) except Sweetlip Emperor (<i>Lethrinus miniatus</i>) except Spangled Emperor (<i>Lethrinus nebulosus</i>)	Doknivudi	38cm	2	
		Belenidawa	38cm	2		
		Kawago	45cm	2		

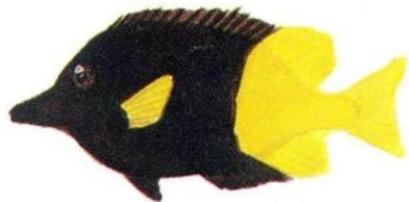
Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Lutjanidae	Snapper	Damu, Kake	30cm	1	 <p><i>Lutjanus argentimaculatus</i> – Mangrove Red Snapper</p>  <p><i>Lutjanus ehrenbergii</i> – Blackspot Snapper</p>
	<i>except</i> Yellowtail Blue Snapper (<i>Paracaesio xanthura</i>)		38cm	2	
	<i>except</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>

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
Gerreidae	Mojarra	Matu	10cm	1	<i>Gerres oyena</i> – Blacktip Silver Bidy
Leiognathidae	Ponyfish	Kaikai	10cm	1	 <p><i>Leiognathus equulus</i> – Common Ponyfish</p> <p><i>Photopecotralis bindus</i> – Orangefin Ponyfish</p> <p><i>Gazza minuta</i> – Toothpony</p>
Muglidae	Mullet	Kanace	30cm	2	

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
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> – Bullethead Parrotfish</p>
	except Bumphead Parrotfish (<i>Bolbometopon muricatum</i>)	Kalia	No take	5	 <p><i>Bolbometopon muricatum</i> – Bumphead Parrotfish</p>
Scombridae	Spanish Mackerel	Walu	75cm	2	<i>Scomberomorus commerson</i>

Family	Common Name(s)	Fijian Name	Minimum	Source	Example(s)
	Wahoo	Wau	75cm	2	<i>Acanthocybium solandri</i>
	Indian Mackerel	Salala	20cm	1	<i>Rastrelliger kanagurta</i>
Serranidae	Groupers	Kawakawa	38cm	2	 <p><i>Plectropomus leopardus</i> – Leopard Coral Grouper</p>
	<i>except</i> Malabar Grouper (<i>Epinephelus malabaricus</i>)	Kasala	38cm	2, 3	
	<i>except</i> Orange Spotted Grouper (<i>Epinephelus coioides</i>)	Kasalanitoga	38cm	2, 3	
	<i>except</i> Blacksaddle Coral Grouper (<i>Plectropomus laevis</i>)	Batisai	50cm	2	
	<i>except</i> Brown-Marbled Grouper (<i>Epinephelus fuscoguttatus</i>)	Delabulewa	50cm	2	
	<i>except</i> Camouflage Grouper (<i>Epinephelus polyphkadion</i>)	Kawakawa	50cm	2	
	<i>except</i> Giant Grouper (<i>Epinephelus lanceolatus</i>)	Kavu	No take	4	

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 <i>except</i> Smalltooth Jobfish (<i>Aphareus furca</i>) <i>except</i> Green Jobfish (<i>Aprion virescens</i>) <i>except</i> Yellowtail Blue Snapper (<i>Paracaesio xanthura</i>) <i>except</i> Red Snapper (<i>Lutjanus bohar</i>) <i>except</i> Humpback Snapper (<i>Lutjanus gibbus</i>) <i>except</i> 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	Kawakawa	38cm	-	2
	<i>except</i> Malabar Grouper (<i>Epinephelus malabaricus</i>)		38cm	100cm	2, 3
	<i>except</i> Orange Spotted Grouper (<i>Epinephelus coioides</i>)		38cm	100cm	2, 3
	<i>except</i> Blacksaddle Coral Grouper (<i>Plectropomus laevis</i>)		50cm	80cm	2
	<i>except</i> Brown-Marbled Grouper (<i>Epinephelus fuscoguttatus</i>)		50cm	70cm	2
	<i>except</i> Camouflage Grouper (<i>Epinephelus polyphkadion</i>)		50cm	70cm	2
	<i>except</i> Giant Grouper (<i>Epinephelus lanceolatus</i>)		No take	-	2

Family	Common Name	Fijian Name	Minimum	Maximum	Source
Sphyraenidae	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).

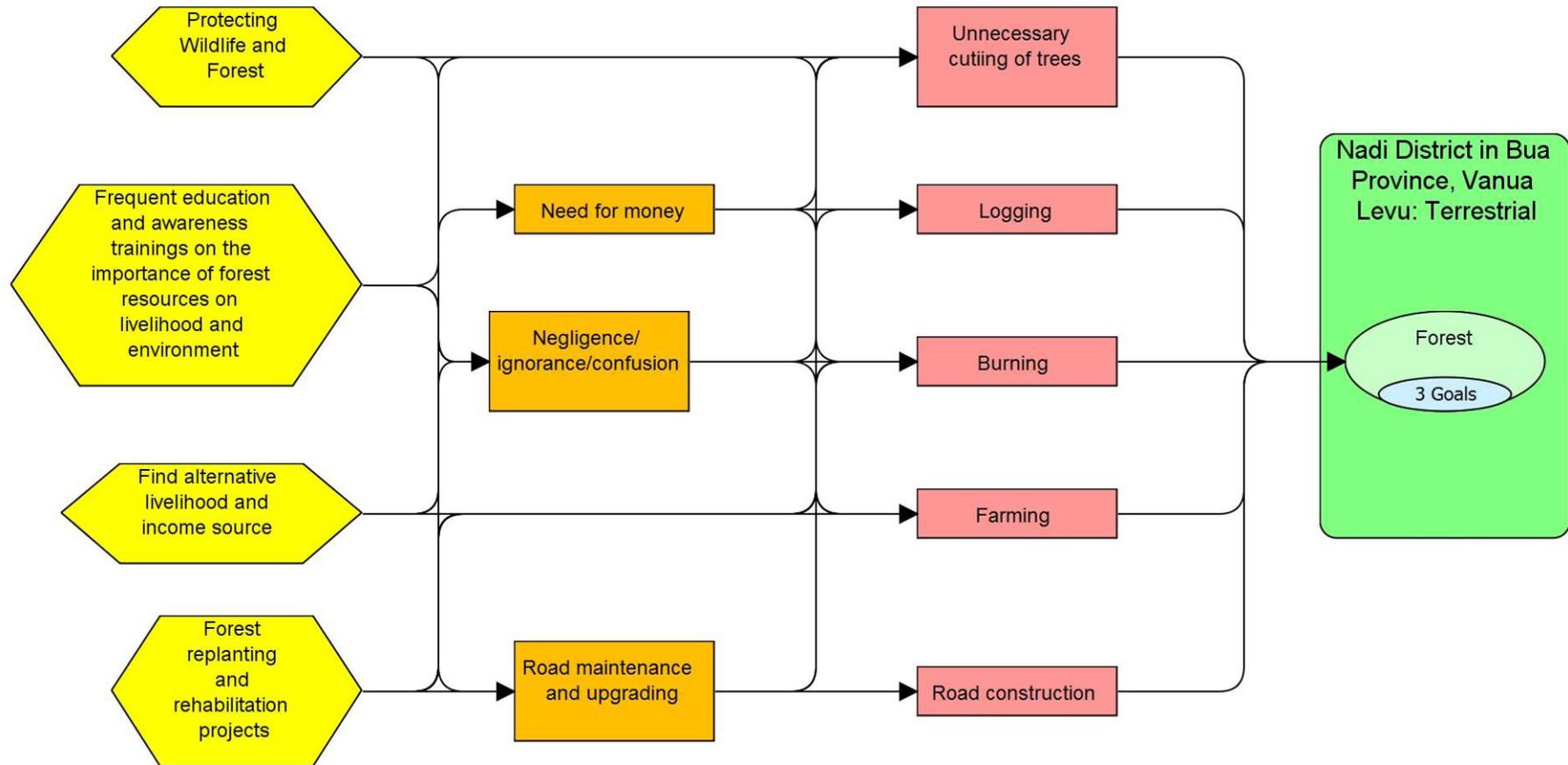
It is an offence under the *Fisheries Regulations* to kill, take, sell or display for sale any of the following species if they are less than the minimum length listed below.⁸⁵

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

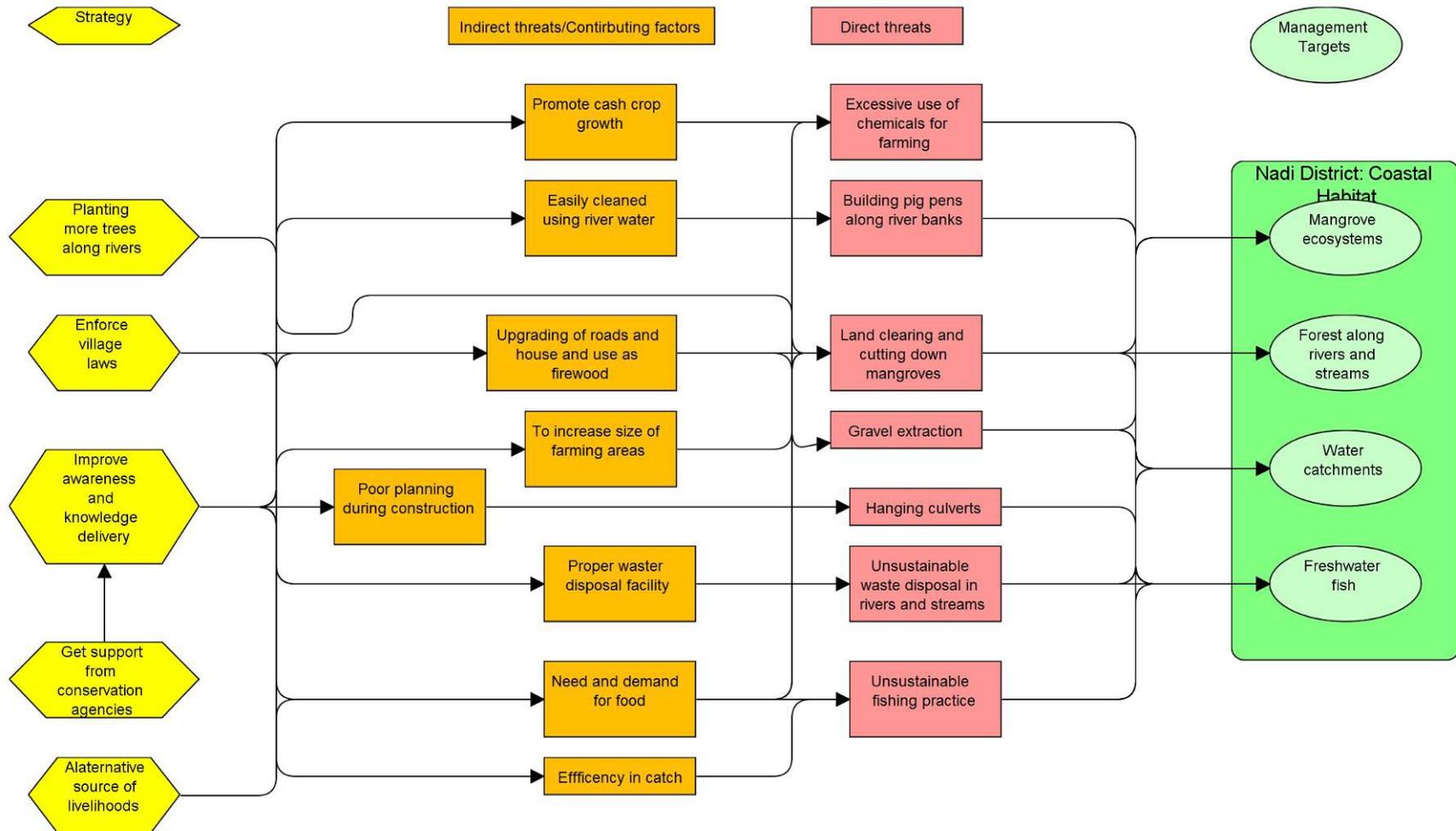
Measurement method: (1) Fish: measure from the point of the snout to the middle of the tailfin when the fish is laid flat. (2) Trochus: measure across the whorl. (3) Pearl Oyster Shell: measure from the butt or hinge to the opposite lip

⁸⁵ *Fisheries Regulations*, rr.18, 19, 21, 25B.

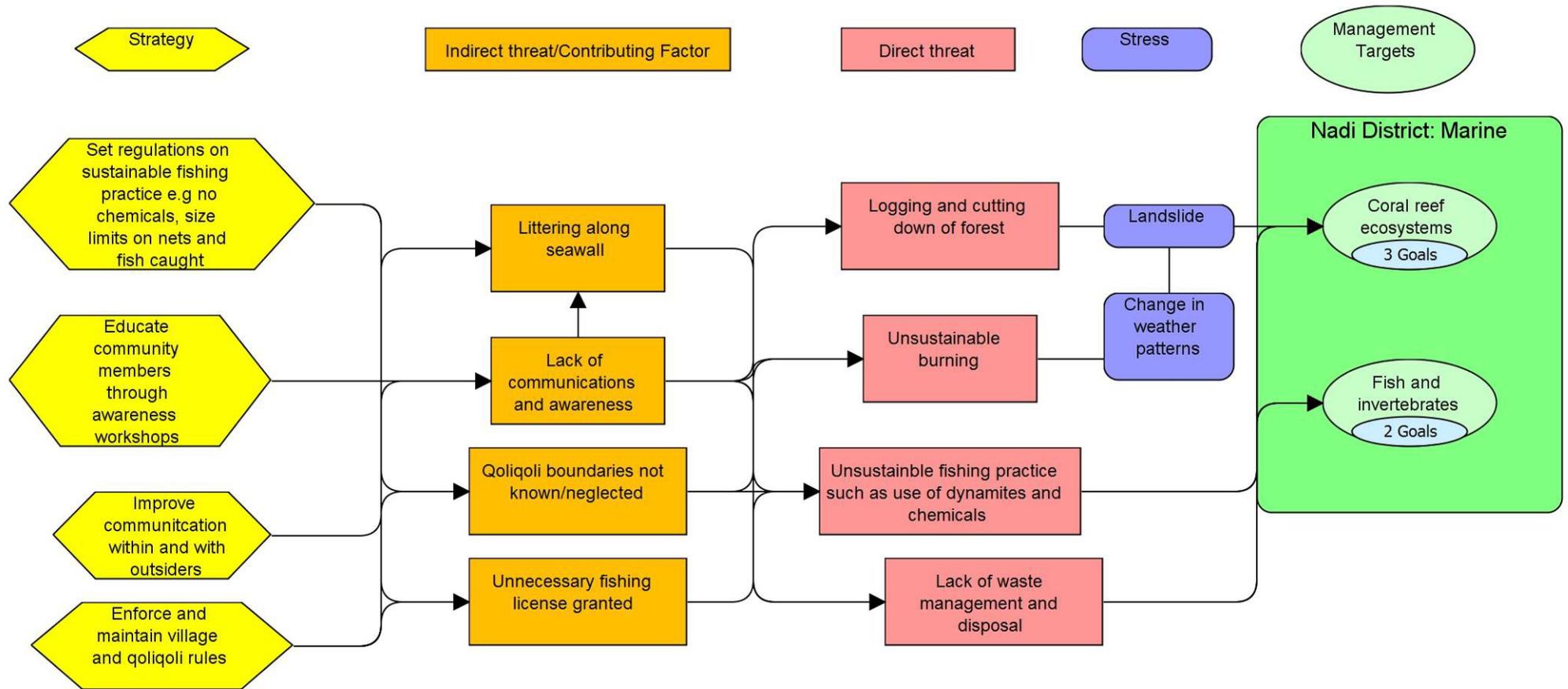
APPENDIX 4 – TERRESTRIAL THREAT DIAGRAM



APPENDIX 5- COASTAL AND ESTUARINE THREAT DIAGRAM



APPENDIX 6– MARINE THREAT DIAGRAM



APPENDIX 7– LEGAL MECHANISMS FOR ESTABLISHING PROTECTED AREAS

1.0. LEGAL PROCESS FOR ESTABLISHING MARINE PROTECTED AREAS

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 *customary fishing ground*, 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 wanting 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).

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*.

Only the Minister for Forests may remove or modify a nature reserve. The Minister may only remove or modify a nature reserve on the recommendation of the Forestry Board.

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 NLTB 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 NLTB and the *mataqali*.

Only the Minister for Water may remove a declared catchment area.

2.3. Conservation Leases

Key Features

The iTaukei Land Trust Board (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.

APPENDIX 8 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

Bua Provincial Office

Roko Tui Bua
Ph: 8836027

Fisheries Officer Bua, Tomasi Cama
Ph: 8674585

Department of Fisheries

\c Officer, Mr. Aisake Batibasaga
Ph: 3361122, 9228973
Email: abatibasaga@gmail.com

Divisional Fisheries Officer Northern
Ph: 8812833

Department of Forestry

Conservator of Forest,
Ph: 3301611

Forestry Officer Bua (Dreketi)
Ph: 8518277

Department of Environment

Director Environment
Ph: 3311699
Email aminiasi.qareqare@environment.gov.fj

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

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

SPC-GTZ

Land Use Planning and Facilitation Specialist
Ms Christine Fung
Ph: 3305983
Email: christinef@spc.int

NON-GOVERNMENT ORGANISATIONS

Wildlife Conservation Society Fiji Program

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

Coral Reef Alliance (CORAL)

Mrs Alisi Nacewa
Ph: 3581863
Email: fijioffice@coral.org

Fiji Locally Managed Marine Area Network

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

Partners in Community Development Fiji

Executive Director, Mr. Tevita Ravumaidamu
Ph: 3300392
Email: travumaidama@pcdf.org.fj

