

GEF Pacific RIDGE TO REEF Programme

Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries

FOREWORD

The Heads of States of 13 Pacific SIDS developed and in 1997 endorsed a GEF International Waters Strategic Action Programme (SAP) for Pacific Island Countries. That document identified priority areas for action in the international waters focal area as improved management of ocean and coastal fisheries, integrated watershed and coastal management, and water supply protection. On the basis of the Pacific SAP, the GEF International Waters focal area has subsequently invested in a series of regional initiatives. The first was the UNDP implemented project entitled "Implementation of the Strategic Action Program for the International Waters of the Pacific Small Island Developing States" initiated in 2000 and operated over almost 7 years to 2006.

In light of the critical water resource and sanitation issues facing Pacific SIDS, GEF support in the years following the conclusion of the IWP project has been targeted at improved coordination and planning of water resource and wastewater management to balance overuse and conflicting uses of scarce freshwater resources through the GEF Pacific IWRM Project. The latter was financed by the GEF, implemented by UNDP and UNEP, and executed regionally by the Geoscience Division of the Pacific Community (SPC) in partnership with 14 Pacific Island Countries.

The GEF Pacific IWRM Project built on achievements of previous investments via a focus on national IWRM demonstration projects aimed at providing an opportunity for participating countries to implement, and experiment with, new management models and methods. The practical on-the-ground solutions to water and sanitation issues demonstrated by the national IWRM projects acted to stimulate support at both community and national government levels for policy reform and the mainstreaming of integrated approaches as part of national sustainable development planning.

The experience and local capacity in integrated environmental and natural resource management generated through the GEF Pacific IWRM project has been recognized both regionally and within the 14 participating Pacific Island Countries as an appropriate entry point for the testing of innovative approaches and measures to integrate land, forest, water and coastal management, including climate change adaptation in Pacific SIDS. In this connection, the GEF multi-focal area, multi-GEF agency programme entitled "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods" (or the GEF Pacific R2R Programme) was developed to provide an opportunity for Pacific SIDS to develop and implement truly integrated approaches for the sustainable development of island economies and communities. Programme activities are organised under the following programme components:

- ✓ National Multi-Focal Area Ridge-to-Reef Demonstrations in all Pacific Island Countries
- ✓ Improved Governance for Integrated, Climate Resilient Land, Water, Forest and Coastal Management
- ✓ Regional and National/Local Ridge-to-Reef Indicators, Monitoring and Evaluation and Knowledge Management
- √ Regional Programme Coordination

This National Programme Document summarizes the development of integrated approaches to water resource and coastal management in Federated States of Micronesia (FSM) to date, including examples of specific results and lessons learned achieved through integrated approaches to environmental and natural resource management. Importantly, this document presents information about the interlinked GEF R2R STAR and GEF International Waters R2R Projects, including programme support activities which focus on science-based planning, human capital development, policy and strategic planning, results-based management, and knowledge sharing.

Marc Wilson

Regional Programme Coordinator Pacific Community Suva, Fiji Islands

INTRODUCTION

Given the close inter-connections between land, water and coastal systems in Small Island Developing States (SIDS), the integration of freshwater watershed management with coastal area management is considered essential to foster effective cross-sectoral coordination in the planning and management of land, water and coastal uses. In Pacific SIDS, such integrated approaches to freshwater and coastal area management have been termed 'Ridge to Reef' to emphasise the inter-connections between the natural and social systems from the mountain 'ridges' of volcanic islands, through coastal watersheds and habitats, and across coastal lagoons to the fringing 'reef' environments associated with most Pacific SIDS. Inherent in the approach is the philosophy of cross-sectoral coordination in the planning and management of freshwater use, sanitation, wastewater treatment and pollution control, sustainable land use and forestry practices, balancing coastal livelihoods and biodiversity conservation, hazard risk reduction, and climate variability and change.

Similarly, the integration of communities, stakeholders, and national governments within such a cross-sectoral planning framework is described by Pacific SIDS as a 'Community to Cabinet' approach. The following sections summarize achievements to date in the development of 'Ridge to Reef' and 'Community to Cabinet' approaches to integrated natural resource and environmental management in FSM. An overview of the purpose of the Ridge to Reef Programme, its GEF R2R STAR Projects and GEF International Waters Projects is also provided.

TABLE OF CONTENTS



1. RIDGE TO REEF CONTEXT

This section provides a brief background of the geography and environmental threats in FSM. This information has been used as the basis for the identification of priority activities for the testing of 'Ridge to Reef' approaches to integrated land, water, forest and coastal management in FSM.



2. RIDGE TO REEF RESULTS

Pacific leaders have called for a strengthened emphasis in results-oriented sustainable development planning. This section benchmarks the main results of efforts to develop integrated management approaches in FSM to date.



3. GEF PACIFIC R2R PROGRAMME

An overview of the "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods" (or GEF Pacific R2R Programme) is provided in this section. Information about the interlinked GEF R2R STAR and GEF International Waters R2R Projects, and Programme Coordination Unit, is also presented.



4. FSM R2R STAR PROJECT

A summary of FSM national project to be financed through the GEF System for Transparent Allocation of Resources (STAR) is provided in this section. The planned contribution of this STAR project to the achievement of the targets for the regional Ridge to Reef program is outlined. The management arrangements for this project are also provided.



5. INTERNATIONAL WATERS R2R PROJECT

Priority actions identified for testing the integration of water, land, forest and coastal management to preserve ecosystem services, store carbon, improve climate resilience and sustain livelihoods in FSM are outlined. A brief strategy for FSM IW R2R national pilot project is provided along with the logical framework matrix. Key assumptions and risks are summarized to guide planning during the project's inception period

RIDGE TO REEF CONTEXT 1.



The Federated States of Micronesia consist of four major island groups with over 600 islands in the northern Pacific. These vary geographically from high mountainous islands to low lying coral atoll and volcanic outcroppings on Pohnpei, Kosrae and Chuuk.

About 60% of water resources in ESM exist as surface water in the form of small, intermittent streams that drain catchments areas of limited aerial extent and are dry for about 20% of the year. The topography in the stream basins is not conducive to the construction of economical dams and requires extensive and costly treatment. The remaining 40% of the islands' water resources exist as groundwater. Many households use roof catchments and are particularly prevalent in the outer islands where there is no piped water.

All of the four focal islands have coastal mangrove fringes and development is largely focused on the coast with minimal interior development. The natural vegetative cover is dense on all islands and has not generally been disrupted for intensive agriculture use.

Whether planned or fortuitous, this has protected watersheds, helping to reduce the rapid runoff and maintaining a reasonable recharge opportunity for the aquifers that are important to each State for a portion of its water supply.

Only limited areas are provided with sewerage systems and large numbers of household still have pit latrines or other unhygienic excreta disposal systems. Combined with frequent rainfall events this can lead to contaminants entering the coastal ecosystems as well as being a critical public health threat.

Considerable attention is required for planned drainage in the developed areas to protect the road pavement and foothill areas from land erosion and flooding.

There are several poorly constructed and maintained dumpsites throughout the FSM and dumping of solid waste in particular human excreta is considered one of the foremost environmental health problems.

Kosrae's Coastal Environment provides its best and most effective defence against climate related hazards. The wellbeing of coastal environment is dependent upon the degree that anthropogenic activities impact on the area from Ridge through to Reef.

Preservation of catchments and in particular upland areas is vital to the maintenance of quality surface and groundwater inflows to the coast areas. Likewise the maintenance of a quality coastal environment offers improved sustainability for lagoonal and reef resources vital to food security.

The need to preserve and protect Kosrae's Coastal Environment has resulted in the development of a comprehensive Shoreline Management Plan which has been endorsed by the Kosrae Government. The plan recommends the staged and planned relocation of coastal communities to upland areas which are currently undisturbed. This will have major impact on land use and its associated impacts on waterways.

The IW R2R Demonstration project will seek to compliment the Shoreline Management Plan through the development of Kosrae State Integrated Freshwater Resources Management Plan that will serve to catalyse an integrated Ridge to Reef approach to the sustainable development of upland catchments.

Some of the above issues have begun to be addressed through the cross-sectoral planning and management initiatives of the GEF Pacific IWRM Project. Needs still exist and have been identified within a Ridge to Reef context.

These include improving land use practices; reducing pathogen and nutrient contamination of ground and coastal waters; assessing Kosrae's freshwater resources; establishing community based management of waterways and; enhancing community and national level awareness of best practice in sustainable management.

RIDGE TO REEF RESULTS 2.

The need for results-based approaches to the management of development assistance programmes and projects has received recent high-level recognition. In adopting the Paris Declaration on Aid Effectiveness in 2005, national government Ministers responsible for development from both developed and developing countries joined with Heads of multilateral and bilateral development institutions in committing to "work together in a participatory approach to strengthen country capacities and demand for results-based management".

This commitment was reaffirmed in the 2008 Accra Agenda for Action which called for accelerated progress on aid effectiveness by better demonstrating the results of development efforts and openly accounting for them.

The Pacific Islands region and its development partners have responded accordingly. For example, in 2012 the Pacific Leaders considered a review of the effectiveness of development efforts in the Pacific and called for strengthened emphasis on results in planning and financing development. The following benchmarks the main results of efforts to develop integrated management approaches in FSM to date.



President Emanuel Mori signing FSM's First National Framework Water and Sanitation Policy and Implementation Plan, 2011

PROCESS

Multi-sectoral body established

In March 2011 the FSM President established a National Water Task Force as the lead body for coordination and planning of water and sanitation in the FSM.

Best IWRM and Water Use Efficiency approaches defined

The FSM national target was to have an agreed approach for IWRM endorsed by a National APEX Water Body. An approach to strengthened national coordination and delivery of IWRM services was developed and endorsed by the FSM President, State Governors, and Traditional Leaders during a National Water Summit in 2011.

National Strategy in place

Significant progress has been made in strengthening national coordination in the water and sanitation sector and to develop a National Water and Sanitation Policy and IWRM Plan.

This was in part enabled via the conduct of a FSM National Water Summit on 22nd March 2011 during which the FSM President, State Governors, and a representative of the Nation's traditional leaders signed a joint resolution establishing a National Water Task Force and endorsing a Framework National Water and Sanitation Policy.

Further support of this work was undertaken to develop a FSM National Water, Sanitation, and Climate Outlook aimed at informing national policy development and IWRM Planning.

The First National Water Task Force Meeting was convened from 23-24 May 2012, and in addition to review and agreement on the Task Force Terms of Reference, a program for development of the National Water Policy and IWRM was discussed and agreed.

This was followed up by several State based working group meetings to consider and develop inputs to the broader National process.

Increase in cross-sectoral communication on water related issues.

The FSM IWRM Demonstration project pilot initiative being carried out in Pohnpei, Nett community and Chuuk State significantly leveraged positive partnerships from National, State Governments, NGOs to community level collaborating effectively to improve water resource management. Implementing streams of community based projects and activities positively contributed to stress reduction benefits on fresh water source to sea.

These projects are being carried out directly with resource owners and traditional leaders who are playing active part in their implementation to demonstrate community-based solutions to threats on community water resources.

In Nett, Pohnpei, the traditional leaders, resource owners, and Nett local government agreed to legal establishment of its Watershed Forest Reserve which constitutes over 1,700 hectares of pristine upland forest critical to the resilience of the Nanpil water as the main public water source for over 70% households connected to the public water utilities system.

Sakau farmers in these forests were encouraged to stop farming activities contributing to wildlife habitat loss and deforestation through CSP's "Grow Low" sakau initiative as a sustainable alternative.



This map was produced by Nett Municipality and CSF with IWRM support to aid ongoing legal discussions.

Water quality monitoring

CSP's "Low Grow Sakau" initiative

STRESS REDUCTION

Increase in land protected and/or rehabilitated over the catchment

At project start-up Nett district government leadership, its traditional leaders and communities were not in support of the State sanctioned 1987 Watershed Forest Reserve Act. It took rigorous engagement by State Government, NGO partner (CSP) and Nett Government to arrive at agreeable intervention on establishment of the Nett Watershed Reserve.

The Nett Government and State worked together on legislation to reflect this. Through the joint efforts of the IWRM process and partners, Nett Municipality principally endorsed the establishment of its watershed boundaries to protect 1,700 hectares of watershed after 23 years since the establishment of the State watershed law.

Sustainable land and forest management practices established and trialled with land owners/users.

Prior to the project "low grow sakau" faced some resistance from villagers who were concerned about reduced growth rate.

Through FSM IWRM, the project partner CSP has worked with 40 active sakau farmers in the Nett upland forest via a targeted "Grow Low" campaign. This campaign focused on educating farmers about the importance of the forest while demonstrating an economically practical sustainable option to destructive upland sakau clearings. IWRM monitoring activities identified a 70% reduction in prevalence of new upland sakau clearings.

It is estimated that 70 of the 1000+ sakau clearings on Pohnpei Island are located in Nett Watershed. The project has employed community-based sustainable solutions to habitat and forest loss through CSP's Grow Low sakau Initiative. Forty community farmers previously causing deforestation in Nett are currently utilizing the preferred "Grow Low" planting techniques.

Increase in population with access to safe water supply

The target of the IWRM project was to ensure 90% of Kolonia had access to safe drinking water as determined by the setting (and meeting) of water quality and safety baselines for the Nett Watershed Forest Reserve/Nanpil River.

At the time of project start-up there was much uncertainty about pollutant sources and water quality. IWRM conducted baseline sanitation and pollutant surveys in 3 major river systems in Nett, covering over 10 miles from ridge to the Dausokele estuary.

All pollutant sources along these river banks were mapped, including at least 70 human and animal pollutant sources requiring remediation. Routine monitoring was strengthened to ensure safety baselines were met and to inform efforts to remediate pollutant source sites. A security fence and educational hut has also been built by PUC to ensure safety of water at intake source and to educate the public visitors to Nanpil Dam.

A number of additional broad awareness mediums were employed through river watch billboard messaging and public radio awareness. With this understanding reversal action to improve water conditions are being implemented to reduce pollution impact on Nett waters. The Pohnpei Utility Corporation has also built a security fence around the Nanpil water intake to ensure water safety and quality at the source inclusive of educational hut to educate the public visitors to the Nanpil dam.

Collaboration of partners contiuned to directly remove pollutant sources systematically with IWRM resources and leveraged support of key partners. This directly improved water quality for over 1,000 Nett residents using these rivers for daily water needs and ensuring reliability of access to safe water for 70% of households connected with the PUC water system.

3. THE GEF PACIFIC RIDGE TO REEF PROGRAMME

The GEF Pacific Ridge to Reef (R2R) Programme was developed to guide the strategic investment of GEF grant and national funding in actions aimed at achieving the sustainable development of Pacific SIDS within a truly integrated environmental and natural resource management framework.

A GEF Multi-Focal Area Approach

Initiatives of the R2R programme aim to deliver tangible and quantifiable global environmental benefits by focusing on a more crosscutting approach to water, land and coastal management that captures the complementarities among the following GEF focal areas



A Multi-GEF Agency Approach

The GEF Pacific Ridge to Reef Programme is a multi-agency initiative involving the United Nations Development Programme (UNDP), the United Nations Food and Agriculture Organization (FAO), and the United Nations Environment Programme (UNEP) as GEF implementing agencies. Coordination support is provided by the Pacific Community (SPC), a regional intergovernmental organisation that works with Pacific Nations across a wide range of areas relevant to programme implementation, including water resource management, geoscience for development, public health, forestry, fisheries, disaster management, youth, gender and culture.

R2R Programme Goal and Components

The goal of the GEF R2R programme is "to maintain and enhance Pacific Island countries' ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal management that contribute to poverty reduction, sustainable livelihoods and climate resilience". Programme activities are organised under the following components:



GEF R2R STAR Projects

Significantly, the programme involves the execution of 13 GEF R2R STAR1 projects which address national priorities and development needs while delivering global environmental benefits in line with the abovementioned GEF focal area strategies.

These UNDP, UNEP and FAO implemented projects are executed nationally on a bilateral basis in partnership with local stakeholders. To ensure cohesion, complementarity and efficiency of GEF investments under the R2R programme, each GEF R2R STAR project has been provided US\$175,000 of International Waters (IW) funding in addition to their national STAR allocations.

The intent of this IW funding increment is to enable effective linkages with the GEF International Waters R2R project, the adoption of integrated approaches aimed at addressing critical water-related issues, and intra-regional capacity building and knowledge sharing.

GEF International Waters R2R Project

The operation of the R2R programme is supported in areas of science-based planning, human capital development, policy and strategic planning, results-based management, and knowledge sharing through the International Waters R2R project which is executed regionally by the Pacific Community. R2R pilot projects, to be implemented through the R2R IW project, are designed to strengthen R2R integration by establishing synergies among the work of the various sector agencies and the GEF R2R STAR Projects, between governments and communities, and civil society and the private sector.

Programme Coordinating Unit

The Programme Coordinating Unit (PCU), hosted by the Pacific Community's Geoscience Division in the Fiji Islands, is tasked with the provision of technical, operational, reporting and monitoring support as requested by the participating Pacific Island Countries.

The PCU also facilitates the consolidation and sharing of sectoral knowledge and expertise to support the uptake of bestpractice management approaches in policy-making and planning. Led by the Regional Programme Coordinator, the PCU possesses multidisciplinary expertise, including administration and financial management officers, to support programme coordination.

The Global Environment Facility's System for the Transparent Allocation of Resources (STAR)

4. FSM'S NATIONAL R2R STAR PROJECT

Implementing a "Ridge to Reef" approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in FSM

To strengthen local, State and National capacities and actions to implement an integrated ecosystems management through "ridge to reef" approach on the High Islands of the four States of the FSM

Component 1: Integrated ecosystems management and rehabilitation on the High Islands of FSM to enhance ridge to reef connectivity

Outcome 1.1	Outcome 1.1 Pressures on natural resources from competing land uses on the High Islands of the FSM covering 55,00	
	are reduced through an integrated natural resource management (INRM) framework, evidenced by 15-20%	
	increases in the LD-PMAT (Land Degradation Focal Area - Portfolio Monitoring and Assessment Tool)	

Outcome 1.2 Improved systemic capacity and financing for promoting sustainable development in the High Islands through INRM across the land- and seascape, evidenced by 20% increase in UNDP-GEF Capacity Development Scorecard

Outcome 1.3 Government and Donor funding allocated to SLM (including PA management costs) increased by 10%

Outcome 1.4 Landscape level uptake of SLM measures avoids and reduces land degradation delivering ecosystem and development benefits over 500 ha (350 ha upland forests, 100 ha agroforestry, 50 ha mangrove) on the High Island of the FSM.

The benefits will include:

- Reduced water deficiency
- Increased clean water supply for human, animal and plant consumption
- % family incomes from SLM practices

Component 2: Management Effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of R2R approach (both marine and terrestrial)

Outcome 2.1	Expansion of protected areas totaling at least 5,000 hectares in all four States
Outcome 2.2	Increased management effectiveness for at least 20 existing and new protected areas covering 16,000 ha (Increased METT scores over baseline by at least 10% over average of the targeted PAs, with no drop in scores in any of the individual Pas)

Outcome 2.3	come 2.3 Stable or increased populations of critical endangered species such as Green Turtle (Chelonia myd	
	Humphead Wrasse (Cheilinus undulatus); as well as Globally vulnerable endemic bird species such as	
	Truk Monarch (Metabolus regensis), Dusky White Eye (Horsfeldia nunu) and Micronesian Pigeon (Ducala	
	oceanica endemic regionally) [Baseline and final indicator species to be established during PPG]	

INFORMATION BOX

GEF Agency: UNDP

National Lead Agency: Office of Environment

and Emergency Management

Funding Source: GEF Trust Fund

GEF Focal Area: Multi-Focal Area

(BD, LD & IW)

Indicative Grant Amount: USD 4,689,815

Indicative Co-financing: USD 17,861,500

Approval Date: 2013

5. GEF PACIFIC INTERNATIONAL WATERS R2R PROJECT

This regional project will support 14 Pacific Island Countries in the development of "Ridge to Reef" and "Community to Cabinet" approaches designed to guide the integration of water, land, forest and coastal management required to fashion sustainable futures for island communities. The project also aims to address the recent high-level recognition and calls for results-based approaches to the management of development assistance programmes and projects, and will provide support in areas of coordination, capacity building, technical assistance, and monitoring and evaluation for the operation of the GEF Pacific Ridge to Reef Programme. Components and outcomes of this programme are:

Component 1: National Demonstrations to Support R2R ICM/IWRM Approaches for Island Resilience and Sustainability

- Successful pilot projects testing innovative solutions involving linking ICM, IWRM and climate change adaptation
- National diagnostic analyses for ICM conducted for prioritizing and scaling-up key ICM/IWRM reforms and investments
- Community leader roundtable networks established for strengthened 'community to cabinet' ICM/IWRM

Component 2: Island-based Investments in Human Capital and Knowledge to Strengthen National and Local Capacities for R2R ICM/IWRM approaches

- National and local capacity for ICM and IWRM implementation built to enable best practice in integrated land, water, forest and coastal management and CC adaptation
- PIC knowledge on climate variability, coastal area planning in DRM, integrating 'blue forest' and coastal livelihoods consolidated and shared to support evidence-based coastal and marine spatial planning
- Incentive structures for retention of local 'Ridge to Reef' expertise and inter-governmental dialogue on human resource needs for ICM/IWRM initiated

Component 3: Mainstreaming of R2R ICM/IWRM Approaches into National Development Planning

- National and regional strategic action frameworks for ICM/IWRM endorsed nationally and regionally
- Coordinated approaches for R2R integrated land, water, forest and coastal management and CC adaptation achieved in 14 PICs
- Physical, natural, human and social capital built to strengthen island resilience to current and emerging anthropogenic threats and climate extremes

Component 4: Regional and National 'Ridge to Reef' Indicators for Reporting, Monitoring, Adaptive Management and Knowledge Management

- National and regional formulation and adoption of integrated and simplified results frameworks for integrated multifocal area projects
- National and regional platforms for managing information and sharing of best practices and lessons learned in R2R established

Component 5 - Ridge-to-Reef Regional and National Coordination

5.1 Effective program coordination of national and regional R2R projects

R2R pilot projects, to be implemented through the R2R IW project, are designed to strengthen R2R integration by establishing synergies among the work of the various sector agencies, between governments and communities, and civil society and the private sector. The following pages present the results framework for FSM's IW pilot project.

INFORMATION BOX GEF Agency: UNDP Regional Executing Agency: SPC - GSD National Lead Agency: Office of Environment and Emergency Management GEF Focal Area: International Waters

R2R IW RESULTS FRAMEWORK

Risks and Assumptions	Residents willing to adopt new land management approaches On-going commitment to operation of sustainable land management	Ability to maintain planned sampling, analysis and reporting Available resources to implement activities	Awareness and capacity building materials are sufficiently well designed to engage community members and resource users Continuity of participation of target audience in awareness raising events
Source of Verification	Consultation meeting reports, including agreements on operations, site selection and roles of stakeholders Report on assessment of the operational status [Yr 3]	Published scientific report	Consultation meeting and activity reports, training workshop outputs including details of trained trainers and school based interviews
Targets End of Project	Sustainable land use management demonstrated through application of upland development and agricultural best practice in 5 priority sites at Tofol, Kosrae	Measurable reduction in environmental stress to Tofol, Kosrae coastal area	Proportion of target community members with awareness of technical skills in sustainable land use and stress reduction measures increased by 30% through best practice approaches captured, documented and communicated locally
Baseline	Undisturbed areas in uplands and few examples of best practice in upland development or agriculture.	No control of nutrient and pathogen contamination	Limited awareness of appropriate land use
Indicator	Status of implementation at 5 priority sites	% Reduction in nutrient and pathogen contamination of Tofol, Kosrae coastal area	Total reach of documented best practice Extent of uptake of land use practices
Outcomes	1.1 Improved land use operations catalysed via piloting of locally appropriate methods for uplands land use	1.2 Environmental and public health safeguarded via targeted reductions in nutrient and pathogen contamination of surface and groundwater	1.3 Kosrae State uptake of sustainable land use promoted through coordinated community sharing of best practice.
Components	Demonstration of innovative approaches to Integrated Ridge to Reef Catchment Management in Kosrae, Federated States of Micronesia		

Risks and Assumptions	Available resources to implement activities	Availability of resources and expertise to undertake development Ability of community to initiate management measures	Training and capacity building materials are sufficiently well designed to engage target staff Continuity of participation of target audience in training events
Source of Verification	Published and endorsed Kosrae Water Resource Outlook	Endorsed Kosrae State Freshwater Management Plan	Consultation meeting and activity reports, training workshop outputs including participatory interviews and knowledge testing
Targets End of Project	Opportunities and threats to freshwater in Kosrae identified through targeted scientific and social research into water use and supply, health of waterways, environmental impacts and future scenarios	Kosrae State Freshwater Management Plan developed with stakeholder involvement, including operational PM&E plan	Proportion of target stakeholders with applied understanding of PM&E techniques and activity refinement methods increased to 60% through innovative training and assessment techniques
Baseline	Limited understanding or technical baseline for freshwater resources	No Kosrae State Freshwater Management Plan	Limited capacity for developing PM&E plans and refining project activities
Indicator	Extent of uptake of findings into Kosrae State Freshwater Management Plan	Extent of uptake of management measures in Freshwater Management Plan	Percent increase in target population with applied skills in PM&E
Outcomes	2.1 Assessment and outlook for Kosrae's freshwater resources.	2.2 Kosrae State Freshwater Management Plan guiding Ridge to Reef catchment and community based management of water resources	2.3 Strengthened capacity for monitoring and evaluation of Kosrae State Freshwater Resources Management Plan targets.
Components	2. Kosrae State Freshwater Resources Management Plan established.		

Risks and Assumptions	Community leaders maintain their motivation and commitment to the cause.	Willingness of the sectors to cooperate and maintain improvements.	Resources available for awareness materials Awareness materials will be sufficiently well designed to improve community understanding
Source of Verification	Quarterly reports of network meetings and activities (including list of participants and results of work)	Partnership agreements, activity plans and reports	Educational films and documentaries, construction training manuals, system operational guides, compost use guidelines, radio/audio talk shows Distribution partnership agreements
Targets End of Project	Networks of sustainable waterways boards and community-based management volunteers for sustainable waterways and land management activities established at Tofol, Kosrae	Established and functional partnerships, sharing resources and technical expertise between government and local networks resulting in improved development	Innovative and locally appropriate educational, training and documentary materials about sustainable development of water, land and coasts, developed for public use and syndicated through school, library, CBO, public radio and online sources
Baseline	Limited community management of waterways and land	No existing partnerships	Limited availability of effective information to stimulate awareness of sustainable development among target population
Indicator	Status and effectiveness of the management board and volunteer networks	Number of Partnerships formalised	Total reach of product that is syndicated Volume of content accessed
Outcomes	3.1 Community based management for sustainable waterways established for pilot catchment (Tofol)	3.2 State actors supporting community based action for sustainable development of Water, land and coasts	3.3 Enhanced community and national level awareness of best practice s for sustainable development of Water, land and coasts
Components	3. Kosrae State and local capacity for Integrated Ridge to Reef Catchment Management built to enable best practice in coastal waters, land and public health protection		



The GEF unites 182 countries in partnership with international institutions, non-governmental organizations (NGOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives.

www.thegef.org



The Pacific Community is an international development organisation with 26 member countries and territories. It is the principal scientific and technical agency proudly supporting development in the Pacific region since 1947.

www.spc.int



UNDP is on the ground in 177 countries and territories and partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone.

www.undp.org



UNEP is the leading global environmental authority that sets the environmental agenda and promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system.

www.unep.org



FAO has 194 Member Nations working to achieve food security for all, to make sure people have a regular access to enough high-quality food to lead active and healthy lives. www.fao.org











