



Applied Geoscience and Technology Division (SOPAC)
Division Géosciences et Technologies Appliquées (SOPAC)

Second Meeting of the SOPAC Division Noumea, New Caledonia, 3-9 November 2012 (SOPAC-2)

AGENDA ITEM	TITLE
3.	SOPAC DIVISION HIGHLIGHTS AND EMERGING ISSUES
3.2	Water and Sanitation Programme 2011/2012 Report
3.2.1	Summary Report of WSP Activities

PURPOSE

The purpose of this report is to provide the delegates to the second meeting of the SOPAC division with a summary account of the implementation of the Water and Sanitation Programme (WSP) 2012 Work Plan during the period from October 2011 to August 2012.

BACKGROUND

1. Water and Sanitation Programme approach

The SPC-SOPAC Water & Sanitation Programme (WSP) operates in the knowledge that access to clean water and sanitation is a fundamental and UN-sanctioned human right (UNGA Res 64/292 28th July 2010), and that the achievement of water security is fundamentally linked to all of the development goals of PICTs and the Millennium Development Goals (MDGs). The Programme also operates under the internationally recognized principles of Integrated Water Resources Management (IWRM), involving the effective management of a complex network of natural resources and human systems in all its many interconnected elements: from ridge to reef and from community to cabinet.

This approach enables the WSP to assist Members on many different levels including: water governance; water resource assessment and management; provision of effective and efficient water services; data collection, management and analysis; community-level water, sanitation and hygiene (WASH) initiatives; pollution reduction, education and behavioural change; as well as disaster preparedness, assessment and response.

Some Key Highlights for 2011/2012*

1. Ecosan Toilets "On The Move"
2. Building Capacity in Integrated Water Resources Management
3. Knowledge Development and Regional Knowledge Sharing – Global Environment Facility (GEF) Pacific Integrated Water Resources Management (IWRM) – Project Results Notes
4. National Policy and Planning Frameworks for Water, Sanitation and Hygiene – The Nauru Experience
5. Vulnerability Assessment and Adaption to Sea Level Rise Project in Lifuka, Tonga

*Details provided in the full narrative report provided in paper SOPAC-2/3.2.2 (English only)

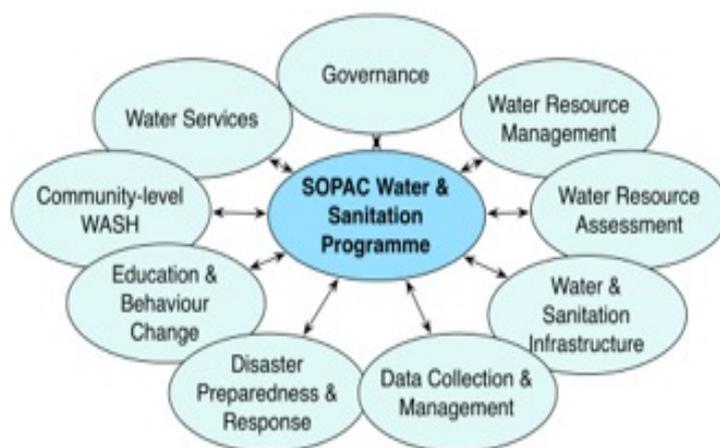


Figure 1: Elements of SOPAC Water & Sanitation Programme support to member countries

2. The Water and Sanitation Programme (WSP)

The current SOPAC Divisional Strategic Plan 2011-2015, takes into consideration the above-mentioned approach and principles and provides the strategic direction for our technical support to Pacific Island Countries and Territories (PICTs) through capacity building, awareness and advocacy in the following areas:

Water Resources Management

Water resources include rainwater, surface water and groundwater resources monitoring, assessment, development, management and protection, with a particular emphasis on water resources management in climatic extremes (both those of water scarcity – droughts; and over-abundance – cyclone-associated flooding). This component therefore includes climate adaptation with regard to water resources issues.

Water Services

Sanitation and drinking water supply services, inclusive of aspects on capacity for drinking water quality monitoring, introducing drinking water safety planning, improving water demand management and promotion of rainwater harvesting. Under the general Water Supply, Sanitation and Hygiene (WASH) sub-component it promotes the use of appropriate technologies and approaches for domestic water supply and sanitation issues through awareness raising, demonstrating best practices and advocacy. This includes the mainstreaming of gender and community participation in water supply and sanitation and the coordination of activities through the Pacific WASH Coalition, including coordinated responses in times of natural disasters through the Pacific Humanitarian Team.

Water Governance

Covers water governance, awareness and advocacy and pulls together a number of different areas which together attribute to better institutional arrangements in the water sector. These include national level policies, plans and strategies; institutional instruments such as legislation and institutional strengthening; multi-stakeholder national water partnerships; Integrated Water Resources Management (IWRM) and catchment level management; community level water governance; awareness raising and education initiatives; and advocacy for community participation and gender. The Governance component also includes regional and global high-level advocacy and awareness with the WSP playing a supportive role for the Pacific Partnership Initiative on Sustainable Water Management which involves national stakeholders and external support agencies in the region.

Cutting across several aspects of the three WSP component areas is the Global Environmental Facility (GEF)-funded “**Sustainable Integrated Water Resources and Wastewater Management Project in Pacific Island Countries**” executed by SOPAC and implemented by UNDP and UNEP in the period 2009 to 2013. This project is focusing on demonstrating practical catchment based IWRM approaches through country demonstration projects on watershed management, wastewater management and sanitation, water resources assessment and protection, water use efficiency and water safety. The project works closely with the “**Pacific Integrated Water Resources Management Planning Programme**”, funded for four and a half years (2008 – 2012) by the European Union, in supporting 14 Pacific Island Countries (PIC’s) to improve their water governance through using the IWRM Planning approach.

3. WSP Structure

The WSP programme operates with four technical (functional) teams, each having a ‘Team Leader’ that reports to the Deputy Director for the Water and Sanitation Programme (DD WSP); and an administrative support unit. The DD WSP is responsible to the Divisional Director for the effective leadership and management of staff and for a broader coordination role amongst water resources managers and water and sanitation service providers. The DD WSP is also responsible for developing and maintaining a range of strategic alliances with development partners as facilitator of the Pacific Partnership Initiative on Sustainable Water Management as well as contributing to the successful implementation of the SOPAC Division Strategic Plan through specific technical and policy support.

The functional teams are:

- 1) Water Resources Management
- 2) Integrated Water Resources and Wastewater Management Demonstrations
- 3) Water and Sanitation Services
- 4) Water Governance

The current structure of the WSP is shown below:

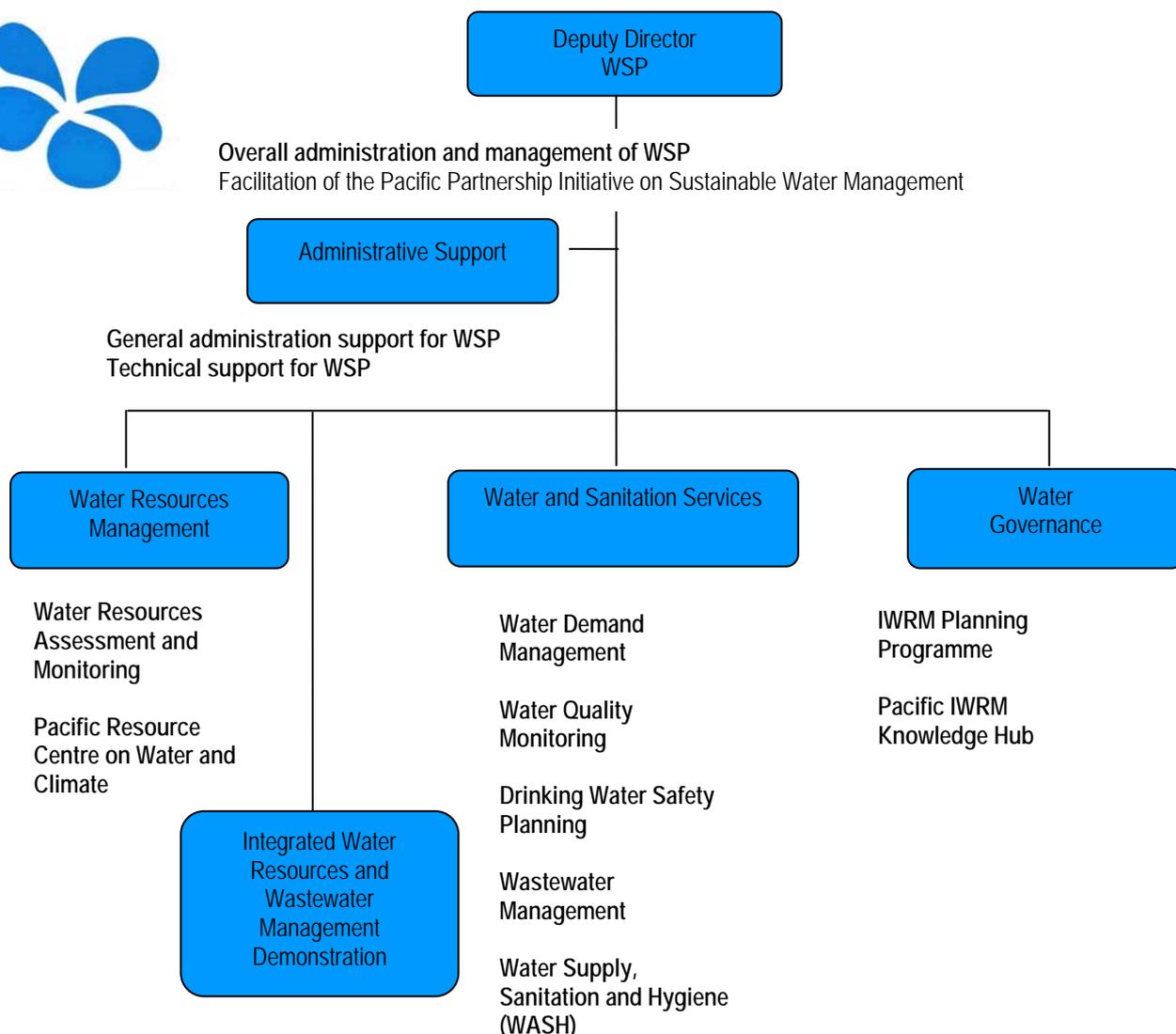


Figure 2: Current structure of the Water and Sanitation Programme (WSP)

WORK PLAN IMPLEMENTATION – SUMMARY OF KEY SECTORAL OUTPUTS

1. Water Resources Management

In terms of staffing, Peter Sinclair, Water Resources Assessment and Monitoring Adviser continues his role in the programme as Senior Technical Adviser providing on-going support towards water resources monitoring and assessment as well as coordinating the delivery of the programme. He is being supported in this role by Water Resources Technical Officer, Amit Singh, recruited in August 2011. This small team has maintained the core services of the programme to the membership in a limited way whilst also being instrumental in starting up and continued implementation of several projects.

One of the key projects in the Water Resources Management component was the (2008-2010) Pacific Hydrological Cycle Observing System (HYCOS) Project which officially ended in December 2010 following final audit and closure. Although all project related activities have technically

concluded, maintenance and population continued for the HYCOS regional water resources information database when new information was received from countries for archiving.

Under UNESCO support the Catalogue of Rivers publication and associated hydrological data brochure was completed in March 2012 and has since been disseminated to countries and partners. The publication is the first of its kind in the Pacific and will be continually strengthened in terms of information and presentation.

In September 2011 Tuvalu called a state of emergency due to an extended drought period affecting water supply. In response and at the request of the Government of Tuvalu a drought assessment was carried out to provide information to support short- and longer-term drought management planning. The technical report for this work entitled "*Rapid Drought Assessment Tuvalu, 13 October – 8 November 2011*" was completed in early 2012 and provided to the Government of Tuvalu and partners.

Funding provided by the AusAID Pacific Australia Climate Change Science and Adaptation Planning Program (PACCSAP) is supporting a vulnerability assessment and adaption to sea level rise project in Lifuka, Tonga. This work commenced in August 2011 and is being delivered in partnership with the Ocean and Islands Programme (OIP) and Human Development Programme (HDP) of SPC. To date the majority of the proposed field fieldwork has been completed and further work in 2013 will entail completion of reporting requirements and development of options for future discussions with communities in Lifuka.

Water resource assessments in the outer islands of Kiribati commenced in August 2012 under the EDF10-funded UNICEF KIRIWATSAN Project. Assessments will continue over the remainder of 2012 and into 2013, with up to 70 villages across 16 islands of the Gilbert Group to be assessed. The first island under the assessment was Marakei.

The SPC Water Resources Assessment group was successful in securing a contract with the EU Research Facility to investigate the "Impact on a freshwater lens in atoll environments under different climate and abstraction scenarios". This 3-year research project will commence in late 2012.

In January and March 2012 Fiji experienced significant flooding in the Nadi Basin and its surrounding areas resulting in loss of life and ability to go about business as a key tourist destination for the Fiji Islands for several months. In the height of this extreme disaster event the WSP were called upon by the Government of Fiji to support response efforts by way of flood impact assessments. A team was mobilised to the affected area to augment work already underway by the national disaster response team and also by the GEF-funded IWRM Demonstration Project in the Nadi Basin entitled "Integrated Flood Risk Management in the Nadi River Basin". Work carried out by the WSP team and national government counterparts included assessments of flood height levels and extent of flooding as well as hydrological assessment of the river systems to understand flow regimes and impacts in such events. This information has been provided to various government counterparts and partners to assist with planning to manage flood risks into the future. In addition to this technical support, input was also provided to the broader networks activated during the flood event by partners such as the Pacific Humanitarian Team and the WASH Cluster to assist with coordination and scoping up of support packages provided. This unplanned work took a significant amount of staff time and resourcing to support and final technical reports are in the process of being finalised for presentation to the stakeholders.

1.1 Support to Pacific Water, Sanitation and Climate Initiatives

WSP continually provides technical support and input in the area of climate change and adaptation, both internally and externally; and this role continues to be a growing part of the programme's annual work plans. During the reporting period, inputs toward several climate-related initiatives were in the following areas:

- ✿ Planning for joint consultation with the 4th Pacific Platform for Disaster Risk Management (DRM) meeting to be held from September 17 to 21 in Noumea, New Caledonia. A feature of this initiative will be dialogue and planning around disaster risk management, climate change

and water and sanitation with considerations on items such as early warning systems, floods, droughts and the like. This will also support articulating the sector position with respect to the Integrated Strategy for Disaster Risk Management and Climate Change post-2015 framework.

- ❁ The WSP was successful in securing funding under AusAID's International Climate Change Adaptation Initiative (ICCAI) Multi-Country Programme for projects in Tokelau on "Strengthening the capacity of Tokelau to effectively manage freshwater resources for enhanced water security" for AUD194,740; and in Tonga on "Building climate resilience of coastal communities in Vava'u, Tonga, through the use of integrated water and coastal management" for AUD750,000. Both projects began in 2012 and will continue into 2013.
- ❁ The WSP have been working over the last several months alongside with the OIP and Resource Economics teams to scope up a project for consideration under AusAID's Pacific-Australia Climate Change Science and Adaptation Planning Programme (PACCSAP for Kiribati and Solomon Islands). This work seeks to address issues of vulnerability through assessments informing adaptation options using resource economics and other tools. This information is intended to support planning and decision making.
- ❁ Throughout the reporting period, the WSP have been involved in scoping up a part of the proposal under the Pilot Programme for Climate Resilience (PPCR) Project targeting Climate Investment Funds (CIF) as part of the Pacific Regional: Strategic Program for Climate Resilience (SPCR). The proposal was successful in its first submission; and proposed to more effectively integrate into decision-making in the areas of water and sanitation, land management, coastal management and fisheries; local and regional climate knowledge in Pacific island countries that contributed to climate resilience and best risk management practice. Work is now underway to secure project design financing to complete the full project design process.
- ❁ At the 2011 CRGA, the WSP was alerted to support from NZAID towards addressing water security issues in relation to experiences such as the late 2011 declaration of a state of emergency in Tuvalu critical shortage of water due to a prolonged drought. The WSP has since been developing a proposal in consultation with NZAID officials towards "Strengthening the Water Security of Vulnerable Island States" to the impacts of climate variability by engaging and supporting local authorities and the most vulnerable island communities to build the skills, systems and basic infrastructure to better anticipate, respond to, and withstand drought. This work is currently being considered by NZAID and is anticipated to continue for the rest of the year with a potential start date of early 2013, if successful.
- ❁ The SPC/GIZ Coping with Climate Change in the Pacific Island Region (CCCPIR) programme aims to strengthen the capacities of member countries and regional organisations to cope with the impacts of climate change. WSP was supporting the scoping up work for country programming and also regional work. There were also efforts to secure resourcing for the support to the WSP specifically in coordinating sectoral inputs to the Project and vice versa. This is earmarked to come online in 2013.
- ❁ The EU-funded Global Climate Change Alliance Pacific Small Island States (GCCA PSIS) Project is working towards promoting long-term strategies and approaches to adaptation planning for more effective and coordinated aid delivery to address climate change at the national and regional level. In instances where countries have identified water as a focus area for their work the WSP have been asked to provide input towards country project plans where appropriate. This is likely to continue and increase into 2013 as countries will be ready to start implementation.
- ❁ Internal SPC climate change work has also featured in the 2012 work plan through the involvement of several WSP staff in climate change planning meetings and activities that are working towards a more structured and integrated approach towards climate change activities. This includes providing input towards the various planning tools and matrices to support this effort and it is anticipated that this will continue as an on-going activity.
- ❁ SPC is also involved in collaborative work with member countries and the South Pacific Regional Environment Programme (SPREP) continued including the development of national

policies with SPREP's PACC programme, and in the mainstreaming of climate and disaster risk responses through the development of Joint National Action Plans (JNAPs) on Climate Change Adaptation and Disaster Risk Management. These plans combine national responses to disaster risk and climate change, and have so far been initiated in six countries, namely Tonga, Marshall Islands, Cook Islands, Niue and Tuvalu. The most recent effort was in Nauru.

Much of the work of SPC and its SOPAC Division is directly concerned with strengthening the capacity of Pacific island countries to assess and respond to the risks of today's climate variability and future climate change, and WSP, SOPAC and SPC as a whole are currently in the process of identifying ways to better engage with other national and regional adaptation efforts.

1.2 Integrated Water Resources and Wastewater Management Demonstration

The IWRM Programme provides a cross-sectoral, multi-level approach to water resources management which also offers an entry point to addressing other inter-related sectors such as health, land and coastal zone management and climate impacts. Two projects comprise the Pacific IWRM Programme and include: The Global Environmental Facility (GEF)-funded "Sustainable Integrated Water Resources and Wastewater Management Project in Pacific Island Countries" (GEF Pacific IWRM); and the European Union (EU) Water Facility-funded "IWRM National Planning Programme" which will be covered under the Water Governance component of this reporting.

The GEF Pacific IWRM Project is being executed by SOPAC and implemented by UNDP and UNEP. Following a vigorous country-driven project design phase, the project was approved for funding by the GEF in April 2008 for USD10.7 M and approximately US\$83 million in co-financing, implemented over the period 2009 to 2013. The Project comprises four components:–

- Component 1; Practical National Demonstration Projects on IWRM and Water Use Efficiency (WUE) in the PICs
- Component 2: Development of an indicator framework for IWRM and Environmental Stress indicators for use within regional and national Monitoring & Evaluation systems
- Component 3: Development of National IWRM Policies and WUE strategies that will enable national implementation of these approaches
- Component 4: Regional capacity building for IWRM and WUE

Component 1 National Demonstration Projects Areas of Focus and Titles are presented below:

IWRM Main Intervention	Country	Title of Demonstration Project
1. Watershed Management	Federated States of Micronesia	Ridge to Reef: Protecting Water Quality from Source to Sea in the Federated States of Micronesia
	Palau	Ngerikiil Watershed Restoration for the Improvement of Water Quality
	Samoa	Rehabilitation and Sustainable Management of Apia Catchment
	Vanuatu	Sustainable Management of Sarakata Watershed
2. Wastewater Management & Sanitation	Republic of the Marshall Islands	Integrated Water Management and Development Plan for Laura Groundwater Lens, Majuro Atoll
	Nauru	Enhancing water security for Nauru through better water management and reduced contamination of groundwater
	Tuvalu	Integrated Sustainable Wastewater Management (Ecosan) for Tuvalu
3. Water Resources Assessment &	Cooks Islands	Integrated freshwater and coastal management on Rarotonga
	Fiji Islands	Environmental and Socio-Economic Protection in Fiji: Integrated Flood Management in the Nadi River Basin

Protection	Niue	Using Integrated Land Use, Water Supply and Wastewater Management as a Protection Model for Alofi Town Groundwater Supply and Nearshore Reef
4. Water Use Efficiency & Water Safety	Solomon Islands	Managing Honiara City Water Supply and Reducing Pollution through IWRM Approaches
	Tonga	Improvement and Sustainable Management of Nieafu Aquifer Groundwater Resources in Vava'u Islands

The original design provided for a Regional Coordinating Unit to be based in SOPAC with 5 staff for three years and two staff including the Regional Project Manager for the last two years. The 3rd Regional Coordinating Committee of the project endorsed the use of unspent UNDP funds to enable the extension of 2 professional staff until the end of 2013 i.e. maintaining a 4 person Regional Coordinating Unit (RCU) until the end of the Project.

The GEF Pacific IWRM Project was subject to an independent Mid-term Review (MTR) which rated the Project as Satisfactory and also concluded:–

Project Management and oversight was effectively supervised by the Regional Steering Committee comprising National IWRM Focal Points, National Demonstration Project Managers, implementing and executing agencies, the European Union and the RCU. The RCU was widely praised by stakeholders interviewed for providing considerable direct assistance to countries for IWRM and Water Use Efficiency (WUE) activities.

Project Achievement – All four project components were assessed as having made significant progress and were considered to be “on-target”. National Demonstration Projects were praised for their considerable efforts to continue high levels of stakeholder involvement and the progress they had achieved.

Stakeholder Engagement and Gender Mainstreaming – National Demonstration Projects were praised for the emphasis on stakeholder participation and gender mainstreaming in the Demonstration Project Steering Committees and community level implementation. These efforts and processes were of global note and worthy of capture for dissemination to the GEF International Water Community.

Monitoring and Evaluation – The project was assessed as meeting the M & E requirements of GEF and the efforts of the RCU to support National Demonstration project’s Participative Monitoring and Evaluation was noted.

Replication and Sustainability – It was noted that there were positive signs of National Government support for up-scaling aspects of the projects and an interest by communities to replicate project activities. If the Project’s impacts are to be sustained beyond the Project, there was a need to nationally support and maintain the local area level committees formed for project oversight and management.

The MTR also recommended that the RCU be extended a further 6 months to ensure the lessons learnt and knowledge gained was effectively captured but the MTR acknowledged that this was contingent upon the retention of the current RCU Staff. Associated with this recommendation was the need to look at how the RCU staff could be incentivised to stay for the full period of the Project. Specifically a completion gratuity was suggested. A total of 4 staff are currently contracted as follows:

Position	Name	Nationality	Appointment Date
Regional Project Manager	Marc Wilson	Australia	05/01/2009
Environmental Engineer Adviser	David Duncan	Australia	13/07/2009
Mainstreaming Indicators Adviser	Christopher Paterson	Australia	30/11/2009
Senior Administration and Travel Officer	Verenaisi Bakani	Fiji	18/05/2009

The following bullets briefly capture the key achievements by country:

❁ **Republic of Palau**

Palau National Water Policy and national coordination mechanism endorsed by His Excellency President Johnson Toribiong. Protection and Rehabilitation Ngerikiil Watershed including increase in land area rehabilitated, establishment of buffer zones, mitigation of pollution sources, and leveraging of financing for ongoing support of watershed conservation.

❁ **Fiji Islands**

An integrated early warning system; along with the establishment of 14 community-based disaster management committees (CDMC). 60 hectares has been rehabilitated with fruit trees and staple food trees – coconut and breadfruit trees. Light Detection and Ranging survey of Nadi and Ba catchments completed to provide topographic data for flood modelling.

❁ **Federated States of Micronesia (FSM)**

Secured a Joint Resolution of President and State Governors endorsing the First Framework for a National Water and Sanitation Policy for the Federated States of Micronesia. Establishment and operation of a National Water Task Force that included representation of all States. Protection and Rehabilitation of Riparian Zone of Main Supply at the Nett Watershed.

❁ **Republic of Nauru**

Establishment of a cross-sectoral APEX body with broad representation from CSO, commerce, community, government; and supported by divisional leader meetings. Provide access to improved, environmentally sustainable sanitation by upgrading sanitation at forty domestic locations and several schools. This included the trialling of compost toilets. Establishment of a national water and sanitation policy with core national budget support; and mainstreaming IWRM and water and sanitation solutions demonstrated through this project.

❁ **Republic of the Marshall Islands (RMI)**

Establishment and operation of the national IWRM Task Force as RMI's APEX body for the coordination and planning of water and sanitation investments and actions; strengthened community engagement with national government on water and sanitation issues via the establishment and operation of the Laura Lens Committee. Reduced stress on the Laura water lens by development and operation of septic remediation programme, pilot ECOSAN, and conversion of piggeries from wash down waste disposal systems to dry litter systems

❁ **Samoa**

Securing land from the Catholic Land subdivision for water resources protection. Government buy-in to a proposal to take subdivision land valued at 50 million Tala as deemed priority land for water resources. Watershed Management Plans (WMP) finalised for 3 of the 4 (sub)catchments in the Apia Catchment. A key feature of the WMPs is the definition of buffer zones and natural reserves. The project has also legally defined buffer zones as 20m from the bank of the river or 20 m from the top of a steep slope where a river flows. IWRM developed policy to reserve the upland of the country for the specific purpose of water resources conservation. Up to 300 m from sea level is encouraged to be developed; 300 – 600 m will be classified as restricted developments; and 600m upward is classified as exclusion zones where no developments are allowed.

❁ **Tonga**

Installation of 10 secondary treatment systems for household sanitation systems. Leak assessment of Nieafu town supply, which identified 70% losses in the system. Assessment of sustainable yield in Nieafu aquifer.

❁ **Niue**

Enactment of the Niue Water Act, providing a framework for water allocation and water resource protection and management. Implementing the national and village Drinking Water Safety Plans to provide safe drinking water to all central areas in Niue. On-the-ground works to

improve Niue's water security, reducing water loss through leakage reduction and increasing water storage (including the doubling of storage).

Solomon Islands

Water use efficiency and water demand management in the Honiara water supply has been progressed with IWRM working with the water provider (SIWA) to implement WUE/WDM at one of its highest leakage zones in Honiara, namely Mbokonavera 1-4 residential area. Two night flow step tests confirmed very high leakages in both distribution and service lines within the zones under consideration. Out of 8 zones that were isolated with valves, three priority areas have leakages of more than 100 litres per minute.

Tuvalu

Project target of the construction of 40 compost toilets completed (see Paper SOPAC-2/3.2.2 for more details highlighting this success story). The Tuvaluan community, Government and politicians were also successfully engaged for the uptake of compost toilets. It is now seen as the preferred sanitation option. Successful designing and replicating across four countries a sanitation solution appropriate for SIDS, using local expertise to adapt existing international technologies. The IWRM concept mainstreamed into Tuvalu through the development of a national policy and a national indicator framework.

Vanuatu

Sarakata Basin Flood Hazard Map has been completed to inform the Sarakata Basin Flood Management Plan. A milestone in stakeholder cooperation was achieved through the signing by the Directors of agencies and NGOs of an MOU agreeing to the prioritisation and coordination of collaborative contributions to the sustainable development and management of the Sarakata Catchment. Compost toilets piloted in Pepsi and Solway; known to have very shallow water tables. 62.5 hectares of land procured by the Government and a protection zone established with a further 1000 hectares of upland catchment area being mapped for conservation and protection.

Regional Project

-  "*From Community to Cabinet*" is a Pacific IWRM Project slogan and GEF Secretariat released a booklet at the World Water Forum with that very title which features some of the GEF Pacific IWRM National Projects.
-  The video-based capacity and awareness development and monitoring programme for Demonstration Project Staff continued at each RSC with several Demonstration Project Documentary Videos being completed and released including:
 - Regional Video "IWRM, The Pacific Way" presented at the 6th GEF International Waters Conference.
 - Nauru – "Delivering IWRM Results in the Small Island Developing State of Nauru"
 - Tonga – "Preserve Water, Preserve Life"
 - Cook Islands – "Protecting Muri Lagoon"
 - Tuvalu – "Falevatie: a toilet for our future"
-  10 of the 12 Demonstration Project Managers, 4 out of the 5 Project Assistants and 10 out of 13 Country IWRM Focal Points have been retained through year three of the project providing excellent project management continuity. One of the resignations was to take up a scholarship to complete a Masters in IWRM.
-  Demonstration Project monitoring and reporting continues to achieve a high level of compliance with quarterly and annual reports being endorsed by Project Steering Committees and meeting agreed reporting deadlines. Audits of the Project for 2011 returned an unqualified report.

- Project expenditure remains on target at both national and regional levels having reached 70% at 3.5 years into the project's 5-year life. The project has developed a comprehensive project indicator framework to enable National Demonstration Projects to be monitored against their targets and these are summed up regionally to provide an assessment of progress both for implementation and outcomes. Expenditure should be related directly to activities but outcomes should lag behind these as impacts take time. The summary of results as at end June 2012 are presented below:

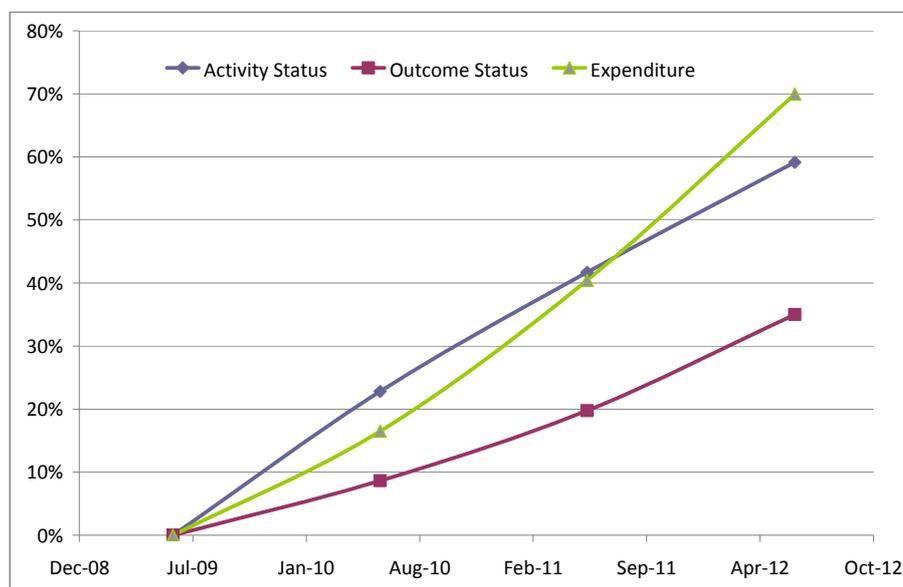


Figure 3: Summary of GEF PACIFIC IWRM Project Results as at end of June 2012

GEF Pacific IWRM Summary of Inputs (Expenditure and Activities) compared to Outcomes (Project Target Indicators) Achieved

- Significant on-ground progress is being made and these can be viewed in more detail on the Project web page at www.pacific-iwrm.org/results/. These are also featured on the GEF website at www.thegef.org/gef/IWRM_result_notes.
- South-South knowledge exchange was fostered between the Caribbean IWCAM and the Pacific IWRM through the participation of the PCU in the terminal Steering Committee meeting of IWCAM.
- The Project's focus on supporting sub-regional approaches continued with attendance at both Micronesian Chief Executives Summit and Melanesian Spearhead Group (MSG) meeting and through provision of secretarial services for the sub-regional WatSan Committees.
- Significant twinning was achieved by the project between Tuvalu, Tonga, Nauru and Marshall Islands on EcoSan.

2. Water Services

The drinking water supply and sanitation services component of WSP includes building capacity for: (i) drinking water quality monitoring; (ii) drinking water safety planning; (iii) improving water demand management; and (iv) the use of appropriate technologies and approaches for domestic water supply and sanitation issues through awareness raising, demonstrating best practices and advocacy. These activities are integral in supporting member countries with the provision of water and sanitation services.

The water services programme was without a Water Services Coordinator for 7 months (December 2011 – July 2012) following the departure of Tasleem Hasan. The new Coordinator, Kamal Khatri,

was successfully recruited into the role in August 2012 and has since commenced work. The absence of a team leader resulted in the maintaining only of the essential core services. Additionally, Jeremy Kohlitz, a Peace Corp volunteer with the programme completed his term in August.

In the reporting period, staffing of the Water Services team was as follows:

Position	Name	Nationality	Appointment Date
Water Services Coordinator	Tasleem Hasan (resigned December 2011)	Fiji	01/08/2009
Water Services Coordinator	Kamal Khatri (started August 2012)	Fiji	01/08/12
Wastewater Officer	Rodney Lui	Fiji	18/04/2011
WASH Officer	Iva Bakaniceva	Fiji	29/09/2008
Project Assistant	Arun Chand	Fiji	01/02/2010
WASH Peace Corps Volunteer attachment (Resigned)	Jeremy Kohlitz	USA	02/03/2011

The key outcomes of the Water and Sanitation Services activities are presented below. One of the key outcomes for the services programme has been the development, endorsement and release of the Rural Water & Sanitation Policy and implementation guidelines for Fiji Islands, which builds strongly on links to the Drinking Water Safety Planning initiatives for Fiji. The high-level endorsement of the policy is a direct impact of country commitment to safeguarding rural drinking water supplies.

2.1 Water Quality Monitoring (WQM)

The aim of the WQM activity is to build sustainable capacity of national laboratories for testing water quality (drinking and/or coastal waters).

The following major outcomes were achieved for WQM in the reporting period:

- ❁ Support was provided to the Republic of Marshall Islands in the analysis of the groundwater quality in Majuro through sampling and testing for the Majuro Water and Sewerage Corporation supply and selected monitoring bores in Laura.
- ❁ Worked closely with the WHO South Pacific Office and in-country counterparts in Vanuatu to develop national drinking water quality standards. Some scoping work was also done for the Cook Islands.
- ❁ Survey completed on the use and microbiological performance of water filters distributed in Fiji and the findings provided to the Ministry of Health.
- ❁ Best water testing practices promoted and shared regionally through the coordination of the Pacific water quality focal group.

2.2 Drinking Water Safety Planning (DWSP)

Drinking water safety planning (DWSP) is a risk management approach to ensuring the safe quality of drinking water from the catchment to the consumer.

DWSP success in Fiji

The Water and Sewerage Department in Fiji spearheaded consultations on their rural water supply and sanitation policy which came into effect in 2012. The Pacific Framework for Drinking Water and Health provides the appropriate guidance on the risk management approach toward water quality assessment.

The concept of drinking water safety planning is embedded in development of the village supply management plans. The aim being to ensure rural communities receive consistent safe drinking water supplies through use of these plans with appropriate technologies.

The DWSP activity is delivered in partnership with the WHO. The following are the major outcomes for the reporting period:

- ❁ Development of regional water safety planning concept and proposals.
- ❁ Completion of drinking water safety planning audit guide after field testing.
- ❁ Assistance was provided to Fiji in developing a water safety planning national strategy for rural and maritime water supplies. Capacity building and training provided through a water quality training package delivered in Tonga.

2.3 Water Demand Management (WDM)

The aim of the WDM activity is to build the capacity of country water utilities in water demand management practices.

The following major outcomes were achieved in the reporting period:

- ❁ Water use efficiency desktop review completed linked to the IWRM programme.
- ❁ Technical input provided into understanding performance of water utilities in the Pacific through benchmarking in partnership with the Pacific Water and Wastes Association and the Pacific Infrastructure Advisory Council.

2.4 Water, Sanitation and Hygiene (WASH)

The aim of the WASH activity is to support member countries with advice and resources on the use of appropriate technologies and approaches for domestic water supply issues through awareness raising, demonstrating best practices and advocacy.

The following major outcomes were achieved:

- ❁ Information and awareness on WASH disseminated regionally through World Water Day 2012 celebrations and development of related resource materials; and coordination of the Pacific hand washing campaign.
- ❁ Coordination of the Pacific WASH Coalition. Partners in the Pacific Coalition include regional and international organisations, regional tertiary institutions and local and regional NGOs.
- ❁ Global hand washing activities held in Tonga, Tuvalu, Vanuatu and Niue.
- ❁ Technical support provided to WASH Cluster under the Pacific Humanitarian Team structure to ensure appropriate WASH response in emergencies, like that experienced in the January and March 2012 flooding events in Fiji.

World Water Day 2012

SPC-SOPAC coordinated the World Water Day (WWD) celebrations nationally in Fiji and regionally through provision of Pacific relevant resource and awareness materials, with the theme "Water security is food security"

Below is one of the resource stickers produced for WWD 2012.



2.5 Wastewater

The aim of the Wastewater activity is to support member countries with advice and resources on the use of appropriate technologies and approaches for sanitation issues through awareness raising, demonstrating best practices and advocacy. The wastewater activity is being delivered separately with one dedicated staff:

The major outcomes of the wastewater activity include:

- ❁ Completion of a composting toilet inventory. Inventory was designed and populated for the Pacific with assistance from the Pacific WASH Coalition partners.
- ❁ Water services programme support in proposal design and development.
- ❁ Community-based water quality and drinking water safety planning training delivered in Tuvalu as a national-level Training of Trainers package.

2.6 Appropriate Technologies

- ❁ An evaluation report on the “Give Clean Water filter use in Fiji” initiative finalised and provided to the Fiji Government; and presented to the Pacific WASH Coalition members.
- ❁ Technical input and advice provided to the Pacific WASH Coalition on the development of PHAST/CLTS and Sanitation Marketing resources for Pacific island countries.

The Water Services unit has also been actively involved in proposal development alongside other WSP units, other SOPAC Division programmes, Member countries and partners. This constitutes a major preoccupation of the SOPAC Division technical work programmes, among which is the WSP.

3. Water Governance

3.1. The IWRM Planning Programme

In accordance with its agreed schedule, the Pacific Integrated Water Resources Management Planning Programme formally concluded its four and a half years of operation on 30 June 2012. The project, funded by the European Union, provided support to 14 Pacific Island Countries (PIC's) to improve their water governance through the development of a range of IWRM frameworks and tools based on the individual circumstances and specific governance needs identified by countries.

Support included the development of policies, plans, strategies and legislation, as well as the facilitation of multi-stakeholder participation and empowerment; support for improved understanding and management of information needs; and support to water and sanitation apex bodies as a mechanism for national-level coordination. Support also included assistance to countries for the development of *National Outlooks for Water, Sanitation and Climate*.

The Programme was implemented in conjunction with the GEF-funded Pacific IWRM Project for the overlapping period of 2009-2012, and sought to incorporate the lessons learned from the GEF demonstration projects in order to feed into national IWRM governance processes and vice versa. Through collaboration and co-financing, the two programmes jointly supported the development of regional indicator frameworks, communication strategies and awareness activities, regional and national capacity building, knowledge exchange, as well as the coordination of joint programme activities across the Pacific.

Programme outputs of particular note in the reporting period include the following:

- Support to Fiji's Nadi Basin Catchment Committee in their undertaking of an IWRM Governance Review and Institutional Analysis.
- Development of Nauru's Government-endorsed National Water, Sanitation and Hygiene Policy and Implementation Plan.

- Support for the finalisation of Niue's Water Act.
- Development of a National Water Policy for Palau, and convening of the country's second National Water Summit.
- Development of Tuvalu's first National Water and Sanitation Policy, and convening of a national summit for water and sanitation.
- Assistance for the preparation of National Outlooks for Water, Sanitation and Climate for Palau, Federated States of Micronesia, Republic of the Marshall Islands, Niue, Tuvalu, (joining the draft outlooks already prepared by the Solomon Islands, Vanuatu, the Cook Islands, Nauru and the Government-endorsed outlook prepared by Tonga).
- Initiation of regional consultations on water, sanitation and climate.
- Country participation in an accredited Post Graduate Certificate in IWRM.

Closure and Ongoing Activities

While the Pacific IWRM Planning Programme has reached its formal closure date, a number of commitments were formalised before this to allow specific country and regional activities to be completed over the 2012-13 financial year. These activities include:

- progressing regional consultations on water and sanitation;
- finalisation of IWRM policy and planning work with countries that have made significant progress so far;
- specific technical assistance to the Solomon Islands and Tonga;
- policy support to the MSG;
- collation of project materials and lessons learned; and
- project reporting and auditing.

The funding for these activities was committed in full from project resources before its closure date of 30 June. Furthermore, SOPAC Division will continue its support for the on-line *Pacific IWRM Resource Centre* developed through the project. This continues to be an important knowledge-sharing tool for the region, meriting its maintenance and improvement into the future.

Status of Country-level Activities

The following table summarises the status of national-level activities being implemented with the support of the Programme, and activities that countries have committed to continue to finalisation in the 2012-13 financial year.

Status of national-level activities	Activities progressing to finalisation in 2012/13
Cook Islands <ul style="list-style-type: none"> • National Water Policy Officer support October 2010 to October 2011 • Development of Draft Water Policy • Preparation of National Outlook 	<ul style="list-style-type: none"> • Endorsement of Policy and TOR for National Water Committee • National engagement in Regional Consultations on Water, Sanitation and Climate
Fiji <ul style="list-style-type: none"> • Support to Government's development of water policy frameworks, including Draft National Water and Sanitation Policy, Groundwater Resources Exploitation and Management Policy, and Rural Water and Sanitation Policy and Guidelines • Completion of Institutional Analysis and IWRM Governance Review for Nadi Basin (pending finalisation of reports) 	<ul style="list-style-type: none"> • Potential Development of National Outlook • National engagement in Regional Consultations on Water, Sanitation and Climate • Finalisation of IWRM Review and progression of recommendations by NBCC
Federated States of Micronesia <ul style="list-style-type: none"> • National Water Policy Officer support February to December 2011 • Development of Draft Framework Water Resources Water Policy 	<ul style="list-style-type: none"> • Finalisation of National Outlook • Finalisation and endorsement of National Policy

Status of national-level activities	Activities progressing to finalisation in 2012/13
<ul style="list-style-type: none"> • Preparation of Draft National Outlook • Convening of National Water Summit and participation in sub-regional framework <p>Kiribati</p> <ul style="list-style-type: none"> • Development of National Sanitation Policy and Implementation Plan • Support for National Water Resources Policy and Implementation Plan • Support for development of South Tarawa Programme for Water, Sanitation and Solid Waste Management <p>Republic of the Marshall Islands</p> <ul style="list-style-type: none"> • National Water Policy Officer support March 2009 to February 2011 • Development of Draft National Water and Sanitation Policy • Preparation of Draft National Outlook • Convening of National Water Summit and participation in sub-regional framework <p>Nauru</p> <ul style="list-style-type: none"> • Development of National Water, Sanitation and Hygiene Policy and Implementation Plan • Preparation of National Outlook <p>Niue</p> <ul style="list-style-type: none"> • National Water Policy Officer support April 2009 to June 2012 • Development of National IWRM Policy • Preparation of National Outlook • Support for finalisation of <i>Water Act 2011</i> <p>Palau</p> <ul style="list-style-type: none"> • National Water Policy Officer support December 2010 to June 2012 • Development of National Water Policy • Preparation of National Outlook • Convening of National Water Summit and participation in sub-regional framework <p>Papua New Guinea</p> <ul style="list-style-type: none"> • Limited participation in activities at a regional level <p>Samoa</p> <ul style="list-style-type: none"> • Development of Water Sector Investment Plan • Development of National Water Allocation Policy and Implementation Plan <p>Solomon Islands</p> <ul style="list-style-type: none"> • Preparation of National Outlook • Recruitment of TA to support IWRM assessment and IWRM Plan <p>Tonga</p> <ul style="list-style-type: none"> • National Water Policy Officer support March 2009 to October 2011 • Preparation of government-endorsed National Outlook • Contract in place for TA to support development of Plan and Procedures for the Implementation of National Water Legislation <p>Tuvalu</p> <ul style="list-style-type: none"> • Preparation of National Outlook • Convening of National Water and Sanitation Forum • Development of National Water and Sanitation Policy 	<ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Potential Development of National Outlook • Publication of National Policy documents • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Finalisation and endorsement of National Policy • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Formal endorsement of Implementation Plan • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Potential development of National Outlook • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • IWRM Review and development of IWRM Plan (with TA) • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Finalisation of Implementation Plan and Regulations for national water legislation (with TA) • National engagement in Regional Consultations on Water, Sanitation and Climate <ul style="list-style-type: none"> • Government Endorsement of National Water Policy • Support for governance review of 2011 drought response

Status of national-level activities	Activities progressing to finalisation in 2012/13
<p>Vanuatu</p> <ul style="list-style-type: none"> • Preparation of National Outlook • Completion of WATSAN institutional review and IWRM assessment • Review of national IWRM consultation mechanisms 	<ul style="list-style-type: none"> • National engagement in Regional Consultations on Water, Sanitation and Climate • National engagement in Regional Consultations on Water, Sanitation and Climate

4. WSP Management

4.1 *Coordination of Regional Collaboration and Knowledge Sharing*

There has been continued effort on sharing of practical knowledge which is key to improved water governance. These are made available through the programme's on-line **Pacific IWRM Resource Centre**, and efforts were undertaken in 2012 to strengthen this facility further, and this will continue into the 2013 work programme as well.

Awareness of water and sanitation issues was further enhanced in the last year by a significant effort in the development of print, audio and visual products, and in the collaborative preparation of country-specific communications strategies, media material and documentaries. Together, these products continue to form a key part of the programme's regional efforts to engage politicians, media and community.