AGENDA ITEM | TITLE
---|---
2 | FORMAL REPORTING
2.1 | Introduction and Director's Report
2.1.3 | Water and Sanitation Programme 2012/2013 Report

PURPOSE
The purpose of this report is to provide the delegates to the third meeting of the SOPAC division with a detailed account of the implementation of the Water and Sanitation Programme (WSP) 2013 Work Plan during the period from October 2012 to August 2013.

All of the work carried out in the last reporting period has been provided in this full narrative report, however there were unplanned requests for support which were also supported during the course of the year and these areas have been indicated with an asterisk (*).

BACKGROUND
1. Water and Sanitation Programme approach
The SPC-SOPAC 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 Pacific Island Countries and Territories (PICTs) and the Millennium Development Goals (MDGs). The Programme also operates under the internationally recognised 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 work 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.

2. The Water and Sanitation Programme (WSP)
The current SOPAC Divisional Strategic Plan 2011-2015 currently midway through its cycle, takes into consideration the above mentioned approach and principles for the WSP and provides the strategic direction for our technical support to PICTs through capacity building, awareness and advocacy in the following areas:

**Water Resources**
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, drinking water safety planning, improving water demand management and promotion of rainwater harvesting. Under the general Water Supply, Sanitation and Hygiene (WASH) sub-component, the use of appropriate technologies and approaches for domestic water supply and sanitation issues is being promoted through awareness raising, demonstrating best practice and advocacy. This includes the mainstreaming of gender

**Some Key Highlights for 2012/2013**
- Assesing Vulnerability and Adaptation to Sea Level Rise, Lifuka, Ha’apai, Tonga from a water resources perspective
- Water Resource Assessments in the outer islands of Kiribati (KIRIWATSAN) Phase 1
- Ecosanitation Toilets in Tuvalu, a continuing success story
- Samoa Catchment Management Plans in the Vaisigano
- In-design a GEF Multi-Focal Area Programme based on a Ridge to Reef Approach for the Pacific
- Community Based Water Safety Planning in Fiji
- Strong Pacific presence at the 2nd Asia Pacific Water Summit in Chiang Mai, May 2013
- Regional Water and Sanitation Consultations continue in conjunction with the Joint Meeting of the Pacific Platform for Disaster Risk Management & the Pacific Climate Change Roundtable 1-3 and 8-11 July 2013
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 (PHT) and WASH Cluster process as well.

### Water Governance

Water Governance covers governance, awareness and advocacy and pulls together a number of different areas which together contribute to improved 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; 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 including support towards the Pacific Partnership Initiative on Sustainable Water Management which involves national stakeholders and external support agencies in the region and is currently being revisited.

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” being executed by SOPAC and implemented by UNDP and UNEP for 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 and is in its final year of implementation.

### 2. WSP Structure

The three WSP programme components and four technical teams each have a ‘Team Leader’ that report 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; this includes monitoring that the goal and agreed outcomes of the Water and Sanitation Programme are effectively achieved. The DD WSP is also responsible for developing and maintaining a range of strategic alliances with development partners through the various networks as well as contributing to the successful implementation of the SOPAC Division Strategic Plan and the SPC Corporate Plan through specific technical and policy support.

The functional teams are:

1. Water Resources Management, complemented by a cross cutting programme for
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: Overview of the Water and Sanitation Programme (WSP)**

**WORK PLAN IMPLEMENTATION – SUMMARY OF KEY ACHIEVEMENTS BY WORK AREAS**

**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. Additionally, Amini Loco was recruited as a Senior Hydrologist in the KIRIWATSAN Project and further details of this work are elaborated on below.
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. Some of the more specific work undertaken through the various projects is outlined below.

The Island Vulnerability and Adaptation to Sea-Level Rise Project on Lifuka Island, Ha‘apai, Tonga, commenced in September 2011 and is to be completed by September 2013. This work is being delivered in partnership with the Ocean and Islands Programme (OIP) and Human Development Programme (HDP) of SPC. The water resources component included mapping of the groundwater using geophysics and existing monitoring bores to delineate areas of the freshwater lens, which will be impacted from modelled seawater inundation. Mitigation options for protection of the groundwater and improved rainwater harvesting potential were identified and the results have been presented back to the community through a field day workshop in Lifuka and then at a series of workshops in Tongatapu with government and community stakeholders during the course of the year. More detailed information of this project has been featured separately as a highlight story.

A second project entitled Water Resource Assessments in the Outer Islands of Kiribati (KIRIWATSAN) commenced in August 2012 funded by the EU under the 10th EDF and implemented through UNICEF. Amini Loco was recruited to the country-based position of Senior Hydrogeologist in February 2013 and is responsible for the day-to-day operation of the project and undertaking the water resource assessments in 35 villages across 8 islands. The field assessments will be completed by December 2013. This work is undertaken in collaboration with UNICEF who are conducting the community engagement component and responsible for the overall project management of Phase I. In connection with this work, additional project documentation was also scoped up and submitted to the EU during the early part of 2013 for phase II of the KIRIWATSAN Project focused on implementation of improved rainwater, groundwater and sanitation infrastructure. This proposal is currently in the pipeline for approval having cleared the Quality Support Group (GSQ) process with associated funding of €3.3 and a final official decision on this should be known by December 2013.

Recruitment issues continue to affect the EU ACP Research grant project “Impact on a freshwater lens in atoll environments under different climate and abstraction scenarios” resulting in a delay of implementation by 12 months. Action has been taken to help fast track and secure a suitable applicant for the position, and the EU have been informed of the delays. Efforts are being made to progress this project and to minimise future delays.

The Bonriki water reserve in Tarawa, Kiribati, provides drinking and domestic water needs for 67% of the South Tarawa 50,000 population. At the request of Australia’s Department of Climate Change and Energy Efficiency (DCCEE) Pacific Australia Climate Change Science and Adaptation Planning Programme (PACCSAP) and in collaboration with SPCs Ocean and Islands Programme (OIP) a project was developed to investigate the potential threat of wave overtopping and seawater inundation into the Bonriki water reserve and the resulting impact on the underlying freshwater lens. The project commenced in May 2013 and field work is currently underway including groundwater monitoring and elevation surveys. A consultant hydrogeologist and groundwater modeller will commence in September 2013 to assist in the development of the groundwater model. The project is due for completion in May 2015.

* A sudden failure of town water supply bores at Qarawalu, Taveuni, in August 2013, and at the request of Fiji’s Mineral Resources Department, the SOPAC water resources unit provided rapid deployment of staff and resistivity equipment to undertake geophysical survey work. The equipment and staff were used to locate potential drilling sites for the replacement of the collapsed town water supply bore in Taveuni.

**Post Disaster Needs Assessments**

The northern islands of the Republic of Marshall Islands suffered a drought during the early part of 2013 resulting in a state of emergency being declared by the Government of Republic of the Marshall Islands in April 2013. The water resources unit provided significant technical support to the UN relief agencies coordination efforts and SPC’s drought assessment mission to Mejit and Utrik by Land Resources Division’s Mereseini Senioli. This support was also extended to the many coordination efforts nationally and regionally such as those of the National Disaster Committee, the Pacific Humanitarian Team (PHT) and the Pacific Water, Sanitation and Hygiene (WASH) Cluster as well.

From 9 to 20 January 2013, WSP also joined the Disaster Reduction Programme (DRP) in supporting Samoa’s assessment of damage and loss and preparation of a Post Disaster Needs Assessment (PDNA) for the impacts of Cyclone Evan. Input was provided into post-cyclone technical reporting and support to the Ministry of Natural Resources and Environment in developing a hydrological study proposal in response to this event. The PDNA outlines recovery priorities from the Government of Samoa, building on the Damage and Loss Assessment undertaken, and providing an avenue to embed Disaster Risk Reduction (DRR) considerations into the recovery process. The WSP assistance to the Ministry’s Water Resources Division has included drafting a Terms of Reference for support for a hydrological study for the Vaisigano catchment, which was badly hit by flooding during the cyclone as well as inputs to the PDNA itself.

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![Figure 3: Impacts from flooding resulting from TC Evan in the Apia catchment, Samoa, in January 2013.](image-url)
HIGHLIGHTS FOR THIS WORK PROGRAMME AREA FOLLOW:

Assessing Vulnerability and Adaptation to Sea Level Rise, Lifuka, Ha'apai, Tonga: A Water Resources perspective

In May 2006, Lifuka Island in the Ha'apai Group, Tonga, experienced an earthquake that generated 23 cm of subsidence. Furthermore, in the past seven years, the island has continued to experience significant coastal erosion and impacts to infrastructure due to inundation as well. In light of this and also considering potential future scenarios such as increased wave impacts, changing rainfall patterns leading to further erosion, inundation and increased threats and demands to groundwater resources, it was recognised that there was a need to support informed and responsive adaptation measures that address these challenges into the future.

With support provided through AusAID funding under the Pacific Australia Climate Change Science and Adaptation Planning Program (PACCSAP), SPC in collaboration with the Government of Tonga developed and implemented a multi-disciplinary assessment approach to better characterise these vulnerabilities and impacts with a view to developing solutions and adaptation responses for community consideration and action.

As an initial part of this work, SPC modelled the potential inundation in Lifuka from storm surge and run-up associated with a severe (1 in a 100 year) tropical cyclone event. Coupled with projected scenarios for sea level rise and rainfall, it was found that seawater inundation of up to 5 m above today’s mean sea level might be expected. This would potentially impact 79% of existing infrastructure and homes, as well as the groundwater resources. The results of the model, together with the implications for possible adaptation options such as seawall revetments, elevated houses, and relocation of infrastructure to higher ground were presented to the community along with the associated benefits and costs for each option.

While the models clearly demonstrate the threat to infrastructure such as homes in their present location and the need for relocation of infrastructure to higher ground to provide longer term security, it was equally clear that the community representatives were divided in their support for relocation as an option as well. Many community members were in favour of alternative options such as coastal protection (revetments) which offered some mitigation in the short term whilst allowing more time to reflect on the difficult issue of relocation.

On the matter of water resources in particular, assessments indicated that although 92% of households relied on and preferred rainwater for their drinking water, groundwater still appeared to account for 80% of all water needs and is currently provided by the Tonga Water Board through a reticulated system as well as through individual and communal wells.

Results from the groundwater assessments confirmed that the fresh groundwater appeared for the most part to be restricted to the unconsolidated sand sediments of the western coastal fringe underlying the villages of Koulo, Holopeka, Pangai and Hihifo. In terms of sanitation it was found that unsealed or bottomless septic tanks, a large proportion of domestic pigs and dogs and the lack of protection of the area immediately surrounding the public water supplies were the main causes of contamination of the groundwater.

Based on all the work conducted, a “no regrets” approach to climate adaptation with respect to the water resources has been identified for Lifuka. This recognises the value of activities such as:

- Improving rainwater harvesting collection and storage
- Protecting groundwater resources with setback zones and bunding around pumping stations
- Introducing adaptive pumping strategies based on salinity of groundwater from the different town water supply wells


- Reducing water losses from the water supply system
- Investigating supplementary water supplies from outside the potential inundation area
- Improving monitoring of the water quality

Combined, these activities can assist to improve availability and protection to fresh groundwater supplies and provide greater consistency in the quality of groundwater supplied to the residents of Lifuka.

The multi-disciplinary approach used in the Lifuka project provided both opportunities and challenges for collaboration between the disciplines. It is recognised however that strong project management and a project structure that promotes interaction between the disciplines is necessary for effective collaboration between researchers and the community alike.

Water Resource Assessments in the outer islands of Kiribati (KIRIWATSAN) Phase 1

Water resource assessment work is being undertaken across 8 islands and 35 villages within the Gilbert Group of islands of Kiribati. As part of this work groundwater resources are being mapped, rainwater harvesting potential is being identified, and the impacts from inappropriate sanitation practices are being recognised. It is intended that the detailed information resulting from these assessments will be used to provide some preliminary designs to implement improvements for water supply and sanitation during a second phase of the project tentatively scheduled to commence at some point towards the end of 2014 or even early into 2015.

Lessons learnt from past projects have been many and some of these are shared below:

- Issues with sustainability of water supply systems by isolated communities requiring expensive repairs or specific skills
- Recommendations of infrastructure solutions that involve multiple land areas and landowners and/or changes in traditional land use practices

In acknowledging these issues and recognising that although there are short-term efficiency benefits to the community from such solutions, the long-term end results are often unsustainable or unsupported water supply and sanitation systems.

Therefore, the assessment work being undertaken by SPC through the KIRIWATSAN Project has been designed to link with accepted practices and financial sustainability by households living in a cash poor society. Working within the constraints of land boundaries, sites for water supply systems ranging from improved household wells to communal water supplies are identified and presented to the community to jointly determine what type of improvements best match their situation with regard to social, economic and environmental considerations. Similarly, a combined approach of understanding the impacts to water quality from existing land use and sanitation practices, and identifying the best location and types of technologies available, will help inform the behavioural change process required to improve sanitation practices.

In order to deliver this work SPC in conjunction with UNICEF have established a KIRIWATSAN Project team based in Tarawa to implement the various components of Phase 1 of the project. Whilst there are additional complexities in supporting a small team in Kiribati the benefits of having this dedicated team to be able to respond to country needs, to resolve issues, provide accountability, and ensure ongoing progress and commitment is invaluable. UNICEF, the project lead, have focussed on awareness and the Community Lead Total Sanitation (CLTS) approach to improved sanitation, promoting hand washing practices and the adoption of Open
Deforestation Free communities. SPC are responsible for the water resource assessments and additional technical support to the project.

The outputs from the water resource assessments include technical reports and large scale maps, detailed preliminary designs for improved water supplies, a web-based Water, Sanitation and Hygiene (WASH) information database along with the training of government counterpart staff in water resource assessment, analysis and reporting. This foundational work under Phase 1 of the project has assisted the Government of Kiribati and SPC in being successful through the first stages of securing further funding from the European Union for Phase II which seeks to continue with the good work as well as implementation of infrastructure for water and sanitation improvements.

![Image: Water Resource Management](image1)

**Figure 4: KRITWATSAN Water Resource team member Martin Malia and Ministry of Public Works and Utilities (MPWU) staff member undertaking geophysical surveys for groundwater mapping.**

**SUPPORT TO PACIFIC WATER, SANITATION AND CLIMATE INITIATIVES FOLLOW:**

The WSP have continued to provide technical support to a range of climate change related activities both internally within the SPC as well as externally to other projects and partners over the course of the last work plan year. This has included specific inputs in the following areas:

- The second Regional Water and Sanitation Consultations (RWSC) were held from 1 to 3 July 2013 preceding the Joint Meeting of the Pacific Platform for Disaster Risk Management and the Climate Change Roundtable held from 8 to 11 July 2013. There is an on-going thread of climate considerations within the RWSC process to contextually the sector into the future in the development of a Regional Framework for Water, Sanitation and Climate as well as the National Water, Sanitation and Climate Outlooks for the next few years. This work will also position the sector well with respect to the post-2015 Integrated Strategy for Disaster Risk Management and Climate Change. Also, given the importance of water security in adapting to climate variability and change as well as disaster response and risk management.

- The WSP were requested to support the implementation of a water security project in Funafuti, Tuvalu valued at AUD1M. This was a result of discussions which were initiated in the latter part of 2012 with the Government of Tuvalu and AusAID through its International Climate Change Adaptation Initiative (ICCAI) funding mechanism. This work is currently being scoped up in more detail before in-country activities are implemented, which include a stocktake to capture current water infrastructure information to better inform investments as well as some targeted Water, Sanitation and Hygiene (WASH) training. The stocktake is planned to take place before the end of 2013 with the majority of the rest of the work being implemented in 2014. The project is scheduled to conclude in June 2015.

- Other ICCAI-funded water and sanitation related work under the Multi-Country Agreement between AusAID and SPC continue namely the project entitled “Strengthening the capacity of Tokelau to effectively manage freshwater resources for enhanced water security” valued at AUD194,740 and in Tonga on “Building climate resilience of coastal communities in Vava’u, Tonga, valued at AUD750,000. This work has been presented in other sections of this report in more detail and is scheduled for completion in June 2014.

- The work undertaken as part of the Pilot Programme for Climate Resilience (PPCR) Project targeting Climate Investment Funds (CIF) has been ongoing in 2013 as part of the Pacific Regional Strategic Program for Climate Resilience (SPCR). Work this year has primarily focussed on securing the design funds and technical experts to develop the full design documentation for submission towards the end of the year for consideration and final approval for implementation. The proposal suggests utilising local and regional climate knowledge by the Pacific island countries, contributing to climate resilience and risk management considerations being more effectively integrated into decision making in the area of water and sanitation, land management, coastal management and fisheries.

- The need for a programme to address water security in drought-prone countries became clear during the 2011 droughts which affected Tuvalu, Tokelau and the Cooks Islands. In response the WSP put together a concept entitled “Strengthening the Water Security of Vulnerable Island States”, which was flagged with NZAID following the 2011 CRGA where New Zealand expressed an interest in supporting this area. These discussions have been ongoing with NZAID with more prominence given to the issue again during the severe drought event experienced in the Marshall Islands in early 2013. We are currently working on a final official decision on this initiative which we expect to hear before the end of the third quarter of this year. If approved the project will require full scoping works in the beneficiary countries (Cook Islands Kiribati, Marshall Islands, Tokelau and Tuvalu) before implementation begins, which will likely be early 2014.

- Ongoing collaboration with the SPC/GIZ Coping with Climate Change in the Pacific Island Region (CCCCPIR) Programme has resulted in resourcing being provided to the WSP through the GIZ Development Worker Programme. Dr Christian Staerz has been selected under a recruitment process and will start work with the WSP in September 2013 supporting a range of work areas including making the connections between the WSP and projects to the various climate change initiatives, supporting IWRM implementation, water quality monitoring and knowledge and information management and transfer.

- There has been an on-going collaboration with the EU-funded Global Climate Change Alliance Pacific Small Island States (GCCA PSIS) Project particularly for countries, which identified water and sanitation as priority areas. Specifically, remote technical assistance has been provided to the Nauru and Palau projects in terms of providing inputs to the Terms of References for work being undertaken, project designs and the provision of information, education and communication materials where possible.

- There have been many internal climate change related activities as well which have featured in the 2013 work plan. Of note is the work towards developing a Multi Sector Vulnerability and Adaptation (V & A) tool which can be used across various SPC programmes in the initial stages of their engagement and planning of activities with countries. There was also other internal SPC Climate change work that has also featured in the 2013 work plan.
such as on-going inputs to the SPC Climate Change Focal Point network (SPC CC FP Meeting January 2013, SIS and SPC Membership CC matrix etc.). This work will continue as an ongoing requirement of the WSP work moving forward, given the centrality of water and sanitation to climate change and disaster risk management.

*There are also other climate change related work, which the WSP is involved with externally. These include sectoral inputs to the recent AusAID review of its climate change and disaster risk management programmes. Through the GEF funded Pacific IWRM Project there has been ongoing collaboration with the Secretariat of the Pacific Regional Environment Programme (SPREP)’s Pacific Adaptation to Climate Change (PACC) programme in the delivery of the various national projects. The WSP has also provided inputs and technical support to the PACC plus Projects more recently in Kiribati in terms of the water and sanitation V & A surveys and use of IEC material as well as in Tokelau with the WASH Training of Trainers for atoll community members who have benefited from PACC support to rainwater harvesting infrastructure. This work will likely continue into the forthcoming work plan year where possible.

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 is currently in the process of identifying ways to better engage with other national and regional adaptation efforts.

2. Integrated Water Resources and Wastewater Management Demonstration

The IWRM Programme provides a cross-sectoral, multi-level approach to water resources management whilst also offering an entry point to addressing other inter-related sectors such as health, land and coastal zone management and climate impacts. The Global Environmental Facility (GEF)-funded “Sustainable Integrated Water Resources and Wastewater Management Project in Pacific Island Countries”(GEF Pacific IWRM Project) and IWRM national planning support under the Water Governance Component of WSP make up the Pacific IWRM Programme. The GEF Pacific IWRM Project is being executed by the SOPAC Division 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 USD9M and approximately US$83 million in co-financing, implemented over the period 2009 to 2013. The Project comprises 4 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 M & E 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 Area 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                | Ngerikil Watershed Restoration for the Improvement of Water Quality |
|                                 | Samoa                | Rehabilitation and Sustainable Management of Apia Catchment |
|                                 | Vanuatu              | Sustainable Management of Sarakata Watershed   |
|                                 | 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 & Protection | 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 |
|                                 | 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. In December 2012 the Projects Environmental Engineer resigned to take up a significantly higher paying position with the UN. The Project has been unable to attract any suitable applicants for the position and has as a result been struggling under the additional load plus the work required to prepare project designs for another round of GEF Funding.
At present a total of 3 fulltime staff are currently contracted as follows:

<table>
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<tr>
<th>Position</th>
<th>Name</th>
<th>Nationality</th>
<th>Appointment Date</th>
</tr>
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<tbody>
<tr>
<td>Regional Project Manager</td>
<td>Marc Wilson</td>
<td>Australia</td>
<td>05/01/2009</td>
</tr>
<tr>
<td>Mainstreaming Indicators Adviser</td>
<td>Christopher Paterson</td>
<td>Australia</td>
<td>30/11/2009</td>
</tr>
<tr>
<td>Senior Administration and Travel Officer</td>
<td>Verenaishi Bakani</td>
<td>Fiji</td>
<td>18/05/2009</td>
</tr>
</tbody>
</table>

The following bullets capture the key achievements of countries in brief:

**Republic of Palau**

His Excellency President Johnson Toribiong endorsed the Palau National Water Policy and national coordination mechanism, a significant achievement in progressing national water governance aspirations. There was also protection and rehabilitation of the Ngerikiil watershed which signified an increase an overall land area rehabilitated. As part of this effort buffer zones were established and pollution sources were also mitigated. There was also leveraging of financing for ongoing support to watershed conservation and strengthening of routine river monitoring. A baseline sanitation and pollutant survey at the Ngerikiil River covering ridge to the Airai Bay was undertaken and an increased and regular community outreach programme supported the adoption of Ngerikiil Watershed management plan with Airai state government funding ~US$250,000 for implementation and remediation of pollutant sources.

**Fiji Islands**

An integrated early warning system along with the establishment of 14 community-based disaster management committees (CDMC) have been installed. 60 hectares have been rehabilitated with fruit trees and staple food trees – 1800 coconut and 554 breadfruit trees and land management practices established and trialled with landowners to reduce runoff and sediment load. Light Detection and Ranging (LiDAR) survey of Nadi and Ba catchments are completed to provide topographic data for flood modelling. Flood inundation modelling is currently under development and is to be completed in 2013. The project has successfully established a total of 21 Community-based Disaster Management Committees (CDMC) trained in planning Disaster Risk Reduction (DRR) action, the role and responsibility of a CDMC, vulnerability capability assessment tools, mapping skills, Community Disaster Response (CDR) planning and implementing a simulation exercise to test out the CDR Plan developed by each community.

**Federated States of Micronesia (FSM)**

A Joint Resolution of the President and State Governors has been secured endorsing the first Framework National Water and Sanitation Policy for the Federated States of Micronesia. A National Water Task Force including representation of all States has been established and is now operational. There has also been protection and rehabilitation of riparian zones of the main supply in Nett Watershed. A baseline sanitation and pollutant assessment of 3 major river systems in Nett has been undertaken and routine monitoring has been strengthened. This has led to the establishment of watershed protection boundaries for sustainable management of 1,700 hectares of Nett Watershed in Pohnpei and 40 active sakau farmers have now adopted low-grow techniques, which has contributed to 70 percent reduction in upland forest clearings.

**Republic of Nauru**

A cross-sectoral APEX body with broad Civil Society Organisations (CSOs), commerce, community and government membership, supported by divisional leader meetings has been established. The upgrading of sanitation at 40 domestic locations and several schools to provide safe access to improved, environmentally sustainable sanitation including trialling of compost toilets has been carried out. The establishment of a national water and sanitation policy with core national budget support has been secured including the mainstreaming of IWRM and water and sanitation solutions as demonstrated through this project. The formation of the Nauru Community Based Organization (NCBO) that coordinates Community Outreach Programs for awareness raising activities has been achieved.

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

A National IWRM Task Force as RMI’s APEX Body for coordination and planning of water and sanitation investments and actions has been established and is currently operational. There has been strengthened community engagement with national governments on water and sanitation issues through the establishment and operation of the Laura Lens Committee. There has been a reduction in stress on the Laura Water Lens through the development and operation of a septic remediation programme with remediation of around 15 percent of overloaded septic systems in the Laura Lens area. This has been achieved in part through the promotion of eco-sanitation within the Laura community and also a conversion of one large commercial piggery from wash down waste system to waterless dry litter pig waste management system and the installation of 20 household dry litter pig pens in the Laura community together with the construction of a pilot eco-sanitation system.

**Samoa**

Watershed Management Plans (WMP) for 4 catchments in the Apia Catchment area has been finalised. A key feature of the WMPs is the definition of buffer zones and natural reserves. As a result the Samoan Government is purchasing 1,500 ha of upland watershed (valued at 270 million tala) for its designation as a watershed conservation zone thereby securing land from the Catholic Land subdivision for water resources protection. The Samoan Government also allocated 90 million tala for implementation and remediation of 90 percent of overloaded septic systems in the Samoan community. The project has also developed a wetland management plan for the Apia Catchment. 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. An IWRM developed policy to reserve the upland of the country for the specific purpose of water resources conservation has been developed. Up to 300 m from sea level is encouraged to be developed; 300 m – 600 m will be classified as restricted developments; and 600 m upward is classified as exclusion zones where no developments are allowed, a significant achievement.

**Tonga**

There has been an installation of 10 secondary treatment systems for household sanitation. A leak assessment of Nefiu town supply was carried out and identified 70% losses and a further assessment has been undertaken to determine the sustainable yield from the Nefiu aquifer. A household Water Safety Plan Manual has been completed along with the formation and subsequent work of the Nefiu Aquifer Management Committee raising community awareness and engagement by 60% of households. 20% of Nefiu households have been serviced through the establishment and operation of pump-out facilities for septic
In tanks. There has also been an installation of 2 demonstration compost toilets through knowledge sharing with Tuvalu IWRM Demonstration Project. There has been further scaling up through the AusAID-funded International Climate Change Adaptation Initiative (ICCAI) of A$750,000 funding towards an Integrated Water & Coastal Management (IWCM) demonstration project in Vava’u, Tonga. Finally, a Neiafu Water Resources Management Plan has been completed and made available for stakeholder feedback.

Niue

There has been an enactment of the Niue Water Act, providing a framework for water allocation and water resource protection and management. National and village Drinking Water Safety Plans (DWSPs) have been developed to provide safe drinking water to all central areas in Niue. A national communication strategy has been developed and implemented to increase community awareness of water resources. On ground works to improve Niue’s water security has been carried out reducing water loss through leakage reduction and increasing water storage, including the doubling of storage. A national waste oil collection and disposal mechanism has been established leading to 56 percent reduction in waste oil on Niue and an increase in freshwater storage by over 45 percent through increasing supply security by eliminating leakage losses.

Solomon Islands

Water use efficiency (WUE) and water demand management (WDM) in the Honiara water supply has been progressed through 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 areas. 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. Water Quality monitoring has since been completed with physical and chemical parameters analysed from 157 samples per quarter at 31 sampling points.

Tuvalu

The target of 40 composting toilets or otherwise called Ecosanitation (ecosan) toilets have been installed, successfully engaging the Tuvaluan community, government and politicians in the uptake of compost toilets, to the point where it is now seen nationally as the preferred sanitation option. The project is currently successfully designing and replicating across four countries a sanitation solution appropriate for Small Island Developing States (SIDS), using local expertise to adapt existing international technologies. IWRM has also been mainstreamed into Tuvalu through the development of a national policy and a national indicator framework. The first 10 compost toilets that have been opened up for inspection and assessment has shown that the compost is suitable for garden use. The Funafuti composting toilet work has been scaled up with EU funding of a further 45 Ecosan toilets.

Vanuatu

A Sarakata Basin Flood Hazard Map has been completed to inform the Sarakata Basin Flood Management Plan at the project site in Santo. 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 have been piloted in the Pepsi and Solway communities, which have very shallow water tables. An area of 62.5 hectares of land has been procured by the government and a protection zone established with a further 1000 hectares of upland catchment area being mapped for conservation and protection. River ban stabilisation has been completed through the Mango Urban Community Riparian Replanting programme and the Luganville Water Safety Plan Audit has been completed with the implementation of the plan assessed as satisfactory.

Cook Islands

There has been limited progress in the Cook Islands due to lead agency management issues. Progress that has been made however includes the Water and Sanitation (WATSAN) website (watsan.gov.ck) which went live in February 2013. Presented in both English and Cook Islands Maori, the website provides up to date information on the work of the WATSAN unit, including the IWRM project.

Regional

8 of the 12 Demonstration Project Managers have been retained through the last year of the five-year project providing excellent project management continuity. Two of the resignations were to take up scholarships to complete post-graduate Masters studies.

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 2012 returned an unqualified opinion whereby report audits of the National Demonstration Projects returned a collective unqualified report but several individual countries did receive qualified audits. Primary issues were a failure to reconcile project and finance department accounts and poor asset coding and maintenance.

Project expenditure remains on target at both national and regional levels having reached 88% at 4.5 years into the projects 5-year life.

New Regional Project Development

The Regional PCU for the GEF-funded Pacific IWRM Project has been working with in-country counterparts and partners towards securing funding for continuing country and regional activities to further some of the good work successfully established under the current project implementation. These efforts and the process moving forward have been explained in more detail in the paragraphs which follow.

The System for Transparent Allocation of Resources (STAR) is how the GEF determines the amount of resources that a given country can access in a replenishment period i.e. GEF 5 (2010-2014). STAR has replaced the Resource Allocation Framework (RAF) that was used during the fourth replenishment period of the GEF (GEF-4 (2005-2009) which for the Pacific was rolled into the GEF-Pacific Alliance for Sustainability (GEF-PAS) Programme. There have been some issues in the slow programming of PAS funds and this issue is also evident for GEF-5. In moving forward the GEF Implementing Agencies (IAs) have proposed that the programming issues could be addressed through a Multi-Focal Area Programme based on a Ridge-to-Reef approach to provide a strategic focus for programming STAR funds and that this could be supported by a Regional International Waters Project that would also be able to help sustain and build on the successes of the IWRM Project.

On this basis the Regional PCU has been involved with UNDP in drafting the design documents for submission to the GEF Council at its June 2013 Meeting. The two documents developed were as follows:
1. A Multi Focal Area Programme based on a Ridge to Reef (R2R) approach to provide a strategic focus for programming STAR funds Titled – “Pacific Islands Ridge to Reef National Priorities – Integrated Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods”. The Goal – To maintain and enhance Pacific Island countries’ ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate resilience.

2. A Regional Integrating and Support Project Titled – “Ridge-to-Reef: Testing the Integration of Water, Land, Forest and Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries” with the Goal – To pilot local actions and revise national policies for integrated, cross-sector approaches to sustaining livelihoods from the ridge tops to coastal areas given expected climate fluctuations.

**Status**

The R2R Multi Focal Area Programme Framework Document (PFD) was endorsed by 14 PICs in March 2013 and subsequently approved by the GEF Council at its 44th Meeting in June 2013. The status of the submission follows:


The R2R Regional IW Project Implementation Form (PIF) was also approved by the GEF Council at its 44th Meeting in June 2013. GEF Implementing Agency UNDP Executing Agency SOPAC Division of SPC, GEF Program Grant: US$9,826,147

**Next Steps**

Under the R2R Multi Focal Area Programme, national PIFs need to be developed by the IAs for Micronesia, Kiribati, Marshall Islands, Niue, Papua New Guinea, Palau, Solomon Islands, Tonga, Tuvalu, and Vanuatu for GEF approval. Under the R2R Regional IW Project a Project Design Document (PDD) will need to be developed by the PCU along with National Pilot Project Designs for the Cook Islands, Fiji, Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Palau, Solomon Islands, Tonga, Tuvalu, Vanuatu and Samoa. A draft of this document is to be considered at the Pacific IWRM Project 5th Regional Steering Committee to be held from the 11 to 16th November at which it is anticipated that the GEF National Operational Focal Points will also participate.

**Highlights from the GEF Pacific IWRM Project follow:**

**EcoSan Toilets in Tuvalu a Continuing Success Story**

The GEF Pacific IWRM Tuvalu Demonstration aims to demonstrate that improved sanitation technology and practices can protect water resources, marine biodiversity, livelihood, food security and public health. Achieving this has required the Project to embark on a programme to change people’s perceptions about how to best deal with sanitation on atolls and then to demonstrate this in practice. After 4 years, a successful public education campaign has resulted in acceptance of the EcoSan toilet (named locally as Falevatie) and the installation of 40 EcoSan toilets in Funafuti.

In August of 2013, ten of the initial Falevatie were ready to be opened after 12 or more months of composting. Householders will use the compost in their domestic gardens, either for ornamental or food crops. Communities have been looking forward to the occasion to see what the end product looks like and how well it will work as a soil conditioner and fertiliser. Falevatie owners have experienced the benefits of the Falevatie from a water saving perspective and many are now eager to see how it performs in the garden. From initial observations it can be seen that the compost process is working at breaking down the component additives and creating beneficial compost. Testing of samples is underway to confirm its suitability for use on food crops.
Figure 8: An opened Falevatie showing the outlet pipe for liquid waste. This soak away area supports a lush selection of ornamental plants.

The EU has provided funding for a further 45 composting toilets on Funafuti. This will bring coverage to almost 10% of the population on Funafuti where Falevatie are considered by many as the preferred choice for sanitation systems.

The EU has also agreed in principle to fund the roll out of 95 Falevatie to the outer islands of Tuvalu. These atolls face the same water and sanitation challenges as Funafuti though without the centralised support of the main island. Community members on the outer islands are familiar with the concept of the Falevatie after travelling to Funafuti and staying with family members who have them, and have positive attitudes about installing them at their communities and homes.

KNOWLEDGE DEVELOPMENT AND REGIONAL KNOWLEDGE SHARING – GEF PACIFIC IWRM PROJECT SNAPSHOTs

The Global Environment Facility (GEF) funded Pacific Integrated Water Resources Management (IWRM) Project was launched in 13 countries in 2009 to protect vital watersheds, manage wastewater and sanitation, assess and protect water resources, and improve water efficiency and safety. After 4 years of implementation, tangible on-ground impacts are obvious. Knowledge exchange is a key objective of all GEF Projects and requires diligent use of an assortment of media products. To increase awareness of national demonstration projects and to inform the region of the significant results achieved most countries have developed Project specific videos, Results Notes and Result Snapshots.

The videos have had wide impact and have proved a valuable tool in communicating knowledge and awareness at all stakeholder levels. A notable example is the use of some of the videos by PBS Learning which provides internet based learning resources for US Schools (http://www.pbslearningmedia.org). Their Teachers Domain is a free digital media service for educational use from public broadcasting and its partners. Lesson plans are developed from the video and these provide an entry for school children to explore the issues.

Figure 10: Web-shots from the PBS Learning media Website

GEF PACIFIC IWRM PROJECT SNAPSHOTs

To complement the Results Notes, condensed Progress Snapshots were created out of them, to highlight Country Project achievements in a more accessible format. These have been highly useful documents that have been used at conferences, are displayed on the IWRM webpage and are featured on the GEF Pacific IWRM Facebook page. The popularity of these Snapshots is noticeable in the amount of ‘views’ that each post receives. This promotion of the projects’ achievements through social media and on the IWRM Kava Bowl (a community sharing page in the GEF Pacific IWRM webpage) has proven an excellent way to share information with a wider, more general audience.

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 safe water and sanitation services.

As mentioned in the last reporting cycle, the new Water Services Coordinator, Kamal Khatri started the role in August 2012. Notable staffing changes in the Water Services programme include the departure of Rodney Lui, Wastewater Assistant who completed his contract on 17/04/2013. There is recognition across the WSP of the essential need for a Water and Sanitation Engineer, primarily to support several infrastructure related activities that are in the pipeline. It is envisioned that this position will be attached to the water services team given the link between engineering related aspects of the role to the existing work in the programme such as Water Demand Management (WDM); however, this support will be available to all programmes across the WSP as well.

Currently the programme is staffed as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Nationality</th>
<th>Appointment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Services Coordinator</td>
<td>Kamal Khatri</td>
<td>Fiji</td>
<td>01/08/12</td>
</tr>
<tr>
<td>Wastewater Assistant</td>
<td>Rodney Lui</td>
<td>Fiji</td>
<td>18/04/2011</td>
</tr>
<tr>
<td>WASH Officer</td>
<td>Iva Bakaniceva</td>
<td>Fiji</td>
<td>29/09/2008</td>
</tr>
<tr>
<td>Project Assistant</td>
<td>Arun Chand</td>
<td>Fiji</td>
<td>01/02/2010</td>
</tr>
</tbody>
</table>

Over the last year, the Water Services programme achieved the following key outcomes: Strengthening of water security in Tokelau through an AusAID-funded Climate Change Project, instigating further replication of drinking water safety planning within rural water supplies in Fiji and supporting water quality monitoring initiatives in SPC’s member countries. Technical advice and guidance to several Pacific islands is continually being provided in partnership with World Health Organization (WHO), specifically addressing community or rural water supplies through risk-based approaches. Efforts are also being made to strengthen the engagement with partners through the Pacific WASH Coalition as well as through the UNICEF coordinated WASH Programme and Cluster for emergency response.

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 for the reporting period:

- Lab-based evaluation on microbiological performance of point of use of filters being utilised in Fiji was carried out. It was found that the filter performed at optimum level in a lab-based setting with effective removal of bacteria from water with different levels of contamination. These findings were shared with national governments and relevant agencies.

Pre-audit support was provided to the Republic of Marshall Island’s Environmental Protection Agency (EPA) Water Quality Laboratory, with successful certification for analysing drinking water and ocean and other surface water samples.
2.2 Drinking Water Safety Planning (DWSP)

Drinking water safety planning (DWSP) is a risk assessment and management approach which ensures consistent supply of safe drinking water from the catchment to the consumer. The DWSP activity is delivered in partnership with the WHO.

The following are the major outcomes for the reporting period:

- Audit of Luganville Water Safety Plan in Santo, Vanuatu, in collaboration with WHO. Commitment from the Santo IWRM Committee to pilot rural water safety plans in 2 villages and few sites in Port Vila under the WHO Phase 3 Water Safety Plans programme.
- Together with the WHO, initiating WSPs through national and community training, policy development, establishment of in-country expertise and sustained advocacy in Tonga, Samoa, Cook Islands and Vanuatu.
- Support efforts on rural and community water safety planning in collaboration with partners such as UNICEF, WHO, PCDF and relevant NGOs like Live and Learn Environmental Education, Habitat for Humanity, Water for Life Foundation and Red Cross Fiji.

The following major outcomes have been achieved as part of the WASH activity:

- Familiarise countries on auditing process on water demand issues through awareness raising, demonstrating best practices and advocacy.

The key upcoming activities and initiatives planned for DWSP include:

- The replication of drinking water safety plans (DWSP) for rural water supplies in Fiji.
- In collaboration with WHO/UNICEF and regional and local NGOs, implementation of rural water supply management plans and concept of drinking water safety planning was supported. National government partners include the Water and Sewerage Department and Ministry of Health in Fiji.
- Local NGOs are being engaged to trial rural drinking water safety planning in 4 pilot sites in Fiji. This work intends to provide valuable feedback at the national level to Ministry of Health and Water and Sewerage Department to roll out this concept and utilise best practices at community and household levels in safeguarding drinking water and appropriate sanitation systems.

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 have been achieved as part of the WASH activity:

- Information and awareness on WASH disseminated regionally through World Water Day 2013 celebrations and development of related resource materials: including supporting the national event held in Fiji. Many other Pacific islands held similar events such as the Chuuk Public Utilities Corporation of Federated States of Micronesia was financially supported to carry out advocacy and awareness around the theme water corporation.
- Coordination of the Pacific WASH Coalition. Partners in the Coalition include regional and international organisations, regional tertiary institutions and local and regional NGOs working in the Pacific region.
- Global handwashing day supported in Fiji was celebrated in October 2012.
- Strengthened coordination of Pacific WASH Coalition and regional WASH Cluster support mechanisms.
- Technical support provided to the WASH Cluster under Pacific Humanitarian Team (PHT) to ensure appropriate WASH response in emergencies, like TC Evan in December 2012 in Fiji and the Marshall Islands drought in April 2013.
- Water, Sanitation and Hygiene training of trainers (ToT) was carried out, together with development of a guide for educators and trainers for capacity building in the area of WASH for Tokelau under climate change support.
The key upcoming activities and initiatives planned for WASH include: celebration of Global Hand Washing Day 2013, celebration of World Water Day 2014, dissemination of relevant WASH resources and materials to member countries and promotion of rainwater harvesting.

3. Water Governance

The reporting period saw a consolidation of water governance support to member countries, with a sharpening focus on the strengthening of regional frameworks to support country efforts in water, sanitation, disaster risk reduction and climate change adaptation. The finalisation of the European Union funded National IWRM Planning Programme was a significant milestone, with final reporting completed in January 2013. Member country support in the past year focused on the areas of: strengthening regional frameworks for water governance; supporting country policy development and implementation; integrating water and sanitation considerations in disaster risk reduction and response; and securing new opportunities for partner support to member countries.

3.1 Strengthening frameworks for water governance

Progress was made on a number of fronts in strengthening the frameworks that underpin the Pacific’s efforts in improving water and sanitation. The Programme supported 8 PIC Heads of State and Heads of Delegation in their effective input to the 2nd Asia Pacific Water Summit, held in Chiang Mai Thailand in May 2013. With high-level country representatives from many countries across the Asia Pacific region, it was a particular challenge to ensure that the voice of Pacific Island Countries would be clearly heard over such a complex dialogue. The WSP worked closely with participating PIC delegations to support their contributions to the Summit, and facilitated the drafting of a Pacific Statement endorsed by all PIC delegations and formally tabled at the Summit by the Deputy Prime Minister of Tuvalu (see Annex 1, Part 2). The Pacific Chiang Mai Statement supported the overall Summit Declaration, while also highlighting the particular urgency of action required in the Pacific, and Pacific Leaders’ concerns that the region as a whole is struggling to meet the Millennium Development Goals relating to water and sanitation (see Annex 1 for the Chiang Mai Statement).

Figure 13: H.E. Ratu Epeli Nailatikau, President of Fiji providing a statement to the meeting at the Summit.

Figure 14: H E. Ratu Epeli Nailatikau, President of Fiji and Honourable Kausea Natano, Deputy Prime Minister and Minister of Public Utilities in Tuvalu as part of the Pacific delegation at the 2nd Asia Pacific Water Summit in Thailand, in May 2013. Building on this call to action, WSP convened the Pacific Regional Water and Sanitation Consultations (RWSC) in Nadi, Fiji, during 1-3 July 2013. This meeting was arranged to
continue discussions between participating countries and partners on how to progress action on the Chiang Mai Statement, with a view to developing an updated Regional Framework for Water, Sanitation and Climate. The RWSC meeting itself is elaborated on further in the section titled “Opportunities in 2013”. While this work is currently unfunded, WSP will identify opportunities to continue this dialogue over the coming year to ensure that member countries have adequate input to the development of a framework that works for the region.

To help facilitate on-going country input; however, the WSP has been working with member countries on the development of national outlooks for water, sanitation and climate. 15 draft outlook overviews have been developed to date, with the aim of finalising these in early 2014. The outlook overviews map the emerging pressures and challenges that PICs might expect in providing and maintaining safe and sustainable drinking water and sanitation over the coming decade, and together will form the basis of a regional outlook to which the updated framework can respond.

In further support of this work, over the past year WSP has also facilitated PIC input to global consultations on groundwater governance, including supporting to Tonga and Kiribati input to the regional consultations conducted by UNESCO and the World Bank in China in December 2012. Pacific input was also provided to the newly formed Asian Pacific Centre for Water Security at China’s Tsinghua University in its scoping of the next Water Security Outlook for the Asia-Pacific region.

Finally, involving the French Pacific Overseas Countries and Territories (OCTs) in the process to develop a Framework for Water, Sanitation and Climate for the region has been made possible through a project entitled “Facilitating Water and Sanitation Consultations in Pacific Island Countries and Territories” funded through the French Pacific Funds, which came to an end in June 2013. Activities in the project enabled OCT participation and involvement in the development of National Water, Sanitation and Climate Outlooks as well as contributing to two consultation processes that have provided input to the development of a new framework. The Drinking Water Safety Planning Workshop from 24/11 to 01/12/12 as well as the Water Governance Workshop from 14 to 16 May 2013 were both held in New Caledonia. Both of those consultation processes provided a platform for the development of the Outlooks in the OCTs. There was also OCT presence at the RWSC meeting in July 2013 as well as part of the development of the Framework for Water, Sanitation and Climate.

3.2 Supporting policy development and implementation in member countries

The past year saw continuing policy support to member countries on an identified needs basis, notably including:

- stakeholder consultations and development of a National IWRM Policy and Implementation Plan for the Solomon Islands;
- preparation of an Implementation Plan and necessary regulations for Tonga’s emerging water management legislation;
- finalisation of Tuvalu’s National Water and Sanitation Policy; and
- input to the ongoing development of Fiji’s national policy for the management of groundwater resources.

3.3 Integrating WATSAN considerations in disaster risk reduction and response

In the reporting period WSP also worked to strengthen the practical working relationship between the water and sanitation, disaster risk reduction and climate change adaptation communities by, building on the dialogue initiated at the 2012 Pacific Disaster Platform. The water sector has an important role in helping build the resilience of communities through better anticipation and response to water related disasters, and the maintenance of safe drinking water, sanitation and hygiene during times of adversity. Water is a major medium through which climate change will impact Pacific communities, and building the capacity to maintain and protect fragile drinking water supplies is key to successful climate change adaptation. By better responding to today’s climate variability, Pacific communities will be far better prepared for the climate challenges of the future. Related work undertaken in the reporting period included:

- Support to the 2013 Joint Meeting on Disaster Risk Reduction and Climate Change Adaptation, including the facilitating of meaningful input to the forum from the water and sanitation sector (further elaborated on under the Opportunities in 2013 section).
- Technical support to the SPC response to the 2013 drought in RMI (as elaborated on under Section 1, Water Resources Management).
- Technical input to the Post Disaster Needs Assessment (PDNA) for Cyclone Evan undertaken in Samoa in January 2013, including participation in the joint assessment mission (further elaborated on under Section 1 Water Resources Management);
- Technical input and support as appropriate to the regional WASH cluster established under the Pacific Humanitarian Team.

3.4 Securing new opportunities for partner support

Finally, in the past year the Programme invested considerable effort into securing new opportunities for partner support to member countries, and in the scoping and detailed design of new projects set to commence. This work is expected to continue into the coming reporting period, with the inception of a number of new projects at the national and regional scale.

REPORT BACK ON ISSUES AND OPPORTUNITIES PRESENTED TO THE 2ND SPC/SOPAC DIVISIONAL MEETING 2012 (SOPAC-2), NOVEMBER 2012

At the Second SOPAC Division Meeting, in Noumea, New Caledonia, from 3 to 9 November 2012, the WSP presented a range of Issues for consideration by members and as well Opportunities to enhance WSP capacity building support in the Pacific. An update of the progress in relation to these is laid out below.

ISSUES

Access to Safe Drinking Water and Sanitation, a Human Right

In terms of progressing the work with respect to the United Nations Resolution 64/292 (July 2010) declaring the access to safe drinking water and sanitation as fundamental human right; there has been limited activity in the last work plan year.

This is primarily due to a lack of dedicated resourcing to comprehensively address this important agenda. An approach that has been taken therefore is to embed these principles and sentiments as much as possible within on-going funded work through WSP projects and with the limited funding that is available to support policy work over the last year.

The need for a new Pacific Regional Water and Sanitation Strategy – “Building a Framework for Water, Sanitation and Climate”
This initiative is a significant opportunity and progress is highlighted below as well as in the Opportunities section later.

Progressing the development of a Regional Framework for Water, Sanitation and Climate as well as the National Water, Sanitation and Climate Outlooks has been a challenge for the WSP due to a significant lack of resourcing for this work for both staff and activities. Previous funding was primarily drawn from projects which supported short-term staff (Patrina Dumaru); however, two of these projects recently concluded, namely the French Pacific Funds supporting the OCT engagement in the process; as well as the EU-funded IWRM Planning Programme, which has affected the ability to consistently make progress.

The approach taken to date in furthering this work has been opportunistic in nature through connections made with the Disaster Platform and Climate Change Roundtable, which has been very positive and has to some extent relieved the cost burden for the necessary consultation process. Nevertheless, this is not a sustainable approach and results are produced over a longer time period without any certainty attached to the process, nor the outputs. This will continue to be pursued until more secure and dedicated funding is sourced to bring this work to fruition.

**OPPORTUNITIES**

**Benchmarking of Water Utilities**

The WSP has responded to this call from the membership to support the Pacific island water and wastewater utilities participating in the benchmarking exercise and to actively collaborate with PWWA to help improve the performance of utilities.

The 2012 Benchmarking continued with a similar approach as utilised in 2011 with some changes to the survey questionnaire used earlier. The findings have been elaborated in a 2012 Benchmarking Report that was launched by the Samoan Prime Minister, Tuilaepa Sa’ilele Malielegaoi, in May 2013, in Apia, Samoa, during the inaugural meeting of Pacific Regional Infrastructure Facility (PRIF) Water and Sanitation Sector meeting.

The process of developing a set of appropriate benchmarks for utilities in the region has been a challenging one, with the current motivation to continue the benchmarking activity at the regional level. PWWA and PCO (PRIF Coordination Office) will continue their ongoing coordination, communications and support to each utility and the next Benchmarking for 2013 will commence shortly.

The WSP as a partner to the initiative and a member of the Steering Committee has been involved with the on-going discussions providing technical advice and support to the consultant and the PWWA as the primary implementers. This work and support is expected to continue for the rest of the work plan year.

**Opportunities in 2013**

**Pacific Framework for Water, Sanitation and Climate**

The 2013 work plan again saw great strides in progression of this work, despite the lack of resourcing, in an effort to respond the call from the membership to revise the existing Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP) made in 2010.
On-going Issues for 2013

**Sustainable Financing for the WSP**

It is anticipated that funding from on-going or anticipated projects in the new work plan year will account for 91% of the overall funding for WSP with the remaining funds being provided for by core or programme funding.

The challenge in balancing the growing gap between project and programme funding is becoming increasingly difficult without any security of support towards core positions and activities to enable the successful delivery activities across the WSP due to the stagnant or regression of programme funding for ever growing programmes.

This will eventually change the dynamic of the support that has been provided in the past to the membership whereby responsive and short turnaround requests for assistance will not be possible, on-going core activities will need to be scaled down and work programme delivery will not be able to grow. Unplanned work requested by countries and partners each year which at present accounts for a noticeable proportion of our work plan for areas such as opportunistic fundraising or post-disaster needs assessments will also be addressed on a case-by-case basis dependent on funding and staff time.

Discussions are being held internally to determine a way forward in dealing with this ever present and on-going issue.

**Strategic Review of WSP**

In relation to the issue of the Strategic Review of the WSP in connection with the Independent Expert Review (IER) conducted in 2012, CRGA 42 endorsed the decisions of the Special Session of CRGA 42 held in August 2012 as well as the comments made by the Director General of SPC which advised that a review of the WSP was not required and that work should continue as is.

There are however, several regional processes underway that will contribute to strengthening the WSP work strategically moving forward including the development of a Regional Framework for Water, Sanitation and Climate, the post-2015 MDG Framework development, the SIDS Conference process and the post-2015 Integrated Strategy for DRM and CC as well.

Alongside this work, the review of the SOPAC Strategic Plan (2011 – 2015) and the finalisation of the SPC Corporate Plan will also be useful instruments for strengthening the WSP moving forward.
PART 1 – Chiang Mai Declaration from the 2nd Asia Pacific Water Summit

We, the Heads of State and Government and the high-level representatives, having met at the Second Asia Pacific Water Summit (2nd APWS) in Chiang Mai, Thailand, on 20 May 2013, reiterating the importance of water as an essential part of human life, human security, environment and economy;

• Recognizing that water is at the core of sustainable development and is closely linked to a number of key global challenges, reiterating the importance of integrating water in sustainable development and underlining the critical importance of water and sanitation within the three dimensions of sustainable development as stated in the outcome document of the United Nations Conference on Sustainable Development, entitled “The future we want”,

• Recalling that 2005-2015 is the United Nations International Decade for Action “Water for Life”, and that 2013 is the United Nations International Year of Water Cooperation,

• Recognizing that Asia and the Pacific region is the most disaster-prone region in the world, and that water-related disasters, including floods and droughts, in the region continue to increase in intensity and frequency,

• Further recognizing the adverse impacts of climate change, which may aggravate the intensity and frequency of extreme events and cause economic and social damages, including the loss of human life,

• Noting with concern the impacts from water-related disasters that pose a significant risk to all countries, particularly the small island developing States (SIDS), the least developed countries (LDCs) and landlocked developing countries (LLDCs) and their efforts to achieve sustainable development,

• Emphasizing that water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels, and that women have the pivotal role in the provision, management and safeguarding of water,

• Recognizing that sustainability of food production increasingly depends on sound and efficient water management, and that the need to increase sustainable agricultural production is closely linked to the development and management of water resources on an integrated basis,

Do hereby declare to:

1. Renew the commitment made at the First Asia-Pacific Water Summit, (Bepgu, Japan, 2001), to accord high priority to water and sanitation in national agendas and to allocate appropriate resources to water and sanitation sectors;

2. Encourage the inclusion of disaster risk reduction in the United Nations development agenda beyond 2015 to address the common challenges to reduce deaths and economic losses from floods, droughts and other natural disasters;

3. Accelerate the process of incorporating integrated water resources planning and management, as appropriate, in the framework of the national socio-economic development planning process while supporting the best practices and traditional treatment of water resources;

4. Enhance regional and international cooperation on sharing, exchange and dissemination of scientific and technical knowledge, as well as best practices, related to integrated water resources management;

5. Promote efficient use of water resources while taking into account basic human needs including domestic, industrial and agriculture water uses and balancing preservation of ecosystems;

6. Improve irrigation systems in agricultural sector which consume a huge volume of water resources as a part of the plans to promote water use efficiency;
PART 2 – The Pacific Statement

Message from Chiang Mai: Acting to Achieve Universal Access to Water and Sanitation in Pacific Island Countries

The following statement was endorsed by Pacific Heads of State and Heads of Delegations participating in the 2nd Asia-Pacific Water Summit in Chiang Mai, Thailand:

We, the Pacific Island Country Heads of State and Heads of Delegations to the 2nd Asia-Pacific Water Summit support and endorse the findings and commitments of the Chiang Mai Declaration and, in further support of these, and in acknowledgement of the special challenges faced by Pacific Island Countries:

1. **Acknowledge** that our Pacific region is vast and diverse, consisting of volcanic islands and low-lying atolls spread across thousands of kilometres of ocean, and home to remote rural communities and rapidly growing urban populations.

2. **Acknowledge** that, despite our great diversity, we share the common important challenge of managing and protecting our limited and fragile water resources, and achieving and safeguarding the fundamental human right of all of our citizens to safe drinking water and sanitation.

3. **Acknowledge** the significant progress made by Pacific Island Countries in recent years, especially through the application of locally based and participative Integrated Water Resource Management solutions that respond directly to the issues and challenges facing Pacific communities, and provide models for replication at a national and regional level.

4. **Note with concern** that, in general, these good efforts are not keeping up with the significant and growing impacts of population growth, urbanization, natural disasters and climate change, and that the Pacific region as a whole is making inadequate progress towards meeting international development goals for water and sanitation.

5. **Recognise** that sustainable water supply and safe sanitation underpins the very feasibility of Pacific Island Countries, and that our national and international development goals are unlikely to be met without increased advocacy and financial support for water and sanitation, which will require renewed leadership and investment at the national, regional and international level.

6. **Recognise** the critical role that regional collaboration plays in the Pacific to enable the sharing and replication of successful approaches and the building of capacity across our region, and the need for sustained support from development partners to strengthen the effectiveness of this collaboration across the Pacific region.

7. **Recognise** that throughout much of the Pacific, water and sanitation are primarily managed at a household and community level, and building capacity and awareness of safe water, sanitation and hygiene practices at this level can be the most effective way of achieving water security and reducing the incidence of water borne disease.

8. **Acknowledge** the important role that the Pacific Regional Action Plan on Sustainable Water Management has played to date, and **support** the review and revision of the plan to provide an effective regional framework for the decade to come.

9. **Acknowledge** the pivotal role that water and sanitation plays in disaster risk management and climate change adaptation in the Pacific, and **undertake** to strengthen national coordination frameworks that enable the integrated management of our efforts in water and sanitation, disaster risk management and climate change adaptation.
STATEMENT OF THE JOINT MEETING

WE, the representatives of Pacific Island Countries and Territories, regional organisations and development partners attending the first Joint Meeting of the Pacific Platform for Disaster Risk Management & Pacific Climate Change Roundtable, in Nadi, Fiji, 08 – 11 July 2013;


2. RECALL the commitment made in 2011 at the Pacific Climate Change Roundtable, the Pacific Platform for Disaster Risk Management, the Pacific Islands Meteorological Council, Secretariat of the Pacific Regional Environment Programme’s Governing Council and the Secretariat of the Pacific Community’s Committee of Representatives of Governments and Administrations to develop an integrated strategy for disaster risk management and climate change for the region;

3. ACKNOWLEDGE that these regional and global policy and planning frameworks, complement and support national policy instruments;

4. RECOGNISE that an integrated approach to disaster risk management, climate variability, climate change adaptation and reducing greenhouse gas emissions involving all sectors will strengthen sustainable development due to their common focus on reducing vulnerability and increasing resilience of communities and infrastructure including through the rollout of renewable energy and energy efficiency initiatives in the Pacific;

5. EMPHASISE that enhanced partnerships at all levels will enable this integration;

6. REITERATE that the Pacific Island region’s greatest sustainable development challenge are climate variability, climate change and disasters with wide ranging impacts that compound existing critical economic, environmental, social and security issues, and place additional burden on humanitarian response, emergency management, development systems as well as on national budgets and efforts to achieve national development goals;

7. VALUE the leadership and the accomplishments by Pacific Island Countries and Territories to adopt an integrated approach where appropriate and noted that the regional integrated strategy will complement and support these national approaches;

8. COMMEND existing regional coordination mechanisms such as the Pacific Platform for Disaster Risk Management, Pacific Climate Change Roundtable and the Pacific

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1 American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Republic of Marshall Islands, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Wallis and Futuna
Meteorological Council, Water and Sanitation Consultations, Regional Disaster Manager’s Meeting for the support they have provided to disaster, risk and climate resilient development in the Pacific;

9. RECOGNISE the commitments made by development partners to provide financial and technical assistance needed to support resilience building;

10. REITERATE that the key principles underpinning the Roadmap process are:
   • Leadership by Pacific Islands Countries and Territories;
   • Ownership of Pacific Islands Countries and Territories and partners; and
   • Inclusive of strengths and priorities of whole communities including marginalised and vulnerable groups

AGREE TO:

11. IMPLEMENT, where possible, climate and disaster resilient practices in all development sectors including agriculture, fisheries, forestry, education, health, energy, transport, infrastructure water and sanitation and tourism, including the inter-linkages among sectors highlighting the critical importance of the application of specific ecosystem-based approaches such as ‘ridge to reef’, ‘watersheds’, ‘coastal zone’ and ‘whole island system’ in managing climate and disaster risks;

12. ENSURE that respective national finance and planning agencies lead strategic, whole-of-country and participatory approaches in mainstreaming disaster and climate-related risk into planning, budgetary and decision-making processes;

13. URGE development partners to align their funding modalities and financing mechanisms to national and regional policy and planning frameworks and partnerships, based on needs and circumstances of each Pacific Island Country and Territory;

14. ENCOURAGE public-private partnerships at all levels and ensure a whole-of-society participation involving vulnerable communities, particularly persons with disabilities, women, youth, children, and the elderly and consider their particular skills and knowledge in efforts to reduce vulnerability and increase resilience;

15. SUPPORT weather, climate, water, ocean and geological observations and services, data collection, appropriate technologies and the provision of reliable weather and climate services and capacities, multi-hazard early warning systems and socioeconomic analysis in informing disaster risk management and climate change decision making;

16. ENSURE the preservation and the use of traditional and local knowledge and practices to increase community resilience and integrate, where appropriate, in accordance with the principle of prior informed consent of traditional owners, into national policies and strategies;

17. SUPPORT the strengthening of emergency and disaster preparedness and response capacities across all sectors at local, sub-national, national and regional levels ensuring improved inter-operability between key response actors to facilitate the effective and efficient management of humanitarian support and risk reduction measures to affected populations;

18. RECOGNISE the importance of loss and damage for Pacific Island Countries and Territories and call for support, as appropriate, to further efforts to secure an international mechanism under the United Nations Framework Convention on Climate Change to address loss and damage resulting from the impacts of human-induced climate change, recognizing the existential threat posed to Pacific Island Countries and territories from mounting greenhouse gas emissions;


19. STRENGTHEN the process of developing an integrated strategy for disaster risk management and climate change with a clear focus on resilient development in line with the milestones in the Roadmap;

20. REQUEST the Secretariat to have the Chair’s Summary of the Joint Meeting made available to participants by August 2013.

CALL ON the disaster risk management and climate change communities to:

21. EXPEDITE the development of an integrated strategy for disaster risk management and climate change towards resilient development for the Pacific in accordance with the milestones in the Roadmap;

22. DISSEminate and advocate the messages contained in this Statement to a wide audience at national, regional and international level and ensure that these are taken into account in the ongoing processes of the post 2015 Disaster Risk Reduction Framework, post 2015 Development Agenda and the Post Rio+20 process in particular the 3rd SIDS Conference 2014.

23. RECOGNISE and undertake harmonisation of synergies between the Hyogo Framework for Action 2005 – 2015, United Nations Framework Convention on Climate Change and the Convention of Biological Diversity, including relevant programmes in other multilateral environment agreements that support resilience building.

Adopted on: Thursday July 11, 2013
ANNEX 3: Outcome Statement from the Pacific Regional Water and Sanitation Consultations, 1-3 July 2013, Tanoa International Hotel, Nadi, Fiji.

The Pacific Regional Water and Sanitation Consultations (RWSC) was convened in Nadi, Fiji from the 1st to the 3rd July 2013. The objectives were to:

• facilitate the further development of the regional framework for water and sanitation;
• define the framework format and discuss preliminary ideas on content and plans for further population by counterparts; and
• provide an opportunity for the Pacific water and sanitation community to discuss and share experiences with stakeholders and interest groups attending other meetings held in parallel with the consultations.

In attendance were representatives from Pacific Island Countries and Territories (PICTs) including the Cook Islands, Fiji, Kiribati, Nauru, Niue, New Caledonia, Palau, Samoa, Tonga and Tuvalu and representatives from other international and regional organizations including the Environmental Health Consulting Services, Pacific Islands Forum Secretariat (PIFS), World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF). The meeting was chaired by the Fiji delegate as host of the meeting, Mr. Malakai Finau, Director of the Mineral Resources Department, Government of Fiji. (Refer Annex 1 for Participants List)

The meeting was held in conjunction with a series of other technical meetings including the 19th Regional Disaster Managers Meeting, Strategic Alliance Meeting of Pacific Islands Disaster, Fire & Emergency Services and Police, Pacific Meteorological Council, Pacific Climate Change Round Table, and ahead of the 2013 Joint Meeting of the Pacific Platform for Disaster Risk Management & Pacific Climate Change.

The Regional Water and Sanitation Consultations:

Regional Framework for Water and Sanitation:

• Noted the uniqueness of the Pacific in terms of its diversity in island types, natural resources, populations, culture, economic and social structures set across a vast ocean space.
• Acknowledged that in the face of this diversity, common challenges emerge to sustainably managing water resources, delivering safe water, improved sanitation services and sustained operation and maintenance of these services including governing water in an integrated way to achieve the human right of water and sanitation.
• Noted that water security and resilience to the impacts of climate change and disasters must take into account sustainability issues including those associated with water resources, human health, the environment and economies.
• Noted that although progress is being made this is not keeping up with significant impacts of population growth, urbanisation, natural disasters and climate change and therefore the Pacific as a whole is stagnating or regressing in meeting the international development goals and targets for water and sanitation.
• Noted that the National Water and Sanitation Outlooks represented significant progress in improved knowledge based decision making and the need for Regional support to assist National Water Committees to maintain and add to this important national resource.
• Noted the progress made in developing a Regional Framework for Water and Sanitation as a means of reviewing the existing Pacific Regional Action on Sustainable Water Management as an on-going and incremental process.
• Reiterated the need for an integrated approach to the management of the critically linked areas of disaster risk, climate change, water, sanitation, hygiene and human health is far more effective than individual sector approaches, and Integrated Water Resources Management (IWRM) provides an important mechanism to bring the components of disaster, climate change and water management together.
• Recognised the opportunity and support provided through the Pacific Disaster Platform process as a means of also engaging with the Disaster Management and Climate Change communities and the proposed Integrated Strategy for Disaster Risk Management and Climate Change process to further articulate the water and sanitation messages given the central role the sector has in these areas.
• Noted the urgent and continued need for resourcing a collaborative and consultative process to develop the Framework for Water and Sanitation for the region including Outlooks for Water, Sanitation and Climate for the Pacific.
• Encouraged countries and partners to invest in emergency preparedness and response arrangements for water, sanitation and hygiene linked to national and international disaster management arrangements.

2nd Asia Pacific Water Summit and the Chiang Mai Pacific Statement

• Acknowledged the Chiang Mai Declaration resulting from the 2nd Asia Pacific Water Summit (APWS2) held in Chiang Mai, Thailand in May 2013. (Refer Annex 2)
• Noted the strong Pacific participation with the President, Fiji; Prime Minister, Vanuatu; Premier, Niue; Deputy Prime Ministers, Papua New Guinea, Solomon Islands and Tuvalu and Ministers, Kiribati and Samoa presented country statements highlighting the unique challenges faced by Pacific Nations in meeting the MDGs.
• Highlighted the Pacific Statement by the Pacific Heads of State and Heads of Delegations participating at the 2nd APWS entitled the “Message from Chiang Mai: Acting to Achieve Universal Access to Water and Sanitation in the Pacific presented to the Summit on behalf of the region. (Refer Annex 3) and in particular:
  ⇒ That the leaders noted with concern the region’s inadequate progress to meeting international development goals for water and sanitation and their commitment to renewed leadership support and investment.
  ⇒ The explicit recognition of the primary role that households and communities needed to play in sustaining access to safe water and sanitation and that this reflected a more local level approach which needed strong national governance and development partner support.
  ⇒ That the leaders supported the development of a revised Regional Action Plan to frame regional and national water and sanitation actions.
  ⇒ Acknowledged the resilience of Pacific Islands Countries would be improved through the adoption of spatially based watershed and “ridge to reef” management of water and sanitation.
  ⇒ That human and institutional capacity were critical constraints to knowledge gathering and support in decision making and pacific leaders the need for increased support from national and development partners.

Joint Meeting of the National Meteorological Services, National Disaster Management Offices including the Water and Sanitation Representatives

• Noted that integrated approaches have been demonstrated as best practice to address hydrometeorological disasters.

Sustainable Development and Small Island Developing States Agenda

• Noted that in order for countries in the region and stakeholders to monitor their own progress on water and sanitation it is important that they invest in national and regional indicator frameworks.
• Noted that the post-2015 sustainable development indicators will include a specific goal on universal access to Water and Sanitation which will give more prominence to this issue.

• Noted that the increased attention to water security reflected greater global attention to the human right of access to sustainable and safe water and sanitation, but that greater political will is required if right is to be realised in the Pacific.

• Noted the need for the Pacific to engage in the development of post-2015 Sustainable Development Goal (SDG) targets related to water and sanitation to ensure relevance to Small Island Developing States (SIDS) and the opportunity for such engagement that exists through the Third International Conference on Sustainable Development of SIDS in Samoa in 2014.

• Noted that water and sanitation managed on a spatial watershed and “ridge to reef” basis required stronger governance linkages between water, land and the coast to ensure greater system resilience through improved maintenance of habitat and environmental services.

• Noted that innovative sustainable financing models including those associated with addressing the impacts of climate change needed to be developed and supported to enable sustainable development in Pacific SIDs.