



Pacific Partnership Initiative on Sustainable Water Management

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Issue: XXII, August 2009

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[Highlights](#)

[Background](#)

[Publications](#)

[Multimedia](#)

[Water Agenda](#)

[Websites](#)

Welcome to the Twenty first official mail-out of the Pacific Partnership Initiative on Sustainable Water Management. This Quarterly Newsletter provides Water and Sanitation information to Pacific member governments, professionals, NGOs, CBOs, researchers, private sector and counterparts in the donor community who are interested in water sector issues and initiatives.

We would appreciate your assistance in forwarding the newsletter to other colleagues who may be interested in this initiative so that it reaches the widest possible audience.

If you wish to print this newsletter, a PDF version is also available on the new SOPAC Water website:
www.pacificwater.org/pages.cfm/water-governance/pacific-partnership-initiative/e-newsletter-subscription/

Highlights

[El Niño is confirmed for 2009/2010](#)

[Micronesians rise up to water challenge](#)

[Investigating Gender Outcomes in Water and Sanitation](#)

[National Wastewater Management Training Courses for Fiji and the Cook Islands](#)

[Pacific Water & Waste Association Conference & Expo, Vavau Tonga](#)

[GIS for Rainwater Harvesting in Nauru](#)

[Improving water security in Tonga](#)

[GEF Pacific IWRM Activities in the Pacific](#)

[Drinking Water Safety Planning - Lessons Learnt](#)

[Publications](#)

[Multimedia](#)

[Water Agenda](#)

[Water Websites](#)





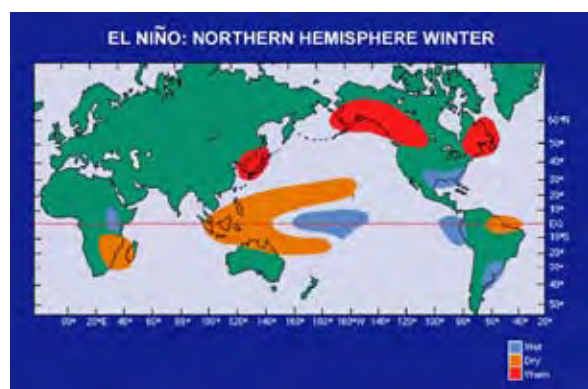
El Niño is confirmed for 2009/2010

El Niño conditions in the Pacific have been confirmed by United States National Oceanic and Atmospheric Administration (NOAA), Australia's Bureau of Meteorology (BOM) and World Meteorological Organisation (WMO).

It is expected that the El Niño will continue to develop through 2009 and last into 2010. Various predictions already suggest that it could become a moderate-to-strong event peaking around the end of the year.

El Niño refers to the irregular warming in the sea surface temperatures from the coasts of Peru and Ecuador to the equatorial central Pacific. This causes a disruption of the ocean-atmosphere system in the tropical Pacific with consequences for weather around the globe.

El Niño translates from Spanish as "the boy-child". Peruvian anchovy fishermen traditionally used the term - a reference to the Christ child - to describe the appearance, around Christmas, of a warm ocean current off the South American coast, adjacent to Ecuador and extending into Peruvian waters.



In most years, colder nutrient-rich water from the deeper ocean is drawn to the surface near the South American coast (upwelling), producing abundant plankton, food source of the anchovy. However, when upwelling weakens in El Niño years, and warmer low-nutrient water spreads along the coast, the anchovy harvest plummets.

During El Niño the rainfall pattern in the Pacific is complex, and no two El Niño are the same. In general the period from December to February will see drier conditions over much of SE Asia, and tropical belts of central and western Pacific. However the equatorial central Pacific area is expected to receive above average rainfalls.

Impacts to water sources and supplies as well as impacts to agriculture can be expected.

It is recommended that water managers and suppliers consider increasing their monitoring of their key water sources and consider strategies for management where drier conditions start to impact on water supplies in the most likely period of December 2009 to April 2010.

Useful links:

<http://www.soest.hawaii.edu/MET/Enso/enso/enso.html>

<http://www.bom.gov.au/climate/enso/>

<http://www.niwa.co.nz/our-science/climate/publications/all/icu>

<http://www.cdc.noaa.gov/enso/>

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/

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Australian Government
Bureau of Meteorology



NIWA
Taihoro Nukurangi





Micronesians rise up to water challenge

Honolulu, July 23, 2009: Throughout the Pacific the availability of fresh water is vital to health and development. However, increased demand and limited supply is putting pressure on water resources.



Micronesia has critical water and sanitation issues that are exacerbated by climate variability. Over the last two weeks representatives from the Marshall Islands, Palau and the Federated States of Micronesia (FSM), met in Honolulu, Hawaii to develop a roadmap to improve water planning and management.

Water systems are both fragile and complex. They connect, intersect and interact with different eco-systems, communities, economic interests and government and non-government agencies. A broad range of key stakeholders involved were invited to the workshop and include information specialists, NGOs, public utility managers, environment protection officials, national planners and senior civil servants.

"We are looking at ways to manage water in a more integrated way, involve more people and to build bridges between stakeholders at the national level and relationships between our island countries," said Jorelik Tibon, Deputy Chief Secretary, Republic of Marshall Islands Government.

The meeting was run by the Pacific Islands Applied Geoscience Commission's (SOPAC) Integrated Water Resource Management (IWRM) project in partnership with the East West Centre. According to Rhonda Robinson, IWRM adviser at SOPAC, IWRM will help Pacific Island Countries develop and strengthen policy, processes and structures, which enhance the intersectoral involvement and coordination of regional, national and local stakeholder groups in water resources management. "An Integrated Water Resources Management approach enables coordinated management and planning to achieve sustainable solutions for water and sanitation issues over the long term," Ms Robinson said. "It provides the process for action and results."

Ms Portia K. Franz, Executive Officer of the Palau Environmental Quality Protection Board said that while there are many different sectors in Palau with policies related to water they are currently not connected. "We will look at the ways IWRM can help us weave these sectors, and policies together," she said. "It will be important to involve communities in the process so that we have a much stronger, workable, achievable and comprehensive national water policy."

Wendolin Roseo Marquez, Terrestrial Program Manager with Conservation Society of Pohnpei, said that by looking at the issue of water management holistically and involving different stakeholders the program has a good chance of succeeding. "Through this approach we can give communities and other NGO's a sense of empowerment and ownership on water issues," he said.

Demonstration projects, funded by the Global Environment Facility, will show communities the tangible benefits IWRM can provide. The meeting covered effective communication, leadership and consensus building, negotiation, and creative strategies to develop an inclusive and wide ranging IWRM programme for each country.

The Pacific IWRM national planning programme is funded by the European Union.

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EAST-WEST CENTER





Investigating Gender Outcomes in Water and Sanitation

The Institute of Sustainable Futures (University of Technology Sydney) and the International Women's Development Agency (IWDA) are working in partnership with Live & Learn Environmental Education and World Vision Vanuatu to investigate gender outcomes in water and sanitation initiatives in the Pacific.

"The study focuses on two Pacific case studies that incorporate gender strategies and support community decision making processes: World Vision's Participatory Hygiene and Sanitation Transformation (PHAST) initiatives in rural Vanuatu and Live & Learn's water governance and sustainable communities projects in Fiji".

Prior to the research, Live & Learn staff were involved in two days of intense research training and planning in Suva, SOPAC also joined in this planning meeting and discussed the tools that's going to be used and create an input into it.

Among Live & Learn staff were the IWDA, ISF and Vanuatu World Vision. The research is facilitated in two communities in Fiji, Vunibau in Serua and Navatuvula in Naitasiri.

The research findings will contribute towards a larger research activity being undertaken in parallel, which aims to investigate gender outcomes in water, sanitation and hygiene initiatives in the Pacific with the intent of influencing policy and practice of Australian, Pacific and regional actors focused on water and sanitation.

The result of the research will be posted on the IWDA website: www.iwda.org.au

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iwda



LIVE & LEARN ENVIRONMENTAL EDUCATION

World Vision



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National Wastewater Management Training Courses for Fiji and the Cook Islands

As part of their ongoing efforts to improve and strengthen wastewater management, both Fiji and Cooks Islands held national training courses on wastewater. This saw key in-country stakeholders come together for a 1-week training course to build their capacity on wastewater management.



A total of 44 candidates from Fiji and Cook Islands participated including personnel from in-country Ministry of Health, Water and Sewerage Utilities, Department of Environment, water and sanitation committee members and local NGOs. Additional observers from the Samoa Water Authority and the Vanuatu Department of Water Resources were sponsored to attend the training as well.

The mentioned training course was basically aimed at enabling people with responsibility on wastewater management to identify problems with wastewater management in-country and come up with appropriate solutions through Objective Oriented Planning, with a wide range of stakeholder consultations. This assisted with the capacity building aspect of the participants as well as fostered good working relationship between the various in-country agencies.

The training courses were funded by the UNEP-GPA and implemented through facilitation and organisation by SOPAC and IAS-USP with assistance from in-country stakeholders namely Ministry of Health and Water and Sewerage department in Fiji and National Environment Services and Ministry of Health in Cook Islands.

The delivery of the training contributes directly to the implementation of the Pacific Wastewater Framework for Action with anticipation that the training plays an integral role in the integration of wastewater and sanitation management into the overarching concept of Integrated Water Resource Management (IWRM) which is currently underway in the Pacific region.

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Pacific Water & Waste Association Conference & Expo, Vavau Tonga

The recent Pacific Water & Wastes Association (PWWA) Conference & Expo held in Vava'u, Tonga from 30th July to 3rd August brought together key officials from most Pacific Water utilities, as well as industry partners and donor agencies such as WHO, ADB, SOPAC and the EU.

The event was highly successful and provided the opportunity for Pacific water utility officials to share their experiences and challenges with each other to collectively decide on a way forward. Key identified needs for utilities to focus on include improving performance and reducing non-revenue water (water lost from the system through leakage, theft or metering inaccuracies), while providing quality service and safe drinking water to communities.



One of the major outcomes of the conference proposed to address these challenges is the draft PWWA Action Plan for 2009 – 2012. Developed in consultation with member utilities, the Action Plan provides guidance and direction for Pacific water utilities and outlines many of the challenges necessary to be addressed in key result areas such as financial management, staff capability, and service delivery.

As an important part of the Action Plan, the PWWA proposes to revive the process of benchmarking for Pacific water utilities. Through collection and use of accurate, reliable data, benchmarking will assist in improving utility performance, the establishment of effective asset management procedures, and will inevitably lead to improved efficiency and cost savings for utilities.

Following the conference, a "Drinking Water Safety Planning - Lessons Learnt" Workshop was held on the 3rd August. This full day workshop provided an important opportunity for pilot and replication countries under the Drinking Water Safety Planning (DWSP) Programme to present on their progress, reflect on the issues and key outcomes of the drinking water safety planning process, and discuss their experiences and challenges arising in their individual countries from the practical implementation of the DWSP risk management approach for water supply systems.

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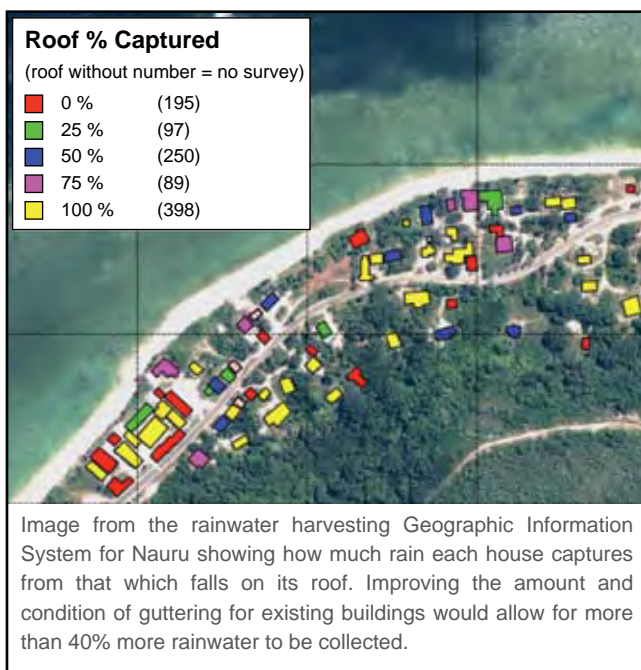
GIS for Rainwater Harvesting in Nauru

In mid June 2009, Mr Edwin Liava'a visited Nauru to undertake further GIS activities as part of the Pacific HYCOS project.

Prior to the visit, Mr Liava'a developed a brochure called 'Harvesting Nauru's Heavens' which promoted rainwater harvesting and highlighted the potential of roof catchment areas. These brochures were distributed in Nauru to create awareness on Rainwater Harvesting (RWH). In addition a presentation was done to secondary school students on practical examples of managing fresh water resources as part of their senior school curriculum.

In addition, Mr Liava'a performed ground truthing of the RWH database and updated the corresponding GIS components before he presented the Nauru Rainwater Harvest (RWH) GIS/Database to the Department of Commerce, Industry and Enterprise (CIE) who will now maintain this database. He emphasised the need for water quality monitoring and encouraged the Ministry of Health to take proactive initiatives to reduce the high cases of diarrhoea in Nauru.

A new TB3 raingauge was also installed and basic training on data collection was provided to the CIE staff.



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Improving water security in Tonga

Tonga is one of the participating countries of the EU funded Multi-Country Disaster Risk Reduction Project (B-Envelope). Implementation period is for duration of 3 years with a total budget of €1,110,000. The overall objective of the project is disasters risk reduction, reducing vulnerability and building community resilience.

The focus of the project is to reduce water supply scarcity and pollution vulnerability in the Kingdom of Tonga.

The specific interventions include:

- Improving dry season water availability and year round water quality of Nuku'alofa reticulated water supply;
- Improving dry season water availability and year round water quality for village groundwater supplies;
- Improving land management and water quality of Matakieua wellfield serving Nuku'alofa;
- Increasing Outer Island dry season rainwater harvesting water supplies; and
- Increasing rural and urban rainwater harvesting capacity building;



The purpose of the visit was to assist the Tonga Water Board together with Grundfos for the installation of the new submersible pumps. Grundfos pumps are intended to replace all existing diesel pumps and oversized electric motor driven pumps. The mission also assists and provide trainings for the operators in fabrication, handling and operation of the new pumps and controls.

Mission also follows up on the progress of Matakieua rehabilitation contract with Moala Friendly Construction and coordinates with TWB on implementation schedule to ensure the two parties are communicating on the works to date.

Visit was also scheduled to meet up with Electrical contractor on the progress of the 3 phase electrification extension.

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GEF Pacific IWRM Activities in the Pacific

GEF-Pacific IWRM start-up activities are accelerating as the countries move towards the Inception Workshop in Fiji in September and the start of full project implementation. Project air-miles have kept pace with visits by the Regional Project Co-ordination Unit (RPCU) to most countries. The two that I have been pleased to visit since the last edition of the Newsletter are Samoa and Niue.

Full marks for forward planning to Samoa where the Ministry of Natural Resources and Environment (MNRE) Watershed Management unit has thousands of tree seedlings in poly-pots in readiness for transplanting in the Vaisigano and Fuluasou catchments. Improved management of these catchments, as the major sources of Apia's water supply, is a main component of the Samoa GEF-IWRM demonstration project.



Judging by the tree vigour, the race is now on to carry out the plan of working out with the catchment communities exactly where to plant which species of trees before the trees burst out of their poly-pots and vote with their roots.

Full marks too for adaptive management. The multi-stakeholder working group that was a core part of the project development and design process has evolved into the IWRM Catchment Co-ordinating Committee. The stakeholder members now have the opportunity to guide and monitor the implementation of the IWRM plans they jointly planned. Working together, planning together to find the best management for the catchment water resources and the best balance for the diverse use(r)s, and then adapting the plans based on the monitoring feedback, the committee will be an expert source for assessing the benefits (as well as the costs) of the IWRM approach.

In Niue, the Niue Water Steering Committee is newly formed and already endorsed by Cabinet as the national committee responsible for water resources management in the country. As such, it also serves as the steering committee for water projects and is actively working with PWD (Public Works Department, the lead agency for the GEF-IWRM project), on the review and up-dating of Niue's demonstration project.

The key focus of the project is the protection of Niue's ground water lens from contamination. Unsurprisingly, the main contamination threats span diverse sectors: livestock production (pig effluent); transport (oil and fuel storage depots and engine exhaust products on roads); industry (fish processing waste); domestic sanitation (septic tanks); construction (gravel extraction); health (hazardous hospital waste), and Niue has identified specific studies and interventions for each of these.

One excellent and ongoing collaborative initiative between the Education Department and PWD is the writing (by teachers) and publishing of a series of leaflets on Niue water issues as curriculum reading materials for school pupils. This collaboration looks set to continue under the co-financing Water Demand Management Project, with a target reader group expanded to include community members. A lesson that might find interested students in other demonstration projects.

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Drinking Water Safety Planning - Lessons Learnt

A Pacific Lessons Learned workshop was organised on the 3rd August to allow participating countries to share their experiences and respective outcomes from implementing the DWSP approach in selected urban and rural water supply systems. The day also provided a forum to gauge the interest of 'new' countries to adopt the DWSP risk management framework, as it was dovetailed to the Pacific Water and Wastes Association (PWWA) Annual Conference.

The following key lessons learned came out of the workshop.

1. Drinking water safety planning process would work more efficiently if it has champions and stakeholders committed to a common goal such as striving for better health of people
2. Stakeholder collaboration is very beneficial but at the same time can become challenging if there is conflict of interests on the end goal
3. Water resources protection and its management is very important in Pacific island countries
4. Water users will pay for safe drinking water
5. Improvements in water supply takes time
6. Mechanisms should be established to better support community water supply and rural water supply
7. Linking water safety planning to other ongoing in-country water initiatives is valuable
8. All operations staff and those involved in the provision of safe water supply need to be thoroughly involved in drinking water safety planning
9. The timeframe for capacity building and knowledge/skills transfer should be recognised and realistic.



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Background on Water in Small Island Countries

The global water community acknowledged the special vulnerability and particular needs of small islands by the inclusion of "Water in Small Islands Countries" as a special theme at the 3rd World Water Forum that was held in Kyoto, Japan from 16-23 March 2003. SOPAC and the Asian Development Bank (ADB) jointly led this Water in Small Island Countries session as well as its preparation through a regional consultation in the Pacific (Sigatoka, Fiji Islands, 2002).

A major outcome of the Pacific regional consultation was the Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP), which details priority actions of the water sector in the region. This action plan, endorsed by 18 island countries, 14 at ministerial level, (and 16 countries at Head of State level including Australia and New Zealand) has been incorporated into the Type II Water Partnership Initiative and was submitted by the Pacific Island Countries to the UN Commission for Sustainable Development (CSD) in Johannesburg during the World Summit for Sustainable Development (WSSD) in August 2002.

The objective of this Partnership Initiative is to implement the Pacific Regional Action Plan on Sustainable Water Management, inclusive of its sister strategies, the Pacific Wastewater Policy Statement and the Pacific Wastewater Framework for Action, as effectively as possible.

Over 200 participants were involved in the national and regional consultations and the Water in Small Islands Countries session and they form the core of the Partnership. Now, over 750 individuals have joined this network. Hardcopies of the Regional Action Plan have been distributed to all attendees of Sigatoka and Kyoto and are available from the SOPAC Secretariat. In addition you can obtain more information through the following website:

<http://www.sopac.org/tiki/tiki-index.php?page=Water+in+Small+Islands+Consultations>

Arrangements of the Pacific Type II Partnership Initiative on Sustainable Water Management

The overall aim of the Partnership Initiatives is to ensure coordination and increased partnerships in meeting the WSSD goals through its Plan of Implementation.

The Pacific Partnership Initiative on Sustainable Water Management is coordinated and facilitated by the intergovernmental organisation SOPAC (South Pacific Applied Geoscience Commission), which has the regional mandate to support the Pacific Island Countries in water & sanitation. SOPAC is assisted in this task by a deputy facilitator, the University of the South Pacific (USP).

The Partnership has a Facilitator (based at SOPAC) who is responsible for implementing the core functions of the partnership: liaising between the regional stakeholder groups and their sub-networks; researching and receiving stakeholder information on on-going and planned water activities; tracking donor and development agency programmes; identifying areas requiring implementation; and coordinating proposal submissions and project implementation. The Facilitator is also responsible for high-level advocacy of the strategic approach.

Monitoring and evaluation are carried out using a matrix inventory of previous, existing, planned and proposed activities, including details of the stakeholders involved, the intervention objectives, implementation duration and status, and anticipated impact.

The Facilitator enables countries and development agencies to: identify successful previous activities and therefore improve the sustainability of subsequent interventions; reduce and prevent duplication of activities; link country requirements to development programmes (and vice versa); and augment existing and proposed activities nationally and regionally.

A working group of CROP agencies (Council of Regional Organizations of the Pacific) and NGO representatives has been set up to act as the overall coordinating body of the Pacific Type II Initiatives. Facilitators are asked to report to this Sustainable Development Working Group on a regular basis.

If you have comments on this Initiative or would like to make contributions and be further involved please do not hesitate to contact Marc Overmars marc@sopac.org



Publication



Converting commitment into action – Sanitation, hygiene and drinking water in the Pacific island countries

“Converting commitment into action – Sanitation, hygiene and drinking water in the Pacific island countries” provides a concise overview of a sector in need.

Statistics from the WHO and UNICEF Joint Monitoring Programme used in the report reveal persistent and direct impacts on the populations of 14 developing Pacific island countries from water, sanitation and hygiene related diseases.

As of 2006 only 48% of these populations had access to improved sanitation. Water supplies fare no better, with only 46% having access to improved sources of drinking-water, and just 13% having the ‘luxury’ of piped water. According to the report, at least 2,800 deaths each year - the equivalent of nine jumbo jets crashing - are ninety percent attributable to the diarrhoeal diseases which result from poor sanitation, hygiene and drinking water.

This Guide can be downloaded from the PacificWater website:

www.pacificwater.org/pages.cfm/resource-center/sopac-water-publications/



Adapting to Climate Change in water resources and water services in Caribbean and Pacific island countries

SOPAC provided a joint contribution with CEHI to the preparation of a session at the 5th World Water Forum on water and climate change adaptation through a Perspective Document on Adaptation to Climate Change in water resources and water services in Caribbean and Pacific island countries.

The outcomes of the Perspective Documents were summarised by WWC, IUCN and CPWC and included the recognition for SIDS as being one of the hotspots deserving attention. The Perspectives on water and climate change adaptation led furthermore to the consortium’s publication towards a framework for climate-proofing “don’t stick your head in the sand!”.

The above documents are providing guidance to climate adaptation in the water sector in the Caribbean and Pacific island countries and can be downloaded from:

www.waterandclimate.org/ and <http://www.pacificwater.org/pages.cfm/resource-center/sopac-water-publications/>



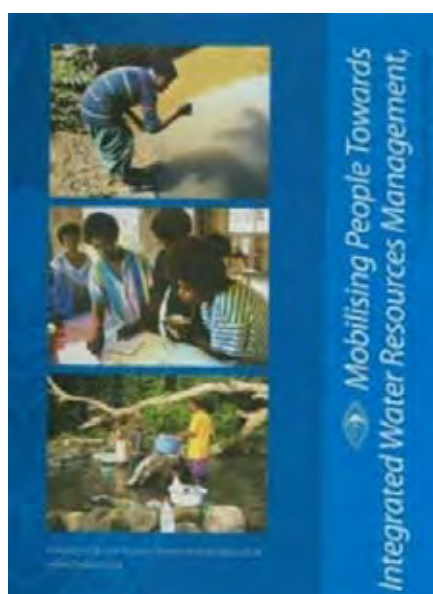
Drinking Water Safety Planning – A Practical Guide for Pacific Island Countries

The 'Drinking Water Safety Planning – A Practical Guide for Pacific Island Countries' has been developed to assist drinking water supply operators and managers improve the day-to-day management of the water supply with the objective of producing safe drinking water for consumers.

Drinking Water Safety Planning – A Practical Guide for Pacific Island Countries' has been developed based on lessons learned and practical experience gained through an AusAID-funded joint SOPAC/WHO programme on drinking water safety planning in Pacific Island Countries. This project involved four pilot countries (Tonga, Cook Islands, Palau and Vanuatu). The lessons learned and approaches used by these countries provide the framework for drinking water safety planning explained in this Guide. The steps and processes described in this Guide are reinforced through case studies from the pilot countries.

This Guide can be downloaded from the PacificWater website:

www.pacificwater.org/pages.cfm/resource-center/sopac-water-publications/



IWRM Community Mobilisation Guidelines

The final Community Mobilisation Guidelines to help assist communities and facilitators working with them to look at IWRM approaches at a village and community level are now available.

Developed by Live and Learn Environment Education, supported by SOPAC and UNDP and UNEP, the guidelines are a key output from the Project Design phase of the Sustainable Integrated Water and Wastewater Management project supported by the Global Environment Facility. This project will work with 14 countries in the Pacific starting in 2008. Through a network of national Demonstration Projects supported by regional capacity building components the project aims to raise awareness on IWRM approaches and strengthen national and regional approaches to integrate improved water management in the water sector and into wider national and community interventions.


The **IWRM Community Mobilisation Guidelines** is available on SOPAC website for download:

<http://www.sopac.org/tiki/tiki-index.php?page=CLP+Publications>





Building partnerships for water and sanitation initiatives in the Pacific Region



Pacific WASH Coalition

The Pacific WASH Coalition supports regional initiatives in the area of water supply, sanitation and hygiene (WASH).



The Pacific WASH Coalition includes the following organisations: Foundation of the Peoples of the South Pacific International (FSPi), the Fiji School of Medicine (FSMed), Live & Learn Environmental Education (LLEE), the World Health Organisation (WHO), the United Nations Children's Funds (UNICEF), International Federation of Red Cross (IFRC) and the Pacific Islands Applied Geoscience Commission (SOPAC).

The Pacific Islands Applied Geoscience Commission based in Suva, Fiji has a regional mandate on water and sanitation and provides a secretarial role within the Pacific as a member of the global Water Supply and Sanitation Collaborative Council (WSSCC).

Jointly the Coalition takes a coordinated approach in addressing the issues of access to safe water supply, adequate sanitation and improved hygiene practices for the people in the Pacific.

The Coalition utilises existing frameworks such as the Pacific Partnership Initiative on Sustainable Water Management, the Pacific Wastewater Framework for Action and the Pacific Framework for Action on Drinking Water Quality and Health to support countries achieving the MDG targets on water and sanitation.

Globally, but also in Pacific island countries, there is a vast need to improve hand washing and sanitation. Eighty-eight per cent of cases of diarrhoeal diseases worldwide are attributable to inadequate sanitation, unsafe water and poor hygiene. In the Pacific island countries, the year 2002 saw the incidence of 871 cases of acute diarrhoea per thousand people, causing the death of 2800 people. More severe forms of diarrhoeal diseases include cholera, typhoid and dysentery.

Pacific Water and Sanitation Flyer

The Pacific WASH Coalition supports regional initiatives in the area of water supply, sanitation and hygiene (WASH).

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The Pacific Water and Sanitation Flyer can be downloaded from the PacificWater website:

www.pacificwater.org/pages.cfm/news?newsid=pacific-wash-coalition



The Pacific Integrated Water Resource Management Programme Brochure

A brief colourful overview of Integrated Water Resources Management (IWRM) and the aims and activities of the Pacific IWRM programme.

Hard copies of the IWRM brochure are available on request via iwrm@sopac.org or can be downloaded from the IWRM website:

www.sopac.org/tiki/tiki-index.php?page=IWRM+Outputs





National Water Apex Bodies – a guide for Pacific Island Countries

This is a brief introduction to some of the key issues and steps to be considered in the establishment and strengthening of National Water Apex Bodies (NWABs) in Pacific Island Countries. It endeavours to give the reader some initial advice on questions such as:

- ❁ What is the point of establishing an NWAB in the first place?
- ❁ Who should be involved in the NWAB and how do you involve them?
- ❁ How do you run the day-to-day work of the NWAB in order to achieve national goals and to ensure impact on the ground?

More specifically, the guide aims to help national civil servants involved in strengthening NWABs to draft or revise Terms of Reference for their National Water Apex Bodies in order to support reform towards integrated water resources management. For this purpose, the guide includes a checklist for Terms of Reference as Annex 1.

The guide has been put together by SOPAC with funding from the European Union as part of the Pacific IWRM Programme, and is based on issues emerging from the process of developing national diagnostic analyses on IWRM and from the IWRM Planning Meeting held in Niue in July 2008.

This is a first edition and should not be seen as a complete review but rather a brief introduction to the basics. Feedback on the content and the usefulness of this guide, and suggestions for how to improve it, are gratefully received by iwrm@sopac.org



Resource Guide - Mainstreaming Gender in Water Management

This is the second edition of the Resource Guide on Mainstreaming Gender in Water Management of August 2006, which was first published by the United Nations Development Programme (UNDP) in 2003. The Guide is a reference document to assist water and gender practitioners and professionals as well as persons responsible for gender mainstreaming, and anybody else who is interested in the water sector. It is a compilation of newer resources – documents, papers, books, case studies, tools and toolkits - on gender mainstreaming in Integrated Water Resource Management (IWRM). It is meant to support action and further reading and research.

For the regular updating of the website version of the **Resource Guide** please visit the following website:
www.genderandwater.org/



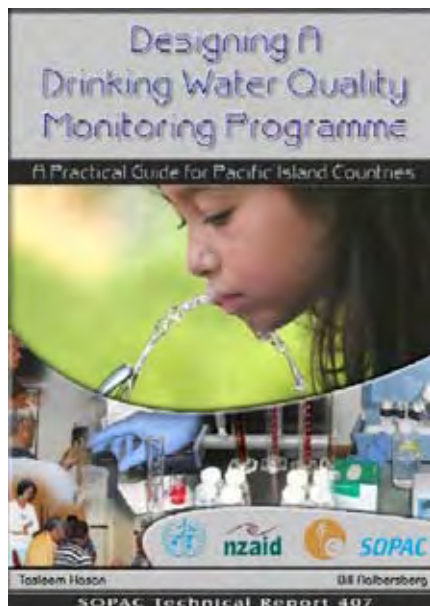


Integrated Water Resource Management in Pacific Island Countries A Synopsis

Under the Global Environment Facility funded Integrated Water Resources and Wastewater Management Project 14 countries of the Pacific Region prepared detailed Diagnostic Reports summarising the status of their water resources and assessing the barriers to implementing Integrated Water Resource Management (IWRM) approaches in their respective countries. This Synopsis report represents a summary of the 14 Diagnostic Reports, providing a baseline status of IWRM approaches in country. It will provide a useful monitoring report over the coming years as countries start to implement IWRM approaches. The report provides some simple solutions to achieving IWRM in small island environments.

Copies of the **Synopsis Report** are available directly from SOPAC, or can be downloaded from the IWRM website:

<http://www.sopac.org/tiki/tiki-index.php?page=IWRM+Outputs>



Designing A Drinking Water Quality Monitoring Programme "A Practical Guide for the Pacific Island Countries"

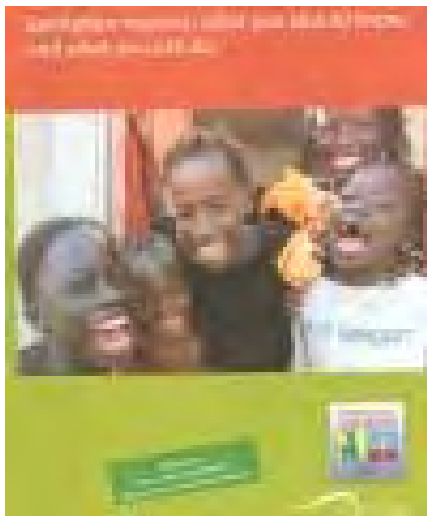
Contamination of drinking water is a significant concern for public health throughout the world. It is important for Pacific island countries (PICs) to identify, prioritize and analyse water quality parameters that are of greatest risk to human health. This will ensure that viable and useful information on the status of drinking water quality is achieved within the existing resources (budget, staff and laboratory capacity).

This guide provides the opportunity and direction for Pacific Island Countries (PICs) to design a feasible and useful drinking water quality monitoring programme that is conscious of their existing, and in some instances limited, resources. It is aimed at assisting agencies involved with water quality monitoring roles design a practical and workable monitoring programme for their country and purpose.

The Guide has been produced and published under the NZAID-funded Pacific Water Quality Monitoring Capacity Building (WQM) Programme which is being implemented by the Pacific Islands Applied Geoscience Commission (SOPAC), the World Health Organization (WHO) and the Institute of Applied Sciences of the University of the South Pacific (IAS-USP).

For copies of the guide please contact SOPAC Water Quality Programme Officer (tasleem@sopac.org)



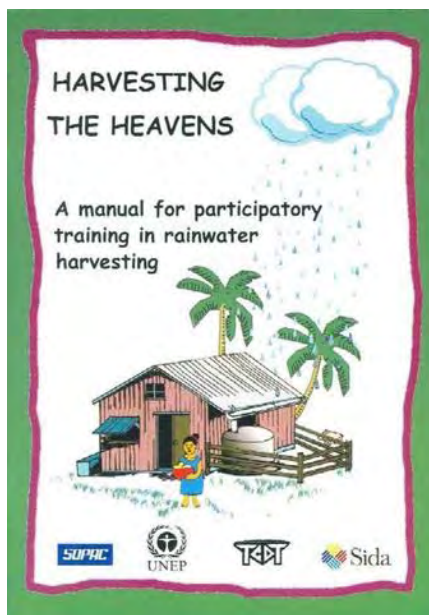


Sanitation matters: what you should know, and what you can do Advocacy kit

2008 is the International year of Sanitation. This kit is designed to further specific goals of the year, namely to increase awareness about the sanitation crisis as well as to secure commitments and mobilize action from the government and other stakeholders to address this global emergency.

The kit contains a **booklet** that summarizes briefly why sanitation matters, detailed **fact sheet** on the links between sanitation and health, economic development, social development and dignity, and environment, a **matrix** that demonstrates clearly that the sanitation crisis affects everyone and that everyone can contribute to solving it, a **list of useful websites, talking points** on sanitation, and a **poster**. Journalists and others in the media will also receive in their kit **recorded interviews** (as well as **transcripts**) with leading experts that can be used in radio or print stories as well as **photographs** and various **figures** that can be reproduced. Professional; campaigners will find an **advocacy guide** in their kit.

For more information on the kit and its content, contact the Water Supply and Sanitation Collaborative Council (WSSCC), Geneva, Switzerland, wsscc@who.int.



Participatory Training in rainwater Harvesting

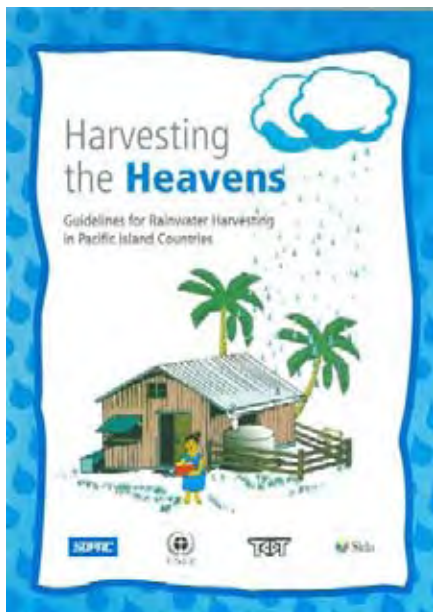
This manual of **Participatory Training in rainwater Harvesting** was developed as part of the United Nations Environment Programme (UNEP) project titled "Pilot Project on Empowering Women in Rainwater Harvesting in the Pacific Atoll Islands" with funding from the Government of Sweden.

The manual is targeted for use by Non-Government Organisations (NGOs), Community-Based Organisations (CBOs) or people involved in rainwater harvesting, and contains a number of participatory techniques, tools and activities based on best practices from a variety of sources.

Copies of this Manual can be obtained from the **SOPAC Secretariat** (arieta@sopac.org) or you can download the document via the following website:

<http://www.sopac.org/CLP+Rainwater+Harvesting>





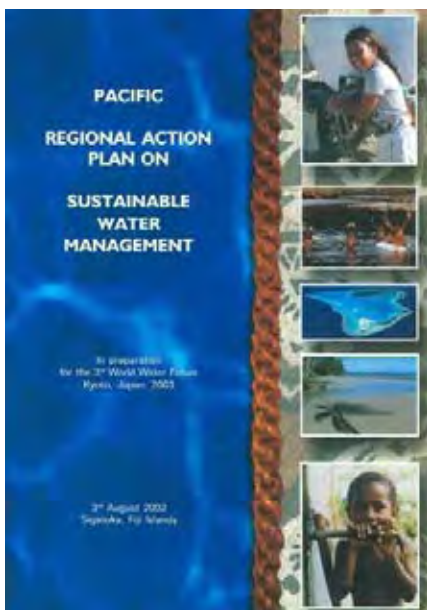
Harvesting the Heavens: Guidelines for the Rainwater Harvesting in the Pacific Island Countries

The “**Harvesting the Heavens: Guidelines for the Rainwater Harvesting in the Pacific Island Countries**” were developed as part of the United Nations Environment Programme (UNDP) demonstrating projects on “Empowering Women in Rainwater Harvesting” funded by the Government of Sweden through their development agency SIDA and carried out in Africa (Kenya) and the Pacific (Tonga).

The guidelines capture the lessons learned during the preparation and the implementation of the demonstration project executed by the South Pacific Applied Geoscience Commission (SOPAC) and carried out in the Island group of Vava’u of the Kingdom of Tonga through the Village Women’s Development Programme (VWDP) of the Tonga community Development Trust (TCDT).

Copies of this Guideline can be obtained from the **SOPAC Secretariat** (arieta@sopac.org) or you can download the document via the following website:

<http://www.sopac.org/CLP+Rainwater+Harvesting>



Pacific Regional Action Plan

National consultations as well as a regional meeting held in Sigatoka, Fiji from 29 July – 3 August 2002 provided a platform through which participants translated ideas into decisions and policy changes on water and sanitation resulting in the Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP).

The outcomes of the consultation were carried forward and presented during the 3rd World Water Forum in Kyoto as part of the theme “Water in Small Island Countries”.

Copies of the **Pacific Regional Action Plan** can be obtained from the **SOPAC Secretariat** (kamal@sopac.org) or you can download the document via the following website:

<http://www.sopac.org/CLP+Publications>



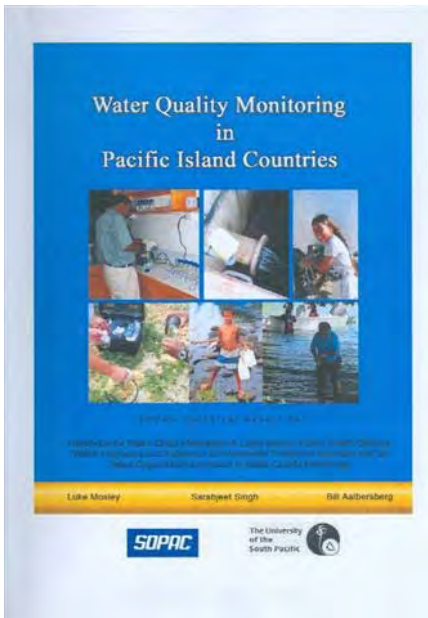


ICU bulletin

Contamination of drinking water is a significant concern for public The ICU is a multi-disciplinary, multi-national project providing Pacific island countries with 3-month climate forecasts. It is published monthly both in print and online by the National Institute of Water and Atmospheric Research (NIWA) in New Zealand and is funded by NZAID. Every month, 1200 printed copies of the ICU are distributed free-of-charge by NIWA, the publisher, directly to subscribers.

Online versions of the **ICU bulletin** can be downloaded from the following **NIWA ICU** website:

<http://www.niwascience.co.nz/ncc/icu/archive>



Water Quality Monitoring in Pacific Island Countries

The Water Quality Monitoring in the picture is the first of its kind guideline that has been developed by the Institute of Applied (IAS) of the University of the South Pacific (USP) and the South Pacific Applied Geoscience Commission (SOPAC). The publication is divided into sections on how to design a water quality monitoring programme; selection of drinking and recreational water sampling; solid and liquid waste management and general notes on sampling and laboratory procedures.

This handbook is aimed for those people working in the water and wastewater sectors in the Pacific region, with local examples to allow more understanding and adaptation.

Copies of the **Water Quality Monitoring in Pacific Island Countries** can be obtained from the **SOPAC Secretariat** (tasleem@sopac.org) or you can download the document via the following website:

www.sopac.org/tiki/tiki-sopac_download.php?path=/data/virlib/TR/TR0381.pdf&file=TR0381.pdf&loc=TR



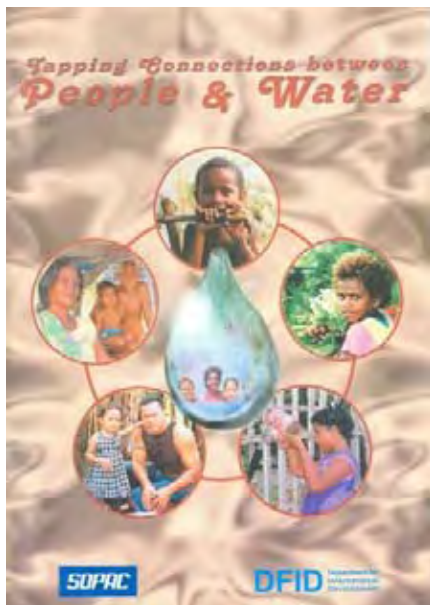


World Water Day Campaign

The World Water Day "Water for Life 2005-2015" Activity Booklet has been produced for schools and communities to further consider water issues through participative activities. The Activity Booklet should be used with the Water for Life Cartoon Scenes on the posters or calendars as the activities are linked to each cartoon scene. Alternatively, it can be used on its own to address different components of the theme "Water for Life".

Copies of the **World Water Day Campaign** are available from the **SOPAC Secretariat** (kamal@sopac.org) or **Live & Learn Environment Education** (marie@livelearn.org.fj). You can also download the document via the following website:

<http://www.sopac.org/WWD+2007>



Tapping Water Connections

Everyone uses water and everyone needs some kind of sanitation. The way water is used depends on the island where you live: the climate, the landforms, and the source of water. It also depends on the tradition and customs of the family and community, their income and the size of the population.

The handbook "**Tapping Water Connections**" can be used by field workers when working with communities to install and maintain water and sanitation systems. It can also be used to support health and hygiene programmes. The handbook raises seven Questions to think about. The Questions can be a checklist to identify important connections between people and their water and their land.

Copies of the Manual can be obtained from the **SOPAC Secretariat** (arieta@sopac.org) or you can download the document via the following website:

<http://www.sopac.org/data/virlib/MR/MR0577.pdf>





Multimedia

Don't Bug Me? – Pathogens and Pathways in Drinking Water Supplies

This is the DVD 1 of the four series produced by New Zealand Ministry of Health and can be used in the Water Safety Plans programme as public awareness material. This video informs on the access and presence of pathogens in the drinking water supplies. It is intended for the small drinking water supplies and can be used in the Pacific Island Countries.

Copies of this documentary are available from New Zealand , Ministry of Health.



Making It Safe? - Principles and Methods of Treatment for Small Drinking Water Supplies

This is the DVD 2 of the four series produced by New Zealand Ministry of Health and can be used in the Water Safety Plans Programme as public awareness material. This video informs on the principles and methods of treatment for small drinking water supplies. It can be used for educating the pacific island communities as well.

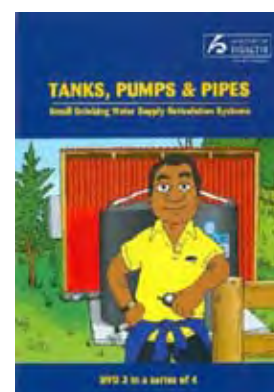
Copies of this documentary are available from New Zealand Ministry of Health.



Tanks, Pumps & Pipes - Small Drinking Water Supply Reticulation Systems

This is the DVD 3 of the four series produced by New Zealand Ministry of Health and can be used in the Water Safety Plans Programme as public awareness material. This video informs on reticulation system for small drinking water supplies. It can be used for educating the pacific island communities as well.

Copies of this documentary are available from New Zealand Ministry of Health.





Checking it Out - Sampling and Monitoring of Small Drinking Water Supplies

This is the DVD 4 of the four series produced by New Zealand Ministry of Health and can be used in the Water Safety Plans Programme as public awareness material. This video provides information on the sampling and monitoring of small drinking water supplies. It can be used for educating the pacific island communities as well.

Copies of this documentary are available from New Zealand Ministry of Health.



Cap-Net - IWRM Tutorial

This DVD contains a brief introductory tutorial aimed at policy makers, water managers, trainers and educators who want a basic understanding of IWRM principle. It provides the case for IWRM and the argument against those who may oppose it on institutional or sectoral grounds.

Copies of the **Cap-Net - IWRM Tutorial DVD** can be obtained from the **United Nations Development Programme**.



Toolbox

This DVD contains a brief introductory tutorial aimed at policy makers, water managers, trainers and educators who want a basic understanding of IWRM principle. It provides the case for IWRM and the argument against those who may oppose it on institutional or sectoral grounds.

Copies of the **Toolbox DVD** can be obtained from the **Global Water Partnership Secretariat**.





Harvesting the Heavens

A DVD documentary which follows the pilot project in Vava'u. The video highlights the important aspects of the project including community participation and ownership, encouraging women as well as men to participate in water management and promoting sustainable approaches. Harvesting the Heavens follows a rainwater harvesting demonstration project carried out in the villages of 'Utungake and Matamaka in the island group of Vava'u in Tonga. The project focused on the importance of community participation and ownership, encouraging women as well as men to participate in water management and promoting sustainable approaches.

Copies of the **Harvesting the Heavens documentary** can be obtained from the **SOPAC Secretariat** (kamal@sopac.org) or you can download the document via the following website:

<http://www.sopac.org/CLP+Rainwater+Harvesting>



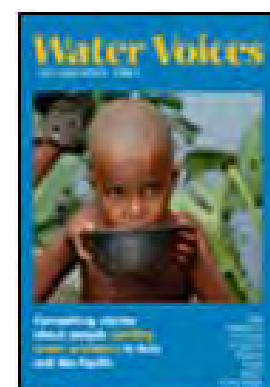
Water Voices Documentary Series

Water is essential to all life. And yet one in three Asians lacks access to safe drinking water, and half the people living in Asia and the Pacific do not have access to adequate sanitation. Conflicts over sharing of scarce water resources are increasing at an alarming rate.

A documentary series that recognizes the power of good examples and lessons learned to inspire 'home grown' solutions to water problems. The series recognizes the power of good examples and lessons learned to inspire 'home grown' solutions to water problems and looks specifically at communities in Fiji, Kiribati and Tonga.

Copies of this documentary can be obtained from the **SOPAC Secretariat** (arieta@sopac.org) or the **Asian Development Bank**

http://www.adb.org/Water/CFWS/Water_Voices_Videos.asp

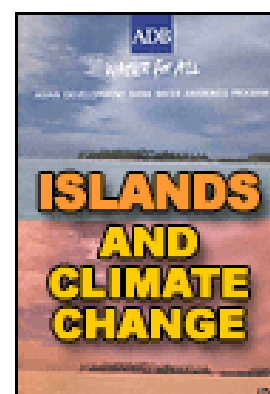


Islands and Climate Change

Islands and Climate Change examines and reports on a unique initiative on Fiji's Coral Coast where coastal communities and the tourist industry try to protect water resources. The Water Awareness Program aims to increase public understanding about vital water issues in the Asia and Pacific region; promote water sector reform; improve delivery of water services, especially to the poor; and foster conservation and integrated management of water resources.

Copies of this documentary can be obtained from the **SOPAC Secretariat** (arieta@sopac.org) or the **Asian Development Bank**.

http://www.adb.org/Water/CFWS/Water_Voices_Videos.asp



Pacific Water Agenda 2009

DATE	EVENT	LOCATION	DETAILS
11-15 May	WSSCC Annual Planning Meeting	Geneva	http://www.wsscc.org/
13-15 May	Water Industry Operations Group of New Zealand Conference	Dunedin, New Zealand	http://www.wiog.org.nz/
19-20 June	2nd Meeting of the International Network of Drinking Water Regulator	Singapore	
22-26 June	26th Pacific Islands Environment Conference (PIEC)	Saipan, United States Minor Outlying Islands	Lee-Ann Choy Jon Ordenstein prc@hawaii.biz 808-864-9812
13-14 July	North Pacific IWRM Workshop	East-West Centre, Hawaii	www.pacificwater.org
29-31 July	Pacific Water Association 2009 Water Conference & EXPO	Va'vau, Tonga	Details will be on the PWA Website soon. www.pacificwaterassociation.org
16-22 August	World Water Week	Stockholm	www.worldwaterweek.org
7-11 September	The 2nd International Conference on Rainwater Harvesting & Management	Brisbane, Australia	http://www.rwhm2009.org/
14-18 September	GEF IWRM Inception Meeting	Nadi, Fiji	
21-24 September	International Riversymposium	Brisbane, Australia	http://www.riversymposium.com/
26-30 October	International Network for Small Community Water Supply Management	St. Lucias	
15 October	Global Handwashing Day	Global	http://www.globalhandwashingday.org/
21-29 October	SOPAC STAR & Annual Session	Vanuatu	www.sopac.org
26-29 October	International Waters Conference	Cairns, Australia	http://www.gefiwc5.com



Selected Water Websites

ADB Water in Small Island Countries www.adb.org/Water/theme3.asp	Pacific ENSO Update http://lumahai.soest.hawaii.edu/Enso/subdir/update.dir/update.html
AOSIS Alliance of Small Island States www.sidsnet.org/aosis	Pacific Water Association www.pwa.org.fj
AUSAID www.usaid.gov.au	SIDSNET www.sidsnet.org
Australian Water Portal www.developmentgateway.com.au/water/index.html	UNEP http://freshwater.unep.net/
Barbados +10 www.sidsnet.org/Mauritius2004/	UNESCAP www.unescap.org
CSD12 www.un.org/esa/sustdev/csd/csd12/csd12.htm	UNESCO www.unesco.org/water
CSD13 http://www.un.org/esa/sustdev/partnerships/csd13_partnership_fair.htm	UNU www.inweh.unu.edu/inweh
Co-operative Programme on Water and Climate www.waterandclimate.org	WHO www.who.int/water_sanitation_health/en/
East-West Centre www.EastWestCenter.org/climate	WMO www.wmo.ch/web/homs/index.html
ESCAP www.unescap.org/esd/water/activities	World Bank www.worldbank.org/html/fpd/water
European Union www.europa.eu.int/comm/development/publicat/water/en/frontpage_en.htm www.euwi.net	SOPAC Water www.pacificwater.org
Gender and Water Alliance www.genderandwateralliance.org	World Water Council www.worldwatercouncil.org
Global Water Partnership www.gwpforum.org	USP www.usp.ac.fj
GWP Australia www.gwpaustralia.org	WSSCC http://www.wsscc.org/
Island Climate Update www.niwa.cri.nz/NCC/ICU	NIWA www.niwa.co.nz
NZAID www.nzaid.govt.nz	SPC www.spc.int
USGS http://hi.water.usgs.gov	Japan Water Forum http://www.waterforum.jp/eng/index.html
Water Virtual Learning Centre (WVLC), University of the South Pacific www.earth.fst.usp.ac.fj/index.php?id=4043	UN-Water http://www.un.org/waterforlifedecade/
World Summit on Sustainable Development www.johannesburgsummit.org	World Wide Fund for Nature www.wwfpacific.org.fj
International Commission on Irrigation and Drainage http://www.icid.org	Cap - Net www.cap-net.org/
Climate Front Lines www.climatefrontlines.org	PI-GOOS www.pi-goos.org





--- Please let us know if you think other websites are worth mentioning here! ---

We have changed the frequency of issuing this newsletter from semi-annually to quarterly so you can be kept updated on the latest developments. As mentioned in earlier mail outs we would appreciate it if you could forward this to colleagues who may be interested in this initiative so that it reaches the widest possible audience.

To subscribe please send an email to arieta@sopac.org to add your contact to our mailing list.
and

Send a blank email message with the words

"unsubscribe" in the subject field to: arieta@sopac.org to unsubscribe from this list if you wish not to receive any further issues in the future.

The Pacific Water Partnership Initiative News is produced by the Pacific Partnership Initiative on Sustainable Water Management for Water Awareness Program to provide water information to Pacific member governments, professionals, researchers, private sector and their counterparts in the donor community who are interested in water sector issues and initiatives.

For comments or more information:

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