



# Pacific Partnership Initiative on Sustainable Water Management

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Issue: VII, October 2005

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Welcome to the seventh official mail-out of the Pacific Partnership Initiative on Sustainable Water Management. This issue has a special focus on Wastewater and Sanitation in light of the Pacific wastewater training course that kicked off this month and you will find specific information and background materials on this topic. For the next issues we will aim to provide similar detailed information on specific topics.

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

## Highlights

This Quarterly Newsletter provides water and sanitation information to Pacific member governments, professionals, NGO's, CBO's, researchers, private sector and counterparts in the donor community who are interested in water sector issues and initiatives.

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## News



For further information on the Wastewater Training Course please visit:

<http://www.gpa.org/training>

**or contact:**

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SOPAC  
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**Prof. Bill Aalbersberg**  
[aalbersberg@usp.ac.fj](mailto:aalbersberg@usp.ac.fj)

## [Wastewater Training Programme in Pacific Island Countries](#)

A **training course for wastewater management** has been jointly developed by UNEP's Global Programme for Action for the Protection of the Marine Environment from Land-based Sources of Pollution (GPA/UNEP) with the UNESCO-IHE Institute for Water Education.

The wastewater training course is addressing one of the Guiding Principles of the Pacific Wastewater Policy and Framework for Action and will be implemented in the Pacific region in 2005-2006 by a consortium of SOPAC, USP-IAS, IOI, in collaboration with SPREP, UNESCO-IHE, GPA/UNEP and UN/DOALOS.

Using UN/DOALOS Train-Sea-Coast standards as well as the GPA Strategic Action Plan on Municipal Wastewater and the UNEP/WHO/UN-HABITAT/WSSCC Guidelines on Municipal Wastewater Management, the training will provide participants with analytical tools, substantive information and skills on how to select plan and finance appropriate and environmentally sound municipal wastewater management systems.

The training is divided into 3 modules:

**Module 1:** Objective oriented planning

**Module 2:** Conventional and innovative approaches to municipal wastewater management

**Module 3:** Presentation skills

A training needs assessment for the Wastewater Training Program has been completed and it became evident that there are not many opportunities for training in wastewater management in the Pacific region. However, respondents in the field of water/wastewater management indicated that the training would be beneficial to them. The programme is designed to build capacity within the water/wastewater sector and will be focused at manager or senior supervisor level. Participants should ideally be from a wastewater utility or equivalent responsible government department.

The first training will be run from **24-29 October, 2005 in Suva, Fiji Islands** with consecutive courses expected in 2006. In a later stage, distance and flexible learning, e-learning or correspondence learning can be considered as modes of delivery. The primary expected outcome is to increase capacity to identify and formulate feasible projects to improve wastewater management that are cost-effective and can in practically be financed, operated and maintained.

### Launch Water Safety Plan Project



For further information on the launching of Water Safety Plan Project please **contact:**

SOPAC  
**Sarah Davies**  
[sarah@sopac.org](mailto:sarah@sopac.org)

WHO  
**Steve Iddings**  
[who@sp.wpro.who.int](mailto:who@sp.wpro.who.int)

A Programme to develop Water Safety Plans in Pacific Island Countries was launched during SOPAC's Annual Session **26th September 2005 in Apia Samoa**. The programme will promote development and implementation of a 'catchment to consumer' risk-management approach to safe drinking water for both urban and rural Pacific communities. The South Pacific Applied Geoscience Commission (SOPAC) and the World Health Organization (WHO) will implement the two-year programme in several Pacific Island countries and is funded by AusAID.

Water Safety Plans are defined in the third edition of the WHO Guidelines for Drinking Water Quality (2004) as:

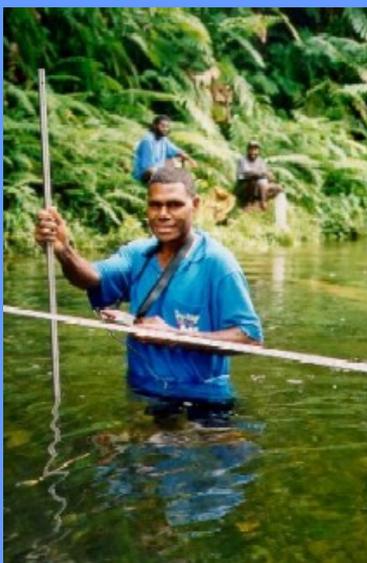
"A comprehensive risk assessment and risk management approach that encompasses all steps in the water supply from catchment to consumer to consistently ensure the safety of water supplies".

A Water Safety Plan comprises system assessment and design, operational monitoring and management plans, including documentation and communication. The elements of a Water Safety Plan build on the multiple barrier principle, the principles of hazard analysis and critical control points (HACCP) and other systematic management approaches. The plans should address all aspects of the drinking water supply and focus on the control of abstraction, treatment and delivery of drinking water.

Recruitment for SOPAC and WHO officers are now underway and the project implementation is expected to commence in January 2006.

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## **SOUTH PACIFIC HELP SYMPOSIUM**



For further information on the Pacific HELP Symposium please visit:

[http://portal.unesco.org/en/ev.php-URL\\_ID=29367&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.php-URL_ID=29367&URL_DO=DO_TOPIC&URL_SECTION=201.html)

**or contact:**  
**Hans Dencker Thulstrup**  
[hans@unesco.org.ws](mailto:hans@unesco.org.ws)

The UNESCO HELP (Hydrology for the Environment, Life and Policy) Symposium is to be held in conjunction with the Motueka Integrated Catchment Management Programme from **7 - 11 November 2005 in Nelson, New Zealand.**

One purpose of the Symposium is to develop ways in which Pacific Island agencies and communities can better manage land uses, bearing in mind their impact on rivers and coasts. This is the basis of Integrated Catchment Management and a focus of the UNESCO HELP Programme along with a demonstration of HELP Basin Project.

In particular, the Symposium is focused on devising ways in which HELP can contribute to strengthening catchment area management practices in the Pacific considering the limited data collection and processing capacity in the region. The presentations and discussions will assist UNESCO and their partners to have a clear indication of where the need to focus their assistance is to develop HELP related activities in the Pacific. The goal of the programme is to conduct multi-disciplinary, multi-stakeholder research to provide information and knowledge that will improve the management of land, freshwater, and near-coastal environments in catchments with multiple, interacting, and potentially conflicting land uses.

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For further information on the wastewater training course please visit:

**Website UNESCO:**

[http://www.unesco.or.id/activities/science/water\\_sci/events/215.php](http://www.unesco.or.id/activities/science/water_sci/events/215.php)

**Website LIPI:**

<http://www.limnologi.lipi.go.id/Bali2005.htm>

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### [13<sup>th</sup> IHP Regional Steering Committee Meeting for Southeast Asia and the Pacific](#)

The 13th IHP Regional Steering Committee Meeting for Southeast Asia and the Pacific will be held in Bali, Indonesia, from 21 to 25 November 2005. The meeting will be organized by IHP Indonesian National Committee, the Indonesian Institute of Sciences (LIPI), and the Ministry of Public Works (PU), and sponsored by UNESCO Office, Jakarta (Regional Science Bureau for Asia and the Pacific), the Indonesian National Commission for UNESCO, and the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT).

A representative from the Federated State of Micronesia will attend the RSC meeting on behalf of the Pacific to present the Pacific Island Countries report.



For further information on Pacific Resource centre for Water and Climate please visit our website:

<http://www.sopac.org/tiki/tiki-index.php?page=Pacific+Dialogue+on+Water+and+Climate>

**or contact:**  
**Komal Raman**

### [Establishment of Pacific Resource Centre on Water and Climate](#)

The Pacific Resource Centre on Water and Climate is now established at the SOPAC Secretariat. The Centre, funded by the Asian Development Bank (ADB), will continue to assist in achieving the goal of the Pacific Dialogue on Water and Climate: "to improve the capacity in water resources management to cope with the impacts of increasing variability of the world's climate, by establishing a platform through which policymakers and water resource managers have better access to and make better use of information generated by climatologists and meteorologists".

The Centre will aim to establish a Pacific Water and Climate Focal Group, promote implementation of the Pacific Hydrological Cycle Observing System (HYCOS) project, promote South-South transfer of knowledge through the Caribbean-Pacific Joint Programme for Action on Water and Climate, and disseminate relevant Case Studies on Water & Climate.

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Groundwater Hydrologist

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For the Progress Report or further information on ACP-EU Water Facility please visit:

[http://europa.eu.int/comm/europeaid/projects/water/documents/newprogress-report\\_july05\\_en.pdf](http://europa.eu.int/comm/europeaid/projects/water/documents/newprogress-report_july05_en.pdf)

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### [ACP-EU Water Facility Progress Report on First Call for Proposals](#)

As mentioned in Newsletter VI the European Union Council had allocated €500 million for the ACP-EU Water Facility. The first €250 million had been made available for 2004 and the First Call for Proposals was launched in November, 2004 for €180 million.

The First Call for Proposals resulted in 800 preliminary proposals being submitted of which 511 had been selected to the second phase. From the Pacific there were in total 10 proposals sent (1 - Niue, 3 - Papua New Guinea 2 - Vanuatu and 4 - on behalf of the Pacific) out of which 5 were selected for the second round.

SOPAC on behalf of their ACP member countries submitted two proposals which were selected for the 2nd round: one on Integrated Water Resources Management in conjunction with the UNDP/GEF IWRM project, and one on the Pacific Hydrological Cycle Observing System (HYCOS) in collaboration with WMO, UNESCO and the Fiji Meteorological Service.



For further information on Pilot Project in Liquid Waste Management please contact:

USP-IAS  
**Prof. Bill Aalbersberg**  
[aalbersberg@usp.ac.fj](mailto:aalbersberg@usp.ac.fj)

### [Coral Coast - Pilot Project in Liquid Waste Management](#)

As part of a joint Government of Fiji/Institute of Applied Sciences (USP) initiative an Integrated Coastal Management project has been established with the Coral Coast as a pilot study site. An initial stakeholder workshop identified pollution as a likely threat to coral reefs in the area. Monitoring of nutrient levels showed highly elevated nutrient (nitrogen and phosphorus) levels in many reef areas and large amounts of algal cover, especially Sargassum seaweed, a long brown seaweed that breaks off and pollutes beaches and interferes with fishing and research.

A study in August, 2004 by a New Zealand and United States expert determined that the three main anthropogenic sources of nutrients were village sewage, pig raising and waste from resorts, in that order. Ammonia and nitrate

nitrogen especially from septic tanks and pig waste rapidly move through sandy coastal soil to reach the reef.

Low-cost, low-technology ways to reduce nutrient pollution on the reefs were suggested and have since been implemented. These include:

- composting (dry) toilets
- composting pig waste
- Wetlands
- Best-practice Commercial Systems

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### [Pacific Preparation for the 4th World Water Forum](#)



For the further information on Pacific Preparation for the 4<sup>th</sup> World Water Forum please visit:

<http://www.sopac.org/tiki/tiki-index.php?page=4th+World+Water+Forum+Pacific+Preparations>

or

<http://www.waterforum.jp/eng/index.html>

**or contact:**

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**Sarah Davies**  
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SOPAC

The regional consultation in preparation for the 3rd World Water Forum (3WWF) in 2003 resulted in a strategic framework for the region to address small island countries water and sanitation issues, this being the Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP).

Regional, national and local action programmes have since been developed and are in various stages of implementation. The Japan Water Forum (JWF) that arose from the Japanese 3WWF Secretariat has approached SOPAC to assist in drafting and finalizing the Pacific sub-regional part of the Regional Position Paper for Asia and the Pacific, which is to be presented at the 4th World Water Forum (4WWF) from 16th-22nd March 2006 in Mexico. The Science, Technology and Research network (STAR) Water Working Group, held in association with SOPAC's Annual Session, will provide a first opportunity to provide this input and organized on September 26, 2005 at the Kitano Hotel in Apia, Samoa, in collaboration with the JWF and the Pacific Water Association (PWA).

All members of the Pacific Partnership Initiative on Sustainable Water Management are invited to provide comments on the draft position paper and make recommendations on the Pacific contributions in Mexico.

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For the further information on Asia-Pacific Region Synthesis Meeting for the 4th World Water Forum please visit:

[http://www.waterforum.jp/eng/tokyo\\_meeting.html](http://www.waterforum.jp/eng/tokyo_meeting.html)

or contact:  
**Shinobu Fukumoto**  
[ap@waterforum.jp](mailto:ap@waterforum.jp)

## [The Asia-Pacific Regional Synthesis Meeting for the 4<sup>th</sup> World Water Forum](#)

A Regional Synthesis Meeting was held on Monday, October 24, 2005 organised by the Japan Water Forum in collaboration with GWP South East Asia, GWP South Asia, GWP CACENA, Korean Water Forum, SOPAC and the Secretariat of the 4th World Water Forum.

The Objectives of the meeting were to:

- Synthesize the sub-regional process
- Finalize the "Regional Document" with adding the common message from the Asia-Pacific region.
- Discuss the program of "Regional Day" at the 4th World Water Forum

The Pacific Position Paper discussed and amended during the Pacific preparation meeting in Apia was presented at the meeting. All the documents and presentation files from the meeting, including the summary of the common message from the region, are available on the Japan Water Forum website.

<http://www.waterforum.jp/eng/apsubregions/>

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## Country Water Actions



For the further information on Strengthening Freshwater Protection in the Cook Islands please visit:

[http://www.sprep.org.ws/article/news\\_detail.asp?id=220](http://www.sprep.org.ws/article/news_detail.asp?id=220)

or contact:  
**Steve Menzies**  
[SteveM@sprep.org.ws](mailto:SteveM@sprep.org.ws)

or  
**Tauraki Raea**  
[tauraki@environment.org.ck](mailto:tauraki@environment.org.ck)  
IWP Coordinator  
Cook Islands

## [Strengthening Freshwater Protection in the Cook Islands](#)

The Cook Islands International Waters Project (IWP) is trying to find practical ways to make sure that freshwater resources are kept safe and clean for everyone in Rarotonga.

In many areas water is collected in a water catchment in the hills before it is filtered through gravel, fed to a holding tank, and distributed to consumers. There is currently no chemical water treatment and activities within the sensitive water catchment areas are contributing to unacceptable levels of contamination of the water supply.

Water tests are now consistently returning positive for faecal coliform from the faeces of warm-blooded animals. This is a threat to public health and locals and tourists alike are now advised to boil their drinking water.

The main objective of the Cook Islands IWP is to find cost-effective ways to ensure access to clean and safe drinking water in Takuvaine and eventually throughout the rest of Rarotonga. The project has been working with the Takuvaine

Community to try and understand the underlying root causes of the problem as a way of helping to identify the most appropriate, cost-effective, and sustainable solutions for Rarotonga.

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### [Pacific Programme for Water Governance](#)

The European Union has established a Programme for Water Governance (PFWG), for the three regions of Africa, the Caribbean and the Pacific. A Pacific region submission was made in 2002 by SOPAC. The submission proposed three pilot exercises for water governance at different 'levels' or scales, namely: national, major utility and local catchment. Fiji was chosen as one of the countries for the national water governance pilot, partly because of initiatives and commitments already made by the Government of Fiji.

The Fiji pilot is to run for eleven months, during which time an international consultant will make visits with an input of totally five months to help progress the development of strengthened arrangements for water governance at the national level in Fiji.

Activities during the first visit for the PFWG pilot were:

1. to scope the water governance requirements and develop an outline program for the pilot;
2. to assist in the development of the national water policy draft which will be circulated for consultation and consideration by the Government by the end of 2005.

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For the further information on European Union Programme for Water Governance Pacific Region please contact:

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SOPAC

### [Comprehensive Review of ADB's Water Policy Implementation In Country Consultation: Fiji](#)

In 2001 the Asian Development Bank (ADB) outlined its vision for integrated water management in its "Water for All" water policy. The policy has seven elements:

- Focussing on national water sector reform
- Managing water resources
- Delivering Water Services
- Conserving water
- Promoting regional cooperation
- Fostering participation and communication



For the further information on ADB Water Policy Consultation Water please visit:

<http://www.adb.org/Water/Policy/consultations/FIJ-2005.asp#TOP>

or contact:  
**Kathryn E. Nelson**  
[knelson@adb.org](mailto:knelson@adb.org)

- Improving water governance

In 2005, ADB launched a comprehensive review of its water policy implementation to gauge progress and set a course for the future. A meeting was conducted on **9th August 2005 in Suva Fiji**. The review provides ADB and the stakeholders with an assessment of progress, challenge, investment requirements, and opportunities for ADB to better help its clients achieve the vision of Water for All.

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For the further information on ADB Water Policy Consultation Water please visit:

<http://www.wmo.ch/index-en.html>

or contact:  
**Komal Raman**  
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SOPAC

### [Hydrological Working Group WMO Regional Association V](#)

The sixth session of the working group on Hydrology of the WMO Regional Association for the South-West Pacific (RA V) was held from **17 - 21 October 2005 in Nadi, Fiji Islands**.

The main purpose of this meeting was to review the various activities related to the regional programme in hydrology and water resources in the South-West Pacific based on the terms of reference of the Working Group and to review the follow-up to the implementation of the recommendation of the previous session.

Three days of the session were devoted for discussions on the various activities related to the regional programme in hydrology and water resources in region and detailed discussions on Pacific-HYCOS with SOPAC experts. The last two days were devoted to a training workshop on IWRM (Integrated Flood Management), Groundwater, Water and Climate (Drought Management) and Economic value of Hydrological products.

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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://list.sopac.org.fj/Secretariat/Programmes/H2O/3rd\\_world\\_water\\_forum/index.html](http://list.sopac.org.fj/Secretariat/Programmes/H2O/3rd_world_water_forum/index.html)

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

The overall aim of the Type II 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.

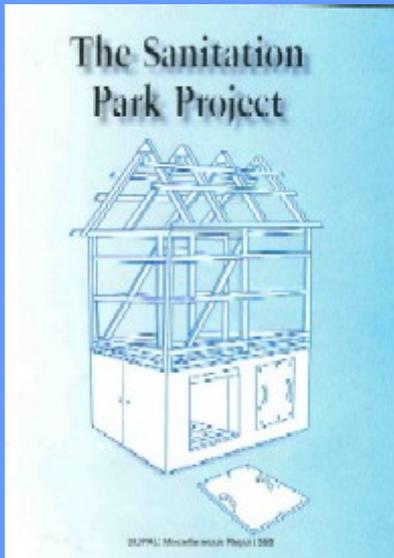
The Facilitator enables countries and development agencies to: identify successful previous activities and therefore improve the sustainability of subsequent interventions; reduce and prevent duplication of activities; link country requirements to development programmes (and vice versa); and augment 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](mailto:marc@sopac.org)

### **Publications**

## Sanitation Park Project Flyer



A flyer on the Sanitation Park Project was developed to provide background information to community members, students and to interested individuals/institutions visiting the Park or for those who would like to make a visit. The flyer gives a brief description of the available Sanitation Park systems and their features. Existing demonstration systems include; a sanitary well, a water seal latrine, a septic tank and soakage trench, a ventilated improved pit latrine and a waterless or composting toilet. Wherever possible pictures and illustrations have been used to present these systems for better understanding. Lastly, some useful references have been listed for those keen on further investigation on one of the wastewater treatment option. Contact details on personnel of the project team are provided should you require specific data on a topic.

Copies of the Sanitation Park Project Flyer can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

<http://www.sopac.org/tiki/tiki-index.php?page=Sanitation+and+Hygiene>

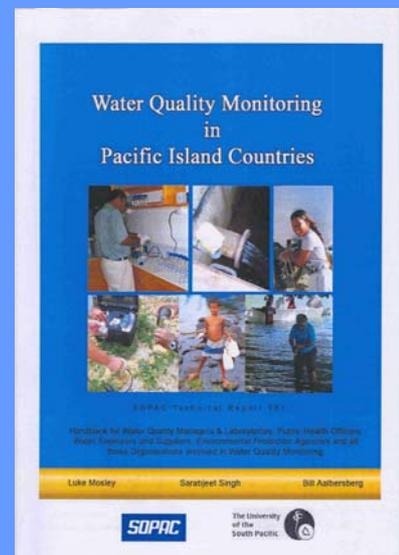
The Water Quality Monitoring in the picture is the first of its kind guideline that has been developed by the Institute of Applied (IAS) of the University of the South Pacific (USP) and the South Pacific Applied Geoscience Commission (SOPAC). The publication is divided into sections on how to design 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.

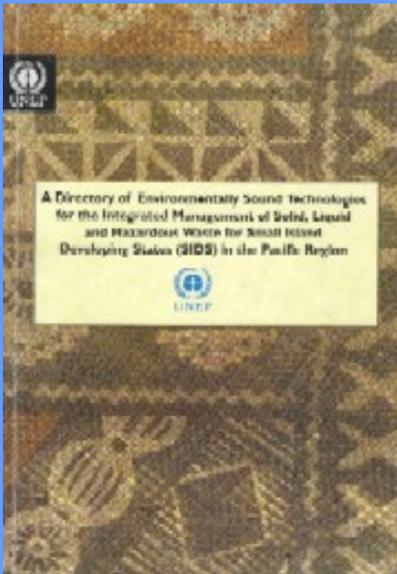
Copies of the Water Quality Monitoring in Pacific Island Countries can be obtained from the SOPAC Secretariat ([tasleem@sopac.org](mailto:tasleem@sopac.org)) or you can download the document via the following website:

[http://www.sopac.org/tiki/tiki-sopac\\_download.php?path=/data/virilib/TR/TR0381.pdf&file=TR0381.pdf&loc=TR](http://www.sopac.org/tiki/tiki-sopac_download.php?path=/data/virilib/TR/TR0381.pdf&file=TR0381.pdf&loc=TR)

## Water Quality Monitoring in Pacific Island Countries



**Directory of Environmentally Sound Technologies for the Integrated Management of Solid, Liquid and Hazardous Waste for Small Island Developing States (SIDS) in the Pacific Region**



The Directory of Environmentally Sound Technologies for the Integrated Management of Solid, Liquid and Hazardous Waste for Small Island Developing States (SIDS) in the Pacific Region represents the combined efforts and achievement of numerous people from **UNEP, SOPAC, ASPA and SPREP** over the last 3 years in the Pacific, Caribbean and the Indian, Atlantic and Mediterranean SIDS regions.

The directory provides solid, hazardous and wastewater technologies.

- Solid waste technologies - discuss information on different municipal solid waste management (MSWM) technologies that are currently used in different regions of the world.
- Hazardous Waste Technologies - addresses the proper management of various types of hazardous wastes, as they require special handling, treatment and disposal due to their hazardous potential.
- Liquid waste or wastewater technologies - in SIDS wastewater disposal systems are just as important for public health as a water supply distribution system.

Copies of the Directory of Environmentally Sound Technologies for the Integrated Management of Solid, Liquid and Hazardous Waste for Small Island Developing States (SIDS) in the Pacific Region can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

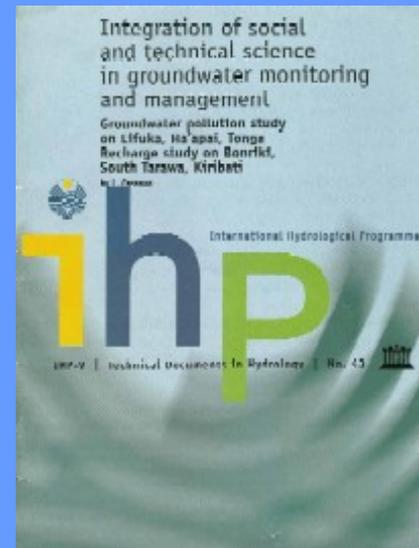
[http://www.sopac.org/tiki/tiki-sopac\\_download.php?path=/data/virlib/JC/JC0143.pdf&file=JC0143.pdf&loc=JC](http://www.sopac.org/tiki/tiki-sopac_download.php?path=/data/virlib/JC/JC0143.pdf&file=JC0143.pdf&loc=JC)

The integration of Social and Technical Science in Groundwater Monitoring and Management describes a groundwater pollution study on the island of Lifuka in the Kingdom of Tonga, in a village where private wells are an important source of water, in addition to dependence on household rainwater tanks and a public reticulated system. Comparison is also made with the findings of a ground water recharge project, which was undertaken on the island of Tarawa in the Republic of Kiribati, Central Pacific, where a reticulated groundwater system, sourced from a government controlled water reserve, was the primary focus of the study.

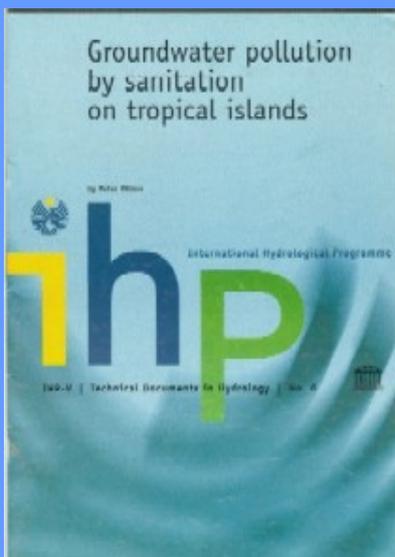
**Integration of Social and Technical Science in Groundwater Monitoring and Management**

Copies of the Integration of Social and Technical Science in Groundwater Monitoring and Management can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

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



### Groundwater Pollution by Sanitation on tropical Islands



The objective of the Groundwater Pollution by Sanitation on tropical Islands is to review the scientific foundations for managing this issue with particular reference to small tropical islands. This includes a brief assessment of the extent of groundwater pollution by sanitation systems, the nature of contaminants, their fate in the subsurface environment including factors affecting their attenuation, and the methods which have been used to study the movement of sewage contaminants in groundwater. The report concludes with a summary of the options for managing this problem, including siting, design, and maintenance of sanitation systems, and techniques to undertake site specific studies.

Copies of the Groundwater Pollution by Sanitation on tropical Islands can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

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

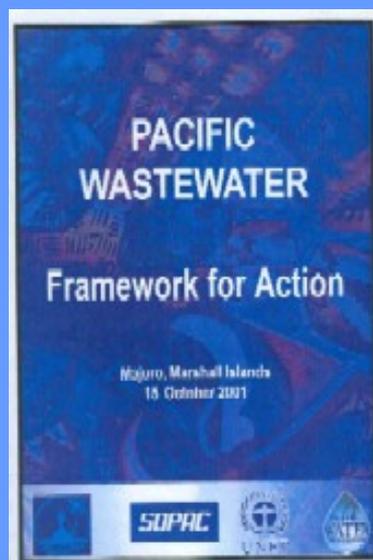
The Pacific Wastewater Policy Statement sets out a framework of guiding principles and policies to guide future development and co-operation by the Pacific Island Countries (PICs).

The Pacific Wastewater Framework for Action comprises a list of proposed actions to be undertaken at national and regional levels to achieve the goals that are laid out in the Pacific Wastewater Policy Statement and which refers to the GPA Strategic Action Plan and Guidance Document on Wastewater (UNEP/GPA, WHO, UNCHS-Habitat & WSSCC).

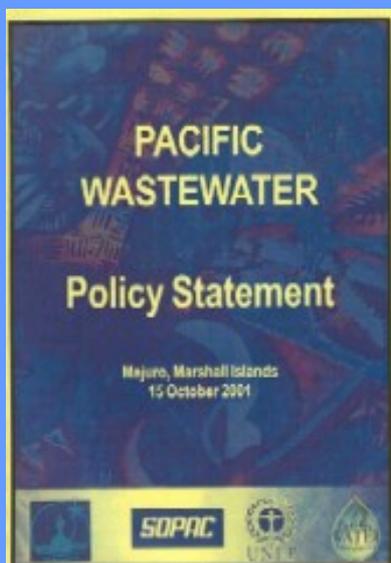
Copies of the Pacific Wastewater Framework for Action can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

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

## Pacific Wastewater Framework for Action



## Pacific Wastewater Policy Statement



The Global Programme of Action for the Protection of the Marine Environment from Land based Activities (GPA) identifies the priority for action on sewage. In the Pacific region, a consultation process was facilitated by SOPAC, SPREP, PWA and the UNEP/GPA Coordination Office on wastewater management. A Regional Wastewater Management Meeting was held 10-15 October 2001 in Majuro, Republic of Marshall Islands and was the latest in the consultation process, which included preliminary sessions in February and March 2001 in Auckland and Apia. The Majuro meeting was sponsored by the Governments of Belgium, New Zealand and Taiwan/ROC.

The meeting brought together representatives from 15 Pacific Island countries (American Samoa, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, New Zealand, Niue, Papua New Guinea, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu), technical experts from in and outside the region, regional and international organisations (SOPAC, SPREP, SPC, PWA, WHO, UNESCO, UNEP/GPA), potential donors and NGO's, to complete the Pacific Wastewater Policy Statement and the Pacific Wastewater Framework for Action.

Copies of the Pacific Wastewater Policy Statement can be obtained from the SOPAC Secretariat ([kamal@sopac.org](mailto:kamal@sopac.org)) or you can download the document via the following website:

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

## Pacific Regional Action Plan on Sustainable Water Management - Community Lifelines Programme

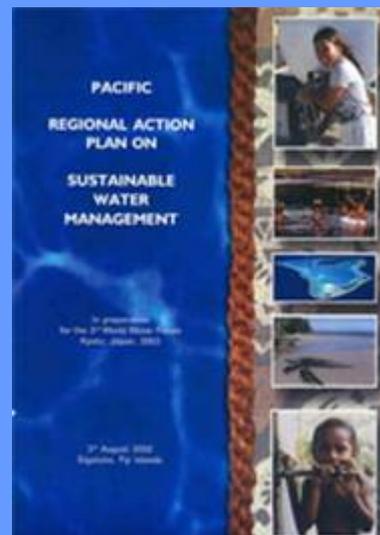
The national consultations as well as a regional meeting held in Sigatoka, Fiji from 29 July – 3 August 2002 provided a platform through which participants translated ideas into decisions and policy changes resulting in the Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP).

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".

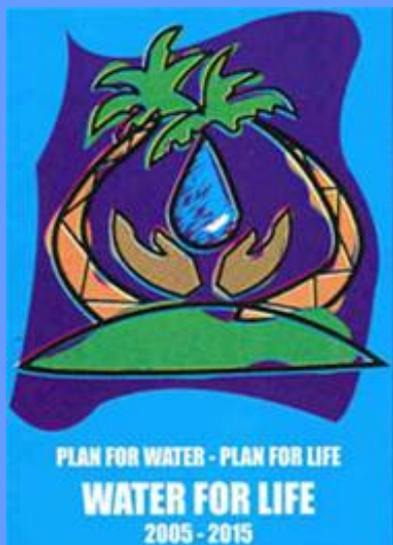
Copies of the Pacific RAP can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or you can download the document via the following website:

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

## Pacific RAP



## World Water Day Campaign



## World Water Day Material 2005 available: Water for Life - Community Lifelines Programme

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](mailto:kamal@sopac.org)) or Live & learn Environmental Education ([marie@livelearn.org.fj](mailto:marie@livelearn.org.fj)). you can download the document via the following website:

<http://www.sopac.org/tiki/tiki-index.php?page=WORLD+WATER+DAY+22+March+2005+-+WATER+FOR+LIFE>

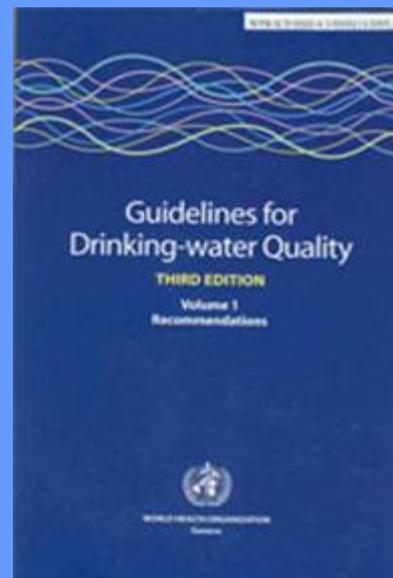
## Third Edition WHO Guidelines for Drinking-Water Quality - Community Lifelines Programme

Since the second edition of WHO's Guidelines for Drinking water Quality, there have been a number of events that have highlighted the importance and furthered understanding of various aspects of drinking-water quality and health. These are reflected in this 3rd edition of the Guidelines.

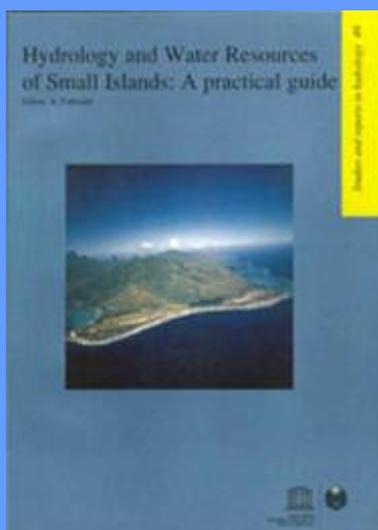
The Guidelines are addressed primarily to water and health regulators, policy-makers and their advisors, to assist in the development of national standards. The Guidelines and associated document are also used by many others as a source of information on water quality and health and on effective management approaches.

Copies of the Guidelines for Drinking - Water Quality are available from WHO's website: [http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3/en/](http://www.who.int/water_sanitation_health/dwq/gdwq3/en/)

or WHO's Pacific Regional Office ([IddingsS@sp.wpro.who.int](mailto:IddingsS@sp.wpro.who.int)).



## Hydrology and Water Resources of Small Islands: A Practical Guide



## Hydrology and Water Resources of Small Islands: A practical guide - UNESCO IHP Studies and Reports in Hydrology 49, Editor: A. Falkland

In most small islands water development projects have not achieved any goal. This is often because the technologies, design and materials were not suitable for either the environment or the cultural habits of the population, or because the operation and maintenance cost were excessive. Combined with geological and other physical complexities and the exposure to natural disasters, the hydrological and water resources problems, must be carefully considered. The situation is aggravated by lack of qualified personnel.

This guide has been prepared to assist technicians, hydrologists, engineers and managers in the identification, assessment, development, management and protection of water resources of islands. It is intended to be a guide to the selection of methods and practices appropriate to the special conditions of small islands.

Copies of the Hydrology and Water Resources of Small Islands: Practical Guide can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or UNESCO Apia Office ([hans@unesco.org.ws](mailto:hans@unesco.org.ws))

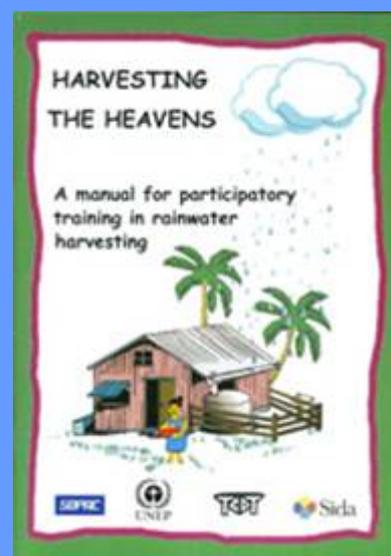
**Harvesting the Heavens, A Manual for Participatory Training in Rainwater Harvesting - Community Lifelines Programme**

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.

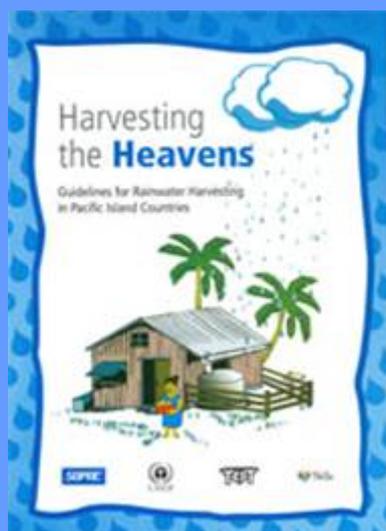
Copies of this Manual can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or you can download the document via the following website:

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



**Harvesting the Heavens, Guidelines for Rainwater Harvesting in Pacific Island Countries - Community Lifelines Programme**

**Harvesting the Heavens, Guidelines for Rainwater Harvesting in 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 (UNEP) 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](mailto:arieta@sopac.org)) or you can download the document via the following website:

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

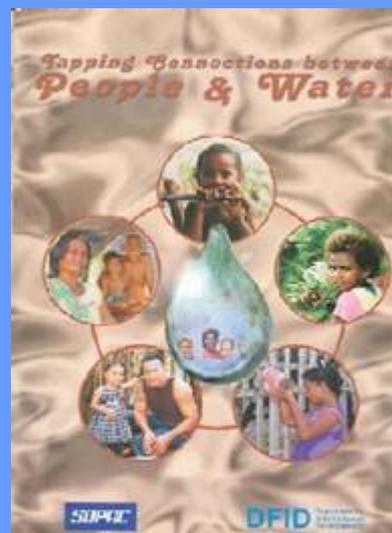
**Tapping Connections between People & Water - Author:  
Dr. Leonie Crennan**

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 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.

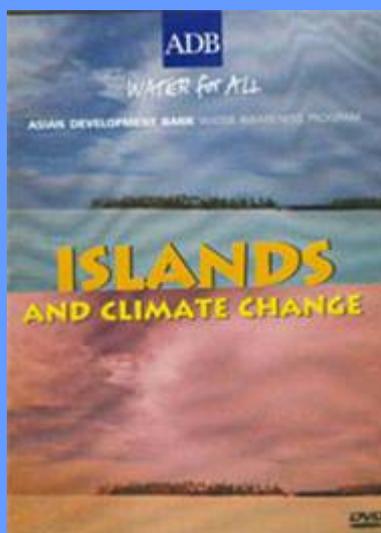
Copies of the Manual can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or you can download the document via the following website:

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



## Multimedia

### 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.

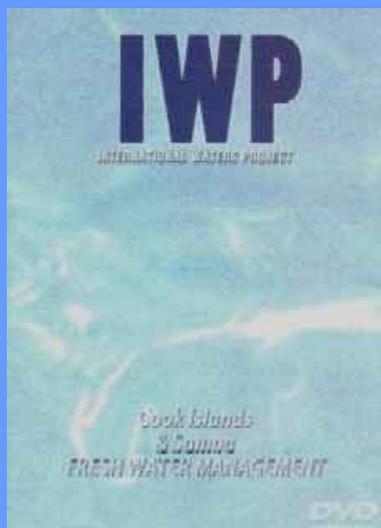
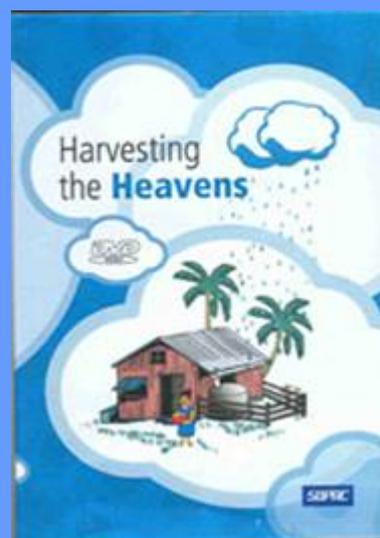
Copies of this documentary can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or the Asian Development Bank ([http://www.adb.org/Water/CFWS/Water\\_Voices\\_Videos.asp](http://www.adb.org/Water/CFWS/Water_Voices_Videos.asp)).

## 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 this documentary can be obtained from the SOPAC Secretariat ([arieta@sopac.org](mailto:arieta@sopac.org)) or you can download the document via the following website:

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



## Cook Islands & Samoa Fresh Water Management

A DVD documentary which follows the pilot project in Cook Islands and Samoa fresh water management. The International Water Project ensures that by establishing a good fresh water management plans our water quality would be safe for consumption.

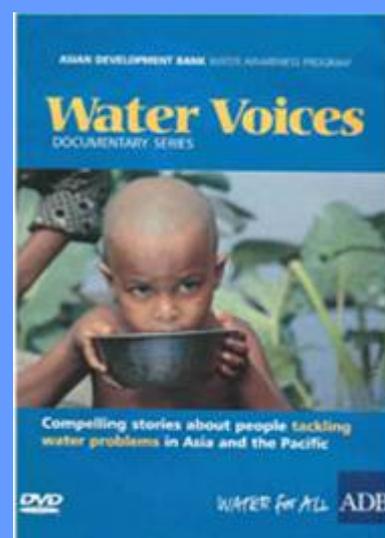
Copies of this documentary can be obtained from the SPREP Secretariat.

## 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](mailto:arieta@sopac.org)) or the Asian Development Bank



([http://www.adb.org/Water/CFWS/Water\\_Voices\\_Videos.asp](http://www.adb.org/Water/CFWS/Water_Voices_Videos.asp)).

## Pacific Water Agenda 2005

DATE	EVENT	LOCATION	DETAILS
January 2005 10-14	UN Sustainable Development for SIDS, Barbados +10 Mauritius	BPOA+10 CSD/ UNDESA Port Louis, Mauritius	10 year Review of progress on the plan for SIDS sustainable development Review of Actions undertaken on the Joint Programme for Action (JPfA) and the South-South Partnership established between Caribbean and Pacific.
February 2005 7-10	Workshop on Drinking Water Quality Standards and Monitoring in Pacific Island Countries	WHO Nadi, Fiji Islands	Identify common water quality issues Review WHO WQ guidelines Propose practical approaches for National Water Safety Plans Recommendations for and Design of Regional Water Quality Monitoring Programme (WHO/USP/IAS and SOPAC).
March 2005 22	World Water Day 2005	SOPAC / Live & Learn Pacific region	"Water for Life" Awareness Campaign Raise awareness on Water, Sanitation and Hygiene in Pacific island countries and prepare for the "Water for Life Decade" (2005-2015).
April 2005 TBC	Pacific Water Association Board Meeting, PWA	PWA Suva, Fiji (tentative)	Further Development of Regional Water Demand Management Programme (PWA and SOPAC).
April 2005 4-22	2nd Course Hydrology Training Programme	SOPAC/WMO/UNESCO/NIWA, Suva Fiji Islands	Training on Surface and Groundwater Hydrology and introduction on the use of Climate Information and Integrated Water Resources Management. Review of the 1st course and identification of contents of the 3rd course. Preparations for the development and implementation of the Pacific Hydrological Cycle Observation System (HYCOS).
April 2005 11-22	13th Commission for Sustainable Development (CSD13)	UNCSD New York, USA	Governments to agree on contents as well as next steps in IWRM planning. Water & Sanitation to be addressed at MDG Review Meeting in September 2005.
June 2005 20-24	24th Pacific Islands Environment Conference: EPA meeting region IX	Guam	Presentations on Water, Sanitation and Hygiene Review of Actions undertaken on Environmental Health and Water Management. <a href="http://www.epa.gov/region09/cross_pr/islands/">http://www.epa.gov/region09/cross_pr/islands/</a>

			<a href="#">conferences.html</a>
<b>Aug 9 2005</b>	Comprehensive Review of ADB's Water Policy Implementation In Country Consultation: Fiji	Suva Fiji Islands	The in-country consultations are expected to: Focus on the three key areas highlighted in ADB's <a href="#">water policy</a> : national policy reform, water resource management, and water service delivery. Address cross-cutting issues (e.g. resource conservation, regional cooperation, partnerships, and governance). Incorporate key elements of ADB's <a href="#">poverty reduction strategy</a> . <a href="http://adbweb/Water/Policy/in-country-consultations/FIJ-2005.asp">http://adbweb/Water/Policy/in-country-consultations/FIJ-2005.asp</a>
<b>Aug 29 - Sept 3 2005</b>	2nd South East Asia Water Forum, GWP SEA	Bali, Indonesia	The 2nd SEAWF aims to build a regional commitment toward IWRM and effective water governance among key stakeholders. Towards these, the forum will: Showcase various experiences and success stories on water management at various levels, ie. Basin, Country, Region). Define, validate and formulate actions plans to implement IWRM in SEA. Formulate strategies and plans for improving urban and rural water supplies in SEA. Promote collaboration and partnership among key water stakeholders. <a href="http://www.adb.org/Documents/Events/2005/2SEA/WF/default.asp">http://www.adb.org/Documents/Events/2005/2SEA/WF/default.asp</a>
<b>September 2005</b> 25-29	Dam Safety 2005: ASDSO's Annual Conference	New Orleans, Louisiana, U.S.	Organizers: Association of State Dam Safety Officials (ASDSO) <a href="http://www.unesco.org/water/water_events/Detail.ed/1046.shtml">http://www.unesco.org/water/water_events/Detail.ed/1046.shtml</a>
<b>September 2005</b> 26	Science & Technology and Resources Network (STAR)	SOPAC Apia, Samoa	Presentations on Water, Sanitation and Hygiene Identification of best practices and lessons learned. The Japan Water Forum will support the Pacific region in its preparations and assist in the region to draft and finalize the Oceania sub-regional part of a Regional Position Paper for Asia and the Pacific that will be presented at the 4th World Water Forum. To this end a special agenda item will be included in this year's Science, Technology and Research network (STAR) Water Working Group which is to be held in conjunction with SOPAC's Annual Session.
<b>September 2005</b> 26-30	SOPAC Council Annual Session & Technical Advisory Group (TAG) Water Working Group	The Hilton Hotel, Barbados	SOPAC Work Programme Review and Approval Reporting to Member States on Pacific RAP review meeting, CSD12 and Barbados + 10, and implications for regional and national support. Identification of priority actions. <a href="http://www.sopac.org/tiki/tiki-index.php?page=Annual+Session+2005">http://www.sopac.org/tiki/tiki-index.php?page=Annual+Session+2005</a>
<b>October 2005</b> 9-14	14th annual CWWA Conference and Exhibition	The Hilton Hotel, Barbados	Caribbean Water and Wastewater Association
<b>October 2005</b> 17-21	4th Technical Conference on Management of Meteorological and Hydrological Services in RA V (South-West Pacific)	WMO, RCD/RAP Nadi, Fiji	Reporting on Pacific progress on Hydrology (Theme 1 Water Resources Management and Theme 2 Island Vulnerability) Review of Actions undertaken and contributions provided to the Operational Hydrological Programme (OHP).
<b>October 2005</b> 24	4WWF Synthesis Regional Meeting	Tokyo, Japan	Japan Water Forum
<b>October 2005</b> 24-29	Wastewater Training course for the Pacific Region	Suva Fiji Islands	The training programme is designed to build capacity within the water/wastewater sector and will be focused at manager or senior supervisor level where participants should ideally be from a wastewater utility or equivalent responsible government department.

<b>November 2005</b> 7-11	Hydrology for Environment, Life and Policy (HELP) Symposium	UNESCO, Nelson, New Zealand	HELP (Hydrology for Environment, Life and Policy) meeting scheduled for 7-11 November in Nelson UNESCO, LandCare, NIWA.
<b>November 2005</b> 15-18	XII International Rainwater Catchment Systems Conference	Vigyan Bhawan, New Delhi, India	Invitation is for the practitioners of rain water harvesting, experts, academicians, technocrats, administrators, legislators, civic bodies, farmers, industrialists, householders - one and all from across the Globe. Theme: Mainstreaming Rainwater Harvesting. For more information: <a href="http://www.ircsa2005.org">http://www.ircsa2005.org</a>
<b>November 2005</b> 21-25	13th RSC Meeting International Hydrological Programme (IHP) for Southeast Asia and the Pacific	UNESCO IHP RSC Bali, Indonesia (tentative)	Reporting on Pacific progress on Hydrology (Theme 1 Water Resources Management and Theme 2 Island Vulnerability) Review of Actions undertaken and contributions provided to the International Hydrological Programme (IHP).
<b>November 2005</b> 21-29	WMO Meeting on WHYCOS	Geneva, Switzerland	Executive Council – Fifty-seventh session <a href="http://www.wmo.ch/web/cpd/listmeet.html">http://www.wmo.ch/web/cpd/listmeet.html</a>
<b>Nov 28 - Dec 2 2005</b>	NZHS-IAH-NZSSS AUCKLAND 2005 CONFERENCE	Auckland, New Zealand	The conference theme is "Where Waters Meet", which will explore the transition phase where water transforms from one expression to another <a href="http://www.uscg.mil/d11/m/rrt9web">http://www.uscg.mil/d11/m/rrt9web</a> / <a href="http://www.hydrologynz.org.nz">www.hydrologynz.org.nz</a>

### Selected Water Websites

ADB Water in Small Island Countries <a href="http://www.adb.org/Water/theme3.asp">www.adb.org/Water/theme3.asp</a>	Pacific ENSO Update <a href="http://lumahai.soest.hawaii.edu/Enso/subdir/update.dir/update.html">http://lumahai.soest.hawaii.edu/Enso/subdir/update.dir/update.html</a>
AOSIS Alliance of Small Island States <a href="http://www.sidsnet.org/aosis">www.sidsnet.org/aosis</a>	Pacific Water Association <a href="http://www.pwa.org.fj">www.pwa.org.fj</a>
AUSAID <a href="http://www.ausaid.gov.au">www.ausaid.gov.au</a>	SIDSNET <a href="http://www.sidsnet.org">www.sidsnet.org</a>
Australian Water Portal <a href="http://www.developmentgateway.com.au/water/index.html">www.developmentgateway.com.au/water/index.html</a>	UNEP <a href="http://freshwater.unep.net/">http://freshwater.unep.net/</a>
Barbados +10 <a href="http://www.sidsnet.org/Mauritius2004/">www.sidsnet.org/Mauritius2004/</a>	UNESCAP <a href="http://www.unescap.org">www.unescap.org</a>
CSD12 <a href="http://www.un.org/esa/sustdev/csd/csd12/csd12.htm">www.un.org/esa/sustdev/csd/csd12/csd12.htm</a>	UNESCO <a href="http://www.unesco.org/water">www.unesco.org/water</a>
Co-operative Programme on Water and Climate <a href="http://www.waterandclimate.org">www.waterandclimate.org</a>	UNU <a href="http://www.inweh.unu.edu/inweh">www.inweh.unu.edu/inweh</a>
East-West Center <a href="http://www.EastWestCenter.org/climate">www.EastWestCenter.org/climate</a>	WHO <a href="http://www.who.int/water_sanitation_health/en/">http://www.who.int/water_sanitation_health/en/</a>
ESCAP <a href="http://www.unescap.org/esd/water/activities">www.unescap.org/esd/water/activities</a>	WMO <a href="http://www.wmo.ch/web/homs/index.html">www.wmo.ch/web/homs/index.html</a>
European Union <a href="http://www.europa.eu.int/comm/development/publicat/water/en/frontpage_en.htm">www.europa.eu.int/comm/development/publicat/water/en/frontpage_en.htm</a> <a href="http://www.euwi.net">www.euwi.net</a> <a href="http://europa.eu.int/comm/development/index_en.htm">http://europa.eu.int/comm/development/index_en.htm</a> <a href="http://europa.eu.int/comm/environment/water/index.html">http://europa.eu.int/comm/environment/water/index.html</a>	World Bank <a href="http://www.worldbank.org/html/fpd/water">www.worldbank.org/html/fpd/water</a>
Gender and Water Alliance <a href="http://www.genderandwateralliance.org">www.genderandwateralliance.org</a>	World Summit on Sustainable Development <a href="http://www.johannesburgsummit.org">www.johannesburgsummit.org</a>

Global Water Partnership <a href="http://www.gwpforum.org">www.gwpforum.org</a>	World Water Council <a href="http://www.worldwatercouncil.org">www.worldwatercouncil.org</a>
GWP Australia <a href="http://www.gwpaustralia.org">www.gwpaustralia.org</a>	World Wide Fund for Nature <a href="http://www.wwfpacific.org.fj">www.wwfpacific.org.fj</a>
Island Climate Update <a href="http://www.niwa.cri.nz/NCC/ICU">www.niwa.cri.nz/NCC/ICU</a>	WSSCC <a href="http://www.wsscc.org/">http://www.wsscc.org/</a>
NZAID <a href="http://www.nzaid.govt.nz">www.nzaid.govt.nz</a>	NIWA <a href="http://www.niwa.co.nz">www.niwa.co.nz</a>
USGS <a href="http://hi.water.usgs.gov">http://hi.water.usgs.gov</a>	SPC <a href="http://www.spc.int">www.spc.int</a>
USP <a href="http://www.usp.ac.fj">www.usp.ac.fj</a>	Japan Water Forum <a href="http://www.waterforum.jp/eng/index.html">http://www.waterforum.jp/eng/index.html</a>
SOPAC Water <a href="http://list.sopac.org.fj/Secretariat/Programmes/H2O/3rd_world_water_forum/index.html">http://list.sopac.org.fj/Secretariat/Programmes/H2O/3rd_world_water_forum/index.html</a>	UN-Water <a href="http://www.un.org/waterforlifedecade/">http://www.un.org/waterforlifedecade/</a>

**--- 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.

Send a blank email message with the words

"unsubscribe PWPI update" in the subject field to: [sanjeshni@sopac.org](mailto:sanjeshni@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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