

Pacific Islands Environment Conference

Session Title:

Water Research in the Pacific

Tasleem Hasan

Water Services Coordinator

SOPAC Secretariat



TUVALU

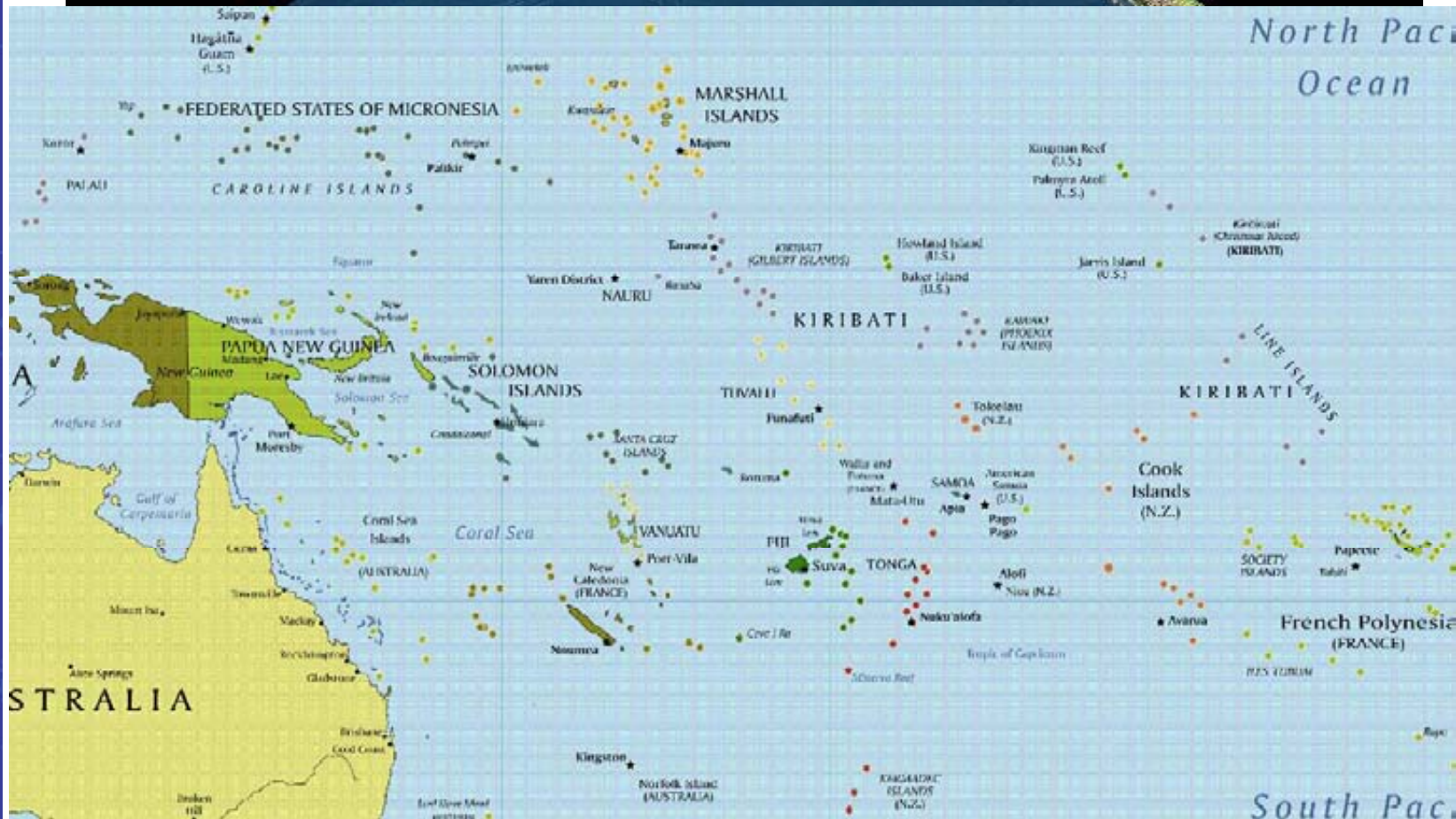




Presentation Outline

- About SOPAC
- Regional Frameworks
- Some Water Support Programmes (Drinking Water Safety Planning Programme)
- Overview of Diarrheal Incidence in Pacific Island Countries.





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Wallis and Futuna
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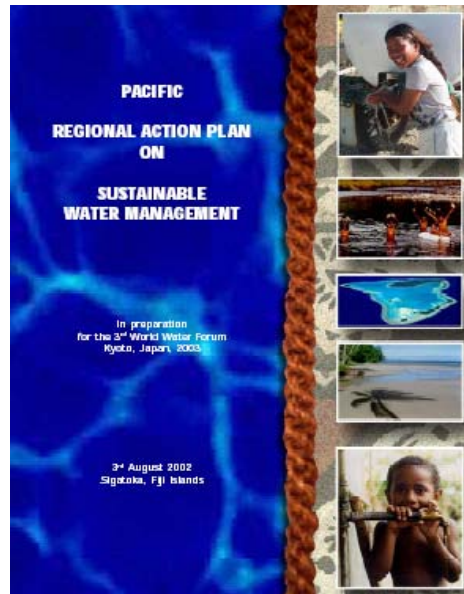
SOPAC, the Pacific Islands Applied Geoscience Commission, is an inter-governmental, regional organisation comprising 21 members.

SOPAC provides applied scientific and technical support, guidance and advice to member countries in three technical programme areas:

- Ocean and Islands
- Community Risk
- Community Lifelines (including Water)



Regional Frameworks



Pacific Regional Action Plan (2002)



Pacific Framework for Action on Drinking Water Quality and Health (2005).



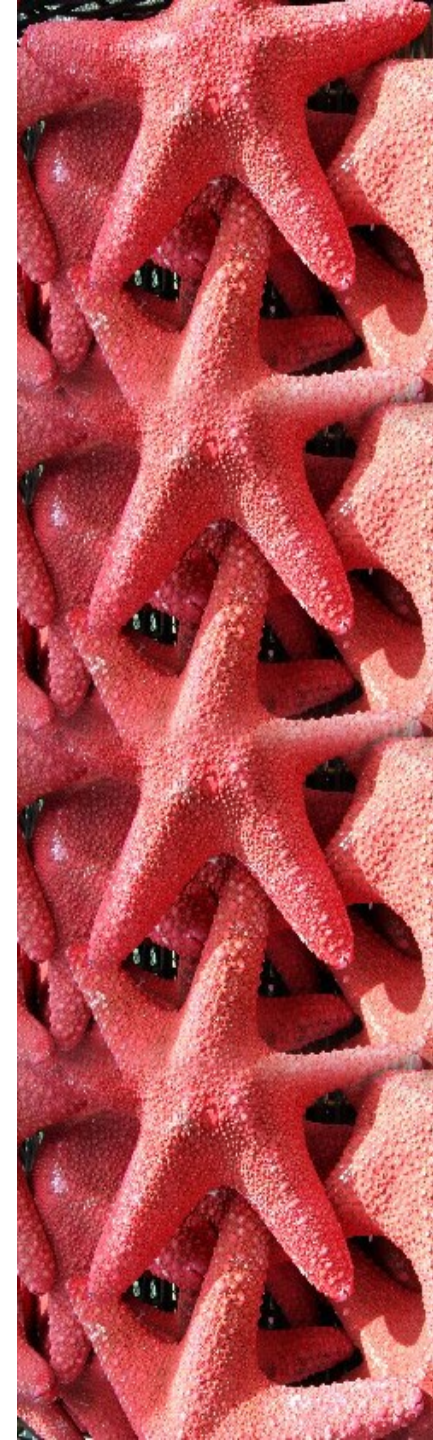
6 Thematic Areas:

- Water Resources Management
- Island Vulnerability
- Awareness
- Technology
- Institutional Arrangements
- Financing

Under each thematic area actions are outlined on how to achieve sustainable water management. Great thing is that its put together by the Pacific Island Country stakeholders themselves and it reflects their needs.

Much donor support has been forthcoming in the form of programmes/projects since the development of the RAP and FFA for implementing the actions identified by PICs related to water management and improvements.

SOPAC is involved in implementing some specific water support programmes based on actions identified in the 2 mentioned frameworks .



SOPAC Water Sector Support Programmes

1. Water Quality Monitoring Capacity Building Programme (WQM)

NZAID-funded being implemented in four selected pilot countries (Cook Islands, Marshall Islands, Niue and Vanuatu) by USP, WHO & SOPAC (NZMoH and Guam EPA as technical partners).

Capacity building of water testing labs through assistance with supply of basic testing equipment, training on proper sampling, analysis and data management including an electronic database for improved data keeping and action.

Lessons learnt will be replicated throughout the region.



2. Water Demand Management Programme (WDM)

NZAID-funded being implemented in selected pilot countries (Cook Islands, Marshall Islands, Niue, Pohnpei and Vanuatu) by PWA, WBWC & SOPAC.

Build capacity of urban water utilities to effectively manage their water demand through having active leak detection programs, necessary equipment and system loss management plans.

Lessons learnt will be replicated throughout the region.





3. Water Sanitation and Hygiene Programme (WASH)

Taiwan ROC / WSSCC / UNEP-GPA funded.

Activities implemented basically through the Pacific WASH Coalition with partners WHO, UNICEF, FSMed, LLEE, FPSI, UN-Habitat, IFRC and SOPAC. Nodes of partners in-country do on-ground implementation.

- Awareness raising campaigns on consumer education and hygiene promotion, wastewater management courses, World Water Day celebrations, promotion of rainwater harvesting, simple community-based water quality monitoring toolkits etc.



4. Pacific Hydrological Cycle Observing System (HYCOS)

EU-funded implemented in 14 PICs by WMO, UNESCO, Fiji Met, SOPAC.

Aims to improve the ability of PICs to manage water resources and increase resilience to climatic extremes (flooding, droughts)



5. Drinking Water Safety Planning Programme (DWSP)

AusAID-funded being implemented in 8 countries as pilots and replication (Cook Islands, Tonga, Palau, Vanuatu and Niue, Samoa, Marshall Islands, Fiji) by WHO & SOPAC & NZ MoH).

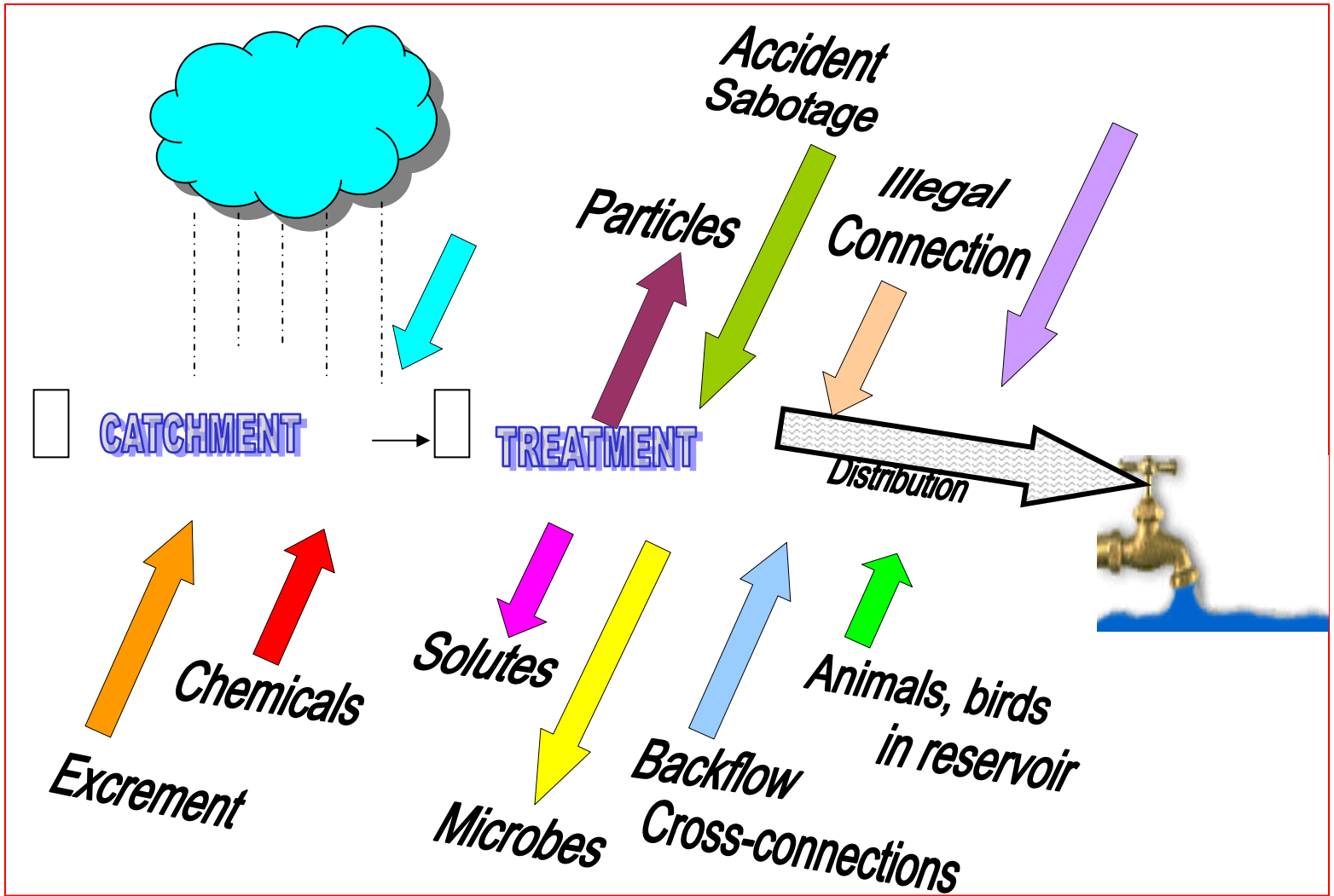
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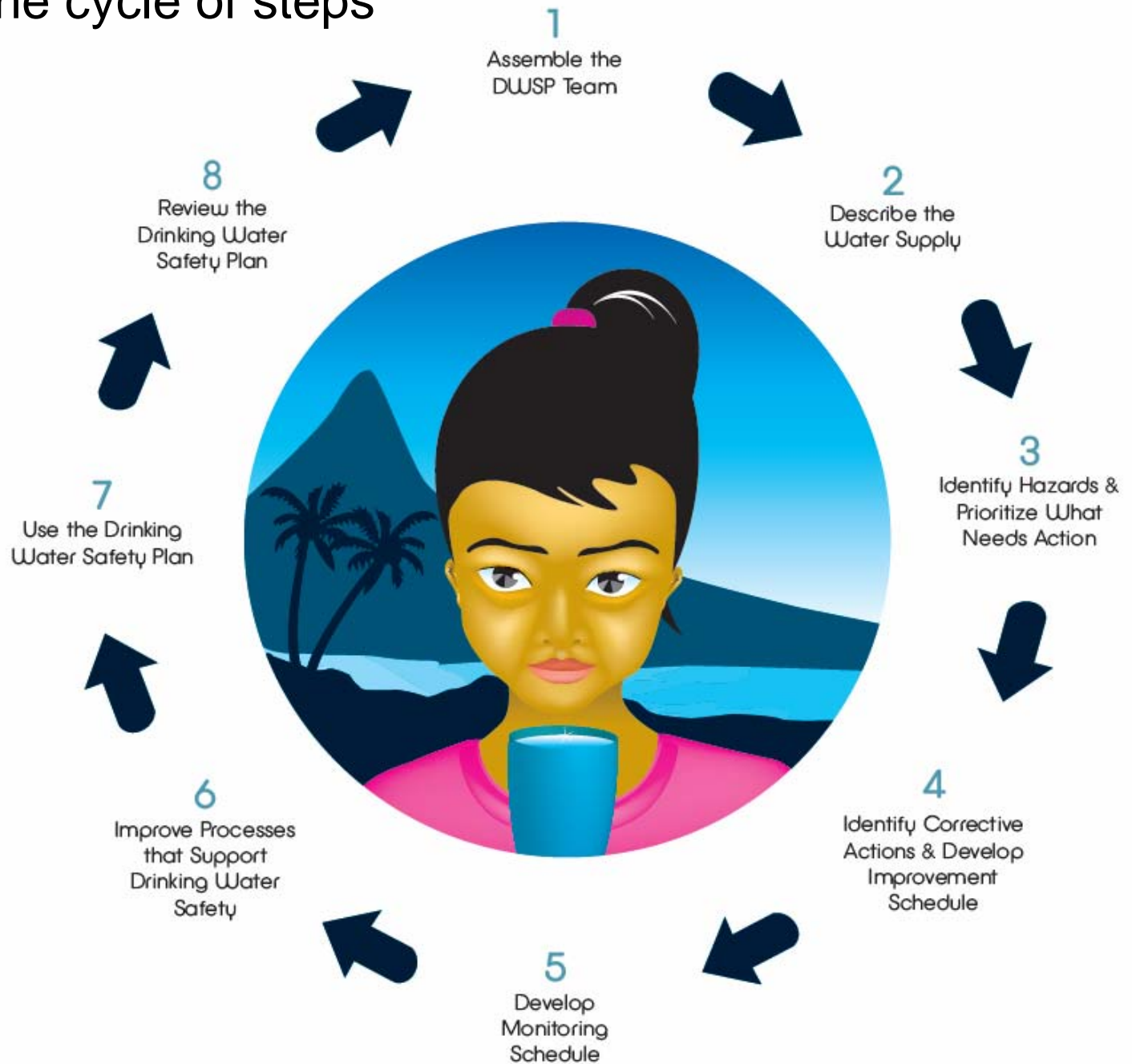


Drinking water safety plans is a new risk-assessment / risk-management approach to ensuring safe drinking water.

It deals with identifying risks within the water supply (from catchment to consumer) and trying to manage the risks by eliminating or reducing them.

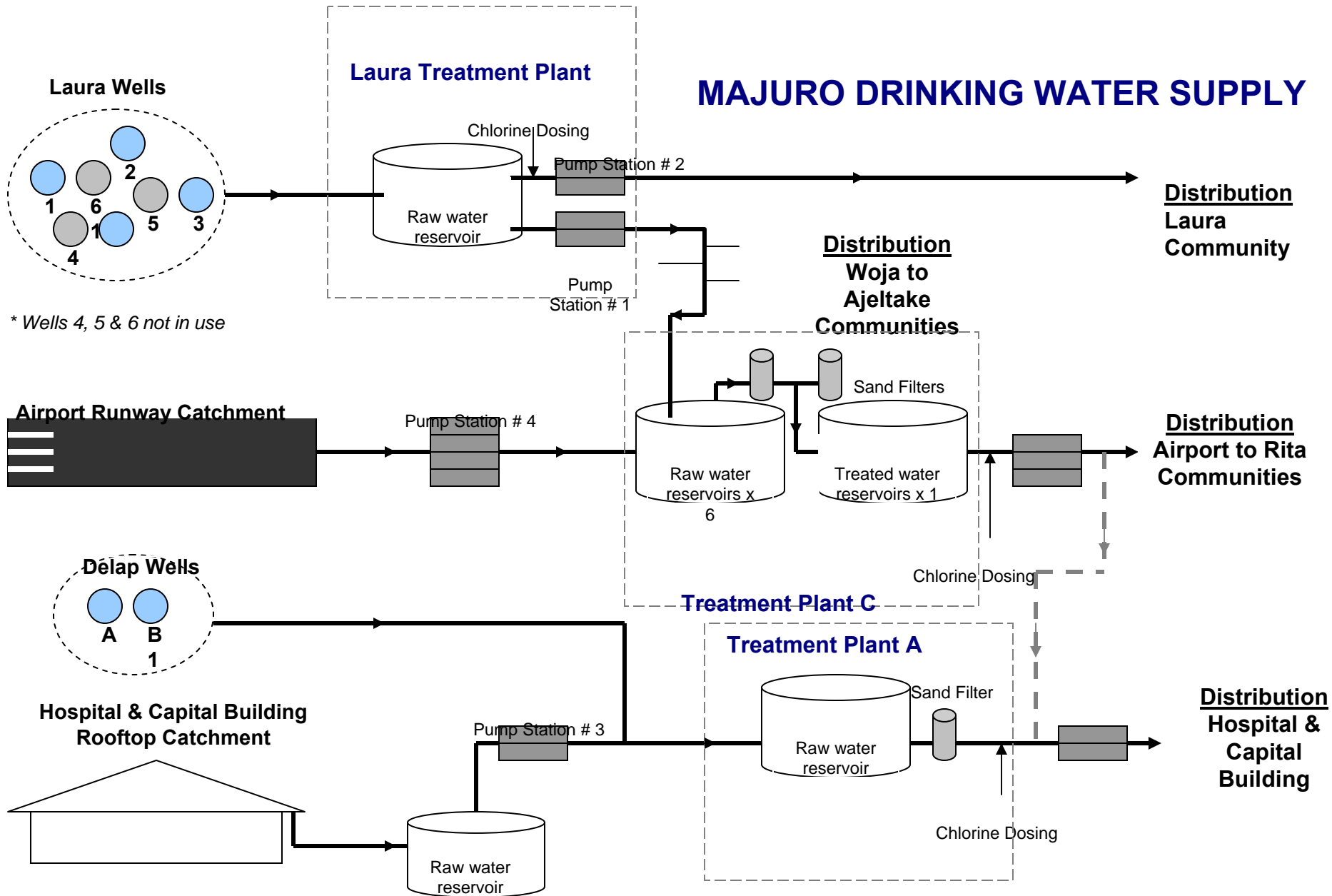


The cycle of steps



Example From Marshall Islands

MAJURO DRINKING WATER SUPPLY



Example from Palau

Distribution

Risk Assessment Worksheets

Risks to Water Quality		Control Measures	Risk Priority
D1	Loss of water due to water wastage	None	<i>High</i>
D2	Increase in water loss from pipe breakages due to aging pipes	None, lack of equipment	<i>High</i>
D3	High water loss due to unattended and/or unreported leakages in the distribution lines	None	<i>Medium</i>

Improvement Schedule

Improvement	Risk	Priority	Agency	Stages/Actions	Time Frame	Estimate Cost
Increase public awareness on water conservation Leak detection program	D1	2	Water supplier, EQPB, NGO	Develop and implement water conservation and awareness campaign	2009	\$20,000
				Develop campaign of water hygiene practice in schools	2009	\$20,000
				Engage suitable resources to quantify water loss through leak survey	2010	\$30,000

For implementing Drinking Water Safety Planning, not all actions require huge capital investments.

Some like fencing off intake area, low cost but very effective (Source water protection).

Needs change in approach, move towards risk management approach.

Indicators such as improved water quality will show that the Drinking Water Safety Plan is making a difference.

Health outcome is another indicator but it will take longer to show, with careful surveillance.

Drinking Water Safety Planning should be promoted, “no-regrets” approach.



6. Pacific Integrated Water Resources Management Programme (IWRM)


Two complementary IWRM programmes, one GEF funded and one EU WF funded.

Both working together towards promoting good water governance through National IWRM approaches.

IWRM is a planning and management approach which aims to manage both water and land resources through improved sectoral collaboration and partnership between the government and civil society.

Implemented across 14 PICs.





IWRM is the larger framework within which all the other water programmes discussed fit in.

All the programmes are trying to improve a certain element that feeds into “good water governance”. IWRM pulls all the different elements together and promotes the development and management of water.

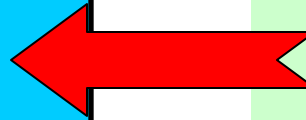
IWRM Programmes

- Cross-sectoral integration
- National Water Committee
- Institutional arrangements
- National level planning, strategies and policies

Improved water governance

Current SOPAC Water Programme

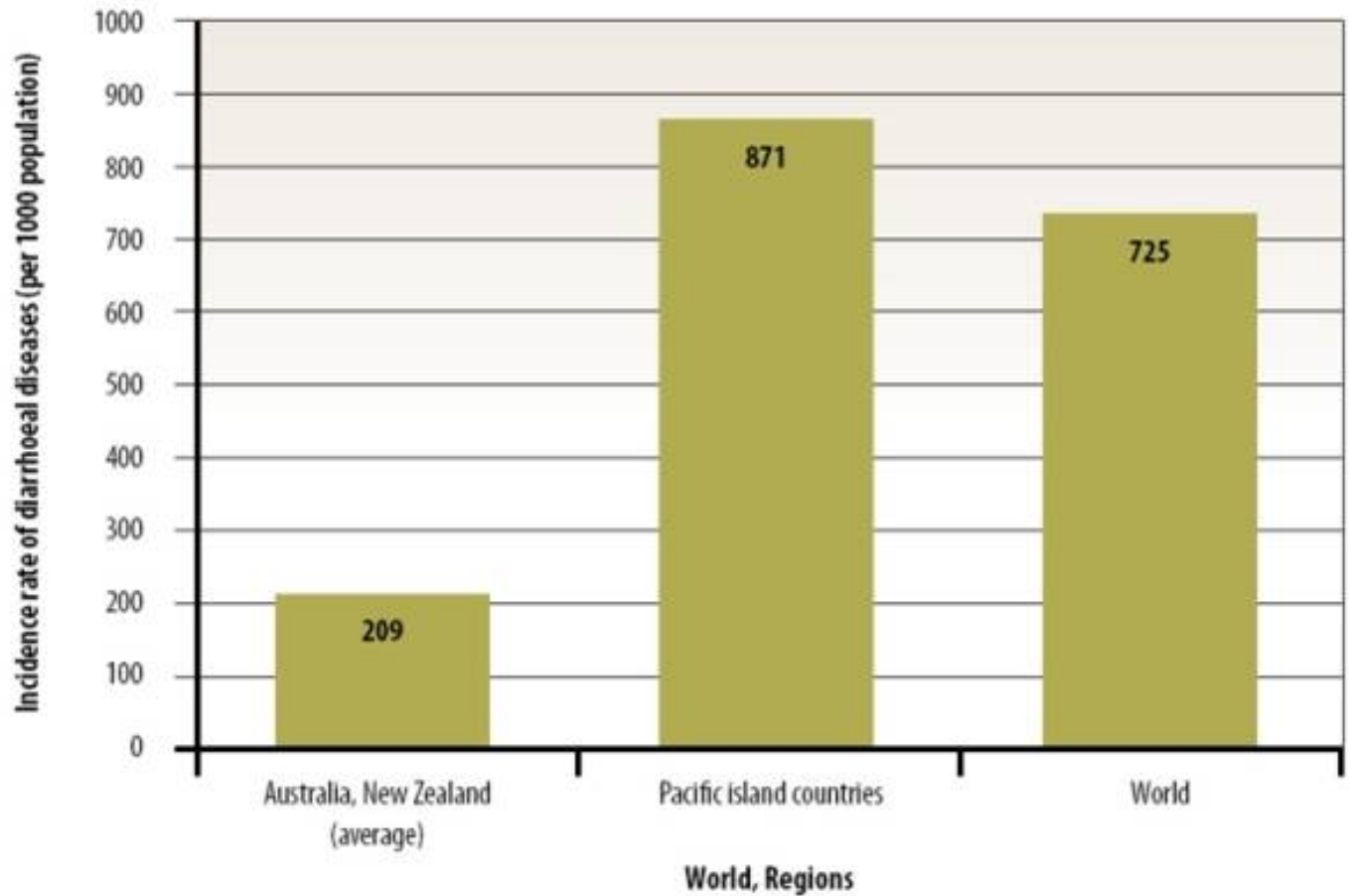
- DWSP
- WQM
- WDM
- HYCOS
- WASH

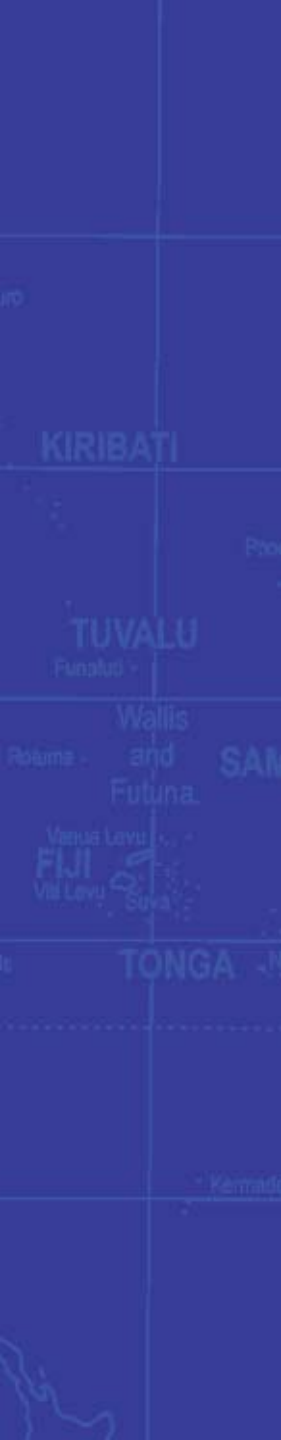




The Pacific island countries present an incidence rate of diarrhoeal diseases 20% greater than the world average and over four times higher than developed countries such as Australia and New Zealand.

Incidence rate of diarrhoeal diseases per 1000 population in Australia and New Zealand, Pacific island countries, and the World, 2002





THANK YOU