PACIFIC

REGIONAL ACTION PLAN ON

SUSTAINABLE WATER MANAGEMENT

In preparation
for the 3rd World Water Forum
Kyoto, Japan, 2003

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PREFACE

It is with great pleasure that the Asian Development Bank (ADB) and the South Pacific Applied Geoscience Commission (SOPAC) accepted the request of the Secretariat of the 3rd World Water Forum to organize a consultation on sustainable water management for small island countries in the Pacific, East Timor and the Maldives.

Water is widely regarded as the critical natural resource for sustainable human and economic development in the coming decades. If we are to achieve sustainable management of our water resources and improve water services we must jointly move from vision to action with concrete commitment and leadership at national and regional levels.

The national consultations as well as a regional meeting held in Sigatoka, Fiji from 29 July to 3 August 2002 provided a platform through which participants translated ideas into decisions and policy changes resulting in the Regional Action Plan that is before you.

We are pleased that many stakeholders have committed themselves to get actively involved in this process and to take this unique opportunity to assist in the development of actions that help to secure a sustainable freshwater future.

The outcomes of the consultation will be carried forward and presented during the 3rd World Water Forum in Kyoto as part of the theme “Water in Small Island Countries”. We are pleased that collaboration between the Asian, Caribbean, and the Pacific regions has been established to facilitate a joint contribution to this global forum.

We would like to take this opportunity to thank the Secretariat of the 3rd World Water Forum for enabling us to organize this consultation meeting. In addition, we are grateful to the International Secretariat of the Dialogue on Water and Climate for providing sponsorship for the theme on Island Vulnerability and the Small Island Countries Dialogue on Water and Climate. We would also like to thank the Pacific Water Association (PWA) and the World Bank for their valuable contributions to the themes on Technology and Financing and AusAID, DFID, and NZAID for their financial support. We acknowledge herewith the assistance rendered by the Pacific Islands Forum Secretariat in the development of the Ministeral Declaration and Communiqué and their advice on formulating the outcomes of the consultation into the Pacific submission to the World Summit for Sustainable Development.

Finally, we would like to express our appreciation to the Government of Fiji for its assistance as host country of this important event.

Yours sincerely,

Mr Jeremy Hovland
Director General
Pacific Department
ADB

Mr Alf Simpson
Director
SOPAC

REPORT OF THE CONSULTATION

Introduction

The Asian Development Bank (ADB) and the South Pacific Applied Geoscience Commission (SOPAC) joined forces to organize a high-level regional consultation for the Pacific water sector in preparation for the 3rd World Water Forum that will take place from 16 to 23 March 2003 in Kyoto, Japan.

The consultation aimed to help small island country practitioners and regional and international organizations strengthen their policies, institutional arrangements, and projects through:

- enhancing public awareness of the need for better water and wastewater management;
- exchanging views and experiences; and
- developing a shared understanding about policies, institutional frameworks, and approaches to sustainable sector development.

Planning Meeting

A planning meeting for the Pacific preparation for the 3rd World Water Forum was held from 31 January to 1 February 2002 in Port Vila, Vanuatu. The planning meeting was convened jointly by ADB and SOPAC to establish the framework of the regional consultation process. It decided that the regional consultation would be high level and participatory. It also identified six thematic areas based on earlier needs assessments in the region, to provide a structure for the consultation. The six themes were: Water Resources Management; Island Vulnerability; Awareness; Technology; Institutional Arrangements, and Finance.

National Consultations and Country Briefing Papers

Countries were encouraged to initiate a national consultation process involving a wide range of water sector specialists in order to develop a clear brief for the representatives of each country.

The national consultations involved stakeholders drawn from governments, nongovernment organizations (NGOs), and the private sector including organizations and agencies concerned with water resources management, water authorities, service providers, rural development departments, health and environment agencies, and regulators. Various countries already had mechanisms in place such as a national water committee or national water council that facilitated this multi-stakeholder national consultation.

Facilitated by the World Wide Fund for Nature (WWF) South Pacific Programme, NGOs in the region were encouraged to take part in the national consultations and contributed to the regional consultation meeting.

Regional Consultation Meeting

A high-level regional meeting was held in Sigatoka, Fiji from 29 July to 3 August 2002 attended by over 150 participants including Ministers, other senior representatives of governments, multilateral and bilateral agencies, representatives of civil society including Community Based Organizations (CBOs), and the private sector.

Country actions prepared by the national delegations were presented on Day 1. Thematic overview papers prepared by theme resource persons were presented, supported by selected case studies from small island countries in the region, on Day 2, 3, and 4. They showed specific actions that were to contribute to sustainable water management and were the starting point for plenary discussions on the Regional Action Plan.

For each theme a working group was established that drafted the action plan for that thematic area which were subsequently discussed on Day 5. A drafting committee was set up that ensured all issues and actions were included in the Communiqué and Ministerial Declaration that were both adopted on Day 6, 3 August 2002.

Outcomes of the Consultation

The outcomes of the consultation, including this Regional Action Plan and Ministerial Declaration, were taken to the Caribbean Water and Wastewater Conference and Caribbean Dialogue on Water and Climate in October 2002. A joint contribution from the Caribbean and the Pacific will be provided to the "Water in Small Island Countries" session at the 3rd World Water Forum in Kyoto.

In adopting the action plan, the ministers and heads of country delegations from 16 Pacific island countries and representatives of civil society groups stressed the participatory nature of their deliberations and reinforced their commitment to sharing knowledge to address common water problems and solutions.

They noted the unique geographic and physical characteristics, as well as the fragile nature of water resources in small island countries, which impact the health and well-being of their peoples, environment, and economic development. They also recognized the important linkages between water resources, water services, and wastewater management, including sanitation and hygiene.

The Regional Action Plan Report

This report is structured around the six thematic areas. Under each theme there are key messages to stakeholders with supporting statements drawn from the discussions in the respective working groups. Under each key message the required actions are listed including the parties deemed most appropriate to be responsible for their implementation.

The Ministerial Declaration that has been signed by 14 Ministers and Secretaries of State as of 21st February 2003 is provided as well as the Communiqué that was adopted during the closure of the regional meeting in Sigatoka, 3 August 2002. The report closes with a list of acronyms and references to documents that are mentioned in the action plan.

At the Thirty-Third Pacific Islands Forum held in Suva, Fiji, 15-17 August 2002, the Pacific Islands Heads of State endorsed full participation in the World Water Forum. The outcomes of the meeting have been incorporated in a Partnership arrangement under the so-called Type II initiatives that has been submitted to the Commission for Sustainable Development in Johannesburg during the World Summit for Sustainable Development in August 2002.

THEME 1

WATER RESOURCES MANAGEMENT

Water Resources Assessment and Monitoring
Rural Water Supply and Sanitation
Integrated Water Resources and Catchment Management

Chair:	Ata Herman
Facilitator:	Tony Falkland
Rapporteur:	David Scott
2nd Rapporteur:	Rhonda Bower

THEME 1

WATER RESOURCES MANAGEMENT

(Water Resources Assessment and Monitoring; Rural Water Supply and Sanitation; Integrated Water Resources and Catchment Management)

Key Message 1: Strengthen the capacity of small island countries to conduct water resources assessment and monitoring as a key component of sustainable water resources management.

Supporting Statements:

1. Many small island countries have noted significant deficiencies in their national and local capacity to conduct essential water resources assessment and monitoring in their country papers at this meeting and at previous regional and inter-regional meetings over the past decade and more.

2. These deficiencies prevent small island countries from conducting proper planning, development, and sustainable management of their limited and vulnerable water resources.

3. Despite this fact, there continues to be no systematic, co-ordinated approach to addressing these deficiencies.

4. Most small island countries lack adequate baseline data that is readily available for planning and development and do not have reliable hydrological databases.

5. There are similarities between needs which can be addressed at regional, as well as national level, through targeted training and capacity building.

6. Proposals for capacity building and training of technicians in Pacific island countries have been prepared in recent years by regional and international agencies with expertise in hydrology, water resources, and water quality (e.g., SOPAC, SPREP, UNESCO, WMO, WHO, and UNEP).

Actions Required:

1. Implement actions to strengthen national capacity (equipment, training, etc) using the model outlined in the Pacific-HYCOS proposal (WMO, 2000) and recommendations regarding water quality in WHO (2001).

Responsible Parties

- SOPAC with support from international agencies (e.g., WMO, UNESCO, WHO) (co-ordination of regional level effort)
- National agencies (implementation and funding)
- Donors (funding)

2. Implement hydrological training for technicians in line with the recommendations presented in the proposal to meet training needs in small island countries (SOPAC/WMO/UNESCO, 2001).

Responsible Parties
- SOPAC with support from international agencies (e.g., WMO, UNESCO) (coordination of regional effort)
- Donors (funding)
- National agencies (implementation and funding)

3. Implement a programme of targeted applied research projects to address knowledge gaps in line with recommendations and priorities presented in ANU/SOPAC/UNESCO (2000) and SOPAC (1999).
Projects include the following:
- catchment and communities project on a high volcanic island;
- groundwater recharge and estimation of sustainable yield using modelling (further work in initial and other sites);
- groundwater pollution due to sanitation systems (further work in initial and other sites);
- integrated island water resources study;
- groundwater and surface water pollution due to chemicals;
- rainwater catchment study;
- appropriate groundwater extraction systems; and
- drought assessment in small island nations.

Applied research projects should adopt the following principles:
- have regional application;
- include training for personnel;
- consider technical and social issues;
- incorporate community awareness and participation; and
- involve close liaison with relevant agencies.

Responsible Parties
- SOPAC, UNESCO in cooperation with other regional agencies (coordination of regional effort and assistance with implementation)
- Donors (funding)
- Regional research institutes (assistance with implementation and training)
- National agencies (implementation and funding)

4. Develop and/or implement minimum standards for conducting island water resources assessment and monitoring.

Responsible Parties
- National agencies (implementation and funding)
- SOPAC in cooperation with other agencies (assistance with implementation)
- Donors (funding)

5. Support community participation in appropriate water quality testing programmes targeted at environmental education and awareness of communities, using existing and proposed programmes as models (e.g., DGMWR/SOPAC/UNESCO/NIWA, 2002; Live & Learn, 2002; SPREP-IWP, 2002).

Responsible Parties
- Regional and other agencies (e.g., UNESCO, SOPAC, SPREP, WHO) (support and technical assistance)

- Communities (implementation) and NGOs (support and training)
- Donors (funding)

6. Implement appropriate water quality testing capability and associated training at local, national, and regional level.

Responsible Parties
- National and local government agencies (implementation)
- Regional agencies (e.g., USP, WHO) (assistance with implementation and training)
- Other institutions and individuals
- Donors (funding of components)

7. Strengthen and enhance communication and information exchange between national agencies involved with meteorological, hydrological, and water quality data collection programmes (including water supply agencies and health departments), and users.

Responsible Parties
- National and local governments (policy)
- Government agencies (coordination, communication, and information exchange)
- Water utilities

8. Enhance education and career development opportunities in the water sector, including:
- scholarships for advanced training courses, including distance learning; regional or in-country training workshops on targeted need areas;
- training courses in partnership with tertiary institutions;
- twinning or interchange of professional and technical staff between different islands; and
- active involvement in appropriate research and implementation projects.

Responsible Parties
- National governments (policy)
- Regional and international agencies (e.g., USP, SOPAC, UNESCO) (implementation of components)
- Other institutions and individuals
- Donors (funding of components)

Key Message 2: Implement strategies to utilize appropriate methods and technologies for water supply and sanitation systems and approaches for rural and peri-urban communities in small islands.

Supporting Statements:

1. Climate and water resources conditions vary considerably between, and even within, islands depending on location, size, geology, topography, and other factors.

2. Water supply for local communities (and tourism in some island countries) is the most important water use, although some islands have sufficient water resources for other uses (e.g., industry, mining, irrigated agriculture, and hydropower).

3. Approaches to provision of water supply vary according to availability and sustainability of water resources.

4. Human factors such as population density, land use, and measures used for sanitation, wastewater, and solid waste disposal have a large impact on the availability of water, the microbiological, and chemical quality of water supplies and downstream impacts on the near-shore and marine environment.

5. Operational and maintenance factors, and social and environmental acceptability, are particularly important in the selection of appropriate solutions for water supply and sanitation.

6. Raw water quality is most important for rural populations as, in most cases, water treatment is not affordable.

Actions Required:

1. Conduct effective water resources planning and implement sustainable water resources development by:
- utilizing naturally-occurring resources before more expensive solutions are adopted;
- accounting for technical, economic, social, and environmental factors;
- recognizing the importance of conjunctive-use schemes; and
- developing and implementing 'drought strategies' in long-term plans including the use of drought indices.

Responsible Parties
- National and local government agencies
- Regional agencies as required (technical support)
- NGOs (assistance)
- Donors (funding)

2. Update and disseminate relevant information on appropriate water supply and sanitation technologies and methods from regional and international agencies (e.g., guidelines, standards).

Responsible Parties
- Regional and international agencies (support and technical assistance)
- NGOs
- Donors (funding)

3. Support rainwater harvesting programmes by:
- implementing at household level through financial incentives and building regulations;
- developing design guidelines using available rainfall data;
- improving water quality through 'first-flush' devices;
- supporting community-based projects in poorer communities; and
- investigating appropriate materials (e.g., water quality tests on polythene tanks).

Responsible Parties
- National and local government agencies

- Regional agencies (technical support)
- NGOs
- Private sector
- Donors (funding)

4. Implement pilot projects for:
- enhanced groundwater recharge from surface water streams;
- use of scavenger wells and infiltration gallery for pumping in small low-lying island situations; and
- use of simple solar distillation and treatment systems.

Responsible Parties
- National and local government agencies
- Regional agencies (technical support)
- Communities and NGOs
- Donors (funding)

5. Incorporate the use of renewable energy sources for pumping into water supply planning and development processes.

Responsible Parties
- National and local government agencies
- Regional agencies (technical support)
- Communities and NGOs

6. Conduct further research into desalination technologies particularly in relation to operation and maintenance costs.

Responsible Parties
- National government agencies
- Private desalination companies
- Research institutes
- Donors (funding)

7. Implement demand management and water conservation measures including:
- training in simple methods of leak detection; and
- community awareness and education.

Responsible Parties
- National and local government agencies
- Regional agencies (technical support)
- Communities and NGOs
- Donors (funding)

8. Develop and implement national guidelines for water quality, particularly drinking water quality.

Responsible Parties
- National and local government agencies (implementation)
- Regional and international agencies (e.g., WHO) (assistance with implementation)
- Donors (funding of components)

9. Implement minimum standards for water quality monitoring, surveillance, and mitigation measures.

Responsible Parties
- National and local government agencies (implementation)
- Regional and international agencies (e.g., WHO) (assistance with implementation)
- Donors (funding of components)

10. Implement sanitation systems which aim to prevent pollution of water resources including:
- further pilot projects in different island environments to determine appropriate low-cost, on-site sanitation technologies (e.g., compost toilets, gravel bed hydroponics or constructed wetlands);
- further applied research to establish guidelines for 'safe distances' (buffer zones) for existing sanitation options in different island environments (e.g., septic tanks, pit toilets); and
- increase government, donor, and community awareness of poor sanitation impacts on water resources and public health.

Responsible Parties
- National and local government agencies (implementation)
- Regional and international agencies (assistance with implementation)
- Research institutions
- Communities and NGOs
- Donors (funding of components)

11. Expand community awareness programmes on health issues and support community participation in the water supply and sanitation sector (e.g., WHO Healthy Islands Programme).

Responsible Parties
- National and local government agencies (implementation)
- Regional and international agencies (e.g., WHO) (assistance with implementation)
- Communities and NGOs
- Donors (funding of components)

Key Message 3: Implement strategies to improve the management of water resources, and surface and groundwater catchments (watersheds) for the benefit of all sectors including local communities, development interests, and the environment.

Supporting Statements:

1. There is a need for a wider view (holistic approach) to water resources management in many countries to ensure social, environmental as well as technical and economic factors are taken into account (Integrated Water Resources Management (IWRM).

2. Many small islands have very limited and vulnerable water resources and there is a need to conserve these resources and protect them from contamination.

3. There are demonstrated examples in Pacific small island countries that participatory approaches to catchment (watershed) management are more effective and sustainable than regulatory approaches, particularly in the context of customary land ownership and use, which is prevalent in most Pacific small island countries.

Actions Required:

1. Implement IWRM principles and practices in small island countries through:
- coordination between all relevant agencies;
- long-term planning and commitment for the implementation of IWRM; and
- appropriate support and training from relevant regional and international agencies.

Responsible Parties
- National and local governments
- Water utilities and power utilities (where hydropower is utilized)
- Local communities and NGOs
- Regional agencies (e.g., SOPAC, SPREP)
- International agencies (e.g., GWP, UNESCO)
- Donor agencies (funding in initial stages)

2. Draft, enact, and apply appropriate national water resources legislation and plans for the rational allocation, use, and protection of water resources.

Responsible Parties
- National governments and regional agencies (technical support)

3. Implement catchment management practices as follows:
- endorse participatory approaches in water resources management within catchments;
- establish water catchment management committees with representatives from key stakeholders;
- develop catchment management plans for the rational allocation, use, and protection of water resources. This may include the establishment of catchment management, protection, and buffer zones;
- apply best management practices to minimize impacts from activities such as logging, cultivation, and mining;
- implement community education and awareness programmes for water resources protection and water conservation, as an integral part of health promotion and sustainable water resources and environmental management;
- identify water pollution sources and undertake preventative and corrective steps, including financial penalties for environmental and water resources degradation; and
- conduct environmental impact assessments as an integral part of planning for development projects to ensure environmental values and objectives are properly considered.

Responsible Parties
- National and local governments
- Private sector
- Local communities and NGOs
- Donor agencies (funding in initial stages)

THEME 2

ISLAND VULNERABILITY

Disaster Preparedness
Dialogue on Water and Climate

Chair:	Patrick Amini
Facilitator:	David Scott
Rapporteur:	Tony Falkland
2nd Rapporteur:	Marc Overmars

THEME 2

ISLAND VULNERABILITY

(Disaster Preparedness; Dialogue on Water and Climate)

Key Message 1: There is a need for capacity development to enhance the application of climate information to cope with climate variability and change.

Supporting Statements:

1. There has been growing recognition of the importance of climate variability and the impact of extreme climatic events and the need for climate forecasting to respond to these events.

2. Significant progress has been made in the development and dissemination of climate information and prediction in the region based, in part, on observations of the coupled atmospheric/ocean system (e.g., GOOS).

3. WMO/CLIPS (Climate Information and Prediction Services) Programme has established a framework of CLIPS focal points within National Meteorological/Hydrological Services.

4. A Pacific Climate Information and Prediction System has been proposed and endorsed at the regional ENSO workshop (SOPAC, 1999).

5. Pacific island countries have recognized the significance of drought as a major hazard that needs to be planned for and that climate prediction allows a much more effective response.

Actions Required:

1. Enable WMO CLIPS/HYCOS (Hydrological Cycle Observing System) with regional partners to develop and enhance the application of climate information and to strengthen links between meteorological and hydrological services by:
- working with existing climate information services in the region;
- formalizing efforts to build climate information and forecasting capacity;
- ongoing development of analysis, forecasting, and application tools; and
- including participation by end users (e.g., water providers, hazard managers, health officials, agriculture, and public).

Responsible Parties
- WMO, National Meteorological Services, Regional Organizations, NIWA, BOM, PEAC, NOAA, donor agencies, and other partners

2. Develop rainfall and drought prediction schemes for Pacific island countries by:
- adaptation of existing models to Pacific island countries; and
- future development of drought monitoring and prediction methods.

Responsible Parties
- BOM, PEAC, Donor agencies

3. Enable regional support to develop water applications of Climate Information and Prediction through:
- training;
- applied research; and
- technology transfer.

Responsible Parties
- SOPAC, Donor agencies

Key Message 2: Change the paradigm for dealing with Island Vulnerability from disaster response to hazard assessment and risk management, particularly in Integrated Water Resources Management.

Supporting Statements:

1. A shift is taking place in disaster management generally from a disaster response approach to hazard assessment and risk management.

2. Most disaster management has not addressed the risk of droughts and few governments have attempted to manage the risk of droughts in the Pacific Islands.

3. Climate change may result in more climate variability and the risk of extreme weather and climate events may increase. SPREP's current work on climate and PICAPP have provided a framework for assessing the potential impacts of climate variability and change.

4. Population growth and development are going to increase the vulnerability of island societies to droughts and other climate and extreme weather events.

5. The Disaster Management Unit at SOPAC has made strides in the development of Comprehensive Hazard Assessment and Risk Management (CHARM). It provides an approach to shifting the approach from vulnerability to hazard assessment and risk management.

6. WMO, SPREP, SOPAC, ADB, and other regional and international organizations can contribute to a shift to hazard assessment and risk management.

7. There are similarities between needs which can be addressed at regional, as well as national level, through targeted training and capacity building.

Actions Required:

1. Implement actions to strengthen national capacity to carry out hazard assessment and risk management using CHARM and other vulnerability assessment and risk management tools.

Responsible Parties
- SOPAC with support from international agencies
- Donor agencies (funding)
- National agencies (implementation and funding)

2. Provide high-level briefings for political leaders from the region on the value of CHARM as a tool for planning and decision-making.

Responsible Parties
- SOPAC with support from international agencies (e.g., WMO, UNESCO) (coordination of regional effort)
- Donor agencies (funding)
- National agencies (implementation and funding)

3. Implement a programme of climate analysis for regional countries that can assess the risk of climate-related extreme events, particularly droughts and floods, and tropical cyclones.

Climate analysis should adopt the following principles:
- have regional application;
- include training for personnel;
- consider technical and social issues;
- incorporate community awareness and participation; and
- involve close liaison with relevant agencies.

Responsible Agencies
- SOPAC, WMO in co-operation with BOM, NIWA, PEAC, and other agencies (coordination of regional effort and assistance with implementation)
- Donor agencies (funding)
- Regional research institutes (assistance with implementation and training)
- National agencies (implementation and funding)

4. Develop and/or implement minimum standards for conducting island risk and vulnerability assessments and development of drought mitigation and response plans.

Responsible Parties
- National agencies (implementation and funding)
- SOPAC in cooperation with other agencies (assistance with implementation)
- Donor agencies (funding)

5. Build on the climate analysis and forecasting capacity provided by Fiji Meteorological Service (FMS), the Pacific ENSO Applications Center (PEAC), the Australia Bureau of Meteorology (BOM), and the New Zealand National Institute for Water and Atmospheric Research (NIWA) to develop risk reduction strategies through the use of climate forecasting in conjunction with risk management.

Responsible Parties
- FMS, PEAC, BOM, NIWA with SOPAC
- National agencies
- Donor agencies (funding)

Theme 3

AWARENESS

Advocacy
Political Will
Community Participation
Environmental Understanding
Gender

Chair:	Vula Vakacegu
Facilitator:	Leonie Crennan
Rapporteur:	Christian Nielsen
2nd Rapporteur:	Rhonda Bower

THEME 3

AWARENESS

(Advocacy; Political Will; Community Participation; Environmental Understanding; Gender)

Key Message 1: A high quality participatory framework should be adopted at the national level to allow for open participation of communities in sustainable water and wastewater management.

Actions Required:

1. Establish a water education fund accessible to government agencies, and civil society groups to ensure effective community participation in sustainable water management.

Responsible Parties
- Regional organizations
- National governments
- NGOs
- Donor agencies
- Private sector including industries and the tourism sector

2. Request donors and governments to adjust funding mechanisms to ensure sustainable implementation of water management programmes.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs

3. Ensure quality community participation that leads to community ownership and sustainability.

Responsible Parties
- Communities
- National governments
- NGOs
- Regional organizations
- Private sector including industries and the tourism sector

4. Improve water and sanitation conditions of squatter settlements and rural dwellers through the participatory framework.

Responsible Parties
- Governments
- NGOs
- National governments
- Local governments

Key Message 2: Access to, and availability of information on sustainable water and wastewater management should be provided to all levels of society.

Actions Required:

1. Develop a toolbox to support water education for all levels of society including politicians, government personnel, civil society, and private sector. Toolbox to include:
- funding and establishing a Sanitation Park;
- creation of an in-country and regional database that provides information on research process and outcomes, aid programmes, NGO and CBO activities, private sector contribution, government agenda, and resources;
- support the use of local theatre groups and media; and
- mobile training programmes for householders and trades people for building and maintenance of appropriate on-site water and sanitation systems.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs and CBOs
- Schools and regional institutions

2. Strengthen the capacity of CBOs, NGOs, and government departments to disseminate information on sustainable water management.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs
- Private sector including industries and tourism sector
- Churches and schools

3. Strengthen the capacity of trainees and dialogue builders.

Responsible Parties
- Regional organizations
- National governments
- NGOs
- Schools and regional institutions

Key Message 3: Water and sanitation education should be mainstreamed into the formal education system.

Actions Required:

1. Government adopt water education as part of the curriculum.

Responsible Parties
- Education ministries
- Donor agencies

- NGOs and CBOs
- Regional Institutions
- Politicians

2. Strengthen the capacity of curriculum developers and teacher trainers to provide water education.

Responsible Parties
- Education ministries and regional institutions
- Donor agencies
- NGOs and CBOs

Key Message 4: Improve communication and coordination of all stakeholders in sustainable water and wastewater management including government, civil society, and the private sector.

Actions Required:

1. Define roles and responsibilities of government, civil society groups, private sector, and communities in the sustainable management of water.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs
- Private sectors including industries and the tourism sector
- Politicians
- Schools and regional institutions

2. Share information between project/programme stakeholders.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs and CBOs
- Private sector including industries and the tourism sector
- Politicians
- Schools and regional institutions

3. Improve awareness of policy and legislation through education and community-based learning.

Responsible Parties
- Regional organizations
- National governments
- Donor agencies
- NGOs and CBOs
- Politicians
- Schools and regional institutions

THEME 4

TECHNOLOGY

Appropriate Technologies
Demand Management and Conservation
Human Resources

Chair:	Bhaskar Rao
Facilitator:	Mike Dworsky
Rapporteur:	Jan Gregor
2nd Rapporteur:	Chris Davis

THEME 4

TECHNOLOGY

(Appropriate Technologies; Demand Management and Conservation; Human Resources)

Key Message 1: Appropriate institutions, infrastructure, and information will support sustainable water and wastewater management.

Clearly-defined responsibilities for all stakeholder organizations in water and wastewater management can prevent fragmented and uncoordinated plans and actions and improve linkages to other sectors. A specific national agency responsible for water and wastewater management can be considered to enhance performance. Strengthened institutional capacities and the collection and dissemination of data and information will support appropriate technology selection, increase system performance, increase the understanding of subsequent environmental and public health impacts, and demonstrate the need for water conservation and natural disaster preparedness.

Supporting Statements:

1. Governments will review and specify roles of, and facilitate coordination between, existing agencies, and where appropriate, create specific responsible agencies for water and wastewater management.

2. Governments will incorporate water and wastewater planning and long-term sustainable management into national urban and rural development plans and schemes.

3. Governments will ensure that water and wastewater technologies and related infrastructure are appropriate to meet national and local priorities and needs, within the constraints of available finance and other resources, while recognizing the need for protection of human health and the environment.

4. Governments, service providers, institutions, and regional organizations will collaborate in partnership throughout the region to improve timely access to, and sharing of, available data and research on appropriate water and wastewater technologies and the dissemination and implementation of wise practice guidelines.

5. Water and wastewater reduction (water demand management and conservation, zero discharge toilets) and reuse strategies will be developed and adopted by governments without compromising public health.

6. Governments and regional organizations will cooperate to develop and sustain regional and national water and wastewater quality monitoring programmes and the use of this information (e.g., benchmarking) to improve water and wastewater management and environmental protection.

7. Governments, regional organizations, and other stakeholders will cooperate to develop integrated water and wastewater management plans to effectively address the impacts of contingencies, emergencies, and disasters.

Actions Required:

1. Identify:
- the key agencies/stakeholders involved with the management of water and wastewater, and environmental health;
- their roles and responsibilities;
- activities they undertake in water, wastewater, and environmental health; and
- lead agencies for specific national activities.

Responsible Parties
- Governments
- NGOs

2. Establish regional mechanisms and guidelines for maintenance of data collection, on water and wastewater management (capacity, standards, regulations, and monitoring) and environmental health impacts.

Responsible Parties
- Governments
- Regional organizations
- UN and donor agencies
- NGOs

3. Develop national guidelines (to be shared in partnership within the region) on wise practice approaches to assessing and managing water and wastewater system requirements that incorporate sound environmental health principles.

Responsible Parties
- Governments
- Regional organizations

4. Review existing water and wastewater technologies and infrastructure and recommend strategies for improvement nationally and to be shared, regionally. Resolving the high unaccounted for water within the regional utilities will reduce the need for additional water resources development.

Responsible Parties
- Governments
- Service providers
- NGOs
- Regional organizations
- UN and donor agencies

5. Develop a national monitoring capacity, building on existing and new resources, to provide baseline data, and long-term quality assurance utilizing hydrogeological and hydrologic data collection and analysis.

Responsible Parties
- Governments
- NGOs
- Regional organizations

6. Promote awareness of links between, and means of integration of, water and wastewater management plans to effectively address contingencies, emergencies, and disasters.

Responsible Parties
- Governments
- NGOs
- Regional organizations

Key Message 2: Utility collaboration and regional partnership to reduce unaccounted-for water will significantly improve the sustainability of utilities and reduce the need for developing new water resources.

Supporting Statements:

1. A regional demand side management programme for the utilities to work in partnership will be institutionalized and implemented through the regional utility organization. Self-help training will be provided, and shared, to sustain the leak-detection effort to reduce unaccounted for water, utilizing not only specialized equipment throughout the region, but also accounting and meter data analysis. Reducing the amount of unaccounted-for water (demand side management) is the highest priority action item for the utilities throughout the Pacific island countries.

Actions Required:

1. Review existing water and wastewater technologies and infrastructure and recommend strategies for improvement nationally and to be shared, regionally. Resolving the high unaccounted-for water within the regional utilities will reduce the need for additional water resources development.

Responsible Parties
- Governments
- Service providers
- NGOs
- Regional organizations, UN and donor agencies

2. Develop island specific training programmes, regional training needs, and pilot projects (leak detection, and resolving unaccounted-for water is the highest priority identified by the utilities), identify resources for delivery (e.g., staffing, equipment etc.), secure funding, and implement them utilizing regional partnership to share skills, experiences, and expertise.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies
- NGOs

3. Reduce water losses through reduction programmes including leak-detection practices, meter and billing data collection, and analysis and installation of water-saving devices.

Responsible Parties
- Service providers

4. Use of water-saving devices to reduce wastage.

Responsible Parties
- Customers

5. Share skills and techniques between utilities in and outside the region.

Responsible Parties
- Service providers
- Regional organizations and cooperating agencies

Key Message 3: Island specific regional training programmes should be developed, resulting in sustainable levels of skilled and knowledgeable people and communities within the water and wastewater sector.

Appropriately trained and experienced urban and rural water and wastewater professionals are needed to develop projects and operate facilities, at both the technical, managerial, and community participation levels. Increased training enables communities and individuals to take responsibility for operating and maintaining their systems.

Supporting Statements:

1. Governments, regional, and international organizations will cooperate to develop and implement effective human resource development programs for water and wastewater management and related personnel (including planners, management and enforcement professionals) with particular attention to upskilling the local workforce.

2. Governments, local institutions, regional, and international organizations will work in partnership to share and develop regional and national training courses in support of human resource development programs.

3. Governments, regional organizations, and NGOs will promote and facilitate the development and training of communities and individuals to strengthen and assist their participation in water and wastewater management.

4. Governments, regional organizations, donors, the private sector, and NGOs will work together to secure funding to support the sustainability of human resources development policies and training programs.

Actions Required:

1. Review the need for increased capacity and management training in human resources development and planning.

Responsible Parties
- Governments
- Service providers

- Regional organizations and cooperating agencies
- International counterparts

2. Carry out training needs analysis (TNA) for workforce and community groups, including communities and individuals, to identify gaps in existing training. This should include reviews of current programs to determine who needs training, the type of training required, and resources needed.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies
- International counterparts

3. Identify funding sources for training program development and share the resources between utilities wherever cost effective and appropriate.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies

4. Develop island specific training programs, regional training needs, and pilot projects (leak detection, and resolving unaccounted-for water is the highest priority identified by the utilities), identify resources for delivery (e.g., staffing, equipment etc.), secure funding, and implement them utilizing regional partnership to share skills, experiences, and expertise.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies
- NGOs

5. Evaluate performance of human resources development planning based on improved water and wastewater management.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies
- International counterparts

6. Periodically go back to Actions 1 and 2 to assure sustainability.

Responsible Parties
- Governments
- Service providers
- Regional organizations and cooperating agencies
- International counterparts

THEME 5

INSTITUTIONAL ARRANGEMENTS

Institutional Strengthening
Policy, Planning and Legislation

Chair:	Keu Mataroa
Facilitator:	David Hill
Rapporteur:	Jan Gregor
2nd Rapporteur:	Ian Walker

THEME 5

INSTITUTIONAL ARRANGEMENTS

(Institutional Strengthening; Policy, Planning and Legislation)

Key Message 1: Work together through a comprehensive consultative process, encompassing good governance, to develop a shared national vision for managing water resources in a sustainable manner.

Supporting Statements:

1. Governments should develop a national vision for sustainable water resources management.

2. Governments should include all parts of the water resources and services delivery sector in the national vision for sustainable water resources management – including water, wastewater, sanitation, and drainage – and give particular regard to cultural and/or traditional rights and practices.

3. Governments should develop their respective national vision for sustainable water resources management through a process of full inclusion of, and consultation with, all stakeholders. That process should be confirmed with stakeholders before the formal development stage commences.

Actions Required:

1. Identify a lead agency for initiating the process of developing a national vision.

Responsible Parties
- Governments

2. Prepare a draft consultation strategy for the development of a national vision.

Responsible Parties
- Governments

3. Establish a process for inclusion and consultation with stakeholders.

Responsible Parties
- Governments

4. Seek agreement from stakeholders on the consultation process.

Responsible Parties
- Governments
- Stakeholders

5. Develop a national vision for sustainable water resources management.

Responsible Parties
- Government departments
- Service providers
- Stakeholders

6. Develop a programme for promotion, education, and awareness of the national vision in the community.

Responsible Parties
- Government departments
- Service providers
- Stakeholders

Key Message 2: Develop national instruments including national visions, policies, plans, and legislation appropriate to each island country taking into account the particular social, economic, environmental, and cultural needs of the citizens of each country.

Supporting Statements:

1. Governments should develop sustainable water resources management policies, laws, plans, and regulations that are consistent with the national vision for sustainable water resources management, international and national laws, regulations, technical standards, and obligations.

2. Governments, regional organizations, and other stakeholders should cooperate to develop integrated sustainable water resources management plans and other instruments.

3. Governments should develop and implement appropriate water and associated regulatory frameworks, compliance, and enforcement requirements that benefit the specific cultures, customs, economies, and environment of the people of the Pacific.

4. Governments and regional organizations, the private sector, NGOs, and Civil Society Organizations (CSOs), should actively cooperate to ensure that sustainable water resources management policies and plans are integrated into the national development policies and plans and other cross-sectoral initiatives.

Actions Required:

1. Establish a process for, and review current laws, policies, plans, and other relevant strategies for consistency with the national vision for sustainable water resources management.

Responsible Parties
- Governments
- Stakeholders

2. Identify gaps in existing national instruments for national planning, water resources, land-use planning and development, and align with the national vision.

Responsible Parties
- Governments

3. Education and awareness on policies and regulations across all sectors with special focus on decision makers.

Responsible Parties
- Governments
- Service providers
- Regional organizations
- Local governments
- NGOs and CSOs

4. Establish appropriate guidelines and systems for reporting on service delivery, and enforcement of regulations.

Responsible Parties
- Governments

Key Message 3: Promote and establish appropriate institutional arrangements resourced sufficiently to enable effective management of water resources and the provision of appropriate water services.

Supporting Statements:

1. Governments, at all levels, regional organizations, NGOs, and CSOs should develop such institutional arrangements as are complementary and necessary to effectively manage water resources sustainably, including through public-private partnerships.

2. Governments should review existing water agencies and other interested parties, involved in sustainable water resources management with a view to facilitating more effective coordination between them.

3. Service providers should take into account traditional knowledge and practices complemented by new approaches to sustainable water resources management.

Actions Required:

1. Develop such institutional arrangements as are complementary and necessary to effectively manage, and where the national vision is in place, implement water resources in a sustainable manner.

Responsible Parties
- Governments
- Regional organizations
- NGOs and CSOs

2. Review existing water agencies and other interested parties involved in sustainable water resources management with a view to facilitating more effective coordination between them.

Responsible Parties
- Governments

Key Message 4: Recognize and share the water resources management knowledge and skills of all stakeholders at a national and regional level in the process of developing and implementing the national vision.

Supporting Statements:

1. Governments, regional organizations, NGOs, and CSOs should cooperate to promote and develop education and awareness of sustainable water resources management issues, including their public health, economic, environmental, social, and cultural implications.

2. Governments, service providers, NGOs, and CSOs should, in partnership with community agencies, pool their respective knowledge, skills and responsibilities, and use this in the development and implementation of culturally appropriate strategies and activities for the implementation of sustainable water resource management programmes.

3. Governments, service providers, NGOs, and CSOs should ensure rural and urban communities have opportunities for active participation in the choice, development, and implementation of sustainable water resources management projects, and the ongoing operation and maintenance of facilities.

4. Where consistent with health and safety guidelines, planning of water facilities should ensure access for all, with special regard to women, the disadvantaged, the disabled, those in rural and remote communities, and the poor.

5. Governments, service providers, institutions, and regional organizations should collaborate throughout and beyond the region, to improve timely access to and sharing of, available data and research on sustainable water resources management and the dissemination and implementation of good practice guidelines.

Actions Required:

1. Develop and implement national and local public awareness and education campaigns with respect to sustainable water resources management.

Responsible Parties
- Governments
- Regional organizations
- Local governments
- Communities

2. Regional water resources professionals should be used, wherever practicable, to assist with capacity building.

Responsible Parties
- Governments
- Regional organizations

3. Local theatre groups and media should be used in raising awareness programmes.

Responsible Parties
- Governments
- Local governments
- Regional organizations
- Communities

4. Establish processes by which key stakeholders can determine their respective roles and responsibilities for sustainable water resources management within the community.

Responsible Parties
- Governments
- Service providers
- NGOs and CSOs
- Communities and Women

5. Create a task force that has representation of all stakeholders that will facilitate the development and implementation of culturally appropriate strategies and activities for sustainable water resources management programmes. The taskforce should have representation that will include women, the disabled, and disadvantaged.

Responsible Parties
- All key stakeholders

6. Include public awareness components in the budgeting of all development programmes.

Responsible Parties
- Governments
- Donors

7. Promote the use of community consultative committees in water sector development programmes.

Responsible Parties
- Governments
- Communities
- Service providers

8. Perform gender assessment studies in sustainable water resources management and, where appropriate, stress the need for gender issues to be included into project planning.

Responsible Parties
- Governments
- Regional organizations

9. Conduct research into traditional practices and determine whether or not these can be adapted to suit the present situation and new development programmes.

Responsible Parties
- Governments
- Regional organizations
- NGOs and CSOs

Key Message 5: National and regional leadership in water resources management should be recognized and encouraged.

Supporting Statements:

1. Governments and regional and international organizations should work together to develop and implement effective leadership development programmes in the area of sustainable water resources management.

2. Governments, local institutions, and regional and international organizations should work together in the development of regional and national training courses in support of broader sustainable water resources management development programmes.

3. Governments, regional organizations, NGOs and CSOs should promote and facilitate the development and training of communities and individuals to strengthen and assist their participation in the area of sustainable water resources management.

Actions Required:

1. Review and identify the need for increased capacity and management training in human resources development and planning in the water resources sector, particularly in the area of leadership (customary, professional, civil and political).

Responsible Parties
- Governments
- Service providers
- Regional organizations
- Cooperating agencies
- International counterparts
- NGOs and CSOs

2. Provide training opportunities in the practice of good governance with respect to water resources management.

Responsible Parties
- Governments
- Service providers
- Regional organizations

3. Identify funding sources for training programme development.

Responsible Parties
- Governments
- Service providers
- Regional organizations
- Cooperating agencies

4. Develop and provide country-specific and regional training programmes, pilot projects, and guidelines in sustainable water resources management.

Responsible Parties
- Governments
- Service providers
- Regional organizations
- Cooperating agencies
- NGOs and CSOs

5. Review opportunities for regional partnerships in sustainable water resources management leadership training.

Responsible Parties
- Governments
- Service providers
- Regional organizations
- Cooperating agencies
- International counterparts
- NGOs and CSOs

THEME 6

FINANCE

Costs and Tariffs
Alternative Models
Role of Donor Organizations and Financing Institutes

Chair:	Latu Kupa
Facilitator:	Ian Walker
Rapporteur:	Stuart Whitehead
2nd Rapporteur:	David Hill

THEME 6

FINANCE

(Costs and Tariffs; Alternative Models;
Role of Donor Organizations and Financing Institutes)

Key Message 1: Create a better and sustainable environment for investment by both the public and private sector, by developing and implementing national, sector, and strategic plans that identify the economic, environmental, and social costs of different services and develop pricing policies, which ensure the proper allocation of resources for the water sector.

Supporting Statements:

1. Governments, regional organizations, donors, the private sector, NGOs, and CSOs should cooperate to develop innovative approaches to existing funding structures and establish mechanisms to improve cost-recovery.

2. Where appropriate, governments, regional organizations, NGOs, and CSOs should cooperate to attract the private sector to invest in sustainable water resources management through public private partnerships and other mechanisms.

3. Governments, donors, and regional organizations should cooperate to develop appropriate service delivery and funding mechanisms to equitably address the sustainable water resources management needs of all in both the urban and rural community.

Actions Required:

1. Improve regulatory oversight and sector governance.

Responsible Parties
- Governments

2. Develop sector master plans to identify funding and cost recovery requirements and benefits, in terms of improved health and poverty alleviation objectives.

Responsible Parties
- Governments

3. Investigate possible conjunctive use of water from other infrastructure projects (e.g., hydropower dams etc).

Responsible Parties
- Utilities
- Governments

4. Consider separate potable water and salt/grey water systems for different treatment uses.

Responsible Parties
- Utilities
- Clients

5. Adopt polluter-pays principles.

Responsible Parties
- Governments

6. Identify potential benefits of partnerships in service provision such as joint ventures.

Responsible Parties
- Governments

7. Assess potential for contracting out particular functions to local groups (e.g., leak detection, billing, aspects of equipment maintenance, etc).

Responsible Parties
- Utilities
- Governments

8. Improve bankability of enterprise to investors and donors.

Responsible Parties
- Utilities
- Governments

9. Improve demand management.

Responsible Parties
- Utilities
- Governments

10. Develop tariff policies and structures to generate revenues to meet financial and cost-recovery policies.

Responsible Parties
- Utilities
- Governments

11. Policy for transparent, sustainable, targeted subsidies.

Responsible Parties
- Governments

Key Message 2: Establish financially-viable enterprises for water and sanitation that result in improved performance by developing appropriate financial and cost-recovery policies, tariffs, billing and collection systems, and financial and operating systems.

Actions Required:

1. Develop business plans, financial plans, and financially sustainable cost-recovery strategies.

Responsible Parties
- Utilities
- Governments

2. Improve billing and collection procedures, and legislate disconnection policies.

Responsible Parties
- Utilities
- Governments

3. Develop tariff structures to achieve adequate cost recovery but protects affordability.

Responsible Parties
- Utilities
- Governments

4. Establish sound asset management procedures and funding, including proper operation and management practices.

Responsible Parties
- Utilities

5. Information sharing and capacity building for sustainable sector finance.

Responsible Parties
- Utilities

6. Consider potential cost savings through multi-function authorities.

Responsible Parties
- Governments

7. Align tariff increases to service improvements.

Responsible Parties
- Utilities

8. Allow water utilities to keep tariff revenues.

Responsible Parties
- Governments

9. Increase consultation and public awareness to support need for cost recovery and hence tariffs or tariff increases.

Responsible Parties
- Utilities

10. Report in transparent manner including costs and tariffs to all stakeholders including consumers.

Responsible Parties
- Utilities

Key Message 3: Reduce costs through improved operational efficiency, using benchmarking, development of water-loss reduction programmes, and improved work practices.

Actions Required:

1. Reduce water losses through water-loss reduction programmes.

Responsible Parties
- Utilities
- Clients

2. Use of water-saving devices to reduce wastage by customers.

Responsible Parties
- Utilities
- Clients

3. Benchmarking to reduce costs, electricity, staff numbers, and salaries.

Responsible Parties
- Utilities
- Regional organizations

4. Report in transparent manner including costs and tariffs to all stakeholders.

Responsible Parties
- Utilities
- Governments

5. Information sharing and capacity building.

Responsible Parties
- Utilities
- Regional organizations

Key Message 4: Ensure access for the poor to water and sanitation services by developing pro-poor policies that include tariffs with lifeline blocks and transparent and targeted subsidies.

Actions Required:

1. Clear framework for participation by poor.

Responsible Parties
- Local governments
- Governments

2. Use Trust funds for community water supply and sanitation.

Responsible Parties
- Local governments
- Governments

3. Affordable cost recovery policies, tariffs with lifeline blocks to ensure services supplied at affordable prices.

Responsible Parties
- Utilities
- Governments

4. Policy for transparent, sustainable, and targeted subsidies.

Responsible Parties
- Governments

Key Message 5: Achieve sustainable rural water and sanitation services at the community level through developing strategies that incorporate mechanisms for appropriate financing and capacity building.

Actions Required:

1. Formulate policy for financing rural water supply and sanitation.

Responsible Parties
- Governments

2. Formulate strategy to increase funding for rural water supply and sanitation.

Responsible Parties
- Local governments
- Governments

3. Strengthen capacity of water committees/community groups for self-sufficient operation and maintenance of community-managed water supply and sanitation facilities.

Responsible Parties
- Local governments
- Governments

4. Consider Trust funds and community savings schemes as sources for community and rural water supply.

Responsible Parties
- Local governments
- Governments

MINISTERIAL DECLARATION

Recognizing, the unique geographic and physical characteristics, as well as fragile nature of water resources in our small and vulnerable island countries which impact on the health and well-being of our peoples, environment, and the development of our island economies;

We declare that on behalf of our governments, we endorse the Communiqué and Regional Action Plan developed during the Pacific Regional Consultation attached to this Declaration.

Signed:

.....
Executive Director, American Samoa Power Authority (ASPA)
American Samoa

.....
For Minister of Works
Cook Islands

.....
Ministry of Transportation, Communication and Public Works
East Timor

.....
Minister of Public Works
Niue

.....
Minister of Works, Water and Electricity
Samoa

.....

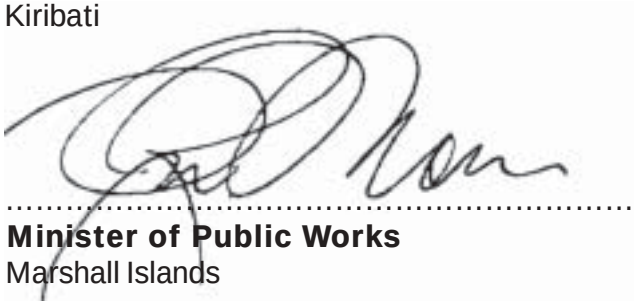
Minister, Department of Transportation, Communication & Infrastructure
Federated States of Micronesia

.....

Minister of Works, Telecommunications, Energy, Road Transport & Shipping
Fiji Islands

.....

Minister of Works and Energy
Kiribati



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Minister of Public Works
Marshall Islands

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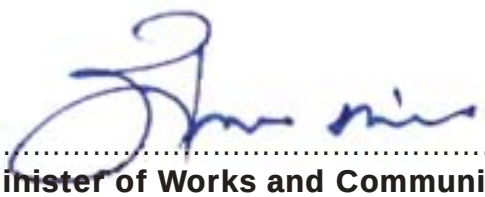
Minister of Health
Republic of the Maldives



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Minister of Works and Community Services
Nauru

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Minister of Rural Affairs
New Caledonia

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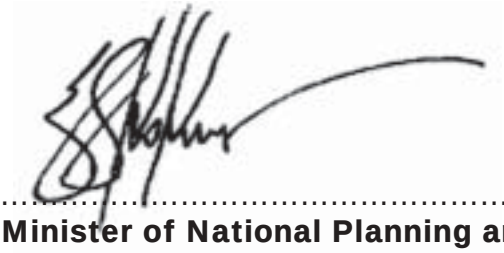
Minister of Resources and Development
Palau



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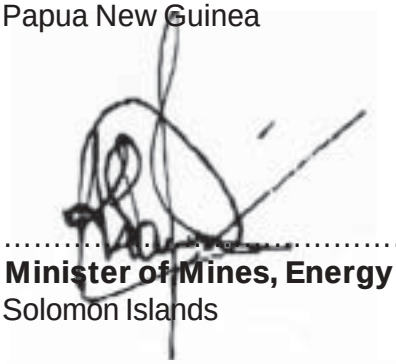
Minister of National Planning and Rural Development
Papua New Guinea



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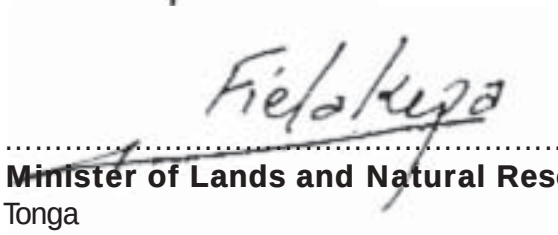
Minister of Mines, Energy and Water Resources
Solomon Islands



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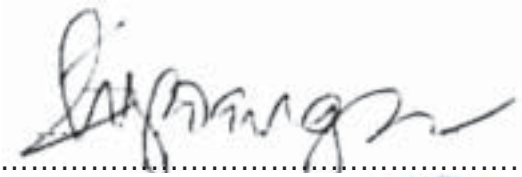
Minister of Lands and Natural Resources
Tonga



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Prime Minister
Tuvalu

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Minister of Lands and Natural Resources
Vanuatu

COMMUNIQUÉ ON THE PACIFIC REGIONAL CONSULTATION ON WATER IN SMALL ISLAND COUNTRIES

Adopted by Ministers and Island Country Delegations and representatives of civil society groups meeting in the final High-Level Session of the Pacific Regional Consultation on Water in Small Island Countries, Sigatoka, Fiji Islands, 3rd August 2002, as part of the preparatory process for the 3rd World Water Forum.

Recognizing, the unique geographic and physical characteristics, as well as the fragile nature of water resources in small and vulnerable island countries which impact on the health and well-being of our peoples, environment, and the development of our island economies;

We, Ministers and Island Country Delegations and representatives of civil society groups, with responsibilities for water affairs from 18 small island developing states from the Pacific, as well as East Timor and the Maldives, met in Sigatoka, Fiji Islands 29 July – 3 August 2002 to share knowledge particularly within and across the small island country regions, and agree to an action plan for sustainable water management in our islands.

We acknowledge the work of national governments, supported by regional and international intergovernmental organizations, and civil society groups to achieve sustainable resource management of water.

We recommit ourselves to sustainable water management components of Agenda 21 agreed to ten years ago in Rio de Janeiro, Brazil, and the Global Action Plan for Small Island Developing States agreed to in Barbados 1994 and the outcomes of the 5-year reviews undertaken in 1997 and 1999.

We associate and reaffirm, as appropriate, ourselves with the outcomes of the meeting on freshwater held in Bonn, Germany, in December 2001, which identified financing, capacity building, and governance as key constraints. This Consultation recognizes these as important in small island countries and adds political will as another important constraint which makes a set of four key constraints that need to be overcome for sustainable management of the region's water resources.

We urge the international community to pursue the achievement of the Millennium Development Goals that target the vital role of sustainable water management contributing to reducing poverty, improving health, and livelihoods for all people.

Recognizing that the World Summit on Sustainable Development (WSSD) is to take place in Johannesburg, South Africa, later this month, 26 August - 5 September 2002, and the 3rd World Water Forum in Kyoto, Japan in March 2003, decide that the following messages are key:

THEME 1: WATER RESOURCES MANAGEMENT

Key Message 1: Strengthen the capacity of small island countries to conduct water resources assessment and monitoring as a key component of sustainable water resources management.

Key Message 2: Implement strategies to utilize appropriate methods and technologies for water supply and sanitation systems and approaches for rural and peri-urban communities in small islands.

Key Message 3: Implement strategies to improve the management of water resources, and surface and groundwater catchments (watersheds) for the benefit of all sectors including local communities, development interests, and the environment.

THEME 2: ISLAND VULNERABILITY

Key Message 1: There is a need for capacity development to enhance the application of climate information to cope with climate variability and change.

Key Message 2: Change the paradigm for dealing with Island Vulnerability from disaster response to hazard assessment and risk management, particularly in Integrated Water Resources Management.

THEME 3: AWARENESS

Key Message 1: A high quality participatory framework should be adopted at the national level to allow for open participation of communities in sustainable water and wastewater management.

Key Message 2: Access to, and availability of information on sustainable water and wastewater management should be provided to all levels of society.

Key Message 3: Water and sanitation education should be mainstreamed into the formal education system.

Key Message 4: Improve communication and coordination of all stakeholders in sustainable water and wastewater management including government, civil society, and the private sector.

THEME 4: TECHNOLOGY

Key Message 1: Appropriate institutions, infrastructure, and information will support sustainable water and wastewater management.

Key Message 2: Utility collaboration and regional partnership to reduce unaccounted-for water will significantly improve the sustainability of utilities and reduce the need for developing new water resources.

Key Message 3: Island specific regional training programmes should be developed, resulting in sustainable levels of skilled and knowledgeable people and communities within the water and wastewater sector.

THEME 5: INSTITUTIONAL ARRANGEMENTS

Key Message 1: Work together through a comprehensive consultative process, encompassing good governance, to develop a shared national vision for managing water resources in a sustainable manner.

Key Message 2: Develop national instruments including national visions, policies, plans, and legislation appropriate to each island country taking into account the particular social, economic, environmental, and cultural needs of the citizens of each country.

Key Message 3: Promote and establish appropriate institutional arrangements resourced sufficiently to enable effective management of water resources and the provision of appropriate water services.

Key Message 4: Recognize and share the water resources management knowledge and skills of all stakeholders at a national and regional level in the process of developing and implementing the national vision.

Key Message 5: National and regional leadership in water resources management should be recognized and encouraged.

THEME 6: FINANCE

Key Message 1: Create a better and sustainable environment for investment by both the public and private sector, by developing and implementing national, sector, and strategic plans that identify the economic, environmental, and social costs of different services and develop pricing policies, which ensure the proper allocation of resources for the water sector.

Key Message 2: Establish financially-viable enterprises for water and sanitation that result in improved performance by developing appropriate financial and cost-recovery policies, tariffs, billing and collection systems, and financial and operating systems.

Key Message 3: Reduce costs through improved operational efficiency, using benchmarking, development of water-loss reduction programmes, and improved work practices.

Key Message 4: Ensure access for the poor to water and sanitation services by developing pro-poor policies that include tariffs with lifeline blocks and transparent and targeted subsidies.

Key Message 5: Achieve sustainable rural water and sanitation services at the community level through developing strategies that incorporate mechanisms for appropriate financing and capacity building.

We urge each country representative to actively promote the priorities outlined in this Communiqué with their country delegations attending (i) the Pacific Island Forum Leaders Meeting in Suva, later this month, and (ii) attending the World Summit on Sustainable Development.

We agree that the Type II Partnership / Initiative on water being submitted by the Pacific delegations at the WSSD must provide an opportunity to secure support to implement the Regional Action Plan and urge donors and partners to do likewise.

Acknowledging the valuable contribution of the International Secretariat of the Dialogue on Water and Climate and the Caribbean delegates to the importance given to island vulnerability, we commend this Plan to the Caribbean Consultative Meeting to be held in October 2002 as part of the preparations for the 3rd World Water Forum, and support partnerships between the small island regions.

We request the organisers of this Consultation, SOPAC and the ADB, to transmit this Communiqué and the Regional Action Plan to the 3rd World Water Forum, in order that the priority actions needed to support sustainable water resources management in our small island countries are endorsed.

Finally, we acknowledge that the above meetings and fora are important steps on the road to addressing the vital water issues confronting our small island countries, and reaffirm our commitment to strive towards the realization of sustainable water resources management for the benefit of the peoples of the small island countries.

Sigatoka, 3rd August 2002

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ANU	Australia National University
AusAID	Australian Agency for International Development
AWA	Australia Water Association
BOM	Bureau of Meteorology Australia
CBO	Community Based Organisation
CHARM	Comprehensive Hazards and Risk Management
CLIPS	Climate Information and Prediction Services
CSO	Civil Society Organisation
DFID	Department for International Development (UK)
DGMWR	Department of Geology, Mines and Water Resources, Vanuatu
DWC	Dialogue on Water and Climate
ENSO	El Niño Southern Oscillation
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
FMS	Fiji Meteorological Service
GOOS	Global Ocean Observing System
GWP	Global Water Partnership
HYCOS	Hydrological Cycle Observing System
IHP	International Hydrological Programme (of UNESCO)
IWP	International Waters Programme (abbreviation for Strategic Action Programme for International Waters)
IWRM	Integrated Water Resources Management
NGO	Nongovernment Organisation
NIWA	National Institute for Water and Atmospheric Research New Zealand
NOAA	National Oceanographic and Atmospheric Administration (US)
NZAID	New Zealand Agency for International Development (formerly NZODA)
NZODA	New Zealand Overseas Development Agency (now NZAID)
NZWWA	New Zealand Water and Wastewater Association
PEAC	Pacific ENSO Applications Center
PIC	Pacific island country
PICCAP	Pacific Islands Climate Change Assistance Programme
PNG	Papua New Guinea
SPREP	South Pacific Regional Environment Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USP	University of the South Pacific
WHO	World Health Organisation
WMO	World Meteorological Organisation

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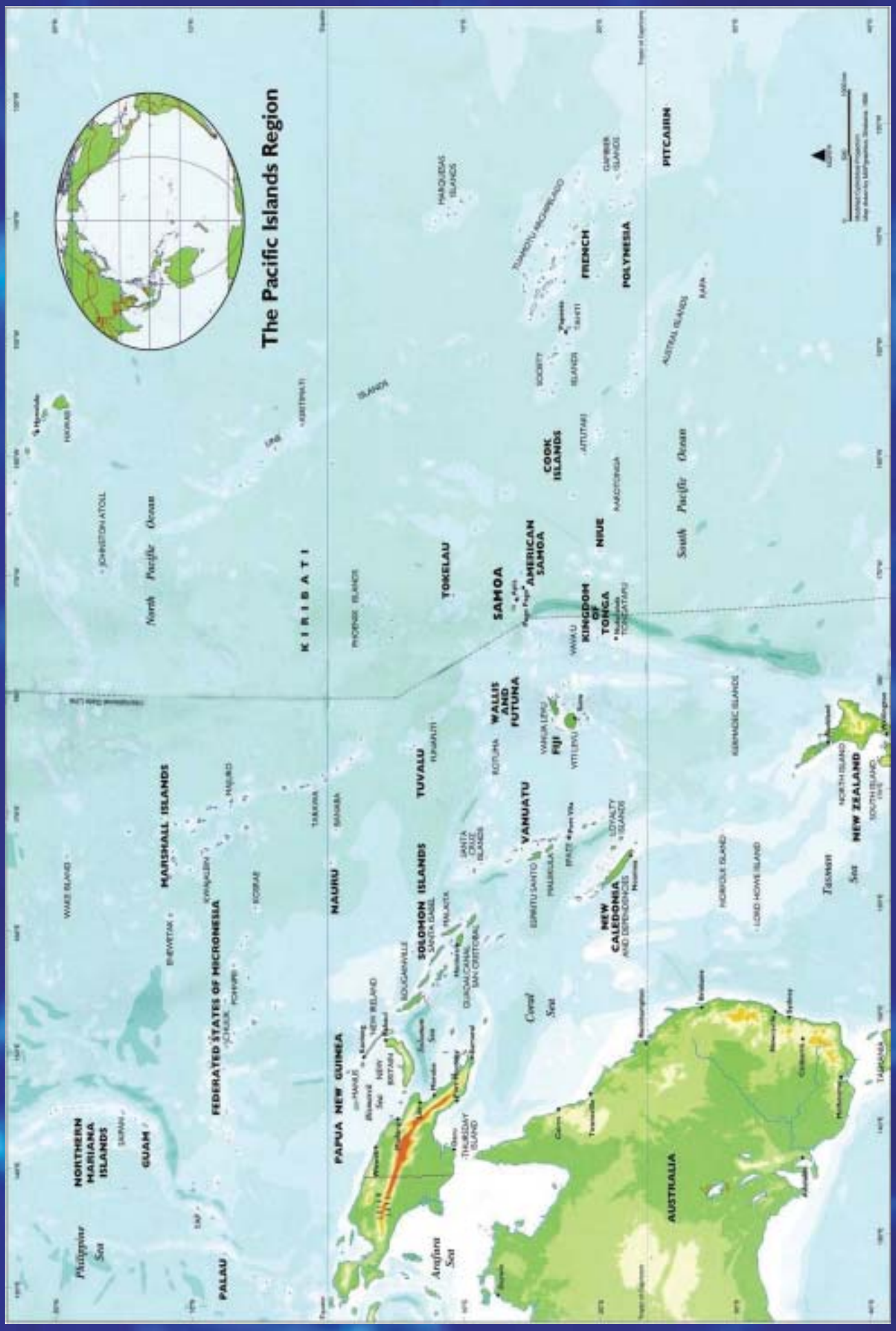
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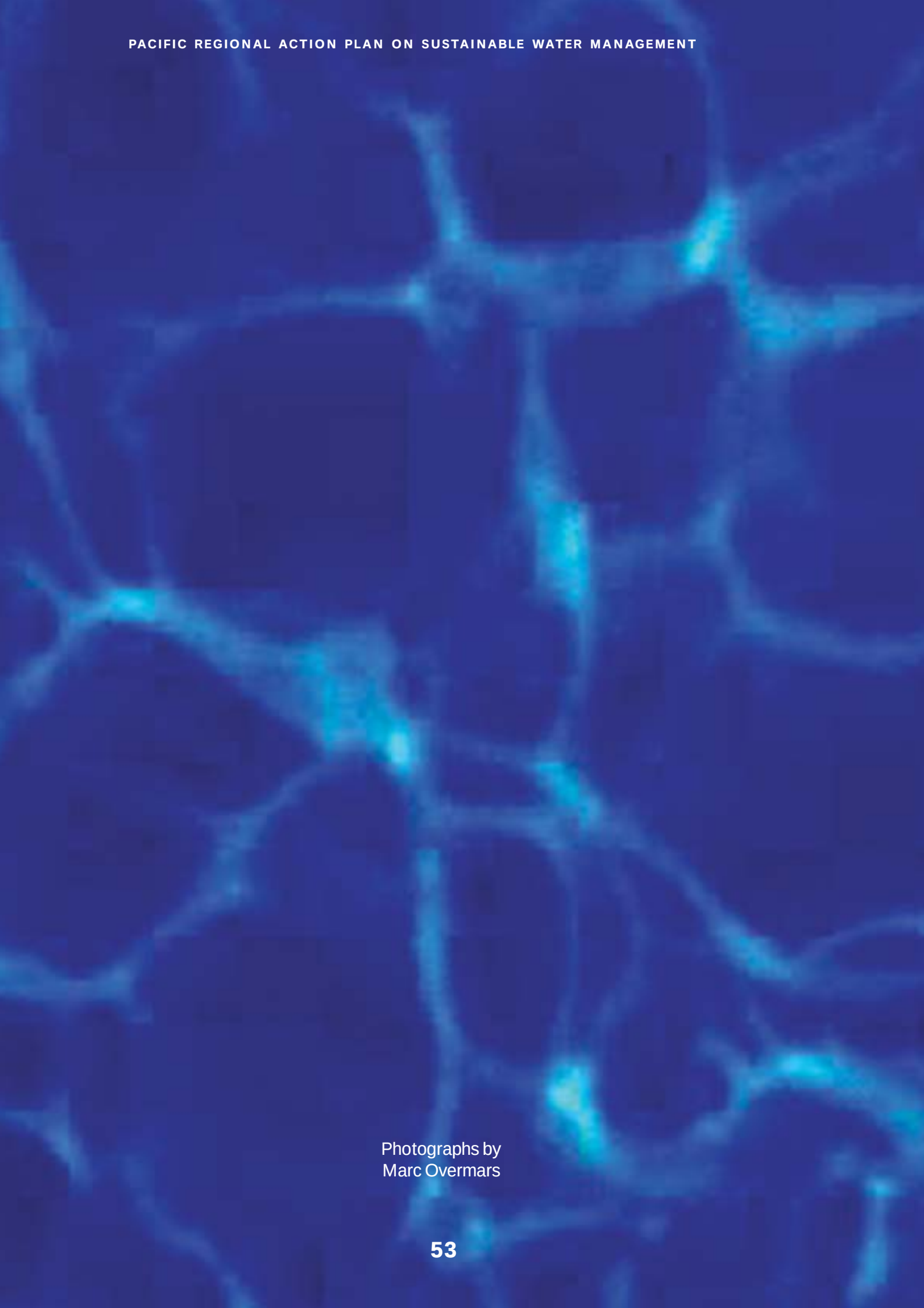

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