### Regional Wetlands Action Plan for the Pacific Islands 2011–2013







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Cover photo: Forest stream, Ravilevu Nature Reserve, Taveuni, Fiji This page: La Foa Estuary, New Caledonia

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Marine Protected Area, Chelbacheb, Palau

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# Foreword

Mangrove ecosystem, La Foa Estuary, New Caledonia

Wetlands are highly productive ecosystems and they play a critical role in sustaining the livelihoods of Pacific island peoples, and contribute significantly to national economies. Wetlands include our rivers, lakes, peatlands, coral reefs, mangroves, mudflats, marshes and seagrass beds. In addition to their livelihood and economic benefits, wetlands support extensive biodiversity with high conservation value and their sound management can contribute to climate change adaptation and mitigation schemes.

Loss of wetlands means losing the valuable ecosystem services that they provide and this impacts negatively on humans. Tourism, food security and coastal protection are often the most impacted by the degradation and loss of wetlands. In small islands, the poorest people usually live very near to and depend directly on wetland ecosystems for their livelihood. They are also the least able to cope with the impacts of wetland loss.

Climate change adds another dimension to the continuing destruction of our wetlands but it brings a greater imperative for their protection and sustainable management. Across the Pacific, there is growing evidence that climate change is resulting in more intense cyclones and storm surges, coastal erosion, loss of fish breeding grounds and reduced water quality on many small islands. It is becoming clearer that better management and protection of our wetland ecosystems could help islands build resilience and adapt better to the impacts of our changing climate. Conserving our valuable wetlands and adapting to and building resilience to climate change impacts are inextricably interlinked. We recognise that one cannot realistically be addressed without the other and, more importantly, that human activity is as much to blame as climate change for the continuing destruction of our wetlands. Wetlands protection needs to be made a priority of national development planning and implementation.

This new Regional Wetlands Action Plan marks a significant step forward for progressing initiatives for the conservation of our precious Pacific wetlands over the next three years. It aims to address some of the fundamental issues, challenges and emerging threats to Pacific wetlands. SPREP and the Ramsar Convention Secretariat are committed to ensuring that the action plan will be implemented in a timely manner and in coordination with all Pacific Island governments and regional and international partners.

Shapand

David Sheppard Director SPREP

Anada Tiega Secretary-General Ramsar Convention on Wetlands





The Regional Wetlands Action Plan (RWAP) for the Pacific Islands (SPREP, 1999) was endorsed by the 26 member countries and territories of SPREP. The Action Plan contained 28 priority actions in the areas of management, capacity building, research and monitoring for wetland ecosystems. In 2002, a formal memorandum of cooperation was signed between the Secretariat of the Ramsar Convention on Wetlands and SPREP to promote the importance of wetland conservation in the Pacific Islands region. This partnership has continued with the third memorandum of cooperation recently signed between the two organizations in 2009.

With respect to conservation priorities, the Directory of Wetlands in Oceania published in 1993 provided useful examples of challenges facing the most important wetlands in the region. In 2005, a regional wetland workshop was organized by SPREP and Wetlands International Oceania to update this information and assess the status of wetland management in the region. This workshop identified four key challenges:

- □ Limited awareness and support for wetland conservation and management at government and community levels
- □ Insufficient knowledge on which to base wetland conservation and management decisions, and also limited access to existing knowledge.
- Limited ability of local communities to influence and control the wise use of their wetlands.
- □ Inadequate policy and institutional frameworks for wetland biodiversity and natural resource management.

A recent review of wetlands in the Pacific Islands region (Ellison, 2009) showed that while many of the actions from SPREP (1999) have resulted in project activity, others have not progressed. Additional priorities for wetlands have also since emerged, necessitating a review of the RWAP.

A Workshop to Review Implementation of the 'Regional Wetlands Action Plan for the Pacific Islands' was held from 2–6 August 2010 in Nouméa, New Caledonia. The workshop took stock of the progress of the 1999 Action Plan and of the recommendations from the 2005 workshop to develop new priority actions for wetlands conservation in the Pacific Islands region over the next three years. The workshop was attended by representatives of 13 Pacific Island countries and territories and regional organizations.

## Wetlands in the Pacific Islands region

Wetlands are defined by the Ramsar Convention on Wetlands as "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres" (Article 1.1 of the Convention text). Wetland types found in the Pacific Islands region are rivers, streams, lakes, floodplain forest, swamps, marshes, mangroves, seagrass-algal beds and coral reefs (Ellison, 2009) (Figure 1). Owing to ecological connectivity, cloud forest, riparian forest, groundwater systems and subterranean flows, beaches, coastal-littoral forest, agricultural wetlands, lagoons and the photic zone of the ocean are also considered of critical importance for wetland management.

The diversity of species in these wetlands is among the highest in the world in the west of the region, declining towards the east with increasing isolation, and decreasing island size and age. Each country has a unique community structure, and most have a high percentage of endemic species due to the habitat isolation that epitomizes this island region (Ellison, 2009). Due to the effects of oceanic separation, wetlands in the Pacific Islands have a unique biogeographic complexity not found in continental tropical regions.



Conversely, some of the atoll and smaller lowlying island countries, although having little or no endemism, have a disproportionate dependence on wetlands as a basis for sustainable development.

Wetlands are critical to the livelihood of Pacific Island populations, providing the resources and services that underlie the survival of all economies, cultures and societies. Wetlands of the region contain recognized unique biodiversity hotspots (Ellison, 2009), hence the conservation and wise use of Pacific Island wetlands is of global importance.

**Figure 1** Major wetland types of Pacific Islands.

# Importance of Wetlands in the region

A key value of wetlands is providing fish and a wide range of other marine and aquatic foods, which are the main source of protein for the region's people. Wetlands further provide the people of the region with a vast range of other food products, building materials, handicrafts, medicines, cosmetics and ornamentation. In a region with among the highest cultural diversity in the world, the cultural and spiritual values of wetlands and wildlife are complex. Many countries have a high proportion of national income from international tourists visiting the rivers, beaches, coral reefs and other wetland areas. This adds environmental pressure to the increasing demography often associated with lowland coastal areas. In a region particularly prone

to natural disasters such as tsunamis, cyclones, and storm-surges, coastal wetlands such as coral reefs, coastal littoral and riparian forests and mangroves provide the first line of defense against devastation. Less recognized are the critical values of wetlands in flood control, water purification, water supply, replenishment of groundwater and the retention and export of sediment and nutrients.

Wetlands are also among the most important spawning grounds and nurseries for most freshwater and marine organisms, many bird species and other animal species. Rivers and other wetland also provide the connectivity, links or migration corridors required for the survival of many migratory or transboundary species, including turtles, seabirds and migratory birds, and most of our freshwater and marine fish, shellfish and crab species.



# Threats

### and **ISSUES**

Despite their clear importance, wetlands are

Plaines des lacs, New Caledonia

vulnerable to both natural and human-induced impacts. Deforestation of catchments in volcanically young and rugged high islands has led to massive soil erosion and impacts upon wetlands. Natural disasters such as cyclones and storm waves have caused extensive damage to coral reefs and at many places initiating coastal erosion. But the day-to-day impacts of human activities have far reaching consequences. This includes logging of mangroves and coastal littoral forests, foreshore reclamation and developments, impacts of inland activities and land-use in the coastal zone, unsustainable commercial and subsistence fisheries, and reduction of water quality and conversion of inland wetlands for farming.

Specific threats identified through country discussions during the Noumea workshop (2010) are shown below:

# Specific Threats to Pacific Island wetlands

Wetland type	Threats and issues
Rivers, marshes, lakes	<ul> <li>Destruction/degradation of riparian vegetation</li> <li>Soil erosion caused by human activities in the catchment, e.g. mineral extraction and forest fires</li> <li>River bank erosion</li> <li>Reduced water quality</li> </ul>
Rivers	<ul> <li>River dams</li> </ul>
Marshes	• Drainage and conversion of wetlands, nutrient pollution
Rivers, marshes, lakes, mangroves	<ul><li>Invasive species (weeds, Tilapia)</li><li>Feral animals (dogs, pigs, mongooses)</li></ul>
Mangroves	<ul> <li>Urbanization, squatters, unplanned development</li> <li>Loss/degradation of inner mangrove communities/ mangrove associate species</li> <li>Solid waste and runoff</li> <li>Invasive species</li> </ul>
Rivers, marshes, lakes, coral reefs	<ul> <li>Wild life harvesting and trade</li> </ul>
Mangroves, coral reefs	<ul> <li>Over-harvesting of marine and mangrove resources,</li> <li>habitat destructive techniques</li> <li>Siltation, sedimentation, sand mining</li> </ul>
Coral reefs	<ul> <li>Nutrient runoff</li> </ul>
All	<ul> <li>Lack of scientific knowledge</li> <li>Weak legislation, protection and planning</li> <li>Loss of traditional knowledge and lack of understanding</li> <li>Natural disasters</li> <li>Climate change and sea level rise</li> </ul>

Pacific Island environments are particularly vulnerable to the effects of invasive species, resulting in higher rates of extinction than anywhere in the world (Sherley, 2000). Fundamental to these problems is the shortage and inaccessibility of scientific information on basic biology for management of pests, and monitoring of infestations. There is also a lack of awareness on impacts, insufficient poorly developed networking systems of information exchange (often due to large distances between islands) and little coordination within the region. Existing legislation, regulations and cross-sectoral policies in Pacific Island governments do not fully address the impact of invasive species on biodiversity, and there is a shortage of technically trained personnel. Of particular concern is the lack of information on the nature and extent of marine invasive organisms, given the high dependence that Pacific Islands have on marine resources and the increasing shipping traffic importing marine invasive species.

There is a shortage of good quality meteorological, hydrological, hydro-geological and water quality data in many of the Pacific Islands. There is generally insufficient baseline data on freshwater quality to evaluate the impacts of developments or land use practices, and little data available on the physical, chemical and biological processes in island watersheds, including soil erosion, loss of biodiversity and land clearance.

Several major wetlands in the region, including coral reefs, mangroves and those found in tropical forests are the most vulnerable to climate and environmental change. Wise management of the region's wetlands is critical to the regional response to climate change, helping limit the damage from sea-level rise, increasing floods and periods of drought.

Coastal development, often linked to increasing demography and tourism, is responsible for degradation of inshore coral reefs and erosion of coastal areas in many countries. Nearshore reefs also tend to be under heavy pressure from commercial coral collection. Destructive fishing techniques and wildlife harvesting remain problems in lagoon and coral reef sustainability. Coastal developments usually proceed without assessment of impacts on seagrass-algal beds, such as direct reclamation or the building of causeways connecting islets without consideration of the need to maintain water flow and exchange.

Over-fishing in the region is common, with consequent decline in the availability of finfish, shellfish, erustaceans, echinoderms and a wide rage of other marine and freshwater foods. There is no systematic monitoring to detect over-fishing, and better management of inshore fisheries requires additional resources. Unsustainable use of coastal wetlands in particular tends to occur due to the subsistence needs of growing coastal village communities, combined perhaps with weakened traditional control over the use of community natural resources. Many coastal wetlands are consequently in poor condition, which means they are less resilient to pressures from impacts such as storms or sea-level rise, tsunamis or droughts.

None of the Pacific Island governments have a Wetland Policy. Furthermore, few Pacific Islands have specific legislation that centrally addresses wetland issues (Ellison, 2009). Although there are some legislations relevant to various wetland issues from the perspectives of various individual government sectors, their enforcement is either limited or not coordinated in a cross-sectoral manner.

There is continuing need for capacity building in management agencies including the capacity to enforce legislation, and improvement of poor technical understanding by staff on wetland science and rehabilitation. There is a particular need for the formal training and education of the technical and scientific personnel within the region needed for effective wetland management. Wetlands are utilized without zoning for different levels of use and protection, or monitoring of sustainable use.

Given the critical significance of wetlands in the region and the multitude of immediate and long-term threats and issues faced by the Pacific Island countries and territories and their wetlands, the need for refined and directed action is of paramount importance. The 13 countries and territories present at the Noumea workshop specifically asked for the goals of the following plan to be realistic and achievable over the next three years, focused on addressing the identified threats and issues outlined on the previous page.

# Action Plan Goals

Togitogiga Falls, O Le Pupu Pue NP, Samoa

For the purposes of the action plan, "regional partners" refers to regional organisations and initiatives such as SOPAC, SPC, SPBEA, PII, PILN, Pacific Island Roundtable for Nature Conservation etc. "NGOs" refers to nongovernmental organisations such as CI, IUCN, WI, WWF, FSPI etc. "Tertiary institutes" refers to academic institutions such as USP etc.

GOAL

#### Wetland Wise Use

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
1.1 Improve and update information on the status of wetlands and wetland biodiversity.	<b>1.1.1</b> Produce regional and national wetland inventories, baseline assessments and ongoing monitoring programs.	Governments, SPREP, NGOs, tertiary institutes, communities.	<ul> <li>Regional and national inventory and maps produced of wetlands and their biodiversity.</li> <li>Updated national inventories produced.</li> </ul>
	<b>1.1.2</b> Improve science-based knowledge and assess threats to threatened wetland species.	Governments, CEPA Focal Points, tertiary institutes, SPREP, Ramsar, NGOs, regional partners.	<ul> <li>20% increase in knowledge of wetland species.</li> <li>Management strategies and actions for threatened species.</li> </ul>
	<b>1.1.3</b> Identify gaps in ecological information on wetlands in the Pacific region.	SPREP, regional partners, Ramsar STRP Focal Points, NGOs, tertiary institutes, Ramsar.	<ul> <li>Information identified, recorded and disseminated.</li> </ul>
	<b>1.1.4</b> Conduct research on ecosystem connectivity and life histories.	SPREP, regional partners, Ramsar, NGOs, Ramsar NFPs, tertiary institutes and research organizations.	<ul> <li>Increase knowledge on ecosystem connectivity and life history.</li> <li>Information recorded and disseminated.</li> </ul>



GOAL

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Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target	
<b>1.2</b> Need to have information on, and control of invasive species in wetlands.	<b>1.2.1</b> Assess the impact of invasive and introduced species, as well as implement programmes for their control and eradication.	Regional partners, SPREP, NGOs, GEF- PAS, tertiary institutes.	<ul> <li>Study of the impact and control of Tilapia on wetland ecosystem initiated.</li> <li>Report on invasive species in wetland ecosystems completed.</li> <li>Priority list of wetland invasive species for eradication completed.</li> <li>Control/eradication strategies in place for invasive species at the national level.</li> </ul>	
	<b>1.2.2</b> Implement a programme to assess the extent and impact of marine invasive species and to implement appropriate programs to manage marine invasive species.	Regional partners, SPREP, NGOs, GEF- PAS, tertiary institutes.	<ul> <li>Awareness strategies implemented in country in close cooperation with organizations, e.g. FAO, SPC who may be responsible for introduction of the invasive species.</li> <li>Strengthened in-country biosecurity measures.</li> <li>Implement a study on marine invasive species.</li> </ul>	
	<b>1.2.3</b> Strengthen curricula on invasive species.	Governments, tertiary institutes.	Invasive species included in the curriculum of formal education system.	
	<b>1.2.4</b> Develop a post-graduate course on invasive species.	Tertiary institutes.	Graduates theses on invasive increased by 20%.	
<b>1.3</b> Information on the vulnerability of wetlands to climate and environmental change.	<b>1.3.1</b> Scientific research and assessment on the vulnerability of wetlands to climate and other environmental change in order to give practical guidance to adaptation planning, e.g. mangrove response to predicted sea level rise.	Governments, SPREP, regional partners, tertiary institutes.	Data and information collected, produced and disseminated.	
1.4 Investigate impact of wetland degradation on public health, food and productive security, and poverty prevention.	<b>1.4.1</b> Reduce wetland related pressures on human health, e.g. pollution.	Governments, regional partners, SPREP, Ramsar, Ramsar STRP, tertiary institutes.	regional partners, (being produced by Ramsar STRP) SPREP, Ramsar, implemented.	
	<b>1.4.2</b> Increased emphasis on wetland conservation to food, health, and productive security, and poverty prevention in USP undergraduate climate change and environmental studies programmes.		<ul> <li>Precise linkages between ecosystem health and human health in the Pacific investigated.</li> <li>Improved engagement between wetland decision makers and human health sectors.</li> </ul>	
<b>1.5</b> Recognize and include wetlands as a key tool for ecosystem based approaches to climate change	<b>1.5.1</b> Collect and disseminate information on the role and value of different wetland types in climate change adaptation, e.g. protection of water resources.	Governments, SPREP, tertiary institutes, NGOs, communities.	Information on the role and value of wetlands in environmental and climate change adaptation collected and disseminated.	
adaptation.	<b>1.5.2</b> Strengthening of wetland issues in climate change programmes.	Governments, Ramsar, SPREP, regional partners, NGOs, tertiary institutes	Wetland activities incorporated in national climate change and NBSAP strategies and implemented at all levels.	

GOAL

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
<b>1.6</b> Provide information on the economic value of wetlands.	<b>1.6.1</b> Conduct research on the economic value of wetland ecosystems and species, and of wetland conservation.	Governments, tertiary institutes, NGOs.	<ul> <li>Studies of the wetland values, e.g. for mangroves and reefs in New Caledonia – translated from French into English and disseminated.</li> <li>Maintain contact with economic network</li> </ul>
			(PREEN) in the Pacific.
1.7 Balance wetland conservation and economic development	<b>1.7.1</b> Improve sustainable production systems in appropriate wetland types through research.	Ramsar STRP Oceania Networker, regional partners, tertiary institutes.	Research information available and disseminated across the Pacific on findings and recommendations.
through identification of appropriate strategies.	<b>1.7.2</b> Develop commercial and industrial strategies that reduce negative impacts on wetlands.	Governments, SPREP, regional partners, Ramsar.	Wetlands safeguarded from unsustainable commercial activities, e.g. 'Green Fee' in Palau.
Policies and legisla	tion to ensure the wise use of wetla	ands.	
1.8 Develop adapted legislation and policy for wetland conservation.	<b>1.8.1</b> Improve legislation, policy and customary laws for the protection of wetlands and wetland species, (e.g. national strategic plan on wetlands).	Governments, SPREP, communities.	<ul> <li>Review national and local level governance.</li> <li>Technical assistance with reviewing legislation.</li> <li>Access to legal advice.</li> </ul>
<b>1.9</b> Where it exists, improve implementation of EIA legislation.	<b>1.9.1</b> Strengthen and implement EIA legislation and procedures to include wetlands.	Ramsar NFPs, SPREP, tertiary institutes.	<ul> <li>Wetland conservation issues are clearly included in EIA legislation and guidelines in all countries.</li> <li>EIA and monitoring procedures are enforced.</li> <li>SPREP to continue EIA training for local governments.</li> </ul>
<b>1.10</b> Improve cross-sectoral cooperation and integration between government departments on wetland conservation issues.	<b>1.10.1</b> Strengthen cooperation and collaboration between government sectors and relevant stakeholders in order to recognize ecosystem and landscape connectivity in wetland conservation.	Governments, Ramsar NFPs, SPREP, tertiary institutes, NGOs.	<ul> <li>National workshops conducted on ecosystem and landscape connectivity in wetland conservation at all level for all stakeholders.</li> <li>Cross-sectoral committee with responsibility for wetlands established (with ToR) at all levels involving relevant stakeholders.</li> </ul>
	<b>1.10.2</b> Wider country and organizational involvement in future regional wetland meetings (AusAID, NZ, SPC, tertiary institutes, Bishop Museum, IRD).	Governments, SPREP, Ramsar.	Wider participation in future meetings by regional organizations that carry out wetland related activities.
1.11 Develop compensation mechanisms for negative impacts and/or loss of ecosystem services.	<b>1.11.1</b> Establish the practice of applying 'environmental levies' or other offsets for development projects that impact on wetlands.	Governments.	Environmental levies developed in the region by 2013.

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
Communication, ed	lucation, participation and awarene	ss (CEPA):	
<b>1.12</b> Improve awareness of wetlands and the need for their conservation.	<b>1.12.1</b> Designate CEPA Focal Points in each country.	Governments, national wetland committees, SPREP, Ramsar.	Active annual reporting by national and local governments on CEPA work.
	<b>1.12.2</b> Develop regional and national CEPA Strategies.	Governments, Ramsar NFPs, national wetland committees, SPREP, tertiary institutes, Ramsar.	<ul> <li>CEPA Strategies in place at the regional and national levels.</li> <li>Regional workshop for CEPA Focal Point to develop strategies.</li> </ul>
	<b>1.12.3</b> Identify at least 4 annual events to highlight wetland CEPA work.	Governments, SPREP, Ramsar.	PICTs to highlight wetland issues during the following annual events: World Wetlands Day (2 Feb), Earth Day (2 April), World Biodiversity Day, (22 May), World Environment Day (June 5), World Water Day (March 22).
	<b>1.12.4</b> Increase community involvement in the development and delivery of wetland awareness programmes.	Governments, CEPA NFPs, tertiary institutes.	<ul> <li>Communities more aware of wetlands and increasingly participate in activities for safeguarding wetlands in their country.</li> </ul>
	<b>1.12.5</b> Produce wetland awareness materials (e.g. wetland biodiversity conservation, wetland connectivity, introduced species, river modification, pollution).	Governments, SPREP, tertiary institutes, Ramsar.	<ul> <li>Publication on wetlands in Fiji produced.</li> <li>Increased number of wetland material to be produced in all languages and shared within the Pacific.</li> </ul>
1.13 Regain traditional knowledge of wetlands in the region	<b>1.13.1</b> Document, highlight, apply traditional knowledge to wetland conservation.	Governments, communities, regional partners, tertiary institutes, SPREP, Ramsar.	<ul> <li>Increased amount of awareness materials on traditional knowledge concerning wetlands;</li> <li>Provision of such material to communities of at least 5 wetland sites.</li> </ul>
	<b>1.13.2</b> Involvement by local students and community scientists in wetland surveys and publication of outputs.	Governments, communities, regional partners, tertiary institutes, SPREP, Ramsar, NGOs.	Increased involvement by local students and communities in wetland surveys and publication of outputs.
	<b>1.13.3</b> Increased publication in local languages.	Governments, SPREP, NGOs, tertiary institutes.	Increased research and management publication in local languages.

### Wetlands of Importance (local, national, regional or international)

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
2.1 Manage important wetlands.	<b>2.1.1</b> Develop and implement management plans for priority wetland sites. (These plans need to include monitoring, review and evaluation of the progress with implementation.)	Governments, Ramsar NFPs, tertiary institutes, NGOs, Ramsar, communities.	<ul> <li>Management plans produced for important wetland areas.</li> <li>Development of ongoing monitoring programmes.</li> </ul>
	<b>2.1.2</b> Undertake rehabilitation and restoration of prioritized wetlands where appropriate.	Governments.	A national list of priority wetlands for restoration and rehabilitation is produced.
	<b>2.1.3</b> Develop programmes and projects for the rehabilitation and restoration of wetlands where appropriate.	Governments, Ramsar NFPs, tertiary institutes, NGOs, Ramsar, communities.	<ul> <li>Identify priority sites for restoration.</li> <li>Mechanism developed to share information on wetland restoration projects.</li> </ul>
	<b>2.1.4</b> Develop interpretive facilities and CEPA programmes for visitors at sites.	Governments, Ramsar NFPs, tertiary institutes, NGOs, Ramsar, communities.	<ul><li>Physical boundary markers developed.</li><li>Interpretive facilities established.</li></ul>
2.2 Increase local stakeholder involvement in site management.	<b>2.2.1</b> Strengthen community involvement in wetland site decision making, management and monitoring.	Governments, Ramsar NFPs, communities, NGOs.	<ul> <li>Identify roles and train local managers.</li> <li>50% increase in community participation in wetland conservation.</li> <li>Provide exchange opportunities to share experiences of best practice.</li> </ul>



#### International Cooperation

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
3.1 Improve access to wetland information through shared information systems at the regional, national and local levels.	<b>3.1.1</b> Consolidated information (analysis, dissemination of information) on wetlands at the regional, national and site levels.	Governments, SPREP, tertiary institutes, CEPA NFPs, STRP NFPs, NGOs, Ramsar STRP Oceania Networker.	<ul> <li>Best web portal for sharing information identified.</li> <li>Information on non-marine wetland types exchanged.</li> </ul>
	<b>3.1.2</b> Develop framework for wetlands information exchange.	Governments, SPREP, tertiary institutions, NGOs.	<ul> <li>Wetland information exchange system established and in use.</li> <li>Translation of key documents into local languages.</li> </ul>
	<b>3.1.3</b> Establish/strengthen regional and national level libraries/resource centre/collection focusing on wetlands including access to use of PIMRIS.	Governments, SPREP, tertiary institutes.	Dedicated information collections strengthened, and made accessible in all countries.
	<b>3.2.1</b> Greater intra-regional exchange and sharing of information and best practices on wetland conservation, e.g. WANI, MESCAL, etc.	SPREP, Ramsar, NGOs, tertiary institutes, regional partners.	Ramsar Pacific Regional meeting held by March 2012.
<b>3.2</b> Strengthen regional coordination and collaboration on wetland conservation.	<b>3.2.2</b> Regional and national mon- itoring and evaluation of status of wetlands using a common tem- plate, e.g. mangroves, freshwater.	Governments, Ramsar NFPs, SPREP, Ramsar, tertiary insti- tutes, NGOs, churches, communities.	Monitoring templates available for countries.

#### Institutional Capacity

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
4.1 Identify and fill in gaps in institutional capacity.	<b>4.1.1</b> Maintain Ramsar Officer for Oceania position at SPREP to assist countries to implement the RWAP.	Ramsar, SPREP.	Ramsar Officer services continued.
	<b>4.1.2</b> Each national government to establish position for a dedicated officer with responsibility for wetland issues.	Governments.	'Wetland Officers' engaged at national level in all Pacific Island countries and territories.
	<b>4.1.3</b> Scholarships for tertiary education incorporated into projects undertaken by governments, NGOs and other organizations.	Governments, SPREP, Ramsar, NGOs, Funding bodies and bilateral and multilateral aid agencies, tertiary institutes.	<ul> <li>Funding mechanism for scholarship established by each country for wetlands conservation.</li> <li>At least one student to be trained under each project.</li> <li>Increased institution, project and government funded scholarship for tertiary wetland related education by 20%.</li> <li>Increase in graduates in wetlands subjects by 10%.</li> </ul>
<b>4.2</b> Increase wetland training opportunities on the regional, national and site level.	<b>4.2.1</b> Provide regional and national wetland training programme, e.g. On monitoring techniques, mangroves, freshwater, impacts of climate change.	SPREP, regional partners, NGOs, tertiary institutes.	Formalized wetland modules included in tertiary curricula.
	<b>4.2.2</b> Develop training for designated officials, communities and guides at sites, etc.	Governments, Ramsar CEPA Focal Point, National Wetland Committee, STRP NFPs.	<ul> <li>Government officials' technical skills to be upgraded. Run two training programmes per year on wetland community based conservation.</li> </ul>

GOAL

GOAL

#### Membership

Key priorities	Activities in 2011–2013	Lead organization(s) and partners	Target
5.1 Increase membership to the Ramsar Convention in the Pacific region.	<b>5.1.1</b> Provide on-going information to non- Contracting Parties on the benefits of accession to the Ramsar Convention and encourage their membership.	Ramsar, SPREP, NGOs.	<ul> <li>At least 4 PIC (including Kiribati, Nauru, Solomon Islands and Vanuatu) to become Contracting Parties by 2013.</li> <li>Holding of visits by Ramsar staff to two non- Contracting Parties by 2013.</li> </ul>
	<b>5.1.2</b> Regional partners assist countries to accede to the Ramsar Convention.	Regional Partners, NGOs.	<ul> <li>Ramsar Secretariat to communicate through letters to non-Contracting Parties to encourage their accession to the Ramsar Convention.</li> </ul>

#### References

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### List of Acronyms

AusAID	Australian Government Overseas	PII	Pacific Invasives Initiative
	Aid Program	PILN	Pacific Invasives Learning Network
СЕРА	Communication, Education, Participation and Awareness	PIMRIS	Pacific Islands Marine Resources information System
CI	Conservation International	PREEN	Pacific Resource and Environmental
FSPI	Foundation of the Peoples of the		Economics Network
	South Pacific International	SOPAC	Pacific Islands Applied Geoscience
GEF-PAS	Global Environment Facility -		Commission
	Pacific Alliance for Sustainability	SPBEA	South Pacific Board of Educational
IRD	French Institute of Development		Assessment
	Research	SPC	Secretariat of the Pacific Community
IUCN	International Union for	SPREP	Secretariat of the Pacific Regional
	Conservation of Nature		Environment Programme
MESCAL	Mangrove Ecosystems for Climate	STRP	Ramsar Scientific and Technical Revie
	Change and Livelihoods Project	JIM	Panel
	(IUCN)	USP	University of the South Pacific
NBSAP	National Biodiversity Strategy and		
	Action Plan	WANI	Water and Nature Initiative (IUCN)
NFP	National Focal Point	WI	Wetlands International
NGO	Non-Governmental Organisation	WWF	World Wide Fund for Nature



The Pacific Regional Environment Programme is an intergovernmental organisation charged with promoting cooperation, supporting protection and improvement of the environment of Pacific island countries and territories and ensuring their sustainable development.

The SPREP Members are; American Samoa, Australia, Commonwealth of the Northern Mariana Islands, Cook Islands, Federated States of Micronesia, Fiji, France, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United States, Vanuatu, Wallis and Futuna. SPREP

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