



# PACIFIC WETLANDS

## Marshall Islands: Jaluit Atoll Conservation Area

Jaluit Atoll is a large coral atoll comprising 91 islets with a land area of 700 hectares enclosing a large lagoon, including diverse and relatively pristine terrestrial and marine habitats, such as reefs, sandflats, seagrass beds, mangroves, and sand cays. There is a considerable range of relatively healthy marine species populations of reef fish and invertebrates, as well as turtle nesting beaches and seabird roosting sites.



Jaluit Atoll Conservation Area, RMI © Vainuupo Jungblut

Potential threats include over-harvesting particularly giant clams, sea cucumbers (*bêch-de-mer*), pearl oysters and trochus, for off-island markets, and the prospect of rising sea levels associated with global warming. Land clearing for road extensions, road up-grading and sand dredging is also of concern.

## Papua New Guinea: Lake Kutubu Wildlife Management Area

Lake Kutubu is a freshwater lake in limestone karst country in the remote and isolated Southern Highlands. At 800m above sea level, the site includes approximately 1,000 hectares of swamp forest. The lake's extraordinary level of endemism, 10 of the 14 fish species found there are endemic to the lake itself, exceeds that of any other lake in the entire New Guinea-Australian region.

The development of oil and gas in the region has increased access with the development of road links and regular flights. Threats to the site include introduction of exotic species, population expansion, and increased land clearing for settlement.

## Papua New Guinea : Tonda Wildlife Management Area

Tonda is a Shorebird Network Site and consists of flat, coastal plains subject to seasonal, freshwater flooding. The site includes tidal river reaches, mangrove areas, grassland, and savannah woodlands. It is an important wetland for over 250 species of resident and migratory waterbirds and a wildlife refuge during drought. Most of the world population of the Little Curlew (*Numenius minutus*) rest and feed on the plains during migration. Sixty-three species of fish are supported and about 1,500 subsistence gardeners and hunters live in the area.

Visitors come for fishing, bird watching, and deer (*Lates calcarifer*) hunting. Threats to the site include poaching and illegal netting of fish.

## Palau: Lake Ngardok Nature Reserve

Lake Ngardok is a small, natural, freshwater lake on Babeldaob Island with some swamp vegetation, and is the largest permanent freshwater body in Palau. It supports indigenous fish and also has a small breeding population of the estuarine crocodile (*Crocodylus porosus*). The Ramsar site also includes the lake catchment area with several streams and small areas of riverine marsh and freshwater swamp forest. The lake is particularly important to the small population of Melekeok State for control of floods and maintenance of water quality, and at least 11 indigenous bird species are supported as well, including the national bird, the Palau Fruit Dove or "biib" (*Ptilinopus pelewensis*).

There are a number of threats to the environment in the Reserve, including: human intrusions and disturbances, over- and illegal harvesting, natural system modification through fire and water extraction, geological events (erosion), introduction of invasive species, climate change and severe weather events.

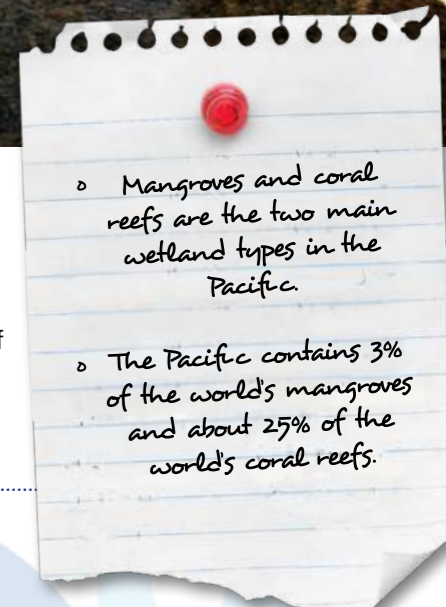


## What are Wetlands?

Plaines des lacs, New Caledonia © Stuart Chape

Wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. These freshwater, brackish or marine areas provide tremendous economic and conservation benefits.

Wetlands provide benefits through fisheries production, habitat for breeding wildlife, flood control, shoreline stabilisation, water filtration, maintenance of coastal water quality and provision of recreational opportunities.



- Mangroves and coral reefs are the two main wetland types in the Pacific.
- The Pacific contains 3% of the world's mangroves and about 25% of the world's coral reefs.

## Why is the Pacific important?

The Pacific region has been a long-term priority for the Ramsar Convention.

The Secretariat of the Pacific Regional Environment Programme (SPREP) is committed to supporting and working with its members and other partners to conserve and manage wetlands in the Pacific. SPREP is currently implementing programmes that aim to support Pacific Island communities to achieve ecologically sustainable use of their wetlands and associated resources.



Ravilevu Nature Reserve, Taveuni, Fiji © Stuart Chape



THIS PROJECT IS FUNDED BY THE EUROPEAN UNION



**SPREP**  
Secretariat of the Pacific Regional Environment Programme

P.O. Box 240, Apia, Samoa - +68 - 5 - 21929 - www.sprep.org

VISION: The Pacific environment - sustaining our livelihoods and natural heritage in harmony with our cultures.

### Why is the Pacific important? (cont.)

Our region shelters many of the most endangered wetland ecosystems on the planet, including coral reefs - among them the Great Barrier Reef, mangroves, sea-grass meadows - a vital ecosystem for the survival of the dugong, and rare island wetlands.

Despite this the Pacific is currently the most under-represented region to the Convention. Of the 160 parties to the Ramsar Convention, only seven are from the Convention's Oceania Region.

In 2002, the first Memorandum of Cooperation was signed between the Ramsar Secretariat and SPREP on wetlands work in the region. This commitment to joint collaboration was reaffirmed through a new agreement signed in 2006 and then again in 2009.

The Ramsar-SPREP partnership facilitates regional and national activities aimed at promoting the wise use and conservation of wetlands in the Pacific region.

## The Ramsar Convention on Wetlands



The Convention on Wetlands, signed by 18 countries in the city of Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

There are presently 160 Contracting Parties to the Convention. As of March 2012, over 190 million hectares from 2,000 wetland sites are designated for inclusion in the Ramsar List of Wetlands of International Importance.

Seven SPREP Members are Parties to Ramsar: Australia, Fiji, Marshall Islands, New Zealand, Palau, Papua New Guinea and Samoa. A number of other SPREP Members are in the process of joining, including Kiribati, Tonga and Vanuatu.

### What are the key issues for Ramsar in the Pacific?

Conservation and wise use of coral reefs, mangroves, freshwater lakes and other freshwater ecosystems.

Maintaining the ecological functioning of wetlands to ensure their cultural and traditional use for the benefit of present and future generations.

Managing wetlands and minimising threats to their ecological character.

Wetlands occur where the water table is at or near the surface of the land or where the land is covered by water. These areas can be natural or human-made, and represent an estimated 1.3 billion hectares. That's around 12% of the Earth's land surface!

Wise Use Principle is the Ramsar Convention's approach for integrated management. It recommends a "big picture" approach to wetlands management, including not only ecological aspects but also human, social, economic, institutional and cultural factors. The wise use principle seeks to find a balance between human needs and the conservation of biodiversity to achieve sustainable development.

# Ramsar Wetland sites in the Pacific

## Samoa: Lake Lanoto'o National Park

Lake Lanoto'o lies in the central highlands of Upolu and consists of three small crater lakes which support fringing herbaceous marsh and (*Pandanus turritus*) swamp forest. The lakes are among the few remaining near-pristine lakes in Samoa and are critical to maintaining the health of the watershed of the capital city, Apia. The forests of the National Park contain threatened endemic bird species including the Tooth Billed Pigeon (*Didunculus strigirostris*), the Mao (*Gymnomyza samoensis*) and the Samoan triller (*Lalage sharpei*).

The Lake is threatened by invasive species, including the Israeli Tilapia (*Oreochromis niloticus*) and cyclones in recent years have also had negative impacts on the site.

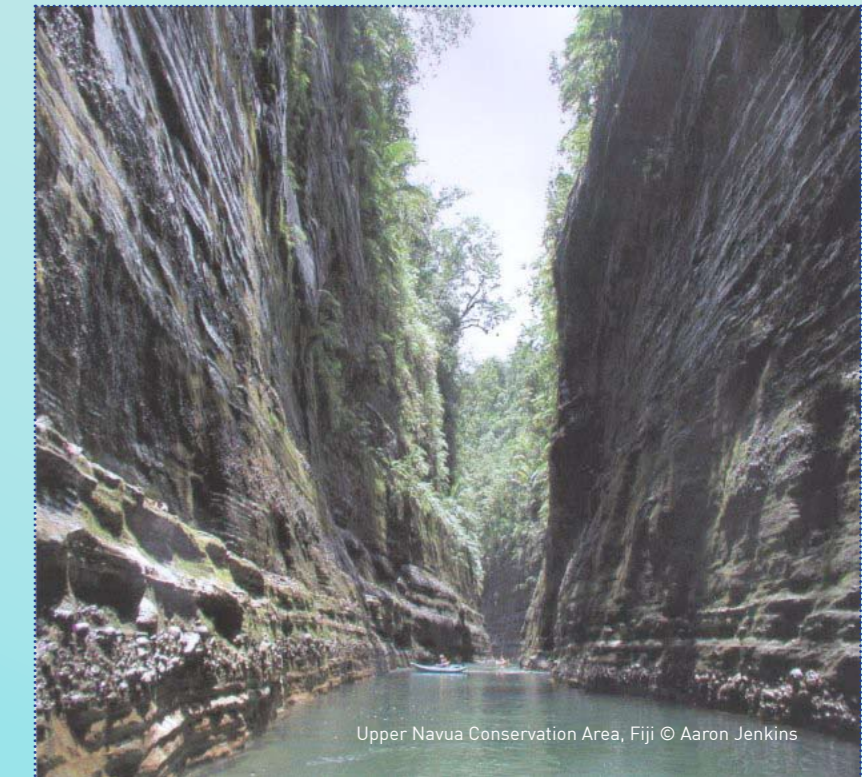


Lake Lanoto'o, Samoa © Stuart Chape

## Fiji: Upper Navua Conservation Area

The upper Navua River cuts a narrow gorge in the central highlands of Viti Levu, the main island of Fiji. It hosts important native fauna and flora, including an abundance of the threatened endemic sago palm (*Metroxylon vitiense*) and breeding populations of at least two endemic freshwater fish species (*Redigobius leveri* and *Schismatogobius chrysonotus*). The surrounding forests also host 17 endemic species of birds.

The land is owned by traditional families and presently leased to an ecotourism and rafting venture which is developing sustainable ecotourism further. The site is threatened by the introduction of invasive species, including the Mozambique Tilapia (*Oreochromis mossambicus*), common bamboo (*Bambusa vulgaris*), hooked pepper bush (*Piper aduncum*), trailing daisy (*Wedelia trilobata*), and African tulip tree (*Spathodea campanulata*), and logging is also a major threat to the ecological character of the site.



Upper Navua Conservation Area, Fiji © Aaron Jenkins



Marine Protected Area, Chelbacheb, Palau © Stuart Chape



Manono Island, Samoa © Stuart Chape



La Foa Estuary Lagoons of New Caledonia © Stuart Chape