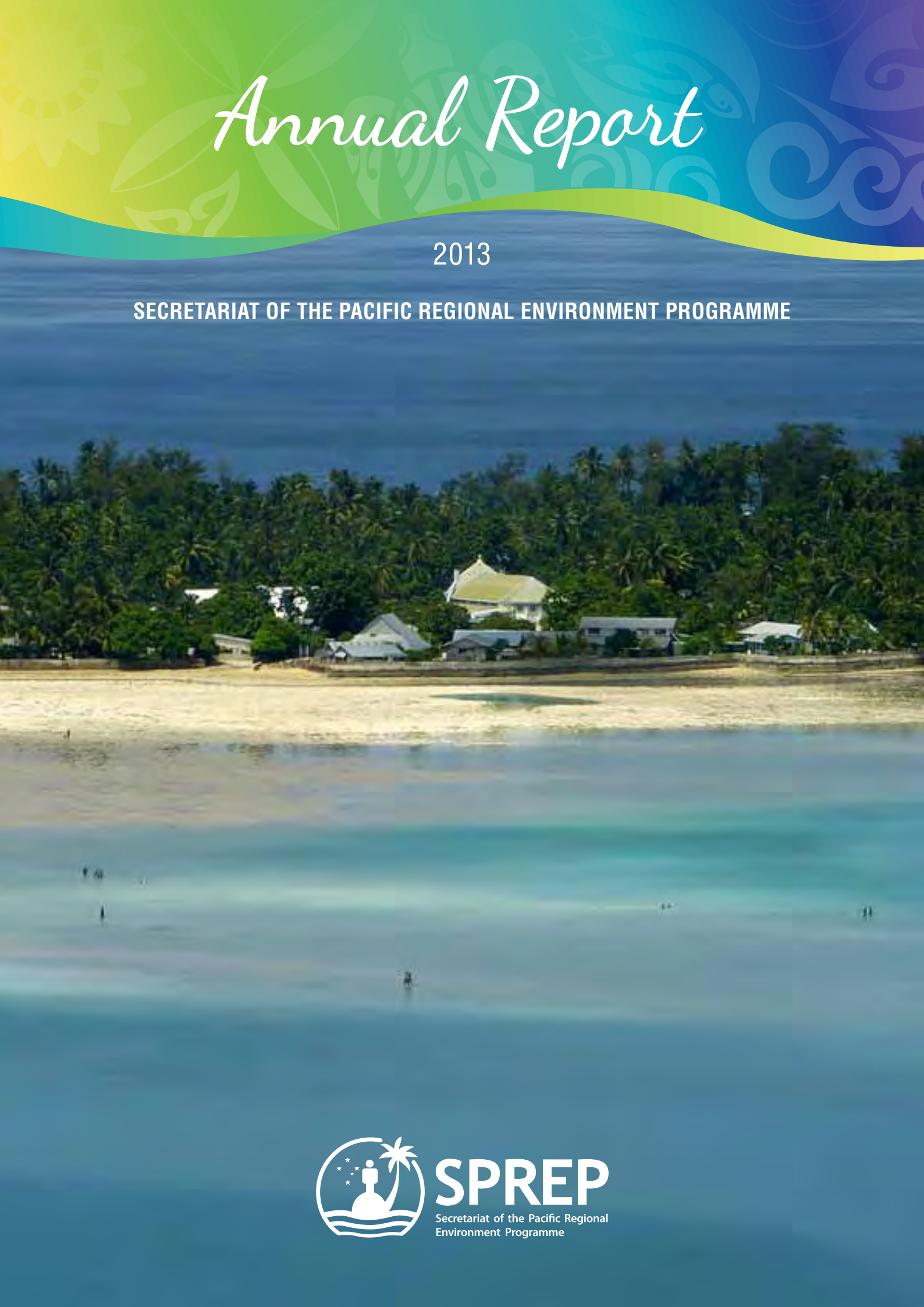
Annual Report

2013

SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME



SPREP
Secretariat of the Pacific Regional Environment Programme

The Pacific environment – sustaining our livelihoods and natural heritage in harmony with our cultures.

The Secretariat of the Pacific Regional Environment Programme (SPREP) is the regional coordinating organisation for the protection and sustainable development of the Pacific island environment.

SPREP was established by its member governments in1992 to support cooperation and coordination across the region. The agreement establishing SPREP came into force in 1993, officially making the organisation an autonomous body.

With headquarters located in Apia, Samoa, SPREP works closely with its 26 member countries and territories – along with partners, donors and local communities – to deliver on environmental management and sustainable development in the region in four priority areas:

- BIODIVERSITY AND ECOSYSTEM MANAGEMENT
- CLIMATE CHANGE
- WASTE MANAGEMENT AND POLLUTION CONTROL
- ENVIRONMENTAL MONITORING AND GOVERNANCE

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Natural Solutions for Island Resilience

The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.

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Foreword

A message from the Chair

The past year has been one of forward motion for SPREP and we, the members and our secretariat, have had much cause to be proud of our progress and achievements.

The natural environment remains a key focus of our national sustainable development plans. The Pacific Leaders have endorsed climate change as the greatest challenge for the region and have acknowledged the importance of addressing environmental issues such as invasive species and the effective management and conservation of the Pacific Ocean. It is clear that the environment cannot be separated from sustainable development and the livelihoods of people in our region and this is reflected in SPREP's vision and our work. The environment is not a narrow sectoral issue – it cuts across all areas and is a key issue for sustainable development and for all countries as we seek to achieve the Millennium Development Goals.

For members of SPREP, our strength is in our unity and this is seldom more evident than at the annual general meetings. The 24th SPREP Meeting brought together our members and many partners and donors. As Chair of


S.Chape

the meeting, I was impressed not only with the positive discussion and debate, but with the passion and commitment of members to working towards a better environment in our Pacific region.

As Chair, I am pleased to highlight a number of new partnerships forged in 2013. These include the Government of Finland supported programme to strengthen the capacity of Pacific Meteorological Services; the Pacific Programme on Climate Resilience with the World Bank, which will enable SPREP to enhance technical support and advice to Pacific countries on climate change; and an increase in the work on waste management, including work on hazardous waste with support from the European Union (EU), United Nations Environment Programme (UNEP), Global Environment Facility (GEF), and the Agence Française de développement (AFD).

We have also seen significant progress in youth engagement – young people, especially young professionals, are at the front line of change. They need our support and encouragement to think for themselves, to question our decisions and, to participate in decision-making that will impact their lives in the future. I commend the Secretariat in its work with youth and young professionals through its various networks and training, internship and mentoring programmes in the environment arena and am confident that we are well on the way to seeing a new generation of environment leaders in our region.

I look forward to continuing this voyage on which we have embarked together, with our vision for a healthy, resilient and prosperous Pacific community.

ELKOGA GADABU
On behalf of Nauru,
Chair of the 24th SPREP Meeting

Introduction

A message from the Director General

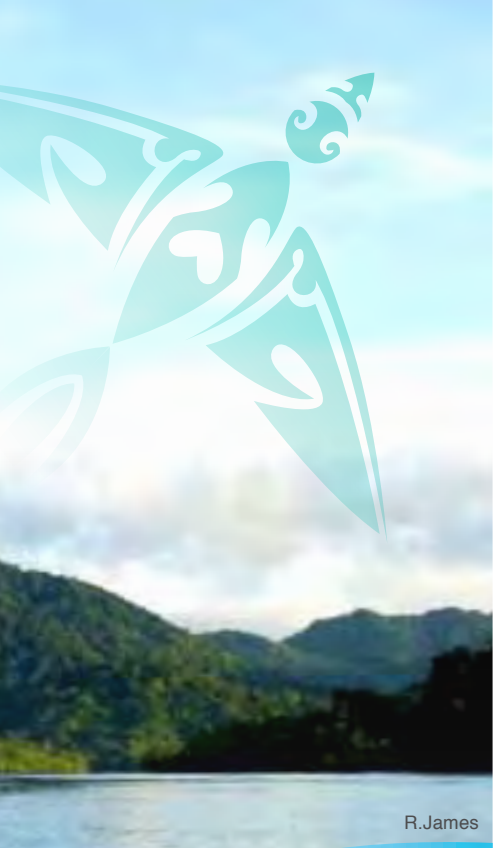
In 2013, we celebrated the 20th anniversary of the signing of the SPREP Treaty, which established SPREP as an autonomous body. There was a lot to celebrate during this anniversary year. The scope of our collective achievements, outlined in this Annual Report, truly demonstrate the scale and impact of SPREP's work in 2013 – at community, national, regional and global level.

At the midpoint of our five-year strategic plan, I am particularly pleased about the continued increase in the secretariat's support and service to our Pacific island members. Since 2011, the amount of direct support provided to the majority of Pacific island countries and territories has doubled.

Members have welcomed this outcome, as reflected in their statements of support at the 2013 SPREP Meeting in Samoa. This support has also been echoed by our donors and partners. Testament to this is the landmark shift to multi-year funding for SPREP from the Governments of Australia and New Zealand.

Overall. the secretariat has increased capacity in core areas of finance, administration, human resources, information technology and communications resulting in increased technical and project delivery support to our members in our strategic priority areas.

Of special note in 2013 was the securing of additional funding from both the EU and the GEF for improved waste management in the region. The EU-funded PacWaste project will support better management of electronic waste, asbestos and healthcare waste and will also look at best practice atoll waste management. Meanwhile, the GEF-funded hazardous waste programme will improve regional used oil management and provide



R.James

training to Pacific island nations in the management of hazardous chemicals and wastes.

The leading role that SPREP plays in the areas of biodiversity conservation and climate change was highlighted in 2013 through the planning and implementation of two landmark meetings that guide coordinated regional approaches in supporting national priorities. These meetings also underlined the convening power of the Secretariat.

The first of these was the historic Joint Meeting of the Pacific Platform for Disaster Risk Management and the Pacific Climate Change Roundtable, where work commenced on developing an integrated Pacific Regional Strategy on Disaster Risk Management and Climate Change. The Pacific is leading the world in this area.

The second landmark meeting was the ninth Nature Conservation and Protected Areas Conference held in Fiji in December. A significant outcome from this gathering was the draft Regional Framework for Nature Conservation and Protected Areas in the Pacific Islands Region. This important document sets the direction for nature conservation in the Pacific islands for the next six years and aligns with National Biodiversity Strategies and Action Plans as well as with the Aichi Biodiversity Targets.

Both meetings were tremendous team efforts by SPREP staff and members and reinforced the strength and importance of our partnerships with key agencies involved in implementation.

In the area of environmental monitoring and governance, significant achievements have been made in mainstreaming environmental issues into national policies and plans. This has included the development of State of the Environment (SOE) reports and also capacity-building work undertaken by the EU-funded project called Capacity Building related to Multilateral Environment Agreements in African, Caribbean and Pacific Countries (ACP/MEAs).

On the home front, 2013 saw the continuation of the learning and development programme for our staff to address priority training and capacity-building needs.

An important aspect of fostering environmental stewardship in the region is the education and support of young and upcoming environmental pioneers. In December, I was very pleased to launch a new SPREP scholarship, created in honour of our colleague and friend, Mr Lui Bell. The Lui Bell Memorial Post-Graduate Scholarship for Marine Species Conservation will provide financial support to a Pacific Islander undertaking a course of postgraduate study or training to improve conservation and management of threatened and migratory species in the Pacific islands region.

None of the achievements from 2013 would have been possible without the support of our members who continue to provide important feedback and expert knowledge to inform our work.

I also take this opportunity to thank all our partners and donors, and to express my personal commitment to strengthening our relationships in the future. Finally, I acknowledge the dedication of our Senior Management Team and all staff who bring enormous experience, skill and expertise to support our Pacific island members. Their individual and collective passion for a sustainable Pacific environment is a distinguishing feature of our staff, and I am proud to work with such a talented team.

Thank you and I hope you enjoy this 2013 SPREP Annual Report.

DAVID SHEPPARD
Director General, SPREP

Our Members

Working in partnership to achieve shared goals

At SPREP, we are committed to working with our members and partners to deliver on environmental management and sustainable development in the region. Our work is driven by a set of strategic priorities which were developed in close consultation with members.

Of our 26 member countries and territories, five are classed as metropolitan and the remaining 21 span the Pacific island region, from as far west as Palau through to French Polynesia in the east. A highlight of our work with each of our Pacific island members is detailed below.

American Samoa: Expanding marine managed areas

As part of the 'Two Samoa's Environmental Collaboration Initiative', American Samoa has been working on establishing a single Marine Protected Area Network extending across the archipelago. Staff from SPREP's Biodiversity and Ecosystem Management and Environmental Monitoring and Governance divisions have been closely involved in these efforts to expand the marine managed areas.

Commonwealth of the Northern Mariana Islands: Battling invasive species

Through the Pacific Invasives Learning Network (PILN), an Invasive Species Team was established in the Commonwealth of the Northern Mariana Islands in 2010. Under the coordination of the Department of Lands and Natural Resources, the team plays a key role in the Micronesia Regional Invasive Species Council, established by Micronesian leaders. Activities undertaken by the team include outreach, targeting schools and the public; restoration of priority landscapes through the removal of invasive species; and treatment using chemical and biological control.

Cook Islands: Successfully de-ratting Suwarrow

A successful rat eradication project was undertaken on Suwarrow, Cook Islands in 2013. This project has helped to safeguard the survival of important ground-nesting birds on the atoll, such as the lesser frigatebird, red-tailed tropicbird and sooty tern. This was a partnership project with BirdLife Pacific, the Pacific Invasives Initiative and the Global Environment Facility – Pacific Alliance for Sustainability (GEF-PAS).

Federated States of Micronesia: Mainstreaming EIA processes

In 2013, SPREP worked closely with all four states from the Federated States of Micronesia to mainstream Environmental Impact Assessment (EIA) processes to help meet obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD). The EIA process in the Federated States of Micronesia is regulated at the state level with federal oversight. The resulting pilot *Draft Guidelines for Kosrae* provides a mechanism for integrating these important Multilateral Environmental Agreement (MEA) obligations into state level planning and development control processes. These guidelines will be adapted and replicated in the other states.

Fiji: Improving waste management in the face of climate change

SPREP commenced a pilot project to improve the resilience of the Labasa dumpsite in Fiji to the direct impacts of extreme weather events and sea-level rise and to minimise the risk to human health and the environment from poor management of debris from natural disasters. The project, supported by the Australian Government, is a model project for the Pacific region.

French Polynesia: Fighting the little fire ant

SPREP worked with Les directions régionales de l'Environnement (DIREN), the Mahina Commune and the Hawaii Ant-Lab to manage the environmental and economic impacts of the little fire ant in French Polynesia and the Pacific. This tiny ant, only 1.5mm in length, is an introduced invasive species now found widely in the Pacific region including New Caledonia, the Solomon Islands, French Polynesia and Vanuatu. This important pilot study, funded through Fonds Pacifique, has improved national capacity to manage this destructive species and, crucially, has developed waste management systems to prevent it from spreading further during the transport of green and bulky waste.

Guam: Protecting the critically endangered Guam rail

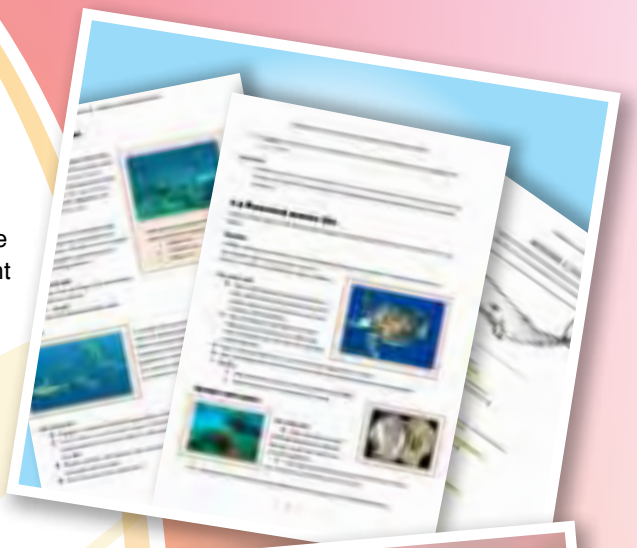
SPREP's PILN worked closely with Guam Agriculture's Division of Aquatic and Wildlife Resources to improve management of invasive alien species. A major success story for Guam has been the successful restoration of Cocos Island with the critically endangered ko'ko' or Guam rail (*Gallirallus owstoni*). The ko'ko' population had declined significantly as a result of the invasive brown treesnake (*Boiga irregularis*) and feral cats.

Kiribati: Improving water resources using a 'Whole of Island' approach

Water resources on the atoll of Abaiang are very limited and have had significant health implications for the population of around 5,000. With the impact of climate change expected to further affect water supply, SPREP and the Kiribati Ministry of Public Works and Utilities, with funding from USAID, are working to improve water resources capacity on the atoll. Water quality testing was undertaken at 15 sites across the atoll, around 10% of households were surveyed and all schools and health centres on Abaiang were assessed. The residents of Abaiang have thrown their support behind this initiative with over 168 residents attending adaptation planning workshops to agree on actions.

Republic of the Marshall Islands: Communicating conservation law

With support from the Government of Canada, SPREP worked with the Office of the President of the Marshall Islands to produce two important documents about environmental law. The first publication, *Review of Environmental Law*, provides information on the current state of environmental legislation to encourage improved implementation and planning by relevant agencies. The second publication, *Guidebook on Environmental Law*, is an easy-to-understand interpretation of Marshallese environmental law which aims to increase public awareness of biodiversity fragility and legal sanctions.



Nauru: Assessing air quality

Improvements in air quality to protect the health of local people is a major concern of the Government of Nauru. To help achieve this goal, SPREP developed comprehensive guidelines for completing an EIA of current air quality on the island for the Nauru Government. Recommendations included the establishment and operation of air monitoring stations across the island to accurately sample airborne dust and their attached heavy metals.

New Caledonia: Expanding the reach of marine turtle monitoring

In August, specialised training in the use of our Turtle Research and Monitoring Database System (TREDS), was conducted in New Caledonia. Fourteen Pacific islanders from a range of different sectors learned how to enter important turtle monitoring data into the system. During the training, processes were also to set up to streamline the data entry procedure, thereby reducing duplication and the risk of human error. Accurate data on marine turtles helps us to study turtle migration patterns and to estimate how many turtles are currently living in specific areas. This information is used to monitor and manage the conservation of marine turtles in the Pacific region. This activity was supported by WWF – New Caledonia, Secretariat of the Pacific Community (SPC) and the New Caledonia Government.

Niue: Boosting meteorology services

SPREP and the World Meteorological Organization (WMO), through the Pacific Meteorological Desk Partnership, assisted Niue to draft the *Niue Meteorological Act, 2013*. Endorsed by the Legislative Assembly in September 2013, this important legislation provides the legal foundation for the operations, roles and responsibilities of Niue's Meteorological Department. At the time of the endorsement, Mr Sionetasi Pulehetoa, Director of Niue Meteorological Service, said: "This is a milestone for the department and government. It is indeed appropriate to have such a document in place to protect and give legal status for the operationalisation of climate and weather, including disaster warnings, for Niue."

Palau: Keeping wetlands free of invasives

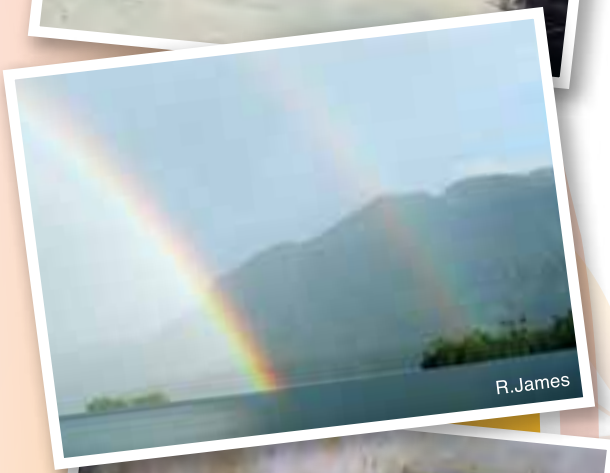
SPREP worked with the Palau National Invasive Species Committee to generate public awareness on the negative impact that invasive plant and animal species have on the nation's wetlands. Colourful posters that clearly identify invasive plant and animal species were produced and distributed in Palau to help with the awareness raising.

Papua New Guinea: Addressing biosecurity threats

In September, Papua New Guinea benefited from participation in a four-day training programme on Island Biosecurity held at SPREP. At the training, Environment and Quarantine Officers from across the region learned about the four key processes that are essential to protect islands: locating the invasive species, determining how it arrived, developing a response plan and communicating the details to other agencies and the wider community. The Island Biosecurity Training was coordinated by the Pacific Invasives Initiative and the PILN through funding support from the Critical Ecosystem Partnership Fund administered by Conservation International (CI).

Samoa: Using natural solutions to protect fragile coastlines

In 2013, SPREP conducted training for the Samoan Government's Ministry of Natural Resources and Environment (MNRE) to enable staff to undertake regular coastal erosion monitoring at Vaiula beach resort at Tafatafa, Samoa. This training is one part of the Samoa coastal ecosystem-based adaptation project, funded through the Australian Government.



Solomon Islands: Making mobile phone-based weather information available to all

Mobile phone users in the Solomon Islands can now access up-to-date weather information for more than 3,700 locations across the country. This SmartMet weather forecasting system was installed at the Solomon Islands Meteorological Services in October by SPREP's Pacific Meteorological Desk Partnership and experts from the Finnish Meteorological Institute (FMI). The service was further improved through a partnership with Big Interaktif SMS Ltd to provide weather information upon request through text messaging. This initiative was made possible through the Finnish Pacific (FINPAC) project, funded by the Ministry for Foreign Affairs of Finland.

Tokelau: Changing lives through improved water quality and security

Through the Pacific Adaptation to Climate Change (PACC) project, residents of Tokelau are better equipped to deal with the negative impact of climate change, such as prolonged droughts. The standardisation and installation of water tanks in homes, along with the introduction of flush diverters, has seen water quality and water security improve enormously. Tokelauan resident, Mikaele Mavaega Maiava, has certainly noticed the difference: "In the past when our family members returned to Tokelau for the happy holidays, our water supply would not last more than two weeks. Now we are amazed that our water supply lasted the whole holiday and still the water tank was half full."

Tonga: Helping the threatened Polynesian megapode

In 1992, efforts were made to boost the numbers of the globally threatened Polynesian megapode (known locally as the malau), by translocating birds to the islands of Late and Fonualei in Tonga. As part of the GEF-PAS project, a field survey was undertaken in September 2013 to assess the status of these colonies. The survey found that the malau is surviving in good numbers on Fonualei but is unfortunately absent on Late. During the survey, data about invasive species was collected, leading to the recommendation of a rat eradication programme on Late. Once rats have been removed from Late an assessment will be made on whether there should be another attempt to reintroduce malau to the island.

Tuvalu: Improving water security for local communities

In January, a new water cistern was handed over to the Lofeagai community in a ceremony presided over by the Deputy Prime Minister of Tuvalu. The cistern allows the community to keep 700,000 litres of water in reserve to cope with long periods of drought. This development took place as part of the Tuvalu PACC project, funded through GEF and the Australian Government.

Vanuatu: Making withdrawals from the fish bank

In 2013, SPREP implemented a coastal ecosystem-based adaptation project with communities at Siviri and Anelkhout in Vanuatu to build the capacity of local communities to replant coastal vegetation and to prevent further damage caused by erosion. The initiative has also seen the establishment of local Marine Protected Areas which have resulted in increased fish numbers, a popular bonus for local communities. This project was implemented by the Vanuatu Department of Fisheries with technical assistance from SPREP and funded by the Australian Government's International Climate Change Adaptation Initiative (ICCAI).

Wallis and Futuna: Improving waste and pollution management

A comprehensive review of waste and pollution management issues was completed in August to help identify environmental priorities for the islands of Wallis and Futuna. Recommendations included the rehabilitation of the coastal dumpsite on Futuna and the implementation of a rat eradication campaign to minimise the risk of Leptospirosis infections to the local population. An integrated recycling programme was also proposed to take advantage of high value waste such as aluminium cans and lead acid batteries. Assistance was also provided to develop an integrated waste management project proposal to Fonds Pacifique to assist in resolving immediate waste management priorities.

Biodiversity and Ecosystem Management

The Pacific islands region is one of the richest complexes of terrestrial and marine ecosystems on Earth, with habitats ranging from mountain forests to volcanic islands and low lying coral atolls. The plants and animals that inhabit our region are often found nowhere else on the planet. Many have adapted to specialised habitats, making them especially vulnerable to the threats and pressures caused by, or derived from, human activities.

Importantly, biodiversity conservation in the Pacific region is much more than an economic and an ecological issue – it is also a social, political and cultural one. Pacific islanders are dependent on natural ecosystems and their resources for survival. Natural ecosystems not only provide food, clothing, tools, medicines and other material products, but are also a critical component of Pacific island cultures, providing the objects of traditional cultural practices, myths and legends.

At SPREP, one of our strategic goals is to improve the region's management and conservation of island and ocean ecosystems and biodiversity – in support of communities, livelihoods and national sustainable development objectives and heritage values.

Of the 316 mammal species found in the Pacific islands, almost 20% are threatened with extinction.

There are over 650,000 square kilometres of coral reefs within the Pacific. More than 60% of them are at risk of environmental damage.

1,327 Oceania species are classified as vulnerable, endangered or critically endangered – 127 species are already extinct.

The most widespread invasive animals in the region are rats, mice and feral cats – all of which have a devastating impact on native bird species.

S.Chape

Setting a Pacific-based and Pacific-initiated agenda for conservation

In December 2013, more than 700 people attended the ninth Pacific Islands Conference on Nature Conservation and Protected Areas in Suva, Fiji. This premier event for nature conservation in the Pacific was organised by SPREP and partner organisations of the Pacific Islands Roundtable for Nature Conservation (PIRT).

Nature conservation programmes across the Pacific are guided by the outcomes of this regional conservation conference that has met every four to five years since 1975.

In the decades since then, the conference has become the principal gathering of government agencies, non-government organisations (NGOs), community-based organisations, donor agencies and individual experts concerned with conservation science and practice in the Pacific islands region.

Of great significance at the 2013 conference was the review of the Action Strategy for Nature Conservation and Protected Areas in the Pacific Islands Region 2008 – 2012. This review process involved a series of consultations with Pacific island governments, NGOs and conservation practitioners both prior to and during the conference. Following the review, a *Regional Framework for Nature Conservation and Protected Areas in the Pacific Islands Region for 2014–2020* was developed and adopted by the conference delegates. This draft Framework, which will be presented for endorsement at the 25th SPREP Meeting, sets the direction for Pacific conservation for the next six years and is designed to align with National Biodiversity Strategies and Action Plans as well as with the Aichi Biodiversity Targets.

Another major outcome was the resounding support from delegates for the adoption of the 40 point Laucala Declaration on Conservation in Oceania, which identifies nine central environmental challenges facing the region. Additionally, ten key actions which were adopted at the high level session of political and NGO leaders focus on how to best address these challenges.

Ecosystem-based adaptation in Solomon Islands:

In 2013, work continued on this USAID funded programme designed to increase the resilience of Choiseul Province to climate change and natural disasters as well as enhance food security and strengthen ecosystem management. Highlights included a study on the management of the Mt Maetambe catchment area and consultations with the villages of Sepa and Loimuni in preparation for the establishment of community managed fisheries.

Regional commitment to the conservation of migratory species:

In 2013, Fiji became the 119th Party to the Convention on Migratory Species (CMS), and the sixth in the Pacific islands region. Additionally, Vanuatu joined five other SPREP members as a signatory to the CMS Memorandum of Understanding on Sharks.

Improved coordination on invasive species at a national and regional level:

Through the PILN, multi-agency national invasive species teams were set up in Tonga and Vanuatu. These specialist teams ensure that priority invasive species issues can be identified and addressed at a national level.

Increased engagement with French Territories:

A new position within SPREP has increased SPREP's work in its French territory members. Our SPREP Focal Point for French Territories, on secondment from the French Government, commenced work in March 2013.

P.Salaun

A stronger regional voice for wetlands:

Following preparatory assistance from SPREP and the Ramsar Convention Secretariat, Nauru looks set to become the seventh Pacific island country to join the Ramsar Convention on Wetlands.

R.Jaensch

Prioritising the threat of invasive species:

Through the work of the Pacific Invasives Partnership (PIP), Pacific Islands Forum Leaders reaffirmed their concerns on invasive species at their Majuro Meeting. Further to this, National Invasive Species Strategic and Action Plans (NISSAPs) were developed for Tonga, Niue and Palau.

Pacific Environmental Leadership Awards

In 2013 SPREP launched the Pacific Islands Environmental Leadership Awards to reward and promote the contributions of individuals, communities, NGOs, private enterprises and governments towards achieving an environmentally sustainable Pacific. The inaugural awards presentation was held during the ninth Pacific Islands Conference on Nature Conservation and Protected Areas in December 2013.

Award recipients were:

Ian Karika, Cook Islands –
Excellence in National Leadership in Environmental Sustainability and Conservation.

Manuai Matawai, Papua New Guinea –
Ratu Aisea Katonivere Award for Excellence in Community Leadership in Environmental Sustainability and Conservation.

Nguna-Pele Marine and Land Protected Area Network, Vanuatu –
Community/Group Category of the Ratu Aisea Katonivere Award for Excellence in Community Leadership in Environmental Sustainability.

His Excellency President Tommy Remengesau, Jr, Republic of Palau –
Pacific Champion Award.

Audrey Newman, Hawaii Green Growth and Global Island Partnership –
Lifetime Achievement Award.

Professor Randy Thaman, University of the South Pacific –
Lifetime Achievement Award.

Professor Bill Aalbersberg, University of the South Pacific –
Lifetime Achievement Award.

Remembering two very special conservation champions

Since December 2013, visitors to the SPREP website have been able to follow updates on the movements of two green turtles that were released in Fiji, equipped with tracking devices.

Named Adi Laumei Madiba and Bulou ni Laucala, the green turtles were released at the end of the ninth Pacific Islands Conference on Nature Conservation and Protected Areas to celebrate the work of the late Lui Bell and George Petro.

Lui was the SPREP Marine Species Adviser for seven years, and was a driving force for marine species conservation and management in the region. Lui's outstanding work on turtle conservation resulted in the development and implementation of ground-breaking approaches for monitoring turtle migration in the Pacific using satellite and static metal tags.

George was involved in turtle conservation for over 15 years through his work as a Turtle Conservation Officer with the Vanuatu non-government organisation and theatre group, Wan Smol Bag. In 2012, George won the International Sea Turtle Society Champion Award for his inspiring work in the field. He was also instrumental in the establishment of the network of turtle monitors in Fiji which continues to grow.

As well as being a fitting acknowledgement of Lui and George's work, the ceremonial turtle release was an important education and awareness-raising activity, highlighting the migratory nature of green turtles and emphasising the need for a collaborative approach to marine turtle protection.

The status of green turtles in the *International Union for Conservation of Nature* (IUCN) Red List of threatened species is endangered, meaning their population is facing a high risk of extinction. There are many threats to survival of green and other turtles in the region, including habitat loss and degradation, hunting (for meat and eggs) and pollution.

One of the challenges in protecting green turtles is that they are highly migratory and frequently cross international boundaries making it difficult to protect them through uniform legislation and associated action.

Activities such as these help to spread the message that marine turtles are shared resources, so everyone is responsible to help manage and conserve them.


S.Chape

Ensuring the region has up-to-date information on national wetlands:

In 2013, wetland inventories for Palau, Kiribati and Vanuatu were updated. These inventories, a priority under the Regional Wetlands Action Plan, are important as they help to form the basis for future Ramsar site designation and other wetland management decisions.


C.Joseph

Finding natural solutions to combat invasive species:

SPREP worked on the introduction of natural predators to address invasive species in the Pacific region. This was part of the GEF-PAS Invasive Species Project, and carried out with many partners, including SPC, the Australian Centre for International Agricultural Research (ACIAR), Queensland Biosecurity, Landcare Research New Zealand and the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS).


© SPC

K.Musudroka

Growing community support for turtle conservation:

Our network of turtle monitors in Fiji expanded to almost 100 in 2013, with funding support from the New Zealand Department of Conservation. This successful grassroots initiative commenced in 2010 through a partnership between SPREP, the Critical Ecosystem Partnership Fund, the Fiji Department of Fisheries, National Trust of Fiji, WWF – South Pacific and Vanuatu's George Petro.

P.Solomona

Marine mammal observation moves to Smartphone:

SPREP joined forces with WWF – France, WWF – New Caledonia and an independent researcher to support the development of a new Smartphone App to assist in the identification and reporting of whales, dolphins and porpoises by observers in the waters of New Caledonia and French Polynesia.

Rapid Biodiversity Survey undertaken in Nauru

In June 2013, a team of international and local experts participated in a biodiversity rapid assessment survey (BIORAP) of land and marine sites in Nauru. The objective of this survey was to identify priority biodiversity sites that could, subject to resource owner agreement, become protected areas.

With a land area of just under 22 square kilometres, Nauru is well known for the phosphate extraction that saw two-thirds of the island mined. This large scale industrial disruption has caused significant loss of land species and has contributed to the introduction of many exotic invasive species.

However, the survey findings strongly indicate that ecosystem restoration efforts are well and truly justified and provide hope for the future.

A notable finding from the BIORAP survey was the discovery of a previously unrecorded ground skink. Based on morphological and genetic assessments, this particular skink represents a very distinct new species endemic to Nauru. The BIORAP team has advised that this species should probably be classified as endangered or critically endangered, and might be at great risk of extinction, particularly by the invasive yellow crazy ant which was also detected during the survey.

Of the 36 bird species that were recorded during the survey, two species, the masked booby (*Sula dactylatra*) and Audubon's shearwater (*Puffinus iherminieri),* are new seabird records for Nauru.

While extensive phosphate mining has clearly impacted Nauru's flora and fauna, the findings from the marine component of the survey were encouraging. For example, reef fish data gathered from 19 different dive sites recorded 280 new species, as well as 31 new family records of reef fish for Nauru.

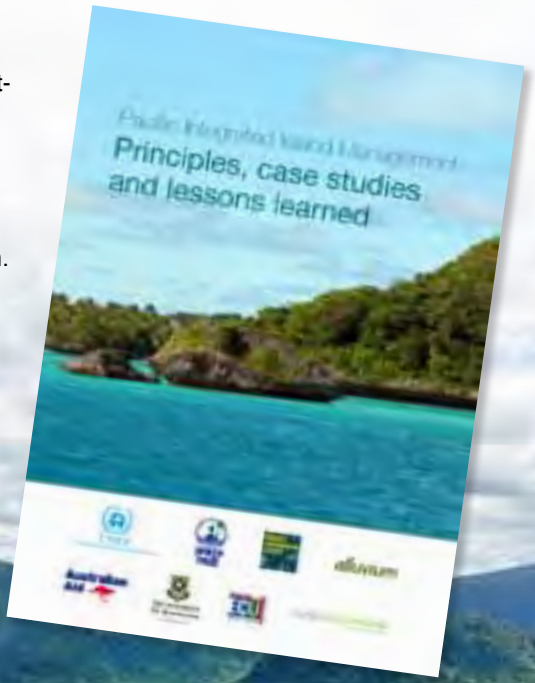
This activity was undertaken as part of the UNEP and GEF-funded Integrated Islands Biodiversity Project. The Nauru BIORAP team was assembled and coordinated by SPREP in collaboration with the Government of Nauru and CI. The team included scientists and experts from Australia, Hawaii, Nauru, New Zealand, Samoa and the United States.

Sustainable, replicable and cost-effective approaches to Pacific Integrated Island Management

As new and more intense pressures develop under modernisation, population pressures and climate change, donors and governments want to see more cost-effective, broader scale and sustainable results from programmes in Pacific Integrated Island Management.

In 2013, SPREP and UNEP produced the publication *Pacific Integrated Island Management: Principles, Case Studies and Lessons Learned,* which brings together ten guiding principles for ecosystem management in the Pacific region. In compiling these key principles, more than 50 different case studies from across the region were assessed and analysed. These real life examples can help to create larger scale and longer term outcomes in the future.

The project was implemented through SPREP with funds from UNEP and the Australian Government via ICCAI.



S.Chape

Additional resources and expertise committed to cetacean conservation in the region:

In December SPREP signed a Memorandum of Understanding with the organisation Whale and Dolphin Conservation.

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Increased collaboration with International Whaling Commission:

In November, SPREP and the International Whaling Commission agreed to closer collaboration between the two organisations on issues of mutual interest, particularly in mitigating the impacts of marine debris on whales in the Pacific islands.

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Building capacity for island biosecurity:

Participants from Kiribati, French Polynesia, Papua New Guinea, Samoa, Tonga, Tokelau and Vanuatu attended training at SPREP to learn about the important role that biosecurity plays in protecting islands from long-term negative impacts of invasive species. The training was carried out in collaboration with the Pacific Invasives Initiative.

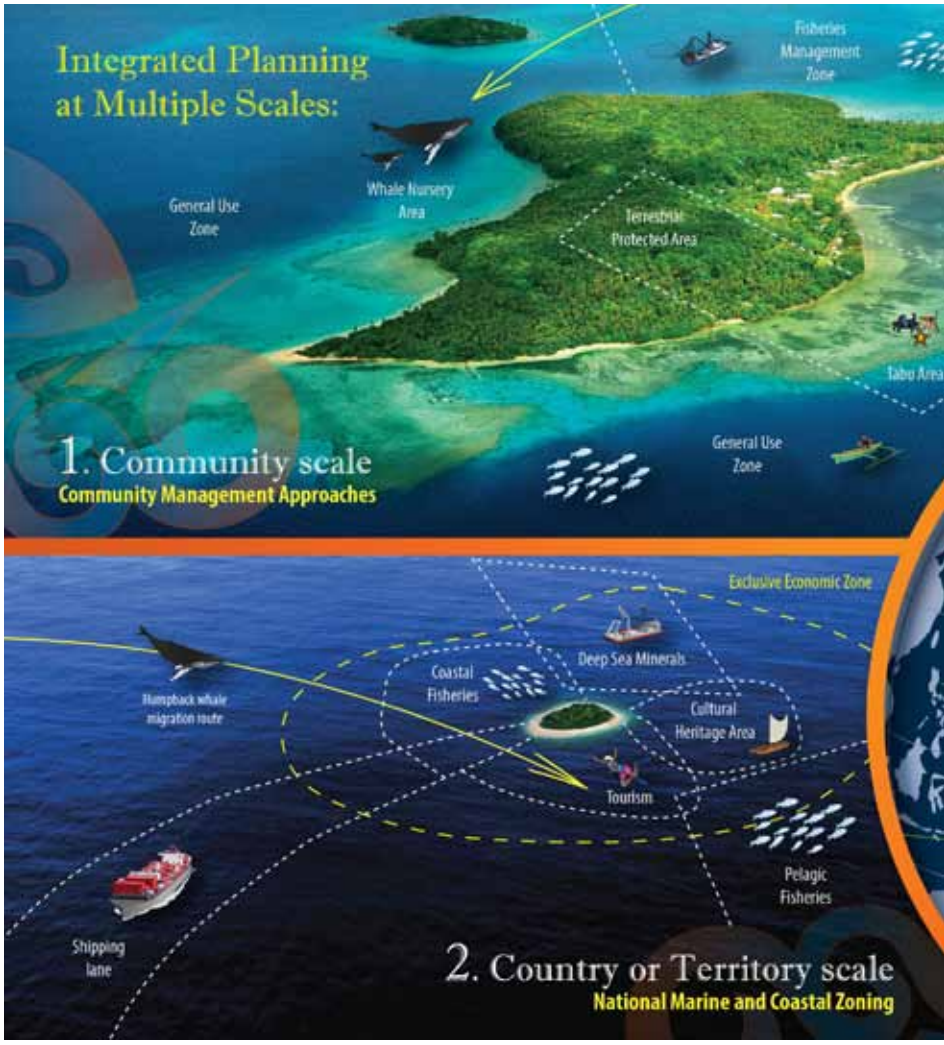
Painting a picture of how we use, monitor and manage marine areas

From local shorelines through to the high seas, marine areas are used by many different groups of people for different purposes. We all have a common interest in ensuring that these areas, and their resources, are managed sustainably. But sometimes, with so many different stakeholders involved, it can be hard to get a clear picture of exactly what is going on in a given area.

Marine spatial panning provides us with a framework to gain a better understanding of how marine areas are being used and valued by different groups of people. The process involves collecting data from different user groups such as fisheries, tourism operators, developers, shipping companies and, crucially, national governments who need to meet their environmental obligations as well as local communities who want to ensure their environment is preserved for future generations.

All this information is collated and mapped to create a visual representation of how different areas are currently being used and how conflicts can be avoided. For example, there may be a shipping channel and a whale migratory route sharing the same space. Depending on the needs and the data available, these maps can be created to identify the potential conflict and identify options at a community, country or regional scale.

These easy-to-understand maps enable better use, better planning



and sustainable management of the resources within marine and coastal areas. They also provide a useful springboard for stakeholder discussion and negotiation on how marine and coastal areas can be used more effectively and sustainably.

Importantly, the approach ensures that Pacific island countries and territories are able to balance cultural, ecological, economic and political objectives in a sustainable way. This can help to avoid future conflict over resources.

In 2013 work commenced on several projects to apply marine spatial planning to all Pacific island countries and territories. These include the Pacific Ocean Ecosystem Analysis (PACIOCEA) Project, the Marine and Coastal Biodiversity Management in Pacific Island Countries and Atolls (MACBIO) Project, the Australian Pacific Marine Management Project, and components of the GEF-PAS Integrated Island Biodiversity Project.

SPREP is coordinating and facilitating links between the projects and with our member countries and territories. With funding from the European Union, Agence des aires marines protégées (AAMP), GEF, and the governments of Germany and Australia, and technical support from key agencies including Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO), France's Institut de recherche pour le développement (IRD), IUCN, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) these efforts will advance capacity building and the management of marine resources in the Pacific to ensure sustainable decision-making processes at all levels.

SPREP members endorse Invasive Species Capacity Development Strategy:

This important strategy document provides recommendations for capacity-building activities, tailored to meet the needs of individuals, organisations and SPREP member countries and territories.

Access and benefit sharing:

Preparatory work was undertaken to assist SPREP members with ratification of the Nagoya Protocol on Access and Benefit Sharing and to pave the way towards implementation, through development of a GEF-funded project to be implemented through UNEP and executed by SPREP.

Supporting SPREP members with reporting obligations:

The 14 Pacific island countries that are parties to the Convention on Biological Diversity (CBD) are required to prepare reports on implementation of the Convention at national level. SPREP and the CBD Secretariat held a workshop in August to assist members with the preparation of these reports. A further activity was held with the CBD Secretariat on ecosystem restoration and conservation, designed to incorporate a national and regional review of Aichi Biodiversity Targets 5 (loss of natural habitats), 11 (conservation of protected areas) and 15 (ecosystem resilience).

Climate Change

Between 1901 and 2012, global surface temperatures increased by **0.89 degrees**. By 2100, temperatures are expected to rise in the range of **0.3–4.8 degrees**.

Global mean sea levels are expected to rise in the range of **0.27–0.97 metres** by 2100. Sea level rise in equatorial regions is expected to be **10–20%** above the global average.

Despite a growing number of climate change mitigation policies, annual greenhouse gas emissions grew, on average, by **2.2%** per year between 2000 and 2010.

The 2013 average annual concentration of carbon dioxide in the atmosphere (Mauna Loa Observatory) is **396.48 parts per million** (ppm). The upper safety limit for atmospheric carbon dioxide is 350 ppm. Atmospheric carbon dioxide levels have stayed higher than 350 ppm since early 1988.

J.Key

The culture, people and future of the Pacific region are at risk to the impacts of climate change and natural disasters. Climate change is no longer a future threat – the impacts of climate change are already evident in all continents and oceans around the globe.

Our region is one of the most vulnerable in the world to the threats of climate change, including global temperature increases and rising sea levels. For this reason, increased awareness and understanding of climate change impacts on Pacific communities and livelihoods is essential, as are activities that foster island resilience to changing climatic conditions.

SPREP is the lead agency on coordinating climate change responses and mainstreaming in the Pacific region. One of our key strategic goals is to strengthen the capacity of our members to respond to climate change. This is undertaken through policy improvements, implementation of practical adaptation measures, growing ecosystem resilience to the impacts of climate change and implementing initiatives aimed at low-carbon development.

Enhancing standards of meteorology services:

Between July and December, a series of training workshops were held to help National Meteorological Services in the region meet standards required for Quality Management certification. Training topics included internal quality management, and the development of competency assessments for Aeronautical Meteorological Forecasters and Aeronautical Meteorological Observers. These activities were supported by the Government of Finland as part of the FINPAC Project, Government of Australia through the Bureau of Meteorology/Public Sector Linkages Programme, and the WMO.

Incorporating climate considerations into development planning:

In July, the PACC project launched *Mainstreaming Climate Change Adaptation in the Pacific*, a comprehensive and practical guide to incorporating climate risks into development planning and practice in the region.

Implementing Entity status heralds new potential for climate change funding:

In November, SPREP was accredited as a Regional Implementing Entity under the Kyoto Protocol Adaptation Fund of the United Nations Framework Convention for Climate Change (UNFCCC). This milestone accreditation, making SPREP one of only three such Regional Implementing Entities in the world, means that we will be better able to support our Pacific members to access financing from the Adaptation Fund. Critically, it enables us to provide technical support and 'lessons learned' to SPREP members who are seeking national accreditation themselves.

Strengthening climate change and disaster risk response in Kiribati:

Joint National Action Plans for Climate Change and Disaster Risk Management were drafted in Kiribati (Kiribati Joint Implementation Plan) in collaboration with SPC, Pacific-Australia Climate Change Science and Adaptation Planning Program (PACCSAP), United Nations Development Programme (UNDP) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – the German agency for international cooperation.

Promoting partnership and collaboration at the PCCR

The fourth PCCR was held from 3–5 July in Denarau, Fiji. This event, one of the most significant regional gatherings on climate change, brought together over 200 participants to explore the theme of building resilience to climate change through collaboration.

The PCCR coordinates climate change dialogue and networking in the region and facilitates links between global, regional, national and community stakeholders. This coordination role directly supports the monitoring and reporting on progress made in the Pacific Islands Framework for Action on Climate Change (PIFACC). It is also a valuable forum for sharing lessons learnt and reporting on the progress of initiatives such as the PCCP – an online repository of information on climate change in the Pacific region.

Since 2011 the PCCR has had four working groups on the topics of: adaptation and mainstreaming; mitigation; information and knowledge management; and resource mobilisation. A key outcome of the 2013 meeting was the establishment of a fifth working group to focus specifically on 'loss and damage' from slow onset and extreme climate events.

The 2013 PCCR was coordinated by SPREP in partnership with the Pacific Islands Forum Secretariat (PIFS), SPC and USP with funding provided by the Government of Switzerland, the EU GCCA, the Australian Government, the British Government and GIZ.

Creating a road map for Pacific island resilience to a changing climate

The Pacific region is taking the lead, globally, on the integration of disaster risk management and climate change adaptation and mitigation. This proactive and focused approach took shape in 2013 with five major regional conferences taking place concurrently in Fiji in early July.

They were followed by an historic joint meeting of these bodies to discuss future actions and commitments and, crucially, to work together to start the process of developing an integrated Pacific Regional Strategy on Disaster Risk Management and Climate Change.

SPREP, along with SPC and the United Nations Office for Disaster Risk Reduction (UNISDR), played an active role in the meetings of the Pacific Climate Change Roundtable (PCCR) and the Pacific Meteorological Council (PMC) as well as the groundbreaking Joint Meeting of the Pacific Platform for Disaster Risk Management and Pacific Climate Change Roundtable.

An integrated approach to ameliorating weather, water and climate risks

The PMC is a specialised subsidiary body of SPREP, established to facilitate and coordinate the scientific and technical programme and activities of Regional Meteorological Services. The PMC provides policy-relevant advice to SPREP member countries and territories in relation to meteorology (weather and climate) and related fields.

In 2013, more than 70 participants from 17 National Meteorological Services met at the second Pacific Meteorological Council (PMC-2) from 1–5 July in Nadi, Fiji. This meeting discussed approaches to strengthen the resilience and security of Pacific communities with an integrated approach to minimise weather, climate and water risks.

The meeting covered a broad range of issues including tsunami warning and response with National Meteorology Services, tropical cyclone forecasting, drought and water management, forecasting for civil aviation, education and training and donor support for meteorological projects. The meeting agreed actions to achieve the goals of the Pacific Islands Meteorological Strategy 2012–2021 and strengthen coordination between National Meteorological Services and development partners.

The second meeting of the PMC was coordinated by SPREP and the WMO with support from the Australian Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICSRTE), the Australian Department of Foreign Affairs and Trade, CSIRO, FMI, United States National Oceanic and Atmospheric Administration (NOAA) and GIZ.

Towards an over-arching regional strategy for climate and disaster-resilient development

The first ever Joint Meeting of the Pacific Platform for Disaster Risk Management and Pacific Climate Change Roundtable took place from 8–11 July in Nadi, Fiji. With this meeting, the Pacific region achieved a world first by bringing together the principal regional conferences on disaster risk management and climate change. The joint meeting helped formulate an over-arching regional strategy and framework for climate and disaster-resilient development. The strategy will enable the Pacific islands region to build resilience to our changing climate.

The meeting, hosted and chaired by the Government of Fiji, was jointly convened by SPREP, SPC and UNISDR.

An integrated approach to addressing disaster risk reduction and climate change is crucial to ensuring the best possible use of national and regional resources to address the risks posed by extreme weather events (such as cyclones and droughts) and slow onset events (such as rising sea levels or ocean acidification associated with climate change).

The ground-breaking draft Strategy for Disaster and Climate Resilient Development in the Pacific (SRDP), developed at the joint meeting, will be considered for endorsement by the Pacific Islands Forum Leaders in 2015. It will replace the current Pacific Disaster Risk Reduction and Disaster Management Framework for Action, and the PIFACC which both expire in 2015.

Local solutions for water supply in Kiribati:

The Tamana pump is an invention from Kiribati that can improve water quality by allowing pumping from closed wells. In September 2013, water resource assessments were undertaken on Abaiang atoll and 92% of households were found to be using open wells that are easily contaminated. Sites are now being identified where Tamana pumps can be installed. This work is being undertaken through the Government of Kiribati's 'Whole-of-Island' integrated approach to climate change adaptation and disaster risk management, with funding from USAID.


C.Iacovino

Technical support for renewable energy technologies:

Through PIGGAREP, technical assistance was provided to Nauru through the training of more than 10 individuals from the Nauru Utility Corporation to maintain and operate the recently installed Solar Photovoltaic (PV) systems at Nauru College.

Northern Pacific adds value to the Pacific Climate Change Portal (PCCP):

A total of 34 participants from Federated States of Micronesia, Kiribati, Nauru, Palau and the Republic of the Marshall Islands attended a workshop in Pohnpei to develop strategies to ensure a steady flow of content to the PCCP – an online hub for Pacific climate change information. SPREP supported this activity with SPC, EU Global Climate Change Alliance (GCCA) and GIZ.

Delivering best practices for Pacific adaptation

The PACC programme began in 2009 as a regional response to climate change. It is currently the largest climate change adaptation initiative in the region, with activities taking place across 14 Pacific island countries and territories. The programme has demonstrated an integrated and coordinated approach to addressing climate change through three main components: practical demonstrations of adaptation measures; driving the mainstreaming of climate risks into national development panning and activities; and sharing knowledge to build adaptive capacity.

After five years of hard work many of the demonstration projects are well underway, completed or close to completion. In 2013, a focus of the programme was to document and share best practices and lessons learned, thus establishing a knowledge base for Pacific adaptation.

All of the on-the-ground adaptation measures being pursued through the programme have focused on one of three key climate-sensitive sectors – food security, water resources, or coastal zone management.

In the area of water resources, a highlight of our 2013 work has included improving water systems and infrastructure for the Hihifo community in Tonga. Changing rainfall patterns in Tonga have seen water shortages become a recurrent problem, especially for the northern region of the Hihifo District. PACC combined climate change models and technical expertise with traditional knowledge to enhance the water infrastructure and ensure the communities have ready access to clean water, year round.

In Palau, climate-induced disturbances in food security are being addressed through the farming of mangrove crabs. Mangrove crabs are a traditional part

of the Palauan diet, especially at custom feasts, and are also in high demand by hotels and restaurants. However, numbers collected from the wild have been dropping, partly due to unsustainable harvesting. Under the PACC project, community farmers are being supplied with small crabs (called crablets) which they are learning to rear to marketable size in submerged cages. In 2013 the hatchery also released nearly 400,000 crablets into the ocean at two conservation sites, in an attempt to boost mangrove crab populations.

One of the major impacts of climate change has been the ongoing degradation and erosion of coastal areas and infrastructure. The Kosrae project in the Federated States of Micronesia provides a shining example of a successful climate change adaptation measure in the coastal management sector. Through an impressive range of activities, the PACC team in Federated States of Micronesia turned this coastal road reparation and climate-proofing project into a fully-fledged awareness-raising exercise. Through the use of a project blog and a live online weather forecast page to provide updates of weather variables every hour, the project has successfully educated thousands of residents on climate change impacts and the need to build island resilience for a safer, stronger future.

The PACC Programme is funded by GEF and the Australian Government with support from the United Nations Institute for Training and Research (UNITAR) Climate Change Capacity Development (C3D+). SPREP is the implementing partner, and UNDP acts as implementing agency.

Strengthening the resilience of natural ecosystems in the Solomon Islands:

In January, SPREP signed an important new partnership with GIZ, PACCSAP, The Nature Conservancy and UNDP. The partnership, known as the Choiseul Integrated Climate Change Programme, aims to increase the resilience of Choiseul Province in the Solomon Islands against climate change and natural disasters.

i-Kiribati children learn about climate change:

In April, GIZ provided 6,000 copies of SPREP's children's story book about climate change to the Kiribati Ministry of Education for distribution to all primary schools in the country. Translated into Gilbertese, *The Children Take Action* explains the basics of climate change and its impacts on the environment.

Building human resources capacity in meteorology, climatology and hydrology:

In 2013, four individuals from National Meteorological and Hydrological Services in Samoa and Papua New Guinea undertook postgraduate studies in meteorology, climatology and hydrology. They were supported by the WMO in partnership with SPREP through the Pacific Meteorological Desk Partnership. This important initiative will boost human resources capacity in these sectors.

Working in partnership to drive the prioritisation of gender and climate change:

In October, two Pacific Gender and Climate Change Toolkits were launched at the 12th Triennial Conference of Pacific Women in Rarotonga, Cook Islands. The two toolkits are designed to help incorporate a gender perspective in development projects that focus on climate change and renewable energy in the Pacific. The toolkits have been developed through partnerships with SPC, UNDP, UN Women and GIZ.

Building capacity of climate change negotiators:

In the lead up to the 19th Conference of the Parties (COP) to the UNFCCC, SPREP provided valuable training in negotiation skills as well as preparatory support and technical inputs. All fourteen Pacific countries which are signatories to the UNFCCC were present. At the conference, there was a high level of engagement from Pacific island delegates with a number of positive outcomes for the Pacific.

Exploring the impact of disasters and climate change on human mobility:

In May, Pacific island governments came together for the first time to discuss and explore the issues of human migration and relocation, and how these relate to disasters and climate change. This special Pacific-wide high level consultation, held in the Cook Islands, was the result of a partnership between SPREP, the Nansen Initiative Secretariat and the Government of the Cook Islands.

Addressing the needs of climate change refugees:

Through our partnership with the Nansen Initiative Secretariat, SPREP's Climate Change Division is hosting a secondment from the Norwegian Refugee Council to explore the needs of people displaced across international borders by natural disasters and climate change. The Climate Change Support Officer commenced work at SPREP in July 2013.

Reducing barriers to the uptake of renewable energy

The Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project, known as PIGGAREP, aims to increase the uptake of renewable energy technologies in the Pacific region, thereby reducing the rate of greenhouse gas emissions from fossil fuel use.

The Pacific islands region is heavily reliant on diesel generators for electricity. This reliance comes at a significant economic and environmental cost. The fluctuating nature of global fuel prices combined with high transport costs results in some island countries outlaying in excess of 30% of their gross domestic product on the importation of petroleum products.

From an environmental perspective diesel is obviously far from an ideal energy source. It is non-renewable and generates carbon emissions, thereby contributing to global climate change and rising sea levels. Diesel is also a potentially devastating pollution hazard to our fragile marine environments.

Renewable energy presents a fantastic opportunity for Pacific island countries, which have some of the highest renewable energy potential per capita in the world. Solar energy, in particular, has successfully proven to improve energy security and access for Pacific island countries and territories. Other renewable energy sources that have a lot of potential in the region include hydro power, wind, bio-energy and even geothermal energy.

In the past, barriers to the uptake of renewable energy technologies have included high costs, lack of knowledge and awareness and lack of institutional capacity. Since 2007, PIGGAREP has been working in 11 Pacific island countries to remove these barriers and pave the way for the widespread and cost-effective uptake of renewable energy. In 2013, additional funds of USD2 million were received from SIDS DOCK to upscale some of these PIGGAREP efforts in six countries and add three more countries (Federated States of Micronesia, Palau and Republic of the Marshall Islands) to increase the number of participating countries to 14.

Our work in 2013 focused on feasibility studies and resource assessment, training, ongoing collection of wind data, raising community awareness of renewable energy technologies and preparations to implement the PIGGAREP+ activities.

Some highlights included our work in the Solomon Islands, where comprehensive consultation and awareness was conducted around the

community-managed Tina River Hydropower Development Scheme. A video documentary about hydropower was produced and distributed to more than 2,000 residents and landowners in and around the Tina River in Guadalcanal. In January, representatives from Vanuatu Energy and the Talise community in Vanuatu visited the site of the Tina River Hydropower Scheme to learn how the system is operated and managed by local communities.

Feasibility studies were also completed for Rakahanga wind/solar hybrid, Pukapuka/Nassau solar grid connected system, Manihiki Solar PV mini grid connected system, and for biomass potential in Atiuin the Cook Islands. This generated USD2 million for hardware installations from the Pacific Environment Fund to support these efforts. In addition, preparatory work for the designing of renewable energy projects in the Northern Cook Islands was carried out. These studies have enabled the drafting of a full project proposal and approval for SIDS DOCK funding of USD450,000 to install a solar PV system for Palmerston Island in the Cook Islands. Previous feasibility studies on solar PV grid connections in Samoa resulted in the installation of a 546kWp solar PV grid at two locations on Upolu and one in Savaii.

PIGGAREP also supported a number of awareness-raising activities to improve the understanding of renewable energy across the region. In Niue, PIGGAREP partnered with Niue Power to run school essay, poem and poster competitions. In Samoa PIGGAREP worked with the Ministry of Finance, Ministry of Natural Resources and Environment and the Electric Power Corporation to educate more than 400 students about the benefits of renewable energy and energy efficiency. In Tonga, PIGGAREP worked to incorporate information about renewable energy into the education curriculum for Years 1-6. Crucially, these activities will help to increase the understanding of renewable energy among the next generation of Pacific island leaders and decision-makers.

Technical training was provided for Tuvalu Electricity Corporation and Nauru Utility Corporation on maintenance and operation of existing solar PV systems installed under other projects.

PIGGAREP is funded by GEF, implemented by UNDP in Samoa and executed by SPREP.

Working together to renew the Pacific's future

PIGGAREP

Preparing Pacific Ministers for Warsaw climate change negotiations:

In November, 15 Ministers and senior officials from across the region attended a two-day gathering to prepare for negotiations at the 19th COP to the UNFCCC. This activity, a first for our region, was undertaken jointly with Climate Analytics, Charles and Associates and the Caribbean Climate Change Centre.

Monitoring wind resources:

In 2013 a total of four wind monitoring masts were set up in the Solomon Islands and Vanuatu, as part of the Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP) project. These masts capture data about wind resources and inform decisions regarding the best locations for future wind farms.

Strategic direction for the development of meteorological services in Kiribati:

SPREP's Pacific Meteorological Desk Partnership worked with the WMO and the Government of Australia through their Bureau of Meteorology to collaborate with the Government of Kiribati to draft the *Republic of Kiribati Meteorology Strategy and Implementation Plan (2013-2018)*. This important plan outlines a road map for the development of weather, climate and oceans related services for the people of Kiribati. It was fully funded by the Government of Australia and the WMO.

Waste Management and Pollution Control

Pollution and the growing volumes of solid and hazardous wastes are major threats to the environments and sustainable development of Pacific islands. Globalisation is accelerating the transition of Pacific communities towards consumer economies, with increasing urbanisation, migration and participation in international trade.

This is resulting in increased quantities of solid and liquid wastes, and these increase the risk of coastal and marine pollution. The lack of controls on imported chemicals and the lack of national capacity for managing pollutants threaten to undermine the quality and health of vulnerable ecosystems on which Pacific islanders depend.

Improved pollution and waste management thus remained a priority focus for SPREP in 2013. SPREP continued to assist countries to address pollution, and to improve management of hazardous chemicals and waste through the provision of technical advice as well as assistance programmes and institutional support.

An estimated **100,000** marine mammals and turtles and up to **one million** sea birds die every year after ingesting or being tangled in plastic marine litter.

Less than half of Pacific island urban populations have full access to adequate waste collection services.

Around **13 million tonnes** of shipping was sunk in the Pacific during the Second World War. Over half a century later, these wrecks still have the potential to leak large quantities of bunker oil into pristine marine environments.

It has been estimated that **seven billion tonnes** of various types of litter enter the world's oceans every year. Plastics, which generally make up about **60%** of rubbish, are the worst offenders. Plastics do not biodegrade, but instead break down into small particles that persist in the ocean, absorb toxins, and enter our food chain through fish, sea birds and other marine life.


P.Anderson


D.Haynes

Pathways to the improved management and disposal of used oil in the Pacific

The proper management of used oil is a significant issue for small island nations in our region. Used oil is often simply dumped, used for ground marking of sports fields by schools and villages, or used as a timber preservative or for dust suppression on roads. When used oil is not disposed of correctly, it can enter the environment and have a devastating impact on water quality, food resources and aquatic ecosystems.

In 2013, SPREP completed a cost benefit study of the options available to dispose of used oil in an environmentally sustainable way in Samoa. This study was part of the four year (2011–2015) AFD Regional Solid Waste Management Initiative, which is implemented by SPREP.

The study determined that there were three potential options for used oil disposal in Samoa: shipping it offshore to New Zealand, Australia, Fiji or India for recycling; adding it to diesel fuel used to run generators for electricity generation; or adding it to the diesel fuel used in motor vehicles, buses and trucks. The study concluded that for Samoa, in the short to medium term, using used oil as a supplementary fuel source for electrical generation is the most practical, cost-effective and environmentally sustainable solution to disposal of used oil. This solution to used oil management is also likely to be relevant for many other Pacific island countries in the short term.

Irrespective of the disposal option for used oil, the costs of collection, storage and transport of used oil for recycling or reuse will always have to be recovered from the oil purchaser through an environmental management fee placed on the oil when it is imported into the country for use. This system has already been introduced into Vanuatu where it is helping protect the environment from oil pollution.

As small island nations increasingly utilise solar power for electricity generation, all collected used oil will have to be eventually exported to environmentally sound recycling facilities in New Zealand, Australia, Fiji or India for disposal.

SPREP will continue to assist Pacific countries to manage used oil by helping to supply collection and storage tanks to hold used oil and by providing technical advice and assistance to allow countries to implement their own user pays used oil management systems.

Collecting baseline marine water quality data:

SPREP assessed the impact of waste disposal sites on local marine water quality in Chuuk Lagoon (Federated States of Micronesia) and in Nuku'alofa Harbour (Tonga). This work was a collaboration between SPREP and the Korean Institute of Ocean Science, which took place following the signing of a Memorandum of Understanding between the two organisations in March.

Increasing regional capacity for the management of marine pollution:

A new position at SPREP will assist member countries and territories to improve the management of marine pollution, solid wastes and hazardous chemicals. The Marine Pollution Officer, on secondment from the Australian Maritime Safety Authority (AMSA), commenced work in August 2013.

Supporting the implementation of the Basel and Waigani Conventions:

SPREP's Pacific Regional Centre is responsible for the regional coordination of the Basel and Waigani Conventions, which address the transboundary movement of hazardous waste. In 2013, the Centre continued regional work in the areas of improved E-waste management, integrated regional used oil management and hazardous waste management training.

Implementing environmentally sound waste management practices:

Waste management assistance (supported by the New Zealand Aid Programme) was provided in Nauru to identify priorities for improvement of national solid waste management. This included the preparation of funding proposals to develop a recycling programme and to pilot a prepaid garbage bag waste collection service.


E.Richards

Building capacity to manage ozone-depleting substances and refrigerants:

SPREP supported 248 refrigeration and air conditioning technicians from eight member countries and territories to access training in best practice refrigerant management through the Australia-Pacific Technical College (APTC) in Samoa.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Supporting the total phase-out of hydrochlorofluorocarbons:

Support was provided to 11 Pacific island countries to help fulfil their national Hydrochlorofluorocarbon Phase-out Management Plan obligations under the Montreal Protocol. This support provided further training in border protection, refrigerant management and community awareness-raising.

J-PRISM review indicates a positive outlook for Pacific solid waste management

The Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM) is a five-year, USD11 million initiative, which builds on the Government of Japan's long-standing commitment, dating back to the second Japan-Pacific Leaders' Meeting in 2000, to assist Pacific countries with solid waste management.

The Japan International Cooperation Agency (JICA) commenced implementation of J-PRISM in collaboration with SPREP in February 2011.

The overall goal of J-PRISM is to enhance the sustainable management of solid waste in the Pacific region, while its purpose is to strengthen the human and institutional capacity base for sustainable solid waste management in the Pacific region, through implementation of the *Pacific Regional Solid Waste Management Strategy 2010–2015*.

J-PRISM is comprised of national-level activities and outputs that are tailored to each of the 11 Pacific country's individual priorities, and regional-level activities that aim to strengthen the regional solid waste management network and enhance capacity for regional coordination and monitoring of solid waste management activities. The 11 target countries for national-level activities are the Federated States of Micronesia, Fiji, Kiribati, the Republic of the Marshall Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

In 2013, JICA commissioned an independent mid-term review of J-PRISM to review and evaluate the project's relevance, effectiveness, efficiency, impact and sustainability and also to identify necessary improvements.

The review found the prospect of achieving the project purpose by 2016 is high, and that the project contributes to the capacity development of Waste Management Officers (and their organisations) in each target country. Each country was also found to have attained a different level of achievement in their respective project outputs, and the level of success was often influenced by factors such as frequency of personnel changes, and the level of individual, organisational, and political commitment.

Tonga was recognised as the highest achiever among participating countries and territories as it met all of its outputs including improvements in the operation and maintenance of the waste disposal site on Vava'u, implementation of a community-based waste collection programme, and development and implementation of a waste management plan.


P.Anderson

Significant achievements were also made in Fiji, and the Federated States of Micronesia also demonstrated high achievements in areas such as promoting school and community awareness of waste minimisation initiatives, development of waste management plans, and provision of local training and capacity building by previously trained locals.

For the regional level activities, monitoring the implementation of the *Pacific Regional Solid Waste Management Strategy 2010–2015* remains a challenge due to the difficulty in obtaining country information, however, this is expected to improve with the approval by the 2013 SPREP Meeting of a simple monitoring framework to be used by all Pacific countries.

Recommendations for the remaining project period include sharing of the good practices achieved to date across the region, development of landfill management training courses, and strengthened monitoring of solid waste management activities throughout the region,

Overall, the outlook for J-PRISM is positive, and it is likely that the project purpose of strengthening the human and institutional capacity base for sustainable solid waste management in the Pacific region will be achieved by the end of the project in 2016.


E.Richards

Sharing experiences on the 3Rs – reduce, reuse and recycle:

With the support of the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM), stakeholders from the Federated States of Micronesia, Palau, Samoa and the Republic of Marshall Islands gathered in Palau to share experiences of implementing financially self-sustaining container deposit programmes. The meeting enabled participants to identify areas for improvements within their own waste recycling programmes.


E.Richards

Developing a national waste recycling policy for Fiji:

At the request of the Fiji Government, SPREP prepared a National 3R (Reduce, Reuse and Recycle) Policy for Fiji. The policy goals include an increase of 15% in the Fiji waste recovery rate by 2020, with an equivalent reduction in the final waste disposal rate (to landfill) by 2020.

Pacific E-waste recycling:

Best practice options for improved management of E-waste in the Pacific region were investigated in a three month study supported by SPREP with funding assistance from the Strategic Approach to International Chemicals Management. The investigation found that with some regional support, electrical and electronics repair shops in many Pacific countries have the capacity to dismantle and export this waste resource for recycling overseas.


D.Haynes

Improving capacity of waste management workers:

SPREP and AFD joined forces with Griffith University in Australia and the Fiji National University to train Pacific island countries in best practice waste management techniques. The course, launched in Fiji in March, provides training for waste management workers in landfill management, hazardous waste management and in presentation and communication skills so that they can pass on useful information and skills to their work colleagues.

Investigating illegal discharge from vessels:

In March and October, training was carried out in Nauru and the Solomon Islands on Investigating Shipping Pollution Violations. The training, carried out in collaboration with Interpol and AMSA, provided participants with improved awareness of vessel waste generation issues and in specific maritime investigative and enforcement techniques.

National oil spill training in the Solomon Islands and Tonga:

Oil spills from onshore and shipping sources is a concern to Pacific island countries, particularly when oil spill response requires special equipment and trained responders. In 2013, SPREP conducted level two and level three oil spill response training for the Solomon Islands and assisted Maritime New Zealand to conduct similar training in Tonga.

Funding support for improved hazardous waste management

Over the past five years, significant progress has been made in the management of household-generated solid waste in many Pacific island communities.

Unfortunately, less progress and support has taken place in the management of hazardous solid waste such as asbestos, E-waste and healthcare waste. The implications of this are quite serious. Improper management of hazardous waste can result in transmission of diseases or produce toxic effects in humans through accidental exposure. Similarly, leaking chemicals from discarded products can contaminate the natural environment. This in turn affects water quality, fisheries, agriculture and tourism – significant areas that contribute to quality of life for Pacific island countries.

In 2013, SPREP secured an additional Euro7.85 million in funding from the EU through the 10th European Development Fund for a regional approach to improve hazardous waste management. This four-year project, known as PacWaste, will identify and implement cost-effective solutions in Pacific countries for improved management of healthcare waste, asbestos, E-waste and integrated solid waste management in the Pacific.

PacWaste will showcase best practice hazardous waste management and strengthen information sharing between countries through regional workshops. A network of private and public sector waste recyclers will also be established to foster future collaboration within the Pacific.

To increase public and industry understanding, awareness campaigns for each waste area will be developed to increase awareness of the hazards associated with each waste area and their impact on the environment and on human health.

The programme also aims to enhance capacity within Pacific island countries through development of policies and regulatory frameworks that will mitigate and better manage hazardous waste streams.

In 2013, additional financial support (USD2.75 million) for improved waste management was also secured from GEF. The funding for this five-year programme will be used to improve regional used oil management, continue a train-the-trainer style waste management course for Pacific islanders, and provide training to Pacific island nations in best practice management of hazardous chemicals and wastes. The GEF-funded hazardous waste programme was approved by participating Pacific island countries at an inception meeting held in Fiji in November 2013.

A cooperative, regional response to marine spills

Many recent events have highlighted the importance of regional marine pollution response preparedness. These include the 2009 oil spill from the *Pacific Adventurer* on the East coast of Australia, the grounding of the *Forum Samoa II* in Apia Harbour and the more recent 2011 *Rena* incident on Astrolabe Reef in New Zealand.

Beyond the significant economic and safety risks posed by shipping accidents, there is a universal concern amongst Pacific island countries and territories to ensure the protection of marine and coastal environments and the natural and cultural resources of island nations, as well as the general safety of the public.

The *Pacific Islands Regional Marine Spill Contingency Plan* (PACPLAN) provides the framework for cooperative responses to major marine spills in the Pacific islands region. PACPLAN was originally developed in 2000 and underwent extensive review and modernisation in 2012. This was carried out through a series of discussions and consultation workshops between host countries (Australia, France, New Zealand and the United States) and Pacific island countries and territories. Funding for the review was provided through the IMO.

In September 2013, the updated PACPLAN was endorsed at the 24th SPREP Meeting in Samoa. Important revisions to the new framework include the consideration of recent developments in international and regional conventions, changes in regional economic and political circumstances (for example, the enduring relationship between Samoa and New Zealand), an updated regional oil spill risk assessment, and an updated guide for the PACPLAN activation processes.

The new PACPLAN can be found on the SPREP website and provides a contemporary approach to the management of major oil spill response in the region.

National Oil Spill Contingency Plans in Nauru, Solomon Islands and Tonga:

The framework used to guide the national management of spill response is reflected in a country's National Oil Spill Contingency Plan or NATPLAN. In 2013, SPREP provided assistance to Nauru, the Solomon Islands and Tonga to review their NATPLANs. A model NATPLAN template was also developed to standardise national plans and oil spill response.

Regional workshop on Anti-fouling Systems Convention:

In November, 17 participants from 13 different countries attended a Samoa-based workshop on the International Convention on the Control of Harmful Anti-fouling Systems on Ships. The purpose of the workshop, supported by SPREP and funded by the International Maritime Organization (IMO), was to explore the key aspects of the Anti-fouling Systems Convention and identify national responsibilities and the steps required for ratification and implementation.

© IMO

Ballast Water Management Compliance Monitoring and Enforcement:

Foreign marine species introduced into Pacific environments through ballast water discharges and through marine fouling on vessel hulls represent a major threat to the integrity of Pacific waters. SPREP assisted the Solomon Islands and Vanuatu to deal with this significant marine pollution issue by providing training to over 50 participants from government and private sector agencies on monitoring for compliance and enforcement. The training workshop, completed in October 2013, was funded by the IMO and run in partnership with AMSA and the Governments of the Solomon Islands and Vanuatu.

Environmental Monitoring and Governance

At SPREP, one of our key strategic goals is to ensure that the region has the capacity to develop and implement transparent and robust governance and management frameworks and processes. This is achieved through improved environmental legislation, policy, planning and assessment, implementation, monitoring and reporting.

Building the capacity of our Pacific island members in environmental management and governance is crucial to achieving environmentally sustainable development.

An important part of our work in this area is the development of a regional monitoring network for the Pacific, through which periodic SOE reports will be produced at both a national and regional level. Other priorities are to ensure that environment strategies, policies and legislation are updated and that robust environment assessment and enforcement systems are in place and integrated into national sustainable development processes.

These activities assist our members in mainstreaming environmental issues at the national level and help to meet their obligations under multilateral environmental agreements.


E.Richards

Mainstreaming environmental issues into national policies and plans

Since 2009, significant achievements have been made in capacity-building through the ACP/MEAs project. The four year multi-region project is executed through UNEP with SPREP as the Pacific Hub.

This important project increases the capacity of countries to better comply with, implement and enforce MEAs. These MEAs, such as the CBD and the UNFCCC, play an important role in addressing global threats to the environment and are important for the Pacific region.

As part of the ACP/MEAs project, SPREP has been assisting member countries and territories to develop integrated national plans which address priority environmental issues. Known as National Environment Management Strategies, or NEMS, these documents identify a country's environmental principles and outline a strategic plan for achieving long-term environmental goals.

In 2013, a milestone achievement in this area was the completion of the Kiribati Integrated Environment Policy (KIEP). SPREP provided assistance to the Government of Kiribati with drafting and facilitating the national consultations for this important document. The KIEP was approved by the Kiribati Parliament in September, providing a firm platform for long-term planning and action on environmental issues.

The KIEP complements other government strategic policy documents, integrates all environmental plans and strategies into a single strategic framework document and is mainstreamed into the Kiribati Development Plan. This initiative is the first of its kind in the Pacific islands region, and sets the scene for other nations to follow.

Also in 2013, SPREP continued to work with the Cook Islands in the development of their NEMS, called the National Environment Strategic Action Framework (NESAF). SPREP provided technical assistance with drafting and the national consultation process. The NESAF is fully integrated into the Cook Island's National Sustainable Development Plan.

Following the success of these activities, SPREP received requests for assistance from Fiji, Vanuatu, Tuvalu and Marshall Islands to draft their respective NEMS. This work is scheduled to take place in 2014.

Preparations underway for United Nations conference in Samoa:

Through our role as co-Chair of the Sustainable Development Working Group for the Council of Regional Organisations in the Pacific (CROP), SPREP provided support to member governments for the preparatory process to the third United Nations Conference on Small Island Developing States (SIDS). The SIDS conference is expected to bring over 3,000 delegates to Apia in September 2014 and SPREP is assisting the Government of Samoa with preparations for this landmark event.

SPREP and Vanuatu receive a positive report card from GEF:

In 2013 the GEF Evaluation Office conducted a comprehensive evaluation for SPREP and Vanuatu for implementing GEF-funded projects between 1991 and 2012. SPREP and Vanuatu received positive results from the resulting Country Portfolio Evaluation Report.


C.Iacovino

New funding for Pacific region capacity-building:

Following successful completion of Phase 1 of the ACP/MEAs project in April 2013, a second phase of the project will commence in 2014. UNEP and the EU will provide SPREP with funding of around one million euro over four years to continue support to Pacific island countries and territories to implement and comply with MEAs.

Planning for the revision of regional EIA guidelines:

In August, SPREP held a workshop to provide input to the review of regional EIA guidelines. Representatives from the New Zealand Association of Impact Assessment, SPREP-based partners, Government of Samoa and the Government of Fiji came together to discuss the inclusion of new higher level planning and assessment tools such as strategic environmental assessments, integrated environment assessments and marine spatial planning, into existing guidelines for environmental assessments.

Working towards an environmental indicator database for the Pacific region:

Throughout the year, work continued on the development of a database of Environmental and Sustainable Development Indicators. The database will reduce the burden on SPREP member countries and territories for national and international reporting. The database project is linked to SPC's National Development Indicators Database and is funded through the ACP/MEAs project.

Raising awareness of conservation laws in Samoa:

In 2013, SPREP worked with the Samoan MNRE to develop a guidebook on conservation laws in Samoa. Supported by CI, the guidebook is written to be easily understood by the general public and to raise awareness of biodiversity fragility and legal sanctions in Samoa.

Supporting the increasing relevance of marine spatial planning:

A Spatial Planning Officer will be recruited in 2014 to support integrated marine and coastal planning and management. This will strengthen secretariat capacity to support the implementation of the Pacific Oceanscape initiative, coordinated through the PIFS.

Strong support for SOE reporting across the region

Having a clear understanding of the current status of a given environment makes it easier to develop policies and plans that will conserve environmental resources for future generations. An SOE report is an effective tool for gaining this comprehensive understanding. Moreover, it establishes a process that allows for ongoing monitoring and reporting.

The SOE reporting process involves assessing a set of specific indicators – first in isolation and then in concert – to paint a picture of the overall condition of a country's environment and natural resources and their implications for sustainable development. The end result is best described as a report card on the health of the environment and its prognosis for the future.

As well as contributing to a robust and streamlined reporting process, the resulting document can be a useful tool for raising public awareness on the impact of human activities on the environmental health and wellbeing of a given country or region. The SOE framework also supports national planning processes and helps meet regional and international reporting requirements.

In 2013, SPREP completed work with Samoa's MNRE and the Maryland University Centre for Environmental Science to prepare an SOE report for Samoa along with the country's first ever Environment Report Card.

The Samoa SOE Report was very different to previous assessments in that it was created using an 'integrated habitat-based approach' to assessment. In this approach, information is organised and analysed based on ecological habitats, in this case extending from 'ridge to reef'.

This integrated habitat-based approach is one of two approaches that SPREP recommends for use in the Pacific region. The other approach looks at information through the lens of thematic areas


P.Anderson


P.Anderson

such as atmosphere and climate, culture and heritage, and the built environment.

This thematic approach was selected by the Government for Fiji as the basis for the Fiji SOE report which commenced in November 2012. Since then, SPREP has worked closely with the Department of Environment and other stakeholders to prepare the draft SOE report – Fiji's first in over 20 years. The final report is expected to be launched in 2014.

In November 2013, SPREP started work with the Cook Islands to formulate their SOE report. Requests have also been received from Vanuatu and the Marshall Islands, and SOE reports will be developed for these countries in 2014.

The development of SOE reports for individual countries is part of a larger body of work, being led by SPREP's Environmental Monitoring and Governance division, to develop a whole-of-region SOE report along with a regional database to store and access key environmental indicators for the Pacific. The growing support for SOE reporting from SPREP member countries augurs well for further progress in this area over the coming years.

SPREP receives support for activities related to SOE reporting from a variety of sources, including the Australian Government, the EU and UNEP.


C.Iacovino

State of the art approach to SOE reporting:

An all-new regional template was developed in 2013 to guide SPREP members with the formulation of their national SOE reports. The template was made available to Samoa and piloted in Fiji.

Strengthening GEF services to members:

In 2013, SPREP established a GEF Advisory Group for better internal coordination of GEF technical and advisory support services to member countries – in particular, the development of their GEF-5 proposals for the Ridge to Reef Umbrella Programme. In June, SPREP worked with the Government of Kiribati to develop their GEF project proposals. A National Portfolio Formulation Exercise was developed for Fiji in August including an application to access these funds. A Pacific Regional Position Paper for the GEF 6 (third and fourth) Replenishment Meeting was also developed and distributed to assist members during these negotiations.

New handbook outlines practical advice for environmental negotiators:

SPREP worked with the New Zealand Centre for Environment Law, and the University of Auckland to produce *The Multilateral Environmental Agreement Negotiator's Handbook for the Pacific Region.* The handbook, funded by the EU through the ACP/MEAs project, provides comprehensive advice on handling international environmental governance and will be formally launched in 2014.

SPREP representation on Pacific Island Development Forum:

In May, SPREP's Director of Environmental Monitoring and Governance attended the inaugural meeting of the Pacific Island Development Forum in Fiji. The Forum aims to provide an action-oriented platform fully inclusive of the private sector and non-government organisations to identify innovative solutions to ensure sustainable development through a green economy approach.

Corporate Services

The Corporate Services division is the engine room of SPREP, encompassing the vital functions of human resources, finance and administration, information and communication technology, communication and outreach, and knowledge management.

The Corporate Services team supports the work undertaken by SPREP divisions in the strategic priority areas.

The role of Corporate Services is expanding to deliver support directly to SPREP members. In 2013 for example, the Information and Communication Technology team worked closely with the Biodiversity and Ecosystem Management and Environmental Monitoring and Governance divisions to create SPREP's first-ever web application developed in-house.

Similarly, in 2013 the Communication and Outreach team delivered media and communication training to representatives from member countries and territories including Federated States of Micronesia, Fiji, Solomon Islands and Vanuatu.

These successes augur well for the more efficient delivery of services to SPREP members in the future.

Communicating our vision for a sustainable Pacific environment

Communication, awareness, education and outreach play a pivotal role in the work of SPREP and the delivery of services to our members. As well as providing strategic support to projects and programmes within SPREP, the Communication and Outreach team plays a key role in raising awareness of SPREP's activities through the media and in supporting the growth of the region's next generation of environmental leaders.

Throughout the year, the team provided communications support which included editing and designing publications, managing the content on the SPREP website, developing promotional, information and outreach material and providing communications support for the organisation's strategic priority areas.

Education and outreach play a significant role in strengthening environmental literacy in the Pacific islands region. Every year, school groups from Samoa visit the SPREP headquarters to learn from our staff about issues ranging from threatened species through to climate change. For schools that are located outside of Samoa, we offer educational and teaching resources and can provide advice on developing lesson plans on environmental themes.

A feature of 2013 was the strengthening of SPREP's media outreach function through the delivery of specialised training sessions. One such session was provided to 15 participants of the high-level workshop for Pacific island Ministers and Senior Officials in the lead-up to the 19th COP to the UNFCCC. Funded by the British High Commission in Suva, the training saw five senior editors work with the participants to develop their print, radio and television interview skills.

Further media training was delivered through PACMAS and PACCSAP.

Strong growth in library utilisation:

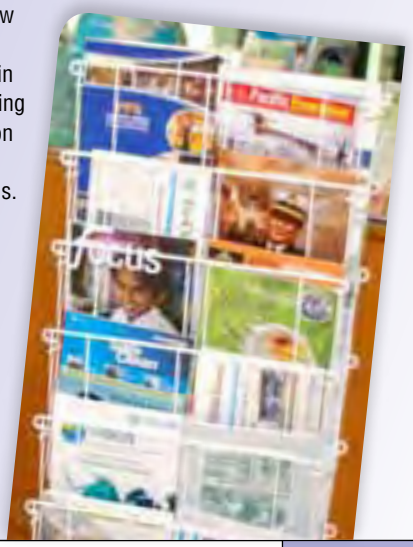
During the year, staff at the Information Resource Centre and Archives (IRCA) responded to 449 requests for information and publications – an increase of 105% from 2012. The number of visitors to the SPREP resource centre also doubled from the previous year. In total, 480 students, researchers, meeting participants, members of the public, visiting dignitaries and representatives of partner and donor agencies visited the library to access information on environmental issues in the Pacific region.

Raising our profile through social media:

SPREP's social media activity grew significantly in 2013 with the introduction of a SPREP Twitter account and a 230% increase in our number of Facebook followers – from 3,000 in January 2013 to more than 10,000 at the end of the year.

Growing our collection of environmental resources:

In 2013 the Pacific Environment Information Network (PEIN) Virtual library was updated with all the latest country reports from SPREP members. The library's physical collection also continues to grow with 512 new materials catalogued in 2013, bringing the collection to a total of 39,686 items.



New online tool for Pacific mangrove monitoring and management:

In 2013, SPREP launched the Pacific Mangrove Monitoring Network, known as PacMan, SPREP's first web application developed in-house. This online database system provides information for Pacific island countries and territories to monitor and make informed decisions on the management of their mangroves.

Providing technical advice to the PCCP:

In 2013, the Information and Communication Technology team continued representation on the Advisory and Technical sub-committees for the PCCP. This representation ensures that support tools and climate change solutions for e-research are not only technically sound but are intuitive, practical and secure.

Visitors continue to flock to SPREP website:

The SPREP website is often the first point of call for people who hear about SPREP's work and wish to find out more. For the 2013 calendar year, the website was accessed 135,572 times representing an increased usage of 42% from the previous calendar year.

Harnessing the power of knowledge to support the SPREP vision

In 2013, SPREP's IRCA continued to cement its role as a leading repository of information about the environment of the Pacific islands.

The specialised library, located on the SPREP campus in Apia, holds a unique collection of publications, periodicals, scientific and technical reports prepared by SPREP, our members, stakeholders and partners. This vast assembly of environmental information is available to SPREP staff, member countries and territories, and members of the public.

The IRCA also manages the PEIN – a virtual repository of information on the countries and environment of the Pacific, all available through an online interface on the SPREP website.

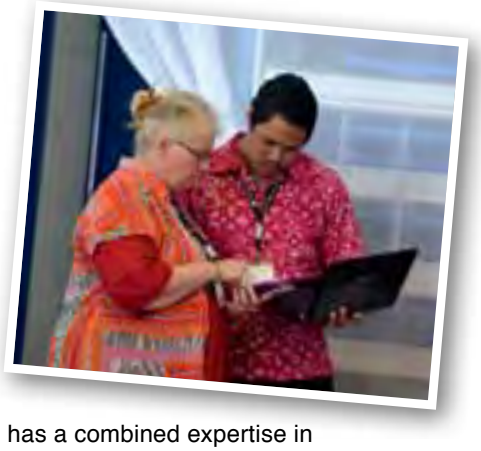
As well as managing the library collection, staff at the IRCA also disseminate SPREP publications to our members, focal points, partners and depository libraries around the region and abroad.

Over the past year, work continued on the momentous task of digitising SPREP records and our legacy collection – a task that commenced in 2011 and is expected to continue until at least 2015. This digitisation will ensure that geographic boundaries pose no obstacle when it comes to accessing these important documents.

A new initiative in 2013 was the introduction of a monthly seminar series to encourage knowledge sharing amongst staff at SPREP. These one hour sessions, provide the opportunity for individuals to share information about their work. After the presentations, key points are made available online for future reference.

The IRCA is open to the public from 8am–4.35pm, Monday to Friday.

Utilising technology to bridge geographic distance



Information and Communication Technology is a vital part of the core services at SPREP. The team ensures reliable, secure and effective systems are available to the organisation in order to effectively deliver services to our members and stakeholders. The team has a combined expertise in systems analysis, design, web and desktop application development, network design, and system administration.

In 2013, a number of additional websites were developed for meetings and conferences, including the ninth Pacific Islands Conference on Nature Conservation and Protected Areas and the Joint Meeting of the Pacific Platform for Disaster Risk Management and Pacific Climate Change Roundtable. For the first time, an online registration facility was also developed to streamline administrative processes. This service was well-utilised with 590 individuals registering online.

Also in 2013, the PCCP was successfully migrated from Australia to a server on location at SPREP. This change in hosting means that the portal can be managed and updated efficiently in-house. SPREP has partnered with USP in Suva, Fiji to host a mirrored site.

Internally, we have made significant investments in improving computing infrastructure and greening our technology. Achievements in 2013 included virtualising our data centre, using end-computing technology in the computer lab and library, expanding the wifi network throughout the campus, and negotiating a 4MB broadband internet connection to improve delivery services to members.

Young journalists help to spread the word about conservation:

At December's Pacific Islands Conference on Nature Conservation and Protected Areas, nine journalism students were mentored by a team of media professionals to develop daily news for the duration of the conference. This activity was run in partnership with the Fiji National University, USP and Pacific Islands News Association, and was funded through the Pacific Media Assistance Scheme (PACMAS).

Media success demonstrated in the numbers:

In July, the Pacific Media and Climate Change project wrapped up after 14 successful months. Through the project, training was delivered to 156 Pacific islanders, 90 of whom work in Pacific media and the remainder as climate change practitioners. The eight reporters producing news items on the July climate change meetings generated 60 news articles which received over 30,000 hits in a period of one month. The project was funded by the Government of Australia through PACCSAP.

Young professionals network grows and strengthens:

In 2013 the Pacific Emerging Environment Leaders' Network (PEEL) continued to grow from strength to strength. In June, ten PEEL members joined forces with 13 students from the University of the South Pacific's Future Climate Environment Leaders Program at a special forum in Nadi to learn more about climate change and various environmental issues and to develop a way forward for working together toward their shared vision for the future.

Pacific Youth Environment Network (PYEN) reconvenes:
The PYEN, led by UNEP, was re-established with the assistance of SPREP. The young participants, who were selected on merit and commitment, developed a declaration to feed into the post-2015 Agenda and prepared an action plan to be implemented in 2014. They also participated actively at the ninth Nature Conservation and Protected Areas Conference where they submitted their vision for conservation in the region.

Planning for the reduction of travel costs:
In 2013 SPREP underwent a thorough procurement process with the aim of reducing travel costs. A contract was awarded to a New Zealand-based firm, Travel Managers, with the goal of reducing travel costs by 15% within the next year.

Major repairs to buildings and grounds:
From January to April, major repairs were undertaken in and around the SPREP campus as a result of damage caused by Cyclone Evan at the end of 2012. Repairs were made to the fale, carport and the fence surrounding SPREP headquarters in Apia.

A clean and unqualified audit for 2012:
in accordance with International Financial Reporting Standards and best practice, an unqualified audit was undertaken of 2012 financial statements, a testament to our high standards of financial management.

Finance and administration: the building blocks for efficiency and accountability

SPREP's finance and administration section looks after a wide variety of essential services ranging from travel, facilities management, property maintenance, internal auditing and day-to-day financial management of the organisation.

A major and ongoing project has been the design and development of a new Financial Management Information System (FMIS). This new system caters for the increasing special financial requirements of our members, donors and partners. It also ensures that we are able to meet the increasing volume of transactions taking place and helps to streamline processes for efficiency. The development of the FMIS is being lead by Finance with the assistance of consultants Tech One and Probity Ltd. Funding from the Australian and Chinese governments has supported this project, which is expected to go live in July 2014.

Also in 2013, the SPREP procurement policy, disaster plan and vehicle policy documents were revised to improve the organisation's approach to risk management.

Supporting SPREP's greatest resource – our people

The past year saw further growth in the number of staff at the Secretariat. As at December 2013, the Secretariat had a total of 88 staff, with an almost equal balance of genders (51% male and 49% female). A total of 14 new staff joined SPREP during the year – 12 were internationally recruited and two were recruited locally. In terms of nationalities, 94% of staff members are from SPREP member countries and territories (both Pacific island and metropolitan).

In 2013, a number of significant achievements contributed to our ongoing commitment to staff satisfaction, learning and development and high performance teams.

In April, the secretariat held an off-site, learning and team-building workshop called the 'SPREP Advance'. Over a period of two days, all staff worked together under the theme of 'Learning Together, Leading Together'. Facilitated by Dr Harold Hillman and Alex Waddell of Sigmoid Curve Consulting, the 73 staff in attendance discussed the forthcoming review of the SPREP Strategic Plan; preparations for the UN Conference on SIDS in 2014; strategies to establish SPREP as a learning organisation; and the qualities of high performing teams.

Another achievement was the establishment of a mentoring programme for senior staff, to support them in their leadership and management roles. Seven of our nine SMT members participated in this programme, which involved regular 'virtual' meetings with specially selected mentors as well as several face-to-face meetings. Participants of the SMT Mentoring Programme provided overwhelmingly positive feedback on the impact of the mentoring scheme on both their professional and personal development.

Both of these initiatives were funded by the Pacific Leadership Program, an initiative of the Australian Government, which aims to equip Pacific islanders with the understanding, skills, networks and profile to become more effective leaders.

Supporting the ninth Nature Conservation and Protected Areas Conference:

In December, the Corporate Services Division provided financial, administrative and communications support for this important conference. This work included servicing the financials and assisting with logistics – both in the lead-up to the event and during the conference.

Recognising the exceptional performance of individual staff:

In 2013, SPREP established the Director General's Excellence Award to recognise exemplary and exceptional performance by staff. In March, three members of staff were recipients of this inaugural award.

Staff morale at an all-time high:

Almost 90% of staff responded to the annual staff satisfaction survey in 2013. With 61% of staff rating their morale as high or very high, this result places staff satisfaction at the highest ever level since these surveys commenced in 2009.

Supporting training and capacity-building of staff:

During the year, 25 staff members were supported under the learning and development programme. This initiative is part of the Performance Development System which identifies staff training and capacity-building needs.

New payroll system brings cross-cutting efficiency:

In August a new 'PayGlobal' payroll system was implemented under the Human Resources Information System project, funded by the Australian Government. The new payroll system integrates the human resources systems with the payroll function, simplifying the payroll process, and staff members now receive new payslips which include leave balances.

FINANCES 2013

DONOR FUNDS AND MEMBER CONTRIBUTIONS (USD)

Details	Balance 01-Jan-13	Actual Funds Received	Total Funds Available	Programme Support	Programme Expenditure	Other Adjustments	Balance 31-Dec-13
AusAID Extra Budget	21,670	2,175,524	2,197,194	(191,207)	(2,051,418)	–	–
AusAID Extra Extra Budget	1,212,950	993,430	2,206,380	(122,028)	(1,208,034)	–	–
British High Commission	13,254	–	13,254	–	–	–	–
Commonwealth Secretariat	10,201	6,086	16,287	–	–	–	16,287
Conservation International	21,172	64,534	85,706	(2,147)	(23,300)	–	60,260
Deutsche Gesellschart fur Internationale Zusammenarbelt (GIZ) GmbH	43,643	569,885	613,528	(29,634)	(306,880)	–	277,014
European Union	53,300	2,662,547	2,715,846	(3,639)	(71,930)	–	2,640,278
Food and Agriculture Organization	51,980	–	51,980	(652)	(4,848)	–	46,480
Government of Canada	2,180	39,840	42,020	(6,000)	(30,000)	–	6,020
Government of Finland	-00	251,747	251,747	(38,509)	(320,911)	–	(107,673)
Government of France	183,451	195,169	378,620	(25,442)	(228,686)	–	124,493
Government of Japan	6,092	–	6,092	–	–	–	6,092
Government of Switzerland	159	167,458	167,617	(21,030)	(147,798)	–	(1,212)
International Maritime Organization	(38,122)	193,780	155,658	(16,470)	(131,684)	–	7,504
John D and Catherine T MacArthur Foundation	6,303	–	6,303	–	–	–	6,303
NZ Aid PIE	4,812	–	4,812	–	–	–	4,812
NZ Aid Extra Budget	27,707	955,451	983,158	(85,926)	(906,467)	–	(9,236)
NZAid Extra Extra Budget	68,674	13,001	81,675	(139)	(103,749)	–	(22,214)
Parkard Foundation	-00	50,000	50,000	(4,052)	(28,764)	–	17,184
People's Republic of China	10,298	–	10,298	–	–	–	10,298
Other Funds	877,382	721,430	1,598,812	(45,828	(591,026)	–	961,958
Ramsar Secretariat	(72,638)	84,970	12,332	(11,816)	(98,735)	–	(98,219)
The Nature Conservancy	3,645	–	3,645	(328)	(3,276)	–	41
The Christensen Foundation	11,568	–	11,568	(305)	(3,085)	–	8,178
United Nations Development Programme	208,296	5,119,252	5,327,548	(210,988)	(4,696,509)	–	420,051
United Nations Environment Programme	542,430	1,079,045	1,621,475	(79,823)	(1,243,993)	–	297,659
United Nations Institute for Training and Research	55,766	–	55,766	(93)	(934)	–	54,738
UN Economics and Social Commission for Asia and the Pacific (UNESCAP)	8,786	–	8,786	–	–	–	8,786
UN Office of Project Services	7,055	–	7,055	–	–	–	7,055
US Dept of Energy/Los Alamos University	4,471	–	4,471	–	–	–	4,471
US Fish and Wildlife	14,625	–	14,625	–	–	–	14,625
US Dept. of State	155,723	51	155,775	(6,076)	(60,756)	–	88,943
USAID	(20,758)	511,127	490,369	(25,752)	(430,966)	–	33,650
US National Oceanic Atmospheric Administration	(27,526)	110,000	82,474	(4,187)	(34,894)	–	43,394
World Meteorological Organization	25,646	5,434	31,080	(7,445)	(57,869)	–	(34,235)
TOTAL	**3,494,194**	**15,969,761**	**19,463,954**	**(939,518)**	**(12,786,512)**	**–**	**5,737,925**

MEMBER CONTRIBUTIONS (USD)	
American Samoa	11,912
Australia	185,106
Cook Islands	10,154
Federated States of Micronesia	10,184
Fiji	20,360
France	134,202
French Polynesia	20,360
Guam	–
Kiribati	10,205
Marshall Islands	20,368
Nauru	–
New Caledonia	20,064
New Zealand	134,202
Niue	10,184
Northern Mariana Islands	–
Palau	32,860
Papua New Guinea	40,720
Samoa	20,360
Solomon Islands	40,690
Tokelau	10,184
Tonga	15,365
Tuvalu	10,238
United Kingdom	178,936
United States of America	235,000
Vanuatu	31,500
Wallis and Futuna	10,184
TOTAL	**1,213,338**

PARTIES TO THE NOUMEA CONVENTION	
Federated State of Micronesia	450
Fiji	450
France	601
New Zealand	3,624
Samoa	450
TOTAL	**5,575**

PARTIES TO THE WAIGANI CONVENTION	
Australia	23,583
Federated Sates of Micronesia	1,075
Fiji	1,075
Kiribati	1,091
New Zealand	23,583
Niue	1,074
Samoa	1,075
Tuvalu	1,024
TOTAL	**53,580**

Note: The income received shown above can be located in the Donor Funds schedule in the rows titled 'Other Funds'.

INCOME AND EXPENDITURE (USD)

INCOME	
Member Contributions	1,213,339
Programme Management Charge	939,518
Programme/donor funds income	12,786,512
Other Donor funds income	682,982
Amortisation of deferred income	83,388
Other income	227,239
TOTAL INCOME	**15,932,978**

EXPENDITURE	
Executive Management and Corporate Support	3,405,211
Climate Change	7,197,889
Biodiversity and Ecosystem Management	3,399,251
Waste Management and Pollution Control	1,285,409
Environmental Monitoring and Governance	903,962
Depreciation expense	127,606
TOTAL EXPENDITURE	**16,319,328**

Betham&co
chartered accountants and business advisors

Independent Audit Report
To the Members of
Secretariat of the Pacific Regional Environment Programme (SPREP)

We have audited the accompanying financial statements of the Secretariat of the Pacific Regional Environment Programme ("SPREP") which comprises the statement of income, statement of movement in reserves and statement of cash flows for the year ended 31 December, 2013, the statement of financial position as of that date, a summary of significant accounting policies and other explanatory notes.

Managements' responsibility for the Financial Report
Management is responsible for the preparation and fair presentation of the financial report in accordance with International Financial Reporting Standards and with the requirements of the SPREP Financial Regulations. This responsibility includes establishing and maintaining internal controls relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility
Our responsibility is to express an opinion to the Members of SPREP, as a body, in accordance with SPREP Financial Regulation 32. Our audit work has been undertaken so that we might state to the Members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than SPREP and the SPREP Members as a body, for our audit work, for this report, or for the opinions we have formed. We conducted our audit in accordance with International Standards on Auditing. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

We confirm that we have no other relationship with SPREP other than the audit of the financial statements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the SPREP's Directors and Management, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Auditor's Opinion
In our opinion, proper books of account have been kept by SPREP, so far as it appears from our examination of those books and the financial statements which have been prepared in accordance with International Financial Reporting Standards:

(i) are in agreement with the books of account;
(ii) to the best of our information and according to the explanations given to us:
  a. give a true and fair view of SPREP's state of affairs as at 31 December, 2013 and of its statements of financial performance, changes in reserves and its cash flows for the year ended on that date;
  b. provide the information required by the SPREP Financial Regulations in the manner so required.

We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit.

Specific Reporting Requirements
In accordance with SPREP's Financial Regulation 32 we report on the specific matters per the financial regulation as follows:

a) The extent and character of our examination has been explained in the section on Auditor's Responsibility above and is based on the International Standards on Auditing. The financial statements for the year end of 31st of December, 2013 have been prepared in accordance with International Financial Reporting Standards.

b) There are no specific matters affecting the completeness and accuracy of the accounts.

c) We confirm the accuracy of the equipment records as determined by physical inspection of additions to assets and verification of disposals during the reporting period.

d) The financial procedures of SPREP are adequate based on our examination of the financial procedures necessary for the purposes of formulating the auditor's opinion expressed above.

e) Based on our examination of the insurance documentation the insurance cover for SPREP's assets is adequate.

f) Others matters which do not affect our audit opinion have been brought to the attention of management in our report to management.

Betham & Co
BETHAM & CO.
Chartered Accountants
Apia, Samoa
Dated: 30 April 2014

AGN

INTERNAL AUDITOR'S REPORT

SPREP
Secretariat of the Pacific Regional Environment Programme

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W: www.sprep.org

The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.

Natural Solutions for Island Resilience

Internal Audit and Risk Management Attestation

Statement Financial year: 2013

The Secretariat of the Pacific Regional Environment Programme

We David Sheppard and Tagaloa Fa'afouina Su'a are of the opinion that the Secretariat of the Pacific Regional Environment Programme has internal audit and risk management processes in place that are in all respects, compliant with the policy procedures and other requirements contained in the Policy document titled "Internal Audit Policy". These processes provide a level of assurance that enables the Senior Management of the Secretariat of the Pacific Regional Environment Programme to recognise, understand, manage and effectively control its exposure to risk.

We David Sheppard and Tagaloa Fa'afouina Su'a are of the opinion that the Audit Committee for the Secretariat of the Pacific Regional Environment Progamme is constituted and operates in accordance with the independence and governance requirements of the Internal Audit Policy and Audit Committee Charter.

The Chair and members of the Audit Committee are:

- Independent Chair Mr. Tagaloa Fa'afouina Su'a (CPA) – Partner Su'a and Associates
- Independent Member Mr. Stuart Horne – Deputy High Commissioner NZ
- Independent Member Mr. Jovilisi Suveinakama – General Manager Apia Office of Tokelau
- Non-Independent Member Mr. Clark Peteru – Secretariat Legal Adviser
- Non-Independent Member Mrs. Simeamativa Vaai – Secretariat Human Resource Adviser

We David Sheppard and Tagaloa Fa'afouina Su'a declare that this internal Audit Attestation is made on behalf of the Secretariat of the Pacific Regional Environment Programme.

David Sheppard
SPREP Director General

22-5-2014
Date

Tagaloa Fa'afouina Sua
Chairman of the Audit Committee

22-5-2014
Date

SPREP PUBLICATIONS 2013

TITLE	ISBN/ISSN	PAGES
Technical reports		
Climate Change Vulnerability Assessment and Ecosystem-based Adaptation: A Synthesis Report, Choiseul Province, Solomon Islands	978-982-04-0487-8 (print) 978-982-04- 0488-5 (online)	9 p.
Aia botumwaka ma aia kakamwakuri ataei! The Children Take Action: A Climate Change Story	978-982-04-0485-4 (print) 978-982-04-0486-1 (online)	20 p.
JNAP Development and Implementation in the Pacific: Experiences, Lessons and Ways Forward	978-982-04-0498-4 (print) 978-982-04-0503-5 (ecopy)	118 p.
An Economic Analysis of Ecosystem-based Adaptation and Engineering: Options for Climate Change Adaption in Lami Town, Fiji Islands	978-982-04-0473-1 (print) 978-982-04-0474-8 (online)	72 p.
Mainstreaming Climate Change Adaptation in the Pacific: A Practical Guide	978-982-04-0510-3 (online)	96 p.
Legal Frameworks for Ecosystem-based Adaptation to Climate Change in the Pacific Islands	978-982-04-0439-7 (print) 978-982-04-440-3 (online)	57 p.
Multilateral Environmental Agreement Negotiator's Handbook: Pacific Region 2013	978-982-04-0475-5 (print) 978-982-04-0476-2 (online)	236 p.
Adapting to Climate Change in the Pacific: the PACC Programme	978-982-04-0501-1 (print) 978-982-04-0502-8 (ecopy)	42 p.
Informing Climate-resilient Development: The Application of Cost-benefit Analysis (CBA) in the PACC Programme – Experiences and Lessons Learned on Capacity Building (PTR1)	978-982-04-0499-1 (print) 978-982-04-0500-4 (ecopy)	52 p.
Informing Climate-resilient Development: The Application of Cost-benefit Analysis (CBA) in the PACC Programme – Experiences and Lessons Learned in the Application of CBA to PACC Demonstration Projects (PTR2)	978-982-04-0499-1 (print) 978-982-04-0500-4 (ecopy)	68 p.
PACC Cost-benefit Analysis Work Programme: Final Evaluation Report of Capacity Building Components	978-982-04-0492-2 (print) 978-982-04-0493-9 (online)	25 p.
Pacific NAMA (National Appropriate Mitigation Actions) Guidelines	978-982-04-0479-3 (print) 978-982-04-0480-9 (online)	44 p.
Pacific Sea Turtle Education Kit / Second Edition	978-982-04-0471-7 (print) 978-982-04-0472-4 (online)	60 p.
PACPLAN: Pacific Islands Regional Marine Spill Contingency Plan, 2013	978-982-04-0479-3 (print) 978-982-04-0482-3 (online)	88 p.
Manuel éducatif sur les déchets du Pacifique: un guide à l'intention des éducateurs et des communautés locales	978-982-04-03963 (online)	96 p.
Pacific E-waste: A Regional Strategy and Action Plan	978-982-04-0448-9 (print) 978-982-04-0449-6 (online)	36 p.

TITLE	ISBN/ISSN	PAGES
Series		
SPREP Annual Report 2012	1562-675X	76 p.
Rapport annuel du PROE 2012	1990-3561	76 p.
Meeting reports		
Report of the Twenty Fourth (24th) SPREP Meeting, 17–19 September 2013, Apia Samoa	978-982-04-0505-9 (print) 978-982-04-0507-3 (online)	80 p.
Rapport de la Vingt-quatrième (24e) *Conférence du PROE* 17–19 septembre 2013, Apia, Samoa.	978-982-04-0505-9 (print) 978-982-04-0507-3 (online)	80 p.
Report of the Second Meeting of the Pacific Meteorological Council (PMC-2), Nadi, Fiji, 1–5 July 2013		49 p.
Pacific Climate Change Roundtable: Report of Proceedings, Nadi Fiji, 3–5 July, 2013		32 p.
Posters, brochures		
Kiribati: adaptation to climate change		
Choiseul province: adaptation to climate change		
Ecosystem-based adaptation: natural solutions for resilience to climate change		
Pacific adaptation to climate change (PACC) project: poster		
Case studies		
Toner cartridge recycling initiative in Luganville		
Scrap metal management in American Samoa		
Videos		
Participatory 3D mapping in Vanuatu		
PACC – Overview		
Vital Food – Fiji (PACC)		
Vital Water – Tuvalu (PACC)		
Vital Roads – Epi island, Vanuatu (PACC)		
Other reports		
SPREP Fraud Manual		
Report on adaptation challenges in Pacific island countries		

STAFF LIST (AS AT 31 DECEMBER, 2013)

	STAFF MEMBER	DESIGNATION	COUNTRY	CONTRACT EXPIRY DATE
SENIOR MANAGEMENT TEAM				
1	David Sheppard	Director General	Australia	31-Dec-15
2	Kosi Latu	Deputy Director General	Samoa	31-Dec-16
3	Stuart Chape	Director Biodiversity and Ecosystem Management	Australia	04-Sep-14
4	Netatua Pelesikoti	Director Climate Change	Tonga	29-Nov-15
5	Sefanaia Nawadra	Director Environmental Monitoring and Governance	Fiji	12-Feb-15
6	David Haynes	Director Waste Management and Pollution Control	Australia	12-Feb-15
7	Clark Peteru	Legal Adviser	Samoa	12-Mar-16
8	Alofa Tuuau	Finance and Administration Adviser	Samoa	23-Jul-14
9	Simeamativa Vaai	Human Resources Adviser	Samoa	07-Jan-16
EXECUTIVE SUPPORT				
10	Rosanna Galuvao-Ah Ching	Executive Assistant to the Director General	Samoa	30-May-16
11	Apiseta Eti	Executive Assistant to the Deputy Director General	Samoa	31-Dec-15
12	*Vacant*	Executive Officer		
INTERNAL AUDIT				
13	Selesitina Reti	Internal Auditor	Samoa	25-Jun-15
CLIMATE CHANGE				
14	Taito Nakalevu	Project Manager – Pacific Adaptation to Climate Change	Fiji	05-Apr-14
15	Peniamina Leavai	Adaptation Planning Officer Pacific Adaptation to Climate Change	Samoa	31-Dec-14
16	Naheed Hussein	Pacific Adaptation to Climate Change Finance and Operations Officer	Fiji	20-Apr-15
17	Diane McFadzien	Climate Change Adaptation Adviser	Cook Islands	12-Nov-16
18	Carlo Iacovino	Climate Change Communications Officer	Australia	06-Oct-15
19	Espen Ronneberg	Climate Change Adviser	Marshall Islands	31-Dec-15
20	Tagaloa Cooper	Climate Change Coordination Adviser	Niue	12-Aug-14
21	Makelesi Gonelevu	Knowledge Management Officer	Fiji	30-Mar-14
22	Rodney Lui	Climate Change Monitoring and Evaluation Officer	Fiji	11-May-14
23	Azarel Mariner	Climate Change Technical Officer	Samoa	01-Dec-16
24	Neville Koop	Meteorology/ Climatology Adviser (On Secondment from Commonwealth Secretariat)	Australia	28-Mar-14
25	Philip Wiles	Pacific Islands Global Ocean Observing System Officer	NZ	06-Aug-14
26	Salesa Nihmei	Meteorology and Climate Officer	Vanuatu	18-Jan-16
27	Christina Leala-Gale	Finland Project – Project Manager	Samoa	01-Sep-16
28	Sili'a Kilepoa-Ualesi	Project Manager – Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project	Samoa	12-Jun-14
29	Nixon Kua	Climate Change Mitigation Officer	Solomon Islands	29-Jun-16
30	Joyce Tulua	Secretary to Division Director/ Division Assistant	Samoa	29-Jul-16
31	Ewan Cameron	Climate Change Support (On Secondment from the Norwegian Refugee Council)	Cook Islands	31-Dec-14
BIODIVERSITY AND ECOSYSTEM MANAGEMENT				
32	Tim Carruthers	Coastal and Marine Adviser	Australia	05-Jun-14
33	Vainuupo Jungblut	Ramsar Officer, Oceania	Samoa	22-Feb-15
34	Michael Donoghue	Threatened and Migratory Species Adviser	NZ	19-Oct-16
35	Penina Solomona	Convention on Migratory Species Pacific Officer	Fiji	07-Jan-15
36	Catherine Siota	Turtle Database Officer	Solomon Islands	12-May-16
37	Easter Galuvao	Biodiversity Adviser	Samoa	11-Apr-16
38	Bruce Jefferies	Terrestrial Ecosystems Management Officer	NZ	04-Apr-14
39	David Moverley	Invasive Species Adviser	NZ	13-Oct-15
40	Posa Skelton	Pacific Islands Learning Network Coordinator	Samoa	29-Jun-16
41	Gianluca Serra	Global Environment Facility – Project Facilitator	Italy	20-Mar-15
42	Pascale Salaun	Marine Conservation and Management Specialist (On Secondment from the French Government)	France	29-Feb-16
43	Makerita Atiga	Secretary to Division Director/ Division Assistant	Samoa	02-Aug-14
44	*Vacant*	Ecosystem-based Adaptation Officer		
45	*Vacant*	Coral Reef Management Officer		

ENVIRONMENTAL MONITORING AND GOVERNANCE				
46	Mark Graham	Environmental Monitoring and Reporting Adviser	Canada	02-Jan-16
47	Paul Anderson	Environmental Monitoring Analyst	USA	17-Mar-14
48	Tepa Suaesi	Environmental Planning Officer	Samoa	31-Jan-14
49	Meapelo Maiai	Global Environment Facility Support Adviser	Samoa	4-Nov-15
50	Jope Davetanivalu	Planning and Capacity Development Adviser	Fiji	30-Sep-16
51	Theresa Fruean-Afa	Secretary to Division Director/ Division Assistant	Samoa	13-Apr-15
52	*Vacant*	Sustainable Development Adviser		
53	*Vacant*	Spatial Planning Officer		
WASTE MANAGEMENT AND POLLUTION CONTROL				
54	Anthony Talouli	Pollution Adviser	Fiji	20-Apr-16
55	Esther Richards	Solid Waste Management Adviser	St Vincent and The Grenadines	11-Aug-14
56	Frank Griffin	Hazardous Waste Management Adviser	PNG	20-Sep-16
57	Lusiana Ralogaivau	Global Environment Facility – Project Coordinator	Fiji	19-Jul-16
58	Stewart Williams	PacWaste Project Manager	Australia	11-Nov-16
59	Scott Willson	Marine Pollution Officer (On Secondment from the Australian Maritime Safety Authority)	Australia	31-Aug-15
60	Pulemalie Habiri	Secretary to Division Director/ Division Assistant	Samoa	03-Oct-16
61	*Vacant*	PacWaste Project Officer		
CORPORATE SERVICES				
Information Resources and Archives				
62	Miraneta Williams-Hazelman	Information Resources Centre and Archives Manager	Samoa	9-Aug-15
63	Taranaki Seiuli	Information Management Officer	Samoa	20-Mar-16
64	Lupe Silulu	Registry and Archives Officer	Samoa	31-Dec-15
65	Helen Tuilagi-Ah Kuoi	Registry and Archives Assistant	Samoa	27-Oct-15
Communications and Outreach				
66	Seema Deo	Communications and Outreach Adviser	Fiji	12-Mar-15
67	Nanette Woonton	Media and Public Relations Officer	Cook Islands	15-Sep-16
68	*Vacant*	Publications Officer		
Information Technology				
69	Christian Slaven	IT Manager	Samoa	02-May-15
70	Epeli Tagi	IT Network and System Support Engineer	Fiji	06-Jan-17
71	Billy Chan Ting	Web Applications Developer Specialist	Samoa	13-Feb-14
72	Ainsof So'o	Systems Developer and Analyst	Samoa	05-May-16
Finance and Administration				
73	Makereta Kaurasi-Manueli	Financial Accountant	Fiji	14-Apr-15
74	William Kunai	Project Accountant	PNG	11-Jul-16
75	Maraea Slade-Pogi	Accounting Officer	Samoa	13-Sep-15
76	Leilani Chan Ting	Finance Officer	Samoa	24-Jun-16
77	Rachel Levi	Finance Officer	Samoa	24-Jun-16
78	Elama Tofilau	Finance Assistant	Samoa	30-Apr-16
79	Lawrence Warner	Property Services Officer	Samoa	4-Dec-15
80	Faamanatu Sititi	Driver/ Clerk	Samoa	05-Dec-14
81	Tologauvale Leaula	Cleaner/ Teaperson	Samoa	31-Dec-15
82	Amosa To'oto'o	Cleaner/ Teaperson	Samoa	31-Dec-16
83	Silupe Gafa	Groundsman	Samoa	31-Mar-14
84	*Vacant*	Finance Officer		
85	*Vacant*	Conference and Travel Officer		
Monitoring and Evaluation				
86	*Vacant*	Monitoring and Evaluation Adviser		
Human Resources				
87	Luana Chan-Jamieson	Human Resources Officer	Samoa	11-Aug-14
88	Christine Purcell	Assistant Human Resources Officer	Samoa	04-Mar-15
89	Jolynn Managreve-Fepuleai	Assistant Human Resources Officer	Fiji	08-Jul-15
90	Monica Tupai	Corporate Services Assistant	Samoa	21-May-16
Temporary Appointment				
91	Priscilla Olano	Climate Change Portal Research Assistant	Samoa	31-Dec-13
Work Attachment				
92	Anna Bertram	UNEP-SPREP GEFPAS Project Assistant	Germany	31-Mar-14

ACRONYMS AND ABBREVIATIONS

AAMP	Agence des aires marines protégées (French agency for marine protected areas)
ACIAR	Australian Centre for International Agricultural Research
ACP/MEAs	Capacity Building related to Multilateral Environment Agreements in African, Caribbean and Pacific Countries
AFD	Agence Française de développement (French development agency)
AMSA	Australian Maritime Safety Authority
APTC	Australia-Pacific Technical College
BIORAP	biodiversity rapid assessment survey
C3D+	Climate Change Capacity Development
CBD	Convention on Biological Diversity
CI	Conservation International
CMS	Convention on Migratory Species
COP	Conference of the Parties
CROP	Council of Regional Organisations in the Pacific
CSIRO	Australia's Commonwealth Scientific and Industrial Research Organisation
DIICSRTE	Australian Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education
DIREN	Les directions régionales de l'Environnement (French regional directorate of environment)
EIA	Environmental Impact Assessment
EU	European Union
FINPAC	Finnish Pacific project
FMI	Finnish Meteorological Institute
FMIS	Financial Management Information System
GCCA	Global Climate Change Alliance project
GEF	Global Environment Facility
GEF-PAS	Global Environment Facility Pacific Alliance for Sustainability
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German agency for international cooperation)
ICCAI	International Climate Change Adaptation Initiative
IMO	International Maritime Organization
IRCA	Information Resource Centre and Archives
IRD	France's Institut de recherche pour le développement (French agency for development research)
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
J-PRISM	Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries
KIEP	Kiribati Integrated Environment Policy
MACBIO	Marine and Coastal Biodiversity Management in Pacific Island Countries and Atolls project
MEA	Multilateral Environment Agreement
MNRE	Samoa's Ministry of Natural Resources and Environment
NATPLAN	National Oil Spill Contingency Plan
NEMS	National Environment Management Strategy
NESAF	National Environment Strategic Action Framework
NGOs	Non-government organisations
NISSAPs	National Invasive Species Strategies and Action Plans
NOAA	United States National Oceanic and Atmospheric Administration
PACC	Pacific Adaptation to Climate Change
PACCSAP	Pacific-Australia Climate Change Science and Adaptation Planning Programme
PACIOCEA	Pacific Ocean Ecosystem Analysis project
PACMAS	Pacific Media Assistance Scheme
PACPLAN	Pacific Islands Regional Marine Spill Contingency Plan
PCCP	Pacific Climate Change Portal
PCCR	Pacific Climate Change Roundtable
PEEL	Pacific Emerging Environment Leaders' Network
PEIN	Pacific Environment Information Network
PIFACC	Pacific Islands Framework for Action on Climate Change
PIFS	Pacific Islands Forum Secretariat
PIGGAREP	Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project
PILN	Pacific Invasives Learning Network
PIP	Pacific Invasives Partnership
PIRT	Pacific Islands Roundtable for Nature Conservation
PMC	Pacific Meteorological Council
PV	Photovoltaic
PYEN	Pacific Youth Environment Network
SIDS	Small Island Developing States
SMT	Senior Management Team
SOE	State of the Environment
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
SRDP	Strategy for Disaster and Climate Resilient Development in the Pacific
TREDS	Turtle Research and Monitoring Database System
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations Office for Disaster Risk Reduction
UNITAR	United Nations Institute for Training and Research
USAID	United States Agency for International Development
USDA APHIS	United States Department of Agriculture Animal and Plant Health Inspection Service
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature

The Pacific islands region

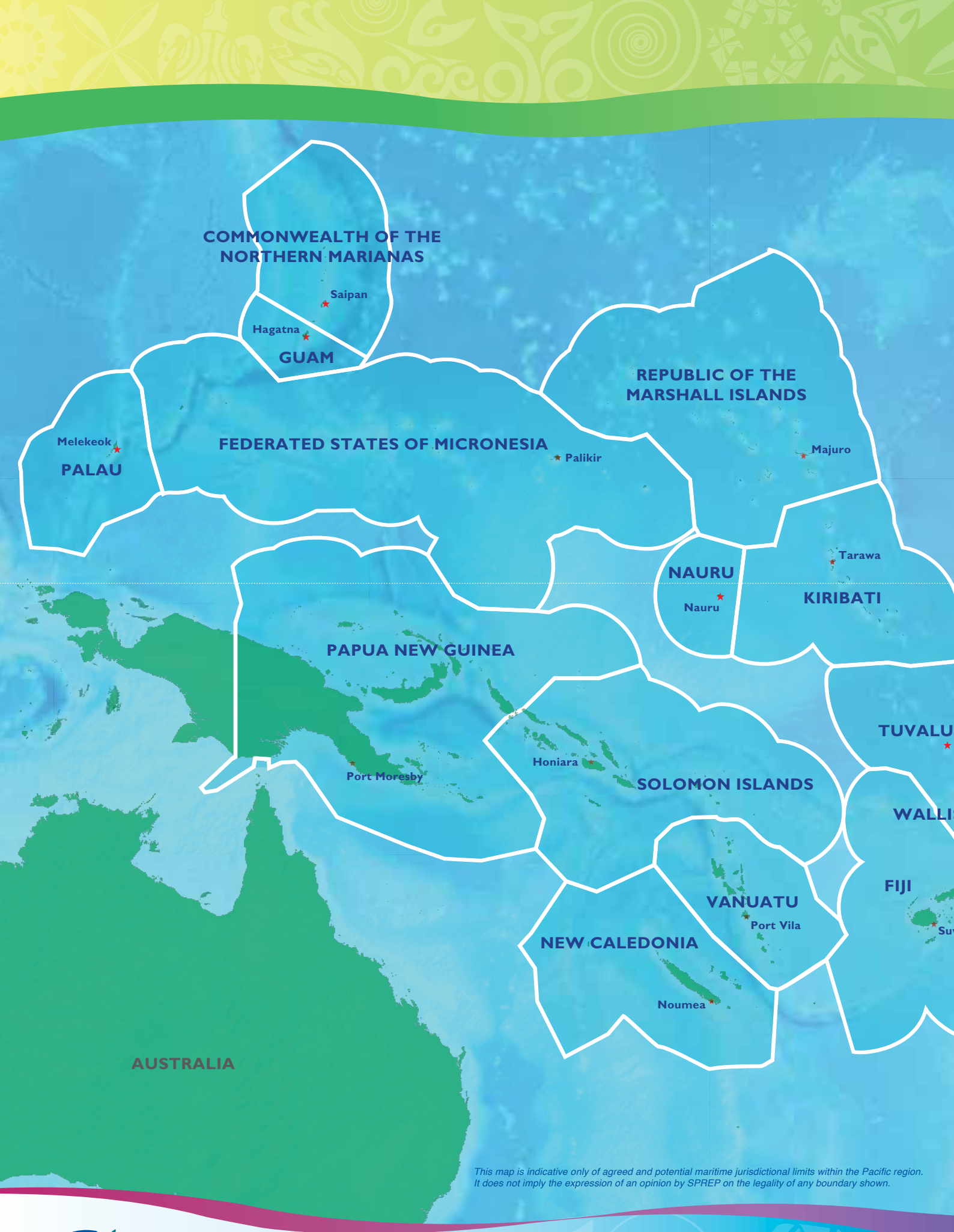
The Pacific is the world's largest ocean, covering nearly one-third of the Earth's surface. About 30,000 islands of varied shape and size lie across its vast expanse.

The Secretariat's Pacific island members are:

- American Samoa
- Commonwealth of the Northern Mariana Islands
- Cook Islands
- Federated States of Micronesia
- Fiji
- French Polynesia
- Guam
- Kiribati
- Republic of the Marshall Islands
- Nauru
- New Caledonia
- Niue
- Palau
- Papua New Guinea
- Samoa
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu
- Wallis and Futuna

In addition to this, SPREP also has five metropolitan members. These are:

- Australia
- France
- New Zealand
- United Kingdom
- United States of America



This map is indicative only of agreed and potential maritime jurisdictional limits within the Pacific region. It does not imply the expression of an opinion by SPREP on the legality of any boundary shown.

SPREP
Secretariat of the Pacific Regional Environment Programme


HAWAII
Equator
KIRIBATI
KIRIBATI
TOKELAU
Funafuti
S AND FUTUNA
Mata-utu
Apia
SAMOA
AMERICAN SAMOA
Pago Pago
COOK ISLANDS
Papeete
va
Alofi
TONGA
NIUE
FRENCH POLYNESIA
Avarua
Nuku'alofa
0
500
1,000
2,000
Kilometres

SPREP
Secretariat of the Pacific Regional Environment Programme