The South Pacific Regional Environmental Programme's (SPREP) Aptitude in Managing Marine Pollution in the South Pacific

Simon Murphy *

Account Director, Howorth Communications.

Introduction

This article examines the South Pacific Regional Environmental Programme (SPREP), a regional organisation established by governments and administrations in the South Pacific to look after the environment, and the means at its disposal to effectively manage and reduce marine pollution in the South Pacific.

The South Pacific is some 30 million square kilometres in area; four times the size of the Australian continent and three times that of the United States of America. It represents 6% of the earth's surface, with land constituting only 2% of the region most of the environmental issues relate to the coastal zone and the high seas.[1] This is exacerbated by the declaration of many states of an exclusive economic zone (EEZ) extending to 200 nautical miles beyond the coastline.

There are many environmental threats in the world and SPREP, like other environmental agencies, is hard pushed to address them all because of a multitude of restraints, notably human and financial resources. According to *Agenda 21,*[2] more than half of the world's population now lives within 60 km of a shoreline, making coastal resources more valuable than before, making marine pollution a key issue.

This article examines the legal tools available and related measures implemented by SPREP to help reduce and manage marine pollution in the South Pacific.

The 1982 *United Nations Convention on the Law of the Sea (UNCLOS)*[3] defines marine pollution as:

> The introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to

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* Simon Murphy is a director at Sydney IT consulting firm Howorth Communications, where he has worked for the last four years. Prior to this he worked for a number of consultancies in London, making the move to Australia in 2000. His clients include multinational software vendors, IT service providers and large telecommunications firms. In 2003 he undertook a sabbatical in marine studies at the University of Queensland which he passed with distinction. Simon also has a Bachelor of Science Degree from Swansea University and post-graduate Bachelor of Arts Honours in Social Anthropology from the University of Cape Town.

[1] Ben Boer "Environmental Law and the South Pacific: Law of the Sea Issues" in *The Law of the Sea in the Asia Pacific Region* (Edited by James Crawford and Donald R. Rothwell) (1995) p. 67 at pp. 67-92.

[2] *Agenda 21*, (United Nations Conference on Environment and Development) (1992) Chapter 17.3.

[3] *1982 United Nations Convention on the Law of the Sea*, Article 1.

> marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

Preceding the legal portion of the article is a brief overview of the origin and mechanics of SPREP, which was founded in the 1980s (although formally established as an autonomous body in 1993). However for the purposes of making this article current the discussion focuses mainly on activities conducted by SPREP over the last five years. A brief analysis of international and regional conventions follows and are considered in terms of how they may impact the South Pacific setting.

Lastly SPREP's most recent marine pollution program, the Pacific Ocean Pollution Prevention Programme (PACPOL) is given some thought. It is particularly interesting how conflicting issues can arise when international guidelines are implemented at a regional level, particularly far-reaching conventions such as *MARPOL 73/78*.

SPREP acknowledges the difficulties of trying to successfully implement international law on a regional scale in order to satisfactorily address marine pollution.

An introduction to the South Pacific Regional Environmental Programme (SPREP)

SPREP is an inter-governmental organisation with input also from non-governmental organisations. It was originally established in 1978 as part of a joint programme of the South Pacific Commission based in Noumea, the South Pacific Forum, UNEP and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).[4]

In 1991, SPREP became an autonomous body after it became a separate regional organisation with a legal personality to be governed by the 1993 *Agreement Establishing the South Pacific Regional Environment Programme*. According to Richard Herr, in the decade since SPREP became independent the organisation has become increasingly institutionalised, substantially advancing the cause of environmental protection in the South Pacific.[5] With its Secretariat based in Apia, Western Samoa, SPREP has approximately 70 full time staff and consists of 27 members including all Pacific island countries, Australia, New Zealand, France, the United Kingdom and the United States.

SPREP's mandate was formalised in the 1993 *SPREP Agreement* as being:

> To promote co-operation and to provide assistance in order to protect and improve the Pacific islands environment and to ensure sustainable development for present and future generations.[6]

Along with input from a variety of international agencies, SPREP is involved in a wide variety of environmental projects, broadly these fall under the following regional programmes:

- Biodiversity and Natural Resource Convention;
- Climate Change and Integrated Coastal Management;
- Waste management, Pollution Prevention and Emergencies;
- Environmental Management, Planning and Institutional Strengthening; and
- Environmental Education, Information and Training.[7]

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[4] Boer, Ramsay and Rothwell, *International Environmental Law in the Asia Pacific* (1998) p. 41.

[5] Richard Herr "Environmental Protection in the South Pacific: The effectiveness of SPREP and its Conventions" in *Yearbook of International Co-operation on Environment and Development 2002/2003* (Edited by Olav Schram Stokke and Øystein B. Thommessen) (2003) p. 41 at pp. 41-49.

[6] SPREP *Environmental Report* (2000) p. iii.

[7] Sourced <www.sprep.org.ws/whatsprep_.htm> at 11 July 2003.

These programmes have formed the basis of the last two Action Plans that set out SPREP's course of action over an 18-month period. These Action Plans operate on the basis of a number of multilateral and bilateral environmental Conventions, the extent of which these are implemented has been regarded as problematic in the past.[8]

SPREP acts as the secretariat for three regional conventions: the 1976 *Convention on the Conservation of Nature in the South Pacific (Apia Convention),* the 1986 *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention)*, and the 1995 *Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (Waigani Convention)*.

Regional cooperation is encouraged by SPREP, however in reality many Pacific island countries (PICs) have only a small number of people trained to manage environmental programmes backed by limited financial resources, making it difficult for each country to effectively address the variety of environmental issues they are faced with.[9] The aptitude of SPREP in addressing these environmental issues is measured in terms of how well it achieves its mandate against the backdrop of severe regional restraints.[10]

The South Pacific Region

The South Pacific covers a large amount of the world's surface (6%) with high land to sea ratios. For example, Kirabati has a land to sea ratio of 1:5,000, with 3.5 million square metres of sea and 33 islands (all atolls)[11] based on the outer limits of Kirabati's EEZ. Geographically the South Pacific islands fall into one of four classifications: continental; volcanic; low coral or atolls; and elevated coral.[12]

Within the 22 countries that make up the South Pacific region there is a diversity of social, political and economic forces at play. The political status of Pacific island countries is important in determining the type of environmental regime implemented.[13] According to Ghai[14] those countries with recent colonial ties (such as Pitcairn with the United Kingdom) will often experience difficulties and increased dependence on foreign personal and assistance, due to recent expansion of state apparatus, and greater complexity and formality of state institutions, especially in areas of environment and development.

Environmental pressures faced by these countries are immense and range from climate change (resulting in increased sea levels), limited drinking water and arable land, severe weather systems, increasing population pressures, industrial and commercial development and the impact of tourism. Marine pollution and the need for effective marine environment protection is one of many ecological problems faced in

[8] Boer, *The Law of the Sea in the Asia Pacific Region* (Crawford and Rothwell) (1995) p. 74 - 75 at pp. 67-92.
[9] Boer, Ramsay and Rothwell (1998) p. 248.
[10] Herr, *Environmental Protection in the South Pacific: The effectiveness of SPREP and its Conventions* (Olav Schram Stokke and Øystein B. Thommessen) (2003) p. 41 at pp. 41-49.
[11] J. Carew-Reid, *Environment, Aid and Regionalism in the South Pacific* (National Centre for Development Studies, Research School of Pacific Studies, Australian National University) (1989).
[12] Ibid p. 12-13.
[13] Boer, *The Law of the Sea in the Asia Pacific Region* (Crawford and Rothwell) (1995) p. 67 at pp. 67-92.
[14] Y.Ghai, *Law, Government and Politics in the Pacific Island States* (Institute of Pacific Studies, University of the South Pacific Suva) (1988) p. 50.

the South Pacific.[15] The task of problem solving offers no economies of scale according to Herr, rather the complete opposite in 'confronting serious and intractable diseconomies of scale.'[16]

The fragility of island states (both economically and ecologically) is recognised in *Agenda 21*, the UNCED initiative to achieve global partnership for sustainable development:

> Small island developing States, and islands supporting small communities are a special case both for environment and development. They are ecologically fragile and vulnerable. Their small size, limited resources, geographic dispersion and isolation from markets, place them at a disadvantage economically and prevent economies of scale. For small island developing States the ocean and coastal environment is of strategic importance and constitutes a valuable developmental resource.[17]

Agenda 21 also emphasises the need for international and regional co-operation and coordination, and the recognition that small island developing States have special needs for the provision of assistance, particularly in relation to the development and implementation of sustainable development plans.[18] This underlines the challenge of running effective environmental sustainability programmes in the South Pacific, in particular the constant ecological and economical challenges faced by SPREP.

The Threat of Marine Pollution

Over the last 40 years the origin and nature of marine pollution has changed substantially. In the 1970s ship sourced pollution accounted for 35% and land based 54% (with other marine sources contributing the remaining 11%)[19] of marine pollution respectively. However more recently the percentage attributed to land based pollution has become the dominant source of marine pollution, contributing up to 70% according to *Agenda 21*.[20]

This change on one hand reflects the increasing success of legislation put in place to combat ship sourced pollution, and on the other the corresponding ineffectiveness of land-based pollution regulation which has now become the main source of global marine pollution.[21]

Warner points out that in modern times it is acknowledged that the majority of marine pollution is derived from land-based sources, however the emphasis of marine regulation to date has undoubtedly been on sea based activities with harmful effects on the marine environment.[22]

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[15] At the time if writing there was no research available that analysed the extent of marine pollution in relation to population capita in the South Pacific. Subsequently actual evidence of shipping sourced pollution in the region is also limited.

[16] Herr, *Environmental Protection in the South Pacific: The effectiveness of SPREP and its Conventions* (Olav Schram Stokke and Øystein B. Thommessen) (2003) p. 43 at pp. 41-49.

[17] *Agenda 21* (1992) Chapter 17.124.

[18] Boer, *The Law of the Sea in the Asia Pacific Region* (Crawford and Rothwell) (1995) p. 71 at pp. 67-92.

[19] R. Michael M'Gonigle and Mark W. Zacher, *Pollution, Politics and International Law* (1979) p. 17.

[20] *Agenda 21* (1992) Chapter 17.18.

[21] Boer, Ramsay and Rothwell (1998) p. 123.

[22] Robin Warner "Environmental concerns: Their impact on activities at sea" in *Rights and Responsibilities in the Maritime Environment: National and International Dilemmas* (Edited by Tsamenyi, M and Herriman, M) (1996) p. 39.

Ship sourced pollution is primarily caused by washing of tanks and dumping of waste (such as sewage and food),[23] while the main sources of land-based pollution are human settlements; land use; construction of coastal infrastructure; agriculture; forestry; urban development; tourism and industry.[24]

This impact of pollution varies considerably across the region, but with the fragile economy and ecology coupled with a dependence on the marine environment, both ship and land sourced pollution pose a serious threat to marine environment sustainability in the South Pacific.

AusAID echoes this above sentiment:

> The underlying importance of SPREP's business is that a healthy environment is critical to the Pacific island countries (PICs) because of their small size and vulnerable ecologies and because islanders' livelihoods are largely dependent on these limited and fragile resources.[25]

SPREP in 2000

In early 2000, the Australian overseas aid agency, AusAID (which has periodically provided significant funding for SPREP projects), conducted an independent review of SPREP with the aim of improving understanding of the organisation, its programmes and the contributions made by the organisation to Pacific islands.

AusAID viewed SPREP as important to the environmental health of the Pacific island countries. Focusing mainly on activities conducted by SPREP in the 1990s, AusAID offers a mixture of positive and negative review analysis.

A topic that draws both praise and criticism from AusAID was the first substantial effort by SPREP to help PICs identify their national priorities for environmental management and protection through a National Environment Management Strategies (NEMS) review.[26]

The initial analysis of this review showed that 86% of the respondents required preparatory and supportive activities rather than actual implementation of resource management. According to the AusAID analysis of SPREP's 1998 Annual Report[27] comparing members need with what was delivered, the analysis confirms that SPREP did deliver value in terms of providing components aimed at building local capacity and environmental awareness.

SPREP attracts criticism because of its inability to maintain NEMS monitoring due to poor planning and monitoring. Subsequent proposals were dismissed by members as wish lists and few resources materialised for implementation. Former SPREP director, Tamari'I Tutangata, suggested in early 2002[28] that this was due to 'funding and equipment' problems, highlighting the imbalance between SPREP's programme goals and its members' capacity.[29]

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[23] Daniel Bodansky, *Protecting the Marine Environment from Vessel-Source Pollution: UNCLOS III and Beyond* (1991) 18 Ecology Law Journal p.719 at p. 724.
[24] *Agenda 21* (1992) Chapter 17.19.
[25] AusAID, *SPREP 2000 – Review of the South Pacific Regional Environmental Programme: Summary Report* (2000) p. 3.
[26] Ibid p. 4.
[27] SPREP *1998 Annual Report* (1999) p. iii.
[28] Tamari'I Tutangata (2002) "SPREP's Year Ahead" in *Pacific Islands Monthly* (February) p. 48.
[29] Herr, *Environmental Protection in the South Pacific: The effectiveness of SPREP and its Conventions* (Olav Schram Stokke and Øystein B. Thommessen) (2003) p. 47 at pp. 41-49.

Elsewhere the AusAID review is critical of SPREP's project outputs with 10 out of 16 of those conducted in 1998 described as 'mediocre'[30] by the review panel.

Members were also concerned that SPREP had neglected the *APIA* and *SPREP Conventions,* leaving AusAID to conclude that SPREP should develop a systematic approach to working on international agreements and then establish an appropriate strategy offering core resources to assist members with a selection of key Conventions.[31]

AusAID does recognise SPREP however as a 'significant organisation for the Pacific islands region.[32] Where SPREP falls in the agencies' opinion is through its preoccupation with projects, a lack of baseline data and monitoring of higher-level trends and strategic achievements, and a relatively weak management structure at the program level.[33]

Subsequently the review concludes that SPREP deliberately should limit its own direct involvement in implementing projects. AusAID advocates a much more strategic role, where SPREP's core function should be to provide and help members access technical and policy advice and information concerning the environment and ecologically sustainable environment.[34]

SPREP Action Plan 2001-04

The 2001-2004 SPREP Action Plan is the fourth of its kind and provides the basic direction for SPREP and its work programme. A similar thematic approach to earlier Action Plans is maintained, under four main headings divided into 'key result areas' (KRAs). These are:

1. Nature conservation;
2. Pollution prevention;
3. Climate change and vulnerability; and
4. Economic development.[35]

Key lessons learnt from the 1997-2000 Action Plan include (among others) better chance of success and sustainability through regional projects; a need for greater focus on regional activities and interventions that address the common needs of groups or groupings of members; and, an acknowledgement that response to members' needs has been constrained by the project driven nature of the Secretariat's funding base and voluntary nature of member's contributions.[36]

Pollution prevention is positioned as critical to maintaining the health of the region's people and ecosystem. Although many of the elements of the earlier plan are still here, the latest plan takes a broader approach by increasing the autonomy of SPREP members to manage and respond to marine pollution, hazardous waste, solid waste, sewerage and other land-based sources of pollution and to meet the requirements of international and legal instruments.[37]

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[30] AusAID, (2000) p. 13.
[31] Ibid p. 5.
[32] Ibid p. 11.
[33] Ibid p.13.
[34] Ibid p.16.
[35] SPREP *Action Plan for Managing the Environment of the South Pacific Region: 2001-2004* (2000) p.8.
[36] Ibid p. 4.
[37] Ibid p.11.

Within the Pollution Prevention KRA SPREP identifies marine pollution; hazardous waste pollution; and, solid waste, sewage and other land-based sources of pollution as areas for action.[38]

Within this structured approach, SPREP begins addressing marine pollution issues, specifically ship-sourced pollution, through the Pacific Ocean Pollution Prevention Programme (PACPOL),[39] endorsed by SPREP's members at the 10th SPREP Meeting in Samoa in 1998.

PACPOL

The PACPOL initiative combines the international framework to address shipping safety and ship-sourced marine pollution as set out by the International Maritime Organization (IMO) in "Safer Shipping – Cleaner Oceans" with the Convention for the Protection of the South Pacific Region and related protocols (SPREP Convention).[40] Its aim is:

> To maintain, protect, and enhance the quality of coastal and marine environments in the Pacific islands region by minimising ship-sourced marine pollution.[41]

The roots of PACPOL lie in similar cooperative, multilateral programmes to address marine pollution instigated elsewhere in the world, including the Baltic Sea, Caribbean Sea, Indian Ocean, Mediterranean and East Asian Seas. Acknowledging the need for a similar programme in the Pacific (as outlined by the SPREP NEMS conducted in 1996-97), SPREP and the IMO published a joint Work Programme in 1993 (the SPREP/IMO Strategy), but for reasons not made clear the Strategy was not implemented.[42]

Development of PACPOL was undertaken in 1998 by the SPREP Marine Pollution Adviser with funding from COMSEC and CIDA, and later endorsed by SPREP's members the same year. The PACPOL foreword (prepared by former SPREP director Tamari'I Tutangata and Secretary General of the IMO William O'Neil) sets out the goals of PACPOL as to address ship-sourced pollution in the Pacific Islands region through (amongst other things) assisting countries to become members of the IMO and to implement various IMO Conventions that deal with marine pollution (notably *MARPOL 73/78*).

Due to their topographic make-up, and hampered by weak economies, many South Pacific islands are unlikely to be able to adhere to all the member requirements of the Convention, especially the ability to accept ships' waste. This is now being dealt with by SPREP on a regional scale and there have been some recent developments in this area discussed in the sections on Conventions that follow.

Although ship sourced marine pollution is less prevalent than land sourced marine pollution,[43] the Work plan points out the susceptibility of the South Pacific to shipping impacts and lack of regional and national capacity to deal with these. These include:

- Introduced marine species;
- Marine spills (oil and other hazardous materials);
- Discharge of ships' waste (oil, sewage and garbage); and
- Impacts from the development and operation of ports.[44]

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[38] Ibid p. 11.
[39] Ibid p. 12.
[40] SPREP *Pacific Ocean Pollution Prevention Programme: Strategy and Work plan* (1999) p. iv.
[41] Ibid p.6.
[42] Ibid p.3.
[43] *Agenda 21* (1992) Chapter 17.18.

Combining the efforts of a number of organisations (both regional and national as well as harnessing co-operation from oil and shipping companies), the PACPOL program is designed around a two-phase developmental and implementation programme from 1998 through to 2004. The bulk of the management and implementation (including the securing of funding) rests with SPREP and its technical secretariat.[45]

In years to come the success of SPREP's marine pollution programme will be measured by how well the following objectives of the PACPOL program are met:

- To assess the current and potential risks of ship-sourced marine pollution in the Pacific islands region;
- To assist SPREP island members to develop better capacity to effectively prevent and respond to shipping incidents and marine pollution, including:
  - Increasing membership of IMO and adoption and implementation of MARPOL and other international marine pollution conventions;
  - Increasing adoption and implementation of the SPREP Convention Pollution and Dumping Protocols;
  - Developing regional and national marine pollution contingency plans and associated activities and systems; and
  - Targeting projects to address identified high priority marine pollution problems.[46]

In the years since PACPOL was endorsed, the remainder of this discussion will show that SPREP has begun enjoying success both in the adoption of a combination of international and regional laws as well as developing and implementing marine pollution management projects.

Marine Pollution Conventions

There is a range of international and regional Conventions at SPREP's disposal and historically many have been difficult to enforce, particularly *MARPOL 73/78*. Others developed regionally, notably the *Apia* and *SPREP Conventions*, may have actually been neglected by SPREP as the organisation has been too focused on promoting the aims of other treaties[47] (underlining the difficult balancing and enforcement act SPREP has to apply).

This section will look at each in more detail particularly in relation to how they may assist SPREP achieve its PACPOL and 2001-2004 Action Plan objectives.

A new regional *Marine Pollution Prevention Act* is currently being drafted as a joint initiative between SPREP, the Secretariat of the Pacific Community (SPC) and the IMO. The draft act is not yet finalised (originally this was earmarked for December 2003), however the model is scrutinised briefly later on to assess whether it will be able to overcome some of the issues raised by other Conventions in the South Pacific context.

In relation to marine pollution there are two other noteworthy pieces of legislation that may be enforced in coming months; the *Anti-fouling Systems Convention 2001,* aimed at reducing the toxicity to ports and harbours due to the anti-fouling currently used on ships hulls; and a possible Convention on ballast water management. Both have positive ramifications for SPREP and the South Pacific if enforced.

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[44] SPREP *Pacific Ocean Pollution Prevention Programme: Strategy and Work plan* (1999) p. ix.
[45] Ibid p. 8.
[46] Ibid p.6.
[47] AusAID, (2000) p. 5.

International Conventions

United Nations Convention in the Law of the Sea (UNCLOS)

As the most comprehensive Convention dealing with the law of the sea, the 1982 *United Nations Convention in the Law of the Sea (UNCLOS)* applies to all marine areas of the world (within and beyond national jurisdiction) and seeks to establish:

> A legal order for the seas and the oceans which will facilitate international communications, and will promote the peaceful use of the seas and the oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment.[48]

Throughout the Convention's many provisions reference is made to the protection and preservation of the marine environment, and is dealt with specifically in Part XII of the Convention with Article 192 making it the State's obligation to protect and preserve the marine environment. Article 194 provides the authority to either jointly or individually take measures to prevent, reduce and control pollution of the marine environment from any source.

Part XII is however written in very broad terms, and has been described by some commentators as merely a framework for future regional and international agreements on marine environmental protection.[49] For organisations like SPREP this is a means of taking a proactive role in marine protection and preservation, including developing new laws relating to vessel-sourced pollution, which shall be more closely examined shortly. EEZ management creates a range of rights and responsibilities for coastal States that directly impact upon the state of the marine environment; *UNCLOS* also provides the foundations for the further development of the law through State practice.[50]

UNCLOS covers land-based sources (Article 207), pollution from seabed activities within national jurisdiction (Article 208), deep seabed activities beyond national jurisdiction (Article 209), pollution by dumping (Article 210), pollution from vessels (Article 211), and pollution from or through the atmosphere (Article 212).

Perhaps most significant is the expanded jurisdiction *UNCLOS* affords coastal States to control marine pollution in the 200 nautical mile EEZ.[51] This recognises the coastal States' interests and relationship with the state of the marine environment, something that is paramount in the South Pacific.

This expansion of coastal state jurisdiction has potential economic advantages to most coastal states.[52] On the other hand, by placing EEZ management in the jurisdiction of coastal States a potential Pandora's box is opened for SPREP and its members. What level of resources are required to effectively monitor and manage 4% of the world's oceans (or 30 million square kilometres) by some of the poorest countries in the world?[53] In a 1996 SPREP report evaluating the implications of *UNCLOS* on SPREP

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[48] 1982 UNCLOS, preamble.

[49] Warner *Environmental Concerns: Their impact on activities at sea* (edited by Tsamenyi, M and Herriman, M) (1996) p. 40.

[50] Ibid p. 127.

[51] Boer, Ramsay and Rothwell (1998) p. 126.

[52] Martin Tsamenyi "Legal implications of entry into the force of the Law of the Sea Convention for coastal and maritime zone planning and management resource issues" in *Coastal and Maritime Zone Planning and Management: Transnational and Legal Considerations* (Edited by Tsamenyi, Bateman and Delaney) (1995) p. 37.

[53] Given that elsewhere in the world programs such as the *UNEP Regional Program* have been well accepted, it would be an interesting project to analyse how well similar programs could be effectively implemented in the South Pacific.

activities, it was concluded that SPREP had some way to go to implementing *UNCLOS*, a necessary task but one that:

> …is a heavy burden on all coastal States. This is more so with developing coastal States who lack information, technical advice and trained personnel to develop comprehensive legal, administrative and policy responses to implement the Convention.[54]

Effectively implementing *UNCLOS* poses both an opportunity and a colossal challenge for SPREP.

MARPOL 73/78

Designed to impose more regulatory control over oil tankers, *MARPOL 73* first came to fruition at an IMO meeting in London in November 1973. The Convention was not well ratified; a new Convention to be read together with *MARPOL 73* that went well beyond oil pollution was developed five years later.

MARPOL 73/78 consists of six annexes addressing the discharge of oil from ships; discharge of noxious liquid substances in bulk (chemicals); carriage by sea of harmful substances in packaged form; discharge of sewage from ships, and an annex created to address air pollution (not yet in force).

Again acceptance of this Convention was sluggish until the *Amoco Cadiz* tanker accident in March 1978 that prompted all coastal nations to realise that even without their own fleet they were still at risk from pollution.[55] Subsequently Annex I and II were well ratified.

In terms of enforcement, any violation of the *MARPOL 73/78* Convention within the jurisdiction of any Party to the Convention is punishable either under the law of that Party or under the law of the flag State.[56] Although the South Pacific does not have a significant fleet to enforce it, given the area of the region (30 million square kilometres, or 6% of the earth's surface)[57] combined with existing socio-economic pressures, it is likely to be very difficult to enforce *MARPOL 73/78*.[58]

Ratification of an international Convention such as *MARPOL 73/78* at the regional level is also difficult because there is a sense of limited involvement and regional ownership felt by prospective members.[59] Without this sense of 'ownership' Boer, Ramsay and Rothwell suggest that there is less commitment to becoming a party or implementing the provisions.[60]

Another impediment to the widespread adoption of *MARPOL 73/78* in the South Pacific is the requirement that waste reception facilities be provided at all member State ports. In a ships' waste review conducted as part of PACPOL it was found that under *MARPOL* only Guam, Tahiti, Noumea, Suva and Port Moresby could meet the waste reception requirements, with none of the five existing Pacific Island Country parties to

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[54] Martin Tsamenyi *Evaluation of the Implications of the United Nations Convention on the Law of the Sea for SPREP activities* (1996) p. 20.
[55] Michael White "Marine Pollution from Ships: International Conventions and Australian Laws" in *Pollution Law in Australia* (Edited by Lipman Z. & Bates G.) (2002) p. 393 at pp. 382-421.
[56] Sourced at <http://www.imo.org/home.asp> at 13 August 2003.
[57] Boer, Ramsay and Rothwell (1998) p. 244.
[58] The acceptance and implementation of global and environmental treaties in the South Pacific has been generally poor. For an up to date list of what countries have adopted various conventions, see <http://www.imo.org/home.asp> and select the *Status of Conventions* option.
[59] Peter Lawrence *Regional Strategies for the Implementation of Environmental Conventions in the South Pacific: Lessons from the South Pacific* (1994) 15 AYIL pp. 203-229.
[60] Boer, Ramsay and Rothwell (1998) p. 264.

MARPOL meeting these requirements.[61] According to the same review most PICs, in particular the smaller atoll countries, struggle to manage their own domestic waste.

Subsequently it was agreed at the 13th SPREP Council Meeting held in July 2002 that a submission should be made to the IMO to inform the organisation and its members of regional arrangements, including establishment of 'Regional Ships' Waste Reception Centres' and the provision that all SPREP members should continue to be responsible for the own domestic shipping waste (except where certain substances cannot be adequately treated in-country).[62]

SPREP Marine Pollution Adviser Sefa Nawadra made the submission to the Marine Environment Protection Committee (MEPC) in July 2003. The submission was approved and it was agreed that the arrangement would require that *MARPOL* be amended. SPREP and Australia have been given the task of formulating a draft resolution for the amendment of *MARPOL* to be presented at the next session of the MEPC.[63]

This underlines the difficulty faced by SPREP in achieving one of its key PACPOL objectives (increasing membership of IMO and adoption and implementation of MARPOL and other international marine pollution conventions),[64] as well as the difficulties faced by member States wishing to tow the line in adopting and implementing the Convention.

The fact that the Convention will be amended to help facilitate the ships' waste disposal challenges faced in the South Pacific is an important step forward. The next issue to address is how the waste is transported and this may fly in the face of the *Waigani Convention* discussed shortly.

Intervention Convention

Created as a result of the 1967 *Torrey Canyon* disaster, where a Liberian owned vessel ran aground and spilled over 100,000 tonnes of oil outside the territorial sea (then three nautical miles) of the British Coast (yet fouling British and French shores),[65] the *Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Damage (Intervention Convention)* was agreed on at a 1969 IMO conference.

The *Intervention Convention* provides powers to States and Governments to deal with marine casualties off their shores that are not necessarily under their flag or within their territorial seas. Now covering a wide list of pollutants, the Convention requires the owner of the vessel to provide a remedy for the situation, or failing to do so allows the affected State government to do so.

Article II of the Convention allows intervention to occur where there has been a collision of ships, a stranding, or other incident of navigation or occurrence that results in material damage (or imminent threat of material damage) to a ship or its cargo. Although not committing to unlimited levels of intervention, in matters of extreme urgency it is possible to take action without consultation.[66]

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[61] SPREP Submission to Marine Environment Protection Committee 49 *Interpretation and Amendments of MARPOL 73/78 and Related Codes* (July 2003) p. 2.
[62] Ibid p.3.
[63] Sefa Nawadra *Duty Travel Report* (5 August 2003) p. 1.
[64] SPREP *Pacific Ocean Pollution Prevention Programme: Strategy and Work plan* (1999) p. 6.
[65] White, *Marine Pollution from Ships: International Conventions and Australian Laws* (Edited by Lipman Z. & Bates G.) (2002) p. 398 at pp. 382-421.
[66] Boer, Ramsay and Rothwell (1998) p. 130.

As with UNCLOS, effective management and action taken under the *Intervention Convention* could be hampered in the South Pacific due to vastness of jurisdiction area and a lack of financial and personnel resources. This will be evident in incidents where the owner of a vessel is not prepared to rectify the situation or provide financial means with which the State can do so.

Civil Liability Convention (CLC)

Also developed as a response to the *Torrey Canyon* incident, the 1969 *International Convention on Civil Liability for Oil Pollution Damage (CLC)* lends weight to the *Intervention Convention* by dealing with legal responsibility of paying compensation as a result of oil pollution at sea. Not only does this Convention apply to territorial sea (Article II) but also, under a 1992 Protocol, to the limits of the EEZ.

Except under limited circumstances, the owner of the ship is liable for pollution damage caused by the ship (Article III), and is permitted to reduce their liability only provided they establish a fund from which damages can be paid (Article V).

Over the years a series of amendments have been made which among other things has raised the level of monetary limits of liability. Because the system has strict liability (meaning negligence does not have to be proven), and there is a limit on the amount of damages and costs recoverable, the *CLC* has proven a very successful insurance system.[67]

Fund Convention

This is a second Convention related to compensation for clean up costs and damage from oil tanker spills, established in Brussels in 1971. Unlike the *CLC*, whose costs fall on tanker owners, the *Fund Convention* provides compensation from a mutual fund, which oil companies contribute towards rather than an insurer,[68] with levies calculated based on tonnage of oil transported.

Designed to complement the *CLC*, the *Fund Convention* has been amended to cover a broader scope of pollution. The fund pays compensation to persons suffering pollution damage if such persons are unable to obtain "full and adequate" compensation under the terms of the *CLC* (Article IV).

As with the *CLC* this should be regarded as a successful means of providing compensation where it is required, provided that the State parties to the *Fund Convention* pass legislation that imposes a reporting obligation on the oil companies operating in their country and pay a levy towards the fund.[69] Given the socio-economic as well as geographic circumstances in the South Pacific, encouraging State commitment to enforce the Convention will be a significant challenge.

London Convention

Another international instrument to prohibit and limit marine pollution, the 1972 *International Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (London Convention)* supports the terms of *UNCLOS* and is similar in its goals to *MARPOL*.[70]

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[67] White, *Marine Pollution from Ships: International Conventions and Australian Laws* (Edited by Lipman Z. & Bates G.) (2002) p. 395 at pp. 382-421.
[68] Ibid.
[69] Ibid p. 396.
[70] Boer, Ramsay and Rothwell (1998) p. 131.

Article I sets out the main objective of the Convention as to ensuring all practicable steps are taken to prevent pollution of the sea by dumping of waste, or other matter likely to cause hazards to human health, harm to living resources and marine life. Contracting parties are obliged to take measures to prevent pollution caused by dumping (Article II) and enforcement is primarily through the flag state (Article VII).

There are various distinguishing factors between types of waste, which cannot be dumped, or may be dumped with a permit or under exceptional circumstances. This Convention has been subject to a number of amendments over the years, most notably in 1995 when the Convention addressed the prohibition of dumping of nuclear waste.

A 1996 Protocol (not yet in force) will introduce further limitations on dumping and so aid SPREP further in its attempts to prevent and protect the marine environment through pollution caused by dumping. Again the effectiveness of the organisation to manage and monitor its area of jurisdiction is questionable, with no evidence to prove the case either way.

Basel Convention

Because of the successful *London Convention* in preventing dumping of toxic wastes into the sea, the international trade in this material expanded.[71] The loophole for a company in a country where the Convention was enforced was to simply ship the banned material to a country that did not enforce the Convention.

The 1989 *Basel Convention* was designed to counter this and asserts that party States control the export and import of hazardous wastes, compile information on the wastes and inform one another.[72]

Unscrupulous operators will of course not necessarily be deterred by this Convention, but it is a starting block and significantly the *Basel Convention* itself has been adapted to the South Pacific region by SPREP in the form of the *Waigani Convention*.

Regional Conventions

Convention on the Conservation of Nature in the South Pacific, Apia 1976

In terms of providing protection for the marine environment the *Convention on the Conservation of Nature in the South Pacific, 1976 (Apia Convention)* is not a particularly effective tool given that it was primarily directed at protection of flora and fauna and of areas of historical and cultural significance (Article 2).

The Convention also excludes protection of the high seas and the EEZ. The *SPREP Convention* has largely subsumed the *Apia Convention* and so there is little need in dwelling on it here.

An interesting observation to make in passing though is Carew-Reid's argument that eventually the *Apia Convention*, *SPREP Convention* and its Protocols, as well as SPREP's Action Plans and Strategy should be meshed together into one regional structure with clearly defined lines of authority and communication.[73]

This argument was put forward in 1989, prior to the 2000 AusAID report, which likewise advocated a more integrative and regional focused role be applied by SPREP.

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[71] White, *Marine Pollution from Ships: International Conventions and Australian Laws* (Edited by Lipman Z. & Bates G.) (2002) p. 399 at pp. 382-421.
[72] Ibid.
[73] Carew-Reid (1989) p. 106.

Convention for the Protection of the Natural Resources and Environment of the South Pacific, Noumea 1986

The *Convention for the Protection of the Natural Resources and Environment of the South Pacific, Noumea 1986 (SPREP Convention)* came into force in 1990 and unlike the *Apia Convention*, the *SPREP Convention* primarily deals with South Pacific maritime areas.[74]

The precise areas it covers are within the EEZ and high sea areas which are enclosed by all sides of various States' 200 nautical mile zone (Articles 1 and 2), the Convention does not apply to internal or archipelagic waters (Article 1). Its goals, which are either undertaken collectively or individually by members, are to:

1. Prevent, reduce and control pollution of the Convention area from any source;
2. Ensure sound environmental management and development of natural resources; and
3. Harmonise their policies at the regional level (Article 5 (1)).

The *SPREP Convention* also makes provision for a wide range of pollution sources, as well as a commitment to deal with future activities and encourage greater co-operation between parties to help conclude bilateral and multilateral agreements related to the marine environment.[75]

At the time of the Convention's adoption (1990) two Protocols were put in place dealing with dumping[76] and combating pollution emergencies.[77]

The dumping Protocol seeks to limit the dumping of waste in the Convention area (including the continental shelf for any party which extends beyond the Convention area (Article 2)). Any dumping that does take place is by prearranged permit only (Article 3) and most significantly any laws that contracting parties implement to regulate dumping are to be no less effective than internationally recognised rules within the framework of the *London Convention* (Article 3).

Ominously, the dumping of waste or material in relation to the normal operation of ships is not covered by this Protocol. As Boer points out, this is an unfortunate limitation given we know that the "normal operations" of ships can constitute a significant source of marine pollution.[78]

The second Protocol is aimed at increasing co-operation in combating pollution emergencies, particularly those that have already occurred.

Whereas on one hand this Convention offers a reasonable power base for developing regional law, other long-term observations suggest that the *SPREP Convention* does not create any specific or unique South Pacific response to marine environmental protection.[79] Instead the Convention is regarded as a wish list of marine environment obligations for State parties to consider implementing (which has been variable) whilst reinforcing *MARPOL* and the *London Convention*. The same observers note that there is room for additional Protocols to be negotiated to deal with specialised problems such as hazardous cargo and protection of sensitive sea areas.[80]

Further concerns regarding the Convention include the general phraseology that is used. For example, that Parties should take "all appropriate measures" in relation to the prevention, reduction and control of pollution, or that States should offer their "best

[74] Boer, Ramsay and Rothwell (1998) p. 134.
[75] Ibid p.135.
[76] 1986 Protocol for the prevention of pollution in the South Pacific region by dumping.
[77] 1986 Protocol concerning co-operation in combating pollution emergencies in the South Pacific region.
[78] Boer, *The Law of the Sea in the Asia Pacific Region* (Crawford and Rothwell) (1995) p. 82 at pp. 67-92.
[79] Boer, Ramsay and Rothwell (1998) p. 136.
[80] Ibid p.136.

endeavours" to achieve obligation goals, are dismissed by Boer as weak. Aside from the storage of radioactive wastes or other radioactive matter in the Convention area (Article 11), there is little in the way of direct prohibition of activities.[81] Liability and compensation for damage caused by marine pollution in the Convention area are not well covered.

Another feature that weakens the overall effectiveness of this Convention is that member States are only obligated to ensuring their activities do not cause harm to the EEZ of other States (Article 4 (6)). Because the Convention does not cover internal or archipelagic waters (Article 1 (2)), it can be interpreted that pollution caused within these areas would not result in liability actions. Coupled with policing and enforcing the Convention over such a vast area, this is severe limitation on the effectiveness of the *SPREP Convention*.[82]

Waigani Convention

The *Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region* (the *Waigani Convention*) was adopted in Port Moresby in September 1995. Though not ratified until recently (21 October 2001 when it had received a tenth member ratification), the Convention was developed within the framework of the international *Basel Convention* as well as *UNCLOS* and is testament to the region's ability to take a more co-operative and broader view on a wide range of common issues.[83]

The *Waigani Convention* was designed to complement the *SPREP Convention* whilst dealing with the transboundary movement and management of hazardous and radioactive wastes. Unlike the *SPREP Convention,* the *Waigani Convention* covers all areas of State land territory, internal waters, territorial sea, continental shelf, archipelagic waters and EEZs as well as the high seas.

The main objectives, found in Article 4, are to:

- Prohibit the importation of hazardous and radioactive waste into Pacific Developing Parties;
- Reduce the transboundary movement of hazardous wastes to a minimum consistent with their environmentally sound management;
- Treat and dispose of hazardous waste as close as possible to their source of generation in an environmentally sound way; and
- Minimise the generation of hazardous wastes.[84]

The regulation applied is such that exporting States are obliged to notify recipient States, with the importing State retaining the option to deny transboundary movement until certain conditions are met (Article 6). Alternatively if these transboundary conditions cannot be met then the exporting State must re-import the waste, widely defined under Annex 1 and Annex II of the Convention.

How the hazardous waste is transported remains a contentious issue that as yet has not been comprehensively addressed by international or regional policy.

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[81] Boer, *The Law of the Sea in the Asia Pacific Region* (Crawford and Rothwell) (1995) p. 80 at pp. 67-92.
[82] Ibid p.81.
[83] Boer, Ramsay and Rothwell (1998) p. 60.
[84] SPREP *Press Release: Implementation of the Waigani Convention and Basel Convention/Protocol on Liability and Compensation by Pacific island countries* (10 June 2002) p. 1.

SPREP Achievements in Reducing Marine Pollution

Having examined the nature of marine pollution and the tools international as well as regional tools that SPREP has at its disposal, it is worth considering recent achievements SPREP has enjoyed in combating the problem using the self assessment reports made available by the organisation at the time of writing this article.

Recent PACPOL Achievements

Every year SPREP prepares a self-assessment paper that evaluates what objectives and targets set in the past year were met. The SPREP Annual Report 2000 summarises a year spent primarily on waste awareness and education throughout the region, with a survey conducted in Suva, Apia and South Tarawa to assess levels of solid waste awareness, identify key waste issues, understand other issues and problems as well as identify remedial resources.[85]

An assessment was undertaken to identify marine spill risk areas around the South Pacific, part of baseline work to help formulate a response planning and monitoring framework within the region,[86] as well as the drafting of Template National Marine Spill Contingency Plans (NATPLANs) to ensure a uniform approach throughout the region.

The main marine pollution achievement for 2000 was the official launch of a Phase I report for the Persistent Organic Pollutants in Pacific island countries Project (POPs in PICs). Funded by AusAID and conducted in 12 of the member States. This report gives the results of a survey of stockpiles and contaminated sites in the survey areas that were then followed up with education workshops. Phase II is dedicated to the clean up and disposal of the identified wastes.[87]

2000 was also the year when the SPC and SPREP (through the PACPOL) initiative began drafting new model legislation to provide enabling legislation for all regional and international marine environmental protection Conventions. The SPREP report acknowledges that:

> The lack of enabling legislation is one of the major reasons why Pacific island members have not met their obligations under international and regional marine pollution conventions.[88]

The Annual Report for 2001 shows a continuation of SPREP's NATPLAN technical assistance and development policy, highlighting that by adopting a more strategic role, where its core function should be to provide and help members access technical and policy advice, SPREP has heeded the earlier recommendations put forward by AusAID.[89]

Workshops were held on the merits of various chemical conventions, but notably this was also the year that the *Waigani Convention* came into force. In addition to training courses on the management of hazardous materials conducted across 14 Pacific island countries, SPREP also joined forces on managing solid waste landfills with JICA, and SPREP's Waste Management and Pollution Prevention Coordinator was appointed

[85] SPREP *2000 Annual Report* (2001) p. 15.
[86] Ibid p. 15.
[87] Ibid p. 16.
[88] Ibid p. 16.
[89] AusAID, (2000) p. 16.

the Pacific coordinator of a GEF project aimed at providing a regionally-based assessment of Persistent Toxic Substances (PTS).[90]

Finally in 2001, SPREP issued a report called *Improving Ships Waste Management in Pacific Islands Ports*, one of the first tangible outputs of the PACPOL initiative (Project SW1) to review ships' waste reception facilities and the management of these facilities within the Pacific.[91] The review contains alarming findings, notably that having surveyed around 30 ports, harbours and marinas in 18 PICs, only five are currently party to *MARPOL 73/78*, and none of these meet *MARPOL's* requirements to provide adequate ships' waste reception facilities.

For many PICs, being able to provide this type of facility is a major impediment to adopting *MARPOL 73/78*, many of the smaller PICs in particular struggle in managing their own domestic waste let alone that received from shipping.[92]

The tasks ahead will be challenging for SPREP. However the organisation appears to have taken this in its stride and provided recommendations at both the regional, national and international level, again suggesting a more strategic advisory role has been adopted. Rather than abandon *MARPOL*, SPREP sees it's as necessary for the IMO to relax some of these responsibilities where warranted,[93] recommending a waste reception facility on islands able to receive and manage waste from less fortunate members.

The report also notes that transferring waste around the region contravenes international and regional policy such as the *Basel* and homegrown *Waigani Convention*. SPREP adopts a pragmatic 'can do' approach:

> These should be reviewed to determine if the net benefits from these restrictions outweigh the regional costs of pollution and ineffective waste management.[94]

If PACPOL is to be a success then some common sense will need to pervade. SPREP appears to have succeeded in fulfilling objective one of PACPOL (assess the current and potential risks of ship-sourced marine pollution in the Pacific islands region) with objective two (assist SPREP island members to develop better capacity to effectively prevent and respond to shipping incidents and marine pollution) firmly underway. NATPLANs are being developed and SPREP Marine Pollution Advisor Sefa Newadra spends much of his time around the region delivering seminars and training on marine spill risks and responses as well as invasive marine species.

Arguably where SPREP has not been effective thus far lays in the increased adoption and implementation of marine pollution Conventions among member states (notably *MARPOL 73/78* and the *SPREP Convention*). However here too some progress is being made.

Regional Marine Pollution Prevention Act for Pacific island countries

It is clear now from the above achievements of the last two years that SPREP has taken a more pragmatic and realistic approach in realising the goals laid out in both the 2001-2004 Action Plan as well as in PACPOL. In so doing, positive results are being achieved in managing marine pollution. Yet SPREP believes that realistic sustainability

[90] SPREP *2001Annual Report* (2002) p. 21.
[91] SPREP *Improving Ships' Waste Management in Pacific Islands Ports* (2002) p. ii.
[92] Ibid p. ii-iii.
[93] Ibid p. xi.
[94] Ibid p. xi.

will only come once the *MARPOL 73/78* and *SPREP Conventions* are widely adopted at the grass roots level.

Preventing this are a number of issues including reception of ships' waste *(MARPOL)* and consideration given to the transportation of hazardous goods *(Waigani Convention)*. As observed already, SPREP has recently been given the green light by the Marine Environment Protection Committee to create a draft amendment for *MARPOL*, which will allow a more flexible view on a case-by-case basis. This is at the international level. At the regional level SPREP, the SPC and the IMO are creating a Regional Model Marine Pollution Prevention Act under the auspices of PACPOL.

The Act is still under amendment, loosely though the structure of the Act is as follows:

> Part I – Preliminary
> Part II – Marine Pollution Prevention
> Part III – Marine Pollution Response
> Part IV – Marine Casualties
> Part V – Liability and Compensation For Pollution Damage From Ships
> Part VI – Dumping and Incineration of Wastes
> Part VII – Miscellaneous Provisions[95]

Because the Act is still at draft stage it is open to substantial change. However it does combine the very best of international and regional Conventions already discussed, including the *SPREP Convention,* the *London Convention, MARPOL 73/78*, and the *Intervention Convention*.[96] Neither the *Waigani Convention* nor the *Basel Convention* are mentioned, or legislation pertaining to the transportation of hazardous materials. Perhaps this will come later, or alternatively the *Waigani Convention* will standalone. This remains to be seen.

The draft Act is comprehensive in other areas, including liability and compensation which may now be an incentive for erstwhile reluctant PICs to adopt and implement an IMO recognised marine pollution Convention.

If the Act is finalised in the near future and ratified across the South Pacific, then from the point of view of fulfilling a large proportion of the PACPOL objectives, those individuals behind SPREP's marine pollution management programme have every right to regard it as a success.

Conclusion

There are many environmental pressures faced by the people who live in the South Pacific, not least the need for a healthy marine environment on which the region is heavily dependent. This coupled with social and economic hardships as well as the lasting legacy of colonialism will always make international maritime law a difficult pill to swallow.

Prior to the study period of 2000, SPREP appears to have been waylaid in project focused activities that it was unable to fulfil due to the complex nature of the projects themselves and the lack of resources required to continue monitoring any developments. However, since then with the adoption of a more pragmatic approach coupled with a long term strategy (as illustrated by PACPOL), SPREP is making significant in-roads in

[95] SPREP, SPC & IMO *Regional Model Marine Pollution Prevention Act: A Template for Pacific island countries* (June 2003) p. 1 – 2.
[96] Ibid p. 11 – 12 .

reducing and managing marine pollution and enjoying success in other areas of environmental sustainability.

International Conventions such as *UNCLOS* and *MARPOL 73/78* are both a blessing and a hindrance for the region, especially in terms of adoption and enforcement. This issue alone will always restrict SPREP's overall aptitude for dealing with marine pollution, as there is unlikely to be a sudden win fall of resources (personnel or financial) to assist the matter and this really is what is needed to comprehensively address marine pollution.

Commentators such as Gleik believe that if today's maritime agenda is more closely considered, it is evident that if meaningful action is to occur, it will have to happen at both regional and national levels, where differences in culture, ideology, political and bureaucratic systems as much as geography and resource endowment can be accommodated.[97]

Through a mixture of gritty determination, programs aimed at research and self-help and by 'translating' international law and applying it at the regional level, SPREP as the principal environmental coordinator rather than operator is proving itself a worthy custodian of environmental health in the South Pacific. An interesting subject for continued research would be whether or not SPREP would further increase its aptitude in this area if it were to become a stand-alone inter-governmental regional agency as opposed to operating through other agencies such as the SPC.

For now though, I leave the final word to recently appointed SPREP director Asterio Takesy:

> Unless concerted efforts to improve integrated management processes are implemented as a priority, continued non-sustainable use of our marine and coastal resources, habitat degradation including pollution of coastal waters and threats due to invasive species, will result in future generations of Pacific Islanders inheriting severely degraded marine environments. Strong political will is required to support efforts, nationally and regionally, to avoid this pessimistic outlook from materialising, otherwise...[98]

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[97] Gleik, P "Environment and Society: The Clear Connections" in *Bulletin of Atomic Scientists* (1991) pp. 17-21.

[98] Asterio Takesy "Keeping Our Pacific Ocean Healthy" sourced at *Pacific Islands CC* (March 2004) <http://www.pacificislands.cc/pm32004/pmdefault.php?urlarticleid=0052>.