

Pacific Regional Solid Waste Management

Strategy 2010-2015

Implementation Update



SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME

A six-monthly update of waste management in the Pacific Islands

June 2010

SPREP and AFD Sign Financing Agreement

On 15 April 2010, SPREP signed an important agreement with the French Development Agency (AFD) to finance a Regional Solid Waste Management Initiative. The agreement, which has been 5 years in the making, will inject 1 Million Euros into the waste management work area in the region over the next four years.

This Regional Initiative has three components:

COMPONENT 1 will support the development and delivery of a vocational training program in waste management through regional institutions.

COMPONENT 2 will contribute to the reduction of the environmental impacts of waste oil in participating PICTs through the development of appropriate frameworks for waste oil collection and disposal.

COMPONENT 3 will provide support to PICTs to prepare country activity proposals that will be considered subject to additional funding being secured This regional project will be implemented by a Technical Expert hired through an international competitive bidding process. The addition of this Expert to the Waste and Pollution Prevention Team at SPREP will also strengthen the Secretariat's ability to respond to Members' priorities.

This project is also to be used as co-financing for a UNEP regional project funded under the GEF PAS umbrella, which will address POPs Release Reduction Through Improved

Management of Solid and Hazardous Wastes. This UNEP project, which is anticipated to begin in 2011, aims to improve the environmentally sound use of chemicals, to reduce releases of POPs and other persistent toxic substances to the environment and to manage previously contaminated sites.

The Secretariat welcomes these new partnerships with AFD and UNEP, and will seek to leverage additional resources to support further implementation of the Regional Strategy.

Terminal Evaluation of SWMPOR is Positive

The Terminal Evaluation Report of the Solid Waste Management Project in Oceania Region (SWMPOR) was officially endorsed by the seventh and final meeting of SWMPOR's Joint Coordinating Committee on 16 February 2010.



SWMPOR counterparts endorse the Terminal Evaluation Report

SWMPOR was a 4-year collaboration involving JICA, SPREP, and the Government of Samoa. The main purpose of

SWMPOR was to support the implementation of the Pacific Regional Solid Waste Management Strategy, through four broad outputs:

- 1. Disseminate the good management practices at the Tafaigata landfill in Samoa.
- 2. Support the preparation of national solid waste management strategies and action plans in line with the Regional Strategy.
- 3. Enhance the exchange of solid waste management information among the PIF countries through SPREP.
- 4. Explore appropriate measures to manage abandoned vehicles and other bulky wastes

The main finding of the Terminal Evaluation Report was that the

Project Purpose has been substantially achieved. The Report goes on further to highlight that positive impacts have been observed within Samoa as well as other PIF countries especially with regard to the drafting of NSWMS. In addition, the sustainability of the Project is moderately assured.

The findings of the Terminal Evaluation Team are encouraging and a testament to the hard work and dedication of everyone involved.

The Government of Japan through JICA has committed to implementing a regional 5-year follow-up project, which will build on the successes of SWMPOR. More details on this will be posted in a later newsletter.

Acronyms

AFD: Agence Française de Développement

JICA: Japan International Cooperation Agency

GEF PAS: Global Environment Facility Pacific Alliance for Sustainability

NSWMS: National Solid Waste Management Strategy

PICTs: Pacific Island Countries and Territories

PIF: Pacific Island Forum

SWMPOR: Solid Waste Management Project in Oceania Region

UNDP: United Nations
Development Programme

UNEP: United Nations Environment programme

The Regional Solid Waste Management Strategy in Brief

VISION: A healthy and a socially, economically and environmentally sustainable Pacific for future generations.

GOAL: PICTs will adopt cost effective and self-sustaining solid waste management systems to protect the environment, in order to promote a healthy population and encourage economic growth

PRIORITIES FOR ACTION:

- Sustainable Financing
- Integrated Solid Waste Mgmt
- Legislation
- Awareness, Communication & Education
- Capacity Building
- Environmental Monitoring
- Policy, Planning & Performance
- Solid Waste Industry
- Biomedical Waste

For a copy of the Regional Solid Waste Management Strategy visit http://www.sprep.org/publication/pub top.asp

In the Spotlight

Waste Management in Tokelau

Tokelau is a non self-governing territory of New Zealand which consists of three coral atolls with a combined land area of 12 square kilometers situated 3-5 metres above sea level. Its population of about 1400 is approximately equally distributed among the three atolls.

with other atoll Αs countries, Tokelau faces many challenges in pursuit of a sustainable system of solid waste management including limited and unsuitable lands for disposal, heavy reliance on imported goods, limited human and financial resources. Despite these challenges, Tokelau has achieved a measure of success through the hard Waste work of its Champions.

Collection



Each atoll is provided with a waste collection service of at least twice per week.

Segregation

A system of segregation exists on each atoll. Kitchen



wastes are fed to pigs, aluminium cans, and glass (beer bottles) are sent to Samoa for recycling and reuse, while the remaining wastes are either burnt or dumped at the dumpsite.

Recycling



Tokelau has an agreement with Samoa which allows them to ship baled aluminium cans to private recyclers in Samoa. Tokelau benefits by reducing its waste stream and generating revenue, while the recycler gets more cans

to improve business operations.

Disposal

Waste disposal practices, although not ideal, have improved in recent years with the centralization of dumping at a single dumpsite on each atoll, where the waste is buried and/or burnt.

Future Directions

In the 2nd quarter of 2010 Tokelau commissioned the review of its solid waste management strategy and the development of an Integrated Waste Management, Water and Sanitation Action Plan. Priorities for action include biomedical waste disposal, dumpsite rehabilitation, and recycling system expansion.



Waste Disposal site in Fakaofo Atoll, Tokelau

Note: This list of activities may not be exhaustive

PRIORITY	SPREP & PICT ACTIVITIES									
Sustainable Financing	2009: Tuvalu completed a feasibility study of economic instruments for waste management which recommends a "Waste Levy"; Recommendations awaiting government approval before implementation									
	2010: Majuro Atoll Waste Company in Marshall Islands expanded its paid collection services to businesses, generating over US\$100,000 in annual revenue									
Integrated	2009: Disposal site plans developed for existing disposal sites in Tuvalu									
Solid Waste Management	Apr 2010: The Government of Fiji approved UNDP assistance to develop a container recycling (deposit-refund) system									
management	Mar 2010: Clean-up Niue Campaign launched in Niue to clear villages of rubbish and demolish unsafe empty houses									
	Mar 2010: SPREP and JICA published a waste disposal guide (available for download from www.sprep.org)									
	May 2010: Fiji undertook a consultancy to evaluate policy options for reducing the use of plastic bags									
	May 2010: Pre-Feasibility study for Waste to Energy Power Plant in Majuro, Marshall Islands completed									
	Aug 2010: Embassy of Japan Grassroots Grant received for over 1,200 bins valued at US\$ 97,000; Each household in Majuro, Marshall Islands is now provided with a 96-gallon wheelie bin replacing 20 & 30 cubic yard bins, with once per week collection									
	2010: Residential waste collection trucks procured to service 96-gallon wheelie bins on Majuro (2) and Ebeye (1); Ongoing recycling efforts to compost organic waste and export aluminium and other non-ferrous metals, lead, PET plastics. Revenue from recycling activities exceed US\$60,000 annually									
Legislation	Dec 2009: SPREP assisted Vanuatu to develop a draft Waste Operations and Services Act, and the Litter and Waste Control Regulations, which are currently being reviewed									
	March 2010: The Environment (Prescribed Activities) Regulation 2002 in PNG amended to accommodate Environment (Ban on Non-Biodegradable Plastic Shopping Bags) Policy 2009 — implementation to follow gazettal of regulation									
	2010: Waste litter control regulation finalized for Tuvalu and is waiting to be signed									
Awareness, Communication	Ongoing: Fiji's Department of Environment embarked on a coordinated enforcement drive of the Environment Act with the cooperation of different agencies									
& Education	Ongoing: Radio programs, pamphlets, jingles and school visits conducted every quarter in Tuvalu.									
	Feb 2010: Honiara City Council supported by Ministry of Environment in Solomon Islands embarked on a solid waste awareness program and ongoing clean up campaigns with major communities in Honiara town									
	Jun 2010: Tonga holds national schools logo and slogan competition for a 'No-Littering' campaign									
Capacity Building	Feb 2010: SWMPOR Wrap-up Workshop was held in Samoa, and attended by representatives of 13 PICs—it was an important networking opportunity for PICs									
	Feb 2010: University of PNG students conducted studies on waste management including waste audit in pilot area, waste oil, medical waste and composting									
	Feb 2010: SPREP and JICA conducted basic waste management training in the Solomon Islands									
	May 2010: SPREP and JICA conducted practical basic waste management training in Niue									
	June 2010: Solid waste management training workshops with outer island planners in Tuvalu									
Environmental Monitoring	No activities reported									
Policy, Planning & Performance	Jan 2010: The Department of Environment & Conservation was established in Vanuatu under the Environmental Management and Conservation Act No. 12 of 2002, and replaces the Vanuatu Environmental Unit									
	Jan 2010: PNG's Department of Environment & Conservation progressed the development of an Environmental Sustainability Economic Growth Policy Framework in preparation for establishment of an Environment Protection Authority; National Capital District Commission developed and consulted on a draft waste management Policy									
	The following draft waste management strategies and actions plans were developed with the assistance of SPREP and JICA									
	• FSM National Solid Waste Management Strategy 2010-2014 (Dec 2009)									
	Kosrae State Solid Waste Management Plan 2010-2014 (<i>Dec 2009</i>)									
	 Vanuatu National Waste Management Strategy & Action Plan 2010-2015 (<i>Mar 2010</i>) Niue Integrated Waste Management Strategy & Action Plan 2010-2015 (<i>May 2010</i>) 									
	March 2010: Auditors General Offices in ten (10) PICs complete a Cooperative Performance Audit on Solid Waste Management in their respective countries—results to be tabled with respective Cabinets/Congresses									
	Apr 2010: SPREP was part of a team commissioned by the Ongoing Government of Tokelau to review the Tokelau Sustainable and Integrated Solid Waste Management Strategy 2007-2010 and to develop an Integrated Waste Management, Water and Sanitation Action Plan									
	July 2010: Solid waste data collected from all Tuvalu islands in preparation for drafting of the National Waste Management Strategy									
	2010: Waste stream analyses for each village on Majuro, Marshall Islands completed									
Solid Waste Industry	No activities reported									
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The Table below shows regional activities under the Pacific Regional Solid Waste Management Strategy 2010-2015. The

rows in the table without a named project represent an opportunity for partnering with SPREP to deliver regional projects, or for partnering with individual PICTs on a bilateral basis.

		Independent Countries Territories																					
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Strategic Action (shortened version adapted from Pacific	Lead	00			l_							Solomon Islands		١.	_	American Samoa	French Polynesia		New Caledonia			Wallis and Futuna	Funding
Regional Solid Waste Management Strategy 2010-2015)	(SPREP	Cook Islands	FSM	₽	Niibali	RM	Nauru	Niue	Palau	PNG	Samoa	non	Tonga	Tuvalu	Vanuatu	ican	h Pc	Guam	ය ව	CNMI	Tokelau	and	assistance secured?
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SUSTAINABLE FINANCING																							
Disseminate information on economic instruments	SPREP								SDDI	ED. I	Jpdat	o ovi	etina	nubli	catio	n							Yes
Assess and apply economic instruments in PICTs	PICTS				Т	Т	Т		JI KI	LI . (Jpuai	CONI	Suriy	publi	Latio			Т		Т	Т		163
117	SPREP				╁	+	+											+		+	+		
Develop regional projects on sustainable financing INTEGRATED SOLID WASTE MANAGEMENT	JEKLE				H																		
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Develop & disseminate model 4R strategy Develop Retired 4R strategies				- SF	PKI	EP: De	veiop	11100	lei Sii	aleg	y bas	eu or	1 1622	0115 1	TOITI .	JICA	pilot	proje	CUIII	FIJI	Т		Yes
Develop national 4R strategies	PICTS			\vdash	⊬	+	\vdash			\vdash	\vdash			_				\vdash	\vdash	\vdash	\vdash		
Asses & Demonstrate new recycling methods	SPREP				_		CDE)FD	D				4-1				1:						NI-
Develop & disseminate regional waste mgmt guidelines	SPREP						SPF	KEP:	Deve	iop e	enviro	nmer	ntai m	ionito	oring	guiae	elines	T		_	_		No
Improve existing disposal sites	PICTs				╀	-	-											-			-		
Develop new landfills	PICTs SPREP					CI :				.1	1			<u> </u>	<u> </u>		-	1	-	1	+	-	D .
Research and develop suitable disposal techniques				JIC	A:	Study										_	_						Proposed
Develop regional management options for difficult waste	SPREP					AFE): Dev	relop	wast	e oil	mana	geme	ent pi	rogra	mme	base	ed on	1 EPR	(Yes
Improve waste collection service	PICTs																						
LEGISLATION					L	_	1	-	-		1	-			-	-	-	1		1	1		
Draft approriate waste management legislation in PICs	SPREP			_	L		1			_	_							1	_	1	1		
Enhance capacity to enforce legislation	SPREP				L																		
Develop & implement enforcement plans	PICTs				L																		
Engage with Attorney General Office	PICTs																						
AWARENESS, COMMUNICATION AND EDUCATION																							
Develop & disseminate model communication strategy	SPREP																						
Develop national integrated communication strategies	PICTs																						
Develop a waste management campaign	SPREP				Г																		
Conduct regular waste forum or conference	SPREP				Γ																		
Activate and implement existing plans	PICTs				Γ																		
CAPACITY BUILDING																							
Develop regional benchmarks in SWM	SPREP				Т																		
Assess capacity gaps for SWM in PICTs	PICTs				T																		
Develop regional training priorities	SPREP				T																		
Implement capacity building programmes	PICTs				T																		
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Conduct an annual training course in municipal SWM	SPREP	SPREP -			JICA, SPREP: Training in Japan														Proposed				
Develop and deliver a training programme for atolls	SPREP				Т			Ī			l	 	Ι	Ι									
Develop a country attachment scheme	SPREP			IIC	Δ	SPRE	P: Cn	untry	attac	hme	nt nro	naran	nme										Proposed
Develop a country attachment schome	OI IXEI			310	,, ,,	AFD,								vaste	man	agen	nent	COLIFS	E	_	_		Yes
Develop a SWM training programme at regional institutions	SPREP					SPR																	No
Develop and maintain an inventory of skilled people	SPREP					51 10	_1 , 0	51,0			Deve						JI 30 0	at 05	<u> </u>				Yes
ENVIRONMENTAL MONITORING					Г		Π		JI 1		Deve	lop o		uata	Dasc			Π		П	Π		103
	PICTs			\vdash	\vdash	+	+				\vdash							+		\vdash	+		
Develop national environmental monitoring plan Develop environmental monitoring capacity of labs	SPREP				\vdash	+	+	\vdash	\vdash	\vdash	+	\vdash	\vdash	\vdash	\vdash	\vdash	\vdash	+	\vdash	+	+		
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POLICY, PLANNING AND PERFORMANCE	DICTO	\vdash		\vdash	\vdash	+	+	-	-	\vdash	+	-	\vdash	\vdash	\vdash	\vdash	\vdash	+	\vdash	+	+	-	
Develop national waste management policies/strategies	PICTs				٨٢٠	D. D-	ion-'	nre!	ot !m	nle:-	onte	 +b	 	רשב	.D. P	00-1-	Lo-t	nia-!	[rt.			V
Strengthen regional coordination of SWM	SPREP				_	D: Reg		, ,															Yes
Fetablish/review national goordination of CNA	DICT			5	PK	REP: Ir	lueas	eres	Source	es 10	was	ie ma	anage I	:men	10 I	3%0) 3P	KEP	กนตดิ	jet	T		No
Establish/review national coordination of SWM	PICTS					IICA C	tor	rd	001-	011-27	 							\vdash		+	+		Dron
Develop standards for collecting and analysing data	SPREP				J	IICA: S	landa	ara w	aste a	audit	prog	am						1		1	1		Proposed
SOLID WASTE INDUSTRY	DICT	H		_	\vdash	+	-	-	-	-	+	-	-	-	-	-	-	-	-	+	+	-	
Implement institutional and economic incentives	PICTs			<u> </u>	H	+	-				-		_	-				-		-	-		
Disseminate solid waste data	PICTs				L	_	-	-	-	-	-	-		_	-	-	-	-	-	-	-		
Cultivate and strengthen partnerships	Both																						
BIOMEDICAL WASTE		\vdash		<u> </u>	L	_	_						_	_				_			_		
	SPREP									1									1				1
Develop model medical waste management strategy Develop a national medical waste management strategy	PICTs	\vdash	_	_	1	_	-	_	_	-	+	_			_		_	+	_	-	-	-	

PICT Case Study



Tsunami devastation in Lalomanu Village, Upolu, Samoa

Photo: Stuart Chape

Post-Tsunami Clean up

On 29th September 2009 at about 6:48 am, an earthquake of magnitude 8.0 struck 120 miles south of Apia, the capital of Samoa. The earthquake triggered a devastating tsunami that hit American Samoa, Samoa, and Tonga, and resulted in a tragic loss of lives.

The tsunami also generated a lot of debris and waste which had to be managed. This article describes a few of the lessons learnt from the clean-up of the waste in Samoa.

Act quickly

Its important to act quickly to restore the cleanliness of affected areas as it will have positive psychological and public health benefits.

Use the right equipment

It is generally more cost effective to use heavy equipment such excavators and loaders for clearing debris from large areas of land and exposing waste buried by sand. Excavators are flexible in working in both dry and swampy conditions, while loaders are better in flat landscapes conditions. Light dump trucks (4-6 tons) are also appropriate more effective as they can easily find a path through the affected areas. In the water, manual labour aided by utility boats, is best for collecting debris.

Segregate waste

Segregation facilitates easier recovery of materials for recycling or reuse in the post-disaster rebuilding effort, and reduces the cost of transportation and disposal of the waste that has to go to a landfill.

It should be noted that much of the debris can be partially or fully covered by sand and mud. It is therefore reasonable to expect the actual amount of waste recovered to be more than twice the amount estimated from initial surveys.

Employ locals

Residents of the affected communities should be

involved in clean-up activities as much as possible. The income each individual earns from this work will help to ease the burden of the trauma for the worker and his/her family.

Be safe

The use of appropriate safety equipment is essential for the clean-up operation. For clean-up on reefs providing a dedicated safety boat, reef shoes and gloves for all personnel is important

More information on posttsunami assessments can be downloaded from www.sprep.org

REFERENCE:

Powell, A.R. (2009) Marine protected Areas and Reef Cleanup plan: A plan to remove debris from inside the reef around tsunami affected regions of Samoa. Government of Samoa.

Sagapolutele, F (2010). Report on the outcome of the community based post-tsunami waste management and cleaning up pilot project, Samoa. Japan International Cooperation Agency.





SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME

PACIFIC YEAR OF BIODIVERSITY

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Phone: +685 21929 Fax: +685 20231 E-mail: sprep@sprep.org Web: www.sprep.org SPREP was established in 1993 as an intergovernmental organization, with the mandate to promote co-operation in the Pacific region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generation.

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

For waste management and pollution matters contact the waste & pollution team at SPREP:

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In other SPREP news...

Preparing the "One Pacific" for international biodiversity negotiations in October

A three day meeting brought the Pacific region closer together as the 14 island countries prepare to face the world at the 10th Conference of the Parties for the Convention on Biological Diversity in October. The international agreement was formed to help conserve the worlds biodiversity and establish targets to halt the current rate of biodiversity loss. The 3-day meeting was held at the Tanoa International Hotel in Nadi, Fiji from 16-18 August 2010.



The Secretariat of the Pacific Regional Environment Programme (SPREP) brought together over 30 people from Pacific Island Parties, donors, partners and other interested conservationalists to discuss and deliberate on key biodiversity issues for countries and the region and how they will be approached at the international arena

"To my mind this has been one of the most effective support meetings," said Mr. Stuart Chape, the Island Ecosystems Programme Manager for SPREP. "I think we have all benefited from this meeting, and SPREP will continue to support you so there is effective engagement and a strong Pacific Voice at the international gathering on Biodiversity in October."



SPREP is now preparing a Pacific brief on the agenda issues that will help the Pacific representatives at the world meeting, SPREP will also assist with a communications plan to raise a 'One Pacific Voice' at side events, exhibitions and media work while at the 2010 Conference of the Parties in Nagoya, Japan. The foundation for this work stems from the three day meeting in Nadi, Fiji, whereby the 11 Pacific Islands parties reached common ground for a Pacific approach.

It is at the 2010 Conference of the Parties for the Convention on Biological Diversity that the Pacific can showcase the conservation efforts underway in the region, for which there are many successes. This will also be the opportunity to highlight the challenges the Pacific region is faced with, such as the impact of climate change on our biodiversity, so that international communities and partners may be able to provide the support needed to address these challenges.

For more information, visit: http://bionesian.blogspot.com/