

PACIFIC OCEAN POLLUTION PREVENTION PROGRAMME (PACPOL) 2010–2014 REVISION

~DRAFT~

Strategy and Workplan



“... to provide overall leadership and technical assistance to improve the prevention and response to ship sourced marine pollution in the Pacific Islands region”

Pacific Ocean Pollution Prevention Programme 2010-2014

Strategy and Workplan



Revised PACPOL Strategy and Workplan prepared by Asia-Pacific ASA (APASA) for the Secretariat of the Pacific Regional Environment (SPREP)

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Document control form

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EXECUTIVE SUMMARY

The Secretariat of the Pacific Regional Environment Programme (SPREP) in partnership with the International Maritime Organization (IMO) has been implementing the Pacific Ocean Pollution Prevention Program (PACPOL). The PACPOL strategy was approved at the 10th SPREP meeting in Apia 1998 with a work plan for a 5 year period (2000-2004).

Asia-Pacific ASA was contracted by SPREP to review the 2000-2004 PACPOL strategy for Pacific Island Countries and to:

- Review the effectiveness and sustainability of the activities carried out; and
- Review the current arrangements for management of marine pollution from ships.

Recent major events in 2009, including the oil spill from the Pacific Adventurer on the East coast of Australia, the grounding of the Forum Samoa II in Apia Harbour, Samoa and the tragic loss of the ferry Princess Ashika off Tonga, highlight that shipping accidents do occur and are an ever present reality for the Pacific Islands. Beyond the significant economic and safety risks posed by shipping accidents there is a universal concern amongst PICTs to better protect the marine and coastal environment, the natural and cultural resources of island nations as well as the general safety of the public.

In order to determine where the PICTs are at with marine pollution awareness, prevention, preparedness and response, Asia Pacific ASA, contracted by SPREP, used the outcomes of stakeholder consultations, interviews, telephone enquiries and a detailed questionnaire on the effectiveness of the existing PACPOL Strategy. With this information we were able to determine the pro's and cons of the current PACPOL strategy and suggest improvements. This information, coupled with International Best Practice forms the basis of the new and revised strategy; PACPOL Strategy 2010-2014.

The review found that PIC governments, authorities, regional institutions, companies and stakeholder groups widely agreed on the need to continue the PACPOL programme and that it is being managed professionally by SPREP but greatly under resourced. Improvements were suggested in the area of communication with stakeholders, the delivery of relevant information and technical advice to PICTs and additional regional and local marine pollution prevention and response projects were suggested.

A major constraint was that few maritime administrations, marine authorities and port organizations in the region currently have the capacity, or are resourced sufficiently, to maintain an up-to-date understanding of the evolving nature of international shipping marine pollution conventions. Implementing local enacting legislation and the ability to adequately enforce those laws already in-place were also seen as major barriers to progress.

Stakeholder consultation identified three overarching areas of concern with PACPOL. They are:

1. High staff turnover in the PICTs resulting in a knowledge gap,
2. A general lack of awareness of PACPOL,
3. The inability to find and resource the appropriate documentation.

In order to adequately deal with the above mentioned concerns and problems a number of recommendations have been actioned that will be included in the revised PACPOL strategy.

Firstly, the PACPOL strategy document itself will be significantly shorter, less verbose and more succinct with at its focal point the new workplans. The format of the document will also be changed to make the strategy easier to read, easier to access and all in all friendlier to use.

The new workplans build on the successes of the PACPOL strategy where possible and intend to address the shortcomings and concerns voiced by the stakeholders. The revised workplans include the survey of Introduced Marine Species (IMS) which was not conducted due to funding constraints. This project has been updated, a new possible donor identified and included in the revised PACPOL strategy. Other new workplans include the effects of noise and cruise liners on the PICTs.

Whilst some PICTs have signed onto IMO international conventions the level of understanding, compliance and enforcement is poor and only a few PICTs have enacted suitable local legislation. This highlights the need for further education, training and awareness. This will be addressed in a number of different forms within the new PACPOL strategy by including in country training programs, exercises and drills, the creation of training programs to be made available on-line and on cd-rom and the creation of a stand-alone PACPOL website to hold all the valuable information for stakeholders regarding the PACPOL strategy.

A major outcome of PACPOL was the development and adoption of the regional cooperative marine pollution response arrangements and contingency plan called PACPLAN. Unfortunately PACPLAN, and what it can provide, is poorly understood and few PICTs are aware of the wealth of human and equipment support that could be provided by the US, Australia, France and New Zealand to support an incident anywhere within the region. There is a need for better communication of these arrangements amongst PICTs.

The capability to respond to any spill incident in the PICTs and territories is very limited. It is our view that the capabilities are insufficient for the risks posed, in particular for the risks posed in HNS and dangerous goods incidents on vessels and ship fires.

It has become evident that countries, companies and resources are still not fully prepared to rapidly come together in country to assist regionally in a major pollution event. To avoid duplication of effort with limited personnel and resources there is a need to strengthen the concept of “regional pool of expertise” rather than all PICTs having all capabilities in marine pollution preparedness and response.

The present focus mainly on oil spill response, combat equipment purchasing and operational aspects is diverting attention away from the prevention and preparedness for other ship sourced marine pollutants. It is for this reason that the revised PACPOL strategy will focus on other sources of marine pollution such as marine litter, ship noise and hazardous and noxious substances. A more holistic PACPOL strategy will expand its activities to include major marine pollution issues associated with fishing vessels, recreational craft and the cruise ship industry.

Greater cooperation with the SPC Regional Maritime Programme (RMP), the Pacific Islands Maritime Association (PacMA), the Pacific Countries Ports Association (PCPA) and local and overseas educational institutions will provide a larger pool of regional expertise and increase the source of marine pollution research studies.

Another major outcome of PACPOL was the development of the environmental management guidelines for the operation of Pacific Island ports. Few stakeholders interviewed neither had any knowledge of these guidelines nor have used them in local port management and operations. A recommendation is that previous projects and outcomes are better communicated to stakeholders through a one-point-delivery of reports, summaries and technical documentation.

The development of local marine pollution prevention and response policies, procedures and best practices is often lengthy and complex for each PICTs and duplication of effort and lack of uniformity would result. PACPOL should provide additional technical and procedural guidance documents, checklists and templates for use in PICTs that are based and comply with best practice internationally.

The SPREP Conventions and its Protocols are consistent with the London Convention however few PICTs are planning, managing and regulating the disposal of wastes at sea, of particular concern the disposal of dredging wastes. We recommend the creation of guidelines for the disposal of dredging wastes based on International Best Practice and international guidelines.

Recent research has concluded that more than 50% of marine pest introductions have occurred through biofouling, (the undesirable accumulation of animals, plants and micro-organisms on vessels' hulls and equipment). With the increase of commercial fishing fleets, recreational and cruise ships within the PICTs there needs to be an increased focus on small vessel biofouling issues.

The PICTs also have an increasing issue with derelict and abandoned vessels. The revised PACPOL strategy will consider more work in this area on, extent of the problem and whether the PICTs should adopt the Nairobi International Convention on the Removal of Wrecks (WRC).

The revised PACPOL strategy will endeavour to follow international best practice and reduce the amount of ship-sourced marine pollution in the Pacific Island Region in a holistic and regional manner. The mission statement of the revised PACPOL strategy is to provide overall leadership and technical assistance to improving the prevention and response to ship sourced marine pollution in the Pacific Island region. This will be accomplished by dedicated and continuous efforts to improve the islands national preparedness, prevention and response capabilities.

TABLE OF CONTENTS

EXECUTIVE SUMMARY IV

TABLE OF CONTENTS 1

MISSION STATEMENT..... 2

PACPOL STRATEGIC OBJECTIVES 3

METHODOLOGY 6

WORK PLANS SUMMARY 7

PACPOL PROJECT SHEETS - PREVENTION..... 8

PACPOL PROJECT SHEETS CONTROL..... 16

PACPOL PROJECT SHEETS - MONITORING..... 18

PACPOL PROJECT SHEETS - MITIGATION..... 22

PACPOL PROJECT SHEETS - MANAGEMENT 27

MISSION STATEMENT

MISSION

The Pacific Ocean Pollution Prevention Programme (PACPOL) mission is to protect public health, safety, environment and natural resources of the Pacific Islands from the effects of ship sourced marine pollution.

VISION

PACPOL's vision is that the people of the Pacific islands are better able to prevent, minimise and mitigate ship sourced marine pollution.

OVERLYING CORE PRINCIPLES

1. **Prevention of marine pollution** - through improved awareness, improved planning and operational practices and systems in ports and on vessels and through risk analysis and reduction initiatives.
2. **Control of marine pollution** - through the adoption of IMO Conventions and Legislative Framework and educational programs.
3. **Monitoring of marine pollution** - through improved surveillance, enforcement, training and new technology developments.
4. **Mitigation of marine pollution** – through more effective response planning, incident support, response equipment, systems and training.
5. **Management of marine pollution** – through the development, funding, implementation and completion of prevention, preparedness and response projects and initiatives.

PACPOL STRATEGIC OBJECTIVES

- ❖ **Prevention** of marine pollution through improved awareness, improved planning and operational practices and systems in ports and on vessels and through risk analysis and reduction initiatives.
 - To make environmental considerations a priority in the planning and operations of shipping in the Pacific
 - Conduct on-going risk assessments of vessel types, movements, frequency and cargos to determine high risks locations for marine spills and shipping waste disposal requirements
 - Promote awareness amongst the general public, in particular school age children, on the sources and issues involved in marine pollution and to develop a life long respect for the need to protect our coastal and marine environmental heritage
 - Promote International best principles and practices in the maritime business & port development & operation



- ❖ **Control** of marine pollution through the adoption of IMO Conventions and Legislative Framework and educational programs
 - Promote and where possible implement world's best practice in marine environment protection from ship sourced wastes
 - Reinforce the internationally accepted practices of "polluter pays" with the establishment and enforcement of local marine pollution protection legislation and of the "potential polluter pays" with the focus on national levy system to support in-country resources

- Promote awareness amongst fishing vessel crews, recreational vessel operators, ship owners, shipping agents and others involved in the maritime trade and industry on their legal obligations to comply with local and international rules, legislation and conventions in regards to ship sourced wastes
 - Maintain ongoing activities for capacity building and institutional strengthening in the area of marine pollution prevention and response
- ❖ **Monitoring** of marine pollution through improved surveillance, enforcement, training and new technology developments
- Extend the knowledge of stakeholders in marine pollution prevention, enforcement and response as it relates to local and international fishing vessels, recreational craft and cruise liners
 - Promulgate uniform policies, consistent principles, guidelines and practices in marine pollution investigation and prosecution
 - Continue to learn the lessons of maritime accidents, incidents and spills that affect the marine environment by sharing case studies and incident reviews from member countries
 - PACPOL must be sufficiently responsive to the pace of change in maritime pollution response, new and emerging technologies, training techniques and expectations



- ❖ **Mitigation** of marine pollution through more effective response planning, incident support, response equipment, systems and training.

- Take a leading role and pro-active approach to the adoption and implementation of PACPLAN
 - Focus on establishing, maintaining and improving regional spill response support systems for PACPLAN
 - Establish basic policies, practices and procedures to ensure efficient and effective preparedness and response at a national level amongst PICTs
 - Improve the capacity and capability of PICTs to manage and respond to chemical spill incidents
 - Provide direct assistance to PICTs to further develop national and local marine pollution response contingency plans
 - Optimise the use of limited resources and trained spill response personnel in the region through the establishment of a Regional Spill Response Team and systems to ensure fast activation, transfer and deployment of staff and equipment to the incident scene
 - Implement a consistent approach to the establishment of a regional policy and decision making guidelines on “Places of Refuge” for maritime incidents in conjunction with RMP SPC
- ❖ **Management of marine pollution through the development, funding, implementation and completion of prevention, preparedness and response projects and initiatives**
- Represent SPREP at local, regional and international forums on ship sourced marine pollution prevention and response activities in consultation with PICTs stakeholders
 - Conduct marine pollution prevention projects and initiatives that meet the priorities and needs of PICTs in a coordinated, effective and cost efficient manner
 - Increase the access and delivery of vital and important PACPOL reports, briefs, data and documents via the establishment of a PACPOL web site that is maintained and user friendly
 - Advise promptly appropriate stakeholders including government officials, companies, employees and the public on significant developments in PACPOL
 - Ensure limited financial resources are invested wisely into the high priority projects and activities
 - Implement cost-effective management of PACPOL projects whilst meeting the objectives of stakeholders
 - Enhance partnerships with the Regional Maritime Program of SPC and the wider maritime and oil industry and collaborate on projects or initiatives where possible

METHODOLOGY

The trans-boundary nature of much marine pollution requires a coordinated and comprehensive approach to both assessment and control. Without adequate measures to combat the growing sources and extent of pollution, the Pacific islands' efforts to maintain healthy societies, to stimulate development and new investment and a sustainable future for its people may be permanently undermined. The PACPOL programme is an important and integral part of this essential work.

In order to determine where the PICTs are with marine pollution awareness, prevention, preparedness and response APASA used the outcomes of stakeholder consultations, interviews, telephone enquiries and a detailed questionnaire on the effectiveness of the existing PACPOL Strategy. With this information we were able to determine the pro's and cons of the current PACPOL strategy and suggest improvements.



WORK PLANS SUMMARY:

STRATEGIC OBJECTIVE	TITLE OF PROJECT	ESTIMATED BUDGET (A\$)	PRIORITY
PREVENTION	Marine pollution video	??	2
PREVENTION	Shipping Risk Study Update	100,000	1
PREVENTION	Oil inputs from small crafts	??	3
PREVENTION	Oil inputs from sunken WWII vessels	80,000 – 90,000	2
PREVENTION	Marine litter	??	1
PREVENTION	Marine noise	??	3
PREVENTION	Effect of cruise liners	??	2
PREVENTION	Dredged Material Disposal Guidelines	50,000	1
CONTROL	Translate Legislations and Conventions	10,000	1
CONTROL	Education campaign for MPA and PSSA	25,000	3
MONITORING	Marine Spill Trajectory Modelling	430,000	1
MONITORING	Coastal Resource Mapping	> 2 million	2
MONITORING	Introduced Marine Species Risk Assessment and Surveys	> 2 million	1
MONITORING	Derelict and Abandoned Vessels	20,000 – 30,000	2
MITIGATION	Exercises and Training	15,000 per workshop	2
MITIGATION	PACPLAN update	5,000 – 7,000	1
MITIGATION	NATPLAN	100,000	1
MITIGATION	Places of Refuge Planning	35,000	2
MITIGATION	Regional Spill Response Team	100,000	1
MANAGEMENT	Format change – PACPOL strategy	??	1
MANAGEMENT	Marine Pollution Project Officer	??	1
MANAGEMENT	PACPOL website	10,000	1

PACPOL PROJECT SHEETS - PREVENTION

MARINE POLLUTION VIDEO (*previously EAR2*)

Introduction

The production of a marine pollution video for educational purposes was a worthwhile initiative which unfortunately was not completed in the original PACPOL scope.

The use of videos is a proven and popular tool in environmental education. It presents a useful medium for marine pollution education as they can be readily used by all stakeholders, including seafarers on board ships. Videos can also provide an opportunity for corporate sponsorship through discreet advertising, especially by relevant industries such as the shipping industry, manufacturers of boating and fishing equipment and the manufacturers of marine pollution equipment.

Aim

To stimulate commitment by all stakeholders to reducing/eliminating marine pollution in the Pacific islands region by raising awareness about the impacts of marine pollution and PACPOL initiatives.

Scope

- This project applies to all Pacific Island countries and the output could be used by all island nations and territories.
- The video will target the full range of stakeholders, including school students, school teachers, university students, coastal communities and villages, the shipping industry (including mariners), the fishing industry, non-government organizations, women's groups and all levels of government.

Outputs

- A simple video using entertaining and easily comprehensible approaches, outlining the sources and impacts of marine pollution and the PACPOL initiatives dealing with this.
- The video must be regionally relevant and culturally appropriate, and have a distinct Pacific islands flavour whilst getting the desired messages across to the target audiences effectively.
- The video will be produced in English, in both PAL and NTSC and also as a CD-ROM/DVD and be accessible for download from the internet.

Methods

- The video will be produced by a consultancy on contract to SPREP.
- Methods to be used will be proposed by the consultancy and reviewed/approved by SPREP.
- Corporate sponsorship will fund the video.
- Approach film companies to undertake the task pro-bono (at cost).

Possible Funding Sources

- Corporate sponsorship from marine spill equipment providers.
- Explore funding from countries who have fishing permits in PICTs

PACPOL PROJECT SHEET - PREVENTION

SHIPPING RISK STUDY UPDATE (*previously RA1*)

Introduction

A major outcome of PACPOL was the completion in 2001 of the Pacific Shipping Marine Pollution Risk Assessment.

The risk assessment identified, described and quantified shipping patterns in the Pacific islands region in order to identify the marine pollution hazards in the region.

Few stakeholders have knowledge of or used the outcomes of this study for in-country initiatives. Some indicated that due to the changes in shipping patterns over the past decade that it would be significantly out of date and would require urgent updating.

Aims

The updated risk assessment aims to use the previous risk assessment and ensure and update the information within to understand the pattern and frequency of shipping in the region.



Scope

The assessment will be updated on three scales;

- The Pacific islands region as a whole;
- Within the 200 nautical mile limit of each PICT;
- For each capital/major port within each country/territory.

Outputs

The project outputs will be a revised version of the shipping risk study already undertaken.



It is also imperative that the risk assessment be made more readily available by disseminating the information on CD-ROM and downloadable from the PACPOL website.

Methods

The study will be done by a consultancy on contract to SPREP.

Budget

Estimated \$100,000

Time frame

Within 6 months of contract signing.

PACPOL PROJECT SHEET - PREVENTION

OIL INPUTS FROM SMALL CRAFTS

Introduction

Oil pollution from small fishing and recreational vessels is now recognized as a major contributor to oil pollution of the seas globally and there is a definite lack of the exact quantities of oil and wastes entering the oceans from these sources.

The 2007 Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) study No 75 recommended that "oil inputs from small craft activity; such as fishing and recreational craft; be extensively monitored and annually summarized" to assist in determining and managing this marine pollution threat.



Aim

To monitor the amount of oil entering the marine environment from small, recreational and fishing craft and to promote fuel spill prevention and oil waste minimization education among fishing fleets, recreational craft and at local marinas and berths.



Outputs

An indication of the amount of oil being discarded by small pleasure craft and fishing fleets.

With this information an in-depth educational campaign to be created targeting the above mentioned marine users.

Methods

This project to be undertaken as a consultancy on contract to SPREP and the methods used will be proposed by the consultancy and reviewed/approved by SPREP.



Budget

MPA to be determined

Time frame 2-3 year

PACPOL PROJECT SHEET - PREVENTION

OIL INPUTS FROM SUNKEN WWII VESSELS (*similar to S1*)

Introduction

The 2007 GESAMP study (No 75) recommends that “oil inputs from sunken vessels (e.g. war related casualties) should be selectively monitored given the number and location of vessels near vulnerable coastlines, and the ageing condition of the wrecks. The risks that such inputs pose to marine coastlines, living resources and ecosystems should be addressed with considerable urgency given the ageing condition of many WWII wrecks and actions taken to reduce those risks.”

The issue of potential marine pollution from WWII shipwrecks was raised by some stakeholders. It is a major issue for some countries including the Solomon Islands, Papua New Guinea and Micronesia but less of a problem in other PICTs.

Aim

To undertake a local risk assessment for the likely impact zones and probability of oiling of shorelines under threat from oil spills from known WWII wrecks in the Solomon Islands, Papua New Guinea (PNG) and Micronesia.



This project will identify the high risk WWII shipwrecks within the region and the

potential environmental threat from these vessels. The project will also develop local contingency arrangements to ensure PICTs can adequately protect key resources under threat from oil spills from these wrecks.



Methods

The use of stochastic spill trajectory modeling from known WWII shipwrecks combined with the coastal resource map will determine the high risk vessels and the possible natural and environmental resources at risk.

Site specific spill response plans would be developed in conjunction with PICTs using skilled response planners and assessing local response capacity.

Budget

Estimated A\$80,000 - \$90,000

Time frame

2-3 years

PACPOL PROJECT SHEET - PREVENTION

MARINE LITTER (*similar to SW2*)

Introduction

Marine litter and debris is an increasing key area of concern for the PICTs. Injury and fatality to marine life caused by ingestion of, or entanglement in, harmful marine debris is on the rise. Aesthetically, the Pacific Island beaches, often reliant on tourism are increasingly showing signs of marine litter washing ashore; sometimes from ship based sources.



Ship based marine litter includes fishing lines and nets. Once abandoned at sea, floating in the ocean and washing into the coast the abandoned nets fish indiscriminately and may trap protected and threatened species. Turtles, in particular, are vulnerable to trapping in ghost nets.

In April 2009, the UNEP published their report on Marine Litter. Unfortunately the PICTs were not included in this study.

Aim

To utilize the framework set up by the UNEP study in order to identify the sources of marine litter in the PICTs.

Methods

- Every PICT to undertake a marine litter assessment identifying the type of litter and the possible sources of this litter.
- Port reception facilities for handling ship generated waste and old/damaged fishing nets should be improved. A reduction of the disposal of fishing gear at sea and in coastal areas should be promoted.
- MARPOL Annex V should be adopted.
- Encourage Reduce, Reuse and Recycle.
- Use back-track trajectory modeling to identify possible key sources of marine litter.

Budget

SPREP and Centre for Marine Conservation (CMC) and other NGO's to combine efforts to achieve this project.

Time frame

As the PICTs were not included in the 2009 UNEP report it is advisable to conduct this risk assessment as soon as possible.

PACPOL PROJECT SHEET - PREVENTION

MARINE NOISE

Introduction

Noise is an often a forgotten source of marine pollution. The 58th session of the IMO Marine Environment Protection Committee (MEPC) in October 2008 approved the inclusion of a new item in the agenda of MEPC 59 (July 2009) on "Noise from commercial shipping and its adverse impacts on marine life".

Aim

To educate the PICTs on the impact of ship noise on marine life.

Outputs

The creation of a noise fact sheet to be disseminated around the PICTs and downloadable from the PACPOL website.



Methods

The fact sheet to be created in-house by SPREP and made available for download on the PACPOL website.

Stakeholders to be kept updated on noise issues as they arise.



Budget

SPREP in-house (PACPOL staff time and minor materials)

Time frame

Creation of noise fact sheet to be completed within one month of commencement.

PACPOL PROJECT SHEET - PREVENTION

EFFECT OF CRUISE LINERS

Introduction

The increase in tourism in the region involving large cruise ships has become a concern to some stakeholders. Increasing large cruise liners are entering areas not well charted and the rate of vessel groundings in the region is increasing. The risk of a shipping accident involving major search and rescue, marine spills, wreck mitigation and the lack of preparedness and response systems to handle such incidents was of particular concern.

The Pacific Island region had become a haven for tourists wanting to see as much of the island as quickly as possible. As such the number and frequency of cruise liners visiting the Pacific islands has also increased. With each vessel having many thousands of passengers and crew these cruise liners are floating cities generating significant quantities of liquid and solid wastes.

Aim

To investigate the risks, contingency plans and response systems in place to address the effect of cruise liners on the PICTs and impact of wastes generated.



Scope

The risk of a serious incident or accident involving cruise liners should be assessed as well as the environmental effects of cruise liners should be investigated including the effects of waste disposal at sea and coming ashore.

Outputs

A study on the amount, severity and effects of cruise liners on the PICTs. This will not only include the risk of the vessel itself but also the associated risk of large amounts of wastes generated at sea and on land.

Methods

In close collaboration with SPC's Regional Maritime Programme investigate the risks, contingency plans and response capabilities necessary to address the increased risk of marine pollution from cruise ships.

Carry out an audit on wastes generated by ships and their disposal practices.

Budget

To be advised.

This project lends itself as a research study for a post graduate student from an educational institution in the region such as SPU.

PACPOL PROJECT SHEET – PREVENTION

DREDGED MATERIAL DISPOSAL GUIDELINES

Introduction

Many PICTs are requiring dredging of their ports in order to allow access to larger and deeper draft vessels into their ports.



The SPREP Conventions and its Protocols are consistent with the London Convention, however few PICTs are planning, managing and regulating the disposal of wastes at sea, of particular concern the disposal of dredging wastes.

Aims

Create guidelines for the disposal of dredging wastes based on International Best Practice and international guidelines.

Once the guidelines are complete an awareness program, education and availability on the PACPOL website to follow.

Methods

This project will be carried out by a consultancy on contract to SPREP.

The consultancy to follow international best practice and to use guidelines from other countries (such as Australia and New Zealand) to adjust the guidelines to be applicable to the PICTs.

Budget

A\$50,000

Time frame

The project to be completed within 3 months of commencement.

PACPOL PROJECT SHEETS

CONTROL

TRANSLATE LEGISLATIONS AND CONVENTIONS

Introduction

The review has identified that many stakeholders are not aware of the obligations and implications of the IMO conventions.

It is important that the legislations and conventions be explained in lay terms with the aim that everybody understands what each legislation means and implications for their particular countries. Often, being party to a legislation will allow that country to implement laws or other legislations nationally.

Aim

To create greater awareness of the IMO legislation by the creation of a booklet explaining in simple every-day language what each relevant legislation means.

Outputs

One booklet with information about all relevant IMO legislation outlining the implications and responsibilities of all parties who ratify the legislation. Also to include a list of advantages and disadvantages of each legislation.

The booklet to be made available for download from the PACPOL website and as a stand-alone reference booklet with its own ISBN number (which allows it to be searchable in the archives).

Methods

This booklet to be produced by in-house by the MPA in conjunction with help from IMO. Otherwise the booklet could also be produced by a consultancy on contract to SPREP.



Budget

A\$10,000 for booklet printing and production

Time frame

This project is of urgent priority as currently PICT are not fulfilling their obligations under certain conventions and legislations.

PACPOL PROJECT SHEET - CONTROL

EDUCATION CAMPAIGN FOR 'MARINE PROTECTED AREAS' AND 'PARTICULARLY SENSITIVE SEA AREAS'

Introduction

Marine Protected Areas (MPAs) and Particularly Sensitive Sea Areas (PSSAs) are areas of the marine environment that need special protection through action by the IMO because of its high significance for ecological, economic, cultural and social values and its vulnerability to damage from shipping. Strict control measures can be placed on shipping including constraints on ship discharges under MARPOL.

Unfortunately, the PICTs have not utilized this valuable management and control measure to protect their vulnerable resources.

Aim

To identify possible areas for MPAs and PSSAs around the PICTTs and to raise awareness of the advantages of these areas.

Methods

In order to better utilize the advantages of MPAs and PSSAs it is necessary to firstly use the Coastal Resource Mapping and the Trajectory Modelling to identify areas.

Once the areas have been identified apply to the IMO to have these areas declared as such.

Outputs

This project will identify areas and resources that are particularly vulnerable to shipping.



Budget

Estimated budget at A\$25,000

Time frame

The project should be completed within 1 year of commencement.

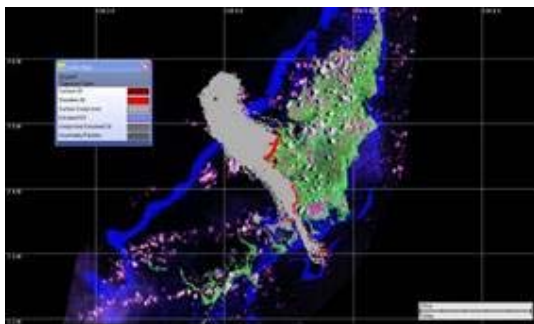
PACPOL PROJECT SHEETS - MONITORING

MARINE SPILL TRAJECTORY MODELLING (previously MS8)

Introduction

The use of computerized hydrodynamic models to simulate the dispersal of marine spills is being used globally for predicting the course of marine pollution and also for search and rescue purposes.

Unfortunately this project was not funded during the previous PACPOL strategy. A similar tool would be invaluable in object drift prediction for search and rescue (SAR) purposes, currently lacking within the PICTs. This lack of a regional system to predict the path and speed of movement of marine spills or for SAR would be a major barrier to the understanding of the local natural resources under threat from a spill or the effective placement of protective booms to protect those resources.



PICTs need a way of accessing modeling capabilities without the high cost and need for local operational staff. Australia and New Zealand maritime agencies have these modeling systems but lack the local PICT data on near-shore and continental shelf tidal currents required to model spills effectively.

Aim

To improve marine spill response capabilities in the Pacific island region by providing spill trajectory modeling for high risk areas, for use in spill contingency planning and response operations.

Outputs

A three dimensional marine spill trajectory model for high risk port areas and busy shipping lanes, linked with the coastal resource map.

Methods

This project will be undertaken by a consultancy on contract to SPREP. Preferably using on-call expertise via a 24/7 contract with an expert provider of spill modeling services.

Budget

Hydrodynamic current model for high risk port areas and busy shipping lanes: A\$ 400,000

Ongoing 24/7 modeling services: A\$ 30,000 per year.

Time frame

Initial pilot studies: 18 months from commencement.

Ongoing 24/7 modeling services to start as soon as practical.

PACPOL PROJECT SHEET - MONITORING

COASTAL RESOURCE MAPPING (*previously MS7*)

Introduction

Coastal resource maps show the location of coastal and marine resources that might be impacted by or used in the response to a spill. Such maps can be used to assess priorities for protection and to better plan the response.

This project was not completed in the previous PACPOL strategy as it was not seen to be of high priority. However, since there are other projects that rely on this project (such as trajectory modeling and places of refuge planning) it is vital that this project be conducted as a priority.

Aim

To improve marine spill response capabilities in the Pacific islands region, by providing coastal resource maps for use in spill contingency plans.

Scope

This project applies to the near shore and coastline areas of all Pacific island countries and territories.

Outputs

For each Pacific island country, a coastal resource map, both in hard copy and GIS, showing the spatial and temporal distribution of all biological, cultural heritage, recreational, commercial and industrial resources and infrastructure, environmental sensitivity grading, protection priorities, chemical dispersant use/non-use zones and spill response equipment and priorities.

Methods

This project will be undertaken as a consultancy on contract to SPREP. Maximum use is to be made of all existing data, including resource maps from other programmes.

Whilst coastal resource maps will ultimately be generated for the entire coastlines of all Pacific island countries, the consultancy will propose undertaking three pilot projects to begin with.



The consultant to use standardized terms, symbols and classification systems, such as those outlined in IPIECA/IMO publications 'Sensitivity Mapping for Oil Spill Response 1996' to be used.

Budget

Initial pilot studies: A\$ 300,000
Remaining surveys: estimated at A\$ 2 million

Time frame

Initial pilot studies: 18 months from commencement.
Remaining surveys: 3 years from date of commencement.

PACPOL PROJECT SHEET - MONITORING

INTRODUCED MARINE SPECIES RISK ASSESSMENT AND SURVEY (similar to IMS1&2)

Introduction

Introduced marine species (IMS) constitute a major threat to marine biodiversity, fisheries, aquaculture and even human health. Shipping, via ships' ballast water and hull fouling is a major vector for the introduction of foreign marine species. In fact more than 50% of marine pest introductions have occurred through bio-fouling (the undesirable accumulation of animals, plants and micro-organisms on vessels' hulls and equipment).

With the increase of commercial fishing fleets, recreational and cruise ships within the PICTs there needs to be an increased focus on small vessel bio-fouling issues.

This project, proposed during the PACPOL strategy was not undertaken due to lack of funding.

Aims

The IMS surveys in Pacific Island Ports project aims to determine the presence/absence of IMS in the Pacific island ports and recommend management response to IMS in the region.

Scope

Surveys to be carried out at all major Pacific Island ports and recreational marinas and fishing fleets.

Outputs

- For each shipping lane in the region, identification of mid-ocean ballast exchange locations (especially relating

to transit shipping), including times, frequencies and volumes of discharge.

- For each port in the region, characterization of the deballasting cycle, including locations, times, frequencies and volumes of ballast water discharged, and description of any hull cleaning practices.
- For each port in the region, identification of its full set of source ports from which ships arrive and the development of an environmental similarity matrix with its set of source ports from which ships arrive.
- For each port in the region, identification of a target list of foreign marine species that pose the highest risk of being introduced.
- For each recreational marina and major port a survey of the IMS found.
- For each Pacific island country, a statement on the risk of IMO occurring via shipping.

Methods

This project will be carried out by a consultancy on contract to SPREP. The project lends itself to a decent post-graduate research study.

Budget

Risk assessment: A\$ 500,000

Pilot study surveys: A\$ 300,000

Remaining surveys: A\$ 2 million

Time frame

Risk assessment & pilot study: 18 months from commencement.

PACPOL PROJECT SHEET - MONITORING

DERELICT AND ABANDONED VESSELS

Introduction

The PICTs are having an increasing issue with derelict and abandoned vessels.

Due to the high cost of vessel repairs, salvage and wreck removal more vessels are being abandoned resulting in pollution from contaminants on board and physical damage to coral reefs as well as sinking causing obstructions and navigational hazards.

Aim

Conduct a regional assessment of the scale of derelict and abandoned vessels in the region and provide guidance materials for PICTs for the effective investigation and management of these vessels and the threat of pollution from contaminants.

Methods

In conjunction with PICTs carry out a risk assessment of the scale of the problem and high risk areas for derelict vessels.



Develop and provide guidance documentation on the techniques for investigating the owner/insurer of the vessels and low cost methods of remediation of abandoned vessels and the contaminants on board.

Consider whether the PICTs should adopt the Nairobi International Convention on the Removal of Wrecks (WRC).



Budget

A \$20,000 - \$30,000

Time frame

2-3 years

PACPOL PROJECT SHEETS - MITIGATION

EXERCISES AND TRAINING

Introduction

The training and desk-top exercises component of PACPOL had previously been included in the PACPOL workshops. However, since there are no further PACPOL workshops planned currently it is important that this project be a stand-alone project.

Aim

The aim of the exercises and training is to develop in-country national capacity to deal with Tier 1 and Tier 2 oil spills.



Scope

A training schedule to be created for each country. With the assistance of a facilitator IMO training should take place in-country on a yearly basis. IMO training modules to be tailored to suit the PICTs environment and conditions. This training should also be made available on the PACPOL website for new staff who may have missed the yearly training schedule or staff who would like to refresh.

Outputs

- Creation of a pre-planned training schedule around the PICTs.
- Yearly exercises to take place as a part of the training schedule.
- Occasional drills to take place to test competency or responders and to test equipment.

Methods

- With the use of a training or workshop facilitator travel to the PICTs on a yearly basis to provide IMO training modules as workshops.
- Workshops to include exercises both desk-top and physical.
- Live desk-top drills to take place at a regional level.

Budget

- Support in-kind to be provided by host country
- Government and oil industry
- A\$ 15,000 per workshop with the use of a facilitator/trainer.

PACPOL PROJECT SHEET - MITIGATION

PACPLAN UPDATE (previously MS2)

Introduction

A major outcome of PACPOL in 2001 was the development and adoption of the regional cooperative marine pollution response arrangements and contingency plan called PACPLAN.

Unfortunately PACPLAN, and what it can provide, is poorly understood and few PICTs are aware of the wealth of human and equipment support that could be provided by the US, Australia, France and New Zealand to support an incident anywhere within the region.

Aim

The aim of this project is to update the 2001 PACPLAN by including response planning arrangements for Hazardous and Noxious Substances (HNS), Dangerous Goods (DG) and ship board fires and emergencies.

Output

The PACPLAN contingency plan will be expanded to include all incidents that could result in marine pollution by the inclusion of planning and response to HNS and DGs incidents.

Once updated, PACPLAN needs to be made readily available on the PACPOL website and also exercises planned and carried out to test mutual aid arrangements.



Methods

The PACPLAN update will be conducted primarily in-house by SPREP in consultation with SPREP member countries and territories, IMO and the oil and shipping industries. Further advice or consultancy may be required for HNS issues.

Budget

The PACPLAN update will be funded by normal SPREP/PACPOL everyday budget.

A\$5,000- A\$7,000

Estimated for expert HNS response advice

Time frame

The PACPLAN update to be completed within 4 months of commencement.

PACPOL PROJECT SHEET - MITIGATION

NATIONAL CONTINGENCY PLANS-MARINE POLLUTION (*previously MS2*)

Introduction

Tier 2 spills are addressed by National Marine Spill Contingency Plans (NATPLANs). A NATPLAN template was developed and provided to all the PICTs.

Due to high staff turnover in PICTs it seems that the implementation of NATPLAN has not proceeded as desired. This project needs a kick start again to complete the national plans.

Aim

The aim of this project is to implement, update and adopt NATPLAN in all remaining PICTs which have not already completed.

More emphasis needs to be placed upon HNS and DGs issues as well as response to ship based fires.

In updating NATPLAN a section on dispersant use and areas for dispersant application should be identified.

To check the status of Port Contingency Plans and ensure that high risk ports have updated contingency plans in place.



Methods

Recommend the use of an expert to provide advice and expertise in-country to complete each individual NATPLAN in cooperation with local government, oil and shipping companies.

In association with the Association of Pacific Ports check the status of Port Contingency Plans paying special attention to the high risk ports identified in the Shipping Risk Assessment study.



Budget

This project will be a one-off cost of a consultant to travel and work with the PICT to update, implement and adopt their NATPLANs.

Estimated costs: A\$100,000

PACPOL PROJECT SHEET - MITIGATION

PLACES OF REFUGE PLANNING

Introduction

The issue of "places of refuge" is one aspect of contingency planning in the consideration of which the rights and interests of coastal States as well as the need to render assistance to vessels that are damaged or disabled or otherwise in distress at sea ought to be taken into account.

The IMO guidelines recognise that, when a ship has suffered an incident, the best way of preventing damage or pollution from its progressive deterioration is to transfer its cargo and bunkers, and to repair the casualty. Such an operation is best carried out in a place of refuge. However, to bring such a ship into a place of refuge near a coast may endanger the coastal State, both economically and from the environmental point of view, and local authorities and populations may strongly object to the operation.

Therefore, granting access to a place of refuge could involve a political decision which can only be taken on a case-by-case basis. In so doing, consideration would need to be given to balancing the interests of the affected ship with those of the environment.

Aim

This regional project aims to provide for the timely and effective response to request for places of refuge by developing consistent planning and response procedures for responding to request for refuge by ships in need of assistance in situations where environmental or economic impact may result.

Outputs

The creation of the Pacific Regional Guidelines and Criteria for the selection of Places of Refuge.

Identification of specific places of refuge for each PICT and to incorporate this information in the coast resource maps.



Methods

This project will be undertaken as a consultancy on contract to SPREP.

The consultant will use the 'Guidelines on places of refuge for ships in need of assistance' produced by the IMO and other regional guidelines and criteria.

The consultant will undertake visits to country to identify possible places of refuge and to provide education and advice on places of refuge.

Budget

A \$35,000

Possible funding sources

This project should be combined with a maritime educational institution as it lends itself well to a higher degree research project.

PACPOL PROJECT SHEET – MITIGATION

REGIONAL SPILL RESPONSE TEAM (RSRT)

Introduction

It has become clear that countries, companies and resources are still not fully prepared to rapidly come together in country to assist regionally in a major pollution event. To avoid duplication of effort with limited personnel and resources there is a need to strengthen the concept of “regional pool of expertise” rather than all PICTs having all capabilities in marine pollution preparedness and response.

Aim

To establish a Pacific Islands Regional Spill Response Team amongst the PICTs with identified supervisory, operational, response equipment skills, environmental and scientific expertise that can be deployed quickly to the site of an incident to support local governments and agencies.

Scope

Involvement in the RSRT would involve leave from current employer arrangements should a spill occur and should the RSRT be called upon to assist. These arrangements need to be in place.

Methods

Each PICTs to allocate two/three oil spill response experts (either operationally, environmentally or scientifically) from government, educational institutions, regional bodies, NGOs who are willing to become involved in this regional response team.

Assess similar arrangements in Australia for example the National Response Team (NRT), the environmental scientific co-coordinators (ESC), the US Coast Guard NRT and Strike Teams and use this as a guide to setting up and operation of RSRT in the Pacific.



Budget

The initial selection of staff for RRST will be done in-house by SPREP MPA.

After that there will be a working trust fund that will be called upon to bring the RSRT together in the event of a spill.

RSRT Trust Fund: A\$100,000 - only to be used unless a spill requires it. Any interest accumulated by the fund used to keep training and education of RSRT members up to date.

Time frame

RSRT members to be identified as soon as possible.

PACPOL PROJECT SHEETS - MANAGEMENT

FORMAT CHANGE – PACPOL STRATEGY

Introduction

Stakeholder consultation has identified that most individuals do not actually possess a copy of the PACPOL strategy. Furthermore, for those who do have access to the document there is only a small percentage of people who have actually read the strategy because of its lengthy nature.

Aims

The format change aims to create a shorter, more succinct PACPOL strategy with at its core the action work plans.

Outputs

The new PACPOL strategy 2009 format is to be printed in A5 format laminated colour spiral booklet. This format tends to be easier to read and provides friendlier accessibility.

Methods

All printing to be undertaken by SPREP.

PACPOL PROJECT SHEET - MANAGEMENT
MARINE POLLUTION PROJECT OFFICER (previously SR2)

Introduction

The securing of the Marine Pollution Advisor (MPA) position as a core SPREP position in April 2007 is seen as a PACPOL success. This highlights the need for marine pollution focal point, advice and action onto the PICTs.

However, the number of projects and issues faced by the PICTs in regards to ship sourced marine pollution are too extensive for one person to manage effectively.

**Scope**

The new position should be filled with a regional counterpart for the MPA with experience in maritime issues, maritime legislation, training and education and marine pollution issues. The new position should also be able to assist the MPA with the provision of marine pollution training, workshops, exercises and drills.

Budget

To be advised – MPA action

Possible Funding Sources

IMO
AusAid
NZAid

Aim

This project aims to secure funding and candidates for a Marine Pollution Project Officer in order to assist the MPA in implementing the PACPOL strategy and projects.

PACPOL PROJECT SHEET - MANAGEMENT

PACPOL WEBSITE

Introduction

One of the main concerns from PACPOL stakeholders was that they could not access, or were not aware of, the availability of PACPOL documents, project outcomes, templates, research and studies. The many outcomes of the PACPOL strategy do not seem to be readily available to the PACPOL stakeholders.

All the stakeholders who responded to the questionnaire agreed that a stand-alone PACPOL website would assist in disseminating all the PACPOL information to the PICTs.

Aim

The creation of a stand-alone PACPOL website with all the relevant PACPOL news, documents and templates, links to relevant information sources and organizations.

Scope

The PACPOL website needs to stand alone and separate from the SPREP website. It needs to be easy to use, fast to download, maintained regularly and full of relevant information for all the PACPOL stakeholders.

The website will also include a quarterly PACPOL newsletter which highlights what projects are being implemented and should also contain a list of current contact information to assist PICTs with their NATPLAN updates.

Outputs

A simple, easy to download PACPOL website (www.pacpol.org is available) with all relevant information as per the discretion of the MPA.



Methods

- The website will be produced, maintained and updated by a consultancy on contract to SPREP.
- Methods used will be proposed by the consultancy and reviewed/approved by SPREP.

Budget

The overall budget for the completion of this project stands at A\$10,000, which includes updates and maintenance for a year.

Time Frame

The initial outputs will be produced within one month of commencement.