

Pacific Regional Action Plan

MARINE LITTER

2018–2025



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This *Marine Litter – Pacific Regional Action Plan* was prepared by the Secretariat of the Pacific Regional Environment Programme to foster discussion and interaction towards the development of a final Action Plan endorsed by all Pacific Island Countries and Territories.

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Foreword

The Secretariat of the Pacific Regional Environment Programme (SPREP), in partnership with the United Nations Environment Programme (UN Environment) Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), has prepared this *Pacific Marine Litter Action Plan (MLAP)*. The *MLAP* has been developed as part of the Regional Seas Programme and the *Global Partnership on Marine Litter (GPML)* for which SPREP is the *Pacific Regional Node*. The *MLAP* is also a subset of the *Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025)* and the *Pacific Oceans Pollution Prevention Programme (PACPOL) 2015-2020*, which have been developed in the context of the *Blue Pacific* narrative under the framework of the *Pacific Framework for Regionalism*, the *Pacific Oceanscape Framework*, and the *SPREP Strategic Plan 2017-2026*.

The primary focus of *MLAP* is marine sourced litter, but it also covers terrestrial based marine litter point sources as outlined in the *Cleaner Pacific 2025*. The action plan sets out the policy context and key actions to minimise marine litter across the Pacific islands countries and territories.

The implementation of the Pacific *MLAP* is a core component of SPREP's role in assisting the Pacific island countries and territories to address environmental and marine pollution issues. This is in recognition of the Forum Leaders 2018 communique that 'waste is critical for the *Blue Pacific*' in which they have reaffirmed their commitment. The Forum also recognised that marine litter is a transboundary issue and noted that globally, we are witnessing an unprecedented focus on waste and pollution issues. They observed that the issue of waste and pollution, particularly plastic, is now of equal prominence for our region as climate change.

In the Pacific islands it is vital that action plans such as the *MLAP* are developed using a "bottom-up approach", where the needs and priorities of recipient countries are clearly identified and effectively addressed. Every effort has been made to achieve this during the development of the *Pacific Marine Litter Action Plan 2018-2025*.

The Pacific *MLAP* represents a significant opportunity for Pacific island countries and territories to take a major step forward to protect our Pacific Ocean from marine litter. It was endorsed and approved by the 1st SPREP Executive Board Meeting in Apia Samoa in September 2018. It was also endorsed in principle at the 2nd Clean Pacific Roundtable in Suva Fiji in August 2018. Furthermore, it is worth noting that the 49th Forum Leaders Communique held in Nauru in September 2018, in recognition of waste as a critical issue for the Blue Pacific, reaffirmed their commitment to eliminate marine litter and the urgency of implementing the Pacific Marine Litter Action Plan.

We commend this important programme to all stakeholders.



Mr. Kosi Latu
Director General, SPREP
October 2018



Mr. Habib N. El-Habr, PhD.
Coordinator, GPA, UN Environment
October 2018

Executive Summary

This Action Plan sets out the policy context and key actions to minimise marine litter across the Pacific Island Countries and Territories. The scope of the Action Plan is intentionally focused on the Pacific island Countries and Territories. It does not include mechanisms to drive change beyond the region's capacity. The transboundary nature of marine litter brings to the fore that "waste is everyone's problem and everyone's responsibility".

The Pacific is the world's largest ocean, covering nearly one third of the Earth's surface. About 30,000 islands of varied shape and size lie across this vast expanse. For thousands of years, the people of the Pacific region have relied on rich natural resources for their survival. The marine environment sustains them, and they depend on it for food, transport, traditional practices and economic opportunity.

Waste and pollution generated from our increasingly consumer-based way of life puts at risk the health of our oceans and the health of the Pacific peoples that depend upon this vital resource. Pacific Island Countries and Territories are striving to balance the needs and economic aspirations of their growing populations with the maintenance of healthy oceans.

The pervasive nature of plastics and other materials means that every beach in all these 30,000 islands is littered with the rubbish of humans. The impact of rubbish extends further, adversely affecting the health of the peoples of the Pacific, the ocean and estuaries, fisheries, coral reefs, shellfish, seabirds and marine biodiversity generally.

This Plan has been coordinated by the Secretariat of the Pacific Regional Environment Programme [SPREP] to build on *Cleaner Pacific 2025* and has been developed in consultation with all island members:

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

The Plan is organised within 4 sections.

Section 1 provides a global, Pacific Island Countries and Territories and overall waste management context.

Section 2 provides detail on marine waste management, the nature of the problem and role of a comprehensive underpinning policy and regulatory framework.

Section 3 groups marine litter within the key sources and for each source lists key actions for the 8 years of this Plan's implementation.

Section 4 provides the mechanics of how this plan will be implemented and progress tracked.

The Appendices provide regulatory and policy reference material.

To address the issue of marine litter in the Pacific region, a range of instruments are proposed in this Action Plan for adoption and implementation. They are:

- Two model legislations for plastics and take-away food;
- The 2017-04 Conservation and Management Measure for fishing vessels, to come into force in 2019;
- Two cross-compliance protocols to strengthen existing MARPOL formal arrangements for cruise and other shipping; and
- A cross-compliance code for tourist resorts to foster a stronger waste management component in Ecotourism Certification.

Moving from draft national legislations and cross-compliance codes to formal adoption and then enforcement requires much discussion, further development, agreement and then implementation across the Pacific Island Countries and Territories.



SECTION 1

The Context



The Global Problem

Marine litter – any solid material that has been deliberately discarded or unintentionally blown or washed into the ocean.

Marine litter includes any persistent, manufactured or processed material. Marine litter originates from various ocean and land-based sources and generally reflects our production and consumption patterns globally. Marine litter includes plastic, metal, wood, rubber, glass and paper. Plastic litter is the most pervasive worldwide and can comprise upwards of 90% of the litter collected on beaches and shorelines.

Most plastics are durable and persist in the marine environment. Plastics can deteriorate and fragment through sunlight or photo-degradation, compounding the problem by producing many smaller particles and by releasing or accumulating toxins. These smaller particles are called micro-plastics. There are also “primary” micro-plastics, being small particles deliberately manufactured for applications such as industrial abrasives or cosmetics.

Plastics – a summary

MACRO PLASTICS – large items such as plastic bags, plastic bottles, fishing nets or Styrofoam products; Some of these like PET bottles can be recyclable, others such as some plastic bags may breakdown in landfills under controlled optimum conditions and all, once in the marine environment progressively break down into smaller sized pieces often with chemicals leached out into the water column.

MICRO PLASTICS – small plastic particles of different origins, sizes and chemical composition; Micro plastic particles have a diameter between 1–5 millimeters. Primary micro plastic is produced industrially in the form of plastic-based granulates or pellets, which can be found as micro beads in cosmetics. Secondary micro plastic occurs through hydrolysis, photo degradation or mechanical/ physical degradation of macro plastic. Secondary micro plastic or degraded macro plastics are at this time the main pollutants in the marine environment.

NANO PLASTICS – very small plastic particles (10–100 nm); Despite their small size they have an enormous surface area, bearing the potential to bind a bigger amount of toxic compounds than micro plastic. As an example, nano medicine has developed nano sized drug delivery systems that, due to their small size, have the potential to spontaneously overcome natural biological barriers such as cell membranes by endocytosis. Nano plastics are likely to be the most pervasive in the marine environment and the most hazardous to marine biodiversity. One common example of how nano plastics are generated is through the washing of synthetic clothes, with the grey water ending up in waterways.

Marine litter threatens human health and the survival of many marine organisms as well as being aesthetically a problem on beaches, shorelines, lagoons and estuaries. Entanglement or ingestion by wildlife will often be fatal. Ingestion of micro-plastics by fish may also be a pathway for transport of harmful chemicals into the food web and eventually humans.

Marine litter is everyone’s responsibility – from our individual actions in consumer choice and then how we dispose of waste through to those businesses importing various consumer items and to the responsibilities of major corporations in designing, manufacturing, promoting and selling various products.

To confuse the issue, some plastics are listed as biodegradable to influence product preferences for purchase. The majority of these products only biodegrade under constant temperature and humidity as found in landfill and industrial composting systems. Within the marine environment even these so-called “biodegradable plastics” persist, smothering the ocean’s benthos, catching on coral reefs or choking the gut of fish, turtles and birds.

UNEP in 2015 estimated that 10 to 20 million tonnes of plastic is finding its way into the world's oceans each year, costing approximately US\$13 billion per year in environmental damage to marine ecosystems. This includes financial losses incurred by fisheries and tourism as well as time spent cleaning up beaches, harbours and ports.

Marine litter can pose a navigational hazard for maritime transport and may result in financial losses due to fouling of propellers, blocked cooling systems and hull damage. Biosecurity may be compromised, with the introduction of alien species using floating items (including plastics) as a raft to move from one place to another.

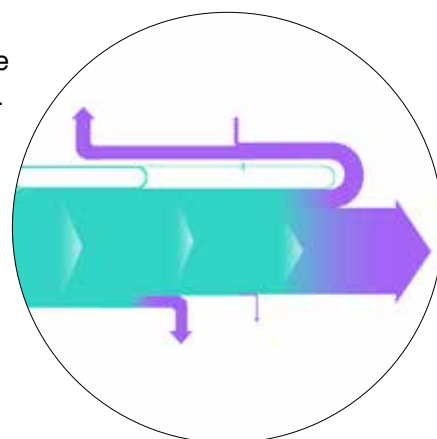
The total natural capital cost or cost to global environments of plastic used in the consumer goods industry is estimated to be more than US\$75 billion per year. The cost comes from a range of environmental impacts including those on oceans and the loss of valuable resources when plastic waste is sent to landfill rather than being recycled. The most significant upstream impact is greenhouse gas emissions released from producing plastic feedstock, which is responsible for almost a third of the total natural capital costs.

The Pacific – a special place

The Pacific, while the world's largest ocean is sparsely populated with a total population for the Pacific Region of about 10 Million on about 500 inhabited islands. With remoteness comes a special global position as being among the world's most pristine and highly valued environments. The ocean defines us as Pacific people. It underpins our livelihoods and way of life. As Pacific Island Countries and Territories we are responsible for managing more than 10% of the planet's oceans. Approximately 98% of this area, totaling over 30 million square kilometers is contained within the Exclusive Economic Zones of our Island Countries and Territories. As an example of the oceans' economic importance, tourism, by cruise ship or at beachside resorts, is a large part of all Pacific Island Countries and Territories' economies.

This remoteness also leads to challenges, with virtually all consumable goods being shipped and air transported to 15 of the Pacific Island Countries and Territories. It is our responsibility to set policy and actions for the future. Policies, multi-lateral environmental agreements and codes of practice are all required so that we can collectively either REFUSE – to prevent deleterious substances being imported to the Pacific; or ensure REUSE / RECYCLING / REDUCE / RETURN – to promote a circular economy and good waste management practices. Certainly it is well beyond our Island economies to fund, control and manage the waste generated through imports to our Pacific Island Countries and Territories.

Analysis as part of the Pacific Region Infrastructure Facility Urban Sector Working Group suggests in excess of 4.7 to 5 million tonnes of materials are imported to the Pacific Island Countries and Territories per annum, dominated by motor vehicles, oil, paper / cardboard and PET containers. Only about 1 million tonnes returns to source, being predominantly used motor / cooking oils, PET containers and scrap metal. These figures are at best estimates but indicative of the problem, the Pacific Island Countries and Territories accumulating substantial volumes of waste annually.



Recycling and reuse is challenging, with limited suitable land available for transfer stations, waste treatment and disposal and a lack of infrastructure. This needs to be addressed as an urgent priority and is outside the scope of this Action Plan. There is also a lack of commercial attractiveness in re-shipping materials and goods past their use-by date (e.g. E-waste, white goods and cars) back to the country of origin or other suitable destinations for reuse / recycling / disposal.

Marine litter fits within two broad categories – the *legacy issue* of what is already in our Pacific Ocean environment and the *positioning the Pacific for the future issue*. Most effort in the Pacific has been put into surveying floating and stranded debris. Quantification of marine litter volumes is virtually absent in Micronesia, Melanesia and Polynesia with most data relating to the Pacific rim e.g. Australia, New Zealand and Chile.

For the northern Pacific, within the North Pacific subtropical gyre, the greatest density of stranded debris has been recorded on Japanese beaches at over 44,500 pieces per square metre and consisting principally of foamed plastic fragments.

For the southern Pacific, densities of more than 100,000 plastic pellets on 1m of beachfront in Auckland were evident even in the 1970's. The same 1970's studies found substantial amounts of pellets in some southwest Pacific Islands, such as Tonga at greater than 1000 pellets per square metre and Rarotonga, Cook Islands at greater than 500 pellets per square metre. Within the South Pacific subtropical gyre considerable amounts of micro-plastic have been found on Easter Island shores at about 800 items per square metre. The beaches of the World Heritage-listed and uninhabited Henderson Island, in the Pitcairn Group off South America, contain an estimated 37.7 million items of debris. This estimate gives the island the dubious honour of being recognized as the place with the world's greatest density of washed up plastics.

For seafloors, debris densities can be exceptionally high. One study in 2010 found over 700 items of macro debris in 3300m² of the shallow lagoon of the Majuro Atoll or 234,000 items per square kilometre and over 780 items in 3900m² on the exposed reef or over 200,000 items per square kilometre. Information on seafloor debris is limited.



SECTION 2

Waste Management the Pacific Island Countries and Territories Vision



The vision of *Cleaner Pacific 2025 – Pacific Regional Waste and Pollution Management Strategy 2016–2025* is ‘a cleaner Pacific environment’ and the mission is to ‘implement practical and sustainable solutions to the prevention and management of waste and pollution in the Pacific’. This Marine Action Plan nests within *Cleaner Pacific 2025*. A detailed summary of the goals, targets and actions under the broader *Cleaner Pacific 2025* is provided in Table ES1 of the *2016–2025 Strategy*.

Terrestrial Waste Management – working towards a circular economy

Waste management is recognised as a major issue for most Pacific Island Countries and Territories. Poor waste management and inadequate control over highly polluting activities poses risks to our overall economic base, our tourism, agriculture and fisheries. All these activities are very reliant on a clean, healthy, well functioning and resilient environment.

It is essential we build across our entire Pacific island Countries and Territories key components of a circular economy in partnership with those countries manufacturing and importing goods to our countries and territories. A circular economy is an alternative to a traditional linear economy. A linear economy makes, often remotely, various goods then imports them to our Countries and Territories, we use these goods and then we are left with the problem – where do we dispose this ever increasing volume of waste products? Exacerbating the problem is often the types of packaging in which these goods are received.

In a circular economy several activities are essential. Firstly, we extend the life of products and resources in use for as long as possible. We extract the maximum value from them whilst in use. Secondly we recover and regenerate products and materials by repairing, upgrading, or remanufacturing products so that we don’t lose the value through wasted materials. Most importantly the import – export loop is closed with the Pacific island Countries and Territories returning an entire suite of waste products back to waste products back to key manufacturing countries for recycling.

Realising a circular economy requires innovative business models to replace existing business practices. Investment and skills are needed for the final return of organic materials back to nature or manufactured items back into the industrial production system. In the circular economy we need new technology, products, services and business models to enable the transition towards minimal waste. We also need an enabling policy and legislative environment to underpin these actions, to make opportunities for the private sector attractive and to ensure certainty for their investments. We need to incentivise the private sector by fostering shifts in import systems and advance extended producer responsibility so that the costs of waste processing are built into the price of goods and can be easily recovered and re-allocated to managing the waste streams.

In brief, we need to build a consistent and fully comparable waste management system across all Pacific Island Countries and Territories – the 5 “R’s” – Refuse, Reduce, Reuse, Recycle and Return.



REFUSE

Refuse The practise of not allowing or buying something that is unnecessary. And in the Pacific context it would be implementing legislations to ban imports of certain products.



REDUCE

Reduce Waste A key part of waste “reduction” is “conservation” – using natural resources wisely, and using less than usual in order avoid waste. Reuse. You can “reuse” materials in their original form instead of throwing them away, or pass those materials on to others who could use them too!



REUSE

Reuse The action or practice of using something again, whether for its original purpose (conventional reuse) or to fulfil a different function (creative reuse or repurposing).



RECYCLE

Recycling The process of converting waste materials into new materials and objects.



RETURN

Return The model for the Pacific region which promotes the return of recyclable commodities to environmentally sound recycling facilities located overseas in recognition of the fact that physically establishing such recycling facilities may not be technically or economically feasible for the majority of Pacific island countries and territories.

e.g. deleterious substances such as asbestos [already Pacific wide], non medical use radioactive materials; plastic micro-beads, single use plastic bags [already seven Pacific Island Countries]; Styrofoam and disposable cups and plates [Marshall Islands]; older cars [Nauru, Samoa and Fiji]; products sent in non-biodegradable packaging.

e.g. polluter pays; plastic waste to oil [Palau]; container deposit schemes [Kiribati, Palau, Kosrae, Yap] and working with key countries to implement cooperative systems [e.g. Japan’s Advance Recycling and Disposal Levy].

organic waste/composting; building extended producer responsibility for manufactured items.

Marine Waste Management

Sources of High Risk

The sources of solid waste of highest likelihood to end up within Island estuaries, lagoons, coastal waters and the Pacific Ocean are:

● Shipping and vessel operations

- accidental and deliberate discharge into the sea of garbage generated during normal vessel operations

● Take-away food and beverage containers

- various plastics dominate for take-away food
- PET plastic, aluminium, glass and steel for beverage containers

This is exacerbated as a problem for the marine environment as takeaway food and beverages are often consumed near a beach

● Packaging and various end of life consumer products

- predominantly various types of plastic, e.g.
 - disposable healthcare products such as nappies, toothbrushes and shavers
 - polystyrene packaging around electronic and white goods

● General litter

- such as plastic carry bags and other household rubbish.

This is especially a problem where there is poor to nil landfill facilities and/ or waste collection systems. Litter is often water and wind borne to waterways, estuaries, beaches, lagoons and Pacific Ocean

● Shipping vessels

- addresses litter from other vessel such as merchant shipping, international yachts and domestic recreational and commercial vessels

● Fishing operations

- tangled nets and monofilament line disposed at sea
- lost gear, such as long lines, fish aggregation devices and nets that drift and are then termed “ghost nets”
- shipboard food and beverage containers and packaging that should be stored on board until off-loading at a suitable port

● Cruise ships

- passenger-based deck-lost food containers and packaging

Note: If vessels are adhering to MARPOL and are sorting and appropriately disposing of on-board waste streams at suitable ports then this waste source should be comparatively minor.

● Beachside tourist enterprises

- tourist-based beach food containers and packaging.

Note: Most tourist enterprises take pride in keeping their beaches and surrounds in clean condition. Often waste is sorted and appropriately disposed of in various waste streams. As with cruise ships, subject to good resort management this waste source should be comparatively minor.

● Disaster waste

- cyclones, typhoons and tsunamis accompanied by high runoff events transport all types of waste to river, lagoon, estuary and ocean accelerating loads of marine litter that would have normally taken years to generate.
- disaster recovery often involves extra waste such as plastic drinking water bottles as saving life and re-establishing lifestyle systems rightly takes precedence.

● Trans-boundary waste

- Marine litter is akin to climate change impacts on Pacific Island Countries and Territories, being recipients of the impacts of a global problem. Although Pacific Island Countries and Territories are estimated to only contribute less than 1% to the mis-managed plastic waste loading in all the world's oceans, the region is a potential recipients of this global, intergenerational and transboundary waste issue.

Note: From plastic ingestion studies we know that more plastics is found in fish in an eastward transect. Of the four locations, Auckland, Apia, Papeete and Rapa Nui, more plastic was found increasing within fish from Auckland to Rapa Nui.



SECTION 3
Action Plan

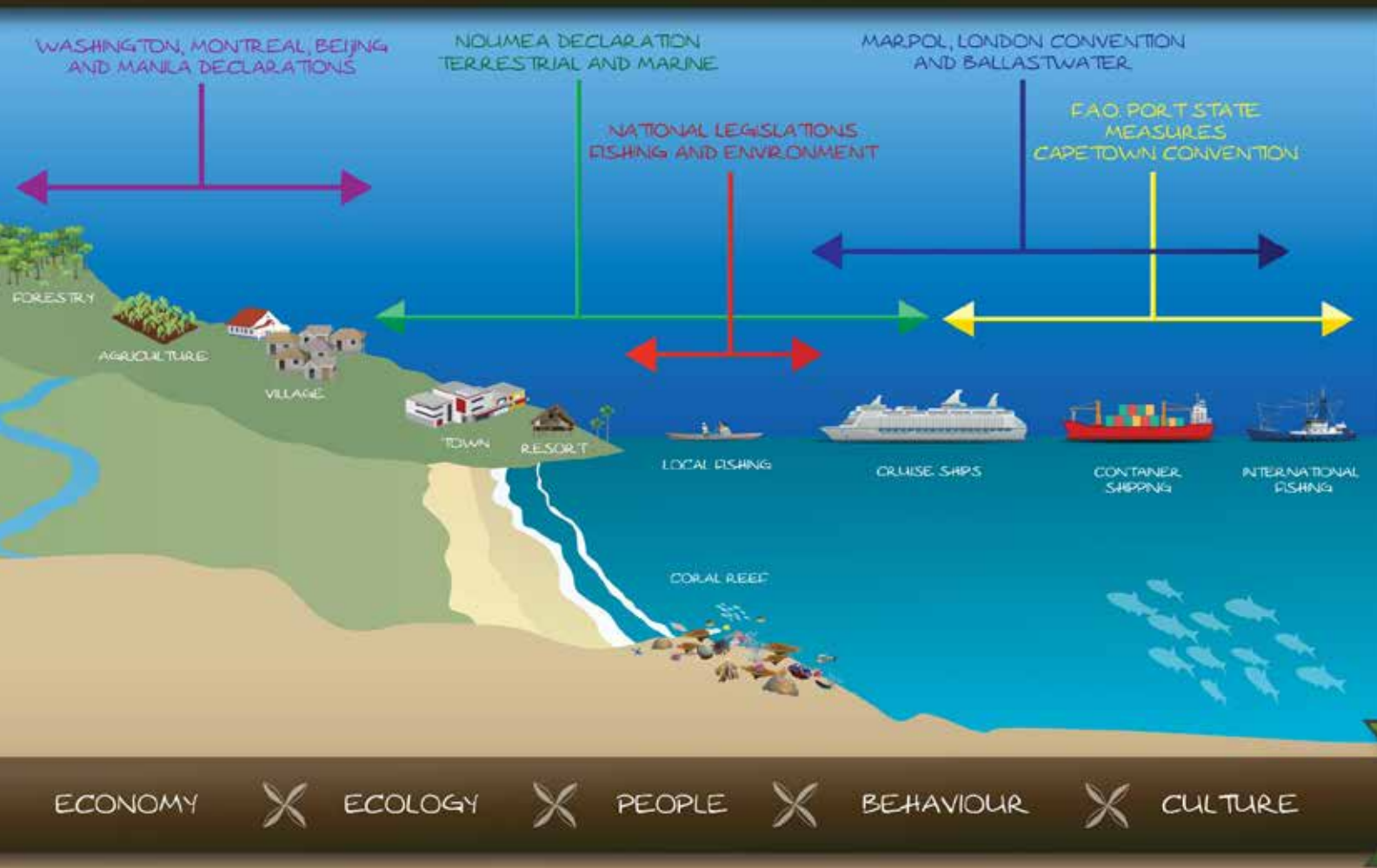


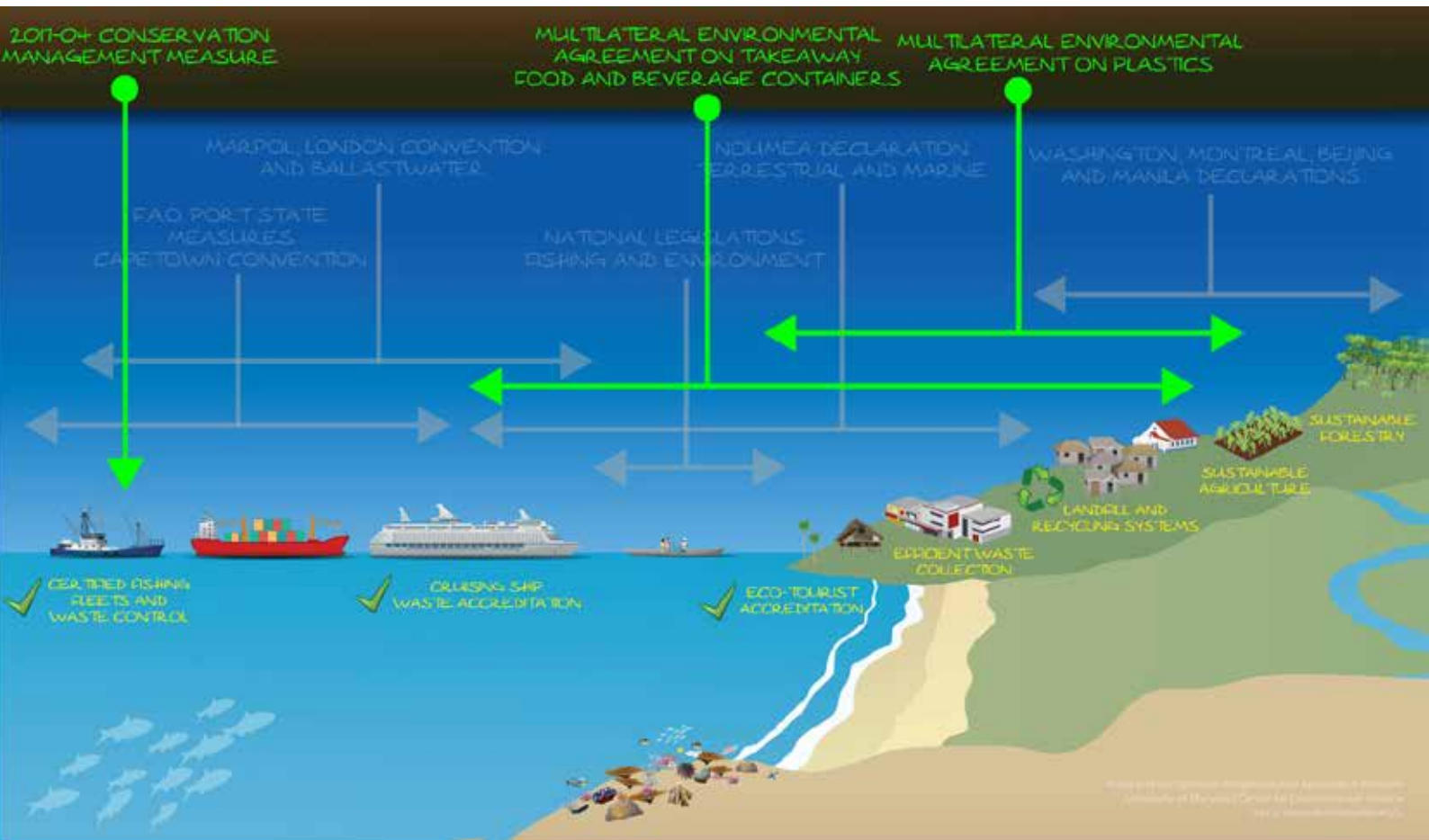
This Action Plan:

- builds on existing policy and regulatory frameworks,
- fosters greater implementation and stronger enforcement of these existing frameworks, especially for all fishing activities and shipping generally,
- recognises the importance of the Pacific Regional Reception Facilities Plan in addressing marine litter particularly in providing adequate facilities to receive garbage from vessels that also aids in combating marine litter,
- recommends further development of policy and regulatory frameworks where there are key gaps, especially for Take Away Food and Beverage Containers,
- allows for adaption as research and investigations better define the key problem areas,
- resources community and tourist industry through increased awareness of best practice waste reduction and disposal behaviours
- ensures issue-specific sources such as tourist resort and disaster waste are better managed,
- invests in key infrastructure in larger urban environments – especially catching water-borne litter, and
- reinforces community behaviour through major investment in coastal clean-ups across all Pacific Islands which will compliment terrestrial solid waste management infrastructure such as landfills and transfer stations.

For each of the proposed actions that follow an estimate of emphasis is provided. Funds will come from multiple sources. Therefore the emphasis percentage is broadly indicative of the proposed relative level of effort to be applied to each activity between 2018 and 2025.

CURRENT PROTOCOLS, REGULATIONS AND AGREEMENTS FOR WASTE





ECONOMY X ECOLOGY X PEOPLE X BEHAVIOUR X CULTURE X ENHANCED CONSUMER CHOICES
 AWARENESS AND ACTION
 REFUSE - REUSE - RECYCLE - REDUCE - RETURN

Building a Policy and Regulatory Framework

Shipping and vessel operations

There are two international legally binding agreements, within the framework of the United Nations Convention of the Law of the Sea, relating to the protection of the marine environment from the discharge of garbage from ships and the dumping of wastes at sea; MARPOL Annex V (Annex V, International Convention for the Prevention of Pollution from Ships 1973, modified by the Protocol of 1978) and the London Protocol (Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972, updated by the Protocol 1996).

MARPOL Annex V entered into force in 1988 and, since 2013, prohibits the discharge of all garbage (including any plastics) into the sea, except in very limited circumstances. The Annex applies to all ships from merchant ships to non-commercial ships, like recreational vessels and yachts. Annex V also obliges Governments to ensure the provision of adequate reception facilities at ports and marinas for the reception of ship-generated garbage.

The London Convention (and Protocol) has been in force since 1975 and aims to protect and preserve the marine environment from all sources of pollution and to prevent, reduce and eliminate pollution by controlling the dumping of wastes and other materials at sea.

There is also the Cape Town Agreement of 2012 on the Implementation of the Provisions of the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977. This aims to provide standards for fishing vessels exceeding 24m in length.

Land-Sourced Marine Pollution

In 1995, UNEP Secretariat convened an intergovernmental conference at which 108 countries adopted a Global Programme of Action for the protection of the marine environment from land-based activities (see Global Programme of Action, UNEP, 2009). The associated Washington Declaration (1995) has been renewed through Montreal (2001), Beijing (2006) and Manila Declarations (2012). These instruments aim to regulate, among other aspects, land-sourced marine debris pollution.

Noumea Convention for the Pacific

Specifically for the Pacific, the Noumea Convention for the protection of the natural resources and environment (1986), with the Protocol for the Prevention of the pollution of the South Pacific Region by dumping (1986) applies (see SPREP, 1986). The Noumea Convention and protocols, came into force in 1990, to address pollution: pollution from ships, dumping, land-based sources, sea bed exploration and exploitation, atmospheric discharges, storage of toxic wastes, testing of nuclear devices, mining and coastal erosion.

From 2001–2004, the Secretariat of the Pacific Regional Environment Programme activities was directed by the *Action Plan for Managing the Environment of the South Pacific Region*. Since 2004, the Noumea Convention's work has been under various thematic frameworks, strategies and action plans, currently *Cleaner Pacific 2025 – Pacific Regional Waste and Pollution Management Strategy 2016–2025*.

The marine pollution component is the *Pacific Ocean Pollution Prevention Programme* (PACPOL) that principally addresses pollution from ships. The PACPOL Strategy 2015–2020 was developed by SPREP, in partnership with IMO, and approved in 2015. Its objectives are provided in Appendix 6. Further detail, including various local to regional initiatives are provided in *Cleaner Pacific 2025*.

Further improvements to this policy and regulatory framework are provided within the following suite of actions – especially for Take Away Food and Beverage Containers. Equally importantly, increased effort is required to implement and enforce these various existing policy and regulatory instruments as is the case with the fishing industry.



Fishing Vessel Waste

The main task is to resource and assist in applying, monitoring and then enforcing the *2017-04 Conservation Management Measure on Marine Pollution* [Appendix 3]. At the very least this should happen as all Pacific Island Countries and Territories renew existing Fishing Access licences and/or establish new licences.

TIMING Progressive implementation as fishing access licences are renewed and or new licences established, all Pacific Island Countries and Territories, over the next 10 years

EMPHASIS 5% on advocacy and resources to support and facilitate implementation and enforcement

Shipping Vessel Waste

Emphasis on MARPOL compliance through Port State Control measures.

TIMING Progressive implementation of port and flag state control measures over the next 10 years.

EMPHASIS 10% on advocacy and resources to support port and flag state control.

Cruise Ship Waste

Recognising the existence of MARPOL and related agreements, the main task is to assist in developing and then applying draft model cross compliance provisions [Appendix 4]. This can be best done as Pacific Island Cruise Company access licences are renewed and/or new licences established. Essentially this activity reinforces their existing corporate social responsibility and can then used by the companies as part of their promotion and certification systems.

TIMING Progressive implementation as licences are renewed and/or new licences are established, all Pacific Island Countries and Territories over the next 10 years

EMPHASIS 5% on advocacy, support and facilitating implementation and enforcement

Trans-boundary Waste

For fishing vessels the 2017-04 Conservation Management Measure on Marine Pollution will come into force after 1 January 2019 and once given effect and then monitored and enforced for all foreign flag fishing vessels, will markedly reduce marine pollution from fishing vessels of all nations.

At this time it is difficult to precisely determine other key trans-boundary waste sources. The proposed *Centre for Environment, Fisheries and Aquaculture Science* project should assist in defining any other key trans-boundary sources requiring regulation and enforcement.

Take Away Food and Beverage Containers

Examples of activities that could be part of this Action Plan include:

- Assist in finalising and then applying draft model provisions [Appendices 1 and 2], based on Marshall Islands example and existing container deposit schemes across all member states
- Demonstrate and make available recyclable and biodegradable options – preferably biodegradable [with short term subsidies if needed for local businesses to make the transition]
- Reinvigorate prior customs and processes for food storage and transport including hand woven natural fibre bilums in Melanesia, and coconut baskets in Polynesia.

TIMING Ongoing, major effort in first 5 years with annual reporting of progress and then assessment of investment needed to continue after that

EMPHASIS 10% in first 5 years –a substantial policy development initiative

Plastics and other Waste Materials generally

Beyond the two proposed model legislations there is a need for return systems, a more circular economy and extended producer responsibility for major capital such as white goods, vehicles and electronic consumer items. These issues are generic, beyond the scope of this Action Plan focussing on marine pollution and best covered under the broader *Cleaner Pacific 2025* strategy. Research and analysis will likely clarify any further issues that need to be addressed as the plan progresses.

Investment in improving collection, landfill and transfer station facilities is part of *Cleaner Pacific 2025* strategy. This Action Plan compliments these investments through Action 3.10, catching water-borne solid waste, reducing risk for the accompanying terrestrial collection and processing systems.

Awareness and Action

General Community Awareness and Action

Examples of activities that could be part of this Action Plan include:

- Modern media – *YouTube* videos of positive action + annual competitions
- Web-based updates and links to competitions
- Primary School children awareness – integrated with health [e.g. *Vili's Healthy Island Adventure*]
- Spray on stencils for urban drains – “*No waste – keep our fish and your food healthy*”
- Churches and other community leading groups sponsoring clean up and maintenance of their nearby beaches
- Champions selling the message – for example rugby, baseball, basketball, outrigger canoeing and netball – every Pacific Island Nation
- Contributions from major importer businesses, manufacturers and NGO's to assist funding

TIMING Ongoing with annual reporting of progress

EMPHASIS 20%

Tourist Focused Awareness and Action

Examples of activities that could be part of this Action Plan include:

- Adding waste management and no disposal overboard ethos to any Cruise Ship “welcome aboard” and safety videos
- Adding waste management and collection ethos to any familiarisation videos for Tourist Resorts
- Fostering greater awareness among Cruise Ship and resort staff through ecotourism certification schemes
- Encouraging tourist operators to add waste reduction and control messages for any new print runs of their brochures and websites facilitated through providing model electronic copy of simple graphics

TIMING Ongoing with annual reporting of progress for 2 years only

EMPHASIS 5%

Tourist Enterprise Waste

Recognising there is already a high level of waste management in most tourist resorts, the main task is to assist in developing and then applying draft model cross compliance provisions [Appendix 5] as Pacific island Tourist Resort access licences are renewed or new developments approved. Again, as with cruise companies, this is essentially part of their corporate social responsibility and can be used by the companies as part of their promotion and certification systems.

TIMING Progressive implementation as licences are renewed and/or established, all Pacific Island Countries and Territories, over the next 10 years

EMPHASIS 5% on advocacy, support and facilitating implementation and enforcement

Disaster Waste

Recognising that responding to disasters requires rapid and coordinated activities in very short timeframes the task is to plan ahead and be ready to implement smart waste management systems as might be required. The three key tasks are to:

- Work with Australian, New Zealand, French and United States Defence Forces to develop and implement Standard Operating Procedures for waste management, all Disaster Recovery missions;
- Build on the Standard Operating Procedures to formulate parallel and locally relevant Procedures for all Pacific Island Emergency Services;
- Train staff in all Pacific Island Countries and Territories so waste management experts and liaison teams can be part of all disaster responses.

TIMING Development of Standard Operating Procedures in the first 5 years of the Action Plan with extension to local emergency services as opportunities occur in the various Pacific island Countries and Territories

EMPHASIS 5% on interaction, support and facilitating implementation

Catching Water-borne Litter

Even with competent terrestrial waste management systems such as transfer stations and landfill sites there is always a high likelihood of water-borne waste in major urban centres. Infrastructure investment to trap waste within major urban areas is recommended and selection criteria for capital investment projects follow:

- Selection criteria for capital investment in trash capture includes:
 - major urban centres
 - centres that already have well managed landfill facilities nearby
 - major waterways / rivers above estuaries
 - preferably also incorporating sediment trapping
- Selection criteria for investment of floating booms in estuaries and embayments includes:
 - major high use embayments and estuaries, often urban
 - centres that already have well managed landfill facilities nearby
 - sheltered locations near wind and tide movement will concentrate floating litter

There are also minor works that can be undertaken such as improving the design of stormwater drainage grates in urban areas to catch more waste as “mini-traps”

TIMING Progressive implementation as landfills reach a suitable standard

EMPHASIS 5% for planning, with capital resources to come from donors

Coastal Clean Ups

Examples of activities that could be part of this Action Plan include:

- Clean up competitions between beaches and islands – all on You Tube
- Eco-tourist adventures to remote islands to clean up the beaches
- Gain sponsorship for special purpose barge / local watercraft events to collect and transport waste back to hubs
- Develop a standardised marine litter data collection, and the subsequent analysis of the source of the litter including ways to mitigate these sources

Note: There is a need to ensure land-based facilities are available to sort and process collected waste so that the amount going to landfill is reduced.

The proposed level of emphasis on this component of the Action Plan is high as such activities will result in:

- markedly increased community awareness of the problem;
- act as an change agent towards improved waste aware behaviour; and
- significantly contribute to reducing the legacy issues of existing waste already washed up on beaches.

It is expected that over time, as collection, landfill and transfer station systems are improved and as community behaviour changes that the emphasis on this activity can reduce. Reassessment of the need and emphasis on this activity will be part of the proposed 2025 review.

TIMING Ongoing, major effort in first 5 years with annual reporting of progress and then assessment of investment to continue after that

EMPHASIS 40% in first 5 years – make it a BIG ACTIVITY

A Note on Implementation

This Action Plan sets the context and broad scope of activities required to markedly reduce marine pollution in the Pacific Island Countries and Territories. The next steps include:

- Review of this Plan by key agencies in all Pacific Island Countries and Territories
- Roundtable in August 2018, hosted by Secretariat of the Pacific Regional Environmental Programme to discuss and finalise an agreed Action Plan
- Working individually with all participants to operationalize actions, possibly including annual timeframes for implementation for each Pacific Island Countries and Territories
- More detailed sub activities in each Action, and with their respective implementation times as might be required by various Pacific Island Countries and Territories
- Review of progress in 2020 and then in 2025 as detailed in the following sections.

Pacific Regional Marine Litter Action Plan – Implementation Activities

Strategic Action	Activities	Lead Agency	Priority PICTs	Potential Partners	Timeframe				Key Performance Indicators
					2018	2019	2020	2021	
1. Building a Policy and Regulatory Framework	1.1 Support the development of a global legal framework to address marine litter and microplastics	UN Environment, SPREP	All	UN Environment, SPREP, PICTs, Private Sector					Report on progress to 29th SPREP Meeting and Noumea COP15 & COP16
	1.2 Develop a regional framework to address marine litter and microplastics possibly through scope of Noumea Convention	SPREP	All	UN Environment, PICTs, Private Sector					Regional Framework for marine litter developed for Noumea COP15 (2019) and COP16 (2021)
	1.3 Ratification of the Capetown Agreement 2012	SPREP	All	SPC, FAO					No. of PICTs ratification of the Capetown Agreement 2012
	1.4. Ratification of the MARPOL Annex V	PICTs	Cook Islands, FSM, Nauru	SPREP, IMO					Ratification of MARPOL Annex v by Cook Islands, FSM and Nauru
2. Shipping and Vessel Operations	2.1 To resource and assist in MARPOL compliance through Port and Flag state control measures. Also assist and support MNZ coordinated IMO Pacific Coordination meetings preparatory meetings.	PICTs, MNZ	All	SPREP, IMO, SPC, Metropolitan Members					Port and Flag state control reports.
	2.2 Conduct national training on litigation, enforcement, compliance, monitoring and prosecution of illegal discharges from vessels (CP2025-11.16)	PICTs	All	SPREP, JICA, IMO, Interpol, Metropolitan Members, OCO, SPC, FFA, WCPFC, PNA					At least 8 national training conducted
3. Fishing Vessel Waste	3.1 To resource and assist in applying, monitoring and then enforcing the 2017-04 Conservation Management Measure on Marine Pollution	PICTs	All	SPREP, RFMOs					No. of GEN6 reports addressed through compliance & enforcement No. of GEN6 reports reduced No. of existing Fishing Access Licences renewed
	3.2 Evaluate options to identify lost fishing gear in order to allocate clean-up costs (CP2025-5.9)	Fisheries Departments/ Coastal Management agencies	All	FFA, FAO, IMO, GGGI					Evaluation report published and disseminated
	3.3 Convene a regional workshop to consider options to reduce the amount of abandoned and lost fishing gear, such as through tagging of fishing gear (CP2025-5.10)	SPREP	All	Metropolitan Countries, FFA, WCPFC, PNA, IWC, Pew Charity Trust, Centre for Marine Conservation					Regional workshop convened and report published

Strategic Action	Activities	Lead Agency	Priority PICTs	Potential Partners	Timeframe				Key Performance Indicators
					2018	2019	2020	2021	
4. Cruise Ship Waste	4.1 To develop and then apply draft cross compliance MARPOL provisions for Pacific Island Cruise Company access licence	PICTs	All	SPREP, SPTO					No. of Pacific Island Cruise Company access licence renewed with cross compliance provisions
5. Trans-Boundary Waste	5.1 Same as 3.1 above								
6. Take-Away Food and Beverage Containers	6.1 Develop model legislation to ban single use plastics, Styrofoam and plastic packaging, based on Marshall Islands and Vanuatu examples.	SPREP	All	RMI, Vanuatu					No. of model legislations completed
	6.2 Apply model legislation to ban single use plastics, Styrofoam and plastic packaging, based on Marshall Islands and Vanuatu examples	PICTs	All	SPREP					No. of legislation completed
	6.3 Demonstrate and make available recyclable and biodegradable options – preferably biodegradable with short term subsidies if needed for local businesses to make the transition	SPREP	All	UN Environment					No. of recyclable and biodegradable options made available
	6.4 Reinvigorate prior customs and processes for food storage and transport including hand woven natural fibre bilums in Melanesia, and coconut baskets in Polynesia	PICTs	All	NGOs, SMEs, Women Groups, Church Groups					At least 2 activities in each subregion - Melanesia, Polynesia and Micronesia.
7. Plastics and other Waste materials generally addressed through CP2025 activities	7.1 Implement solid waste management initiatives and actions as outlined in the Cleaner Pacific 2025 moving from a linear economy to a circular economy of Reuse, Reduce, Recycle and Return. Applying Resource Recovery Schemes and Extended Producer Responsibility schemes (CP2025-6.1 & 6.4)	PICTs, SPREP	All	SPREP, UN Environment					At least 7 Extended Producer Responsibility and Resource Recovery schemes adopted
	7.2 Support PICTs expand user-pay waste collection services (CP2025-8.1 to 8.4)	PICTs	All	SPREP, JICA, PRIF					At least 7 user-pay waste collection services implemented
	7.3 Implement the Moana Taka Partnership agreement with Swire 2018 to 2021 and beyond.	SPREP	All	Swire, PICTs, Recycling					Moana Taka Partnership successfully implemented beyond 2021

Strategic Action	Activities	Lead Agency	Priority PICTs	Potential Partners	Timeframe				Key Performance Indicators
					2018	2019	2020	2021	
	7.4 Identify and disseminate market information for recyclables, and appropriate transboundary disposal facilities for hazardous waste (CP2025-9.3)	SPREP	All	Private Sector, recycling organisations, metropolitan countries, JICA					At least once a year disseminate information commodity markets as well as disposal facilities for hazardous waste
	7.5 Support PRIF Regional Recycling Network	PRIF	All	SPREP, CROP, Regional Recyclers					Regional Recycling centres established in Suva and PNG
8. Awareness and Action	8.1 Develop a regional model communication, awareness and education action plan and implement in countries (CP2025-12.1)	PICTs	All	SPREP, UN Environment, Private Sector					At least 7 national communication, awareness and education action plans developed
	8.2 Develop and implement 'Clean schools' and 'Clean Campus' programmes to encourage adoption of waste reduction and recycling best practices in schools and educational institutions (CP2025-6.7)	PICTs	All	SPREP, JICA, Private Sector					At least 2 'Clean schools' and 'Clean Campus' programmes implemented
	8.3 Implement a standardised marine litter and microplastics data collection system and app for the Pacific	SPREP	All	Tangaroa Blue, UN Environment, JICA, IUCN, Metropolitan Countries, Voyage Societies, Ocean ambassadors'					Marine litter and Microplastics app launched for the Pacific
	8.4 Support community based cleanup activities to raise awareness of marine litter	PICTs	All	Tangaroa Blue, UN Environment, JICA, IUCN, Metropolitan Countries, Voyage Societies, Ocean ambassadors', Sustainable Coastlines					At least 1 activity per PICTs supported
	8.5 Support 2 major regional activities raise awareness of marine litter and plastics	SPREP	Samoa (2019), ?? (2021)	Pacific Games Organising Committee, National Armature Sports Organising Committee					Support provided to Pacific Games in 2019 and 2021
	8.6. Implement awareness raising for domestic/ regional shipping, fishing and recreational vessel sectors.	SPREP	All	IMO, SPC, FFA, WCPFC, PNA, Metropolitan SPREP Members					Number of awareness raising activities conducted

Strategic Action	Activities	Lead Agency	Priority PICTs	Potential Partners	Timeframe				Key Performance Indicators
					2018	2019	2020	2021	
9. Tourist Focused Awareness And Action	9.1 Inclusion of waste management and no disposal overboard ethos to any Cruise Ship 'welcome aboard' and safety videos	PICTs	All	SPREP, JICA, UN Environment, SPTO					At least 2 welcome aboard and safety videos included
	9.2 Inclusion of waste management and collection ethos to any familiarisation videos for Tourist Resorts	PICTs	All	SPREP, JICA, UN Environment, SPTO					At least 2 tourist resort video included
	9.3 Fostering greater awareness among Cruise Ships and resort staff through ecotourism certification schemes	PICTs	All	SPREP, JICA, UN Environment, SPTO					At least 2 ecotourism certification schemes implemented
	9.4 Tourist operators to add waste control messages for any new print of their brochures + websites facilitated through providing model electronic copy of simple graphics	PICTs	All	SPREP, JICA, UN Environment, SPTO					At least 7 tourist brochures and websites contain model waste control messages
10. Tourist Enterprise Waste	10.1 Develop, adopt and implement cross compliance provisions as part of Pacific Island Tourist Resort access licences are renewed or new developments approved	PICTs	All	SPREP, JICA, UN Environment, SPTO					At least 7 Pacific island tourist resort access licences or new developments includes cross compliance waste provisions
11. Disaster Waste	11.1 Improve national dumpsites (when appropriate) according to regional and exiting guidance, and incorporate best-practice sustainable financing measures (CP2025-9.9)	PICTs	All	SPREP, JICA, PRIF, Metropolitan Members					At least 2 dumpsites and landfills improved
	11.2 Implement National Disaster Waste management plans (CP2025-2.10)	PICTs - NDMOs	All	SPREP, SPC, WCP Departments/ NDMOs, Metropolitan countries, UNISDR					Disaster waste management plans developed for all PICTs
	11.3 Conduct national and regional disaster waste management training (CP2025-11.13)	SPREP	All	SPC, NDMOs, UNISDR, AS, FP, JICA					Training conducted in 7 PICTs

SECTION 4

Resourcing and Tracking Progress



Funding Implementation of the Action Plan

Funding of the Action Plan will utilise resources from many international investment programs as well as resources and capacity from the contributing Pacific Island Countries and Territories. All activities nest within the broad strategic guidance of the Pacific Regional Waste and Pollution Management Strategy 2016–2025. Following is an example of how some of the international investment programs will contribute to implementation of this Action Plan.

International Investment Program	17	18	19	20	21	22	23	24	25	Focus	Marine Outcomes
JPRISM II										Terrestrial Waste Management – Landfills and Recycling	Less wind and water-borne waste to coasts and ocean
EDF II										Addressing 8 waste streams – E-waste, asbestos, healthcare and medical waste, residual solid waste, disaster waste, organic waste, and waste water emanating from these waste streams.	Reduced terrestrial sources through improved collection and disposal as well as improved quantification of the sources and solutions.
AFD										Focuses on 3 key waste streams – marine plastics, used oil and disaster waste by implementing a citizen science best practice approach.	Better understanding of the marine plastics issues – sources and solutions.
CEFAS										Baseline information – sources, nature and impact of pollution	Action can be targeted on key marine pollution sources
IMO										Protocols and procedures for reduced waste from ships	Reduced marine waste from shipping
GEF 7										Major investment in pollution reduction, all sources	Less wind and water-borne waste to ocean + increased community awareness + regulatory and policy development
PRIF										Regional Recycling hubs established in Fiji and PNG	Reduced plastic and debris through regional recycling networks

JPRISM II Japanese Technical Cooperation Project for promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries

EDF II European Development Fund

AFD Agence Française de Développement

CEFAS Centre for Environment, Fisheries and Aquaculture Science

IMO International Maritime Organisation

GEF 7 Global Environment Facility

PRIF Regional Recycling Network

Monitoring Progress

Much of the monitoring of progress in implementing the Action Plan involves monitoring the uptake and implementation of various Codes, Agreements and new agreements such as the *Fishing Conservation and Management Measure 2017-04*.

Other activities are synonymous with the processes and monitoring arrangements already incorporated in *Cleaner Pacific 2025 – Pacific Regional Waste and Pollution Management Strategy 2016–2025*.

Two specific additional monitoring activities are:

- **Coastal Clean Ups** – requiring a specific protocol to standardise sampling methods as a sub-component of all Coastal Clean Ups. The aims of the data collection and analysis to be implemented across all participating Pacific Island Countries and Territories are to:
 - track progress and record geographically which foreshores have been cleaned up and the frequency of clean up;
 - understand if the litter collected on particular foreshores is changing in time from both a volume and a type perspective; and
 - use the standardised marine litter data collection system to quantify the likely sources of the litter collected, thereby informing other strategies to control litter at source.
- **Disaster Waste** – all disasters by necessity initially concentrate on humanitarian activities, ensuring public safety, rescuing any injured and facilitating the provision of healthy temporary living conditions until infrastructure and related services and amenities can be repaired. Even following the adoption of protocols by all emergency services groups and participating Defence Forces some form of liaison and audit of implementation of the protocols will be required. The training and appointment of specialist staff will ensure both the adoption of smart practices and as needed suggestions to amend and adopt improved protocols.

Monitoring activities are summarised in the accompanying table.



TABLE 1 Monitoring the Marine Pollution Action Plan

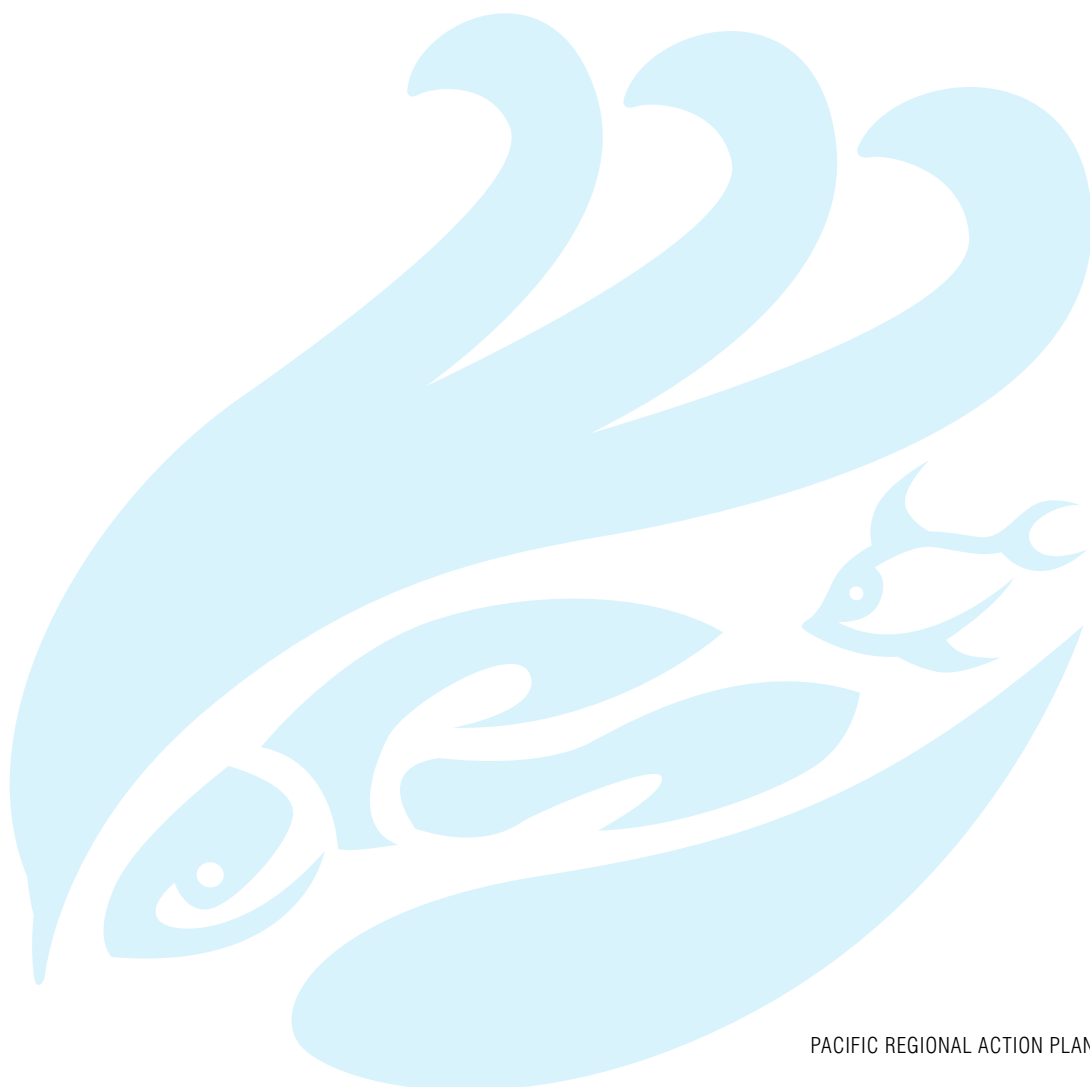
Monitoring Actions	2020	2025
Fishing Vessel Waste	Initial progress in Conservation and Management Measure on Marine Pollution (2017-04) being adopted by all Pacific Island Countries and Territories	Track the level of adoption of the Measure and design activities to monitor and as necessary enforce implementation
Cruise Ship Waste	Ensure MARPOL conditions, protocols and procedures is part of all renewed and new access licences, all Pacific Island Countries and Territories	Track the level of adherence with MARPOL requirements and related agreements and design activities to monitor and as necessary enforce implementation
Trans-Boundary Waste	Initial progress in Conservation and Management Measure on Marine Pollution (2017-04) being adopted by all Pacific Island Countries and Territories plus the Centre for Environment, Fisheries and Aquaculture Science project providing information on other key sources	Review and if other key sources are determined as major issues, develop appropriate policy or regulatory responses
Take Away Food and Beverage Containers	National legislation building on the Marshall Islands initiative and existing Container Deposit Schemes in place	Analyse progress in implementation of the national legislations, all Pacific Island Countries and Territories
Plastics – Refuse / Recycle / Return	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy
General Community Awareness	Part of implementing Cleaner Pacific 2025	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy
Tourist Focussed Awareness	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy
Tourist Enterprise Waste	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy	Part of implementing Cleaner Pacific 2025 and targets and monitoring activities all specified and undertaken as part of the broader strategy
Disaster Waste	Standard Operating Procedures formulated and in place, all emergency services and key Defence Forces + Liaison teams in place and trained	On an emergency by emergency basis, audit and continuously improve the Standard Operating Procedures
Catching Water-Borne Litter	Part of implementing Cleaner Pacific 2025	Part of implementing Cleaner Pacific 2025
Coastal Clean Ups	Data and Analysis under standard protocols, all Pacific Island Countries and Territories	Review all Analysis, all Pacific Island Countries and Territories as input to better understanding sources and therefore changed emphasis in Action Plan II

Evaluation and Review of this Plan

Evaluation and changes to focus for this Marine Pollution Action Plan are to be based on the monitoring findings in the previous Table at both the 2020 and the 2025 intervals in line with the implementation of the broader remit detailed in the *Cleaner Pacific 2025 – Pacific Regional Waste and Pollution Management Strategy*.

Recognising that our knowledge and the issues surrounding marine litter are rapidly changing the types of amendments to the Action Plan as part of Marine Pollution Action Plan II in 2025 are likely to include:

- continuing community awareness activities, all Pacific Island Countries and Territories;
- reduced need for cruise ship and tourist / visitor awareness and possibly no further actions or intervention required;
- continued coastal clean ups, with possibly as big an emphasis but focussing on more remote islands, assuming that on more populated islands such activities are becoming mainstream or almost routine, often led by Church, school and community groups;
- the proposed national legislations on take-away food containers and beverage containers being in place and reducing the need for any further actions on this issue while simultaneously increased action on plastics generally;
- infrastructure to catch water-borne litter increasing in investment profile as part of the next phase of the Cleaner Pacific 2025 initiative and recognising that the current Cleaner Pacific 2025 initiative has already led to a suite of well managed landfills, all Pacific Island Countries and Territories; and
- fishing, cruise ship, tourist resort and disaster management codes, agreements and protocols all entering a case by case monitoring and enforcement phase.



Conclusions

The capacity of Pacific Island Countries and Territories to prevent and respond to marine litter is limited and most countries do not yet have in place adequate waste management and pollution minimisation plans. Most importantly, several Pacific Island countries have yet to become Parties to the various conventions and protocols relating to the protection of the marine environment, including the MARPOL, London and Noumea Conventions. The *2017-04 Conservation Management Measure on Marine Pollution* that, if implemented, will do much to minimise fishing industry waste is scheduled to come into force 1 January 2019.

With over 98% of our region covered by ocean, marine litter impacts to ecosystems and coastal communities are heightened by the reliance of island communities upon healthy ocean ecosystems and services. Pacific Island Countries and Territories can also be particularly vulnerable to marine litter impacts due to financial and institutional challenges in properly managing waste before it is transported by wind or water to the marine environment.

It is therefore imperative that a suite of activities, as outlined by this Action Plan are implemented across all Pacific island Countries and Territories – that the foundation policy and regulatory frameworks are implemented, where necessary enhanced as in the case of Take Away Food and Beverage Containers, and most importantly then enforced by all. This will set an excellent foundation for the various improved management, awareness, infrastructure and clean up activities that will be resourced through this Action Plan.



Further Reading

Ellen Macarthur Foundation (2017) *The New Plastics Economy – Catalysing Action*

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Markic, A (2014) *Marine Debris Pollution in the Pacific – Literature Review*

Markic, A and Costello MJ (2017) *Plastic Ingestion by Fish* Final Report, Thesis Part I

OSPAR Commission (2014) *Marine Litter Regional Action Plan* OSPAR Secretariat, United Kingdom

Pacific Region Infrastructure Facility – PRIF (2018) *Regional Recycling Network Proposal in the Pacific Region*, Draft V2, for the Pacific Region Infrastructure Facility Urban Sector Working Group

UNEP (2014) *Valuing Plastics: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry*. United Nations Environment Programme, Nairobi

UNEP (2015) *Biodegradable Plastics and Marine Litter. Misconceptions, concerns and impacts on marine environments*. United Nations Environment Programme (UNEP), Nairobi.

UNEP (2016) *Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change*. United Nations Environment Programme, Nairobi

SPREP (2016) *Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025: Implementation Plan*, Apia, Samoa

APPENDIX 1

Draft Pacific Island model legislation for plastics [building on the Marshall Islands Styrofoam and Plastics Products Prohibition Act, 2016]

[Draft model legislation to be developed through detailed discussion with all Pacific Island Countries and Territories as well as the private sector]

APPENDIX 2

Draft Pacific Island model legislation for takeaway food containers and including widespread adoption of container deposit schemes

[Draft model legislation to be developed through detailed discussion with all Pacific Island Countries and Territories as well as the private sector]

APPENDIX 3

2017–04 Conservation and Management Measure on Marine Pollution (effective from 1 Jan 2019)

This Conservation and Management Measure is as follows:

COMMISSION FOURTEENTH REGULAR SESSION

Manila, Philippines, 3–7 December 2017

CONSERVATION AND MANAGEMENT MEASURE ON MARINE POLLUTION 2017-04

The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

Concerned that marine pollution is increasingly recognised as a significant global problem, with detrimental impacts on ocean and coastal environments, wildlife, economies and ecosystems,

Recalling that the need to prevent and significantly reduce marine pollution of all kinds was affirmed at the United Nations Conference to Support the Implementation of Sustainable Development Goal 14 through the adoption of paragraph 13(g) of the ‘Our ocean, our future: call for action’ declaration;

Convinced that certain activities associated with fishing may affect the Western and Central Pacific marine environment and that these activities may play a notable role in WCPFC’s efforts to minimise incidental mortality of non-target species and impacts on marine ecosystems,

Noting that abandoned, lost or otherwise discarded fishing gear in the marine environment can damage marine, reef and coastal habitats, be harmful to marine life through ghost fishing, entanglement, ingestion and acting as habitat for the spread of invasive species, and create a navigation hazard,

Noting that the provisions of Annex V of International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto and by the Protocol of 1997 (MARPOL), prohibit the disposal of all fishing gear and plastics at sea,

Further noting that the provisions of Annex I, Annex IV and Annex VI of MARPOL manage and restrict the discharge of oil, sewage and air pollutants from ships at sea,

Noting that there is limited monitoring and implementation of MARPOL obligations on fishing vessels, and consequently little information exists about illegal pollution activities by fishing vessels at sea,

Further noting that the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and the 1996 Protocol (London Protocol) manage or prohibit through regulation the dumping into the sea of wastes or other matter.

Recalling that information from observer reports suggests that fishing vessels are responsible for significant amounts of marine pollution in the Western and Central Pacific Ocean, even when observers are aboard, and that marine pollution is likely to be even more significant on fishing vessels, particularly longline fishing vessels, where observer coverage is very low,

Recognising that Article 30(1) of the Convention requires the Commission to give full recognition to the special requirements of developing States that are Parties to the Convention, in particular the small island developing States (SIDS) and Territories, in relation to the conservation and management of highly migratory fish stocks in the Convention Area and development of fisheries for such stocks;

Recognising further that Article 30(2) of the Convention requires the Commission to take into account the special requirements of developing States, in particular SIDS and Territories. This includes ensuring that conservation and management measures adopted by it do not result in transferring, directly or indirectly, a disproportionate burden of conservation action onto developing States Parties, and Territories;

Recalling the adoption of CMM 2013-07 which also recognises the special requirements of SIDS and territories;

Adopts, in accordance with Article 5 (d-f) and 10 (1)(h) of the Convention that:

1. Commission Members, Cooperating Non-Members and Participating Territories (CCMs) that are entitled to ratify, accept, approve or accede to the annexes of MARPOL and the London Protocol are encouraged to do so at the earliest possible opportunity if they have not already done so. CCMs that experience difficulties in becoming Parties to the MARPOL or London Protocol are encouraged to inform the International Maritime Organization of the circumstances thereof, so that consideration can be given to take appropriate action in this respect, including providing necessary technical assistance.
2. CCMs shall prohibit their fishing vessels operating within the WCPFC Convention Area from discharging any plastics (including plastic packaging, items containing plastic and polystyrene) but not including fishing gear.
3. CCMs are encouraged to prohibit their fishing vessels operating within the WCPFC Convention Area from discharging:
 - a oil or fuel products or oily residues into the sea;
 - b garbage, including fishing gear¹, food waste, domestic waste, incinerator ashes and cooking oil; and
 - c sewage, except as would be permitted under applicable international instruments.
4. CCMs are encouraged to undertake research into marine pollution related to fisheries in the WCPFC Convention Area to further develop and refine measures to reduce marine pollution, and are encouraged to submit to SC and TCC any information derived from such efforts.
5. CCMs shall encourage their fishing vessels within the WCPFC Convention Area to retrieve abandoned, lost or discarded fishing gear and retain the material on board, separate from other waste for discharge to port reception facilities. Where retrieval is not possible or does not occur, CCMs shall encourage their fishing vessels to report the latitude, longitude, type, size and age of abandoned, lost or discarded fishing gear.
6. CCMs are requested to ensure adequate port reception facilities are provided to receive waste from fishing vessels. SIDS CCMs are requested to utilise, as appropriate, regional port reception facilities in accordance with international standards.
7. CCMs are encouraged to ensure that fishing vessels flying their flag and operating within the WCPFC Convention Area inform their flag State of ports in countries that are Party to the annexes of MARPOL which do not have adequate port reception facilities for MARPOL wastes.
8. CCMs shall cooperate, consistent with national laws and regulations, directly or through the Commission, and in accordance with their capabilities, to actively support SIDS and Territories through the provision of adequate port facilities for receiving and appropriately disposing of waste from fishing vessels.
9. CCMs are encouraged to develop communication frameworks to enable the recording and sharing of information on fishing gear loss in order to reduce loss and facilitate recovery of fishing gear.
10. CCMs are further encouraged to develop frameworks or systems to assist fishing vessels to report the loss of gear to their flag State, relevant coastal States, and the Commission.
11. CCMs are encouraged to conduct training and awareness programs for the crew and master of fishing vessels flying their flag regarding the impacts of marine pollution and operational practices to eliminate marine pollution caused by fishing vessels.
12. This measure will be reviewed by the Commission every 3 years to consider expanding the scope of measure with respect to the elimination of marine pollution caused by fishing vessels.
13. The date of implementation for this measure is 1 January 2019.

.....
1 Fishing gear, for the purposes of this measure, that are released into the water with the intention of later retrieval such as FADs, traps and static nets, are not considered garbage.

APPENDIX 4

Draft additional cross compliance protocols for Cruise Ship access to build on MARPOL agreement

[Draft cross compliance protocols to be developed through detailed discussion with all Pacific Island Countries and Territories]

APPENDIX 5

Draft cross compliance protocols for Tourist Enterprises

[Draft cross compliance protocols to be developed through detailed discussion with all Pacific Island Countries and Territories]

APPENDIX 6

Pacific Ocean Pollution Prevention Programme (PACPOL) Strategy 2015–2020 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 lifelong respect for the need to protect our coastal and marine environmental heritage.
- Promote International best principles and practices in the maritime business and port development and 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.



