

Marine Pollution in the Pacific Region¹

1. Key points

- Marine pollution is a significant threat to the Pacific and takes several forms and originates from a multitude of sources both on-land and at sea, making addressing the issue complex and requiring a multi-sectoral and multi-dimensional response.
- More than 80% of marine debris originate from land.
- Discarded plastic waste is considered one of the priority issues facing the region. Every year, between 4.7 and 5 million tons of materials are imported into Pacific island countries and territories (PICTs). Only 1 million tones are returned to their places of origin¹. Close to 2,000 billion pieces of plastic are found in the North Pacific Ocean – 58% of these originated from China and 27.2% from Japan. 491 billion plastic pieces found in the South Pacific Ocean, - 26.6% of these originated in South America and 30.8% in Indonesia.
- Abandoned, lost and discarded fishing gear remains a significant problem, with some estimates from SPC indicating between 30000 and 60000 drifting FADs (dFADS) are deployed each year in the Pacific Islands region. FADs may consist of old purse seine net, polystyrene or plastic floats, and other materials. It is estimated that less than 10% of these are recovered. A number become stranded on reefs and coasts; the fate of the remainder is largely unknown.
- SPREP has reported that there are over 20,000 recorded GEN6 SPC/FFA Observer MARPOL violations from fishing vessels of which 16% is attributed as ALDFG.
- Despite the multiplication of reports on plastics, including microplastics/pharmaceuticals or cosmetic products, in the ocean, there is little data available to quantify or qualify extent of the problem in the environment and potential risks to human health for people in PICTs.
- Oil Spills are another risk facing PICTs, with the recent oil spills in the Solomon Islands highlighting the significant impacts such accidents can have. Regional Oil Spill response is coordinated through the Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN), recently revised.
- World War II Wrecks pose additional significant environmental risks through oil leaks and spills from their corroding hulls. This risk is exacerbated by extreme events such as severe tropical cyclones and typhoons. Extensive mapping of wrecks was conducted in the early 2000s and oil successfully pumped out of one ship through involvement of partners, including SPREP.
- Dealing with nuclear waste and ongoing impacts of the USA Nuclear Testing Programme has been an issue high on the priority list of the Pacific Islands Forum leaders.
- Underwater noise is an emerging issue in a region with such a dense maritime traffic. Sources of underwater noise include ship operations (from all vessels), seismic surveys, sonars, acoustic masking, etc. It is difficult to address as it propagates fast and wide, and there is uncertainty as to the long-term chronic aggregate effect. Reports have demonstrated the

¹ Pacific Marine Action Plan: Marine Litter 2018-2015. Apia, Samoa : SPREP, 2018.

significant impact on marine species, including marine mammals such as whales that have significant cultural and economic importance to many PICTs. Solutions to address underwater noise include retrofitting of maritime technology (vessels), reduction in navigation speeds, designing navigation path to avoid emblematic marine species.

- Land-based pollution such as land development run-offs, including from agricultural, urban and industrial development, represent a significant issue that is difficult to tackle. While under the Convention on the Law of the Sea (UNCLOS) countries have the duty to protect and preserve the marine environment, there are much progress that needs to be done to tackle land-based pollution. Such run-offs have significant impacts on the coastal environment, smothering coral reefs that support close to a quarter of marine life and provide significant livelihoods benefits for coastal populations. In addition, such stressors further inhibit the ability of these ecosystems to respond to the effects of climate change.
- Some frameworks and mechanisms to address marine pollution include:
 - i. The International Maritime Organization, including through the MARPOL convention, aims to limit and address pollution from shipping. Some Pacific Island states are still not signatories to MARPOL. In recent years, the IMO has developed regulations and guidelines to address pollution from ships, including discharge as well as greenhouse gases emissions from ships, as well as recently underwater noise. MARPOL Annex V prohibits disposal of plastics from any vessel.
 - ii. Pollution from fishing vessels is also addressed through MARPOL as well as through WCPFC. In particular, WCPFC Conservation Management Measures 2017-04 requires Parties and complying non-member parties to *prohibit* flagged vessels from discarding plastics from sea and *encourages* parties to recover lost fishing gear. Close to 20,000 recorded GEN6 SPC/FFA Observer MARPOL violations from fishing vessels have been reported.
 - iii. The Noumea Convention is the Pacific node of UNEP’s global network of regional seas convention aimed at protection of the marine environment from all sources of waste and pollution, with SPREP as its secretariat.
 - iv. The Pacific Regional Integrated Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025) is the overarching framework for addressing marine pollution. It is implemented through the Pacific Oceans Pollution Prevention Programme 2015-2020 (PACPOL 2020) and Pacific Regional Marine Litter Action Plan 2018-2025 (PMLAP 2025)

2. Challenges and opportunities (*appetite for integrated ocean governance*)

- Improved waste-management capacity and practices, including low-waste production and industry, resource re-use, and effective waste disposal, are vital. Wastewater and solid waste collection and management are key to preventing pollution and litter entering waterways and the ocean.
- Marine Debris and Plastics:
 - i. Plastic pollution is a global, trans-boundary and cross-sectoral problem which requires global solutions, coordinated actions, shared responsibilities and a collective approach. The current global governance structure on marine plastic pollution is fragmented and ineffective. As of today, there is no dedicated international treaty in place to specifically and comprehensively tackle marine plastic pollution. A more coherent, integrated and targeted global response is needed.
 - ii. Pacific Island Forum Leaders have committed to eliminate marine litter and to urgently implement the *Pacific Marine Litter Action Plan 2018-2025*, including by supporting the development of a global legal framework to address marine litter and micro-plastics.
 - iii. Abandoned Lost and Discarded Fishing Gear remains a significant problem in the region.
 - iv. Projects are developing in the region, including to reduce the use of single use plastics through identifying innovative pathways to change.
 - v. Effectively addressing marine debris and plastics pollution in the region requires strong regulations, developing alternatives and recycling and re-use programmes, as well as non-generation of such waste. The role of citizens and individuals is paramount.
- World War II Wrecks
 - i. 53 wreck sites have been prioritized as needing urgent remedial action, based upon their condition and exposure to damage, their location and proximity to the surface and to sensitive habitats. Remedial action may include, cathodic protection, oil removal or hull and tank repairs. This work is costly, and funding and partnerships are needed to undertake this important work.
 - ii. There is the desire by some countries to raise the issue of WWII wrecks globally as a draft resolution for tabling at the UN Environment Assembly
- Oil Spill Response
 - i. Oil spill response amongst in the Pacific Islands is guided by the PACPLAN which recently underwent review to improve its implementation.
 - ii. Becoming parties to relevant international conventions, such as MARPOL, can support countries to access insurance and compensation funds, and having corresponding domestic legislation in place, to give this access the force of law.
- Abandoned Lost and Discarded Fishing Gear
 - i. There are programmes and measures in place to address abandoned Lost and Discarded Fishing Gear. However, implementation remains an issue.

- Waste management, recycling and disposal facilities –
 - i. Countries continue to strengthen and improve their facilities, systems and capacity for waste management assisted by partners, such as UN agencies, regional agencies, bilateral and multilateral banks and donor agencies and others.
 - ii. Fiji, Samoa and Vanuatu have set up national recycling and waste management associations as a private-public partnership to implement and coordinate waste management activities.
 - iii. Through the “Moana Taka Partnership,” SPREP and Swire Shipping with oversight and facilitation of UNEP have made available free shipping of non-commercial waste from PICTs to ports within the Swire’s Asia Pacific Shipping route.
 - iv. The closing of China to recycling and concerns raised by South East Asian countries that currently accept recycling is a challenge to current recycling arrangements. PICTs could consider alternatives, include region-grown recycling programmes.
- Further scientific data and information on Marine Pollution is needed to allow policymakers to better understand the scope and extent of the problem. Policies and legislation should be developed based on the best available science.
- Effectively tackling marine pollution will not be possible without the strong involvement of individuals. Informed consumer decisions through increased awareness and provision of alternatives will support addressing this issue.

3. How issues link to key policies (SDG14, FPO, Samoa Pathway, 2050 Regional Strategy, etc.)

- SDG Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds. In particular from land-based activities including marine debris and nutrient pollution. Also, relevant 14.2, 14.C. Attention should also be focused as well on SDG 14.A;

4. Background and other reference materials

(links to relevant documents)

- [PACPLAN 2019](#) (marine spill contingency plan)
- SIGNATORIES TO MARPOL
- [PMLAP](#) (Marine litter action plan)
- [CMM 2017-04](#) (MARPOL compliance and enforcement for fishing vessels)
- [PACPOL 2020](#) (addressing ship related marine pollution)
- [Cleaner Pacific 2025](#) (integrated approach to waste and pollution management)
- [WWII Wrecks project](#)
- [Pacific Ocean Litter Project](#)
- <https://www.sciencedirect.com/science/article/pii/S1382668902001266?via%3Dihub>
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/714511/CEFA_S_Pacific_Islands_Report_Card_FINAL_AMENDED_Single-pages_LOW-RES.pdf
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- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/717512/9_Corals.pdf
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/714525/13_Society_Culture_and_Gender.pdf

ⁱ This brief was compiled by UNEP and SPREP with inputs from relevant organisations and experts