

United Nations Environment Programme (UNEP)  
Inputs to the Secretary-General's Report on Marine Debris, Plastics and Microplastics

Summary

UNEP together with the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) has been working to prevent, reduce and mitigate impacts by marine litter on marine and coastal ecosystems. Challenges posed by marine litter and responses to the challenges by UNEP are reviewed below.

At the First Session of United Nations Environmental Assembly (UNEA), member states adopted resolution 1/6 Marine plastic debris and microplastics. UNEP, under the leadership of the Director, in consultation with other relevant institutions and stakeholders, to undertake a study on marine plastic debris and marine microplastics, building on existing work and taking into account the most up-to-date studies and data. The study has focused on key sources, possible measures and best available techniques and environmental practices to prevent the accumulation and minimize the level of microplastics in the marine environment; urgent actions; research needs including key impacts on the environment and on human health; other priority areas identified in the assessment of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection. The study is going to be submitted to the Second Session of UNEA in May 2016.

An analysis of socioeconomic aspects of marine litter at a global level was prepared by IEEP, on behalf of UNEP, and delivered in time to provide input for the G7 Summit, June, 2015.

Regional Sea Programmes spearhead monitoring, assessment and awareness raising at the regional level. Through the Global Partnership on Marine Litter, several regional action plans have been developed. For example, in 2013 a legally binding Marine Litter Regional Plan was adopted by the 22 participating countries to the Barcelona Convention. Long-lasting monitoring programme within the Northwest Pacific Action Plan (NOWPAP) region have also enhanced understanding of marine litter and associated impacts.

Recently UNEP launched Massive Open Online Course on Marine Litter, aiming to raise citizen awareness across the world. Over 6,000 people were enrolled.

Although significant efforts have been made to tackle the issue of marine litter, further action needed in order to effectively address the issue. Recommendations for future action include to



(Manila Declaration)<sup>1</sup> Following the recommendation the GPML was officially launched at Rio + 20 in Brazil, in June 2012.

The GPML is a multistakeholder global partnership, which brings together international agencies, governments, NGOs, academia, the private sector, civil society and individuals under the common vision to reduce and better manage marine litter. At the heart of GPML is the implementation of the Honolulu Strategy – A Global Framework for Prevention and Management of Marine Debris<sup>2</sup>. The strategy has three main goals: (1) Reduce amount and impact of land-based litter and solid waste introduced into the marine environment; (2) Reduce amount and impact of sea-based sources of marine debris, including solid waste, lost cargo, ALDFG (abandoned, lost or otherwise discarded fishing gear) and abandoned vessels introduced into the sea; and (3) Reduce amount and impact of accumulated marine debris on shorelines, in benthic habitats, and pelagic waters.

Based on the strategy, the GPML will continue assisting stakeholders to reduce the impacts of marine litter. UNEP, together with the GPML, continues providing technical assistance and raising awareness with regards to marine litter and its associated impacts so that member states can effectively achieve the Sustainable Development Goal 14. By 2025, *prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution*<sup>3</sup>.

As is shown by the Declaration of the G7 Summit in 2015<sup>3</sup>, there are increasing concerns over marine debris and associated impacts among the policy makers. Increasing efforts will be made, driven by the 2030 Agenda for Sustainable Development and the Paris Declaration, in order to prevent, and reduce marine litter across the world. With the long-standing experiences on the issues, UNEP will continue providing links between science and policy in order to effectively address the challenges posed by marine litter.

## 2. Progress to date

### 2.1 UNEP

The UNEP/GPA Coordination Office has led efforts in addressing the issues related to marine litter globally. Among its efforts included the launch of the Global Partnership on Marine Litter (GPML) in 2012, which was launched during the First United Nations Environment Assembly (UNEA) and which noted that the overall natural capital cost of plastics use in the consumer goods sector each year is US\$75 billion<sup>2</sup> calculated as the negative financial impact of issues such as pollution of the marine environment or air pollution caused by incinerating plastics.

<sup>1</sup> UNEP/GPA/IGR.3/6

<sup>2</sup> <http://unep.org/gpa/documents/publications/honolulustrategy.pdf>

<sup>3</sup> [https://www.g7germany.de/Webs/G7/EN/Home\\_en/home\\_node.html](https://www.g7germany.de/Webs/G7/EN/Home_en/home_node.html)









parties in 2012 to enhance cooperation in order to prevent, reduce, mitigate and control pollution from land-based sources.

In October 2015, the Abidjan Convention held a marine litter workshop of its network of marine environmental journalists in an effort to ensure sustained coverage of the problem and create heightened public and government awareness to the threat litter causes to marine life, coastal habitats and water bodies.

## 2.2.2 Barcelona Convention

In 1975, 16 Mediterranean countries and the European Community adopted the Mediterranean Action Plan (MAP), the first ever Regional Seas Programme under UNEP's umbrella. In 1976, these Parties adopted the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention). Today, 30 years later, the Barcelona Convention and MAP are more active than ever. The Contracting Parties are now 22, and they are determined to protect the Mediterranean marine and coastal environment while boosting regional and national plans to achieve sustainable development.

### i. Challenges posed by marine debris, plastics and microplastics

The Mediterranean Sea is considered as one of the areas most affected by marine litter in the world. Human activities generate considerable amounts of waste, and quantities are increasing, although they vary between countries. In the Mediterranean, reports classify land-based sources (up to 69% of litter) and vessel-based sources (up to 26%) as the two predominant litter sources. Plastic is the main litter component; it has now become ubiquitous and may comprise up to 95% of waste accumulated on shorelines, the ocean surface, or sea floor (UNEP/MAP, 2015). A large scale study in the Mediterranean Sea identified five different types of plastic items (pellets/granules, films, fishing threads, foam, fragments), with the majority of items being fragments of larger rigid objects (87.7%, e.g. bottles, caps) and thin films (5.9%; e.g. pieces of bags or wrappings)<sup>9</sup>.

Littering, land based sources from coastal landfills, water transport, recreational beaches, illegal dumping and riverine inputs, all contribute to the marine litter problem. Marine litter from

Assessments of the composition of beach litter in different regions of the Mediterranean Sea show that synthetic materials (bottles, bags, caps/lids, fishing nets, and small pieces of unidentifiable plastic and polystyrene) make up the largest proportion of all litter pollution.

Tourism is the sector that contributes the most to marine litter and the amount of litter originating from recreational/tourism activities greatly increases during and after the tourism season. Household

Recent findings show that synthetic polymer items among fishing nets make up the largest





- c) Launch of a Trash Free Partnership at 2015 Our Oceans Conference in Chile in collaboration with the Peace Corps, US Environmental Protection Agency and the Governments of Panama and Jamaica.
- d) Regional capacity building workshop in support of MARPOL Annex V: Special Area Designation for the

ii. Actions and activities

With support from UNEP, Global Partnership on Marine Litter, COBSEA produced two documents on marine litter 1) Regional Review on Marine Litter in the East Asian Seas Region, and 2) COBSEA Regional Action Plan on Marine Litter (RMAPLI). The regional review showed that there were serious gaps with regard to marine litter management in the region. These include: few scientific studies and limited monitoring data on marine litter.

Since then the Nairobi Convention has contributed to the strengthening of the legal capacity of countries in the region to address land-based pollution. A U H J L R Q D O J X L G H E S T A S D S H U of ratification and implementation of the LBSA protocol: Challenges and Solutions for the WIO region<sup>23</sup>, which aims at assisting member states to address identified policy, legal and institutional gaps and constraints that have an impact on domestication processes has been widely disseminated

## 2.26 Northwest Pacific Action Plan (NOWPAP)

The Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) was adopted in September 1994 as a part of the Regional Seas Programme of UNEP. The overall goal of the Northwest Pacific Action Plan is "the wise use, development and management of the coastal and marine environment so as to obtain the utmost long-term benefits for the human populations of the region (China, Japan, Korea and Russia) Z K L O H S U R W H F W L Q J K X P D Q K H D O W K H F R O R sustainability for future generations".

### i. Challenges posed by marine debris, plastics and microplastics

In the NOWPAP region, where fisheries and aquaculture are developed and supply seafood for people in the region and where maritime transportation is very active, marine litter has serious negative effects on these sectors of national economies. Tourism is also affected through reduced aesthetic value of beaches and coastline in general. Microplastics and contaminants associated with marine litter have negative effects on marine life and affect food safety. In recent years, NOWPAP has published the following reports related to marine litter:

- a) Regional overview of marine litter in the NOWPAP region<sup>24</sup>
- b) Negative impacts of marine litter in the NOWPAP region: case studies<sup>25</sup>
- c) Regional report on sea based marine litter in the NOWPAP region<sup>26</sup>

### ii. Actions and activities

The NOWPAP Regional Action Plan on Marine Litter (RAP MAL) was adopted in 2008. Since then, numerous activities to address the negative effects of marine debris have been implemented. For example, every year a NOWPAP International Coastal Cleanup (ICC) campaign has been organized in one of the member states along with a workshop where representatives from member states, neighboring countries, NGOs and intergovernmental organizations (such as Ocean Conservancy, the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, GPA, COBSEA, Partnerships in Environmental Management for the

<sup>23</sup> UNEP(DEPI)/EAF/CP.7/Inf.19

<sup>24</sup> [http://dinrac.nowpap.org/documents/NOWPAP\\_Marine\\_Litter\\_2011.pdf](http://dinrac.nowpap.org/documents/NOWPAP_Marine_Litter_2011.pdf)

<sup>25</sup> [http://merrac.nowpap.org/FPM/download.html?mfi\\_idx=62](http://merrac.nowpap.org/FPM/download.html?mfi_idx=62)

<sup>26</sup> [http://dinrac.nowpap.org/documents/NOWPAP\\_MERRAC\\_Regional\\_Report\\_Seabased\\_Marine\\_Litter.pdf](http://dinrac.nowpap.org/documents/NOWPAP_MERRAC_Regional_Report_Seabased_Marine_Litter.pdf)

Seas of East Asia Yellow Sea Large Marine Ecosystem projects share their experience and best practices in preventing, monitoring and removing marine litter. The following reports were published in recent years<sup>27</sup>

a) Best practices in dealing

- x Ensure a better integration and cooperation among the various sectorial branches  
sectors