



UNEP/IOC Guidelines on Survey and Monitoring of Marine Litter

Regional Seas Reports and Studies No. 186
IOC Technical Series No. 83

UNITED NATIONS ENVIRONMENT PROGRAMME



**Regional
Seas**





UNEP/IOC Guidelines on Survey and Monitoring of Marine Litter

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by

Anthony Cheshire and Ellik Adler

with

Julian Barbière, Yuval Cohen, Sverker Evans, Srisuda Jarayabhand, Ljubomir Jeftic,
Rho-Taek Jung, Susan Kinsey, Eng Takashi Kusui, Ingrid Lavine, Peter Manyara,
Lex Oosterbaan, Marcos A. Pereira, Seba Sheavly, Alexander Tkalin, Sampath
Varadarajan, Barbara Wenneker,
Grant Westphalen



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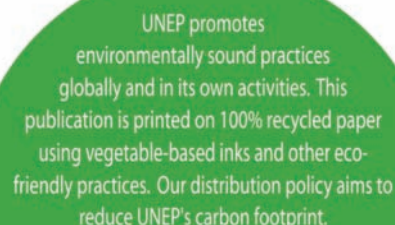
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Foreword

Marine litter is found in all sea areas of the world – not only in densely populated regions, but also in remote places far away from any obvious sources. Marine litter originates from many sea-based and land-based sources and causes a wide spectrum of environmental, economic, safety, health and cultural impacts. The very slow rate of degradation of most marine litter items, mainly plastics, together with the continuously growing quantity of the litter and debris disposed, is leading to a gradual, but dramatic increase in the quantities of marine litter in our oceans and world shores.

In response to the global challenge posed by marine litter, UNEP's Regional Seas Programme (RSP) and the Global Programme of Action (GPA) embarked in 2003 on the development of a '**Global Initiative on Marine Litter**'. Although marine litter is found in all oceans and sea areas of the world, this initiative focuses on the establishment and development of pilot regional activities in twelve regions (Baltic Sea, Black Sea, Caspian Sea, East Asian Seas, Eastern Africa, Mediterranean Sea, Northeast Atlantic, Northwest Pacific, Red Sea and Gulf of Aden, South Asian Seas, South East Pacific, and Wider Caribbean) that are particularly affected. The global initiative also provides a global platform for the establishment of partnerships, cooperation and coordination of activities for the control and sustainable management of marine litter. Most of these activities have been developed by UNEP/RSP in close cooperation with the secretariats of participating Regional Seas Conventions and Action Plans and in consultation and, when appropriate, in cooperation with UN Agencies, including IOC of UNESCO, FAO and IMO.

The problem of marine litter was recognized by the U.N General Assembly (UNGA), which in its Resolution A/60/L.22 (Nov. 2005) calls for national, regional and global actions to address the problem of marine litter. This resolution notes the lack of information and data on marine debris, encourages States to develop partnerships with industry and civil society, urges States to integrate the issue of marine debris within national strategies dealing with waste management; encourages the development of appropriate economic incentives to address this issue, and encourages states to cooperate regionally and subregionally to develop and implement joint prevention and recovery programmes for marine debris. A number of regions and countries have taken some steps to address the marine litter issue but despite all these efforts there are indications that the marine litter problem keeps growing.

As recognized in the UNGA Resolution one of the significant barriers to addressing marine litter is the absence of adequate science-based monitoring and assessment programmes that will provide useful information, from which the most critical impacts of litter, on national, regional and global scales can be determined. Changes in accumulation rates and composition, trends over time and the effectiveness of management systems are also hard to assess without good monitoring methodologies. Although monitoring of marine litter is currently carried out within a number of countries around the world, the methods of survey and monitoring used tend to be very different, preventing comparisons and harmonization of data across regions or time-scales.

In order to confront this problem the Regional Seas Programme of UNEP launched, in full cooperation with the Intergovernmental Oceanographic Commission (IOC) of UNESCO, the development of the **UNEP/IOC Guidelines on Survey and Monitoring of Marine Litter** that will assist policy makers and support efforts by regions, countries, Regional Seas Programmes and other relevant organizations to address the problem of monitoring and assessment of marine litter.

These Guidelines include a comparative analysis of information from around the world on existing experience and methods for surveys, monitoring, reporting protocols and assessment of marine litter. The compilation of the information and the development of the Guidelines were carried out by a group of experts from all around the world and representing all oceans, lead by Prof. Anthony Cheshire of Australia and supported by the Government of Australia. UNEP and IOC wish to thank all the scientists and individuals who took part in this project!

It is a hope by all organizations and individuals involved in the preparation of these Guidelines that they will be adopted and implemented for years to come by the relevant international and national organizations, regions and countries.

Dr. Elik Adler
UNEP, Nairobi

Mr. Julian Barbieri
UNESCO/IOC, Paris

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I would like to acknowledge the substantial efforts by the many people who contributed to the development of these guidelines. Although some of you are listed as co-authors it is important that your contributions should not be understated so the following is intended as a thankyou to the many people who helped in this project.

I would like to make special mention of the work by Ellik Adler whose vision, drive and enthusiasm took the project from inception to completion. Ellik has led the way, working tirelessly to illuminate the issues and challenges we all face in dealing with the problems of marine litter.

Each and every one of my co-authors provided invaluable help and assistance in locating source material, reviewing ideas and concepts and providing the advice, feedback and critical review that were essential to developing this document. Whereas each of you came with a different background and brought different experiences to the table your willingness to work collectively was central to us reaching a consensus on some very challenging issues.

The contributions by Ljubomir Jeftic, Seba Sheavly, Yuval Cohen and Alexander Tkalin were also greatly appreciated for the help they provided in developing the initial framework for the project and also for their tireless contributions editing and reviewing the final document. Grant Westphalen is also thanked for his ongoing support and assistance and particularly for his support in developing the first complete draft of the document.

No project can be completed without the support of the people who make things happen behind the scenes. This project benefited enormously from the work of Julian Barbieri and his team at the IOC who worked with UNEP to manage and administer the project, the UNEP team including Peter Manyara provided ongoing logistic and technical support and our workshop in Thailand was a success largely due to the hard work and planning from Srisuda Jarayabhand and her team. To all of these people a warm thankyou for your help and assistance.

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To all of you – it was a great pleasure working with you and I sincerely hope that our efforts will make a difference in helping the world to address the complex and challenging problems of marine litter.

Anthony Cheshire

March 2009

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