Harmonizing Marine Litter Monitoring in the Wider Caribbean Region: A Hybrid Approach

Armonización del Monitoreo de la Basura Marina en la Región del Gran Caribe: Un Enfoque Híbrido

Harmoniser la Surveillance des Déchets Marins dans la Région des Caraïbes: Une Approche Hybride

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Commissioned by:

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UN Environment's Caribbean Environment Programme (UNEP-CEP),
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EXTENDED ABSTRACT

All around the world, Non-Governmental Organizations are launching a growing number of clean-ups as part of awareness raising programs. While people are becoming increasingly aware of the magnitude and risks of the plastic debris found in our oceans, policy development is still at an early stage. Increased public awareness has helped to drive new policies that are aimed at preventing plastics from entering the ocean. A key question is whether in fact these policy measures, such as bans on certain single-use products or policies aimed at better waste management in ports, are actually working. In order to assess the effectiveness of these measures, policy makers need a new robust monitoring scheme that delivers good quality data.

Apart from monitoring the effectiveness of policies, such a monitoring system could also lead to a better understanding of the amounts, types, sources and potential impacts of marine litter in the Wider Caribbean Region (WCR), thereby enabling the development of targeted measures to reduce plastic and other types of marine litter pollution.

This study aims to contribute to the development of a monitoring scheme for marine litter in the WCR, with a focus on monitoring visible marine litter on the shoreline - litter that derives from rivers, ocean currents, waves and wind, or left behind by tourists. This report aims to assess leading initiatives and provide recommendations to policymakers and experts in the WCR.

On 18 and 19 October 2018, the UN Environment's Caribbean Environment Programme (UNEP-CEP), and the Gulf and Caribbean Fisheries Institute (GCFI), co-hosted a workshop in Miami focused on harmonizing marine litter monitoring in the WCR. The workshop was a direct result from a commitment made by the OSPAR Commission and CEP at a United Nations (UN) Conference held in New York in June 2017, about the implementation of Sustainable Development Goal 14 (#OceanAction17198). Apart from the direct connection by sea, the Cartagena Convention and OSPAR Commission share several common Contracting Parties including The Netherlands, France and the United Kingdom. A variety of approaches for both the collection of information, as well as the cataloguing of data were presented. The participants in the workshop recognized the value of a concentrated number of approaches for collecting and cataloguing this information and agreed that the next steps should focus on determining the most appropriate methodology. A pilot project about testing the OSPAR Marine Litter Monitoring methodology, a monitoring scheme used by constituent member countries of the OSPAR Commission, as well as various NGO driven initiatives were presented to participants in the workshop.

This assessment is one of the tasks identified during the workshop and focuses on two priority objectives:

- i) Evaluate a hybrid approach to data collection methods employed by OSPAR and Ocean Conservancy for the Wider Caribbean Region. This includes identifying the pros and cons of each methodology by comparing the different survey methods, field forms and databases, as well as governance of the initiatives, and
- ii) Evaluate the technical merits of marine litter data housing by comparing different databases currently used to collect data.

This study compared three initiatives in the Caribbean region and the OSPAR marine litter monitoring methodology against a set of predetermined criteria. These criteria where adapted from a previous assessment made by UNEP in 2009 (UNEP 2009). Furthermore, a case study is described from Bonaire, where the authors initiated and employed a hybrid

approach to cleaning the coast and monitoring the litter according to different existing initiatives. A short questionnaire was sent to the initiatives about data management, including data housing and data ownership.

There are significant distinctions between the methodologies employed. One important difference is the aim of the monitoring. Where the OSPAR marine litter monitoring methodology serves to inform policymakers about progress on policy measures in the North East Atlantic Region, most of the other initiatives have as primary aim to raise awareness, engage with citizens and to inform policymakers. There are also differences in the governance of the initiatives. Regarding the methodology, there are differences in location selection, frequency, items on the field forms and in people who perform the surveys. These aspects have consequences on the type of analyses that can be made from the data gathered. To analyse trends, for example, it is key to have frequent monitoring on the same site over a predetermined distance and preferably surveyed by trained surveyors to avoid bias. While this approach is ideal for monitoring, it may not serve well for engaging citizens and raising awareness. The authors therefore suggest adopting a hybrid approach that allows for engagement with citizens for monitoring, while ensuring good quality data collection on certain preselected sites.

Regarding the data collection and data housing, the recommendation is not to reinvent the wheel, but to make use of existing IT infrastructure and/or copy databases from successful initiatives. Some capacity and resources would be needed to develop a consistent monitoring program in the Wider Caribbean Region. As a first step, an action plan could be drafted, including the establishment of a three-year pilot program. The pilot would identify potential pilot countries, build on the experience in Bonaire and include a follow-up regional marine litter harmonization workshop.

LITERATURE CITED

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