

Introducing the Caribbean Node of the Global Partnership on Marine Litter (GPML-Caribe)

Presentamos el Nodo del Caribe de la Alianza Global sobre Basura Marina (GPML-Caribe)

Présentation des Caraïbes Noeud du Partenariat Mondial sur les Déchets Marins (GPML-Caribe)

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EXTENDED ABSTRACT

The Global Partnership of Marine Litter (GPML) is a multi-stakeholder partnership administered by the United Nations Environment Programme (UNEP) that provides a unique mechanism to bring together all actors working on marine litter to share knowledge and experience and to advance solutions to this global issue. This ‘voluntary open-ended partnership’ has an overall goal of reducing and managing marine litter and is guided by the Honolulu Strategy (Pettipas et al. 2016). The Caribbean Node of the The Global Partnership on Marine Litter (GPML-Caribe) was formed in 2015 and represents a partnership for national and regional organizations, governments, research, and technical agencies and individuals, that work together to reduce the quantity and impact of marine litter in coastal zones of the Wider Caribbean Region. The Gulf and Caribbean Fisheries Institute (GCFI) and the Secretariat for the Cartagena Convention (UNEP-CEP) are the co-hosts of the GPML-Caribe.

GPML-Caribe is involved in supporting national and regional marine litter projects whilst also promoting national policy and legal reforms. Through the support and development of marine litter related projects, a dedicated webpage in English, Spanish, and French, social media platforms, factsheets, email distribution lists, and sharing of information on new grant opportunities, GPML-Caribe strives to be the coordinating force that unifies all regional actions to achieve the overall goal of reducing and managing marine litter in the Wider Caribbean Region. Since its inception, GPML-Caribe has supported numerous activities within the region such as:

- i) Developing marine litter reduction strategies for cultural events,
- ii) Investigating the link between marine litter and mosquito-borne diseases,
- iii) Investigating the incidence of microplastics in commercially important fish in Grenada,
- iv) Developing an approach to harmonizing marine litter monitoring in the Wider Caribbean Region,
- v) Launching the Caribbean Clean Seas Campaign,
- vi) Enhancing the Whitehouse & Bluefields Solid Waste Reduction Project in Jamaica, and
- vii) Development of a regional Marine Litter Management Strategy.

i) Development of marine litter reduction strategies for cultural events in the Caribbean

For this project, a concept note was developed related to the reduction of marine litter associated with a major Caribbean cultural event – Carnival in Trinidad and Tobago (Poon Kong and Doyle 2018). When people come together to enjoy Carnival, a tremendous amount of waste is generated, even though 70% is recyclable. Greening Carnival and other cultural events in the region can lead to a reduction in the generation of solid waste. Furthermore, introducing measures to accelerate the cleanup and disposal process helps to prevent a significant amount of that waste washing down into drains, waterways and eventually reaching the marine environment.

ii) Investigating the link between marine litter and mosquito borne diseases

This study mapped the incidence of mosquito borne public health concerns in the Caribbean to compare this with plastics consumption and to put the findings into the context of the zika virus. Puerto Rico was used to examine this relationship because the marine litter data was extensive and robust. By overlaying GIS data the study was able to investigate potential correlations and analyse various environmental, health, and demographic data to evaluate issues of poverty and gender as they may be related to incidence of disease and risk. This study revealed that there was a relationship between the cases of ZikV and marine debris density, especially of large marine debris (i.e. tires). These results also suggest that coastal communities may want to prioritize clean up of large marine debris to limit the habitat for *Aedes aegypti* and subsequent transmission of ZikV and other mosquito borne illnesses.

iii) Investigating the incidence of microplastics in commercially important fish in Grenada

In collaboration with St George's University in Grenada, this study was able to document microplastics in fish species from Grenada (Taylor et al. 2016). Occurrence of microplastics in the intestinal tracts of marine fish is a concern to human and ecosystem health as pollutants and pathogens can associate with plastics. Over 97% of the fish examined in this study contained microplastics. There are plans to extend the study in order to assess sediments, water samples (including bottled water) and other fish products consumed in Grenada.

iv) Developing a harmonized approach to marine litter monitoring in the Caribbean.

In October 2018, GPML-Caribe hosted a workshop in Miami focused on harmonizing litter monitoring in the WCR. The workshop was a direct result from a commitment made by the OSPAR Commission and the Cartagena Convention Secretariat (UNEP CEP) at a United Nations (UN) Conference held in New York in June 2017, about the implementation of Sustainable Development Goal 14. As a result of this workshop, the Node hired consultants to develop the report "Harmonizing Marine Litter Monitoring in the Wider Caribbean Region: A Hybrid Approach" which was published in 2019. This study compared three initiatives in the Caribbean region and the OSPAR marine litter monitoring methodology against a set of predetermined criteria (Caporusso and Hougee 2019). Findings from this research also helped 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 discarded by tourists. This report aims to assess leading initiatives and provide recommendations to policymakers and experts in the WCR on how best to monitor marine litter to achieve scientific and policy objectives. This project has since been successfully piloted and implemented by Clean Seas Bonaire and will be introduced to Barbados, Grenada, St Kitts and Nevis, St Vincent and the Grenadines and Trinidad and Tobago via the Caribbean Youth Environment Network (CYEN) in 2019.

v) Launching the Caribbean Clean Seas Campaign

This project focused on enhancing the work of the GPML-Caribe through the design and launch of a Regional Clean Seas Campaign that formed an integral part of the International Coastal Cleanup (ICC) 2019 regional campaign and supported UNEP's Global Clean Seas Campaign launched in 2017. Additionally, the node developed communication materials to adopt and implement the Clean Seas Campaign in the Wider Caribbean Region, and field tested the aforementioned standardized hybrid approach to monitoring marine litter on beaches. The ongoing overall aim of the project is to increase engagement and awareness of the general public, private sector, and government in the fight against marine plastic pollution. The Caribbean Youth Environment Network

(CYEN) Chapters in Barbados, Grenada, St Kitts and Nevis, St Vincent and the Grenadines and Trinidad and Tobago helped facilitate this project. CYEN is a regional organisation that aims to promote and empower youth to take positive action on issues related to the environment and sustainable development.

vi) Enhancing the Whitehouse & Bluefields Solid Waste Reduction Project in Jamaica

In partnership with the Sandals Foundation, this project focused on enhancing the Whitehouse & Bluefields Solid Waste Reduction Project through the institution of a waste management system upgrade in Bluefields, implementing sustainable meals in schools, improving plastic waste storage and transportation, facilitating the start-up of a sustainable compost business startup, and development of a video case study of the project. The project focused on education and provided residents along the south coast of Jamaica with a structure for better solid waste management through effective waste separation. This project ultimately aims to use the strategy of waste separation and waste diversion to reduce and prevent pollution on both land and sea. This built on a previous project under the US Environmental Protection Agency (EPA) Trash Free International Programme implemented in partnership with UNEP CEP.

vii) Development of a Regional Marine Litter Management Strategy

GPML-Caribe enlisted national and regional marine litter experts to assist with the development of a Marine Litter Management Strategy for the region. This strategy identifies priority actions which can be used as the basis for developing new project proposals and assist in resource mobilization efforts whilst supporting both the implementation of the Regional Action Plan for Marine Litter Management in the Wider Caribbean Region (RAPMaLi) and implementation of the Protocol on Land Based Sources of Pollution (LBS Protocol) of the Cartagena Convention. The RAPMaLi for the WCR was originally developed in 2007 and first adopted in 2008 as a project under the directive of the United Nations Environment Programme (through its Regional Seas Program) as a regional policy response to the growing global concerns of litter accumulation in the Caribbean Sea (UNEP-CEP 2014). It was designed to serve as a comprehensive toolkit to assist SIDS in incorporating components of proper waste management across all sectors.

In the future, GPML Caribe will continue to build and strengthen local, regional and international partnerships including supporting and collaborating on projects that bring together multiple stakeholders to share knowledge and experiences with the overall goal of reducing marine litter.

GCFI and UNEP CEP, as the co-hosts for the GPML Caribe will continue to facilitate synergies between various marine litter programmes, projects and activities in the Wider Caribbean Region while promoting greater cooperation and experience exchange during various regional and international conferences and events.

KEYWORDS: Marine litter, partnership, pollution

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