Designing and implementing a marine microplastics monitoring program: the AIMS experience

Cherie Motti*[1,2], Michaela Miller[1,2], Marina Santana[1,2], Carine Lefevre[1], Samantha Jaworski[1], and Frederieke Kroon[1]

[1]Australian Institute of Marine Science – PMB 3 Townsville MC, 4810, Australia
[2]AIMS@JCU – JCU, Townsville, 4810, Australia

Abstract

Marine plastic pollution will likely increase should projections of increased plastic production eventuate. This necessitates monitoring status and trends of plastics entering the marine environment. Presented here is the development and validation of microplastics methodologies for quantifying microplastics in the marine environment. The translation of these methods into a long term spatial and temporal marine microplastic monitoring program in Australian waters is also described. Data will be discussed in the context of physiochemical parameters (i.e., surface current speed, wind speed, salinity, and temperature) to reveal the potential drivers of microplastic distributions.

Keywords: Microplastics, monitoring, temporal, spatial

*Speaker