

# Accumulation of Microplastics in waters and sediments in the Gulf of Thailand

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## Abstract

Marine plastics account for more than 45% of all marine debris along the coast of Thailand. There is an increasing number of coastal population and an extremely high percentage of tourism which contributes significantly to marine debris. This study has been undertaken to better understand the spread of microplastics in the Gulf of Thailand, for which there is little information. For this study, we have collected water and sediment samples from across 72 stations in the Gulf of Thailand. Water samples show a varying concentration of plastics from 2 pieces to 20 pieces per litre, with a comparatively higher number of small microplastics and small percentage of large microplastics. Sources of these plastics were varying and included things such as tape, foam, wires, bottles etc. Sediment samples show initial results of a high concentration of microplastics ranging from 40 – 60 pieces per kg in the outer Gulf of Thailand.

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