

The Role of Ocean Currents in Distributing Plastic Pollution and its Ecosystem Impacts

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Abstract: *Ocean currents play a pivotal role in distributing plastic pollution across the globe, transforming localized waste into a global environmental crisis. This paper examines the mechanisms through which ocean currents transport plastics, the formation of accumulation zones such as gyres, and the subsequent impacts on marine biodiversity and ecosystem health. It also highlights the socio-economic implications of plastic pollution and underscores the need for coordinated global efforts to mitigate its effects.*

Keywords: Great Pacific Garbage Patch, Marine debris, Biodiversity, Ecosystem impacts, Plastic accumulation zones