

Ocean plastic from 1000 rivers

Over 1000 rivers are responsible for nearly 80 per cent of all the plastic waste in the sea, according to a study by The Ocean Cleanup together with WUR, Delft University of Technology, Utrecht University and the Helmholtz Centre for Environmental Research.

Rivers are the main source of ocean plastic. Estimates from 2017 suggested that 10 of the largest rivers make the biggest contribution. The new model calculations look not only at the amount of plastic waste in a river basin but also at the probability of it drifting out to sea. That probability depends on factors such as precipitation, wind, land use and terrain gradient. This shows that plastic is in fact carried out to sea by a large number of small and medium-sized rivers. The Ocean Cleanup will use the new data to guide its cleanup activities.

‘A little-known result is that less than two per cent of the plastic that ends up in the environment flows out to sea,’ says researcher Tim van Emmerik of the Hydrology and Quantitative Water Management chair group. ‘So most remains behind somewhere in the river systems. We are trying to figure out where all that plastic is.’

The study was published at the end of April in *Science Advances*.

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