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FAST FER TRAFFIC AS A NEW FORCING FACTOR OF ENVIRONMENTAL PROCESSES IN NON-TIDAL SEA AREAS

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The impact of wake wash from high-speed ferries on the coastal environment is analysed in terms of wave energy and power, and properties of the largest waves. Shown is that hydrodynamic loads caused by heavy high-speed traffic may play a decisive role in certain non-tidal areas with high wind wave activity. The main reason of concern is the long periods of wake waves. The leading waves typically have a height of about 1 m and a period of 10–15 s. They cause unusually high hydrodynamic loads in the deeper part of the nearshore. The fast ferry traffic is thus a qualitatively new forcing component of vital impact on the local ecosystem.

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