MARINE BIOSECURITY PORTHOLE: https://marinebiosecurity.niwa.co.nz/whatsatstake/



Taihoro Nukurangi

What's at stake?



This four-year research project, funded by the Ministry of Business Innovation and Employment, aims to better understand the impacts that non-native marine species have on New Zealand's coastal ecosystems. It is developing tools that will help us identify and prioritize future threats from new species and changes in the distribution and abundance of established pests.



Like our native forests, New Zealand's marine plants and animals have evolved in relative isolation from other parts of the world and are vulnerable to the effects of non-native species. The number, distribution and abundance of non-native species in New Zealand's coastal waters is increasing, but our ability to manage threats from them is limited by our understanding of how they behave in New Zealand and the impacts that they have on our biodiversity, fisheries, aquaculture and other features of our marine environments that are integral to the lives of New Zealanders.

This programme aims to develop better understanding of the impacts that harmful non-native species have on our native marine biodiversity and the long-term benefits we derive from better marine biosecurity. It includes four streams of research:

- developing standard classifications of the types of impacts caused by non-native marine species and methods to assess their effects on the cultural, economic, environmental and social values that are at threat,
- measuring the effects of non-native species on native marine biodiversity and ecosystem function,

- developing methods to forecast future distributions of non-native species in New Zealand's coastal waters, and
- evaluating the costs of non-native marine species to New Zealand and benefits from their management.

Key contacts

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