



Associate Professor Karin Bryan

SURF-BREAK RESEARCH IN THE PIPELINE

New Zealanders are known for their passion for surfing, and tourists come from all over the world to visit our beautiful surfing breaks.

However, breaks can be threatened by coastal activities such as dredging and marina development. How? The problem is that, although we have anecdotal evidence, we don't really know.

Associate Professor Karin Bryan from Earth Sciences at the University of Waikato is leading a consortium that will carry out a three-year study of seven popular New Zealand surf breaks. Researchers will collect baseline data, including wind and wave conditions and underwater topography, and use this to assess changes in "surfability". This will provide a baseline against which to assess any changes caused by human activity.

Results will support the 2010 New Zealand Coastal Policy Statement, which said that coastal management should allow for the protection of surf breaks deemed "of national significance", and their data will be used to create a detailed description of how the surfbreaks work from both

a physical and scientific viewpoint. The breaks to be studied include Piha Beach near Auckland, Manu Bay at Raglan, "The Bar" at Whangamata, "Pines" at Gisborne's Wainui Beach, Lyall Bay in Wellington, and Aramoana and Whareakeake, also known as Murdering Bay, near Dunedin.

Dr Bryan says these breaks were selected because they represent a range of break types, and are either world-famous or important to their local communities as a recreational resource.

Research funding of \$1.206 million was awarded by the Ministry of Business Innovation and Employment and partners in the project with Waikato University are the marine and freshwater consultancy eCoast and Hume Consulting Ltd.

PhD candidate Ed Atkin says New Zealand is the only country in the world to recognise in legislation the importance of surf breaks as important social and economic resources that should be protected.

"Yet there is essentially no baseline quantitative information on which to

base any management decisions. This project will change that and serve as a model for others to follow in terms of surf break protection and the protection of recreational resources in general," Ed says.

This research will help community members and decision-makers to be better informed about what is really important with regards to how surf breaks work and serve as a knowledge base and provide guidelines to help managers with the challenging task of sustaining other "famous" New Zealand breaks into the future.

Other surfbreaks described as being of national significance in the National Policy Statement include "Peaks" in Northland, "Whale Bay" and "Indicators" at Raglan, "Waiwhakaiho" and "Stent Road" in Taranaki, Makorori Point and "The Island" in Gisborne, "Mangamaunu" and "Meatworks" in Kaikoura, and "The Spit", Karitane and Papatowai in Otago.

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