

## WA property owners could be in deep water

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Perth's Swan River floods about twice a year.

A Perth academic has warned that global warming could cause the Swan River to flood its banks at every high tide and beaches could disappear by the end of the century.

University of Western Australia Professor Chari Pattiarachi said sea levels on Perth and the South-West would rise up to one metre by the end of the century, affecting foreshore developments, beaches and housing.

The predictions are so severe, Professor Pattiarachi said he would "probably not" invest in a waterfront property.

"The Swan River floods perhaps twice a year now, but by the end of this century it could flood at every high tide," he said.

The coastal oceanographer said climate change was to blame for the rising sea level, which would have a devastating effect on WA's coastline, inlets, estuaries and rivers over the next 100 years.

"A one-metre sea level rise may not be of great significance in the sparsely populated Kimberley, where the tidal range is up to 10 metres," he said.

"However in the South-West, with a less than one-metre tidal difference, a one-metre rise will have significant effects on coastal development."

The dire predictions are part of Professor Pattiaratchi's findings of his research into the effects of climate change, which includes creating models of the past and the future to contribute to coastal planning guidelines.

"We're using wind fields to predict future wave climate under climate change, and will be able to identify changes and to ascertain whether those changes will be significant," he said.

"If so, we may need to modify the design criteria when we build groynes, breakwaters, sea walls and other marine structures."

His team are looking at sea level rises and the effect on beach stability in different regions along the coast.

"In the South-West we know that the average sea level is increasing, so our work now is to project how much it will rise in the next few years," he said.

"Between Port Bouvard and Two Rocks there are 99 beaches, many of them 'perched' on rock or limestone platforms that prevent erosion.

"Beaches not on these platforms are already eroding, so we need to know the extent of future erosion to ensure the right planning takes place."

\* <http://www.watoday.com.au/environment/wa-property-owners-could-be-in-deep-water-20091112-ic7q.html>