

## Why did we undertake this study?

As climate change threatens our coasts, adaptation is required, both in response to rapid (e.g., storms) and slow-onset (e.g., sea-level rise) impacts. In practice, certain adaptation measures are preferred based on the speed of the hazard. But what does the general public think? As research on coastal adaptation progresses, increasingly public support for adaptation becomes a focal point. Yet, it remains unclear whether or how individual support for coastal adaptation change between different hazards.

## How was it done?

This study employed an online questionnaire followed by semi-structured interviews with residents in two small coastal settlements: Shediac, Canada and Yeppoon, Australia. Presented with different hazard scenarios, residents were asked to rate their support for a series of adaptation options for each scenario.

## What did we find?

In both case study areas, residents rarely changed their levels of support for adaptation options between rapid and slow-onset events, however:

- Accommodation options, such as emergency preparation and floodproofing, have less support for use in responding to slow-onset scenarios. The decrease in support for accommodation options could be due to perceptions that they are unsustainable.

Preferences remain unchanged largely in line with a perception that the risks will remain unchanged, either due to a failure to perceive the risks associated with slow-onset hazards, or the perception that sea-level rise will exacerbate risks associated with rapid-onset hazards.

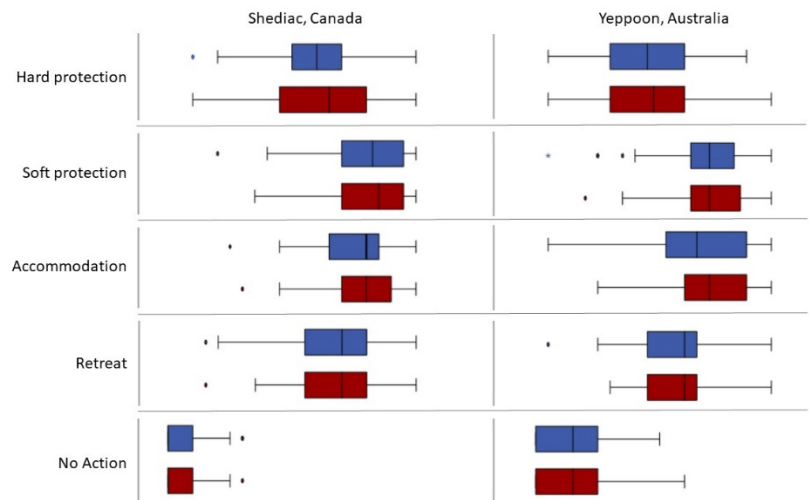


Figure 1: Boxplots representing favourability for each category of coastal adaptation for a rapid-onset scenario (red) and slow-onset scenario (blue)

## What are the implications?

The findings have implications for adaptation planning. Distinguishing adaptation between rapid and slow-onset events is crucial due to their distinct timescales, levels of certainty, and systems they affect. Residents' limited differentiation in how adaptation should occur reflects a lack of certainty or understanding and highlights potential areas for communicating how slow-onset events may require different approaches. In addition, individuals are not deferring retreat to the future, which is a common assumption. The fact that residents believe the same measures will work for rapid events and sea-level rise suggests they are not recognising the permanency of sea-level rise. Practitioners should consider emphasising the connection between sea-level rise and retreat.

## Want more information?

The full paper is not currently available online. Keep an eye on the project website for updates.

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## Coastal Governance: Embracing Vulnerability and Change

