

Why did we undertake this study?

The interplay between adaptive management and law is not well understood, particularly in coastal management, and there have been calls for more case studies to explore legal frameworks across jurisdictions. We analysed if and how legal frameworks for coastal management facilitate or hinder adaptive management in Australia and Brazil.

How was it done?

We analysed documents (i.e. legislation, case law, management documents, and academic publications) and conducted 50 semi-structured interviews with key informants in Byron Shire (Australia) and Florianópolis (Brazil) to capture their perspectives on the legal barriers to adaptive coastal management.

What did we find?

Legal certainty and legal flexibility influence the success of adaptive coastal management. We proposed three ways to integrate adaptive coastal management and law:

- Incorporate the structured and iterative process of adaptive management into coastal management laws and regulations by: (i) improving legal provisions concerning stakeholder involvement and participation; (ii) clear objective setting; (iii) assessment of management alternatives; and (iv) monitoring and evaluation;
- Address legal path dependencies that cause maladaptation, such as the negative effects of existing use rights and instead allow for the review of past legal decisions based on lessons learned through adaptive management; and
- Better integration of adaptive coastal management law mechanisms, such as legal provisions that stimulate polycentricity.

In pursuing these directions, attention is needed on legal flexibility that enables effective and quick actions in response to change, but also on legal certainty for implementing such actions through clear and structured decision-making processes that provide for stability and accountability.



Figure 1: Coastal erosion hotspot at Armação Beach.

What are the implications?

Our proposed directions contribute to improved adaptive coastal management law by emphasising the need for an optimal balance between legal flexibility and legal certainty. Our research may also prove useful to other jurisdictions considering more adaptive approaches to coastal management.

Want more information?

The full paper is available from: <https://doi.org/10.1016/j.ocecoaman.2022.106057>

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Coastal Governance: Embracing Vulnerability and Change

