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# Hard protection adaptation options are preferred by the public

# Why did we undertake this study?

Lack of public support for coastal adaptation can present significant barriers for implementation. Building public support for coastal adaptation first requires a deeper understanding of peoples' preferences for coastal adaptation and what motives those preferences.

#### How was it done?

A systematic literature review was conducted to understand preferences for coastal adaptation options and the factors influencing these preferences. Ninety peer-reviewed publications consisting of 121 case studies from the years 2007 and 2020 were reviewed. A questionnaire was applied to record types of adaptation studied, findings on public preference, and details on the potential factors influencing preference for each empirical case study.

### What did we find?

Research on perceptions of coastal adaptation have been steadily increasing in the fourteen-year period covered in the review. Research emphasis has been on public views of managed retreat, and developed country contexts.

- Hard protection options were often the most frequently preferred, due to a desire to maintain current shoreline, to protect recreational spaces and private property, and perceived effectiveness.
- Retreat options were the least preferred, often due to strong place attachment.
- Twenty-eight factors influencing preferences were identified, including risk perception, place attachment, and financial considerations.

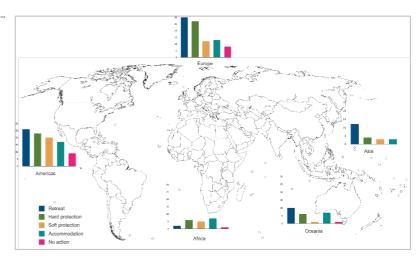


Figure 1: Bar graphs display the frequency count each category of adaptation was studied in each region

#### What are the implications?

For practitioners aiming to implement coastal adaptation, the findings suggest potential leverage points in which the option has more positive sentiment; for example, restricting future development in at-risk areas. Recognizing that each case is context-specific, and that any considerations of preferences should occur on a local scale, planners and policy makers should consider local preferences (what) and the factors influencing preferences (why). This will foster policy that respects the values of communities and supports communication with diverse audiences.

## Want more information?

The full paper is available from: https://www.mdpi.com/2071-1050/13/15/8594

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# Coastal Governance: Embracing Vulnerability and Change











