

Community Involvement in Coastal Adaptation

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What is Adaptation?

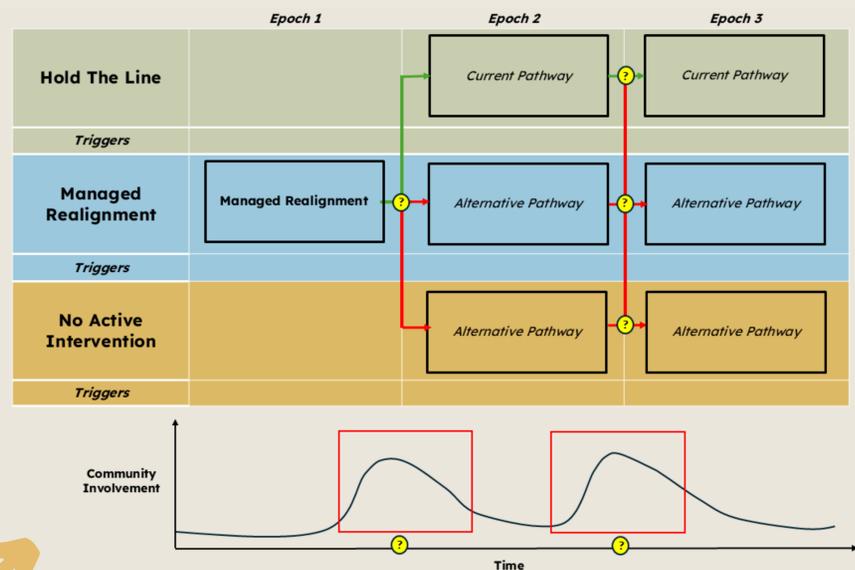
- Adaptation involves anticipating and planning for future changes in a way that will result in no regrets or sustainable social ecological outcomes (Bennett et al., 2014)
- Adaptation is critical in coastal management to ensure decisions account for uncertainty in the timing, frequency, magnitude and consequences of flooding and erosion.
- Adaptation Pathways are increasingly used globally to support adaptation planning by accounting for uncertainty and keeping options open (Haasnoot et al. 2024; Lawrence et al., 2025).
- Decisions to embark on a specific pathway are typically 'triggered' by a shift in underlying environmental, social or economic conditions to avoid an adaptation threshold.
- Developing Adaptation Pathways is a bottom-up and local task (Susskind & Rumore, 2015; Jenewein & Hummel, 2022). Coastal communities can play important roles in understanding and contributing to adaptation planning.



Some coastal communities are on the 'frontline' of climate change

Adaptation in Our Future Coast

- Our Future Coast, part of the DEFRA funded Flood and Coastal Resilience Innovation Programme, is testing several innovations, including Nature Based Solutions (NBS), community engagement and Adaptation Pathways.
- The focus is on embedding Adaptation Pathways within Shoreline Management Plans (SMP) to ensure they account for the latest data, respond to triggers, and create opportunities for NBS.
- This research project explores the role of local communities in the Adaptation Pathway planning process.



Involving Communities: Walney Island Case Study

1) Understanding the Context & Climate Risks



West Shore Park on Walney Island in Cumbria



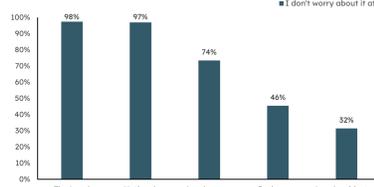
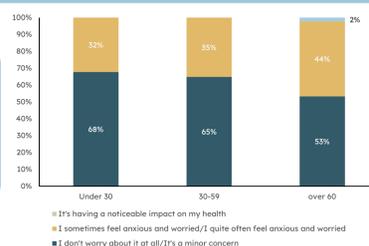
95 receptors at risk of erosion by 2105



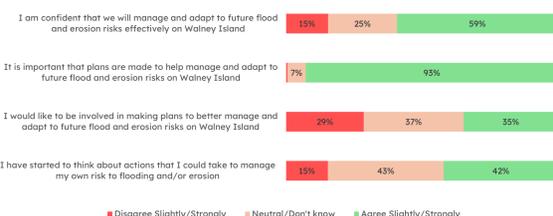
145 residential properties at risk of flooding under a climate scenario (2105)

2) Exploring Adaptation Readiness

How concerned are you about climate change impacts on Walney Island?



Who should be responsible for developing Adaptation Plans for Walney Island?



3) Developing Community Workshops



We are currently designing our workshops, accounting for research questions including:

- Can we simulate future climate scenarios with the community to build their understanding and explore options to manage and adapt to risks?
- What actions can a community take to adapt to climate risks?
- Would the community be willing to contribute financially to adaptation options?
- Who is responsible for governing and managing Adaptation Plans long-term?

References

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Acknowledgments

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