



# UK Coastal Research Conference

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### CO-CREATING RESILIENT COASTS: ADVANCING EQUITABLE AND COMMUNITY-LED MANAGEMENT WITH DPSIR+

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Over one-third of the global population lives within 100 km of the coast, while nearly 1 billion people live in a low-elevation zone. In England, around 2.4 million properties are currently at risk of flooding, which is predicted to rise.

Sustainable and adaptive coastal management is essential. Interdisciplinary approaches help, but aligning conflicting perceptions of coastal social-ecological systems (SES) remains challenging. So, we develop a revised DPSIR (Drivers, Pressures, State, Impact, Responses) framework to integrate diverse perspectives into decision-making.

As part of the CoOpt project, we employed an interdisciplinary and SES-based approach to explore the complexity of coastal decision-making. Through workshops, focus groups and surveys, we gained insights from stakeholders into how they perceive the system and what should be prioritised, and we developed a revised DPSIR framework.

We then tested the framework within a workshop in Hesketh Bank (Northwest England), where Hesketh Out Marsh (HOM) provides an example of managed realignment. Local stakeholders, including farmers and landowners, local authorities, community representatives, Environment Agency, Natural England, Royal Society for Birds Protection, and researchers, took part in the workshop.

By the end of the day, participants had co-created a shared understanding of the HOM system, and outlined the next steps required to address existing challenges.