Cambridge Prisms: Coastal Futures

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Editorial

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Introducing Cambridge Prisms: Coastal Futures

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Whilst there is little argument that coasts are on the frontline when it comes to the impacts of near-future global environmental change, is there a need for yet another coastal journal? Emphatically 'yes'. There is an unfilled niche here for a forum that promotes and presents cross-disciplinary research, from fundamental science to impact-orientated approaches. We wish to see a journal that informs pathways away from unsustainable practices towards more socially just and equitable futures for the world's coastlines and their communities. We set out below some of the questions that arise when articulating this pathway, using the high-level categories in the journal's topic map as some of the stepping stones that will be encountered along the way.

We are, of course, interested in submissions that better report the environmental hazards that coasts face, now and into the immediate future. We are keen to explore both how the latest knowledge of climate change has implications for the coastal system (topic map: climate change) and new science on coastal response (topic map: geomorphology, coastal engineering) and its assessment (topic map: monitoring). Changing coastal dynamics often threaten coastal habitats and species assemblages (topic map: conservation and restoration). At the same time, however, the presence of natural ecosystems also gives opportunity – but what exactly do we know about the design rules and implementation practices to successfully 'work with nature'? (topic map: nature-based solutions).

It is often argued that coastal systems are particularly vulnerable to the effects of global environmental change as their dynamics are being compromised by anthropogenic pressures (topic map: coastal development, tourism), often after centuries of modification, degradation and loss from land conversion and mis-use (topic map: pollution). However, rather than 'natural systems that are disturbed by humans' we believe that a more compelling storyline has emerged, one of 'human systems that are entwined with natural systems'. This view calls for the incorporation of indigenous knowledge and values into coastal adaptation strategies and, more broadly, looks to the role and juxtaposition of the arts and humanities with the natural sciences (topic map: society and culture). Fundamentally, of course, there is a need to address the socio-spatial injustices associated with climate change from being realised (topic map: governance).

If your concerns about coastal futures map onto the concerns raised above, and you recognise yourself in the guiding perspectives of the Journal's Editor-in-Chief and Senior Editors below, then we would be delighted to consider a manuscript from you. Let's build brighter coastal futures together!

The journal is led by an international editorial board formed of Editors with diverse perspectives and experience. The topics of the journal are represented by the Editor-in-Chief and four Senior Editors who introduce their expertise and perspectives in these subject areas below.

Professor Janine Adams, Nelson Mandela University, South Africa.

"My research focuses on the conservation and management of coastal ecosystems working across the science-policy-practice continuum. Blue carbon ecosystems (salt marsh, mangroves, seagrasses) and responses to climate change, as well as innovative methods for coastal water quality improvement, are investigated. Restoration research considers coasts as complex socio-ecological systems where the communication of positive outcomes inspires the next generation of researchers and change makers."

Dr Martin Le Tissier, Coastal Matters, UK.

"My career has taken me from research on the biology of corals and coral reefs to broader interests in the management of coastlines and coastal communities. I work across academic and consultancy domains to engage across disciplines with a view to addressing the challenges of climate change, sustainable development and balancing the often competing demands between nature and people for space and resources."

Professor Brad Murray, Duke University, USA.

"Rooted in a geomorphologist's desire to understand how coastal landscapes work–how they form and how they respond to changing climate forcing – my research has come to focus on couplings between physical and ecological processes, and on the thorough couplings between

human and natural dynamics that determine how communities and landscapes change together on developed coasts."

Emeritus Professor Tom Spencer, University of Cambridge, UK.

"I have always been fascinated by how a particular coast – in all its aspects – at a specific point in time is the product of the intersection of its continental-scale to local setting and its geological to contemporary history. To that must now be added its imagined near-future trajectory. It is deeply satisfying to engage with, and hopefully progress the understanding of, this rich complexity."

Associate Professor Kristen Splinter, UNSW Sydney, Australia.

"I fell in love with water as a young child growing up in Canada and have felt so privileged to work and travel to various countries doing research on beach morphodynamics over the past 20 years. I use a mix of laboratory, field, numerical models, and remote sensing to understand fundamental processes of our coasts. As an engineer, I try and help provide rigorous science and design to better manage, predict, and live within the constraints of a changing coastline now and into the future."

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