



COASTAL PROCESSES

We understand that the coastal environment is a complex and challenging place to work and needs effective understanding along with the integration of coastal and river processes. Alluvium provides specialist assessment of physical processes associated with the coastline, estuaries, floodplains, and waterways.

We provide an integrated catchment to coastline perspective to inform strategic planning. This perspective comes from understanding the trajectory of change associated with flow, sediment dynamics, water quality, vegetation and ecosystems, urban development, and climate change.

The Alluvium team have expertise in coastal geomorphology, strategic planning, hydrodynamic modelling, engineering design, and ecosystem processes to inform management options.

Why Alluvium

Physical processes understanding

We provide expert knowledge on the past, present, and potential future states of the landscape, which is fundamental for the long term success of coastal adaptation planning and engineering works. Our expertise in site assessments and research is combined with modelling and strategic thinking to inform management actions and outcomes.

Personalised stakeholder engagement

Strategic planning in the coastal zone is complex, with multiple stakeholders and objectives. We recognise the importance of early and meaningful engagement. Our team are experienced in tailoring programs to meet the needs of the project, including discussing processes on site, assisting with communications material, and running effective workshops and collaborative planning sessions.

Capacity building and knowledge sharing

We focus on identifying long term implications for management and knowledge sharing. We offer on-site discussion and training as part of all of our projects, and work with land managers to explore the potential for innovative options for strategic management, including the integration of amenity, recreational, cultural and environmental values.



Condition assessments

We undertake assessments of coastal processes including sediment dynamics (erosion, deposition), trajectory of landscape change, implications for management and mitigation options.



Tailored stakeholder engagement

We focus on identifying long term implications for management, knowledge sharing with relevant land managers, and exploring the potential for innovative options for strategic management, including the integration of amenity, recreational, cultural and environmental values.



Coastal hazard risk

We provide expert assessment of integrated physical processes, which expands on standard vulnerability and coastal hazard risk assessments. We include consideration of the coastline, estuary, waterways, floodplain, urban water sources and interdependencies.



Training

We regularly conduct coastal processes training for NRM organisations, often on-site during inspections of the coastline.



Climate change

Our team brings a range of expertise to the climate change adaptation planning process, including specialist understanding of coastal processes, strategic planning, stakeholder engagement and economics. We assist planning authorities with assessments at a range of scales from site specific advice through to catchment and coastal zone plans.