



Theme 5 - Integration and Synthesis

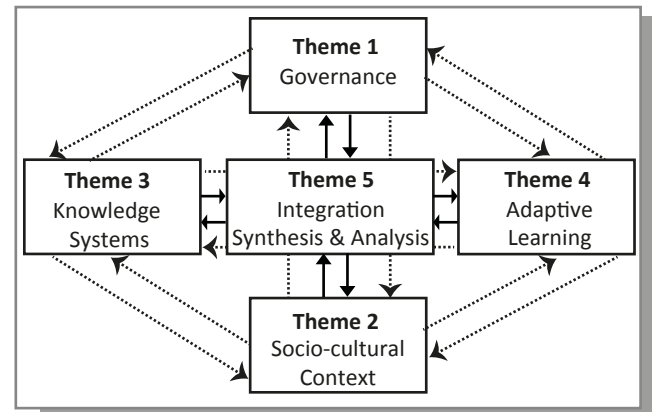
Leadership, cooperation and communication fostering a collaborative approach

Integration and Synthesis plays an active role in drawing together the work of other themes to generate insights and analyses that will be greater than the sum of individual Themes. Integrating, distilling and testing lessons increases understanding of how different disciplinary knowledge systems can be brought to bear on complex coastal problems.

Theme 5 will also identify improvements to research commissioning and research outputs delivery facilitated by better mutual understanding of the needs perspectives and priorities of:

- management and policy makers
- science providers in critical areas such as effectively dealing with the impacts of coastal development and climate change
- application of science in regulatory controls

Based in the Faculty of Law at the University of Wollongong, Australian National Centre for Ocean Resources and Security (ANCORS) specialises in transdisciplinary studies of marine management.



North Wollongong Beach, NSW. Image: D. De Freitas

Aims

The primary and essential aims of the Synthesis and Integration theme are:

- Develop practical, workable strategies for improving integrated management and communication between the many players with diverse needs, expectations and perspectives involved in the coastal zone. Such strategies represent a core focus on how development, implementation and dissemination of the results of scientific work might be developed to better contribute to overall outcomes for the future of the coastal zone.
- Identify legislative, institutional and implementation constraints to the design, conduct, reporting and application of science in coastal policy and management.



Steelworks, Port Kembla, NSW. Image: D. De Freitas



Wollongong Lighthouse, NSW. Image: D. De Freitas

Design and Methods

The Integration and Synthesis Theme will explore results from the four input Themes. It will use a variety of techniques including systems, contingency, risk, effects-based analysis, agent-based modelling and complex systems approaches to explore interactions of theme outcomes and legal implications for governance and transition management.

Key Outputs

- An enabling roadmap for assessing knowledge-making and decision-making approaches designed to:
 - compile practical and implementable suggestions for improvement of interaction between scientific and management agencies
 - enhance the take up of outcomes from scientific inputs for policy development from local to regional and national levels
 - identify legal constraints and opportunities in governance and institutional for on-going science implementation in the coastal zone-
 - provide a frame for the future of coastal zone management in Australia
- Reports and articles that draw and review the collective findings of the series of Cluster research. These will provide recommendations for improving the path for science impact by identifying and developing strategies for addressing the social and institutional impediments to effective and integrated management of Australia's coastal zone in the face of future change.



Belmore Basin, NSW. Image: L.F. Gusmão

Enable the transferability of research findings beyond the Cluster to maximise impact and relevance of the Cluster for future science-governance interaction.



Illawarra coast, NSW. Image: C. Woodroffe

Contacts

Theme Leader

Professor Richard Kenchington

University of Wollongong

Australian National Centre for Ocean Resources and Security

Wollongong NSW 2522

Phone: +61 2 4221 4883

Email: rkenchin@uow.edu.au

Key Researchers

Dr Debora De Freitas (University of Wollongong)

Professoral Advisory Board

Martin Tsamenyi

Pascal Perez

Warwick Gullet

Colin Woodroffe

Alistair McIlgorn

John Morrison

Clive Schofield

Robin Warner

Ron West

Support

Katie O'Neil (University of Wollongong)



The CSIRO Flagship Collaboration Fund facilitates involvement of the wider Australian research community in addressing the nation's most significant challenges and opportunities. Flagship Clusters are three-year partnerships between Flagships, universities and other public research agencies.