



Theme 4 Adaptive Learning

Organisational, social and sustainability learning

Complexity, uncertainty and high decision-stakes are typical characteristics of many coastal systems. Adaptive management has recently emerged as a paradigm for responding to these characteristics within coastal systems. Adaptive learning essentially drives the adaptive management process by facilitating connections between science and management processes and thereby maximises pathways to science uptake.

The Adaptive Learning Theme is researching a range of national and international coastal management cases studies drawing on principles and practices of:

- adaptive learning
- organisational learning
- sustainability learning
- adaptive management
- integrated coastal zone management.

These will provide part of the knowledge base to enable adaptive learning within coastal organisations and inform the development of a simplified framework for coastal organisations to monitor and evaluate their institutionalisation of adaptive learning.

The Adaptive Learning Theme focuses on South East Queensland to analyse how a more communicative relationship between knowledge-makers and decision-makers could be enabled for the coastal zone.



Noosa National Park. Image: D.Thomsen.

Adaptive learning is a concept that combines organisational learning, social learning, and sustainability learning through the institutionalisation of learning processes and outcomes for improved integrated coastal zone management. It calls for action on the basis of the 'best' available information at the time, and to monitor and evaluate the results to derive 'lessons learned' that will aid in the improvement of our response to the problem.

pic 2: diagram?

Aims

The research aims of the Adaptive Learning Theme are to:

- determine the processes by which adaptive learning frameworks function in the coastal management context
- analyse the barriers and opportunities to embed adaptive learning within coastal institutions
- assess institutional adaptability success factors
- develop and test a monitoring and evaluation framework for assessing adaptive learning about science uptake in the coastal zone.

Design and Methods

This research focuses on coastal organisations responsible for managing social-ecological systems that are characterised by complexity and uncertainty in relation to change. The proposed study will be grounded in the literature relating to three broad theoretical frameworks: sustainability, resilience and adaptive learning.

Desk-top case studies of adaptive learning across Australia and international coastal organisations will be analysed. These studies will also provide scope to assess adaptive learning in case studies where primary data will be collected.

The theoretical framework will be applied to 3-4 coastal organisations within Australia. The purpose is to evaluate organisational structures and processes and related information/knowledge sharing arrangements that exemplify adaptive learning. Qualitative interviews will be conducted with individuals within the organisational structure of the case studies.

Key Outputs

- An on-line toolkit for institutionalising adaptive learning within coastal institutions, including:
 - mechanisms to enable adaptive learning within coastal organisations
 - principles of adaptive learning (searchable annotated bibliography)
 - examples of adaptive learning successes
 - a simplified framework for coastal organisations to monitor and evaluate their institutionalisation of adaptive learning
- Reports and articles that detail a framework for monitoring and evaluating science uptake in the coastal zone

The need for coastal organisations to become adaptive learning organisations and to contribute to improved system resilience is premised by the inherently dynamic nature of the coastal zone. Thus, mechanisms that assist coastal organisations to be more intelligent, flexible and reflexive and to become part of a collaborative adaptive learning network will aid in developing sustainable solutions and strategies for integrated coastal zone management.

Pic 3: Brainstorming and networking coastal management issues. Image: T. Smith ?

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