

Coast to Coast 2012 - Living on the Edge

Symposium 2: Alternative futures for Great Barrier Reef coastal ecosystems

# Assessing Risks in Coastal Governance Affecting the GBR – Priorities for Reform.

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# Why Assess the Governance System in the GBR Coast

- Healthy governance systems are the key to delivering sound environment management outcomes.
- There are surprisingly few risk assessment frameworks that can pin point those governance domains and sub-domains that most influence environmental outcomes.
- This paper proposes a clear risk assessment framework for analysing governance systems.
- We are testing this through its application to a significant real world context; coastal management as it relates to the health of Australia's Great Barrier Reef (GBR).

# The GBR Context

- The GBR exists at a supra-regional scale along most of the north eastern coast of Australia.
- Brodie *et al.* (2012) find overall trends in GBR ecosystem functions are of significant concern.
- At the same time, official international concern over the governance of the reef has recently been flagged through IUCN processes.
- The GBR is an ideal candidate for testing improved governance risk assessment tools.

# Understanding Governance Systems

- We have a societal-wide view of governance as the “intentional shaping of the flow of events so as to realize desired public good” (Parker and Braitwaite:119).
- Governance represents a wider set of processes of bargaining and negotiation among differing interests in society, leading to particular system outcomes.
- We need to look at the overall health of the wider governance system if we want to understand GBR health outcomes.
- First, however, need to look at various governance domains and sub-domains of importance to the coast and the GBR.
- We can then look at both the structural and functional health of different governance domains and sub-domains.

# Analyzing Risks in the Governance System

Risk analysis is a step in any risk management procedure.

In any risk assessment two key concepts need specific attention:

- **Likelihood:** Events with a very low likelihood (or probability) of occurring present a low risk to system managers;
- **Consequence:** Highly likely events might actually have limited consequences (or impact) for system outcomes, meaning they also should have a corresponding low risk rating;

Together, likelihood and consequence analysis of the potential failure of key domains in a governance system provides a simple but powerful analytical approach.

# Key Steps in Assessing Risk in Different Governance Domains and Sub-Domains

- *Step 1: Determine the Key Domains/Sub Domains of Governance of relevance to the coast in the GBR.*
- *Step 2: Undertake (Structural and Functional) Health Analysis of Key Domains and Sub-Domains of Governance.*
- *Step 3: Undertake Likelihood and Consequence Analysis of Failure in Key Domains and Sub-Domains.*
- *Step 4: Cost Assessment of Reform Inaction vs Action.*
- *Step 5: Design, Implement and Adaptively Monitor a Progressive Reform Program.*

*From rapid appraisal to deep analysis, all steps work better through the use of highly participatory approaches.*

# Broad Preliminary Thoughts:

## **Higher Order Priorities for Reform:**

- Climate Adaptation, Major Projects, Ecosystem Service Delivery and National Education Domains/ Sub Domains .

## **Sub-Domains on the Divide Between Success and Failure:**

- Reef Protection Legislation, Property Planning and Management, Indigenous Land and Sea Governance.

## **Stable Sub Domains But Need Ongoing Refinement:**

- Regional NRM, Water Quality Planning and Implementation.

## **Sub-Domains With Good Progress and Now Low Risk:**

- Reef Fisheries, Reef Tourism Impact Management, Water Resource Planning and Allocation, Reef-based Fisheries, Reef Research Systems.

# Some Broader Observations:

1. Importance of Australia continuing to play an active leadership role in strategic international conventions.
2. There are major cross-jurisdiction and cross legislative efficiency and integration issues in the system.
3. There are stark differences between governance *in* GBR versus catchments draining *into* the GBR.
4. Spatial edge and connectivity issues need constant consideration due to the ecologically artificial boundaries of the World Heritage Area.
5. Seemingly un-related Governance domains (like education) can have a big impact on the Reef.

# Applying the Governance Systems Risk Assessment Tool:

- Best applied in a highly participatory context, bringing together stakeholders, researchers and government.
- Can be applied in rapid assessment or in the deep research context.
- Enables the foundation for long term benchmarking of the health of governance systems (e.g. Outlook).
- Can identify redundant parts of governance system.
- Would be a valuable tool in the context of the Reef Strategic Assessment Process (State and Feds).