

Natural Resources Management Plan 2015–2025

Have Your Say



Discussion paper No 12: Governance, knowledge management and social learning

This discussion paper is part of a series covering all of the 'Big Issues' raised by the community during meetings and workshops about the new Kangaroo Island NRM Plan. It provides a summary of the current state of knowledge about the issue, suggests courses of action and identifies who might work together with us in addressing it.

We now invite your comments, suggestions, criticisms and ideas.

Introduction

Good decision-making is fundamental to good natural resource management. Decision-making that is based on local and the best available technical knowledge, which is inclusive, fair, transparent, accountable and timely, is a foundation for building a sustainable, resilient community that enjoys high levels of wellbeing over time. Making good NRM decisions is challenging however. Some of the most important natural resource management issues facing the Kangaroo Island community are highly complex, with interactions between social, economic and environmental factors, sometimes driven by processes well removed from the Island.

There are no simple solutions to many of these issues and resolving them will involve trade-offs between what different stakeholders value. These issues also cut across organisational and stakeholder roles and boundaries and operate at different scales, both in space and time. This means that no single organisation or stakeholder can address these issues alone. It will involve collaborative partnerships between organisations and the Island community. Coupled with this complexity there are frequently major knowledge gaps or high levels of uncertainty about how some of the most important issues and drivers, such as climate, may play out in the future.



Natural Resources
Kangaroo Island



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Adaptive decision-making (or adaptive governance) is the process of making decisions in complex settings under uncertainty. Supporting adaptive governance requires particular focus on how knowledge is gathered, ensuring different types of knowledge from local to expert are used, stored and renewed over time. Adaptive governance is also concerned with how people are engaged in the process of decision making, who is involved and how the key organisations and community share and learn from their experience and practice over time. These factors have been shown to be critical for decision-making and managing complex problems.

Creating good, adaptive governance processes that bring together local knowledge with other types of knowledge, that are inclusive of all stakeholders where possible, and that evolve and learn over time as more experience and knowledge is gathered, are a cornerstone of meeting future challenges for KI.

Some key terms for thinking about how decisions are made:

Adaptive governance refers to how decisions are made and implemented at any scale, from a landcare group deciding what their priorities are for the next year, to a community project deciding where revegetation will occur, to an NRM Board deciding how resources will be allocated between competing issues. It also includes the structures and processes that are put in place to ensure that decisions and implementation are meeting the principles of good governance.

Knowledge management refers to how relevant knowledge, including local and traditional sources, scientific, agency and political forms of knowledge are gathered, combined, stored and brought to bear on decision-making processes. It also includes how knowledge is improved and adjusted over time as new information is gained.

Social learning refers to deliberate processes for individuals and groups (organisations or communities) to develop shared understanding of problems and solutions. Social learning happens when people come together to understand a problem and work together to develop solutions.

Building adaptive governance for NRM on KI – making good decisions in a changing world

Kangaroo Island has a wealth of capacity to draw on to make decisions about the future of the Island's natural resources. We have a small but actively engaged community with many locals and visitors that are passionate about particular issues, and agencies and organisations made up of local people that are keen to ensure a prosperous and sustainable future for the island. While these are considerable strengths to build on, there are also a number of issues identified through the consultation and review processes leading up to the development of the new NRM Plan. These include:

- » considerable frustration expressed throughout the community consultation process around decision-making: some stakeholders thought too many decisions were being dictated by the mainland, while others thought that vested interests had too much say in decision-making
- » lack of use of local knowledge: many people thought that outside experts had a bigger say in managing issues on the Island than they did, particularly regarding native vegetation management and fire management



- » lack of trust between key organisations on the island or between the island community and agencies: this lack of trust is further entrenched when local knowledge is not sought and used in decision-making, while clear divisions between some stakeholder groups are evident
- » lack of coordination between agencies, seen by many people to be a barrier to achieving a sustainable future for KI
- » lack of basic technical and local information to inform decision-making and management of some of the key issues on the island
- » little awareness or use of some key strategic documents to guide decision-making: many stakeholders expressed little faith in the capacity of government processes to solve issues on the island.

Addressing these issues and moving towards a more adaptive approach to decision making will require a deliberate focus on developing processes based on sound principles. Principles for adaptive governance that have emerged in similar setting elsewhere are documented in the table below.

Table 1: Seven principles of adaptive governance (modified from Griffith et al. 2009¹)

| Governance Principle | Description |
|------------------------|---|
| Legitimacy | the conferred or earned authority and necessary diligence and integrity to make decisions on behalf of others |
| Procedural fairness | an ethical basis for the way decisions are made and how communities and stakeholders are involved and treated |
| Accountability | being answerable to those on whose behalf decisions are made |
| Institutional networks | the linkages, networking and knowledge exchange that enables coordination of effort to occur |
| Reflective process | the awareness, reflection and responsiveness to changing conditions that enables learning, new knowledge and feedback to be incorporated into planning and action |
| Adaptation | flexibility to manage and respond to change and manage towards desired outcomes |
| Transformation | potential to navigate a shift to a fundamentally different system of natural resource use and management when the existing system becomes untenable. |

These principles are designed to inform the development of any natural resource decision-making process, from state agencies to local Landcare or production groups, to the design of a particular NRM project. Further, it is possible to assess and track how well organisations and processes perform against these principles. Some NRM regions around Australia have incorporated these or similar sets of principles into their organisation to guide their strategic and operational activities.

Coordination between agencies has been recognised by many as a critical challenge for the Island. The appointment of the Commissioner for Kangaroo Island is seen by some as an important step for developing a coordinated approach to service delivery on KI. While the Commissioner's role will undoubtedly improve coordination, there remain significant challenges to ensure the community is actively engaged in decision making around natural resource management issues in the future.



¹ Griffith, R, Davidson, J and Lockwood, M. 2009. *NRM Governance for change: Revisiting 'good' governance through an adaptive lens*. Report to Land and Water Australia, University of Tasmania, Hobart.

Knowledge Management

A clear message from the community consultation was that KI has a wealth of leaders and vast stores of local knowledge that can be applied to decision-making. There was clear feeling from the community that much of this local knowledge wasn't being used or ignored in preference for 'off island' expertise. While most people recognised the importance of using the best available knowledge, many thought that local knowledge could be much better used to help guide decisions, particularly in informing some issues such as native vegetation management.

Ensuring that knowledge is captured, stored and used in transparent ways to inform decision-making is a major step in improving natural resource decision making. One of the major challenges for using any form of knowledge is ensuring that it is recorded and stored in ways that it can be drawn on in the future as part of future decision making or review processes. Some important elements of a deliberate approach to knowledge management are:

- » recording local and other knowledge that may come in different formats, including stories, maps, photographs, other objects and artifacts, etc.
- » recognising and categorising different types of knowledge — local, traditional, technical, political and agency knowledge, and adopting the principle that we should always be trying to use multiple sources of knowledge to inform decision making
- » making knowledge and information accessible to all stakeholders where possible
- » ensuring that knowledge can be accessed and drawn on quickly, e.g. in searchable data bases
- » having processes for updating or amending knowledge and information
- » creating opportunities for all stakeholders to engage in knowledge gathering and review.

Using local knowledge relies on having good decision-making processes in place that ensure everyone gets an opportunity to participate and have their knowledge included. This requires a greater emphasis on consultation and engagement. Some community members expressed a degree of frustration with being consulted (or over consulted) without feeling like their input had been taken into consideration. Approaches such as citizens' juries that have been successfully trialed on the Island are one mechanism to allow wider input into decision-making.

Learning for the future

Many Islanders recognise the role KI could play as a centre of excellence for sustainable natural resource management and production systems. Many community members recognise the opportunity this could represent for attracting different types of visitors to the Island and creating diversified employment opportunities. This aspiration fits very strongly with the need to develop a learning approach to future management. Kangaroo Island is subject to complex local and outside influences (such as political decision-making, global financial changes that impact visitor numbers and commodity prices, and climate change) that continually create novel situations and challenges. There is little choice but to take a learning-by-doing approach to management.

We have a highly active and engaged community, an aspiration to become a centre of excellence for sustainable management and a need to develop a deliberate learning approach to sustainable management. This creates an opportunity to bring together citizen science, participation in natural resource management and a structured learning approach to provide diversified employment and economic opportunities for the Island community.



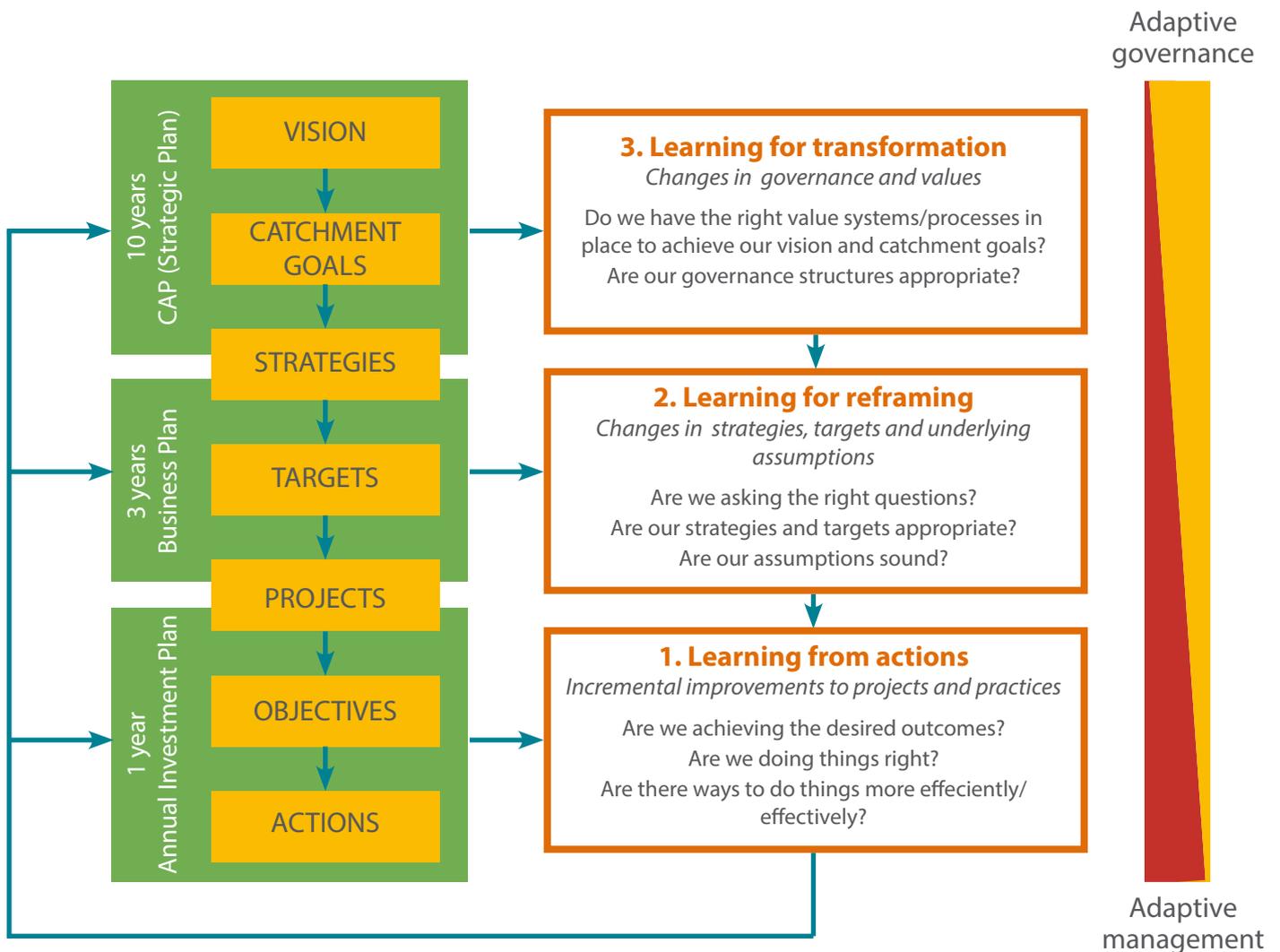
Learning-by-doing

Developing a learning 'culture' in organisations requires a shift in mind set to one that sees the issues and uncertainty as an opportunity: to learn together about the nature of those issues, to test different solutions, monitor the outcomes, reflect on the process and refine future management based on what has been learned.

For most organisations and groups, the current approach to Monitoring, Evaluation, Reporting and Improvement (MERI) has become overly focused on reporting back to funders and promoting successes. While this is important, it doesn't necessarily help us to tackle future challenges or improve our understanding of which interventions work best under what circumstances. Only a deliberate and organized approach to experimenting with different management options can deliver this kind of learning. This requires the development of agreed 'models' of change. Key knowledge, evidence and assumptions underpinning the model need to be recorded and an experimental approach is needed to test the model.

Figure 1 below provides an example of a structured 'triple loop' approach to learning developed by the Murray Catchment in NSW. This 'triple loop' approach to learning has been recognised as a critical approach to managing complex issues where social, ecological and economic factors are intertwined. It provides a structured approach to learn from on-ground management and practice and to use that learning to improve strategic decision-making over time.

Figure 1. Multi-layered evaluation, learning and refining applied to Murray CMA planning framework (adapted from Pahl-Wostl 2009²; Peschl 2007³)



² Pahl-Wostl, C. 2009. A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change* 19 (3) 354–365. doi:10.1016/j.gloenvcha.2009.06.001

³ Peschl, MF. 2007. Triple-loop learning as foundation for profound change, individual cultivation, and radical innovation. *Constructivist Foundations* 2(2-3), 136–145

Strategies and priorities

It is important to note that the NRM plan is intended to guide and coordinate the efforts of all stakeholders in the region and responsibility for its implementation is a joint one.

- » Adopt adaptive governance principles and embed an adaptive governance approach to decision making processes.
- » Review current knowledge management approaches for gathering, storing, using and renewing knowledge, including local knowledge. Develop a knowledge management system that allows local knowledge to be brought together with other knowledge types and to be used in decision making.
- » Develop an adaptive management framework (in which current MERI activities would sit) to allow and drive adaptive governance and management in the future. The approach could adopt a 'triple loop' approach to ensure learning at different levels and over time.
- » Investigate options for the development of a 'Centre of Excellence' to engage internal and external stakeholders in monitoring and learning collectively about sustainable management, making all types of knowledge more accessible and working towards effective information flows between stakeholders.
- » Work together to develop the KI Creed — a new social contract that embodies local values and provides guidelines or principles within which the broader KI community (across sectors) chooses to live and operate.

Partners

- » Department of Environment, Water and Natural Resources
- » Primary Industries and Regions SA
- » Department of Planning, Transport and Infrastructure
- » Research agencies and academic institutions
- » Non-government organisations
- » Kangaroo Island Council
- » Industry
- » Industry
- » Tourism Kangaroo Island
- » Community

What are your thoughts?

1. Have all the key issues relating to this **big issue** been adequately captured and understood?
2. Are there any gaps or misinterpretations?
3. What is the overall trend in relation to this issue — are matters improving or deteriorating, how fast and why?
4. In order to address this challenge, will the 'business as usual' approach work, or is adaptation (substantial change) or transformation (complete rethink of how we do business and how we tackle this issue) needed?
5. Do you agree with the strategies and priorities listed and/or do any need adding?
6. Who are the partners that need to collaborate to address this challenge?

FOR MORE INFORMATION

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