



Inovact CONSULTING

Insight | Innovation | Impact

Community Skills Knowledge and  
Engagement in Regional Natural  
Resource Management:  
Case Studies of Organisational  
Performance

July 2011



**Brian Ramsay**  
Managing Director

**Inovact Consulting Pty Ltd**

Ground Floor, AMP Building  
1 Hobart Place  
CANBERRA CITY ACT 2601

GPO Box 2067  
CANBERRA CITY ACT 2601

**P:** + 61 2 6140 3900 | **F:** + 61 2 6262 9307

**W:** [www.inovact.com.au](http://www.inovact.com.au)

**ABN:** 17 587 520 145

*Acknowledgements*

Inovact would like to acknowledge the contribution of each of the case study participants and thank them for providing their time and insights about developing effective Community Skills, Knowledge and Engagement strategies in their region.

*Disclaimer*

The information contained in this report has been compiled from data and other materials supplied by the Australian Government, case study organisations and publicly available information.

Every effort has been made to ensure the information presented and the conclusions reached are realistic and not misleading. However, Inovact Consulting Pty Ltd makes no warranty as to the accuracy of the information contained in this report and will not accept responsibility or liability for any loss incurred by any person or entity relying on the information in this report.

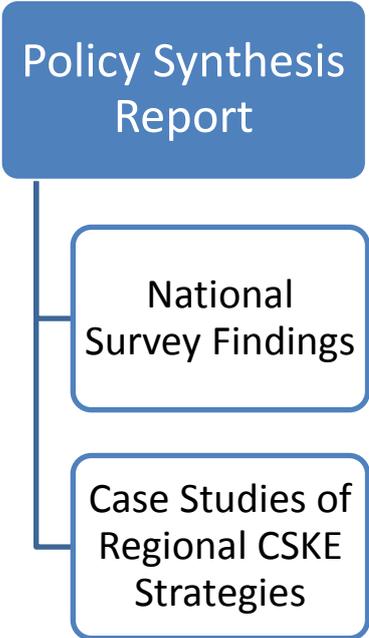
This report is solely for the use of client personnel. No part of it may be circulated, quoted or reproduced outside the client organisation without their prior written approval.

# Overview and Key Findings

This report presents a series of case studies describing and analysing the Community Skills Knowledge and Engagement (CSKE) approach of regional Natural Resource Management (NRM) organisations.

This report is one of a series of three reports which together provide a comprehensive national review of CSKE by regional NRM organisations. The project’s stated objectives are to:

- conduct a national survey and a series of interviews with NRM organisations and then analysis, to provide information that will enable Australian Government Land and Coasts (AGLC) to report on Caring for our Country CSKE achievements and progress towards five year outcomes;
- inform the review of the Caring for our Country program regarding CSKE;
- assist the development of a stakeholder strategy by AGLC; and
- generate policy-accessible information in a report that will inform refinement of CSKE targets and future investment, including implications for policy.



**Figure 1: Project Report Structure**

The companion reports include (Figure 1):

- a national survey report, and
- a policy synthesis report presenting an integrated analysis of the findings of the case studies and the national survey for AGLC.

The case study organisations include two organisations in New South Wales (Namoi and Sydney Metro Catchment Management Authorities (CMAs)) and two in Queensland (Desert Channels Inc. and Terrain NRM).

The case study regions include both community based regional NRM organisations and statutory structures. Their regions include some of the most sparsely populated areas of Australia and the most densely populated. They include regions where land management is dominated by agriculture, conservation reserves or an urban environment with a diversity of local governments and statutory authorities. They also have different capacities in terms of funding and staff.

Table 1 provides a comparison of some of the key factors that influence the CSKE approach of each of the case study regions. These factors emphasise the divergent challenges faced by regional NRM organisations in designing and delivering successful CSKE initiatives and strategy. Together the case studies provide important insights about the differing approaches and challenges for regional NRM organisations in delivering effective CSKE.

**Table 1: Comparison of CSKE contexts for the case study regions**

	Budget	Staff	Region Area (km <sup>2</sup> )	Population	Pop. Density (p/km <sup>2</sup> )	Local Govts	% of region used for agriculture	% of region reserved
<b>Namoi CMA</b>	~\$7.8m	38	42,000	100,000	2.4	6	73%	6%
<b>Desert Channels</b>	~\$3.6m	16	509,933	14,500	0.03	7	94%	4%
<b>Sydney Metro CMA</b>	~\$6.5m	25	2,470	3,000,000	1215	39	5%	42%
<b>Terrain NRM</b>	~\$10m	62	22,000	200,000	9.1	8	15%	80%

### *Integrating community development approaches with corporate style management frameworks*

While the national survey provides a picture of a regional NRM system that is performing well in creating and maintaining relationships with stakeholders, the case studies show the ongoing challenges and tensions that exist as organisations seek to build their engagement and influence on NRM knowledge and practice. In seeking an effective approach to CSKE at the regional level, the case studies show that there are two different perspectives that have driven thinking and strategy within regional NRM organisations; a community development model of engagement and an investor-provider model.

The community development model sees the development of community knowledge and skills as the primary challenge for NRM given the link between the current problems with resource health and resource management decisions across the community. A community development approach emphasises that everyone is important in NRM change and prioritises relationships and learning as the crucial short-term outcomes from CSKE. Understanding and responding to community identified needs is the driver for initiative implementation and design.

In many cases, the direct results of a community development approach may be harder to measure immediately as the causal link between learning and on-ground action is difficult to establish. However, in the longer term a focus on developing people is expected to result in a sustained improvement in NRM and less need for public investment to ameliorate biophysical problems. The influence of the Landcare movement on resource management in agriculture is one of the best and longest running examples of this kind of community development driven change.

The alternative emphasis is an investor-provider model which takes a business-like, results focussed perspective to CSKE. This approach is primarily focussed on achieving biophysical outcomes in the short-term and utilising corporate-style organisational structures and planning for Program design and decision-making. CSKE is positioned as a facilitator of efficiency and effectiveness in this process and is primarily used as one component of integrated Programs seeking to catalyse specific change. General engagement activities and capacity building may be incorporated in the suite of initiatives but at a lower level of priority. In this approach people are primarily seen as intermediaries in the change process and longer term attitudinal and broader practice changes as something that will flow from ongoing results focussed effort that catalyses and leads practical change.

Both approaches have some important similarities in that they:

- require the fostering of a strong learning culture supported by a robust internal evaluation protocol and feedback process;
- focus on achieving results that are valued by stakeholders as well as investors;
- recognise the value of people in NRM (in the organisation, as operational intermediaries and on the action front in the community); and
- require that the NRM body become a central hub or connector of information for NRM practitioners as well as the custodian of regional NRM planning responsibilities.

The case studies demonstrate that both of these perspectives are being applied by regional NRM organisations. In each case study, elements of both perspectives are evident in the organisation's strategy and initiatives. The relative emphasis of each organisation's approach is driven by its leadership, regional context and organisational history. All of the case study organisations are actively seeking a middle ground that balances the advantages of both approaches with the community development orientated organisations seeking to be more business-like and results focussed in the future and the more business-like seeking to develop their mechanisms for broader engagement and inclusiveness.

While all regional NRM organisations are seeking to create a balance between community development and the investor-provider model, the national survey demonstrates the importance of a well-developed governance framework and strategy to guide CSKE investment regardless of the emphasis taken.

Each case study organisation is continuing to develop and refine the quality of their CSKE systems. Given the strong foundation of relationships regional NRM organisations have established, it is in refining and further developing organisational approaches to CSKE that the big gains in return on investment are likely to be made for the Caring for Our Country Program.

In developing the national-regional partnership it is also important to note that the Caring for Our Country program has moved national investment significantly towards the investor-provider perspective. For regional NRM organisations that have primarily pursued a community development strategy, this transition is more difficult compared to those whose structures and approaches were already more aligned to an investor-provider approach.

For example, the requirement to link CSKE investment to specific on-ground outcomes is much easier to accommodate for regions with a history of an investor-provider approach compared to those that have focussed on broader capacity building strategies. As can be seen in the case studies, these organisations are still translating their systems and knowledge bases to support a more business-like approach to CSKE. In the context of a system that is performing well (as identified by the national survey), this makes continuity of the national investment strategy important to ensuring regional NRM organisations can complete the transition to the new investment framework and begin to learn and refine their approaches to CSKE strategy and initiatives.

### *Importance of strategy, prioritisation, staff and relationships*

Regardless of the community development/investor-provider emphasis of an organisations approach, the case studies reflect the findings of the national survey in terms of what is required for success at an organisational level.

This recipe for success begins with a clearly defined strategy that is built upon a clear understanding of the organisations mission (regional priorities) and knowledge and insight about the group(s) of stakeholders that the organisation is seeking to influence. Within the strategy, clear prioritisation of focus, effort and approach with different stakeholder groups is essential so that limited resources can have the greatest influence.

In the Namoi this prioritisation of effort has led to the CMA targeting CSKE and investment to larger innovative farmers who can achieve more significant outcomes at a landscape scale and also lead change within the farming community. In contrast, Sydney CMA has a focus on cooperative programs to facilitate changes in the way local governments manage stormwater and urban catchments. Terrain's strategy is driven by the overwhelming priority need to manage impacts from land management on the Great Barrier Reef while Desert Channels is focussed on building a range of connections, relationships and influence with the small number of land managers who have responsibility for managing most of the regions relatively unaltered natural systems.

Alongside targeted initiatives designed to influence landscape changes, each region is seeking to develop ongoing relationships with key stakeholders. These relationships are a basis for development of the organisations profile and for engagement and ownership of the regional NRM strategy. Each region must do this if it is to assume and maintain a leadership position in regional NRM.

A continuing challenge for each region in forming these relationships is translating the objectives of the organisation into something that is relevant for stakeholder groups who usually do not operate or engage in NRM at a landscape scale. An emerging opportunity to better communicate regional mission and priorities is flowing from the adoption of a resilience framework for prioritisation and decision-making. Each case study organisation is moving in this direction.

The advantage of the resilience framework for CSKE is that it translates regional priorities into a risk management framework and identifies a set of landscape thresholds for key resources. These thresholds provide a more tangible rationale for prioritisation of effort within the region and the risk management approach with defined targets can be more readily communicated to stakeholders. While it is early days, this resilience framework may help regions better frame and communicate their broader role and objectives.

Once an organisational approach and priorities are in place, specific CSKE solutions are developed at a Program or project level to meet the objectives of the organisations strategic initiatives. The case studies reinforce that successful implementation is dependent on the application of good quality processes for initiative design and committed staff with the right mix of skills, knowledge and relationships. Each organisation has developed its own approach based on the background and experience of its leadership and the internal learnings from previous CSKE initiatives about how best to work in their region. Across these approaches are three key types of strategies that are worth noting in considering the system as a whole and the investment approach taken by the Australian Government.

### *Three strategies for CSKE initiatives*

At the initiative level, CSKE strategies are essentially fit-for-purpose and there is no single approach that can guarantee a good result across the diversity of areas in which regional NRM organisations seek to influence. However, across the range of initiatives reviewed, the case studies identify three core strategies for achieving CSKE impact at the regional level:

1. Direct engagement of a smaller number of key influencers to develop skills and knowledge that can be immediately applied in on-ground change.
2. Development of interactive forums for discussion and agreement on priorities and action as a foundation for relationships and alignment of objectives between organisations, often leading to longer term co-investment and collaboration.
3. Broader awareness raising and profile development to provide a foundation of goodwill, confront attitudes that maintain poor practices and build community engagement and willingness to invest in NRM.

To be successful, a regional NRM organisation must be capable of effectively implementing each of these strategies. All three are implemented by each case study organisation with the approach taken for particular stakeholders shaped by the context and scope of the initiative (Table 2).

**Table 2: Summary of the strategies underpinning the CSKE initiatives described in the case studies**

<b>Example</b>	<b>Summary (CSKE component)</b>	<b>Direct engagement</b>	<b>Interactive forums</b>	<b>Awareness and profile</b>
<i>Native Grasslands Program (Namoi CMA)</i>	A significant initiative to reduce the critical threats to the EPBC listed grasslands	Integrated with funding for on-ground change on private land	Namoi Grasslands Network Field days	Distribution of a CD containing maps, monitoring techniques and other information.
<i>Urban Sustainability Initiative (Namoi CMA)</i>	Meet community demand for information on urban sustainability issues		Open house days Community gardening	
<i>Indigenous engagement (Namoi CMA)</i>	Develop the role of Indigenous people in regional NRM	Training programs	Events on country	TV ads to raise wider community awareness of Indigenous role in NRM
<i>Cooks River Urban Water Initiative (Sydney CMA)</i>	Improve Cooks River water quality and wetland health			Cooks River Community Forum Urban Streams email group
<i>Botany Bay Water Quality Improvement (Sydney CMA)</i>	Better manage polluted run-off into the Bay	Development and training to implement a decision support system for councils	Project reference committee	Presentation to councils and community groups Newsletters to network of stakeholders
<i>Community Forums (Desert Channels)</i>	Maintain connections to disparate communities in the region		Interactive forums for information sharing and communication	
<i>Re-engaging Indigenous communities (Desert Channels)</i>	Reinstate a relationship between local groups and the landscape	Engage with elders and others to collect and preserve traditional knowledge	Regular Indigenous forums.	

Example	Summary (CSKE component)	Direct engagement	Interactive forums	Awareness and profile
<i>ABCD Framework (Terrain NRM)</i>	A structured process for investing in on-farm practice changes	Engagement with extension officers and others to implement		
<i>Reef Rescue (Terrain NRM)</i>	Reduce impacts on reef from agricultural run-off	Targeted training and development for farmers who agree to lead change in the broader industry		
<i>Urban Rivers (Terrain NRM)</i>	Water Quality Improvement Plan development and implementation		Ecological values workshops with stakeholders to guide planning Steering Committee	

## Case Study Insights

### *Namoi Catchment Management Authority*

Namoi Catchment Management Authority (Namoi CMA) operates in an environment dominated by productive agricultural land use and the associated legacies of past land management practices. Namoi CMA approaches CSKE with an investor-provider approach that is built on strong structures and procedures, clear prioritisation of activity and quality information on both socio-economic and environmental issues. Its key clients are businesses, particularly large and influential agricultural businesses that lead change in the region. Namoi CMA has balanced this investor-provider approach with development of a strong regional profile and a broader stakeholder engagement strategy.

Namoi CMA presents a strong case study of the effectiveness of an investor-provider approach to CSKE. However their strategy is also balanced and increasingly inclusive of the community development perspective. This is achieved through investment in broader engagement activities, awareness building and attitudinal change. The current challenge for the organisation is in building two-way communication and extending its scope of influence beyond its key clients. This is recognised both internally and in external reviews as crucial to ongoing success for Namoi CMA.

The Namoi CMA case provides some relevant insights for the future of the current Caring for Our Country program approach, particularly the:

- attributes for success of this investor-provider investment approach (clarity of objectives, quality of information and strong relationships)
- need for balance and a diversity of approaches as well as focussed investment in short-term results
- time required to achieve momentum in key regional issues that have substantial barriers created by attitudes and historical practices, and
- trade-offs and tensions between a direct or indirect approach to influencing on-ground change.

### *Desert Channels Inc.*

DCQ NRM operates in a remote environment with a sparse population, complex Indigenous lineages, changeable climate and high levels of private land management. DCQ is a small organisation of less than 20 people, but is required to deliver big landscape outcomes across 510,000 square kilometres. This challenge is offset to some extent by land management being mainly in the hands of only 1000 private land managers.

The context for DCQ requires the development of efficiencies in service delivery, layering of relationships to enable multiplier effects, innovation in programs for engagement and flexibility in program design and delivery.

The key insights from the case study include the:

- Importance of a small number of relationships to achieving impact in sparsely populated regions. These relationships need to be established and managed effectively over time. There is not a lot of choice for the region in terms of who can deliver on-ground outcomes and so continuity of engagement and maintaining trust is crucial.
- Need for CSKE to achieve cultural change amongst land managers by better socialising environmental problems and finding ways to privatise benefits of better NRM.
- Different approaches to engaging with a small number of people over a large area. This is particularly important in considering the transaction costs in sparsely populated landscapes with large distances between centres of activity, where every individual manages large portions of the land and has critical impact on NRM.

### *Sydney Metro CMA*

Sydney Metro CMA (SMCMA) is one of the smallest and newest regional NRM organisations. It operates in an environment that is highly urbanised and one which features many established government organisations who have the key responsibility for NRM in the region including 39 local governments. The population is large, transient and mostly disconnected from the natural environment. This context drives the CSKE approach for SMCMA.

The organisation is highly focussed on facilitation of collaboration between local governments and provision of regional level NRM information to support collective decision-making and innovative action. SMCMA also sees developing community connection to environment as a way of reinforcing volunteerism in the region.

Its CSKE strategy remains developmental and is being progressively refined as the foundations of regional planning and relationships become more established for Sydney Metro CMA. Important insights from the case study include:

- In regions with more complex institutional environments, inter-organisational relationships are the key to success. Appropriate investment in developing personal relationships between staff through informal contact as well as more formal collaborations through projects and engagement forums is vital to long-term success.
- In a crowded institutional environment the role of the region is very different to areas where the regional NRM organisation is the peak regional interest and source of funding. While direct change is difficult, effective collaboration can lead to long lasting outcomes and significant leveraging of investment.
- An urban-nature disconnect is potentially a significant barrier to long-term NRM improvements. Consequently programs that focus on re-connection with nature and explore community attitudes and the potential to mobilise increased volunteer activity are an important part of achieving change in the long-term.

### *Terrain NRM*

In a region which is highly conserved and features some of Australia's most important World Heritage areas, Terrain NRM has been effective in carving an essential role in the institutional landscape of Far North Queensland (FNQ). The organisation is delivering on nationally significant NRM outcomes as part of the initiatives to reduce the impacts of land use on the Great Barrier Reef.

Terrain NRM has a strong ethos of community participation and consulting widely with experts and partners for implementation of programs. Its strategic focus is shaped by its membership structure and a mission to act as an effective facilitator across the matrix of stakeholders and interests in the region. Terrain NRM primarily works to develop an effective coalition for action on priority NRM issues using a community development approach.

The organisation faced a confronting time in its early years when other organisations were confused or threatened by its presence. Terrain NRM has learned to be a facilitator, a resource and a coach for change. It is now moving into a more deliberative stage where experience is showing how to work with other agencies, how to get value for money from investments and how to drive and measure change on the ground. This is bearing fruit through success in implementation of the Reef Rescue initiative.

# Contents

<b>Overview and Key Findings .....</b>	<b>iii</b>
<b>About the Case Studies.....</b>	<b>1</b>
<b>Namoi Catchment Management Authority .....</b>	<b>3</b>
Case Study Overview .....	3
The Catchment .....	4
Organisational approach.....	6
Effectiveness and learnings.....	11
<b>Sydney Metro Catchment Management Authority .....</b>	<b>13</b>
Case Study Overview .....	13
The Catchment .....	14
Organisation approach .....	15
Effectiveness and Lessons .....	21
<b>Desert Channels Queensland Inc. ....</b>	<b>23</b>
The Catchment .....	25
Organisation Approach.....	26
Importance of facilitative relationships .....	28
Effectiveness and Lessons .....	29
<b>Terrain NRM .....</b>	<b>30</b>
Case Study Overview .....	30
The Catchment .....	31
Organisation approach .....	33
Importance of facilitative relationships .....	37
Effectiveness and Learnings .....	38
<b>Figures</b>	
Figure 1: Project Report Structure .....	iii
Figure 2: Map of the Namoi Catchment.....	4
Figure 3 Relationship between the Namoi CAP, strategy and implementation .....	7
Figure 4: Prevalence of key practices amongst landholders in the Namoi CMA (2007-2010)..	12
Figure 5: Sydney CMA Region .....	14
Figure 6: SMCMA Implementation Structures .....	17
Figure 7: The Desert Channels Region .....	25
Figure 8: Terrain NRM Region .....	31
Figure 9: Terrain Program and Regional Staff Structure .....	34
<b>Tables</b>	
Table 1: Comparison of CSKE contexts for the case study regions .....	iv
Table 2: Summary of the strategies underpinning the CSKE initiatives described in the case studies .....	vii
Table 3: SMCMA Engagement Structures .....	16
Table 4: ABCD Framework.....	35



# About the Case Studies

---

The case studies are a component of the national assessment of Community Skills, Knowledge and Engagement (CSKE) for regional Natural Resource Management (NRM) on behalf of Australian Government Land and Coasts (AGLC).

As well as the nation-wide survey, more detailed regional case studies showcase some of the specific approaches to CSKE that are being pursued by individual regions. The case study process was designed to be one that is both beneficial for the Australian Government project and the participating regions.

## *Case Study Research Process*

The case studies sought answers to the following research questions:

1. How does the geographic, demographic and social context affect the strategies and approaches to community engagement undertaken by regions?
2. How do individual NRM regions embrace the concept of success in engaging their community and supporting the development of knowledge and skills?
3. How are organisations designed and managed with respect to effective engagement programs? How has this developed over time?
4. How does the organisation investigate the target audiences and stakeholders and match their needs, values and aspirations with appropriate programs and incentives?

Invitations to participate in a case study were made to selected regions in early April 2011. The case study process involved:

- A request for a kit of material summarizing the organisation's community engagement programs and services including:
  - relevant strategy and policy documents
  - investment (budget) information
  - process for planning and delivery of programs
  - reporting frameworks
  - copies of stakeholder surveys or analysis
  - identification of key stakeholder relationships/alliances
  - information on programs delivered to date
  - examples of regular communications, and
  - any recent evaluations of performance.
- Completion of the national survey process with staff and stakeholders
- A two-day visit from one of the Inovact Consulting team to discuss the region's approach to CSKE issues with key staff and stakeholders. This built upon and expanded the information provided in the formal telephone survey by:
  - discussing the history and development of stakeholder strategy
  - talking through specific initiatives, and
  - collecting additional qualitative information.

Inovact sought a series of interviews during the visit. This included a mixture of discussions with:

- the Chair of the regional body and/or members of any Board Committee that oversees CSKE issues
- the CEO and/or key executive responsible for CSKE
- staff managing key CSKE initiatives, and
- one or two key stakeholders who are engaged in advisory groups or other formal structures (as recommended by the CEO).

The exact nature of each field visit and information to be reviewed was discussed and agreed with each region during the initial contact and in the lead up to the field work.

Field visits were undertaken in mid to late April depending on the best time for each participating organisation.

# Namoi Catchment Management Authority

---

*Highly Targeted Skills and Knowledge Development for Land Managers*

*Inclusive Community Engagement and Awareness Building*

*Responsive Regional Partnerships*

## Case Study Overview

Namoi CMA is implementing a sophisticated and focussed organisational strategy for CSKE issues. It has built this approach over the seven years since the organisation was established.

Key elements of the Namoi strategy include:

- a strong media strategy that has built basic awareness and presence and promoted the use of the CMA as a resource amongst the wider community
- positioning Namoi CMA amongst the wider community as the key regional 'advocates for the resource' through their engagement in high profile resource management issues
- being precise about what they are trying to achieve in the landscape and communicating this to stakeholders
- targeting specific CSKE activities to those stakeholders who have the potential to substantially influence regional NRM outcomes
- building staff expertise so that the organisation has access to specialists
- staff who have good networks and knowledge in different parts of the catchment that can be leveraged in on-ground activities
- an inclusive and responsive engagement strategy for Indigenous people and community groups, and
- building new support and engagement amongst the community by moving out of traditional NRM issues to meet stakeholder priorities and interests.

The success of Namoi CMA's approach is beginning to show through in their monitoring and evaluation of activities. The increased recognition of the CMA as a leader in NRM and positive trends in community and landholder action in relation to NRM and the growth in positive land management practices underpins this trend.

Namoi CMA is now entering a challenging phase for its CSKE activities as it actively seeks to move its on-ground activities beyond the core group of professional, interested large scale farmers who have been able to deliver on-ground returns at a lower engagement cost.

This expansion of focus is being supported by a transition to a resilience framework in the new Catchment Action Plan. This approach is based on managing the resources of the region against key scientific thresholds and risks to landscape structure and function.

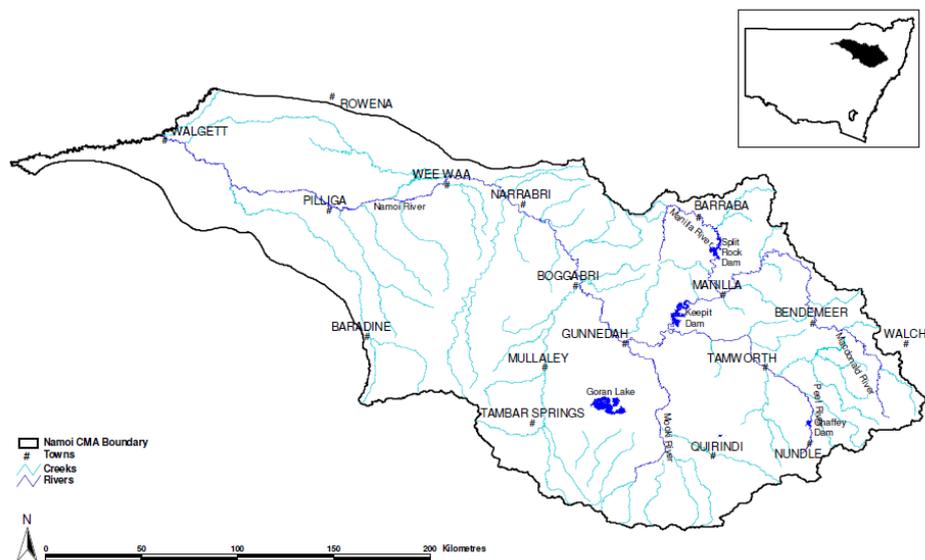
The region is also in the midst of major socio-economic changes driven by resource use. In particular mining and water reform issues have the potential to divide or alienate the community and further degrade resource condition if not handled well. Namoi CMA sees itself as an active participant in these issues.

# The Catchment

The Namoi Catchment (Figure 2) in north west NSW is bounded by the Great Dividing Range in the east, the Liverpool Ranges and Warrumbungle Ranges in the south, and the Nandewar Ranges and Mt. Kaputar to the north.

The Catchment is home to around 100,000 people, in an area of approximately 42,000 square kilometres, concentrated mostly along the Namoi River and its tributaries between Tamworth and Narrabri. About two thirds of the population live in towns with Tamworth, Gunnedah and Narrabri being important regional centres.

The Region contains three distinct landform types - tablelands, slopes and plains, each with distinctive patterns of drainage, soils, native vegetation, settlement and land use. The socio-economic characteristics differ significantly according to this landform, with each area having a distinct history and community.<sup>1</sup>



**Figure 2: Map of the Namoi Catchment**

Of the Namoi's annual regional output of over A\$1 Billion, agricultural production enterprises represent approximately half. This is around 11% of the State's on farm production from only 6.25% of the State's area. Major industries include cotton, livestock production, grain and hay, poultry and horticulture.

A range of land and water management issues affect the Namoi Catchment including water quality decline, soil and land degradation, increasing dryland salinity, and loss of native vegetation and decline in biodiversity.

<sup>1</sup> Namoi CMA, pers comm. April 2011

### *The Role of the Namoi CMA*

Namoi CMA has a broad role in natural resource management within the region. The organisation sees itself as being the key advocate for regional natural resources and is committed to ensuring the landscape of the region is resilient and sustainably managed.

As a New South Wales regional NRM organisation, Namoi CMA also needs to comply with:

- its enabling legislation and NSW Natural Resources Commission Standard and State-wide Targets
- Caring for Our Country Program guidelines, and
- government expectation that all investment funds must be directed to outcomes that improve catchment health.

These factors, as well as the ability for the organisation to access investment funding, shape the way the organisation does business.

### *Key Stakeholders for the Namoi CMA*

Namoi CMA identifies eight major target audiences for its work:

1. Rural industry groups and landholders
2. Local Government and urban/peri urban communities
3. Aboriginal communities
4. Non-rural Industry and their representative associations
5. Environmental Groups
6. Government Agencies / JSC / NRC
7. Politicians and the Media
8. Neighbouring CMAs

For the Namoi community as a whole, water scarcity remains the key issue for the catchment despite the breaking of the drought.<sup>2</sup> Riparian care and the loss of biodiversity are the other NRM issues that people are most concerned about. Looking to the future, people are also concerned about the influence of climate change and mining on the resources of the catchment.

There is evidence that the community is becoming more proactive in relation to Natural Resource Management with 47% of people identifying personal participation in environmental change and 49% identifying that they have actively tried to influence others in the community to change their behaviour in a positive way. Both of these measures of engagement have increased significantly since 2007.

---

<sup>2</sup> IPSOS 2010 Social Survey of Stakeholders, Namoi CMA

# Organisational approach

## CSKE Strategy

Namoi CMA has set itself the following outcomes for engaging with the community:

- Relationships based on trust, honesty, equity and transparency
- A catchment community that is encouraged to have a sense of ownership of NRM initiatives
- Voluntary and enthusiastic participation in activities
- Effective shared decision-making
- Informed and motivated stakeholders, empowered to undertake their own NRM activities and decisions, and
- Feedback on the performance of Namoi CMA to enable modification to future engagement activities.

These outcomes are achieved through a combination of strategy, structure and implementation.

The CSKE strategy for Namoi CMA emphasises highly targeted on-ground investment. Priority is considered in terms of resource management issues and whether landholders can achieve the scale of change required for a good return on investment. The Namoi utilises its quality data on the catchment and knowledge of the landholders in each region held by regionally located staff to enable this targeted approach.

*"For on-ground activities to date we have deliberately targeted the top quartile of farmers in the region. This group, compared to others, are capable of providing a larger return for our investment – they manage larger properties and are likely to be more effective land managers" – Namoi CMA*

This strategy creates a priority set of stakeholders for whom skill and knowledge development are crucial to the success of on-ground works. This group becomes a focus for one-on-one advice.

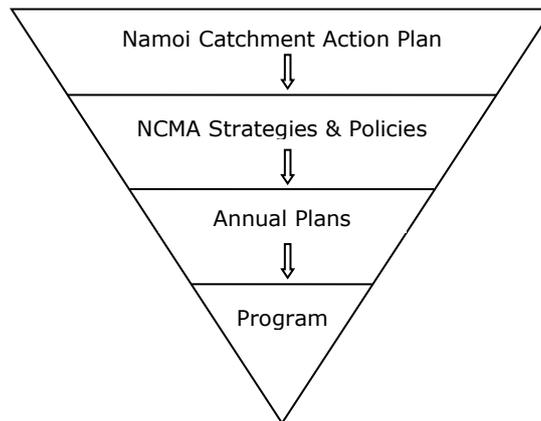
Beyond this focussed investment, the Namoi seeks to achieve a balance in the provision of opportunities for engagement and skills and knowledge development amongst the region's population. They recognise that there is an obligation to engage the whole community in order to 'bring them with you' in seeking landscape change.

The varied nature of the work of Namoi CMA means that different methods of community engagement need to be used at different times. The aim is fit for purpose in response to goals and the stakeholder context.

The CMA is taking a leadership role on NRM issues. For example by actively engaging with landholders, Namoi CMA is challenging the traditional notion that the highly endangered Brigalow is a weed and develop a better understanding of its significance as an endangered vegetation community. The CMA also sponsored showings of the AI Gore documentary *An Inconvenient Truth* across the catchment with the aim of stimulating debate and discussion on climate change amongst stakeholders.

## Organisational Structures

This overarching strategy for CSKE is captured by the newly developed capacity building guideline. This overarching guideline is supported by engagement, communications and education strategy which provide additional detail on how the CMA will engage stakeholders. The CMA has also put in place a service charters, policies on sponsorship, media and key issues such as mining. A complaints and feedback processes also provide monitoring basic service performance.



**Figure 3 Relationship between the Namoi CAP, strategy and implementation**

The CAP priorities and organisational strategies and policies are translated into Programs through an annual investment planning process (*Figure 3*). Under the new resilience approach, parts of the catchment are identified as high, medium or low priority based on their status against the resilience thresholds and the likelihood these will be breached (or are already breached). This provides a basis for development of Programs which are assessed for achievability, impact and cost. Out of this process comes a set of recommendations for the Board who consider strategic questions such as socio-political risks, investor preferences and catchment equity before signing off on an annual investment plan.

*"Our investment planning process translates strategy into action for the CMA. It guides engagement by providing clarity about when and why the CMA should be engaging or developing knowledge and skills for a particular group of people in the region." –  
Namoi CMA*

## Staff

To match staff and organisational capacity to its investment and engagement goals, the CMA has built cross-functional teams that create sources of in-house expertise for projects. While the organisation is nominally divided into strategy and operations, staff have responsibility for different projects and these roles are distributed across the organisation. Staff are also expected to build expertise and be willing to apply this outside of their core role.

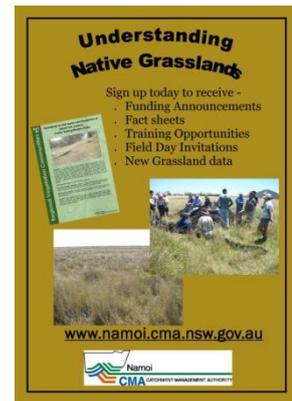
Spatial distribution of key officers within the catchment and employing people who bring a long-term engagement and existing relationships with local communities is also crucial to the success of CSKE strategy. This has been particularly important in operationalizing the direct approach to investment on-ground that has characterised the work of the organisation to date.

## Examples of Key CSKE Initiatives

### *CFOC Funded Grasslands Program*

An example of Namoi CMA's targeted on-ground action approach is the grasslands initiative which is funded by Caring for Our Country. Namoi CMA has received funding to reduce the critical threats to the EPBC listed grasslands of the Namoi Catchment. Activities that being carried out during the program include:

1. Mapping of current and pre-European history locations of natural grasslands (completing a seamless vegetation map of the Namoi Catchment).
2. Vegetation of the Namoi CD – This CD has comprehensive benchmark and location information for all the Regional Vegetation Communities (RVCs) in the Namoi Catchment, as well as a practical video of monitoring techniques, threatened species and weed information.
3. The delivery of 5 field days across the Namoi Catchment to promote grassland management – These will be run with Evergraze and NSW Industry – Agriculture.
4. A substantial funding round to support landholders who are managing their natural grasslands to combat critical threats – such as set stocking, weed infestation, overgrazing and other threatening processes.



The key to the CSKE approach is to base on-ground action around quality information about where action can have the greatest impact. Completion of the mapping processes allows the CMA to be confident of its knowledge of priority areas and the CD offers to opportunity to provide this to landholders for use in on-ground management. In addition, Namoi CMA has set up the Namoi Natural Grasslands Network to provide a forum for engagement by land managers on grassland management issues and practices.

### *Urban Sustainability*

As part of its general awareness raising and development of broader engagement amongst the community, Namoi CMA has taken a lead role in facilitating access to information on urban sustainability issues such as energy conservation and sustainable housing. This is a response to the high levels of interest evident amongst the general community on these issues (66% identify renewable energy as a key information gap and 82% had invested in energy efficient appliances).

The CMA has run a series of successful open house days where people can visit local homes that have been sustainably designed. The CMA is also facilitating community gardening through a partnership with TAFE. The level of interest and engagement has surprised the CMA and provided a low-cost way for the CMA to significantly raise the level of engagement and communication with the urban population of the catchment. The value of this is expected to be reflected not only in the sustainability of regional population centres, but also in the level of engagement by the urban community in NRM issues more generally.

## *Indigenous Engagement*

*"The engagement and skill and knowledge development for Indigenous people in the Namoi is something we are improving all the time. We have raised the profile and role of Indigenous people in NRM and we are also building skills and knowledge within communities." - Namoi CMA*

The Kamilaroi people inhabited the entire Namoi catchment before European settlement. Today, there are 12 local land councils representing some 6,500 people. The Namoi Indigenous community is largely disconnected from country as most of the catchment is held under freehold title and Indigenous people do not own a lot of land.

Namoi CMA views developing awareness and improving the current value of Indigenous engagement in NRM as equally important as building awareness of traditional and cultural knowledge. For the CMA, the local Indigenous community is an underutilised resource and a source of NRM knowledge and skill that is underdeveloped and undervalued in the region.

Namoi CMA has a multi-focussed strategy for this issue. Key strategies for Indigenous engagement have included:

- facilitation of events to bring Indigenous people in contact with country
- a partnership with TAFE to provide training in Cultural Heritage and Land Management for Indigenous communities
- developing the profile of Indigenous knowledge, contribution and heritage through a series of media, and
- documenting the knowledge of the community.

The CMA is now moving towards addressing the issue of access to land by encouraging landholders to permit Indigenous access and developing arrangements for access agreements to be developed and implemented. A survey of landholders showed that while only 12% of landholders had ever facilitated Indigenous access to land for cultural purposes, 50% would be willing to engage with the idea.

## **Importance of facilitative relationships**

Facilitative relationships, where the regional organisation partners with another regional or local group to pursue shared objectives can be an effective way of extending the influence of CSKE investments.

While Namoi CMA has mostly pursued a direct approach to development of community skills knowledge and engagement in the region, it also maintains relationships with a number of key regional organisations and is looking to form new groups to support stronger ongoing engagement.

## *Cotton CRC*

In the early stages of its existence, Namoi CMA established a partnership with The Cotton Catchment Communities Cooperative Research Centre (Cotton CRC). This research and extension based partnership has been a core component of Namoi CMA's partnership

activities. The Cotton CRC remains a key partner in engaging the cotton industry and improving natural resource management outcomes in irrigated areas of the catchment.<sup>3</sup>

The partnership has enabled the objectives of both organisations to be met with less resources and effort. Key achievements have included:

- native vegetation conservation and improvement has been achieved at a substantially lower price relative to direct investments by Namoi CMA
- a 15% Water Use Efficiency improvement over 8464ha (4,733ML water savings)
- the NRM module of the cotton BMP manual was delivered to 45 growers, and
- NRM capacity has been built amongst landholders and many others have been made aware of NRM issues through field days and other events members of both organisations delivered together.

### *Landcare Groups*

Landcare groups have historically been a prominent feature of NRM in the Namoi region. In 2007 nearly 100 Landcare groups were believed to exist. However, the activity and influence of networks has declined over time. A 2007 study of Landcare groups in the region was only able to confirm that only around 10 per cent of the estimated 100 groups to be active.<sup>4</sup>

The decline of Landcare in the region and periodic tensions between Landcare and the CMA about roles and responsibilities has made it difficult to utilise groups as managers of devolved grants. Early partnerships of this nature were beset by administrative problems and the outcomes were not what was initially expected.

Namoi CMA now pursues a responsive approach to engagement with Landcare groups. This includes giving a staff member responsibility for maintaining relationships with Landcare groups and ensuring regular attendance at meetings to keep people informed and engaged with the CMA's activities. The CMA also maintains an open invitation to all Landcare groups to approach the CMA for investment or to create a project partnership depending on the priorities of a particular group at a particular time.

### *Formal Advisory Groups*

The CMA is now in the process of establishing a set of three formal advisory groups within the Catchment – Tablelands, Slopes and Plains with membership drawn from communities across the catchment. These committees will provide a source of formal advice and interaction with community leadership and help the CMA forge more structured ties across the catchment in addition to its informal networks.

---

<sup>3</sup> Roberts Evaluation 2009, *An evaluation of the partnership between the Namoi CMA and the Cotton Catchment Communities CRC and A Partnership Strategy for the Future*, Namoi CMA

<sup>4</sup> Centre for International Economics 2007, *State of landcare groups in the Namoi Catchment*, Namoi CMA

## **Effectiveness and Learnings**

*"As a landholder with a strong interest in NRM I have had a proactive engagement with Namoi CMA. While I used to be a critic of the organisation, the CMA has built a level of real respect amongst my local community which is no mean feat given their natural cynicism about government organisations"*

- Landholder, Namoi Region

After 7 years of operation, Namoi CMA's approach to CSKE is beginning to bear fruit for the organisation. The latest information suggests significant progress against key indicators of success and Namoi CMA is now well positioned for ongoing leadership and influence in regional NRM.

### *Audit of CSKE Approach*

The Natural Resources Commission audit of 2009<sup>5</sup> confirms that Namoi CMA has performed relatively well as an organisation in relation to stakeholder issues. In reviewing Namoi CMAs approach the audit found that:

- Namoi CMA had identified the key stakeholders it must consider in planning and undertaking its work
- The CMA Board and staff recognised that partnerships and strong associations with key stakeholders are essential to delivering the CAP
- The CMA had targeted selected players in NRM in its catchment to develop capacity, share knowledge and identify opportunities and threats to CAP implementation, and
- The CMA had made a conscious decision to maximise efficiency of its investments. In order to achieve this it focussed on delivering outcomes through a highly targeted selection of stakeholders that demonstrated strong capacity to engage.
- The CMA was effectively implementing its communication strategy through a wide range of approaches including regular media releases and radio interviews, publications, advertising and high profile events.

### *Namoi CMA Standing and Reputation*

Namoi CMA has assumed a leadership position within the region on NRM issues and is recognised by the catchment community for this role. There is strong awareness amongst the community of the organisation (92% of the community have heard of the CMA). Almost two thirds of Namoi residents surveyed (64%) have positive impressions of Namoi CMA.

Positive impressions are highest among those who have had contact with Namoi CMA (75% compared with 50% for those who have not had contact). 29% of people in the region identified a direct and positive dealing with the CMA as the basis for their views, suggesting the CMA has been successful in achieving reach into the community as a whole in delivering CSKE activities.

Progress has been achieved despite a significant reduction in funding and a decrease in the reported contact amongst the community since 2007.

---

<sup>5</sup> Institute for International Development 2009, AUDIT REPORT - NAMOI CATCHMENT MANAGEMENT AUTHORITY Commissioned by the Natural Resources Commission

### Trends in Practice Change

Namoi CMA's latest community research suggests that the community and particularly landholders are becoming more deeply engaged and active in NRM issues. Figure 4 identifies that since 2007 there have been significant increases in the prevalence of good planning and management practices amongst landholders.



**Figure 4: Prevalence of key practices amongst landholders in the Namoi CMA (2007-2010)**

### The Future

Despite a positive performance by Namoi CMA, there remain opportunities for improvement and challenges to be faced in the coming years.

Clarifying the broader concept of NRM and the CMAs role in NRM issues, particularly as a landscape level manager remains a significant challenge. The latest research shows that the community remains uncertain about NRM and the exact role of the CMA despite positive orientation and participation at the issue level. The CMA is conscious of this issue and continuing to work on messaging to better define its role as a landscape manager. The resilience framework in the new CAP is assisting better communication of organisational mission.

The audit report in 2009 identified that input from community and stakeholders was on an as needs basis or issues specific, potentially constraining input over time. The CMA is seeking to address this by the formation of the three advisory groups to create a more structured and permanent source of input to CMA activities and plans.

Finally, the organisation continues to grapple with the perception that it is not fully utilising existing networks and expertise within the catchment. The audit suggested that a narrow focus could impact on its credibility at the local level, limit its ability to identify and respond to emerging issues in the catchment and restrict its capacity to engage more broadly in the future.

The review of the Council partnership structure and the ongoing commitment of a staff resource to engagement of community groups are the ways in which the Namoi is responding to this issue.

# Sydney Metro Catchment Management Authority

---

*Highly targeted relationships with local council and the facilitation of collaborative programs cross council areas*

*Willingness to lead from behind and to coach others to drive changes.*

## Case Study Overview

Sydney Metropolitan CMA is the smallest and newest of the NRM bodies and serves the largest urban population of any of the NRM bodies in Australia. It is small in terms of the size of the organisation, its recurrent funding base and the physical size of the catchment.

The operating environment for SMCMA is multifaceted with many well-established institutional frameworks around NRM issues. SMCMA has been successful in responding to both a crowded field of NRM responsibilities and a complex community by developing a modest (even understated) approach to CSKE. It has been

- strategic in its relationships with a strong focus on supporting the roles of Local Governments
- highly targeted in its funding to ensure maximum leverage with key stakeholders where there is alignment of NRM goals
- flexible in its NRM leadership role so that it maintains a reputation as a facilitator
- prepared to lead on NRM planning but also play a more supportive role (of intermediaries) during implementation and interaction with the broader community
- presenting itself as vital hub of information (a knowledge pool) that serves all participants, and
- conducting background research that enables better design making and monitoring stakeholders and their needs.

At an institutional level SMCMA supports this strategy by:

- ensuring the Board takes responsibility for the overall approach to working with stakeholder and reflects this in community engagement strategy and in the design of programs and relations under the approved CAP (Catchment Action Plan)
- ensuring that the Board receives monthly reports on key NRM programs including CSKE with progress goals and preferred outcomes
- building capacity of key community groups and providing basic support so that they remain viable
- being inclusive and ensuring that planning of programs has locally appropriate steering committees, scientific input and opportunities for interest groups to comment and participate
- holding regular forums for community members, groups and institutions to meet with the board and staff, and
- engaging staff with strong skills in both NRM planning and CSKE and ability to communicate with a range of stakeholders.



**Figure 5: Sydney CMA Region**

mobile with turnover of the population varying from 17-50% in some LGAs. Between 2001 and 2006 nearly one half of the population in North Sydney moved in or out of the area.

A key dilemma and challenge for SMCMA is that this Sydney population is not well connected to its environment. The natural environment provides a backdrop to a busy urban life and a source of recreation but there is little personal connection. Sydneysiders certainly gain a sense of identity from the harbour, beaches and other natural features but the responsibility for care is allocated to distant authorities.

The institutional landscape for Sydney is complex. The SMCMA works across 39 local government areas, with a complex of coastal authorities, with a wide range of government agencies at state and federal levels and a very large number of other interest groups. To manage this complexity at both a biophysical and socio-institutional levels, SMCMA has become adept at diplomacy, working as a coordinator and hub of information.

## The Catchment

The Sydney basin covers 2470 km<sup>2</sup> including offshore islands (Figure 5). The region is diverse topographically, biologically and culturally while also being highly urbanised. The basin includes 34 reserves with major conservation value and supports 21 endangered (or vulnerable) ecological communities and 139 species listed as endangered or vulnerable. The natural environment is also fragmented and highly modified by development.

The Sydney basin includes 39 local government areas and 6 Indigenous Land councils. It has a population of approximately 3 million (including 21,000 Indigenous residents). The population of the Sydney basin continues to grow.

A growing population brings ongoing development pressures for the environment. The population of Sydney is also

## *The role and approach of SMCMA*

The specific functions of SMCMA under the NSW CMA Act (2003) include:

- development of a catchment action plan (CAP)
- provide loans, grants, subsidies for other financial assistance for catchment activities
- enter into contracts for works for the catchment
- assist landholders to achieve the objectives of the CAP
- provide education and training in regard to NRM

The SMCMA has developed a collaborative CAP for the Sydney region to 2016 that has been endorsed by all the relevant stakeholders and prepares an annual investment program to support the CAP that focuses on three key themes:

- Protect and improve the condition of key natural resources (this is based on strong science and monitoring of the assets and inclusion of the community in driving change).
- Reconnecting nature and people with nature (this includes corridors of natural connection and improving understanding and values of nature).
- Reducing threats, mitigating key threats and monitoring change.

A large number of organisations influence NRM decisions in the Sydney basin. At one end of the spectrum is the array of institutions and government agencies that have interests in the key landscape features or assets. In the middle are a number of organisations and individuals who provide information, research or help to manage information sharing. These organisations include government agencies, universities, scientific groups, NGOs and learning organisations (education or environment centres). At the other end of the spectrum, there is a community of interest and volunteers involved in local NRM which may include individual residents or organised community groups.

SMCMA has carved out a role as the primary facilitator of multiparty programs for the environment and a reputation as a community-focussed organisation striving to reconnect people with the natural environment.

## Organisation approach

### **CSKE Strategy**

The large number of authorities and agencies managing the environment of Sydney means that the SMCMA has had to carve out an approach within this institutional environment that ensures it can serve its mandate for leadership through a cooperative approach.

The institutional niche for SMCMA includes serving as:

- a critical hub and spoke organisation for information management and sharing. SMCMA provides regional information connects stakeholders with information held by others
- a facilitator of complex relationships and programs requiring co-investment and other resource contributions
- an enabler – an educator, capacity builder and story teller to raise the profile of NRM in the Sydney region

In this regard the Board of SMCMA has determined that it will:

- create a unifying direction for all NRM managers in the region through collaboration, best available science and best decision-making processes
- establish a trusted position among stakeholders by listening to their needs on an ongoing basis, supporting their programs and providing resources where possible
- build relationships that enable SMCMA leverage grant funds through partnerships and co-investment (funds and in-kind), and
- work through local government organisations, NGOs and community groups to conduct on-ground works and to shape public attitudes or change behaviour. This is the most efficient approach given the large size of the population (3 million), the number of local governments (39) and the small size of the SMCMA staff and budget.

A formal Community Engagement Strategy for SMCMA provides a framework for the engagement activities pursued by staff. The response by SMCMA to its complex planning and implementation environment is to use a flexible and multi-tiered approach to engagement. SMCMA prefers to engage with *organised* groups and does not typically engage at the individual level. However, information is made available to individuals through website or calls to action by local groups.

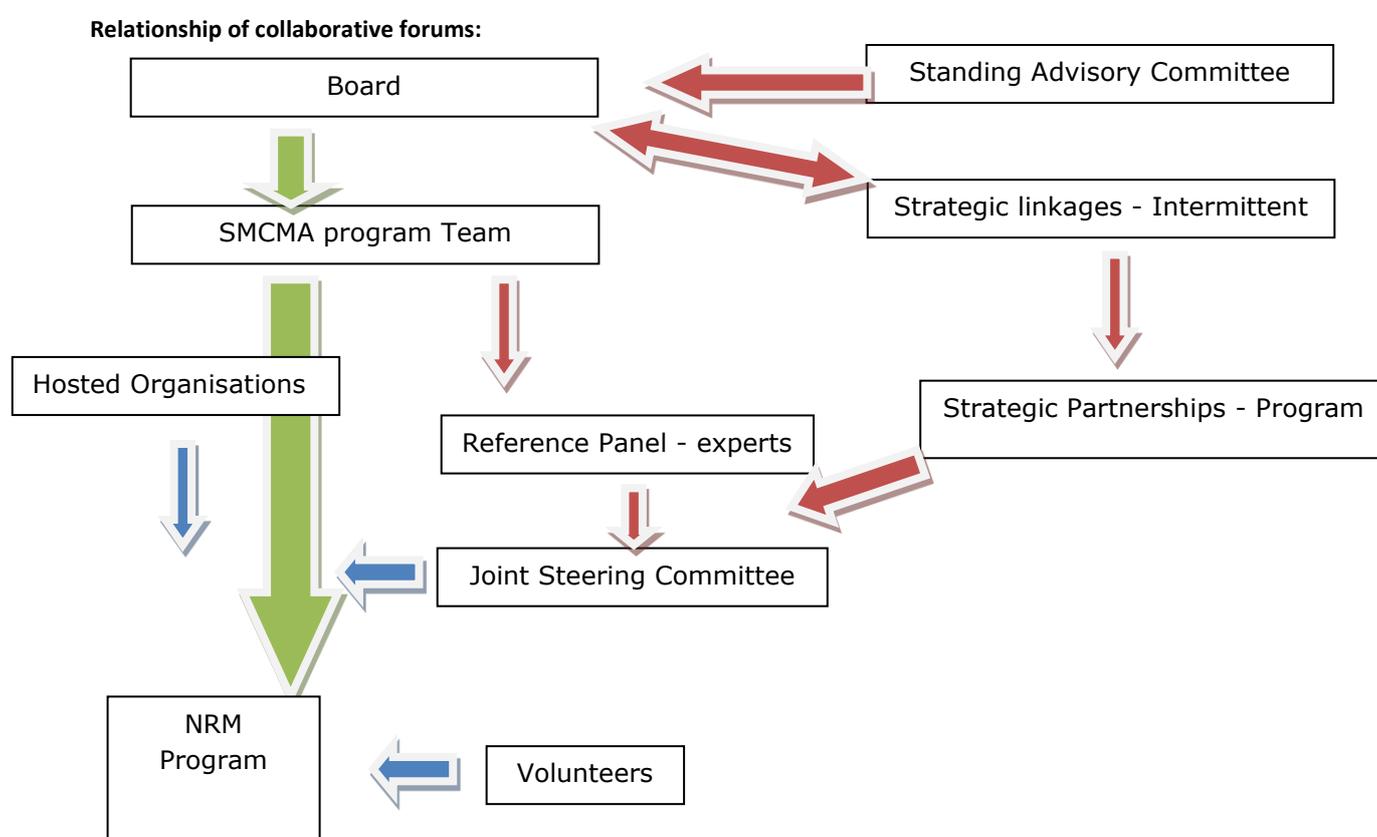
### Organisational frameworks

The SMCMA applies an orderly and multi-tiered approach for engaging the interest groups at an institutional and program level (Table 3: SMCMA Engagement Structures and Figure 6).

**Table 3: SMCMA Engagement Structures**

Level	Description/Example
Board Governance	Board membership reflects the diverse community interests in the region( geographical spread of membership, gender balance, balance of skills and experience) Board has an approved community engagement strategy and requires Management to report on key areas of the engagement strategy for each program. This includes the number and nature of partnership, levels of co-investment, funds management and grant schemes, budget expenditure on ROI on community programs, measures of success relating to engagement of the community
Standing Advisory Committees	Indigenous Advisory Committee
Strategic Linkages	Regular meetings with regional organisations for Local Government These collaborative council groups may be facilitated or supported by SMCMA
Program Reference Panels	Expert groups and representative groups assisting the design and development of programs or reviewing the quality of proposals. May include contracted researchers
Program Partnerships and Contracts	Formal and informal relationships involving various levels of co-investment or grant management. Organisations may be engaged to undertake scientific investigation, train volunteers, provide accredited skills-based programs
Program Joint Steering Committee	Cross-institutional teams with responsibility for on-ground action, knowledge networking, education and tactical design of programs and addressing operational risks. This committee may evolve from the

Level	Description/Example
	Program Reference Panels.
SMCMA Program Team	Responsible for coordination of engagement, documentation of progress, photographic records, reporting publicity, information collating and sharing
Volunteer Collaboration & Forums	Volunteer groups are coordinated and trained to deliver citizen science programs and conduct practical work on ground. Forums are held to exchange ideas, stories, techniques and to celebrate achievements
Hosted Organisations and Community Groups	SMCMA provides office space and administrative support several groups in order to enhance collaboration of efforts, increase information flow, align objectives and help the group remain viable



**Figure 6: SMCMA Implementation Structures**

The SMCMA program engagement process includes:

1. **Development of a communication plan.** This involves assessment of range of communication needs of stakeholders, the appropriate styles and the frequency suitable to stakeholders.
2. **Stakeholder analysis** is undertaken at the planning stage. This is used to guide relationships and help define the "value proposition" for stakeholders to participate.
3. **Establishment of reference committee** (drawn from scientists, information managers/agencies, local government, interest groups such as fisheries, national parks, NGOs, organised community groups, Indigenous interest groups (TOs), education or skills providers, government agencies).

4. **Establishment of joint planning processes** and principles for decision-making and collective agreement processes.
5. **Analysis of risks and opportunities** and assessment of alternate scenarios for program design and implementation depending on stakeholder involved.
6. **Articulation of a program engagement strategy** with strategies for engaging different types of stakeholders, co-investors and other contributors. The goals of each level of engagement are crystallised and action plan developed for each stage of the project.
7. **Integration of all costs relating to engagement** activities and relationship management into the program budget. Return on Investment is measured and reported (i.e. the social-cultural, economic and environmental benefits and impacts of the program are reported.)
8. **Development of a 'program identity'** that can be used to highlight the collaboration and to 'marketing' the program (e.g. development of a logo for the program – see below)
9. **Development of an implementation plan** that focuses both on risk and opportunity and responds to both
10. **Enabling and adaptive approach** to program implementation and engagement that allows for use of a wide range of engagement tools available through collaborating stakeholders. This may include social media.
11. **Thorough and ongoing monitoring and evaluation** – providing regular feedback to the joint steering committee and SMCMA.
12. **Development of a plan for ongoing maintenance** of the program beyond the life of a particular grant and continuity with other programs. This may involve securing commitment and investment by key stakeholders.
13. **Ongoing documentation** of the engagement process and outcomes using case studies, photo, press releases and web-based communication and social media.
14. **Celebration** of outcomes, forums for community review.

### **Staff**

SMCMA has internalised the requirements for CSKE by securing high quality staff with a key skills such as:

- Relationship management (from groups of volunteers to coalitions of LGAs and across government agencies)
- Coordinating cross-sectoral grant writing and coordination management of outcomes
- Community education and communication
- Information management and mapping
- Biodiversity, physical, aquatic-coastal sciences
- Indigenous engagement
- Management of volunteers
- Social profiling and institutional analysis are pursued through partner organisations

## Examples of CSKE Initiatives



### *Cooks River Project*

The Cooks River Urban Water Initiative aims to improve the Cooks River by partnering with the local community and land managers in stormwater and wetland improvement projects across the catchment. Partners include Marrickville Council, City of Canterbury, Strathfield Council, Rockdale Council, Cooks River Valley Association, Cooks River Foreshore Working Group, DECC, and Sydney Water.

The project is coordinated by SMCMA, supported by the Australian Government through Caring for Our Country and is regarded as an example of outstanding community engagement in work along the river and in its basin.

Wolli Creek, a tributary of the Cooks River, is significantly impacted by stormwater runoff from adjacent urban areas leading to nitrification, pollution and sedimentation. It contains important flora and fauna habitat, and has cultural and historical significance. The project improves the quality of runoff, removal of litter and major pollutants and provides for installation of pollutant traps and bio-retention systems to filter stormwater flowing into the Creek.

A wetlands recovery initiative focuses on restoring the key wetlands along the Cooks River that once filtered the water catchment. Wetland areas are being re-constructed in both the freshwater and estuarine reaches of the river with intensive re-vegetation and weeding with local volunteers.

The Cup and Saucer Creek Wetland provides an example of the transformation that is possible and is an inspiration to the local community. This was featured at a recent community forum (8 May 2011) at which more than 100 community members gathered to learn about the work and volunteer for the next stages. As a result of the community interest, state and Commonwealth governments made commitments to support ongoing community work to restore the basin.

### *SMCMA providing critical baseline data for NRM - Botany Bay Water Quality improvement Program*

The Botany Bay Program is managed by SMCMA and funded by Caring for Our Country and the 14 surrounding local government bodies collaborate on this project. It seeks to achieve long-term protection of the surface waters of Botany Bay, its estuaries and its catchment. It is primarily focused on managing the pollutants that wash off the hard surfaces in the catchment leading to very high levels of suspended solids, nitrogen and phosphorus.

SMCMA provided a baseline study of the environmental values of Botany Bay and its catchments waterways – information that had not been previously collated. It developed a model the current contributions of nutrients and sediments pollution in the catchment and a hydrodynamic model for Botany Bay and catchment watercourses. It also commissioned a review of the ecological aspects of the Towra Point Ramsar site.

To achieve change, SMCMA brought the councils together to deal with both the symptoms and the cause of the problem. SMCMA has employed a number of new tools for informing the local managers about the issues and their management. For example, the project involves deployment of a real-time water quality monitoring network for Botany Bay and its estuaries, a Water Quality Decision Support System that can be used at the catchment and sub-catchment scales. The monitoring project led to installation of water quality improvement devices to treat at least 50 hectares of urbanised land and implementation of water sensitive urban design.

### *Reconnecting habitats and people with nature*

The lack of connection between the general public in Sydney and the environment is seen by SMCMA as a fundamental issue for longer term NRM, particularly given the role that volunteerism can play in urban conservation and management.

As one way of countering this disconnection and engaging with the broader community, SMCMA has explored opportunities to encourage events for the arts that celebrate linkages with nature. In conjunction with the Kurnell biodiversity project, the Kurnell Art Gallery launched an exhibition featuring paintings of local artists and Marton Park Wetlands which lies in one of the biodiversity corridors. The arts will feature throughout the life of the program and will be used to focus on the natural features of the area and explore the values held by the community to participate in painting or photographic competitions.

## **Importance of facilitative relationships**

Facilitative relationships are vital to SMCMA in its delivery of its NRM mandate. The key facilitative relationships are with three tiers of government including the 39 local governments and regional councils of government.

SMCMA recognises that council have the pre-eminent role as natural resource managers within the core of the Sydney region. They have the primary role in land use planning and development assessment and control over public lands. They levy funds for stormwater management and some of the associated infrastructure. They also have a direct relationship with their community, community groups and local issues. They have the primary information on the demographic issues as they relate to NRM, to community attitudes and behaviour.

SMCMA has responded by facilitating regional councils of local government to work together on NRM issues. By facilitating their secretariats or enabling them to define projects and gain vital grant funds, SMCMA is achieving outcomes at a catchment scales that are not otherwise possible. SMCMA has also been able to effectively enlarge its small core budget through strategic alliances and co-investment. Some of the projects have had co-investment ratios of 4:1.

A second group of facilitative relationship is with Local Aboriginal Land Councils (LALC). The SMCMA recognises that the Indigenous people of the region have an integral connection to their land and to the resources. These relationships are both historical and relevant to the current knowledge for NRM. In some cases the Indigenous groups are gaining new NRM experience and training and then applying it to their traditional lands. This is an important part of the recovery of their culture and connection with the land in the Sydney Basin.

## Effectiveness and Lessons

SMCMA has achieved a great deal for a small organisation in a challenging operating environment. Several key strategic decisions about the approach for leading change are critical to overcoming the challenges of working in a crowded and well-established institutional environment relating to NRM. SMCMA has had to develop its brand as a facilitator and secure agreement on a unified suite of NRM priorities for the Sydney region.

SMCMA has demonstrated the value of working collectively on environmental issues especially at a sub-catchment level. These benefits have been measured in terms of leveraging of investment and other support for projects, sharing of critical information through a knowledge pool, creating a heightened sense of achievement on difficult issues, establishing critical mass of volunteers and gaining public interest in local NRM issues

Some of the recent achievements include:

- Establishing working relationships across three tiers of government, four regional organisations of councils (ROCs), one river trust, 5 Aboriginal Land Councils and a myriad of community groups, trusts and scientific organisations
- Establishing and coordinating the Cooks River initiative that improved storm water runoff and wetland and riverine communities throughout the entire sub-catchment
- Establishing long-term monitoring of the Georges River Basin run-off with training for citizen science teams. Training of volunteers and provision of community education in 4 languages leading to volunteer work for habitat recovery at 42 sites; the area covered was 960 square kilometres with cooperation across nine councils.
- Establishing capacity building program for Aboriginal groups and enabling application of skills in waterway and wetland management at Mill Creek
- Developing long-term monitoring and recovery of the Botany Bay including Ramsar wetlands and management of dangerous water pollutants. This project leveraged funds at a ratio exceeding 4:1 among partners and has led to a consolidated program for storm water run-off, sediment management, estuary and wetland recovery and prevention of coastal erosion
- Introducing Water Sensitive Urban Design principles to the Botany Bay hot spot and all 14 associated councils
- Coordinating the Kurnell biodiversity corridors program with recovery of about 10 ha of prime habitat, broad weed control, pest management and community education
- Coordinating salinity mapping for the Sydney basin
- Coordinating biodiversity education programs across the Sydney basin with local environment centres
- Enabling collaborative programs to assess projected impacts of climate change on coastal council areas and natural assets
- Recovery of approximately 480 hectares of habitat in 2009-10

### *Areas for Improvement*

Although SMCMA has made some significant steps toward developing a reputation for collaboration and put in place some strong internal mechanisms to support this approach, their CSKE strategy and implementation remains emergent.

There is a need to fully document their processes, to target new approaches and to measure impact more precisely. One of the most valuable first steps being considered is to consolidate tools and approaches now used across the staff and to document these into check lists for action and a series of testable ideas and assumptions.

With such a major emphasis on relationships and intermediaries, SMCMA makes large investments in relationship management as the pathway for NRM outcomes. Exploring and document the relative contributions arising from those partnerships and the ultimate impact impacts on NRM outcomes will help SMCMA to refine its prioritisation and relationship management.

### *The future*

The approach that SMCMA currently takes to CSKE in both its planning and implementation will be affected by its adoption of relatively new approaches to NRM planning and collective decision-making. The up-coming review of the CAP after five years of implementation provides an opportunity to apply 'resilience' thinking to environmental targets as well as a new decision-making model for priority setting.

The first approach promises to be a more intuitive approach to environmental management and so more easily understood by the community than the environmental asset management approach. The second will provide a mechanism for tracking decisions and collecting inputs from all participants in the process of setting priorities.

# Desert Channels Queensland Inc.

---

The ethos is “People First” – “engage and inform them; support them and build their capacity to care for their country....”

## Case Study Overview

The Desert Channels NRM (DCQ) region covers the entire Queensland section of the Lake Eyre Basin and nearly one-third of Queensland. The population of the area is small and sparsely distributed and only a few individuals are responsible for the NRM outcomes across the region.

DCQ NRM provides a case study into NRM management in a remote and sparsely populated landscape where NRM issues are generally extensive, rather than intensive. Individual changes in behaviour and land management practices can be very significant. It also highlights the challenges of working across large distances, where transfer of knowledge and skills is labour intensive and taxing on small budgets. DCQ demonstrates the impact of well-targeted engagement with Indigenous communities and some of the innovative ways of embracing their traditional knowledge and restoring their connections with the landscape.

The key elements of the CSKE strategy and programs include:

- practical focus on people at all levels of programs
- strong relationships with the 14 Indigenous groups and development of an Indigenous Engagement Strategy
- innovative approaches to working with a sparse and widespread community managing large landscapes – using local forums, internet training and intermediaries in smaller catchments.
- seeking champions of change in the rural sector who are visible and by demonstration show leadership in land management
- use of devolved grants to focus the efforts of farmers, organised groups of volunteers and councils of townships to improve environmental management and water quality
- provision of education and capacity building programs on an ongoing basis to build general skills as well as on program basis.
- provision of general support to the community to build relationships and social networks that can assist better NRM including youth, townspeople working on town commons, women’s networks and Indigenous groups.

The success of the DCQ programs appears to reflect on five strong management principles and themes that appear in each of their programs:

- attracting and retaining highly qualified staff and a strong array of skills
- building strong relationships across the community and supporting key social networks that can provide leadership for NRM in the longer term
- continuity of programs on the ground
- a flexible and innovative approach to its business management, and
- devolution of NRM implementation and decisions to the lowest capable level.

Some of the flagship engagement programs that highlight the skills and innovation of DCQ are as follows:

- *Naturally Resourceful Women* workshops to empower women to help drive change across the landscape, to contribute to their social networking and encourage them to play a major role in intergenerational planning of the region.
- Landowner support Services program have engaged land managers in 11% of the region in one suite of changes for NRM.
- Sustainable Farm Practices Program - This occurred under Queensland's Blueprint for the Bush program funding and was a 3 year delivery of programs to engage and train land managers. It engaged 22 farm enterprises across 240000 ha of critical catchment areas in better soil management, carbon retention and erosion reduction.
- Critical Habitat protection –using incentives to engage land managers in retention and protection of 2,200 ha of threatened ecosystems
- Delivery of outcomes through 10 devolved grants to NRM committees, Landcare groups, local government for NRM projects 2009- 2011
- Town Commons planning – engaging town communities in improving whole of town planning, parks management, water and waterways management, waste management, biodiversity protection ad recovery, street scapes, development of pride in local ions and broad education on environmental assets etc. It aims to empower the community to make the towns a 'living natural asset' and 'healthy living environment'
- Delivery of series of regional planning sessions engaging nearly 80% of land managers.
- Development of strategies at the board and senior management level to track achievements in CSKE, to assess risks to programs or relationships and to highlight key skills that can be captures in a business-like way.
- Use of an 'Enquire System' to assist with interacting with mining industries

The organisation is now embarking on a major change in its management structure that is intended to provide a more sustainable business base. This is designed to help DCQ adopt an enterprising approach to NRM in the region. DCQ will then have a business framework with three arms including a commercial consulting arm, an arm that continues its work in community programs for NRM and a trust that captures profits, donations and sponsorship that supports the long-term programs.

DCQ NRM is also investigating the use of resilience thinking as the underpinning science for NRM planning. The intuitive and scientific concepts of thresholds and focusing on landscape function may be more easily transited to land managers and Traditional Owners. DCQ is hoping this will lead to a better general understanding of NRM goals and support for actions.

# The Catchment

The DCQ catchment (*Figure 7*) is the largest catchment in Queensland, covering 509,933 square kilometres. The catchment stretches from the Desert Uplands in the north east, to the Cooper Creek basin in the south east and the combined basins of the Georgina and Diamantina Rivers in the west. These catchments contribute 40% and 60% respectively to the inflow to Lake Eyre.

The region has been less altered than most, with the absence of tilled soils or large urban centres. The rivers are not regulated and the landscape has vast tracks of land that are not dissected by roads.

The region supports a dispersed population of 14,500 inhabitants - less than one thousand live in the rural areas and the remainder are in small, scattered townships. The population is generally decreasing in the rural areas and the towns are increasingly supported by tourism, government and mining and petroleum industries. The predominant land-use is rangeland grazing of cattle and sheep.



Copyright: Desert Channels Queensland

**Figure 7: The Desert Channels Region**

improve the capacity of the community to better manage natural resources in this changing climate. Additionally, the DCQ has the challenges of working with a small population at long distances and managing large tracks of land. The Indigenous population associated with Desert Channel country are not all resident and reconnection across the land and with each other is important.

The landscape is primarily managed by individual landholders. This includes 84% leasehold, 9% freehold, 4% reserves, 3% other land tenure. The Indigenous inhabitants of the region are made up of 14 distinct language groups.

There are seven bioregions in the DCQ area. There are also 23 wetlands of national importance that have been listed because of their uniqueness or value to biodiversity conservation.

The community and DCQ Inc. have identified the major natural resource challenges of the region to include: the recovery and protection of vegetation in a highly variable environment, water management, weeds, feral animals and sustainable enterprise development. It is also a broader aim to

### *The Role of the DCQ NRM Body in Achieving regional objectives*

As a Queensland based NRM body, the DCQ oversees the investment of State and Federal funds in sustainable natural resource management and coordinates other NRM activities that contribute to economic, ecological and social sustainability.

DCQ Inc. is also responsible for ensuring that:

- It develops a plan with its communities to identify and protect natural assets at a regional level (see "Protecting our Assets")
- It ensures that there is an action plan that devolves responsibility for actions, contracts key research and monitors outcomes and impacts (see "Powering our Actions")
- It manages devolved grants that specific programs at a local level
- It reports achievements and impacts to its stakeholders, government and the broader community

DCQ do not have recurrent core funding provided by state government. One of the key challenges for organisation such as DCQ is the development of a sustainable income base that provides program continuity and a buffer against variable outcomes from competitive grant cycles, while also ensuring that they can meet long-term obligations in the local community.

DCQ will become the Desert Channels Group that will include a nest of business ventures that will sharpen both the focus on income and the delivery of key services. This will include a natural resource consulting business (Desert Channels Solutions) that will provide financial continuity and sustainability to the organisation, a service delivery arm similar to its current regional NRM role (Desert Channels NRM), and a trust (Desert Channels foundation or Trust) for redirecting profits from the consultancy and other donations to provide ongoing support of key social program, capacity building and long-term NRM projects.

## Organisation Approach

### *Strategy*

DCQ Inc. has evolved from a community organisation with a primarily bottom up approach to planning to an organisation whose planning and delivery mode is truly focussed at a regional level. While the clients of the previous model of DCQ were landholders, the most significant clients of the current model are governments of different levels.

Connectivity from the board room to the farm is key for the DCQ Board given that 1000 land managers are responsible for NRM outcomes. As one Board member expressed, "there is no effective conservation in their landscape without people".

The key implication of this insight for DCQ is the need to match values and aspirations of their target audience in their Programs and initiative. If successful this can lead to significant co-investment by key players in the DCQ programs. A serious mismatch can cause programs to fail.

DCQ investments that use social forums to promote family and community interaction are a reflection of this approach recognising the aspiration of a dispersed community to feel genuinely connected. In this way NRM is presented as a unifying and shared community goal.

The CSKE strategy and approach of DCQ is not currently crystallised in one general document or strategy but is spread across a number of more specific strategies and program procedures. These include:

- Aboriginal Engagement Strategy
- Community workshops and forums program
- NRM Plan with broad principles for and targets for community engagement against each resource goal
- Program reports against specific CSKE goals and targets and Board reporting processes including meeting of global and specific engagement targets
- A communication strategy associated with each NRM program and project

DCQ also tries to reflect an open-door approach to its business, a service culture in its staff and a 'can do' profile. DCQ has identified 18 communities of interest in NRM work in the region. To access these communities they regularly use radio, field days, and development of local champions of key programs.

### *Structure*

The history of DCQ means that it is a community owned organisation with solid connections on the ground. It remains connected back to the three key catchment committees of the regions through its membership. Community members sit on committees and work to implement the projects funded through grants which are generally devolved or collaborative funding with DCQ.

Some of the tools used to regular engage with stakeholders include:

- Stakeholder analysis associated with each program used at the beginning of the planning phase, implementation and measurement of impact
- Regular meetings of each of the three river catchment committees and agendas that include community engagement and communication (two-way communication)
- Regular bulletins to all stakeholders indicating goals for engagement, outcomes and opportunities
- Open meeting forums at sub-regional levels dealing with specific NRM issues
- Capacity building and training workshops at local levels used to share information and skills and to build social networks and collaborative teams
- Leadership and other training programs for women, Indigenous groups and youth. These are aimed at build skills, trust and social networks

### *Staff*

DCQ is a small organisation and so the quality of staff is crucial to its effectiveness. Relationships at the state and commonwealth levels are reinforced by placement of staff in key offices and by attracting staff to join DCQ with experience in key agencies.

### *Illustrative Examples of Key CSKE Initiatives*

#### *Regular Community Forums*

Regular community forums are viewed as an important way to gain feedback and have a social event around the environment. One Board member reflected on discussions that would lead to these forums serving as local Annual General Meetings for DCQ where there is clear

accountability back to the community by DCQ, a desire to get input from the locals and key topic is put on the table for resolution.

#### *Innovative programs to engage and reconnect Indigenous communities*

The DCQ has an innovative program working with representatives of the 14 Indigenous language groups in the area to re-instate the relationship that existed over millennia to facilitate trade from the Gulf Country to the Desert. The program is called *Salt to Dust*, and involves the development of regular Indigenous forums to discuss key issues of 'country' and 'community', to establish common goals.

DCQ has developed a formal Aboriginal Engagement Strategy and series of protocols to guide interaction and access information. There are a series of programs to:

- Collate, conserve and interpret Indigenous materials for Indigenous use;
- Record language and knowledge of country and to trace/reinforce connections;
- Develop leadership skills through dedicated programs (this crosses through a wide range of life skills and is in line with the programs of the federal Department of Families, Housing, Community Services and Indigenous Affairs);
- Develop specific programs such as Salt to Dust and Indigenous Forum;
- Learn from Indigenous land management approaches and traditional natural knowledge;
- Record stories and publish where possible;
- Record stories of elders and community groups – a special video/recording program is underway; and
- Celebrate connections to country through stories, dance and song – sharing this where possible.

#### *Landholder Support Services and Support of Women's Networks*

In addition to the resources on display at the headquarters, DCQ manages major service programs for land managers. It is broadly called *Blueprint for the Bush* (a Queensland Government program) and is a specific suite of services for landholder support in the DCQ and is supported by the Queensland Government. It has covered 140 properties, 46000 sq km of land and approximately 11% of the DC region. Events were held across the area and nearly 30% of attendees were other community members who came along to learn. These events and services covered topics such as weeds, wild dog management and control, biodiversity of the Mitchell Grass Downs, soil management, innovation in land management, carbon and climate change.

A program for women called *Naturally Resourceful Women* was aimed at enhancing the involvement of women living in remote grazing properties and in townships. It focussed on building relationships with and among women, building skills and engaging women as key influences, key educators and drivers of change. The workshops covered biodiversity, financial planning, grant writing, succession planning, arts, health and well-being and positive change.

## Importance of facilitative relationships

As described above, the key relationships in the Desert Channel Region and reflected in the strategic plan for DCQ to 2011 includes:

- State government
- Commonwealth government and CFoC program staff

- Local governments for townships scattered throughout the region
- The 3 key Catchment committees
- 14 Indigenous Councils
- Landcare groups
- Land managers (less than 1000 managing more than 90% of the landscape)

Of these organisations, the three catchment Committees (Coopers Creek, Georgina-Diamantina, Desert Uplands) and the Indigenous Councils (and key traditional owners) are the major intermediaries through which the programs are coordinated or delivered. DCQ engages them in planning and delivery of devolved grants and in regular training workshops or field days.

The traditional linkages between the DCQ board and the three catchment committees are reflected in board membership and formal agreements for consultation on key issues. These are relationships that are effectively hardwired into the strategies and structure of DCQ and will be carried forward into the new business structure as well. Other relationships, such as those with Indigenous groups and local government are primarily pursued on a program basis with ongoing efforts to maintain trust and information exchange.

## Effectiveness and Lessons

Key lessons listed by staff, board members and key stakeholders are as follows:

- Take the time to build trust and exchange information
- Learn to listen to the issues and priorities of the participants and then develop a common language for addressing issue
- Use information about the landscape and its impact on livelihoods as a point of introduction and to attract interest
- Determine those who officially run programs or manage lands and those who influence the outcomes such as women and key social networks

The improvements that staff and others suggested were in developing their knowledge of the target audience and translating this into new or more effective actions:

- "We should be undertaking more thorough social profiling as if this community represents the "market" or clients of a more commercial enterprise. We don't do enough of this work..."
- "To evaluate the impact of programs on shifts in values, key learning, and change in behaviour, we need to know more of the situation at the start. We need to do this research as a benchmark"
- "Development of clearer strategies and targets in regard to community development and outcomes would be useful. The current reports focus on measure of "process" rather than "impact" – for example current reports will tell how many people came to events, how many workshops were held but not the learning outcomes or on-ground impact"

The CEO of DCQ described community engagement as an ethos of DCQ but not yet its business acumen. While this ethos underpins all its programs and investments, it needs better translation into specific strategies and business targets. DCQ also aims to be more explicit in its principles, processes and protocols so that there is both internal learning among staff and preservation of ideas for transfer over time. This is an honest analysis and represents an aspiration for the organisation. It does not necessarily deter from the achievements to date.

# Terrain NRM

---

*An integrated approach to NRM and community development focussed by the need to protect world heritage biodiversity*

## Case Study Overview

Terrain NRM, previously known as the Far North Queensland NRM, is a relatively new NRM organisation. It is a not-for-profit company with a membership of 120 institutional partners, each with roles in NRM either directly or as intermediaries. This membership includes a relatively a large number of Indigenous groups, state, federal and local government and community groups.

For the past five years, Terrain NRM has been responsible for the NRM programs of Wet Tropics Area of Queensland. The region is dominated by world heritage values (approximately 80% of the landscape), agriculture (approximately 10%) and urban centres. The area is a major focus for domestic and international tourism driven by the coincidence of rainforest and reef.

The approach taken by Terrain NRM to CSKE is characterised by community development thinking which integrates CSKE into every aspect of the organisations approach and focuses on relationships and the pursuit of mutual benefits with partners and key parts of the community.

This approach has been successful in:

Providing a foundation for integrated community participation in key issues including:

- Developing the first Aboriginal Cultural and NRM Plan and worked with the communities to map cultural heritage and to build capacity to deliver key programs.
- Responding to crises such as cyclone Larry and Cyclone Yasi by providing critical environmental, production and community information to decision makers and employing displaced agricultural workers in key environment clean-up and restoration roles.
- Working with community groups to establish water quality monitoring programs.

Facilitating proactive change in regional NRM issues (including those that have a clear national significance):

- Transforming sugarcane farming practices in the Herbert Area and with farmers, stopped 80% of the surface fertiliser applications that ultimately entered the water of the catchment.
- Developing exemplary cross-sectorial and community based programs for biodiversity conservation (Mission Beach Cassowary Conservation program).
- Working with urban communities in Cairns to restore green corridors along the Barron River (The Green Corridor Project).

Terrain NRM has achieved this by building trust and credibility across the community and by ensuring that NRM is clearly linked to livelihoods and community well-being of the region. This approach is drawn from development models of participation and contrasts with other regions whose use models built primarily around strategic partnerships and business efficiency and productivity.

Terrain NRM is currently looking at the success and limitations of its approach as part of a continuous improvement mentality. The goal is to streamline business management, sharpen the core services and programs and develop a more sustainable income base given its position as an independent community based organisation. It is aiming to do this without losing its reputation as an approachable and responsive organisation that has played a key role in enabling collaboration and coalitions to form across organisations and community groups who had not worked together in the past.

## The catchment

The Terrain NRM covers approximately 22 000km<sup>2</sup> stretching from Douglass Shire in the north, to Hinchinbrook in the south, extending west to include the Atherton Tableland and the Upper Herbert catchment and seaward into the Coral Sea (Figure 8).

More than 80% of the area is protected in some way. This includes 91% of the Wet Tropic World Heritage Area along with part of the Great Barrier Reef Marine Park, other National parks, State forests and reserve. Approximately 15% of the landscape is dedicated to farming of tropical food and fibre and it supports a resident population of over 250,000. The area has a large itinerant and tourist population that is highly season and up to 20% of the population can be in this category in some seasons. There are also at least 21,000 Indigenous residents from 17 Traditional Owner groups, each one with many clans. Each of the interest groups brings a different land use perspective and each of these is heightened by World Heritage focus of the area that brings national and international scrutiny.

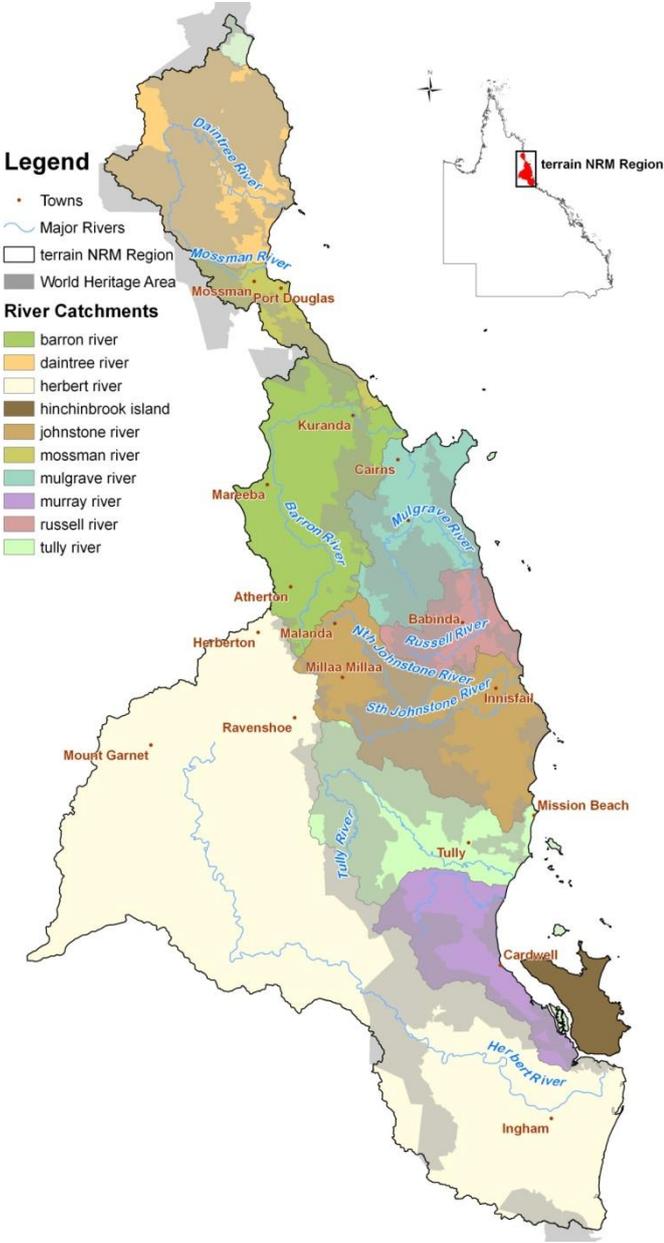


Figure 8: Terrain NRM Region

The institutional structures around the wet tropics and Far North Queensland development are complex and densely populated. There are now 4 local government authorities (once 9) in the Terrain NRM region, a large number of research groups (including CSIRO, cooperative research centres, universities and reef research groups) and tourism interests.

This northern area of Australia (along with Cape York the gulf county, NT and northern WA) is seen as the next frontier for development. The Queensland government has prepared a blue print for development of the far north (FNQ Development Plan, 2010) and there are investment pressures relating to new agricultural interests, tourism, harnessing of water and major infrastructure developments. At the same time, there is a desire to focus on sustainable industries, sustainable populations and adequate protections for the unique environment.

The area supports spectacular biodiversity icons including tree kangaroos, cassowaries, unique possums, bird communities and plant assemblages. The soils in the flood plains are rich and until recently, it was easy to be complacent about the health and sustainability of the landscape. However land use practices have resulted in depletion of some soils, high nutrient run off, degraded wetlands and invasion of pest species. Riparian zones and wetlands are major filter systems and the target of restoration works.

The population sees itself as self-reliant and resourceful. The relatively rural population is eager to ensure that agricultural is environmentally and economically viable in the longer term and is in the process of taking up current recommended practices. The urban communities are focussed on tourism both in the hinterland and along the reef. Local government have been important agents of change in the region with some having reputations for being very forward thinking.

### *The role of Terrain NRM*

Terrain NRM was established to coordinate NRM planning. It is a not-for-profit company, with a membership of more than 120 local organisations including four local governments, numerous NGOs, Indigenous community councils and volunteer organisation. Each member has a role in managing the region's natural resources.

Terrain also has partnerships with the Australian Government, state government agencies, research organisations, universities and other educational providers and other NRM bodies.

The challenges for the regional body are to reduce the degradation of the rivers and reefs from agricultural runoff and land clearing, protect high value biodiversity assets, restore the function of wetlands and encourage development of sustainable industries. These goals are reflected in the organisational structure.

# Organisation approach

## *Strategy*

Terrain NRM has a strong ethos of community participation and consulting widely with experts and partners for implementation programs. Its strategic focus is shaped by its membership structure, with a key operational mission being to act as an effective facilitator across the matrix of stakeholders and interests in the region. Terrain NRM primarily works to develop an effective coalition for action on key NRM issues.

A community development model provides the basis for its CSKE. This includes use of a:

- participatory approach (a focus on enabling locals to own solutions to local problems)
- livelihood approach (improvements in NRM are directly linked to improved livelihood outcomes in the short-term and longer term)
- whole of system approach (The entire value chain and community is engaged at some stage and new cross-agency relationships encouraged. All perspectives of the problem, solution and knowledge are all heard. Everyone has a say and feels heard so that they jointly own the problem definition and feel motivated to take action).

The principles of participatory approaches emphasise the development of relationships and work on areas of mutual benefit across all priority issue, in contrast to a more business orientated investment driven purchaser-provider model. Building on this approach, CSKE is integrated into each program. The development of programs requires collaboration from the first stage of program concept through to delivery.

The collaboration process includes:

- a cross-sectoral steering committee including special attention to Indigenous interests if relevant.
- implementation partnerships – often with Local Governments, business groups, rural industry groups, Indigenous Councils or volunteer organisations
- development of relationships to deliver on dispersed monitoring systems such as citizen science groups for water quality monitoring or farm run-off measurement
- a communication plan for each stage of program development, each working group and each stage of implementation
- establishment of specific capacity building programs for some groups (as required). These are also used as opportunities to align interests and goals and to establish social networks centred on the environment.
- opportunity for coaching, education and capacity building during grant delivery. This is usually the role of the catchment officer together with industry extension officers.
- A knowledge management plan is developed to enable both program design, implementation and impact analysis
- Staff are assigned roles to manage and report on the matrix or relationships associated each program. The matrix is drawn and specific tasks allocated to key staff.

The communication strategy and plan for the organisation is treated as a living document and all aspects of communication are scrutinised for quality control and impact. Each aspect of its public reporting and communication is linked to a program of interest and to a key audience for that program.

## Structure

In its key documents, Terrain NRM makes it clear that it is a not-for-profit company – not a government agency. This distinction is used to gain initial trust for those who are wary of government intervention in their business or communities.

The governing board is skills based, not representative. It is small and focussed on business outcomes and service delivery. Membership is selected by an independent panel. The organisational structure reflects the corporate plan and includes senior positions in community engagement and education in each of the 4 sub-regions, sustainable industry development and delivery of programs and services in regard to biodiversity protection and recovery, coastlines and water quality improvement.

Terrain has a suite of 4 regional offices and shares accommodation with other partner organisations, thus improving interactions. These are in Innisfail, Cairns, Atherton and Port Douglas.

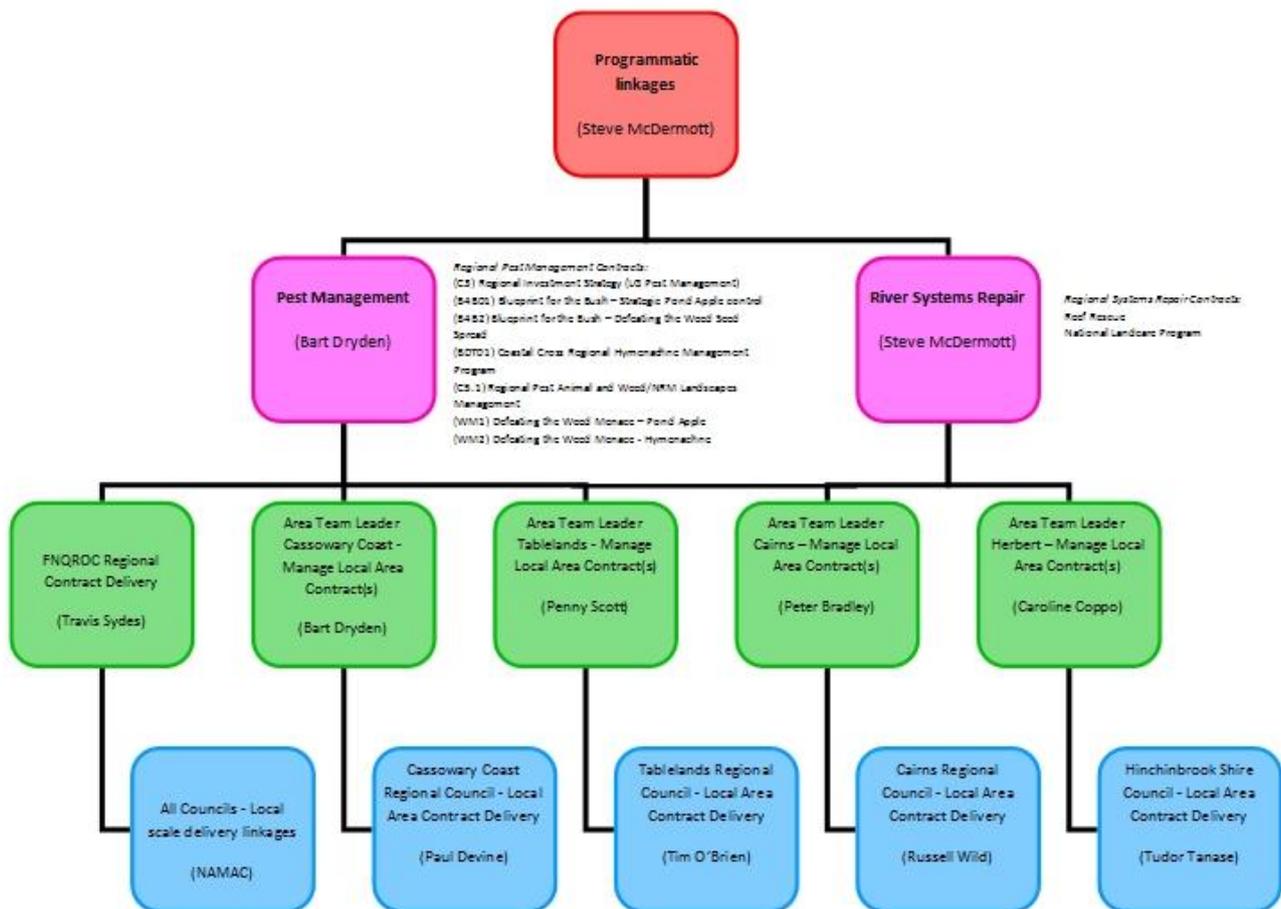


Figure 9: Terrain Program and Regional Staff Structure

## Staff and Membership

Terrain has attracted well-qualified staff in technical areas of NRM especially regarding biodiversity management, wetlands recovery, NRM planning and community engagement. Their skills and practices have helped to build the reputation of the organisation but these have not been documented as procedures that can be passed on to others. Typical of many

NRM bodies, the staff are time-poor and much of their work has been driven by embedded knowledge and experience.

The Board and CEO engage with the 120 members of the organisation. Some are key stakeholders in program and form strong working relationships. These include the four local governments, each served by a catchment liaison officer who is embedded in the organisation.

The major industry groups such as cane growers and banana industry are served by staff assigned to key programs that have developed in partnership with the industry. Other partnerships exist with research organisations, volunteer groups such as Landcare, Indigenous Council and government agencies such as DERM and DEEDI at the state level, World heritage management agency and federal government departments.

## Examples of important CSKE driven initiatives

### *Implementation of the ABCD framework in farming sector*

The basis of funding allocation for the Reef Rescue water quality improvement incentive grants (WQIG) is the **ABCD** framework for management practices targeting nutrients, sediments and pesticides.

Terrain administers and Reef Rescue and the ABCD framework for the FNQ region. It works with extension officers of participating agricultural industry groups, catchment officers and land managers to drive change on the ground.

The ABCD system (*Table 4*) classifies farming management practices as being either, A, B, C or D; where C meets a bare minimum standard, and D practices are seen by industry as being out-dated; B is considered to be current best practice, and A may be innovative, or considered an improvement on best practice.

**Table 4: ABCD Framework**

Class	Category	Description of practice
A	Aspirational or Cutting Edge	Practice expected to exceed Best Management Practices, providing society with additional ecosystem services, but are not all validated economically or experimentally.
B	Best Practice	Practice meets agreed industry and community Best Management Practices.
C	Compliant	Practice meets the minimum industry and community standard, and regulatory obligations. Meets legislative requirement, code of practice or locally agreed duty of care
D	Dated	Practice unacceptable by industry and community standards.

The grants provide incentive funds to facilitate the changing of old practices to best management (B) and cutting edge (A) practices.

Applicants for grants are required to list their current and intended practices according to the ABCD rating. Practice tables, based on the ABCD framework are compiled for each eligible industry in the Wet Tropics. Practice tables are given to grant applicants as part of the application. Applicants are required to complete these tables to show how their proposed project will raise their land management practices to A and B level practices.

### *Coordination of the Reef Rescue Program*

Reef Rescue is a Federal government initiative managed by Terrain NRM in the wet tropic region and commenced this role approximate one year ago. The program is committed to agricultural and environmental research and the implementation of practices to protect the Great Barrier Reef.

Reef Rescue aims to apply cutting edge science and proven technologies that ensure that desired outcomes of both agricultural production and environmental concerns can be met in the short, medium and long-term. The programs are focussed on prevention and restoration and work directly with farmers, agricultural organisations, representative bodies, companies, government agencies, natural resource management groups, research institutes, environmental groups and educational organisations.

Terrain has established close working relationships with key agricultural industry groups such as cane growers, bananas growers and processes, peanut, maize and potato growers, melon and pineapple growers and graziers. It has targeted growers on the basis of impact and capacity to change (value for money invested), on the scale of the landscape collaboratively working toward change (value for money invested) and wiliness to co invest and likely impact on water quality or biodiversity assets.

Approximately 6.8 Million will be invested in this program in the next year. At this stage 10 cane growers have been recruited as part of Project Catalyst (under Reef Rescue) to commence the program in this year and demonstrate the value of the program to others. The willingness to "learn and pass it on" is key to the success of the program and is part of the selection criteria for early participants. There is a need for local champions for change across agriculture of the region.

In only 2 years, sugar cane farmers of the Herbert River region have worked with Terrain NRM to achieve an 80% reduction in surface fertilisation. The remaining 20% fertilizer is added using "fertigation" and is absorbed into the soil profile. The reduction in surface application reduces run-off and nutrient load in nearby creek and save money for the farmer. There is less loss in each rain event, more effect sub-surface utilisation and less need to disturb soil or crop.

### *Restoration of urban river reaches*

Barron River Green Corridor was a community program initially funded (\$750K) by the Cairns Airport Pty and Cairns port Authority, and supported by Cairns Regional Council and number of local businesses and volunteer groups. Its aim is to rejuvenate the Barron River that runs through the Cairn landscape from the Cater National park to a reef lagoon north of Cairns. It is part of the natural background to Cairns and seen by visitors every day. The program aimed to remove weeds, restore wetlands and create a strong connection between the community and its river. The program generated enormous success in all these aspects and is regarded as a model program for community engagement in urban centres. It focussed on social benefits, establishing long-term connections and leaving a natural legacy.

### *Research into community and stakeholder attitudes and triggers for change*

Partnerships with scientific organisations and universities have led to a series of publications regarding the attitudes, knowledge and belief systems that affect adoption of new farming practices. The link between knowledge of the larger system and understanding of the impacts of old practices and benefits of new practices is shown to be very powerful in adoption across the farming community. In addition, incentives such as improved farm economy, better planning, better production, new social networks and celebration of outcomes affect the rate of uptake.

## Importance of facilitative relationships

As a membership based organisation pursuing a community development approach to CSKE, Terrain has placed facilitative relationships at the heart of its approach to having influence in the region.

Terrain NRM works closely with several types of organisations as vital intermediaries for implementation of programs including:

- 4 Local governments and regional councils of local governments
- Indigenous councils
- Protected area managers
- Community groups and volunteer groups

To support these collaborations, Terrain administers a grant scheme that operates at two levels– to small organisations or organised groups of land managers and to individuals under key programs such as Reef Rescue farm practices improvement schemes. In general these grants are issued with equal or better matching of resources by the grant recipient. To date the funds have leveraged at least equal investment (ratio 1:1).

Terrain has important relationships with Indigenous groups and after several years of collaboration and support they developed an Aboriginal Cultural and NRM Plan. This was completed in 2005 and remains a major achievement. The process was overseen by the Indigenous Board Member for Terrain, chaired by the Chair of the Indigenous Council and supported by a specialist Indigenous technical working group. The process to generate the plan was confronting and difficult but the outcomes have been long-standing. For Terrain, there is now an accepted standard for engagement with Indigenous groups, an understanding of the values and aspirations of Indigenous people and the best ways to ensure they are consulted on a program by program basis.

The facilitated roles bring many benefits including:

- Giving voice to Indigenous values and knowledge and creating a system to embrace them
- Coordinating wide ranging interests in NRM to deliver high value outcomes that would not otherwise be possible
- Ensuring that there are appropriate responses to the community needs in times of crisis such as after devastating cyclone while still maintaining a focus on NRM
- Providing a range of organisations with hub for information and mechanism for information sharing

## Effectiveness and Learnings

Similar to several of the other case study organisations, Terrain NRM is moving toward a resilience-based planning and management framework. The new NRM plans will identify acceptable thresholds for managing resources. These will be based on the latest and best available science and may set thresholds for water quality, for habitat loss, for types of habitat that must be retained and so on.

Terrain NRM is looking toward conducting an organisational audit to be applied to its 120 members. This will be used to review the nature and value of relationships, institutional capacity and return on investment.

Terrain is also entering a new phase of consolidation and forming new relationships with the community. It sees the community as its greatest asset in NRM management and the area of greatest strategic risk (other than funding).

Terrain NRM is looking at new ways of leveraging its funds and streamlining its partnerships to reduce transaction costs and increase return on investment at the program level. It is restructuring its engagement programs, reviewing its institutional membership and their individual capacity to deliver NRM outcomes and social benefits.

Part of the next phase for the organisation is to document successful processes of working with Indigenous and other local communities, to target their work based on this experience and to leverage further income from partners and co-investment by the community. To assist this process, the board and the senior management have prioritised the need to:

- Document and test engagement principles and processes
- Monitor and control transaction cost and to look at return on investment in key relationships
- Monitor community and partner attitudes and change processes and build on the MERI system to improve program impact through better ongoing monitoring and learning processes
- Drive community research through a more collective or syndicate approach that benefits all partners and helps shape major change processes across business, agriculture and the community
- Define the business of Terrain NRM more clearly around the services to the community and impacts on the environment (especially water quality entering the reef)

These future activities are crucial to refining and improving Terrain's CSKE strategy. At an operational level, Terrain will benefit from clearer documentation of its CSKE systems, preparation of a general policy or set of principles that captures and communicates its organisational approach and the development of annual strategies and targets. This process will integrate some of the most valuable aspects of business driven approaches to CSKE with the components of the community development model that have underpinned success to date.