

## Part 3: Synthesis of case study findings

This third part of the report presents a synthesis of findings from the eight case studies in Part 2. The findings are synthesised using seven themes. A detailed description of the themes and rationale for their development is presented in Appendix A.

The findings presented below complement those presented in the second *Benchmark Report*<sup>20</sup> of the broader Healthy Planning Systems project and readers would benefit from referring to both sources. Also readers might note that much of the detail of case study findings is still captured within the individual case studies themselves presented in Part 2. The material below reflects some broader discussion of regional NRM experience, gained through the case study process.

### 9.1 Devolution

The NAP/NHT principles that are applied throughout Australia emphasise devolving effort for NRM planning and investment to the regional level. In NSW, Victoria and South Australia statutory catchment management authorities create strong foundations for devolution, but there are no such authorities in northern Australia and not likely to be in the foreseeable future. Consequently devolution is a more ambiguous process in northern Australia.

The case-study reports highlight the reality that regional NRM planning requires innovative approaches to ensure NRM planning is both strategic and locally relevant and that the devolution is effective. In some people's minds, regional NRM planning is just the Commonwealth empowering regional community-based groups as a way of by-passing state governments. Others see regional arrangements as ensuring the right business management and strategic planning skills, scientific and technical knowledge are developed and applied at the most appropriate natural resource management scale. While most plans pay homage to State/Territory and Australian Government policies and programs, many struggle to show the precise and practical nature of the links between their plans and these statutory instruments (see for example Taylor 2004).

Devolution of planning to local stakeholders does not translate merely to an extension of government-inspired NRM strategies or solutions. Instead, there is evidence of flexible and innovative decision-making processes at work. This includes efforts to utilise local knowledge and to consider Country-based decision-making as an adaptive approach to engage Indigenous people into the design, implementation and review of NRM partnerships. Some home grown solutions to overcome impediments of distance and potentially alien formal decision-making procedures include: piggybacking meetings in remote locations to meet multiple purposes, combining business with social get-togethers in order to build social cohesion and develop trust, and communication products which also assist the creation of a regional identity and language. Clearer roles emerged for community-based activities in supporting the statutory water supply and water quality program implementation, from awareness raising to on-ground works beyond statutory provisions. Devolution of some of the responsibilities for water quality management to regional bodies has not yet resulted in clear structures for all the necessary water quality management actions. In the case of biodiversity

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<sup>20</sup> Taylor et. al., 2006 *Evaluation of regional planning arrangements for NRM 2005-6: Benchmark Report 2*. Project milestone report No. 4, TS-CRC.

conservation, some operational responsibilities are being increasingly shared if not devolved by governments to regional NRM bodies. This has been found to pose both new challenges and opportunities for biodiversity researchers and conservation efforts.

Devolution of technical capacity is occurring as regional bodies acquire technical support staff and develop good working relationships with research providers and other collaborative cross-agency/regional body science projects initiated both centrally and regionally. For remote western and northern regions, however, attracting and retaining qualified technical staff is proving more difficult. Cross-regional and even cross-state collaborations are being formed to deal with larger landscape scale and cross-regional issues making more effective use of often-limited human and financial resources. The case studies reveal that for managing a number of issues such as weeds, fire, carbon and climate change, action at the regional scale is not sufficient and responses to these pressures are falling through the cracks as management strategies vary in focus and intent across administrative boundaries. There is a key role here for the State to address, in order to work toward consistency of management approaches.

Whether devolution of responsibility is perceived, actual or more increasingly being seen as a shared responsibility between statutory and voluntary managers, it is essential that communities, regions and governments see this as an ongoing adaptive process to developing effective NRM governance arrangements and not a finished solution. Critical here is that regional flexibility in governance and operating arrangements is maintained to suite regional conditions whilst greater clarity on roles, responsibilities and expectations is pressing. Also critical is that in devolving responsibility to regional NRM bodies – either perceived or actual – governments and programs match this with adequate resources and decision-making power at the regional and sub-regional level to avoid empty ownership and increase legitimacy of the regional approach with local communities.

## **9.2 NRM partnerships**

In the northern Australia collaborative model of regional NRM, the development of partnerships is critical. The diversity of such partnerships includes efforts to exchange knowledge and information through appropriate science delivery. For example, collaborative research partnerships are being forged between research providers some state government agency salinity, modelling and biodiversity scientists and regional NRM bodies, with some regions more open to this process and capable of participating than others. There are also examples of successful partnerships forged between stakeholders with different NRM objectives (e.g. see Country-based management case study). However there is also evidence that partnerships even with key savanna stakeholder groups and interests require more careful and thoughtful design than undertaken at present.

Currently in most jurisdictions partnership discussions between pastoral industry groups and regional bodies are still at a preliminary stage. There are however a number of examples of promising fledgling partnerships emerging between industry organisations and regional bodies for grazing land outcomes and an affirmation of a clear ‘place’ or role for industry groups within the regional NRM delivery model would assist.

Understanding and working with partner expectations and fostering a commitment to agreed NRM activities and outcomes is a challenge identified in several case studies. Successful strategies for regional body partnerships with researchers and pastoral stakeholders alike were found to include starting modestly to ensure NRM partner expectations are met, and thereby

demonstrating what each partner can offer in the short-term. Larger, long-term projects can then follow once collaborative partnerships and the required trust and respect are built. For example, with research partnerships, salinity and biodiversity scientists are slowly building new partnerships with regional NRM bodies by sharing data, developing mutually agreed research designs and focusing on implementable solutions. Recognition of existing contributions is also a key requirement for successful partnerships. For example recognising and supporting existing land management networks and activities of say the pastoral sector is important in forming working partnerships where each partners' contribution and aspirations are valued.

Yet there are also examples where regional body efforts to provide services as an interface between local, regional and government efforts are underdeveloped and in some cases unappreciated. The diversity that exists within and between local stakeholder groups (e.g. pastoralists) continues to pose significant challenges.

The importance of sub-regional partnerships is taking on new urgency. Regional NRM bodies increasingly recognise that management change must be effected by working through land managers, whether indigenous, local government, State and National parks or other managers. Past government programs, such as Landcare or Integrated Catchment Management brought on board a range of land managers, but time, policy changes, issue fragmentation and shifting, ever widening areas of concern, have caused burn-out in earlier champions. At present, regional bodies are focusing on "the willing", i.e. land holders who are willing to accept incentive dollars for on-ground conservation actions. The challenge is to identify and reward those land holders who are currently "doing the right thing" while identifying new partners against areas of mutual benefit.

### 9.3 Aligning institutions

As with partnerships, aligning community NRM, government and industry activities through cooperative and less formal means is a major challenge in northern Australia. There are many local, state and national programs as well as industry activities to include in the total NRM effort. Regional investment through regional bodies is only one component of investment in NRM in the regions and a minor proportion of the total public sector effort. Clarifying the relationships between these investment streams is essential but is only slowly being resolved. Significant progress has been made but there is still a long way to go:

- The regional NRM process has been a major catalyst for aligning the effort of agency programs and ensuring community-based activities contribute to meeting agreed priorities. Some strides have been made in beginning to align science research to meet defined resource management needs of regional bodies.
- *Regional Coordination Groups* in Queensland (State resource, environment and land management agency forums), continue to be important as forums for focused discussions with regional bodies, for negotiation and joint planning. Creative regional structures, such as the Cross-Region and Agency Monitoring, Evaluation and Reporting group (CRAMER) in Southwest Queensland and a similar forum in Central West Queensland are now operating to foster discussions and assist in aligning planning and monitoring efforts.
- The establishment of the *Reef Catchments Partnership* of regional NRM bodies and government agencies working in the Reef catchment has been undertaken with the intent to provide a framework for effort alignment in catchment management, target setting and

monitoring and reporting between Australian, Queensland agencies and reef regional bodies that has not existed.

- Activities addressing weeds within regions seem to be quite well aligned, with many regions amplifying existing cooperative local programs to the regional level.

A critical point revealed in the case studies remains the confusion and frustration over who is responsible for management of different assets at different scales (e.g. State, Australian Government, regions etc). This remains unresolved, though some of the structures and functions noted above represent creative, if nascent, efforts toward resolution. For example the institutional setting for water quality management varies widely but the most significant conclusion is that the regional NRM efforts and state agency run water allocation process, especially in the Northern Territory, Ord and Gulf regions require significant alignment.

Cooperative explorations are beginning to be made of the necessary links between property scale management and the impacts on catchments and rivers and how farm management practices could assist. Clearer frameworks for landholder and industry engagement in strategic and priority actions now exist in some regions and for some industries. The difficulties of effort alignment however can be seen in the case of multiple fragmented investments by governments, industry and regional bodies to achieve sustainable agriculture outcomes, particularly through a suite of regulatory and voluntary PMP initiatives and requirements. Where agreements exist between agri-industry and government on policy frameworks to support implementation in this area, the process of operationalising the agreement is proving more difficult than envisaged. Aligning efforts between the regional and property levels, linking effort to regional targets, and aligning different service provider efforts still needs work.

#### **9.4 Engaging stakeholders**

Industry groups are increasingly looking to engage now in developing practical co-investment with benefits to members and arrangements that recognise their contribution. Some industries however, see NRM as just one of many matters on their very full plate. Statutory issues such as water allocation, leasehold regulations or tree clearing laws are more compelling issues of concern. There is scope, also representing a challenge, for regional bodies and industry groups to negotiate who and how their respective roles as interface with pastoralists and growers will operate most productively in regions. Both have some ownership over this role.

Each of the case studies reveals ambiguities and gaps in the engagement of stakeholders, especially regional industry groups, and in differential engagement with NRM issues, e.g. land degradation versus maintaining biodiversity integrity. The diversity of aspirations and operating contexts in savanna resource-based industries and other key stakeholders need to be better considered by regional bodies in their implementation design. For example, some players are not sure why Indigenous people 'are at the table' for NRM i.e. what their aspirations and values are, and how to reflect these values in planning and action. Another example is where biodiversity outcomes are often seen as secondary to soil, water and socio-economic objectives of both NRM bodies and land holders yet soil, water and grazing management does not automatically ensure biodiversity outcomes.

Engagement with the pastoral sector and its peak industry organisations during the development of regional plans has been less than effective in a number of key pastoral

regions. There are, however, encouraging signs that sub-regional land management networks are re-building, being re-invigorated or are positioning themselves to access resources through the regional NRM investment phase.

## **9.5 Integrating knowledge**

Regional bodies have suffered from a lack of baseline data about resource conditions and trend in most districts and about cost-effective programs of action. Overcoming these deficiencies has been and still is a major challenge for all regions. Furthermore there are major differences in the level of research support available in northern Australia. Regions with catchments that flow into Great Barrier Reef tend to be well supported where western regions with river systems that do not flow into the GBR receive or access less support. Adding to this, these largely NHT-only funded regions, receive less funds with which to broker partnerships with research or other knowledge providers.

Access to appropriate and informative data is a critical ingredient for regional bodies that need to set SMART targets and design appropriate management responses and incentives. Yet there remain significant information gaps to assist in regional efforts to manage critical issues such as reducing the impacts of diffuse-source pollution, conserving biodiversity in the rangelands or identifying priority areas and activities to manage salinity risk. Very few plans could define resource condition targets for water that met program expectations, despite major efforts to collect new information for regional overviews and to assimilate the available science. The collected information was patchy and the science behind cost-effective management change remains incomplete. In some cases this reflects fragmented knowledge systems, in others the failure of knowledge custodians/managers to develop appropriate and accessible delivery systems.

In the past there has been poor prioritisation of science to meet management needs, particularly management needs outside government. However, increasingly, research work is being focussed on the needs of regional bodies and that of government and industry users. On the other hand, research for the extensive rangelands, both more meagre and with results more elusive to source, would benefit from dedicated and purposeful efforts. Integrating the necessary economic and social knowledge with scientific knowledge to inform the choice of effective and efficient actions still remains a challenge.

Some regional processes which are beginning to make better use of available data and information, particularly knowledge of both the scientific and Indigenous communities. In addition they demonstrate ways to support the synthesis and integration of knowledge and values of different groups such as science incorporating community values or management incorporating Indigenous values.

Clearly gaps remain between scientific efforts and what is required for the evolving community-based NRM process. The key need is to bridge the gap between research and stakeholder knowledge. The case studies provide examples of some design and operational characteristics of successful and effective science projects in regions. These include: i) adopting a co-learning approach to linking community needs and scientists' aims; ii) 'protocols' for how researchers might operate more successfully in regions; and, iii) developing the broad 'buy-in' of other projects, personnel and resources to achieve critical mass for successful research and delivery.

These approaches share much in common with those successfully tried and tested for integrating Indigenous values into management practices through Country-based

management. These make use of exploring the different appraisals of ‘damage’ by Traditional Owners and rangers, different degrees of tolerance to damage and the resulting management of risk to assets to begin to define cost-effective approaches to feral animal control.

## **9.6 Adaptiveness**

There is a high level of concern about the ability to demonstrate on-ground outcomes through changes in resource condition within the timeframe of the national programs. In northern Australia this raises a deeper question about the suitability of a linear or centralised planning model in the face of low levels of predictability and control. Several factors suggest the current target based approach is too narrow and the overt commitment to adaptive process insufficient. Nonetheless a number of regions make a commitment to an adaptive management approach, recognising that adaptive management is an important part of the planning and management process.

It is becoming increasingly clear that assessment of the effectiveness of NRM investments is emerging as a critical question for government agencies, regional bodies and local stakeholders who have invested considerable resources to regional NRM. As such the monitoring and evaluation of effectiveness is central to the credibility of regional NRM delivery yet continues to be a weak link in the planning cycle. The case studies highlight that the most meaningful indicators to support improved local action are drawn from the stakeholders immediately engaged in those activities. These often bare little connection to the government investor defined measures of performance. As such the learning cycles at local and regional level are often mismatched to learning and adaptive management cycles at state and national scales.

## **9.7 Achieving outcomes**

On the assumption that expenditure is related to accomplishment, prospective outcomes can be inferred from an analysis of expenditure patterns as was undertaken in the final case study *Regional investment patterns and trends in NRM*. It was clear from the analysis that the focus of funding over the three years of the investment period changed from resource assessment, planning and capacity building, moving to on-ground activities at a later stage. Most regions show a strong increase in investment in on-grounds works over the three years to complement the early planning and resource assessment focus. The disparity between regions in terms of available financial and hence human resources to implement NRM outcomes was also highlighted in the analysis. There is a clear spatial divide between well-funded coastal and Reef catchment regions (NAP/NHT) on the one hand, and ‘funding deprived’ remote rangelands regions (solely NHT) on the other hand. Since NHT regions receive substantially less funding than NAP/NHT regions, the relatively similar ‘core operating costs’ associated with running the organisation in NHT-only regions represent a much higher proportion of total expenditure than in the NAP regions, approximately 20% and 7% respectively.

Secondly, even though NAP/NHT and solely NHT-funded regions spend their proposed investment on similar issues, their priorities lie in different areas. While NAP/NHT regions focus on the management of freshwater (25% of funds), non-NAP regions spend the largest proportion of their funding on land management (18%). This may reflect the more natural state of northern rivers and a focus on protecting existing values related to water quality rather than on remediation. Interestingly, NHT regions also tend to allocate a greater proportion of

funding to cultural heritage outcomes, protecting Indigenous cultural heritage and engaging Indigenous communities in NRM. Biodiversity, not a traditional concern of most regional NRM groups, attracts overall lesser funds, but also accounts for quite variable proportional investments across the regions. The Northern Territory Investment Strategy breakdown of indicative funding to output categories has similarities to that of Queensland's NRM regions. NHT and NAP funding obtained through the RISs is only part of the story as regional bodies have (variable) access to other funding sources for NRM projects.

As stated above, regional bodies were aware of state and national governments' desire to be able to demonstrate changes in resource condition through on-ground action. However there is also a high level of concern amongst regional bodies and government partners about the actual ability to demonstrate changes in resource condition. This is hindered by the short-term nature of funding cycles to achieve biodiversity outcomes, or indeed most resource condition changes. This means a move to a longer-term funding horizon and shift in reporting focus from "spending" to outcomes-based reporting, supported by a commitment by all parties to an adaptive management approach.