Experiences and lessons:
Regional NRM Planners Workshop Report

Healthy Savanna Planning Systems Project
Tropical Savannas CRC

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Background, purpose and approach of the workshop

The *Healthy Savanna Planning Systems* project
The NRM planners' workshop is part of the *Healthy Savanna Planning Systems* project. The project team is evaluating regional natural resource management (NRM) planning activities and plans across Queensland, Northern Territory and Western Australia's Kimberley region. The project involves working with state / territory governments, regional bodies and other stakeholders to improve planning outcomes in northern Australia and it forms part of the Tropical Savannas CRC regional planning research theme.

Workshop aims
The workshop aimed to draw on the experiences of professionals involved in regional NRM plan development, and by exploring these experiences, identify future directions for better planning practice and policy design.

Workshop participants were provided with a 'trigger' paper in the week leading up to the workshop. The purpose of which was to stimulate and focus discussion at the workshop by drawing on issues and questions arising from a current review of regional NRM plans in Queensland[1]. These issues and questions are summarised under five **key learning areas**.

Key learning areas reflect steps in the planning process providing the 'big picture' questions used to critically examine regional NRM plans. These were used to guide discussion at the workshop and also provide a framework for reporting outcomes from the workshop (see following table).

Planning stage	Key learning areas
Regional profile or inventory	1. How are we using scientific knowledge, data and stakeholder knowledge to identify condition and trend, understand the region and predict future landscapes?
Target setting	2. Have plans set meaningful and achievable targets? Is it too early, too hard or too many?
Priority setting	3. Exploring options and priorities: analysis, consensus, politics or guesswork?
Implementation	4. Do we have the right tools for job? What are the proposed models for implementation? How are they integrated to existing planning?
Monitoring, review & adaptive management	5. How are we measuring, tracking and responding to changes in regional conditions? Can we measure for management and improvement?
Plan advice & approval	6. Were planning guidelines adequate and effective? How might government advisory and plan review functions be improved?

The five key learning areas also helped explore planners' approach to planning for regional assets such as water quality, biodiversity, institutions, coasts or communities.

[1] See McDonald et al (2005) *Benchmarking regional planning arrangements for natural resource management: progress, constraints and future directions*, Milestone report 3, Tropical Savannas CRC.

Outcomes from workshop

Discussions and examples surrounding the key learning areas from the NRM planning process are captured in this report. This in turn has informed the development of the project's benchmark report on regional planning arrangements.

Workshop and report structure

The workshop involved 18 planners and planning consultants engaged in regional NRM plan and/or regional investment strategy development from QLD, NT and WA. Each session elicited both general 'group' views and different individual experiences and perspectives. A range of approaches was used to facilitate discussion. One approach included **'hot seat' forums** where planners permitted the group to interrogate their experience or planning methods. Jason Cater, Nigel Weston, Mike Chuk and Susanne Cooper generously presented '**case studies**' from their regions to stimulate discussion. Planners from Kimberley and NT also ran a 'question and answer' session with the group to explore the value of different approaches in their regions.

Planners reflected on key **issues, challenges and successes** relating to each of the learning areas. This information was then used to identify different **strategies** or approaches used in plan making that were effective in their region. The group then reflected on **lessons** arising from their collective experience and explored **future directions**.

The **trigger paper** also contained the following instructions for participants:

> *Your perspectives about the regional NRM planning process are invaluable to our workshop goals and discussions. The project team encourage you to write a summary or story that illustrates your experiences for each of the five learning areas.*
>
> *Empty text boxes are provided at the end of each learning area summary. If willing, you will be encouraged to hand in your comments and examples to be copied, returned to you, and be included in the final milestone and workshop report. Authorship will be acknowledged if explicitly agreed by you.*

Written feedback from participants was gathered after the workshop. The project team also requested the planners to complete a short **evaluation** of the workshop.

Learning area 1:
How are scientific knowledge, data and stakeholder knowledge being used to identify condition and trend?

Background discussion from plan reviews

Condition and trend analysis has taken a number of forms in the recent round of NRM plans, and includes scoping papers, technical reports and regional profiles or overviews. The real challenge is to decipher what regional condition means for management decisions – what does the region look like now, what might it look like in 15 or 25 years time, is this acceptable or manageable, what needs to be done? The 'so what' factor is still an important criteria, and a tough one. More data does not always translate into increased clarity for planners. The absence of a "level playing field" across regions in terms of data availability and suitability continue to be an issue e.g. basic spatial biodiversity mapping is simply not available for some rangelands regions. Some regions have explored the use of conceptual and other models to address the increasing emphasis on integrated approaches. Even so, challenges remain:

Trigger questions for Learning Area 1:

- Is there adequate and available technical baseline data?
- How do broad regional trends inform specific resource management directions?
- Given limitations of data how can we link the impacts on one environment to adjacent environment (e.g. nutrient discharge to the reef)?
- What are the best ways to 'map' a region's social and cultural features for NRM planning?

- Is information adequate about water supplies (especially groundwater) for defining condition, trend and threats? Is information on sediments, nutrients and chemical pollutants adequate to assess water quality?
- Understanding the connections between terrestrial and marine systems - What do we do when water quality data sets stop at estuaries, did plans give adequate attention to science about tidal, estuarine and coastal systems?
- Making connections between rural industry trends, condition of the resource base and capacity to pay?
- Considering the affects of climate variability and fire management on soil carbon management or exploring options for carbon trading?
- Understanding how multiple causes impact on a regional asset e.g. cumulative impacts of fire, predation and grazing pressure on biodiversity in rangelands;
- Recognising other stakeholders' knowledge and values - such as traditional owners, industry or 'external' stakeholders such as tourists. How are these different knowledge systems captured and integrated?
- Are social, cultural, physical process and amenity values of coasts considered?

Issues raised by planners

There was general consensus that the coverage or amount of relevant data varied across regions. Challenges commonly identified included the usefulness of available information in terms of scientific and technical rigour, ability to interpret technical data provided by agencies and researchers, the conversion of data to a regional scale and ensuring data is up to date. Some regions experienced poor data availability at several spatial scales, or, could only access spatial data that was unsuitable for regional level planning. Producing useful regional maps was difficult due to poor alignment between regional NRM boundaries and those of agencies and organisations holding relevant data.

A lack of a central information 'point' to assist in the data gathering process exacerbated these issues. Some planners suggested that a '**data warehouse**' for state NRM information would have benefited the regional planning process. There was mixed views on the value of this and on responsibility for managing such a resource. State of the Environment Reporting was recognised as a potential tool to facilitate this in conjunction with regional bodies for data warehousing for use in reporting on regional NRM planning objectives. It was acknowledged that this would require role clarification for the regional NRM bodies. Data warehousing however was acknowledged as a separate although related issue to data access agreements.

Even if there is 'enough' data available for the planning process, challenges arise about when and how to use **expert and local knowledge** in the planning process. The presence of scientific information or other evidence did not readily demonstrate the cause and effect relationships required to design effective targets. This extended to difficulties in capturing and appropriately using economic data at the regional scale for major industries such as grazing.

Difficulties also arose with the vague definition of what constitutes 'the community' and how socio-economic data can inform better communication processes with the regional community. Planners could see value in applying this socio-economic information in industry planning, however, inconsistencies in data collection and NRM-relevant boundaries and the lack of regular agricultural census data limited these kinds of uses.

The lack of useful **guidelines** and measures for developing the regional profile and subsequent target setting impacted negatively on the preparation of regional plans.

Planners recognised the need to improve the connection between property scale information and regional scale resource condition data. It was widely stated however that there was little data relating to management action scale activity. A group observation was that the science associated with management action targets and resource condition targets needs to more closely integrated (see also Learning Area 2).

Strategies used by planners

To address some of the issues and limitations raised above, planners reported using the following strategies or approaches:

- The Desert Channels region adopted a "**realistic risk management approach**" in the context of low data availability. This involved developing the regional profile in a manner that the regional community could understand, that gaps in knowledge were clear. DCQ sees that its ability to manage information and disseminate it in a form that the community can readily use is a critical role for a regional body and the planning process need to support this 'service provider' role for the region.

- Other regions also identified adopting a 'risk management' approach given the rather large volume and equally large gaps in data by deciding where regional bodies would "put efforts" at a strategic level in terms of data acquisition and use in the planning process.

Planner's Perspective: **Data availability**
Jason Carter, Southern Gulf and Cape York

The Southern Gulf Catchments (SGC) identified themselves as a data poor region primarily due to its geographical isolation and lack of funding to undertake data capture. While it was recognised that 'there has been some monitoring in the region' by the National Land and Water Resources Audit, the data does not meet quality and length of record requirements regarded as necessary for assessment or development of water quality targets.

Cape York Peninsula has considerably more data available than SGC. Some of this information takes the form of gauging stations and an ambient monitoring network, which has been managed by the Queensland Department of Natural Resources and Mines, but most of the data collected under this program has never been formally analysed or interpreted for management.

Learning area 2:
Have plans set meaningful and achievable targets?

Background discussion from plan reviews

A major challenge of the planning process has involved setting resource condition and management action targets that are measurable, clearly grounded in place and time but also politically acceptable. Many regions have drawn quite heavily on technical and local knowledge within the region's rural industries in setting targets – how has this contributed to more 'realistic' and acceptable targets? A number of assumptions in program rules and found in political quarters about the linear nature of target setting have been challenged during this process.

Trigger questions for Learning Area 2:

- Where 'interim' resource condition targets have been set, what are the next steps?
- Do the policy guidelines and statutory plans provide enough direction for target setting? If not then what?
- Is the rationale for the selection of management targets always clear?

Different expectations on whether targets are set within an adaptive management context or 'hard-wired' into the plans have also played out in many regions. For example, issues presented to planners in setting condition targets for water, included: whether water resource plans sufficient for water supply targets, including environmental flows? Most water quality targets were targets to set interim targets – how are the next generation of water quality targets to be set? What are the next steps?

Some common 'types' of management action targets emerging from regional plans included:

- further investigation, feasibility studies, establishing monitoring systems
- on-ground investment through property management planning or improving the uptake of sustainable management practices through incentives
- organisational or institutional requirements for regional management, participation and coordination or alignment of effort.

Where there is a lack of clear policy or management frameworks 'above' the regional scale (i.e. at state level or national level) to what degree does this lack of direction affect target setting? Plan reviews suggested that this is a particular issue for managing climate or carbon management at the regional level; identifying coastal management targets and integrating biodiversity conservation with resource management targets.

Issues raised by planners

The data challenges noted in *Learning Area 1,* also have ramifications for target setting. Key questions discussed here included: what constitutes a reasonable target, and, what is the best way to manage risk and uncertainty in setting such targets? Other issues that were raised included:

- High reliance on interim targets and reliance on targets for action rather than resource condition (due to poor quality of resource condition data)

Planner's Perspective: **Investing in target setting**, Jason Cater, Southern Gulf and Cape York

Critical steps for setting effective regional targets (that will require ongoing funding through the region's investment strategy), include:

- review and collate existing data sets
- identify / assess priority sites
- connect to state-based monitoring programs

Similarly, in the Cape York NRM Plan, setting specific and effective regional targets was 'driven' by;

- Full analysis of existing water quality data
- Design and commencement of a program to develop regionally relevant water quality targets consistent with the Reef Water Quality Protection Plan and including West Coast catchments and coastal areas.

Ongoing development and refinement of regional targets is seen as a critical part of NRM plan implementation investment.

- Differences in opinion between State and Australian governments regarding what is a 'target'
- Managing 'political' impacts such as 'watering down' agreed targets
- Managing uncertainty and risk in the process
- Setting too many targets
- Needing to know how the plan is to be implemented and its achievability including targets need to reflect the modest resources available (planning from constraints) with many targets unfunded and unrealistic timeframes for implementation of management action targets
- The need for implementation of statutory objectives to be resourced adequately by agencies
- Balancing regional goals versus program requirements for targets i.e. too much focus on funding programs during target development – need to plan holistically for the region, identify a range of resource options
- 'Minimum matters for targets' were at times taken as being a definitive list
- Incorporating statutory targets and minimum matters into targets a major challenge
- Targets were often developed in isolation or as 'silos of targets' raising questions about effectiveness of integration.

Strategies used by planners

The use of an environmental benefit index was suggested as one way by which the relationship between targets could be demonstrated. Planners also indicated that individual actions or investment programs were designed to meet multiple targets (i.e. address several pressures). This can be enhanced through thoughtful design of implementation frameworks that help integrate management objectives at property or subregional scales i.e. taking a 'place-based' approach to delivery on targets.

Lessons and future directions

There was a general agreement that the learnings of this process should be used to inform future stages of the NRM planning process. Some of the key areas included reviewing targets and indicators to ascertain what was useful and reasonable. Improving the integration (when and how) of management action targets, resource condition targets, actions, and implementation is also seen as an area for improvement by planners. The timing of such exercises is seen as critical in successfully resolving these issues.

To improve delivery on regional resource condition targets planners emphasised the need for future science funding to be directed towards designing management action targets that reflect the cause and effect relationships with resource condition outcomes. This would also address the question of 'are we monitoring the right things?'

Conflict arises between funding rules and the views of regional communities as to what resource condition targets are most important or how they should be designed. Achieving a balance between these viewpoints in the development of the plan enables the identification of the critical targets in terms of both the regional body-defined targets and those interpreted as 'statutory' targets.

Planner's Perspective: **Building reef water quality outcomes into NRM plans,** Nigel Weston, Rainforest CRC

Being adjacent to the Great Barrier Reef World Heritage Area, the Wet Tropics region (FNQNRM), used the Reef Water Quality Protection Plan (RWQPP) to help establish targets to address water quality decline in the region. By focussing on the RWQPP and its priorities and targets, FNQNRM were able to ensure that Australian Government concerns for water quality were addressed by adopting actions from the Plan and identifying areas of responsibility and appropriate agencies and organisations for the delivery of project work.

The relationship between issues such as water quality decline and reduction of erosion highlighted the need for improved land management practices and reinforced the actions required to adopt the RWQPP targets.

Complementary targets relating to clearing and ecosystem fragmentation pressures were also developed but require further refinement due to gaps in asset condition information.

Learning area 3:
Exploring options & priorities: analysis, consensus or guesswork?

Background discussion from plan reviews

A wide diversity of approaches and techniques has been used in setting priorities. Why were certain approaches adopted and what were the implications of doing so? What did plans actually prioritise (e.g. condition targets, threats, management action targets, or management actions) and why?

In many cases regional plans signalled intent to achieve 'best value for money' or cost effectiveness from effort. How was this done? Several plans also outlined proposals for impact assessment of prioritised actions or targets as part of the implementation phase. In any region, particularly the larger regions, subregional or catchment priorities can differ to those at the regional scale. How are these differences between scales managed and how does this influence implementation?

Does a low ranking for an issue like carbon management reflect its importance for NRM, or, because it is outside the scope or ability of regional NRM stakeholders to address?

Trigger questions for Learning Area 3:

- How were NRM priorities influenced by science and local knowledge?
- Who or what were the winners and losers in priority setting?
- Were priorities put in a spatial context – how were critical locations for action identified?

Issues raised by planners

Many planners emphasised the role of **politics and negotiation** in priority setting. Several regions believed the process they used is defendable and repeatable but also requires negotiation with stakeholders to 'get ownership' of the plan. Some regions also experienced pressure from governments to define a 'single' priority or from state and Australian government officers 'inserting' priorities and interests late in the process (often after consultation and negotiation with regional stakeholders). This often occurred after the formal priority setting process (so planners were unsure how to incorporate or weigh those interests) and was done without any cost-benefit analysis (thought to have skewed the process). Planners noted a real tension between spreading dollars to re-enforce existing groups versus realigning investment. There is also a shared view that stakeholder interest in the planning process (politics and influence) increases as the dollars start hitting the table, thus making the translation of regional priorities into the investment strategy a key challenge.

It is also difficult separating the priority setting process from considerations of equity, particularly when this includes identifying geographical priorities and best value for money criteria for investment. Some regions avoided **setting place-based priorities** during the 'planning' stage (however several regions as part of the implementation planning are moving to higher resolution). Up front spatial prioritisation (early in the process) raises the risk of some sectors or land users feeling 'targeted' by the process or conversely 'left out'. Balancing this is highly political in regions as it risks alienating the very on-ground service providers needed to implement the regions objectives. This is in the context of

Planner's Perspective: **Spatial Priorities** Claire Rodgers, Fitzroy Basin Association

Most of geographic prioritisation has happened post-RIS development. In part as key data was unavailable at the planning stage. Actions were prioritised through a three-step process (community, stakeholders council, then the Board) then geographical priorities assigned later. For sub-regional delivery, a set of criteria applied for selecting priority investment locations for 'neighbourhood catchments' implementation.

"pollies simply wanted a 'map' of where dollars are being spent across the region".

Planners reported using some **formal tools** for decision-support such as multi-criteria analysis based approaches. These were often combined with community forum processes. In most cases these formal tools were considered as a 'vehicle for discussion' as well as improving strategic focus, rigour and transparency to some degree. For example planners from several regions found that there was an initial community perception of that different sectors or interests had vastly different priorities. The process revealed however a higher level of consistency than first thought. Often outputs from the 'formal process' supported **intuitive priorities** and generally revealed a 'good match' between scientific priorities and community priorities. QMDC indicated that use of analyses such as cost benefit for water use efficiency expenditure indicated that maximum gains are to be made in irrigation not urban areas for example.

Planners noted variation and sometimes a lack of clarity in what was actually prioritised (e.g. issues, assets, risks and threats, actions). Some regions noted that their priorities were 'nested' under 1) aspirational 2) management action targets and 3) actions levels.

Planners from some regions (such as Kimberley, NT, Southern Gulf) reported that the interest groups present during the priority setting largely determine which priorities are selected (i.e. who is **not** there also effects the outcome). Allocation of resources associated with priorities is closely linked to actual and perceived **equity issues for stakeholders.**

Strategies used by planners

Some strategies are discussed in the context of the issues above. ***Perspectives: Planners reflections on priority setting -*** on the following page - capture several regions' experiences with priority setting including methods and outcomes.

Lessons from priority setting

The workshop identified some general 'lessons' from priority setting:

- It is meaningless to prioritise targets on their own – planners need to consider the suite of actions associated with that target
- Pressures or issues considered outside the scope of the board or capability of the region to deal with are generally ranked lower (e.g. greenhouse gas emission);
- A wide variation in how Indigenous issues have been included in plans exists – some Indigenous communities seeking parallel process while others seeking inclusion throughout plan
- Some regions found that prioritising management actions, rather than prioritising areas in the region, was more agreeable with stakeholders
- Return on investment criteria in many regions required more explanation and explicit treatment in the priority setting process (e.g. such as Cost Benefit Analysis)
- Value of using a formal MCA tool varied. Some regions considered it as a means to verify their process to funding agencies. Others considered it a vehicle for discussion of priority setting that helped depersonalise or de-politicise the process and largely affirmed what were considered 'intuitive' priorities
- Managing bias of 'representatives' involved in planning process was tackled by some regions through:
    - Using explicit criteria
    - Scoping likely negative impacts
    - Involving a range of groups and interests at various scales, and
    - Ensuring good communication with groups who might 'lose' out from the process.

Planners' Perspectives: Reflections on priority setting

Rangelands (Kimberley subregion) - Gill Holmes
The WA rangelands region is looking to set sub-regional priorities then aggregate to a 'Rangelands' scale. This includes using a multi-criteria analysis (MCA) approach at whole of rangelands and at subregional scales. Kimberley subregion has had good Indigenous involvement. This improved the sub-region's MCA process by co-selecting and using criteria that reflect Indigenous cultural heritage and other interests explicitly. This has only happened in Kimberley subregion to date but has significantly influenced outcomes at the rangelands level.

Qld Murray Darling - Geoff Penton, QMDC
QMDC needed to manage the perceptions of competing or differing priorities between stakeholders. A multi-criteria analysis approach using weighting of criteria and scoring was adopted. Eight workshops were run across the region. These found a high level of consistency across groups and areas. Very few actions stood out as having different scores. By prioritising 'up' from the action level this helped match available resources to priorities.

Cape York - Jason Carter, Earth Tech
A three-tiered process was used. This involved an initial workshop with the NRM Board members (to ensure sectoral interests were considered); followed by a workshop with the technical advisory group, and then several regional sessions to get 'community input'. We found that context matters greatly e.g. in Cape York region regardless of process used the "result would have been the same". NRM priorities are influenced by more than just science and local knowledge. Rightly or wrongly, the influence of politics and history should not be overlooked. With only six moths to engage the community – particularly short for Indigenous communities on a planning process – the tight timeframes didn't provide space for the 'macro' scale cycles and longer timeframes required.

Wet Tropics (FNQNRM) - Nigel Weston, Rainforest CRC
To identify priority revegetation corridors we decided to use regional scale mapping from existing statutory and biodiversity planning. The intent was to overlay this with existing areas of community activity. By taking that path we discovered nobody had data about where revegetation activities were actually occurring in the Wet Tropics. It was also necessary to balance ongoing support for existing revegetation units (where the community infrastructure exists) with 'new' areas requiring investment.

Burdekin Dry Tropics and Northern Territory - Susanne Cooper, SKM
If working on the assumption that all regional assets have equal validity then it often helps to 'map' significant services associated with those assets and consider relative values of the services provided by those assets. Assuming 'representativeness' of the NRM boards, a consensus based approach was used i.e. structured / formal consensus building process to determine the 'board's view' of regional priorities. Running the process with the boards' engendered a major shift in their knowledge and understanding of key directions and investment options.

Desert Channels Qld - Mike Chuk NR&M/DCQ
Regional priorities outlined in the plan are now 'set' for the next 3-5 years as the community won't tolerate another roadshow in that timeframe. "If we think we can drag the planning chain around the bush again anytime soon, we are fooling ourselves. There is a limit to how often we can go into the community and ask people to be involved in this [the plan making process]" The region is however willing to consider emerging priorities. We used a ranking approach 'perceived level of importance' of key regional issues. Using this approach meant Indigenous land management always came up lowest at workshops for several reasons. These reasons include people who attend workshops are primarily white pastoralists and it's simply not on their radar. There area also few resident traditional owners in the region. Weeds and feral animals and vegetation management were consistently first and second on the list. Recent history mattered with many in community still smarting from recent statutory vegetation planning. We also drew on lessons on priority setting from Fitzroy Basin's experience.

Learning area 4:
Do we have the right tools for job? Approaches and models for implementation

Background discussion from plan reviews

Several plans promote the use of subregional, catchment or industry based frameworks for implementation – how do these help translate regional priorities to local scales? Integrated models of property management planning are also widely proposed as a fundamental delivery framework. Is this viable in regions where the spatial information is lacking for biodiversity or soils at adequate scales?

Considerable interest (and high reliance) has also been generated on the use of incentives, payments or other market instruments to encourage or cost-share on adoption of more sustainable practices. Who delivers the implementation support or direction and who in the community actually does the implementing? Have 'new' or emerging stakeholders been identified?

Water use efficiency projects seem to be the most important for water supply actions whereas best management practices (BMPs) seemed to be the main actions for achieving water quality targets – how are they to be implemented? Do we know enough about the effectiveness of BMPs in improving water quality and water supply outcomes? How can water supply and quality targets, including riparian zone and wetlands projects be integrated?

Plans were particularly sound in communicating arrangements, agreements and partnerships to integrate or coordinate management responsibilities. This was particularly the case for issues of mutual concern (e.g. weeds and ferals), managing across tenure (e.g. fire), and, across regional planning boundaries (e.g. custodial management). These arrangements and partnerships seem to form significant parts of implementation frameworks – how robust are they?

Trigger questions for Learning Area 4:

- Do we understand regional industries well enough to design effective incentives?
- How will property management planning work in 'low data' regions?
- Will adoption rates of 'best management practices' be enough to improve water quality?
- How are management responsibilities being coordinated through plans?

Planner's Perspective: **Landcare parenting structures,** Geoff Penton QMDC

QMDC is using a Landcare parenting structure consisting of multiple sub-groups, facilitator and technical support to implement NRM planning objectives across the region.

The administration and coordination of projects was described as taking up to 20 per cent of the funding and time allocated to projects. QMDC used a Landcare model where contracts of up to $15,000 could be allocated to sub-regional committees for agreed work in the implementation of the regional NRM plan. Over time it was expected that sub-regional forums would be an effective mechanism for achieving regional NRM outcomes.

Issues raised by planners

Issues identified by planners during the workshop included:

- The risk of 'drifting milestones' as regional NRM bodies awaited the 'bureaucratic tick off'. This created considerable pressure to complete the required stages of the plan development and led to various forms of 'crisis management' to achieve the desired results
- Some regions such as Desert Channels Queensland are limited in terms of potential investment partners for plan implementation in their region
- In developing the regional investment strategy, emphasis shifted from implementation of management actions to project development and related budgeting tasks

- There is considerable advantage in building on existing processes with priorities previously established, some identified priorities not in other planning schemes, and some regions with 'implementation teams' already formed
- Sectoral interests and politics influenced the priority of projects to some extent in regions (see *Learning Area 3*)
- Regional bodies required the planning process to be able to validate strategic direction and projects developed for the regional competitive bid process.
- 'Governance rules' and other bureaucratic processes were perceived as having considerable negative impacts on the plan development
- Regional bodies were reluctant to be involved in a 'rubber stamping' exercise as many wanted to use the NRM plans as a conduit to deal with ongoing regional NRM on-ground issues
- Decisions made in the development of the NRM plans are highly 'vulnerable' to further scrutiny as the knowledge base from which strategic and operational directions were developed is often inadequate
- Timing is a significant issue with regional groups having to manage receipt of proposals for on-ground works from stakeholders, as the management action targets are still being prepared and/or finalised
- Highest priority investments cannot necessarily be funded through the RIS. (e.g. insufficient indicative allocation to fund of GLM in Desert Channels).
- Uncertain how regional bodies could ensure state agencies deliver on projects or components of projects within the regional NRM plans
- Key areas of uncertainty regarding institutional arrangements for implementation included
    - How much reliance on existing statutory arrangements?
    - What share of the plan was the responsibility of the State agencies with regard to enforcement?, and
    - implications for the legal status of regional NRM plans
- The considerable difference in the funding made available to the regions and the implications for getting work done in low-funding regions: "Each of our rangelands groups was at the end of their state's food chain" *Mike Chuk (DCQ) on resources for rangelands regional bodies/groups and the need for collaboration of these groups across Australia*

Strategies used by planners

Planners state that in order to be effective regional investment strategies needed to consider and outline skills required (either in-house or outsourcing of tasks), strategic alliances, the mosaic of facilitators, geographic spread of projects, and different mechanisms for delivery.

Regional level structures, while a useful tool for developing a NRM plan have some drawbacks with regards to implementation. **Sub-regions** are considered as a more appropriate scale for implementation of the NRM targets. Suggestions for supporting this approach included:

- Using contracts for the work to be undertaken;
- Smaller incorporated structures for delivering on-ground works,
- Effective negotiating with landholders, and
- Technical support provided by the regional groups at a sub-regional level.

Another key strategy used by planners was to securing implementation resources from other organisations that offered complementary skills (e.g. government agencies, CRCs, industry bodies, Indigenous organisations, NGOs) or those skills not present in the regional NRM bodies to undertake specific NRM tasks (e.g. NT and Burdekin).

Planner's Perspective: **How much data is needed before action?** Southern Gulf Catchments & Cape York Peninsula, Jason Cater

In these regions stakeholders believed that there is no need to wait for results of water quality monitoring programs before encouraging best management practice to protect riparian zones and manage ground cover for erosion control.

Designing the implementation framework also brought into question the validity of using financial incentives as an appropriate motivation to fence riparian areas or manage ground cover. Arguments were put that these should be undertaken as standard practice as part of leasehold agreements.

Planner's Perspective: **Resources, roles and responsibilities for implementation**
Susanne Cooper, SKM (NT & Burdekin Dry Tropics)

The focus of NRM planning shifted quickly from target level to the action level of project delivery in preparing the regional investment strategy (RIS). This required including a detailed 'layer' of action/project planning to be considered as part of the RIS development.

This project layer consisted of articulating the scope, geography, brief, budget, task breakdown, outputs required and a timetable for delivery. Some projects were identified to be undertaken 'in-house' and the areas where external expertise was required. This lead to questions regarding the 'who' and 'how' of administering the competitive tender process for the region.

There is a definite transition phase from plan development and coordination into the implementation phase of the NRM plan. This manifested in a need to match existing regional coordination/facilitation staff with the plan implementation needs including the identification of gaps, and whether local, sub-regional and regional coordinators had the desired extension skills to deliver relevant experience and training. In the case of the NT this involves re-thinking the possible roles of 17 regional and local coordinators and in the Burdekin a further nine or ten sub-regional coordinators. Aligning existing staff is not easy as it means re-negotiating existing roles and resources.

Several mechanisms and resources were identified for plan implementation including:

- Resource assessments (identifying priorities, risk, criticality, functions)
- GIS products
- Monitoring (community, agency) and surveillance
- Incentives and management support
- Best management practices and industry guidelines
- Developing and implementing management plans and strategies for key issues (pests, weeds, fire) and for different managers (property scales, local government plans etc) and
- Information, training & education

Lessons

Lessons identified by the workshop for improving implementation planning and delivery included:

- Considerable time is required for these regional bodies and their stakeholders to understand the regional priorities and targets for the implementation of the NRM plan.
- A more assertive investigation by regional bodies of resources to implement was found to provide better leverage in negotiations with governments, as opposed to a passive 'wait and see' approach.
- Delineating roles and responsibilities for implementation was made more difficult in regions where relationships between regional NRM boards and government agencies were strained by the planning process
- Is cost sharing a good mechanism for encouraging sustainable and acceptable land use practices? This depended highly on the 'volume and amount of impact sought' and whether individual 'extension-type' work on properties or larger groups facilitated by extension officers were the right approach for the objectives.

Perspectives: Approaches for tendering and project development, Group discussion lead by Robyn Delaney, NT and Gill Holmes, Kimberley subregion, WA

Two questions put to the workshop for discussion were:

1. What are the best standard operating procedures for delivery of funds in regions? and, 'What are the most effective ways of 'packaging' projects or actions for investment through tendering arrangements? and

2. What are the best arrangements for working with subregions for NRM delivery?

A summary of the discussion:

1. The workshop suggested that first step is to 'check' or determine if the market place (inside and outside the region) can support or provide for your proposed delivery approach and needs. This is in terms of capacity to deliver and coverage. Ensuring that Terms of Reference for outsourcing are tight and explicit was also seen as a critical requirement. Also important to tap into the 'experience of the decision-makers around the table' including staff and committee members of the Board when writing / designing projects.

The approach used by the Northern Gulf Regional NRM Board was proposed as one model that may suit NT circumstances. This used a tendering process for project work and monitoring and evaluation components of implementation. Tenders included short-term outcomes and long-term building of the Boards relationships with regional service providers or implementation partners

2. The workshop re-enforced the importance of effective working relationships with subregional groups. Some strategies suggested included using a range of agreements with sub-regions from Memoranda of Understanding or 'regional handshakes' to more formal contractual arrangements to implement specific projects or consultation processes. Having a good understanding of subregional priorities and interests is critical in negotiating implementation arrangements.

Learning area 5:
How are we measuring, tracking and responding to changes in regional conditions? Are we able to measure for management and improvement?

Background discussion from plan reviews

Given the limitations and differences in base line data between regions (see *Learning Area 1*), what other information has been used to design and select indicators, surrogates or thresholds?

How has published research been used? How has different stakeholder's knowledge been used? Can a single indicator have several functions? How have national standards and indicators been adapted to suit regional needs?

Trigger questions for Learning Area 5:

- What other sources are/can be used when scientific data is scarce or indicators poorly defined?
- What have been the challenges in designing effective response indicators?
- Who's responsible for measuring water quality throughout the system?
- How have local, regional, state and national monitoring frameworks for NRM been linked?

With the considerable emphasis placed by governments on tracking resource condition and other biophysical attributes linked to pressure and state considerations, how have plans fared linking these with suitable response indicators? Are we at the stage where can we measure changes in regional capacity, capacity to pay, sustainable economic activities and improved coordination?

Are the monitoring responsibilities clear for water resource conditions in surface, groundwater and receiving waters? What is the role for community groups and industries in monitoring programs? With an increasing awareness of state and national monitoring frameworks (e.g. State of Environment), planners have tried to inform or align with these through complementary regional reporting processes. Have efforts to link monitoring with the full adaptive management cycle influenced the requirements for condition and trend reporting?

Issues and strategies raised by planners

Some key issues and ongoing challenges identified included

- 'Who is responsible?"
- What monitoring activities are more critical: resource condition versus management performance
- 'What level of rigour' was required to adequately ensure that monitoring and evaluation is acceptable for reporting purposes.
- Data suitability to support monitoring and evaluation is highly variable and therefore difficult to compare progress across all regions
- The level of information required to satisfy different monitoring functions i.e. resource condition or management action varies

Other issues explored in greater detail included community involvement, monitoring for different management objectives and roles and responsibilities at different scales and of different players. These are discussed below.

Community involvement in monitoring and evaluation
Community ownership of the monitoring and evaluation agenda is considered difficult to build into the regional NRM process. Being able to communicate changes in resource condition in a meaningful way to the wider community is equally difficult. Although developing regional indicators is seen as a good starting point, translate information back to a 'paddock scale of change' is seen as a major challenge. Planners also reported there are various levels of capability amongst communities to successfully interpret scientific and technical information collected through the course of conducting monitoring and evaluation. Engaging landholders in monitoring and evaluation is similarly difficult due to gaps between resource condition

monitoring and management based information. It was suggested that regional bodies' capacity to adequately undertake monitoring and evaluation is a useful measure of their effectiveness or maturity.

Monitoring for different objectives

The four main functions of monitoring and evaluation identified by the workshop included;

- To review the regional NRM plan,
- Tracking outcomes from investment programs – this includes the challenge of identifying criteria or measures to asses 'value for money' and ensuring the level of effort required in the monitoring and evaluation phase is also cost effective
- Providing a 'feed back loop' for correcting activities within a project if necessary, or establishing whether further remedial action is necessary
- Accountability based reporting to funding agencies

Roles and responsibilities

In terms of identifying 'who does what' and 'how are they to do it' the following strategies were suggested:

- The wording of projects clearing state levels of responsibility and roles between contributing organisations and agencies
- Providing a road map of 'trust' and 'accountability' through a 'trail/chain of monitoring and evaluation players',
- Using the development of the regional investment strategies to negotiate monitoring partnerships and highlighting areas where the plan had indicated a monitoring task but no responsible organisation is identified.

Planners Perspective: **Role of NLWRA**
Group discussion

The role of the National Land and Water Resource Audit (NLWRA) for monitoring resource condition was discussed. The group determined that the scale the NLWRA collected and presented data at was too coarse to provide meaningful information for regional scale target development or monitoring of those targets.

There was considerable discussion on 'what are regional bodies responsible for?' and how can regional bodies ensure state agencies are delivering against their own monitoring responsibilities and 'parameters'. Co-evaluation of project progress involving state agencies, landholders and regional bodies was suggested as a possible strategy to improve this situation.

Learning area 6:
Were planning guidelines adequate and effective? How might government advisory and plan review functions be improved?

Background and information sources

The following material has been synthesised from two information sources from the Healthy Savanna Planning Systems project, Tropical Savannas CRC:

1. Data collected through 56 interviews between September and November 2004, with regional NRM planners, regional NRM body chairs and regionally-based state agency staff participating on Regional Coordination Groups; and

2. Experiences and perspectives provided by 18 regional planners and consultants from Qld, NT and Kimberley regions at the regional NRM planners workshop conducted on 9th March 2005 at CSIRO Sustainable Ecosystems, Brisbane.

This information is only a small subset of the broader evaluation findings from the project.[2] It deals explicitly with the guidance material prepared by the Queensland state government for regional NRM groups to support their planning and engagement activities between 2002-2004.

There are six discussion points identified from the data sources, namely:

- Process and politics of development
- Timing
- Clarity and consistency
- Usefulness
- Plan approval
- Future guidelines

Process and politics of development

There is a strong perception that there was no 'market research' conducted with the regional planners and that the guidelines were developed in isolation from the proposed users. This was surprising given an existing set of 'regional NRM strategy' guidelines were in place from NHT1 from the late 1990s. No attempt appears to have been made to evaluate the effectiveness of the existing guidelines including canvassing regional strategy groups' experiences to improve the design of the proposed set. A further concern was the perceived lack of explicit recognition of previous efforts to develop regional strategies which – following the signing of the Bilateral agreement – had become simply 'not good enough, overnight'. This also should be seen in the context of several NHT1 regional NRM strategies having only been endorsed by governments some months earlier as important achievements.

It also became evident that the main driver being used for the guidelines – the Bilateral agreements – proved problematic for informing the plan-making process. Rather than asking 'what makes good regional planning?' and then 'how do we meet program requirements through that planning model?' what occurred was in fact the reverse. Policy officers attempted to *derive* planning principles from what was essentially a program-based political agreement between governments. This resulted in the 'guidelines' being subject to inappropriate over-interpretation of 'requirements' under the Bilateral agreement(s) rather than providing a clear and sound basis for regional planning. It was also observed and reported that the process for developing guidelines had become something of a 'tug of war' between competing agencies' interests and that 'getting State and Federal agencies to agree' on what the regional bodies had to do had become a major issue.

[2] For more information on provision of government technical and policy advice refer to the report *Benchmarking Regional Planning Arrangements for Natural Resource Management 2004/5: Progress, constraints and future directions*, May 2005, TSCRC.

Timing

Generally, the timing of the guidelines' release was considered to be too late to be helpful. The final version of guidelines and many modules were developed and released after many regional plans were partly or fully developed. This further complicated the completion of several draft NRM plans rendering them 'out of date' in terms of the updated requirements resulting in much information being 'retrospectively fitted' and plans re-worked.

Clarity and consistency

There was confusion over whether the main purpose of the guidelines was to provide general *guidance* to regional planners or present a prescriptive set of *requirements* to access funding. The large or 'excessive' volume of material, the numerous draft versions and the general complexity of much of the material (language, style etc) made it difficult for planners to 'define what it all meant'. There was also consensus that the material generally focussed on what the "teller" thought the reader needed or ought to know, rather than what the critical messages actually were for the user.

There was also a strong view that the instructional detail between some of the guidance material was contradictory, and that advice from JSC members and agency staff was often inconsistent with advice provided in the written guidelines.

Usefulness

It was almost unanimously believed that guidance material was unhelpful. Regional planners acknowledged however the inherent difficulties in producing a single set of guidelines applicable across regions' different backgrounds, planning capability and stage of development. Even so, a strong view was that the guidelines were too rigid and did not provide for the adaptive nature of planning process. It was considered that the guidelines and modules did not provide a *process* or pathway to progress alignment with other planning activities, but only sought to ensure 'consistency' with statutory planning in theory rather than in practice. Planners believed the generally low level of comprehension amongst regional agencies' staff of modules' content exacerbated this problem.

Regional NRM planners identified a critical gap in the guidance material – links between regional NRM plans, local government planning schemes and regional planning under IPA and believed that this was by and large also one of the less well understood or articulated relationships. Another reported gap was the lack of direction on 'tools to consider the implications of planning on the economic and social assets' of regions. Materials provided in this respect were considered poorly constructed and poorly focussed.

Plan approvals

It was widely reported that the lack of clarity on plan accreditation requirements and poor delivery/consistency of relevant advice left both planners and government staff 'second guessing on the fundamentals' leading up to the formal plan review and accreditation period.

Several planners considered that their planning process had been subject to an exceedingly high level of 'interference' by government and had opted to not incorporate state interests until after the community consultation phase. Other regions noted however that the approval process tended to run more smoothly when regional government officers participated 'early on' in the plan development and review process. During the pre-accreditation review process a number of regional bodies reported a shift in government perceptions over who 'owned' the plan. There was a feeling amongst planners that regional plans were 'swamped' by state interests and priorities at the eleventh hour.

Future directions

During the course of the workshop, participants identified important lessons from the recently completed NRM plan development process (see *Lessons* sections under each of the learning areas). Participants were also asked in the final session of the workshop:

- 'What would you do differently next time?' or
- 'What aspects of the plan development process need ongoing improvement?'

The summarised responses are presented below in the context of future directions for better plan making practice and responding through regional investment or improved partnerships.

1. Reviewing and reducing the number and complexity of regional targets

> "…unlike Generals who are always planning for the last war, the next plan-making phase should be about simplifying plans, such as getting fewer, better targets." *Tim Cummins (Earth Tech)*

Several planners stated the need for a more detailed technical evaluation of targets and indicators to ascertain what was useful and reasonable. This needs to be done as part of capturing learnings from the process and could be used to inform future stages of the NRM planning process. Ongoing development and refinement of regional targets is seen as a critical part of NRM plan implementation investment.

A common view was that fewer targets would enable more effective development and implementation of future incarnations of regional NRM plans. This would support the creation of precise targets in priority regional areas and be a better use of regional NRM resources for plan implementation and provide a tighter focus for monitoring and evaluation programs and improve adaptive management response.

2. Refocus NRM science to help demonstrate cause-effect relationships required to design effective targets

To improve delivery on regional resource condition targets planners emphasised the need for future science funding to be directed towards designing management action targets that reflect the cause and effect relationships with resource condition outcomes sought and adequately demonstrate the effectiveness of specific management actions. This would also address the question of whether 'we are monitoring the right things' and improve the practical understanding of the links between property scale information and regional resource condition data.

3. Improve availability and use of social and economic data for regional planning

Planners experienced difficulties in capturing and appropriately using economic data at the regional scale to inform target development – particularly in relation to developing targets and management responses for major resource and agricultural industries. Planners also recognised that with improved design, stakeholder knowledge gathered through the consultation processes could be more formally (and transparently) applied to target development and impact assessment where other 'technical' forms of data did not exist or were not suitable.

4. Improve priority setting and assessment of investment options

More work is needed to identify appropriate 'return on investment' criteria for regional planning and implementation. Planners also highlighted the need for improved use of cost benefit analysis, involving more explanation and explicit treatment in the priority setting process.

5. Clarify uncertainty regarding institutional arrangements for implementation

> "The discussion regarding implementation raises the issue of what is core business of government and this has been shifting." *Geoff Penton (QMDC)*

Key concerns and directions identified here include developing appropriate ways of 'ensuring' state agencies deliver on projects or components of projects within the regional NRM plans. Underlying questions associated with this include clarifying reliance on existing statutory arrangements and compliance. It was felt that state government agencies are in a position to be 'reaping the advantages of regional delivery partnerships' but this requires an improved level of commitment.

6. State of Environment and State of Region are valuable frameworks to facilitate negotiation of monitoring and reporting responsibilities

It was suggested that the Regional NRM Groups Collective negotiate with State Government in determining who is responsible for monitoring resource condition of biophysical assets (such as water quality, biodiversity etc.) and that this should happen prior to reviewing resource condition targets. State of region reporting frameworks were identified as valuable node for negotiating, clarifying and coordinating resource management reporting contributions across the state and region.

7. Co-evaluation of project progress involving state agencies, landholders and regional bodies.

Developing regional indicators is seen as a good starting point but translating information back to a 'paddock scale of change' is seen as a major challenge, as is communicating progress in resource condition and management practice improvement in a meaningful way to the wider community, partners and investors. Co-design and co-evaluation of investment outcomes involving state agencies, landholders and regional bodies is seen as a strategy to improve this situation.

8. Planning guidelines and advice from government agencies

Participants at the NRM planners' workshop were asked their views regarding the value of producing a revised set of guidelines in the short to medium term. The overriding view was that any revision of guidelines (e.g. new versions) prior to the next review phase of NRM plans would have little value. There was however disagreement amongst planners on the merits or otherwise of applying a future standard template for plans.

The discussion however did raise several key points including some further reflections on advice and requirements in guidelines. A firmly held belief amongst planners was that the guideline requirements for including specific information within plans gave little consideration, or provision, of the necessary support required by regional bodies to meet those specifications (i.e. access, technical interpretation and inclusion of that information in plans).

Moreover the existing guidelines failed to provide the balance between effective planning advice, complex agency requirements and a style of document that is acceptable and comprehensible to the regional users. Addressing this point in particular is seen to be critical to the acceptability of any future proposal to revise the existing planning guidelines.