

THE NATURAL RESOURCE MANAGEMENT (NRM) REPORTING JOURNEY **IN QUEENSLAND**

Claire P. Carter., Philip E. Maher and Nicole Blackett.

Catchment Programs, Water and Catchments Division,

Queensland Department of Natural Resources and Water, GPO Box 2454, Brisbane, Qld 4001, Australia.

Regional natural resource management in Queensland – where we come from

Regional natural resource management (NRM) in Queensland involves a multitude of players including State and federal governments, regional NRM bodies, local government, industry associations, community NRM groups such as landcare groups, cooperative research centres and indigenous groups. In cooperation, these players are targeting the big environmental issues in Queensland including biodiversity, climate change, erosion and soil conservation, managing natural resources, salinity, social and economic aspects of NRM, sustainable development, vegetation management, water quality and invasive species management.

The majority of investment in NRM over the past ten years has come from government programs such as the National Landcare Program (NLP), the National Action Plan for Salinity and Water Quality (NAPSWQ) and the Natural Heritage Trust (NHT). In Queensland these programs are administered in partnership through the Australian and Queensland Governments and include projects implemented in all 14 NRM regions across Queensland. Projects today are predominantly managed and delivered by regional NRM bodies, however, investment has also been delivered through state agencies, landcare groups, local government and industry bodies. See Figure 1 for regional NRM bodies in Queensland.

Each regional NRM body has a Regional NRM Plan and a corresponding Regional Investment Strategy. The NRM Plan identifies a region's key assets, sets long-term targets (20+ and 50+ years) and defines actions to minimise the threats to these assets and guide the regional community in their management for future sustainability. The Investment Strategy provides details on the specific actions, resourcing and timeframes that are required to implement the regional plan and achieve its targets. Investment decisions are made based on the Plan and Investment Strategy. Regional Bodies are contracted by the Queensland Government to implement planned activities to improve natural resources across Queensland.

The journey towards reporting and evaluating outcomes of investment in natural resource management in Queensland has been a long, bumpy and winding road. Substantial collaborative effort through research, reflection and ongoing evaluation of processes, requirements and products has led to continual improvement in this area over time – this is *the Natural Resource Management Reporting Journey*.

Monitoring and Reporting – what is being done

For the past decade in Queensland, two types of monitoring data have been captured. The first, performance monitoring, relates primarily to measuring program performance against contract-based requirements, including financial expenditure, contractual accountability, the outputs (products and services) delivered and progress towards achievement of long-term targets. This reporting information maintains governance of public funds and indicates impressive immediate outcomes in planning, resource assessment, capacity building and on-ground products and services.

The second type of monitoring captures the condition of natural resources. This is the scientific/ technical/ surveillance monitoring of the environment which shows the current state of the natural environment and can indicate trends in the condition of the resource over time. This type of monitoring can show progress towards maintaining or improving the long-term condition of our natural resources, or may track the decline in quality or availability of resource.

It is generally considered that state and trend monitoring is a State Government responsibility, whereas performance monitoring and changes in the condition of resources at the point of investment (local scale) is a regional NRM body responsibility. However, it is important that the two types of monitoring 'talk to each other' and inform future activities.

As government NRM investment programs matured over time, from 1997–2002 (NLP, NHT1) and 2002–2008 (NHT phase 2, NAPSWQ, NLP), the process to capture and report performance monitoring information has continually improved. An overhaul of contract specification was undertaken in March 2007, with the simplification and standardisation of all NAPSWQ/NHT contracts across Queensland. This included the structure, terminology and level of detail contained within every contract. Concurrently, the reporting method was improved; from Microsoft Excel spreadsheets distributed across Queensland, to a uniquely designed web-based centralised reporting system. To accompany these improvements a comprehensive education package and hands-on training was delivered to all regional NRM bodies across Queensland, promoting the requirements, process and importance of accurate and timely monitoring and reporting.

The time, effort and resources required to improve the processes and methods surrounding performance monitoring have provided a good return on investment. Impressive immediate outcomes achieved from investment in Queensland in the areas of planning, resource assessment, capacity building and on-ground works are reported each year. See Figure 2 for an example of Queensland performance monitoring information for the past 6 years (summarised from reports submitted by Queensland regional NRM bodies).

The quality and quantity of reporting has been significantly enhanced by the use of a purpose built web-based system (enQuire) to consistently manage information and performance monitoring about NRM activities in Queensland. See Figure 3 for the enQuire interface.

The enQuire system was implemented in Queensland in December 2006 and has improved efficiency of reporting at a regional, state and national level. enQuire's strengths include unique design for:

- Contract management - storage of contracts, tracking variations and generation of copies for easy management;
- Project management - administration/ management of users and project staff, setting objectives and budgeting for projects, updating and tracking project information, capture of spatial data;
- Reporting –compliance with reporting requirements and monitoring of activities region wide;
- Alignment – showing a logical hierarchy of how elements fit together or inform each other (see Figure 4 for a diagrammatic representation of how alignment is facilitated; from individual projects, to contracts to long-term regional targets).

- Project/ activity communication – using project and reporting information and data that is already in enQUIRE to help promote and communicate delivery of projects, for example allowing users and external stakeholders to view publicly available project information in factsheet format.

The personas (or various user roles) within enQUIRE allow user access to be customised for various levels of permission and access; creating one system for multiple purposes. The qualitative and quantitative data within enQUIRE provides a solid platform of information which can be used for various reports on NRM investment, to meet contractual, promotional and evaluative requirements.

The originality in the approach Queensland has taken to address the challenge of capturing NRM outcomes has been acknowledged nationally with enQUIRE being recognised as the first integrated web-based system to manage performance information about NRM activities in Australia¹.

Evaluation - the ‘so what’ question

The current monitoring information adequately explains immediate outcomes. We can identify and quantify ‘what’ has been done. We can report that funding has been expended and that there has been lots of activity and immediate deliverables (outputs) achieved. However the burning question being asked by NRM investors and practitioners is: ‘To what extent is this funding and activity contributing to or having an impact on improvement in the long-term state and trend of our natural resources?’ Also, ‘Is this investment effective, efficient and appropriate?’ These are the challenging ‘*so what?*’ questions.

The approach taken in Queensland is that monitoring, evaluation and reporting obligations must be considered in the context of maximising use of information to answer multiple evaluative questions which may be asked by the various stakeholders and audiences involved in NRM. This is important because there are various types of outcomes, in addition to temporal and spatial scales when considering the types of evaluation questions that could be posed. However, answering these evaluative questions is extremely important because in a world of limited financial and natural resources, sound investment decisions need to be made today for the benefit of our environmental future.

Evaluating the impacts of NRM activities on the long-term condition of our natural resources is challenging because we work in a chaotic, dynamic, natural environment. It is unrealistic to expect that a simplistic cause and effect relationship exists between on-ground action and improvements in the long term condition of natural resources. This is because a specific and predictable path from a management action to the desired long term environmental outcome does not always exist due to the numerous and various other contributing factors in the natural environment. Additionally, there is a substantial time lag that exists between a management intervention and any observable, tangible results or improvements generated as a result of the intervention. This lag time is usually outside the lifecycle of a funding program, therefore measurable changes are not able to be demonstrated within the program. In addition to this, there is a considerable lack of baseline data on the current condition of resources, making judgements of progress or changes in the environment very difficult. This means there are considerable challenges in evaluating the impact of NRM activities on achieving long term resource condition outcomes.

¹ Australian National Audit Office, Audit report No 21, 2007-08, *Regional Delivery Model for the Natural Heritage Trust and the National Action Plan*

The road ahead – ‘MERI’

The challenge for NRM across Australia is to incorporate performance monitoring information with other quantitative and qualitative information to enable the assessment of the impact, appropriateness, effectiveness and efficiency of NRM activities now and in the future.

This is especially important as monitoring, evaluation and reporting and program improvement (MERI) are key components of the regional NRM programs being delivered through the Australian Government’s \$2.25M Caring for our Country initiative (2008-2013). Caring for our Country places a greater emphasis on evaluating the NRM outcomes of investment to demonstrate value for money.

To secure investment in NRM for the future, projects and programs need to demonstrate the impact of intermediate and long-term outcomes from current investment. In order to meet this challenge, program logic is progressively being promoted and implemented across Queensland (See Figure 5 for NRM Program Logic). Program logic shows the rationale behind a program, from the foundational activities and outputs, to intermediate and long term outcomes. Essentially, program logic is the evidence of the expected ‘path’ from immediate action through intermediate outcomes to long-term outcome. Intermediate outcomes are the stepping stones towards achievement of long-term targets. These have a timeframe of one to five years and therefore can be reported and documented within the lifecycle of the funding program, as tangible evidence of progress of investment towards the long-term targets.

Causal links within the program logic hierarchy show the cause-and-effect relationships that exist and the series of expected consequences and effects which will flow on from the immediate actions. The assumptions on which these decisions are made are also documented and interrogated, providing rigor to the logic framework and pointing to key areas of further investigation in monitoring and evaluation activities.

Complex programs and logic frameworks can also benefit by the identification of ‘critical pathways’ or the key activities and outcomes that are expected to lead to the achievement of the long-term goal. This helps to focus project activities and can assist in prioritising what to measure, assess and report on for evaluation.

The future of NRM investment appears to be much more focussed with emphasis on specific environmental priorities and the requirement to show evidence in advance that the outcome will be achieved. In a chaotic and dynamic natural environment, best available science can guide assumptions, however the outcomes cannot be guaranteed. Evaluating the impact of NRM activities in achieving long-term resource condition outcomes is infinitely complex, however it is a challenge we are embracing in Queensland. After all, in a world of limited financial and natural resources, good decisions need to be made today for the benefit of our environmental future.

Attachments

Figure 1 – Regional NRM Bodies in Queensland

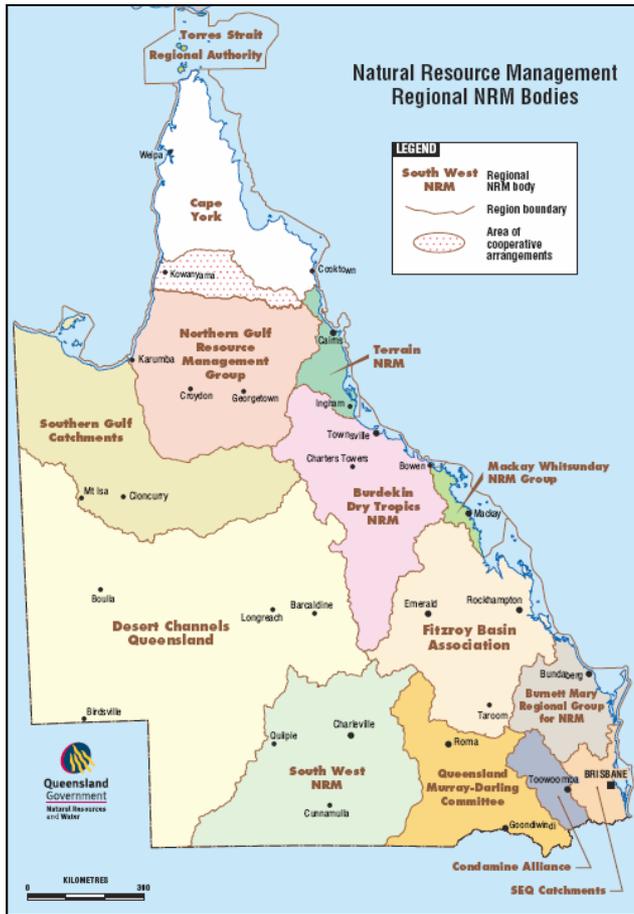


Figure 2 – Example of a summary of performance monitoring information in Queensland

Total reported achievement by Regional NRM Bodies 2002 – 2008 (NAPSWQ, NHT and NLP):

- ❖ **1,025,379*** ha of native vegetation protected, enhanced, rehabilitated or revegetated (* Note – does not include 7,806,131ha of improved fire management practice reported by Cape York in 2006-07 or 1,000,000 ha reported by in 07-08)
- ❖ **3,819,726*** ha of pest plant and animals control (* Note – does not include 5,312,900 ha of integrated baiting wild dogs and pigs reported by Cape York in 05-06 or 2,300,000 ha reported in 2007-08)
- ❖ **51,631** ha of land where improved irrigation practices have been adopted by **190** landholders
- ❖ **2,054** new or improved natural resource monitoring programs
- ❖ **3,449** conservation agreements protecting **812,086** ha
- ❖ **6,865** biophysical studies
- ❖ **9,537** awareness raising events with **214,332** participants
- ❖ **5,530** training events with **60,039** participants
- ❖ **12,390** community groups or projects assisted
- ❖ **5,725** collaborative arrangements

Figure 3 – enQUIRE interface

The screenshot displays the enQUIRE web interface. At the top, the logo 'enQUIRE' is visible next to a question mark icon, with the text 'Queensland Regional NRM Information' below it. A navigation bar includes links for Home, Print, Contact Us, and Help. The main content area is divided into several sections:

- enQUIRE Menu:** A vertical sidebar on the left containing sections for 'Welcome Claire Carter' (with 'My Account' and 'Log Out' links), 'Projects' (with a 'Search' link), 'Activity Agreements' (with 'Draft', 'Active', 'Completed', and 'Variation' links), 'Plans', 'Programs', 'Portfolios', 'Custom Reports' (with a 'Create' link), 'Group Menu', 'Users and Contacts' (with 'DNRW Contacts', 'DNRW Users', 'DNRW Details', and 'Search enQUIRE directory' links), and 'Structure Menu'.
- Welcome:** A central message stating: 'Welcome to enQUIRE - the central point of natural resource management information and project management tools for regional bodies and individuals. If you are a first time user, register with enQUIRE to receive the full benefits of the enQUIRE system. Help with enQUIRE is available online. Select the Help link from the top of the page for assistance with:
 - Your enQUIRE Account
 - Project management in enQUIRE
 - and all other available tasks in enQUIRE.
- News:** A section with four sub-items:
 - Voice of the Regions:** A monthly newsletter published by the Regional NRM Communications team. It provides information on regional NRM body progress. Read the most recent issue of [Voice of the Regions](#) or browse past issues.
 - Regional Bugle:** Published by Natural Resource Management Arrangements, Natural Resources and Mines. It is a weekly publication providing information on natural resource management issues and activities within Queensland. Read the most recent issue of [The Bugle](#) or browse past issues.
 - ABC Landline:** A national rural news program. The website provides Landline program summaries, related rural news items and a discussion area.
 - QLD Country Life:** [Queensland Country Life](#) covers Queensland livestock, cropping, horticulture and alternative farming pursuit news.
 - The Courier Mail:** [The Courier Mail](#) provides daily and breaking Queensland news.
 - The Queensland Regional NRM Groups Collective:** The [Queensland Regional NRM Groups Collective](#) (the Collective) is a lead body for regional NRM bodies in Queensland. The Collective's mission is to provide a cohesive and cooperative forum to: collaborate, support, advocate for and add value to regional groups to effect positive natural resource condition change.
- Resources:** A section with three links: [The Regions](#), [NRM Bodies](#), and [Arrangements](#).

At the bottom of the page, there is a footer with links for 'Terms & Conditions', 'Copyright', 'Disclaimer', 'Privacy', 'About enQUIRE', and 'Contact Us'. The copyright notice reads '© QIRIS Project - SEQ Catchments Ltd 2008' and the enQUIRE logo is in the bottom right corner.

Figure 4 – Alignment is facilitated through enQUIRE



The enQUIRE diagram

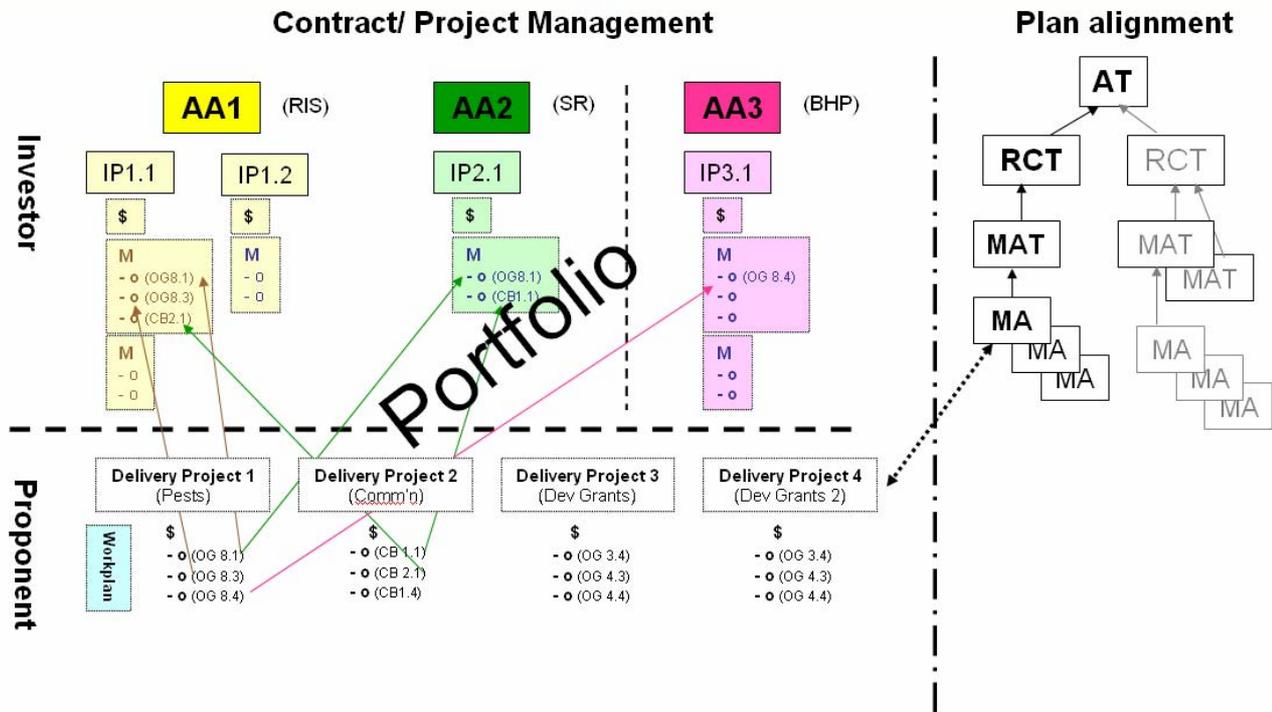


Figure 5 – NRM Program Logic

