Collaborative development of evaluation capacity and tools for natural resource management

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This paper outlines the approach that was undertaken to develop an evaluation framework for the NSW Catchment Management Authorities (CMAs). From the beginning the small project team[1] took the attitude that the evaluation framework will be applied and maintain a longer life if there was strong ownership amongst the target audience and it was presented in a format that would enable components within the framework to further evolve as the experience and needs for evaluation tools expanded.

The evaluation framework for CMAs was developed to provide context to the drivers for the CMA evaluation process, relevant evaluation principles for NRM, a broad approach to follow and tools and templates that could assist.

The target audience

In recent years, the NSW Government has introduced extensive reforms in natural resource management. One major initiative has been the establishment of 13 regional natural resource management bodies, or Catchment Management Authorities (CMAs). These 13 organisations integrated a lot of the regional activities work of the previous property planning committees, catchment management committees and water management committees. The CMAs are statutory organisations, directed by a Board of community members from the catchment area to coordinate natural resource management (NRM) in each major catchment. They work in partnership with farmers, Landcare and other local groups, Aboriginal communities, local government, industry and State agencies to involve regional communities in the management of key NRM issues facing their catchment.

The CMAs have prepared and are implementing their catchment action plans (CAPs) and investment programs which identify catchment and management targets and management actions for their region. These address a wide range of resource issues depending on location across the state and have been developed with significant input from local communities. The CMAs are delivering incentive funds from the NSW and Commonwealth Governments to support projects and activities which help communities to restore and improve the natural resources in their catchments. This work contributes to the NSW State Plan's environment targets that call for better outcomes for native vegetation, biodiversity, land, rivers and coastal waterways. After several government agency restructures, the NSW Department of Environment and Climate Change (DECC) is now the lead agency for providing support to the CMAs.

Requirements for evaluation

NSW CMAs are required to monitor, evaluate and report on their investments in resource management and the outcomes achieved. Explicit requirements for MER are detailed in:

- NSW legislation, particularly the *NSW Catchment Management Authorities Act 2003*

- The Natural Resources Commission's Standard for Quality Natural Resource Management (NRC, 2005)

- State Plan – A new direction for NSW (NSW Government, 2006)

- NSW Natural Resources Monitoring, Evaluation and Reporting Strategy (DNR, 2006)

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[1] The project team included the authors and Emma McGloin who was instrumental in development of the evaluation framework for the Hunter Central Rivers CMA and later moved on to work with industry.

- Bilateral funding agreements between the Australian Government and NSW Government (Commonwealth of Australia and State of New South Wales, 2003)

- The Commonwealth Government's Caring for our Country program

Regional communities have an expectation that delivery of funding and assessment of outcomes will be undertaken transparently and that they will be kept fully informed of progress.

The relatively new regional model of delivering NRM also raised the need to progressively improve, or adaptively manage, resources. The use of feedback loops to improve program design and implementation allow the use of an adaptive approach to resource planning, management and sustainability. This allows:

- the application of the 'precautionary principle'

- continued accommodation of the complexities and interactions within our environment, overlain by social complexities

- adjustment for the need to implement strategies on best-available information

- consideration of the extended time frames before strategy outcomes in sustainable resource management can be determined.

The application of evaluation in the natural resource management sector is relatively new, with greater knowledge and expertise in quantitative monitoring and reporting but little understanding of evaluation. The CMAs recognised the importance of evaluation informing business and assisting them in the meeting of their funding requirements. As part of this recognition CMAs have either appointed a monitoring and evaluation officer or the role has been included within the scope of an existing role.

What needed to be considered in the development of the evaluation framework

The project team had been approached and recently completed the development of an evaluation framework for the Hunter Central Rivers CMA, when the CMA chairs council agreed that a similar framework should be developed for all the NSW CMAs. It would have been easy for the project team to have re-edited the Hunter Central Rivers framework and published it as an evaluation framework for the NSW CMAs but this approach would not have developed capacity or greater understanding of evaluation nor would it have resulted in greater ownership of the product.

Given the broader objectives for this project than just the production of a document, the project team also took into consideration the changing NRM environment in NSW and some of the evolving evaluation requirements coming from the Australian Government. Therefore the scoping of a project to address evaluation needs of CMAs needed to consider the following:

- Limited monitoring, evaluation and reporting (MER) expertise was available in the CMAs, state or federal environment agencies

- The drivers and 'clients' for CMA evaluations had very different needs and expectations and the level of detail required varies enormously between clients. For example the audience for evaluation information included the Australian Government NRM agencies and various State agencies as major funding sources, catchment community, the CMA Board and any other sponsors that the CMA may have sought.

- The CMAs were under pressure to deliver their CAPs and investment strategies within tight timeframes at the time when they were only just being established

- Few practices specifically for evaluating NRM programs were available

- Evaluation processes were new to CMAs

- There was a very broad range of resource conditions across NSW and so the 13 CAPs addressed a wide range of issues, specific to their catchment needs

- CMAs provide funding for a large number of community and landholder projects which they are required to assess

- CMAs are relatively small organisations and have significant constraints on the resources which can be dedicated to MER

- There was limited resource condition information to inform the CMA planning processes

The approach to the evaluation framework

Consideration of all MER requirements and the conditions in which CMAs operated highlighted the need for an integrated and flexible process to enable CMAs to meet their responsibilities at all scales, for all 'clients' and in a reliable and rigorous way. Clearly, the range of considerations highlighted that a collaborative approach was needed with the specific objectives to include:

- Delivery of an evaluation framework specific to the requirements of the CMAs

- Development of flexible evaluation processes and tools that could evolve to meet CMA needs over time

- Building the evaluation capacity of the staff of the CMAs and increasing the knowledge of evaluation amongst their key stakeholders

- Developing ownership of the framework by the CMAs and

- Improving the culture for adaptive management practices through evaluative processes

To deliver the identified objectives, the program undertook a range of activities:

1. Steering and reference committees were established to oversee the program. These committees included high level participation of representatives from the Commonwealth Government (NRM team, National Land and Water Resources Audit, Department of Agriculture, Fisheries and Forestry), the NSW natural resource agencies (DECC, Department of Primary Industries, Department of Water and Energy, Department of Lands), the Natural Resources Commission, Local Government and Shires Association and the CMAs (representative Chairs and General Managers).

   These committees met regularly throughout the project to review progress and to provide input. The contribution of NRM expertise and understanding of the political situation was very valuable to the project. The high level representation also allowed the project team to engage all levels of government and CMA management in development of tools and processes and increase understanding of evaluative practices at high levels within the represented organisations, ensuring "no surprise" at critical decision points.

2. The establishment of a monitoring and evaluation officer forum. A formal network of monitoring and evaluation officers from the CMAs was established to enable the project team to engage with CMAs at an operational level as well as to assist capacity building. This network also allowed the participating officers to share their experiences. While the 13 CMAs operate under the same requirements, they operate separately, can be administered quite differently and are responding to different issues among quite different communities. The ability to share and discuss experiences proved to be valuable. Whilst the project team originally established this forum, we gave the M&E officers the ownership of the running of the forum so that it met their requirements for different issues to be addressed. We found that they are still effectively operating this forum since the completion of the project and its operation is well supported by CMA management.

3. Regular briefings to the NSW CMA Chairs Council and CMA General Managers. Whilst there was some CMA representation on the steering committee, it was considered important to keep the whole CMA strategic management structure informed and therefore updates at strategic stages of the framework were presented to the Chairs and General Managers. This allowed further input from the CMAs into the project and kept the Chairs and General Managers informed of project development, again ensuring no surprises for the CMAs or for the project team.

4. Specific capacity building workshops. Initially, two workshops were delivered that involved representatives from each of the CMAs. The first workshop was in the first few months of the project being commenced and therefore had the aim of introducing the basic concepts through the Hunter Central Rivers CMA framework. The second workshop was held to specifically work through and adapt the concepts associated with the use of "Multiple Lines and Levels of Evidence" in NRM evaluation. Officers from the NSW and Commonwealth NRM agencies also attended these workshops. We moved away from holding workshops across all the CMAs following the first year of the project for several reasons:

   - The M&E Officers forum had commenced functioning and was providing a face to face forum for discussion of issues relevant to all CMAs and

   - Some CMAs had applied and developed their evaluation skills more than others, resulting in CMAs having different capacity building requirements.

The project team then moved more to responding to specific CMA capacity building needs by working with the CMAs on the application of different elements of the framework but in a more applied approach to meet the specific CMA needs.

5. The tools and presentation of the framework information was developed in close consultation with the CMAs. Using the whole of the monitoring and evaluation officers' forum and working with the individual CMAs enabled the components of the framework to be trialled in a practical sense before final documentation. It also enabled the components of the evaluation framework to be embedded within the "Monitoring and Evaluation" plans being developed by the CMAs, rather than everyone waiting until a final document was formally published.

6. Documentation of the 'Evaluation framework for CMA natural resource management' (DECC, draft). The project team in consultation with the CMAs wanted to ensure the framework was easily applied. It was therefore decided to ensure that the final documentation was presented in a web based format so that it was easier to navigate through the material but to also ensure the information was more widely available and easily updated as the practice for evaluation in NRM evolved.

7. <u>External peer review of the framework</u>. The project team had always been open to input and commentary on the framework from the stakeholders involved in its delivery but it was considered important to have external peer review of the framework to increase confidence in the application and ensure that it was a technically correct approach to evaluation.

What outcomes were expected

The 'Evaluation framework for CMA natural resource management' project realised its planned outputs and outcomes. A few examples of this are given below:

- CMA understanding and capacity to undertake evaluations has been established. The CMAs' monitoring and evaluation officers are developing detailed evaluation plans to meet the MER requirements for investment and projects. For example, the Murray CMA is developing a high-level evaluation plan to identify the broad MER requirements, roles and responsibilities for its CAP. It will identify the major types of evaluations required by drivers and stakeholders, their timing and broad requirements. The plan will be used as a tool to communicate MER issues, inform project management and support any funding bids. It will detail a hierarchy of evaluations which together cover the detailed planning for all required evaluations. The operational staff will use the hierarchy to build MER requirements into project plans to enable evaluation of each funded project.

- There has been a change in the culture among CMAs to recognise the value of adaptive management processes. Adaptive management principles are being adopted by the Southern Rivers CMA where progressive review of implementation activities is keeping investment on track and ensuring CAP priorities are regularly considered. A review of investment in revegetation was undertaken to identify the number of hectares, vegetation type, kilometres of fencing, location of revegetation, etc. to determine whether investment is in line with CAP priorities and the investment cycle. The CMA has thus identified that the area treated at this point in the investment cycle is close to plan and that a small adjustment in the location of treatment in the next investment phase will ensure that CAP priority areas are meeting CAP implementation requirements.

- Evaluation processes specific to NRM and which consider resource limitations are being developed. The development or adaptation of tools suitable for NRM has included NRM specific program logic, multiple lines and levels of evidence and the use of an evaluation panel to develop evaluation programs and findings in a cost effective way. In particular, the use of multiple lines and levels of evidence and an evaluation panel allows CMAs to combine information from disparate sources and disciplines to develop reliable evaluation findings.

  Efficient management of evaluation resources is critical in the resource restricted environment in which CMAs operate. The Hunter–Central Rivers CMA has established a risk-based decision-making system for applying monitoring and auditing resources to its investment projects. The process is used to guide the use of limited resources and meet reporting requirements. Financial investment, landholder capacity and complexity of the work have been used to determine whether frequent site inspections, less frequent inspections or a single final inspection are required. This allows efficient use of CMA resources while ensuring that the most significant and highest risk investments are targeted for evaluation.

- The process for endorsement from the steering committee and CMA Chairs Council ran very smoothly, with both forums expressing their gratitude for the work that had been undertaken.

- Documentation of evaluation methods and tools for NRM in the 'Evaluation framework for CMA natural resource management' (DECC, draft) has been completed and is expected to be published on the DECC internet page (www.environment.nsw.gov.au) during September 2008. While there have been delays in the publication process that were outside of the control of the project team, this did not stop the CMAs using and adapting tools within the framework for their own evaluation plans. The tools within the framework are downloadable and made available to the CMAs once developed and reviewed. A map of the site is included in the following table.

Background to evaluation		Tools and tips
About the evaluation framework	Principles of evaluation Applying the evaluation framework Developing evaluation capacity	Checklist for whole evaluation cycle
Evaluation context	Establish terms of reference Identify stakeholders Define type of evaluation (appropriateness, efficiency and/or effectiveness) Understand the logical framework (conceptual models, results hierarchy, program logic table)	Template: Defining stakeholder needs Template: Defining evaluation type Building a conceptual model Template: Constructing a program logic table
Evaluation design	Develop information requirements including MLLE approach Identify performance measures Specific design for evaluation type Establish an evaluation panel Document Evaluation Plan and implement evaluation	Template: Identifying performance measures Template: Identifying performance measure attributes Template: Preparing performance measure profiles and monitoring plans Evaluation analysis tools Template: Recording assessment using MLLE criteria Performance story chart Establishing an evaluation panel
Developing and sharing information	Analyse information Use evaluation findings: adaptive management, CMA reporting, state-scale effectiveness reporting, performance story reporting Learning from evaluations	Writing effective evaluation reports

What outcomes were unexpected

The unintended outcomes are considered significant in terms of the longer term benefits to the CMAs beyond the delivery of this project.

- The network of monitoring and evaluation officers, which is now known as the Monitoring and Evaluation Forum, continues to meet quarterly. It is administered by the officers themselves and has grown to be a common forum for

problem sharing and solving among CMA staff, dissemination of information, joint CMA project development, network building, a focus for discussion between all levels of government and CMA operational staff and mentoring of new M&E officers. It is now commonly used as the point of contact for CMA operational input to State and Commonwealth policy and programs, such as monitoring and reporting program and decision support tool development.

- The broader engagement in evaluation processes by other staff within the CMA has been observed by members of the project team. It is thought that the establishment of an evaluation champion in each region through the CMAs M&E officer is facilitating this continued capacity building within the CMAs. This process has further benefited from the MERI training sponsored by the Australian Government.

- The level of engagement of CMA staff and management together with that of State and Commonwealth officers is resulting in ongoing development of evaluation methods and tools specific to NRM which were not anticipated. The development of flexible tools which can be adapted for CMA use will result in further development of the framework and its tools. For example, criteria for use in analysing evaluation evidence were developed collaboratively and will be tested by CMA staff undertaking evaluation. Further development of these criteria where needed will be addressed to ensure application of the multiple lines and levels of evidence tool is appropriate for CMA NRM.

What was learnt

The NSW experience of collaboratively developing evaluation practices highlights the potential to maximise effective evaluation and increase the number of evaluation advocates. By developing accepted and appropriate processes and tools for evaluating NRM programs, sound evaluation practices can be expanded into disciplines where the benefits of evaluation have not been recognised. Because of collaboration with all stakeholders, the program has been enhanced by unexpected outcomes that will see the program have an ongoing positive impact on NRM.

References

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