About the evaluation framework

Key information in this section

- What is evaluation?
- What's in the evaluation framework and how should CMAs apply it?
- Principles to guide sound evaluation

What is evaluation?

Evaluation is a systematic and objective review of the appropriateness, efficiency and/or effectiveness of a program (Department of Finance 1994). The results of an evaluation are used to adaptively manage programs either by improving them or adopting evaluation findings from other programs.

The terms 'evaluation', 'program evaluation' and 'performance evaluation' are all used to describe the process of monitoring, evaluation and reporting (MER).

Monitoring and reporting, when applied to the management of natural resources, support evaluation by providing the information needed to undertake evaluations and sharing the evaluation findings so that improved practices and outcomes can be achieved. For NSW Catchment Management Authorities (CMAs), monitoring, evaluation and reporting processes are concerned with collecting, recording, analysing and using information to adaptively manage investment strategies and ensure that progress towards catchment targets is being achieved.

By treating the evaluation process as a systematic and transparent learning process, the individual interacting components may be considered in the following ways:

Evaluation attempts to explain why a particular outcome has occurred, how well a program or activity was undertaken, whether it was a good thing to do, and what should be done in the future in light of the evaluation findings. Evaluation requires a questioning attitude for it to lead to continual improvement. The complexity and stage of the program or activity will determine the type of evaluation. For example, an evaluation that considers whether a program's outcomes have been achieved will occur towards the end of a program as well as at the mid-term if it is a long program.

Monitoring addresses the evaluation questions and describes what is occurring over the monitoring period. The information gathered may be a mix of qualitative and quantitative, generated from formal or informal collection processes. Examples of formal processes include specifically designed natural resource monitoring programs or designed survey questionnaires. Informal processes include general observations about process, interactions or information gathered through informal project team discussions or discussion with a landholder. Information gathered from informal processes needs to be tested to determine if it is suitable as evaluation evidence.

Reporting is the communication of the results and findings and facilitation of their use. Good reporting is essential to demonstrate accountability and inform adaptive management that improves methods of program delivery and the achievement of outcomes.

What is the evaluation 'framework' for NSW CMAs?

The evaluation framework for CMA natural resource management provides guidance and practical resources to assist CMAs fulfil their evaluation responsibilities. It will be referred to throughout as the '*framework*'.

The framework will help CMAs develop their evaluation systems to achieve the targets under their Catchment Action Plans (CAPs) and adaptively manage their investments. Applying the framework will enable CMAs to meet their evaluation obligations to both NSW and the Commonwealth.

The framework allows appraisal of complex natural resource management (NRM) programs using different sources of information. It is easily adapted to meet various evaluation requirements. The framework is strategic in approach to ensure the efficient use of information and puts forward a process that provides for repeatable and transparent evaluations.

The evaluation framework map (www.environment.nsw.gov.au/4cmas/evalframeworkmap.htm) illustrates the components of the evaluation framework. While presented as a sequence, the process of undertaking an evaluation is iterative as information gathered during later steps may require a revisit to earlier steps.

See also the checklist for the whole evaluation cycle (www.environment.nsw.gov.au/resources/4cmas/08644evalchecklist.pdf) which can be used in conjunction with the more explanatory information and examples presented in the following other sections of the framework:

Evaluation context (www.environment.nsw.gov.au/resources/4cmas/0945evalcontext.pdf)

Evaluation design (www.environment.nsw.gov.au/resources/4cmas/0946evaldesign.pdf)

Developing and sharing information (www.environment.nsw.gov.au/resources/4cmas/0947devshareinfo.pdf)

The evaluation tools (www.environment.nsw.gov.au/4cmas/evaltools.htm) include a number of templates for use in real-life evaluations and several practical examples of framework applications (www.environment.nsw.gov.au/4cmas/evalexamples.htm) at different scales are also provided.

Other background information provided:

- Glossary of evaluation terms (www.environment.nsw.gov.au/4cmas/evalglossary.htm)
- Further reading (www.environment.nsw.gov.au/4cmas/evalreading.htm)
- Establishing an evaluation panel (www.environment.nsw.gov.au/4cmas/tipsevalpanel.htm)
- Writing effective evaluation reports (www.environment.nsw.gov.au/4cmas/tipsevalreports.htm).

Why an evaluation framework?

In 2005 the chairs of NSW CMAs agreed on the need for a common evaluation framework to help them meet their evaluation and reporting responsibilities.

The aim of the framework would be to provide guidance and tools that CMAs could use to develop specific evaluation plans for their CAPs. Ongoing implementation of the evaluation plans by CMAs would meet several objectives. It would enable CMAs to meet their evaluation obligations, including legislative responsibilities, at both national and state levels. Importantly, it would also enable each CMA to adaptively manage its CAP to:

- **improve and strengthen design** of new or revised implementation activities using lessons learnt from evaluation
- **improve implementation** to enhance the efficiency and effectiveness of new or revised implementation activities, again from lessons learnt

- **report change resulting from implementation** and so demonstrate returns for natural resource management investment
- **demonstrate the benefits of sustainable resource management**, thereby promoting current best practice.

It would be difficult for a CMA to meet its responsibilities without revising internal processes where necessary to adaptively manage the implementation of its CAP.

The evaluation framework provides processes to guide the three types of evaluation (appropriateness, efficiency and effectiveness). These processes have been developed collaboratively by CMAs, the Commonwealth Government, the Natural Resources Commission (NRC) and other relevant resource management agencies.

'Evaluation context' (www.environment.nsw.gov.au/resources/4cmas/0945evalcontext.pdf) provides an introduction to defining the type of evaluation to use.

Principles of evaluation

Evaluation processes require the collection, analysis, use and communication of a wide range of information from many sources. Adhering to a set of principles can guide these processes, particularly when dealing with complex evaluations. The following principles (not in any order of priority) form the basis of the framework and can also be applied when developing and implementing evaluation systems:

Principle 1: Link the performance information to other planning scales

There is a hierarchy of links between sub-catchment, catchment and state resource planning scales. Indicators are selected and measured to ensure that they satisfy the requirements of the scales against which they are primarily evaluated. Ideally, the information provided by these indicators is able to be aggregated or disaggregated and used at other scales of evaluation. It is important, however, to ensure that the data is technically relevant for use at these other scales. For example, it may not be possible to directly aggregate or disaggregate the data itself, but the information or knowledge gained from the evaluation may be applied at other scales. This principle is relevant to the other principles of consolidation of complementary systems (2), cost-effectiveness (3) and technical validity (4).

Figure 1 provides an example of the potential for aggregating information across scales.

Principle 2: Complement and consolidate relevant existing systems

An evaluation system should, where feasible, integrate and complement relevant existing evaluation requirements. This ensures a consistent approach that not only helps build capacity but also enables more efficient use of evaluation information. This principle does not deny the importance of considering the appropriate method of evaluation on a case-by-case basis. In addition, the evaluation system should complement other systems already in place within an organisation, e.g. project management and information management.

Principle 3: Be cost-effective

The benefits of the information obtained from the monitoring and evaluation system must outweigh the costs of developing and implementing the system. Existing monitoring programs, for example, should be reviewed and, where relevant, incorporated to reduce duplication and increase cost-effectiveness. The principle can also be applied to reporting processes which can be aligned to meet different stakeholder needs.

Principle 4: Ensure the evaluation system is relevant to the CAP targets

Evaluation design and, in particular, the selection of performance measures must be relevant to the targets of the plan and the type of evaluation to be undertaken. If the design is not relevant, it will be difficult for a CMA to make judgements on the performance of the CAP.

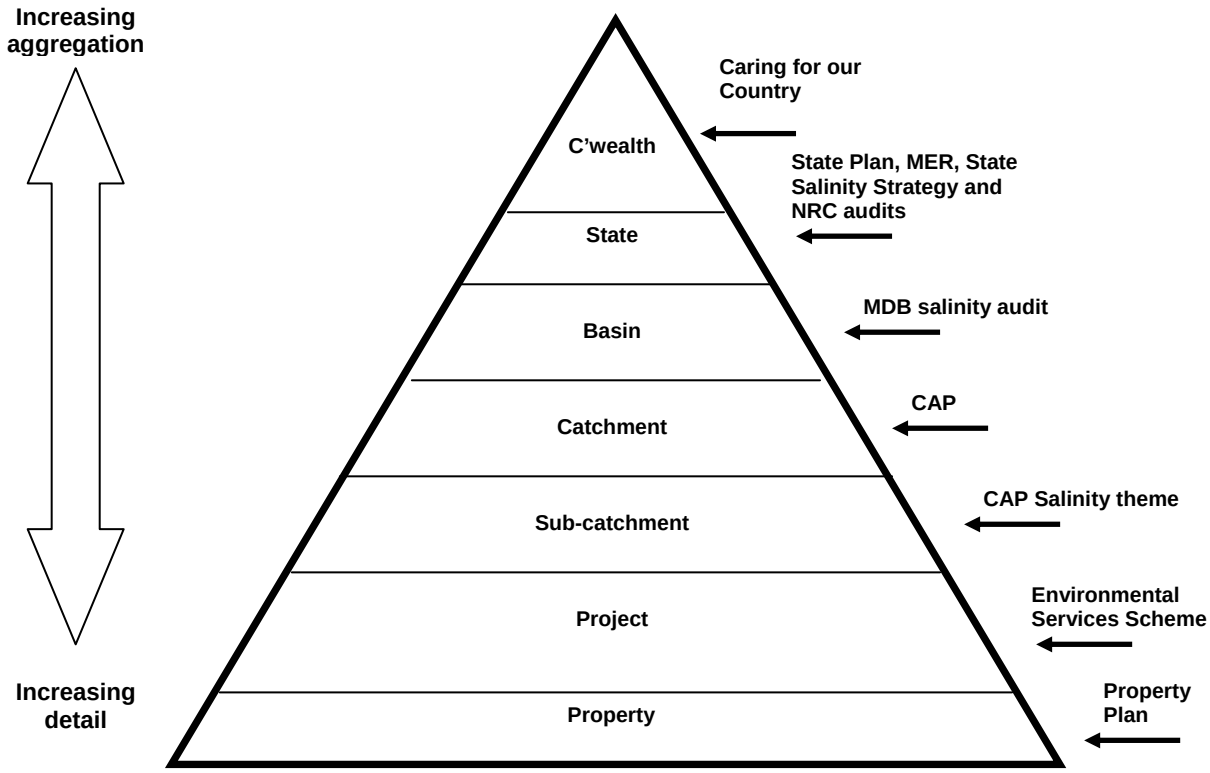

Figure 1: Potential aggregation of information

Principle 5: Apply ethical practices to evaluation

Ethics is about right and wrong. In the context of evaluation, ethics covers issues such as informed consent, appropriate behaviour, and storage and retrieval of study data. Ethical issues should be considered at the beginning of an evaluation and throughout all its phases, no matter what role is being played: commissioning the evaluation, undertaking it, or participating in it.

The Australasian Evaluation Society (2002) has prepared guidelines (see www.aes.asn.au) for the ethical conduct of evaluations covering:

- commissioning and preparing for an evaluation
- conducting an evaluation
- reporting evaluation findings.

Ethical conduct covers the ways in which information from surveys or interviews should be used. Patton (2003) suggests the following common ethical principles:

- explanation of the purpose of the study should use appropriate language and include precise detail of the work and the outcome expected
- commitments made to participants should be taken seriously and honoured
- planning should consider risks to people, such as psychological stress, legal liability and community repercussions, and how to deal with them if they arise
- confidentiality and anonymity should be considered and defined, in particular who will own the data, where it will be stored and how long it will be kept

- it should be decided who will provide advice on ethical issues to staff undertaking if it is needed.

Equality of opportunity for access to resource management investment within a catchment community also needs to be maintained.

The presentation of evaluation findings should not only be balanced to ensure validity and acceptance, but also take into account any arrangements for post-evaluation use of the data sourced from collaborators or participants.

Principle 6: Make evaluations manageable

The complexity of natural resource management (NRM) issues, CAPs and their targets, and the practical constraints of the operational environment can make developing and implementing an evaluation system seem overwhelming. It is therefore important to ensure that CAP evaluations are manageable by:

- starting with a good overall understanding of the logic or intent of the CAP
- using or disregarding the framework tools as necessary and adapting them to needs
- breaking large tasks down into their smaller parts
- keeping watch on practical issues such as budget, workload, funding, etc. and implementing or adjusting practices where necessary
- keeping the evaluation plan for the whole CAP evaluation focused on higher level needs
- developing more detailed evaluation plans that incorporate project planning for the component parts of the evaluation system
- using a team approach to evaluations and, where possible, allowing individual staff or groups of staff to take responsibility for parts of the evaluation requirements
- keeping everyone informed and ensuring no surprises when an evaluation report is delivered
- seeking expert advice or assistance where needed
- using available information, standards and methods
- focusing on the most critical information pathways to address the evaluation questions and not being distracted by information that, while relevant to someone else, may not be relevant to the evaluation at hand.

Principle 7: Ensure indicators are flexible

NRM is an evolving discipline and is based on current best practice. Issues that need to be addressed to ensure appropriate management of natural resources will change over time and it will be likely that some of the indicators chosen for long-term projects may also change.

Principle 8: Develop evaluation in partnership

Partnership approaches will greatly benefit in building capacity and managing expectations of evaluation. In addition, the sources of data to meet the evaluation needs are likely to come from a variety of collaborators. As evaluation and the CAP are both long-term projects, it is essential that the partnerships are also seen as long-term. Direct links will need to be developed with NSW Government agencies as well as broader links to the community, community groups, universities and others.

Principle 9: Use practical and objective verification

An evaluation system must be based on sound information and processes so that there is confidence in its findings, it is practical to apply, and its approach transparent.

Principle 10: Link evaluation to the adaptive management cycle

Evaluation systems are primarily implemented to provide feedback on NRM. They should be used as part of a continuous improvement or adaptive management process and focus on the use of information from the evaluation, not just the collection of the information. 'Developing and sharing information' (www.environment.nsw.gov.au/resources/4cmas/0947devshareinfo.pdf) has more on adaptive management.

Principle 11: Be consistent with the State-wide Standard

CMAs are required to apply the elements of the State-wide Standard for quality NRM in all aspects of their business, including evaluation processes. Some elements may be more relevant to evaluations than others, but following the elements of the standard will contribute to sound project management and NRM practices.

The State-wide Standard recommended by the Natural Resources Commission (NRC 2005) can be accessed from the Natural Resource Commission's website (www.nrc.nsw.gov.au). Table 1 lists those elements within the standard that, as a minimum, need to be considered when applying the framework.

Table 1: Elements of the State-wide Standard

Standard's required outcome	Framework's information or tools
Collection and use of knowledge: Use of the best available knowledge to inform decisions in a structured and transparent manner	Conceptual models Evaluation design Multiple lines and levels of evidence Information collection Information management Reporting and using findings
Determination of scale: Management of natural resource issues at the optimal spatial, temporal and institutional scales to maximise effective contribution to broader goals, deliver integrated outcomes and prevent or minimise adverse consequences	Evaluation context Conceptual models Evaluation design Multiple lines and levels of evidence Information management Reporting and using findings
Opportunities for collaboration: Collaboration with other parties to maximise gains, share or minimise costs, or deliver multiple benefits explored and pursued wherever possible	Stakeholder analysis Program logic analysis Evaluation design Multiple lines and levels of evidence Analysis of information Information management Reporting and using findings
Community engagement: Implementation of strategies sufficient to meaningfully engage the participation of the community in the planning, implementation and review of NRM strategies and the achievement of identified goals or targets	Stakeholder analysis Evaluation design Multiple lines and levels of evidence Information management Reporting and using findings
Risk management: Consideration and management of all identifiable risks and impacts to maximise efficiency and effectiveness, ensure success and avoid, minimise or control adverse impacts	Evaluation context Stakeholder analysis Conceptual models Program logic analysis Evaluation design Multiple lines and levels of evidence Information management Reporting and using findings

Standard's required outcome	Framework's information or tools
Monitoring and evaluation: Quantification and demonstration of progress towards goals and targets by means of regular monitoring, measuring, evaluation and reporting of organisational and project performance and the use of the results to guide improved practice	Evaluation plan All steps and tools in the framework address this outcome
Information management: Management of information in a manner that meets user needs and satisfies formal security, accountability and transparency requirements	All steps and tools in the framework address this outcome

Reviewing the framework

The framework was developed as a collaborative project by the former Department of Natural Resources and the CMAs. State and Commonwealth agencies and other key stakeholders also provided input.

Evaluation of the performance and outcomes of natural resource management investment can be complex and application of the evaluation discipline to NRM is still relatively new and being undertaken in an evolving policy environment. It is therefore envisaged that the framework will also evolve as understanding and experience increases.

It is expected that the framework will be reviewed at least at strategic milestones such as:

- every five years or following the major reviews of CAPs
- following any significant institutional or policy change.

These reviews should take an opportunity to draw on new techniques and experiences gained by CMAs from the application of evaluation.

Applying the framework

The following points should be considered when applying the framework.

- Depending on the type of evaluation, and the driver, budget and time frame for undertaking the process, some elements of the framework may not be applicable. Using the checklist for the whole evaluation cycle (www.environment.nsw.gov.au/resources/4cmas/08644evalchecklist.pdf) as a guide allows reference to the relevant sections of the framework for additional information and assistance.
- The framework has been written to address the needs of a CAP but could also be applied to projects, programs and themes. The resourcing of any evaluation process needs to be 'fit-for-purpose', depending on the drivers, risk, budget and time frame.
- While the framework has been developed as a logical step-by-step approach, it should also be viewed as an iterative process: that is, as information is gathered to address some steps, previous steps may need to be updated. The person commissioning an evaluation, for example, may have originally requested a review of whether a program is achieving its objectives. However, after completing the evaluation context steps, it may be apparent that a different type of evaluation is required.

- The application of program evaluation is reasonably new to NRM. This framework has therefore been prepared as a guide and will be reviewed and updated at strategic milestones outlined in the framework. The updates will incorporate new knowledge and experience in applying evaluation to NRM.

Developing evaluation capacity through a participatory approach

Adopting a participatory approach will increase the capacity of those undertaking an evaluation or potentially affected by it, and also help manage expectations about the evaluation and increase the uptake of any resulting recommendations.

In the context of the framework, the creation of a participatory environment is not just about involving the community, local government or state agencies during the gathering of information; it is also about ensuring that the staff or organisation associated with managing or delivering the program has ownership of the process too.

Further, participation by partners in an evaluation should not just involve them at the point of gathering information, but at every stage of the process. This might include:

- scoping for the evaluation, including understanding of the project or NRM issues
- evaluation design
- information needs, monitoring and data management
- evaluation of findings against evaluation questions
- reporting or communicating evaluation findings and negotiating any program changes.

The evaluation process should recognise that different partners can provide insights into the evaluation and the information required to support it. These insights will lead to greater common understanding of the program objectives, why investment strategies are being delivered in particular ways, and why particular programs or projects may need to change. This in turn can increase the partners' commitment when working towards targets.

One of the aims of increasing the capacity for evaluation is to also reduce some of the 'myth' or uncertainty around the process. This can increase a partner's willingness and ability to contribute to evaluations as well as critically evaluate their own contribution (both direct and indirect).

Some things to consider when developing a participatory approach to evaluation include:

- How much participation is relevant for each partner? This will depend on the role of the partner in the program and the reason for involving them.
- Do not force partners to participate as a single group if it diminishes what is trying to be achieved or the motivation for each group to participate.
- Ensure that participation is worthwhile for the partners – often partners will become and remain involved if they see some benefit from the investment of their time and resources.
- Ensure that the participation is relevant to the evaluation.

The following questions should be considered when looking to engage partners in the evaluation process:

- When is participation important for evaluation and who are the most relevant partners to involve at each of the stages?
- Who is going to use the evaluation findings and for what purpose, e.g. accountability, program improvement or high-level decision-making?

- Will the analysis of information against evaluation questions require specialist skills or a broad range of skills?
- Are the roles and responsibilities for evaluation clear or is a partner's help needed in defining those roles?
- Will there be a requirement for capacity building with partners in advance of, or during, the evaluation process?

Long-term programs, such as CAPs, require a long-term commitment from partners for many different facets of their implementation, including evaluation. Factors that may influence a sustained involvement include:

- perceived benefits
- relevance to the priorities of the partners
- quick and relevant feedback to participants
- capacity of the program to act on issues or recommendations that arise from the partners
- capabilities, leadership and maturity of the group
- willingness of groups to be open or acknowledge ethical issues as part of a two-way process of trust.

It is important for any evaluation system and its application to remain flexible to deal with some of the above issues.

It may be that not all aspects of an evaluation system will require a participatory approach from a CMA's partners. However, by giving thought to the questions and the issues outlined above, participatory and non-participatory elements can be blended and complementary within an evaluation system.

The best time to consider the questions and issues above is when developing an evaluation plan, which is discussed in 'Evaluation design' (www.environment.nsw.gov.au/resources/4cmas/0946evaldesign.pdf). It is important, though, to regularly review this element during a longer-term evaluation process, such as the evaluation plan for the overall CAP.

References

Australasian Evaluation Society 2002, *Guidelines for the ethical conduct of evaluations*, Australasian Evaluation Society Inc., Lyneham, ACT, available at www.aes.asn.au.

Department of Finance 1994, *Doing evaluations: A practical guide*, Commonwealth of Australia, Canberra.

NRC 2005, *Recommendations: State-wide standard and targets*, Natural Resources Commission, Sydney, available at www.nrc.nsw.gov.au.

Patton, MQ 2003, 'Qualitative evaluation checklist', *Evaluation Checklists Project*, University of Western Michigan, available at www.wmich.edu/evalctr/checklists/qec.pdf.