Design for efficiency evaluations

Efficiency evaluations are concerned with the processes by which a plan is delivered to produce outputs. In theory, they are concerned with comparing the inputs with the outputs and determining how best to maximise outputs for the resources allocated. However, efficiency evaluations for NRM need to also consider whether programs are being implemented using the best available methods in areas where the most progress toward desired outcomes is likely and with an understanding of contextual needs.

Efficiency evaluations rely on descriptions and judgements during the life of the project. The information required for efficiency evaluations is generated by the project information. Therefore, this type of evaluation may consider what systems are in place for activities to be implemented, the application of best practice, or allocated expenditure versus actual expenditure.

Efficiency evaluations are an important tool allowing CMAs to manage the delivery of strategies under their CAPs in order to achieve desired outcomes. This is because these evaluations provide ‘leading’ information during the life of a program rather than after completion when it is too late to influence the desired outcomes.

Many CMAs already employ strategies for undertaking efficiency evaluations. Southern Rivers CMA, for example, undertakes an annual review of the delivery of its CAP. In most other CMAs, monitoring and evaluation officers provide input to the monitoring requirements for incentive projects.

Example: An efficiency evaluation by Hunter–Central Rivers CMA
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 increased surveillance.

Design considerations

Even though CMAs have to provide accountability reports, they are not specifically required to undertake an efficiency evaluation as part of this process. Therefore, apart from NRC audits, most efficiency evaluations are internally driven. As part of the strategic use of CMA resources, monitoring and evaluation officers are encouraged to use program logic to identify significant projects or programs for efficiency evaluations. These should be chosen because they are:

- critical to the achievement of management and catchment targets
- of high investment value
- perceived as a higher risk investment because they are innovative or use new best practice.

If designed appropriately, evaluation information can also be used not only for the specific program or project that was evaluated but to inform the effectiveness evaluation for a CAP.
Example: Western CMA incentives program

The Western CMA incentives program is the delivery mechanism for investment in on-ground works for natural resource management. The desired outcomes from the delivery of this program have clear linkages to all management and catchment targets in the CAP. The incentives program team has reviewed and made changes to the program in the past. The more formal evaluation of the incentives program with the monitoring and evaluation officer, project manager, operations managers and investment managers was designed with multiple purposes. Firstly, it provides training on monitoring and evaluation within the CMA. Secondly, it provides an opportunity for the significant changes adopted by the program to add benefit to the program delivery. Finally, the information from this evaluation is able to inform the anticipated mid-term evaluation of CAP performance.

<table>
<thead>
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The table below provides a summary of the design considerations for an efficiency evaluation. These considerations are applicable to both a project and program evaluation.

The evaluation questions are examples only as more specific questions are likely to be identified against an individual program or project.
### Design considerations for efficiency evaluations

<table>
<thead>
<tr>
<th>Typical efficiency questions</th>
<th>Examples of comparisons</th>
<th>Potential monitoring methods</th>
<th>CAP example</th>
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<tbody>
<tr>
<td>Is the program achieving the planned outputs?</td>
<td>Extent of actual outputs against planned outputs</td>
<td>Analysis of routine project information of resources, processes and outputs</td>
<td>The CMA investment group is preparing to undertake its annual review of major programs. In preparation for this, it has collected information on planned versus actual resources, processes and outputs. This information is also used to report to the Commonwealth Government. Spatial information from the investment database illustrates where investment has occurred and has also enabled the group to calculate most of its outputs. The group also has a copy of the last NRC audit against the state-wide standard in case it provides supporting information on process. As part of its annual review, a major program is identified each year and simple case studies comparing the delivery of projects within the program undertaken. These case studies are designed so the group can also add to the effectiveness evaluations planned by the CMA.</td>
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<tr>
<td>Are the program’s resources being used to achieve outputs of the desired quantity and quality?</td>
<td>Expenditure compared with allocations</td>
<td>Audits against standards</td>
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<tr>
<td>Could the use of the resources be improved?</td>
<td>Community accessing the program versus those most in need of the program</td>
<td>Benchmarking against other like programs</td>
<td></td>
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<tr>
<td>Is the implementation proving feasible?</td>
<td>Areas of actual investment versus priority areas</td>
<td>Case studies</td>
<td></td>
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<tr>
<td>Is the program adequately resourced to enable the achievement of desired outcomes?</td>
<td>Current costs of outputs compared with planned costs from original feasibility studies</td>
<td>SWOT (strengths, weaknesses, opportunities and threats) analysis</td>
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<tr>
<td></td>
<td>Program implementation compared with standards or known best practice</td>
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<td></td>
<td>Actual implementation compared with desired implementation</td>
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Information management

Information management is a broad term which covers all the tools, systems and processes used to collect, record, store and access information. Information management considerations for evaluation design should be based on the information needs already identified.

Storage and retrieval of qualitative or project-based information

Numerous reports into the evaluation process point out that most time allocated to an evaluation is spent trying to find relevant information rather than analysing it against the evaluation questions. The evaluation process will be greatly streamlined if a CMA can efficiently record its qualitative information or search for past catchment studies or relevant information.

Some CMAs, such as Hunter–Central Rivers, are currently recording their catchment reports in a local database.

Example: Border Rivers–Gwydir CMA’s resource library

Information and equipment is being managed by the Border Rivers–Gwydir CMA through a system called Equipment and Resources Library (EARL).

EARL provides a range of services for CMA staff, the catchment community and others involved in resource management. A number of component sections will allow the CMA to manage access to information and equipment by various groups. Some of the services include:

- a central and complete record of all equipment, documents and other resources held by the CMA
- a lending service where the catchment community and others can borrow resources, such as books and equipment, that can assist in on-ground works
- an internal assets register to allow the CMA to track and manage resources.

Electronically held information will be downloadable from the CMA’s internet site.

To access EARL, registration and a password is required. A link to the site from the CMA’s website will be available but the site can be accessed (and registration and password organised) by going to www.cmaextra.net.

Many CMAs are now adopting the use of a land management database. This is a spatial recording and reporting tool developed by the Department of Environment and Climate Change. The system enables:

- accurate spatial recording of funded works, including extent of works
- detail of activities undertaken for the investment
- linkage to the funding sources, and management and catchment targets
- project monitoring and output reporting.

The database also has the capacity to link products from an investment, such as project reports, methods and photo-points, so that all information on a project is more easily retrievable.

Natural Resources Information Management Strategy

It is likely that some of the outputs generated by CMAs could be served to NRM databases held by different agencies. Information storage and retrieval procedures for NRM agencies
are specified in the Draft Natural Resources Information Management Strategy (NSW Government 2002; available at www.nrims.nsw.gov.au). The information management practices for natural resource management agencies within NSW must be consistent with NRIMS. The strategy identifies the coordination, communication, quality, data management and access requirements for natural resource information and is consistent with national standards and practices. All CMAs will need to consider these requirements when they wish to serve information to an agency database. At the same time, custodianship of spatial data and brokerage arrangements are continually being updated. As a result, reference should be made to DECC’s Director of Information Science for the latest requirements and procedures.

Example: Southern Rivers CMA review of implementation activities

The principles of evaluation 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.

Financial and milestone reporting

CMAs are required to complete financial and milestone reporting biannually. These reports relate to funds for each funded activity and include:

- funds spent during the reporting period
- anticipated expenditure (contingent liabilities) over the next reporting period
- additional funds required for disbursement from the Joint Steering Committee’s holding account to the CMA to cover contractual obligations over the following six months
- which milestones were achieved and in which quarter
- which milestones were not achieved
- any changes to milestones and delivery dates approved by the NSW and Commonwealth governments.

A shell of each report (in the form of Excel spreadsheets pre-formatted and populated with financial or milestone details) is provided to each CMA shortly before the end of the reporting period. The report is organised by activity.