



Audit Report  
Sydney Metropolitan  
Catchment Action Plan  
Implementation

September 2012

## Enquiries

Enquiries about this report should be directed to:

Name	Lauren Tapp
Phone	(02) 8227 4300
Fax	(02) 8227 4399
Email	Lauren.Tapp@nrc.nsw.gov.au
Postal address	GPO Box 4206, Sydney NSW 2001

## List of Acronyms

CAP	Catchment Action Plan
CMA	Catchment Management Authority
MERI	Monitoring, Evaluation, Reporting and Improvement
NRC	Natural Resources Commission
NRM	Natural Resource Management
NSW	New South Wales

This work is copyright. *The Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, table or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

Document No. D12/1867  
ISBN: 978 1 921050 75 6

## Table of contents

<b>Executive Summary</b>	<b>i</b>
Response from the CMA	i
<b>1 Introduction</b>	<b>1</b>
1.1 Background	1
1.2 Focus of the audit	1
<b>2 Summary of audit findings</b>	<b>2</b>
2.1 Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?	2
2.2 Are the CMA's vegetation projects contributing to improved landscape function?	3
2.3 Is the CMA actively engaging its communities?	5
2.4 Is the CMA effectively using adaptive management?	7
<b>3 Detailed findings, recommended actions and CMA response</b>	<b>9</b>
<b>Attachment 1 - Audit response table</b>	<b>25</b>
<b>Attachment 2 - About the audit</b>	<b>33</b>
<b>Attachment 3 - About the CMA</b>	<b>35</b>

## Executive Summary

In 2009 the Natural Resource Commission (NRC) audited the effectiveness of Catchment Action Plan (CAP) implementation by the Sydney Metropolitan Catchment Management Authority (CMA). The audit found a number of limitations to effective CAP implementation and recommended the CMA focus on:

- prioritisation of CAP targets for robust investment planning and decision-making
- improving the measurability of CAP targets
- improving the monitoring, evaluation and reporting (MER) of CAP target achievement
- implementing organisation-wide adaptive management to enable continual improvement.

This audit report seeks to provide the NSW Government with an understanding of progress in the effectiveness of the CMA's CAP implementation since 2009 and to guide the Board in continuous improvement.

Sydney Metropolitan CMA operates in a complex, highly urbanised environment and faces unique challenges: multi-institutional resource management interests (including 39 local government areas); intensive urban, industrial, transport and recreational land use pressures; the demands of four million residents and millions of visitors; and national and international scrutiny. Within this context CMA staff continue to demonstrate motivation, energy and skills to deliver projects.

Since the audit in 2009, the CMA has demonstrated limited improvement in the effective implementation of their CAP. While some progress has been made in addressing the priority areas identified in 2009, significant limitations remain.

The CMA is engaging well with local councils, is successfully delivering projects and is achieving short-term outputs in line with its CAP. However, it is unclear how these contribute to long-term outcomes and resource condition change. This can be attributed to three key issues:

1. lack of a clearly articulated strategic direction for the catchment
  - impacts the CMA's ability to effectively prioritise investment, optimise project outcomes and align engagement activities
2. lack of a clearly articulated operational strategy for the CMA
  - impacts operational efficiency by hindering cross-theme coordination and investment, project management and risk management processes
3. lack of effective monitoring, evaluation and reporting including information management systems
  - limits the CMA's ability to report on outputs, outcomes and achievements and therefore to adaptively manage CAP implementation.

## Response from the CMA

The CMA agreed with all of the suggested actions outlined by the NRC and has identified timeframes for completion of the actions. Under its new Chair, the CMA has commenced addressing the priority suggested actions and has committed to completing the remaining actions after its CAP upgrade is prepared. Refer Attachment 1 for more detail.

# 1 Introduction

## 1.1 Background

The Natural Resources Commission (NRC) has a statutory role to audit whether the state's 13 Catchment Action Plans (CAPs) are being implemented effectively to comply with the *Standard for Quality Natural Resource Management* (the Standard) and help achieve state-wide targets for natural resource management.

In 2008 and 2009, the NRC completed the first round of CAP audits. The audits focussed on opportunities for improvement in Catchment Management Authorities' (CMAs') capabilities and business systems that would deliver on-ground results likely to lead to improved local resource conditions and engage their communities.

Nine CMAs demonstrated a very high or high level of effectiveness in implementing their CAP, and four demonstrated a fair level of effectiveness. The NRC decided to conduct second audits of the latter four CMAs to understand how CAP implementation has progressed. Sydney Metropolitan CMA was audited in 2009 and is one of the four CMAs to be audited again.

The Sydney Metropolitan CMA's new Chair was appointed in January 2012 and the Minister has also recently appointed one new Board member and reappointed two existing Board members.

## 1.2 Focus of the audit

Although a range of government agencies have a role in implementing CAPs, the NRC focused its first round of audits on the actions of the CMAs in NSW as the lead agencies responsible for implementing CAPs.

A CMA that enacts the quality benchmarks set by the Standard has the greatest chance of achieving multiple natural resource management outcomes and making the highest possible contribution towards the state-wide targets.

Consistent with the focus and approach of all other CMA CAPs in this round of audits, the NRC examined four lines of inquiry to measure the CMA's performance:

- Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?
- Are the CMA's vegetation projects contributing to improved landscape function?
- Is the CMA actively engaging its communities?
- Is the CMA effectively using adaptive management?

In pursuing each line of inquiry, the audit team focused on CMA projects that use vegetation to improve landscape function as in general these have the most potential to contribute to multiple natural resource management targets across more than one biophysical theme. For the Sydney Metro audit, projects were selected that also reflected the importance of other biophysical themes, particularly water, to the CMA.

## 2 Summary of audit findings

### 2.1 Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?

The NRC's 2009 audit of the Sydney Metropolitan CAP implementation found that CMA staff had a sound understanding of resilient landscapes in the region; however, this understanding was not consistent among staff and the Board, and the CMA's knowledge base for managing resilience required further development. In addition, there was no transparent or systematic approach to investment prioritisation and there were gaps in data on assets and threats that informed investment prioritisation decisions. There was also a lack of documentation of systems that integrated short- and long-term investment in CMA activities at the strategic level.

Since the last audit, the CMA has made limited progress towards addressing the recommendations made in 2009. The CMA has a system to rank investment options that is consistently implemented; however, this system is not transparent. For example, the logic underpinning the investment prioritisation process is not clearly documented or consistently explained.

The weaknesses in the CMA's investment prioritisation system continue to impact on the CMA's ability to effectively prioritise its investment to promote resilient landscapes. As a result, the CMA is not able to ensure that short-term project outputs are likely to contribute to changes in long-term resource condition.

While the CMA has undertaken important work to improve its understanding of social-ecological systems as it develops the upgraded CAP, there is still disagreement among the Board and staff as to the impact of particular threats on landscape function and which threats pose the most significant risk<sup>1</sup>. The lack of a consistently articulated definition of the systems operating in the catchment undermines agreement between the Board and staff on options for action and the development of targets.

The prioritisation system does not incorporate the best available information. While the CMA has made efforts to develop new knowledge,<sup>2</sup> this knowledge is not yet being effectively integrated into the CAP upgrade process or into investment prioritisation.

Additionally, the prioritisation system does not promote or track multiple CAP target achievements. The investment prioritisation criteria do not include an assessment of a project's ability to contribute to multiple targets, and information management and reporting systems do not consistently track against multiple targets.

The division of responsibility for operational review and approval of investment prioritisation is not robust, due to siloing within the organisational structure and ineffective approval process design. The Board has limited visibility of the prioritisation process (the various investment

---

<sup>1</sup> The CMA has held and participated in a series of workshops with other CMAs and stakeholders to further its understanding of landscapes in the catchment. While work has been done around the identification of key assets in the region, and their diversity, value and interactions characterising landscape function, this was not yet complete.

<sup>2</sup> A number of knowledge improvement projects have commenced since the last audit, for example, the draft Sydney Metro CMA Biodiversity Corridor Prioritisation, Rapid Fauna Habitat assessment and the drafting of the Sydney Metro CMA Priority Action Statement (PAS), which discusses species, communities, populations and key threats in the region.

options considered and the rationale for the options recommended) to inform its review of investment plans.

The CMA has elements of a system that could accommodate change and help it adaptively manage towards long-term targets but this is not well coordinated and not implemented consistently. The CMA shows limited preparedness to overcome constraints (funding, resources, institutional directives, etc.) and capitalise on the unique opportunities presented by the Sydney Metro catchment. This is evident in their focus on short-term outputs rather than long-term goals.

The NRC recommends that the CMA:

1. Further develop its understanding of the unique social-ecological systems operating in the urbanised catchment, develop strategies to improve landscape function and describe these in the revised CAP.
2. Review and streamline the investment prioritisation criteria to ensure that investment contributes to the achievement of multiple CAP targets and delivers improved long-term landscape function.
3. Review the prioritisation system to ensure that it:
  - i. is transparent, understood by all Board members and staff and informs organisation-wide decision-making
  - ii. considers alternative options for investment at the landscape scale to achieve long-term outcomes and clearly documents these options for review and approval
  - iii. incorporates projects that promote long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes
  - iv. is documented and implemented consistently across the organisation.
4. As part of the CAP upgrade, refine targets and actions so they deliver improved long-term landscape function, are logically nested and able to be measured and reported on.
5. Build appropriate internal feedback loops and controls into the prioritisation system to enable the CMA to accommodate change and adaptively manage towards long-term goals.
6. Develop a strategic plan that articulates the CMA's role, its organisational priorities and how it intends to effectively implement its CAP.

## 2.2 Are the CMA's vegetation projects contributing to improved landscape function?

In 2009, the NRC found that the CMA had well documented long-term project outcomes that clearly linked to the NRM Standard and CAP targets. Short and long-term goals and actions to realise these goals were commonly understood by operational staff but not by the Board. Although projects were found to be contributing to improved resource condition across multiple targets, there were system limitations in reporting on outputs across multiple projects. Not all project benefits were documented, but monetary and in-kind contributions appeared to be tracked. Systems for monitoring, evaluation and reporting on project outputs were also not present but at the time of the 2009 audit the CMA did not have an MER Officer and was seeking to fill this role.

In the 2012 audit the NRC found that the CMA's projects have mostly successfully achieved short-term improvements, both in natural resource outcomes and the capacity of natural resources managers. The CMA was able to deliver project outputs that contributed to the achievement of CAP targets. This was primarily due to the dedication and experience of project staff.

In 2012, as in 2009, the CMA demonstrated a common understanding of the relationship between short and long-term goals and has documented its projects' expected long-term outcomes for all contracts reviewed.

However, a number of risks to the achievement of long-term outcomes were observed. The demonstrated understanding of realistic options for action (where and what for maximum impact) varied between projects. This appears to be linked to the weaknesses identified in the investment prioritisation process (outlined in 2.1 above). The CMA's short-term focus is impacting both project design and project selection.

The understanding of risk management varies between projects. The use of risk management systems, including the CMA standard Project Risk Assessment Template (RAT), is weak. Risks to the achievement of long-term outcomes are not being effectively managed in all cases.

Projects with multiple outputs do not prioritise the various outputs. This makes it difficult for project managers to understand the impact of changes to the effective delivery of outputs and long-term outcomes, and to adjust to changing circumstances.

While the CMA has sought opportunities to add value to projects, for example by linking contracts to larger landscape scale projects, some important opportunities had been missed. The CMA had developed some long-term collaborative project partnerships and improved the appreciation of natural resource values in its region, but in a number of instances had not managed to link projects with surrounding land managers or with community initiatives.

Inconsistency in stakeholder alignment and engagement, plus a lack of post-implementation follow-up, has limited the added value that the CMA's projects can deliver, especially in the long-term. This undermines the CMA's stated strategic focus on a 'partnership approach' to project delivery.

CMA contracts did identify the CMA's understanding of appropriate sharing of costs. The CMA has attracted some additional resources and encouraged stakeholders and land managers to make ongoing in-kind contributions, to promote stewardship and long-term commitment to the success of the project over time.

However, the CMA has not clearly maximised the efficient use of its investments, and has achieved modest average leveraging of investment funds across the three years from 2008-09 to 2010-11<sup>3</sup>. In three of the contracts reviewed, the contracts seemed to have low return on investment; either because the works were non-strategic maintenance work and therefore unlikely to achieve long-term resource condition change, or the works were subject to unmanaged risks, such as storm-water damage or loss of stakeholder engagement.

---

<sup>3</sup> Investment funds leverage calculated as: additional investment provided by partners divided by the sum of category two and three CMA funding for the financial year (figures provided by the CMA). Leverage achieved as follows: 2008-09 = 54%, 2009-10 = 79%, 2010-11 = 17%. Three year average = 50%.



Additionally, the CMA does not appear to be implementing a targeted leveraging ratio at the project scale.

The CMA continues to produce limited reporting on project outputs and outcomes and is not accurately documenting or tracking all project benefits. MER systems that support project delivery have not improved since 2009, although the recent appointment of an MER officer provides the opportunity to make improvements and prioritise this aspect of their business.

The NRC recommends that the CMA:

7. Review its risk management planning and reporting protocols and ensure they are suited to effectively managing risks. Complete meaningful risk assessments, document and use them in review and approval processes, and monitor mitigation actions, especially at the project scale.
8. Implement project management processes that consistently include and document:
  - i. consideration of alternative options for action at the project scale
  - ii. prioritisation of multiple output achievement, to assist project managers to respond to changes as the project progresses
  - iii. incorporation of long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes
  - iv. a leveraging target or ratio for additional resources attracted.
9. Review and improve MER processes to:
  - i. strengthen links between on-ground works and monitoring and evaluation actions so that project outputs inform future project selection decisions and improve outcomes
  - ii. ensure contracts include post-implementation monitoring plans, enforce monitoring agreements with partners and ensure monitoring data is fed back into the MER system to inform future decisions.

## 2.3 Is the CMA actively engaging its communities?

In the 2009 audit, the NRC found that the Sydney Metropolitan CMA had identified and developed a good understanding of the key community groups and stakeholders that contribute to achieving outcomes in its catchment. This information was captured in a Community Engagement Strategy, which was in draft and had not been endorsed by the Board.

Despite having a draft strategy, the CMA demonstrated that it was implementing a range of methods to engage key community groups in its projects. However, the CMA did not demonstrate that it had analysed the capacity of these community groups to deliver NRM outcomes.

The 2009 audit also found limited evidence of the Board's active involvement in strategic planning for stakeholder engagement, and stakeholders did not appear to understand the CMA's strategic goals, although this was attributed to delays in CAP approval.

Since the 2009 audit, the Community Engagement Strategy has been endorsed by the CMA Board. This strategy identifies 11 strategic catchment-based groups as the key conduits for

community consultation and engagement. This includes several local council groups (including Georges River Combined Councils Committee, Parramatta River Catchment Group and Sydney Coastal Councils Group) identified for their alignment with the CMA's NRM objectives.

The CMA has effectively engaged with these council groups at multiple levels by adopting a number of communication tools such as newsletters, community networks and annual community forums. The ability to engage these groups is a strength of the CMA and has led to good networks and relationships. This success has been due to the efforts of the staff as a whole. However, it appears that the Community Engagement Strategy still does not guide the CMA's engagement activities, which are delivered by individual staff members without sufficient overarching coordination.

The CMA also remains unable to evaluate its own capacity-building programs and its effectiveness as an NRM facilitator. A limited ability to evaluate engagement activities also affects the CMA's ability to determine if it is engaging at the appropriate scale for its catchment. It currently focuses on local government and has adopted a Strategic Liaison Program to discuss strategic issues with state agencies. However, this program is not implemented effectively and the CMA does not appear to have reviewed its stakeholders and partners since the development of its initial CAP.

One of the critical elements of the CMA's strategy which does not appear to be functioning effectively is how it captures, analyses and responds to feedback from its stakeholders. For example, the CMA does not appear to have captured and addressed feedback from multiple stakeholders, which suggested that the CMA could reduce competition for funding by leveraging stakeholder partnerships. The CMA currently uses community surveys to capture feedback on its activities, but these are ad hoc and not used cross-program. Furthermore, the surveys do not appear to be capturing the full range of stakeholders or to be part of an evaluation strategy.

The NRC recommends that the CMA:

10. Adopt a Board-directed, coordinated approach to engagement with all levels of local government, other stakeholders and the broader community that promotes the CMA as a strategic NRM facilitator and embed this approach in its Community Engagement Strategy.
11. Review its Community Engagement Strategy to identify the most effective tools for engagement. Stakeholder mapping should be revisited as part of this process.
12. Capitalise on stakeholder relationships, including Board member and CMA networks, to improve coordination, increase opportunities for funding through better partnering and more effectively deliver NRM outcomes.
13. Embed effective mechanisms to seek feedback that is representative of all external stakeholders. Additionally, the CMA should embed mechanisms to capture, analyse and respond to this feedback and use it to improve stakeholder engagement.
14. In order to evaluate the effectiveness of its programs, the CMA should analyse organisation-wide communication and engagement activities to identify common goals and gaps, and systematically capture and share lessons learnt.
15. Develop indicators for measuring and monitoring capacity building and use these indicators to evaluate the CMA's strength and value as a catchment-wide networker and facilitator.

## 2.4 Is the CMA effectively using adaptive management?

The 2009 audit found that the CMA had not documented how adaptive management principles were applied in planning and business systems. This lack of strategic and operational documentation hindered the CMA's ability to effectively implement adaptive management. Subsequently, the CMA recognised the need for an Adaptive Management Strategy but stated that other strategic documentation which would underpin this strategy was incomplete, including a Monitoring, Evaluation and Reporting (MER) strategy.

In 2009, the CMA also had limited ability to report on its CAP targets due to a lack of coordinated monitoring and evaluation. Inadequate information management systems limited the CMA's ability to report on and implement adaptive management. Systems did not support the interpretation of project data and could not assist with tracking changes in landscape function.

Since the last audit, the CMA has made some progress in implementing adaptive management to optimise delivery of its CAP. The CMA has included a MERI framework in its CAP which aims to embed a culture of continuous improvement in the CMA. An MER strategy, which is linked to the MERI framework, was developed in 2010 but this document is still in draft. The CMA's ability to measure and report against its CAP targets has been hindered by this lack of an effective MER strategy.

Adaptive management principles continue to be missing from the CMA's planning and business systems and the Adaptive Management Strategy, raised as a priority in the previous audit, has not been instigated. The CMA is not able to evaluate its progression towards CAP targets and lacks the ability to review its activities, to subsequently improve CAP implementation. The CMA's management of investments is generally ad hoc due to a lack of a robust prioritisation system, rather than strategically delivering cost-effective projects that align with the CMA's CAP targets.

The CMA demonstrated the use of risk assessment tools in the management of some of its projects and has developed a Risk Management Strategy to deal with uncertainties. However, these tools are not being used adequately or consistently to mitigate project risks. This is leading to a lack of transparency in project delivery and in assessing value for money. Critically, key lessons from risk management cannot be readily shared.

Monitoring and evaluating CMA activities have been performed at a project level, but inconsistently, due to an incomplete MER strategy. Without integrated systems in place to assess project implementation, share learning and generate new knowledge, there is limited ability to evaluate the effectiveness of project investment. As part of the upgraded CAP development, project-specific data is now being captured at the project level and the CMA's MER Officer has begun assisting with deriving appropriate metrics as part of this process.

In addition, the CMA's information management systems are ineffective for extracting information and don't support knowledge sharing. This creates limitations in providing effective support for the CMA's operations and for reporting against CAP targets.

As a priority, the NRC recommends that the CMA:

16. Apply and integrate the 'plan, implement, audit and respond' adaptive management cycle identified in the *Standard for Quality Natural Resource Management* into all planning and business systems.
17. Finalise and implement the MER strategy and ensure monitoring, evaluation and reporting processes are incorporated into the CMA's business systems at all levels so that underlying investment assumptions can be tested and the effectiveness of investments can be improved.
18. Review information management systems and develop a strategic approach to guide improvements that will support data integration and accessibility, to better allocate scarce resources on key priorities.

### 3 Detailed findings, recommended actions and CMA response

The findings of NRC's audit, the actions recommended for the CMA and a summary of the CMA's response to the recommended actions are detailed below. The NRC expects the CMA Board to monitor the completion of these actions and advise the NRC via strategic progress letters.

#### Line of inquiry 1: Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?

**Criterion 1.1: The CMA has a commonly understood definition of what constitutes resilient landscapes in its region.**

#### Findings

- The CMA had accepted the suggested action in the previous audit report that it develop a common understanding of resilient landscapes for the catchment. This process was being undertaken in conjunction with the CAP review and is not yet complete.
- The CMA has held and participated in a series of workshops with other CMAs and stakeholders to further its understanding of resilient landscapes, for example, resilience concept and process workshops have been held with the Board, staff and Councils. Also, workshops with coastal CMAs have been attended to discuss coastal resilience.
- The outcomes of the workshops for the CMA were not conclusive and there were mixed messages from staff as to how the resilience concept could be applied in the complex, urbanised Sydney region. These difficulties are still being worked through.
- The Board has not yet agreed on the key elements of resilient landscapes in the region. While work has been done around the identification of key assets in the region and their diversity, value and interactions characterising landscape function, this is not yet complete. There is disagreement as to the impact of particular threats on landscape function and which threats pose the most significant risk.

In respect to the standard, the CMA:

- demonstrated it has collected knowledge of environmental, economic, social and cultural assets and threats to inform its understanding of landscape function (collection and use of knowledge, community engagement and determination of scale)
- could not demonstrate it has documented its understanding of characteristics of socio-ecological systems in the region, the key assets, and their diversity, value and interactions characterising landscape function, in a way that would build a common understanding (community engagement, risk management and information management).

---

#### Recommended actions

1. Further develop the understanding of the unique social-ecological systems operating in the CMA's urbanised catchment, develop strategies to improve landscape function and describe these in the revised CAP.

---

#### CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

**Criterion 1.2: The CMA has a system that ranks investment options, which incorporates the best available information and multiple CAP target achievement**

**Findings**

- Strategic alignment between the CAP and investment prioritisation is not explicit. For example, there is inconsistency between statements of purpose in various documents and there is confusion as to the content and role of key elements such as the Strategic Plan and the CAP. The resolution of these key issues was not clearly explained.
- The investment prioritisation process allocates funding to actions designed to address a wide range of threats to landscape function. The CMA intended to develop a Strategic Plan to better explain the logic underpinning the priorities, but progress on the plan is minimal.
- There are multiple investment 'criteria' that do not align, references to an 'intuitive feel', competition between 'themes' and acknowledgement that the prioritisation process is not documented. The documentation that does exist is not consistent, not clearly linked and not consistently applied by all levels of authority within the CMA.
- The CMA is undertaking work that would assist in the prioritisation process, including collection of background data, introduction of program logic and undertaking a range of studies to assist in the strategic targeting of investment. However, the Board has not been involved in strategic discussions.
- The Gating Criteria in the Project Assessment Template do not assess the project's ability to contribute to multiple targets (only single targets based on a yes/no response).
- There is evidence from internal audits that some projects have delivered towards multiple targets. However, the information management system and output reports do not appear to consistently track against multiple targets for project and contract levels.
- The CMA has recognised the importance of using the 'best available information' and has identified a range of strategies to capture and incorporate new knowledge. A number of data gathering and knowledge improvement projects have commenced since the last audit, such as the draft Sydney Metropolitan CMA Biodiversity Corridor Prioritisation, the Rapid Fauna Habitat assessment and the drafting of the Sydney Metro CMA Priority Action Statement (PAS) that discusses species, communities, populations and key threats in the region.
- However, other strategies to capture and incorporate best available knowledge into the prioritisation process are not well developed, clearly expressed or consistently implemented. New knowledge strategies are focused on capturing biophysical knowledge with less emphasis on capturing social and economic knowledge.
- The investment prioritisation system is not transparent and the Board's role in reviewing investment prioritisation is not clearly spelled out anywhere. The Board does not have a clear understanding of the prioritisation process and plays a limited role in formulating or reviewing the Investment Plan.
- It was observed that the Investment Plan has been signed off each year, but as the last few years have been relatively repetitive the Board was less engaged as priorities had been set. Board members do not see the Investment Plan prior to the Board meeting and are requested to review and approve it at the meeting. The Board have typically not made changes.
- Internal project prioritisation appears to operate like a competitive bidding process. There is

---

no clear way of assessing priorities across themes, although staff have some success in hitting multiple targets at the project scale.

- The CMA has completed program logic which led to how they selected individual contracts. It was observed that the CMA uses 18 prioritisation criteria, but prioritisation has tended to occur within themes. Also, the CMA does not have priorities across themes as yet. Each Place Manager has a series of programs but there's no co-ordination of prioritisation. It is predominantly a silo approach.
- The prioritisation process could be improved if the themes were more collaborative, for example, developing new projects through Theme and Place Managers working together.
- Staff members are doing great work at the project level but are limited by a lack of coordination. If they worked together more effectively they could achieve better landscape outcomes.

In respect to the Standard, the CMA:

- could not demonstrate it has applied its knowledge of assets, and threats and risks to actions, to prioritise investment, design programs and assess individual projects (collection and use of knowledge and determination of scale)
- could not demonstrate it has incorporated the best available knowledge to improve its prioritisation of investment (collection and use of knowledge, determination of scale, risk management and information management)
- could not demonstrate it has considered the potential of projects to contribute to multiple targets when prioritising investment (determination of scale and risk management)
- could not demonstrate it has used documentation to build a shared understanding of a transparent, consistent and repeatable system to rank its investment options (collection and use of knowledge, risk management and information management).

---

### **Recommended actions**

2. Review and streamline investment prioritisation criteria so that investment contributes to the achievement of multiple CAP targets and delivers improved long-term landscape function.
3. Review the prioritisation system to ensure that it:
  - i. is transparent, understood by all Board members and staff and informs organisation-wide decision making
  - ii. considers alternative options for investment at the landscape scale to achieve long-term outcomes, and clearly documents these options for review and approval
  - iii. incorporates projects that promote long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes
  - iv. is documented and implemented consistently across the organisation.

---

### **CMA response**

The CMA agrees with the recommended actions. Refer Attachment 1 for details.

---

**Criterion 1.3: The CMA has a system that ensures short and long-term investment priorities are consistent with each other and integrated with other planned natural resource management targets**

**Findings**

- The CMA has developed some elements of a system that could accommodate change and help it adaptively manage towards long-term targets. These elements included the Strategic Roadmap, the MERI Strategy and Program Logic. However, use of the Strategic Roadmap has been discontinued, the MER strategy is not yet operational and there is limited use of Program Logic, particularly across themes.
- Management and staff recognise the need to align short and long-term targets and take a more strategic approach. However, they describe their first priority as delivering on-ground works and maintaining project staff numbers. Consequently the focus of the CMA is on maximising delivery of short-term outputs rather than maximising achievement of long-term outcomes.
- It was noted that the gating criteria built into the project assessment template hadn't changed in a number of years.
- It was observed that management targets are very open ended. Monitoring of progress is done at a project level e.g. hectares, or numbers of community members involved.
- The information management system could not report on progress against targets and consequently progress achieved could not be used to adaptively manage toward long-term targets.

In respect to the Standard, the CMA:

- could not demonstrate that it has adapted its short-term investments to promote integrated long-term outcomes (collection and use of knowledge, determination of scale and information management)
- could not demonstrate that it is applying the best available knowledge and collaboration to promote long-term achievement of catchment targets (collection and use of knowledge, collaboration and risk management).

---

**Recommended actions**

4. As part of the CAP upgrade, refine targets and actions so they deliver improved long-term landscape function, are logically nested and are able to be measured and reported on.
5. Build appropriate internal feedback loops and controls into the prioritisation system to enable the CMA to accommodate change and adaptively manage towards long-term goals.
6. Develop a strategic plan for the CMA that articulates the CMA's role, and how it intends to effectively implement its CAP and organisational priorities.

---

**CMA response**

The CMA agrees with the recommended actions. Refer Attachment 1 for details.

---



## Line of inquiry 2: Are the CMA's vegetation projects contributing to improved landscape function?

### Criterion 2.1: The CMA has documented expected long-term project outcomes

#### Findings

- The expected long-term outcomes were identified in the files of each of the five contracts visited during the audit. All five contracts clearly identified the relationship between contract outputs (short-term goals) and CAP management targets (long-term goals).
- However, there was no specific reference to CMA targets in one of the work plans (although the stated project aims do have logical links to CAP targets). Another contract clearly outlined the expected outcomes; however, it also identified the effective operation of non-CMA assets as a key outcome of the project (which is not linked to CAP targets).
- One file identified a program logic linking on-ground activities with long-term outcomes that did not reflect those identified in the contract or the CAP.
- The use of the CMA standard Project Risk Assessment Template (RAT) seems to be incomplete. The RAT on one file showed assessment of likelihood and consequence of a set of risk events, with some identified risk management actions identified. However, it contained a number weaknesses: some risk events were identified as not applicable, but had a management action identified; some risk events were assessed as Moderate/Medium but had no management action identified; many risk events identified as Lower/Low risk had management actions identified; and some risk events that have actually occurred prior to contract completion had not been reviewed and updated.
- On one contract, CMA staff members identified the risk of unmanaged storm-water impacts to the contract outputs and expected long-term outcomes, but had not been able to manage this risk prior to commencing the contracted works.
- Staff indicated that the RAT was intended to be used to inform contract preparation only. Others indicated that the RAT was intended to be used to inform contract preparation, contract approval and project management. CMA staff members were not able to confirm that the RAT had been used since contract drafting.

In respect to the Standard, the CMA:

- demonstrated it had clearly documented expected outcomes in its CAP; however, these were not consistently expressed in all supporting plans and associated project management templates (determination of scale and risk management)
- demonstrated a common understanding of the logical relationships between project outputs, management actions and the long-term expected outcomes (determination of scale, community engagement and risk management)
- could not demonstrate that the long-term objectives of both parties were clearly documented in project contracts (risk management and information management).

#### Recommended actions

7. Review its risk management planning and reporting protocols and ensure they are suited to effectively managing risks. Complete meaningful risk assessments, document them and use them in review and approval processes, and monitor mitigation actions, especially at the project scale.

---

## CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

### Criterion 2.2: The CMA is successfully achieving project outcomes, and maximising opportunities to add further value

#### Findings

- The CMA reported achievement of contract outputs for all completed projects. CMA staff members generally considered that the contract outputs were contributing to the expected outcomes. Changes could be observed for three contracted works sites visited.
- However, at one site, it was indicated that natural resource condition at the site was worse than in the recent past, due to decline in interest from a key local stakeholder.
- The evidence for the reported achievement of contract outputs was not apparent for one contract as the works are as yet incomplete and the documentation of achievement of capacity building was not available on file.
- The planned outputs for one site may not be achieved given the lack of management of engagement and storm water risks.
- The CMA's success in steering the Kurnell 2020 and Botany Bay Water Quality Improvement projects resulted in added value to individual landholder and stakeholder projects.
- However, for one contract, while aligning the contracted works with other projects in the reach, the CMA has not sought to follow-up stakeholder proposals for upstream storm water works, despite an existing risk to the maintenance of contract outputs.
- For another contract, the CMA had sought to link the NRM outcomes of the contracted works to the partner's objectives, but had not been successful in attracting matching funds from the partner. The CMA had not linked the works directly with the works or proposals of any other landholders or stakeholders.
- The CMA has developed long-term collaborative project partnerships for its icon Kurnell 2020 and Botany Bay Water Quality Improvement projects. For these projects, CMA staff and representatives of the contracting partners demonstrated a good rapport, which would indicate a strong base for good working relationships.
- The CMA had used one contract to continue a long-term partnership with the local Aboriginal landowners but there is an emerging risk that engagement from another key project partner has reduced due to staff redistribution.
- With one contract, the CMA had not clearly used the contract to develop long-term relationships with stakeholders. The CMA had not managed to link this project with any surrounding land managers (which included the local council, the water authority, corrective services, SES and a public transport company) or with any community projects.
- The CMA had used one contract to maintain a long-term relationship with the landholder, providing support when little resources were available internally or from adjacent landholders and stakeholders. However, the CMA had not used the contract to further develop a long-term relationship with local government (the upstream 'owner' of storm water directly affecting the site). Despite involvement in stage one of the project, local government was not involved with stages two and three.

---

In respect to the Standard, the CMA:

- could not demonstrate its ability to successfully plan and implement projects that are likely to achieve outcomes that build resilience and address real landscape processes (determination of scale and community engagement)
- demonstrated development of opportunities to add greater value to the projects proposed by landholders or other stakeholders, although this could be improved (community engagement and risk management)
- demonstrated the use of strong collaborative partnerships to deliver project outputs and maximise value; however, the longevity of partnerships was variable (determination of scale, community engagement and opportunities for collaboration).

---

### Recommended actions

8. Implement project management processes that consistently include and document:
  - i. consideration of alternative options for action at the project scale
  - ii. prioritisation of multiple output achievement, to assist project managers to respond to changes as the project progresses
  - iii. incorporation of long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes
  - iv. a leveraging target or ratio for additional resources attracted.

---

### CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

## Criterion 2.3: The CMA's projects are attracting additional resources to match CMA funding

### Findings

- The CMA had managed to encourage land managers to make ongoing in-kind contributions to two of the five contracted sites visited.
- One contract successfully attracted contribution from private landholders (in terms of access and monitoring), which should improve the chances of ongoing stewardship and maintenance. Local government commitment to weed and pest animal control was evident.
- Another contract which was part of the larger Botany Bay Water Quality Improvement Project, also demonstrated success in encouraging private landholders to make an ongoing contribution. The CMA has managed to link this project with existing community projects (both temporally and physically), which is likely to promote local stewardship and long-term success.
- Staff indicated that partnerships with other agencies and stakeholders are the only way to achieve NRM outcomes.
- For three of the contracts where site works were visited, the ongoing in-kind contribution to maintain contract outputs, and achievement of long-term outcomes, is not apparent.
- Despite one contract being part of the larger Kurnell 2020 project, which is a long-term landscape-scale project involving multiple stakeholders, the commitment of the contracting partner to maintain either the natural resource condition or the capacity-building objectives

is doubtful.

- For another contract, the landholder representative indicated that they were having trouble attracting resources to assist and maintain the project work. During the previous stage of the project, local government undertook management of the works; however, the CMA had not engaged other levels of government or other stakeholders in the project.
- For the final contract, Parramatta Council is one landowner, the site is adjacent to Corrective Services and SES facilities, and the site is upstream of other areas (and therefore provides a weed seed bank/vector), yet none were engaged in the project. The CMA had not managed to link this project with any existing landowners (including Sydney Water and Westbus) or community projects.
- Across the periods 2008-2009 to 2010-2011, the CMA has invested \$13.75million. To this investment funding, the CMA has attracted an additional \$7.04million from investment partners. The CMA has achieved less than \$1:\$1 leveraging of CMA investment funds, over the past three years. For the 2010-2011 financial period, this leveraging ratio was \$0.17:\$1.
- However, some contracts had achieved greater leveraging, including one contract where the CMA attracted \$1.35 for every \$1 of CMA funds, and another where, the CMA attracted \$3 for every \$1 of CMA funds.
- The efficiency of contract investments was weakened in three of the five contracts because the contracts seemed to have low return on investment. For one contract, the total contract costs are \$269,000, to achieve a primary outcome of capacity building. The CMA had not explicitly documented the cost of achieving the training, and in its documentation had not identified any alternative approaches to capacity building that had been considered.
- For another contract, the efficiency of the 'catch-up' weed control and rehabilitation works is weakened by the likelihood that it is only a 'catch-up' investment, rather than an effective long-term change to the creek reach. Additionally, there is evidence of lack of landowner, stakeholder or community commitment.
- Finally, for one contract, the efficiency of investment is weakened by the lack of upstream storm-water risk management, and the apparent difficulty that the partner is having in attracting long-term commitment to the site rehabilitation. Without this commitment, the contracted works may not last beyond the next flood event or the tenure of the current individual partner.

In respect to the Standard, the CMA:

- demonstrated it had attracted additional resources to its investments and promoted community awareness of appropriate cost sharing (opportunities for collaboration and community engagement)
- could not demonstrate it was maximising the efficient use of its investments in all situations (opportunities for collaboration, community engagement and risk management)
- could not demonstrate it had accurately collated and recorded the extent of the additional resources it had attracted (monitoring and evaluation, and information management).

---

### Recommended actions

Refer to recommended action nine.

---

### CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

## Criterion 2.4: The CMA has a system to monitor ongoing achievement of projects

### Findings

- The CMA does not have a formal system for tracking the progress of contracts beyond the completion of contract works.
- Some contracts identify a contracted responsibility for ongoing maintenance, although it is unclear how compliance with these requirements will be ensured. These requirements do not include reporting to the CMA beyond completion of contracted works.
- In the case of multi-stage projects, some monitoring of ongoing achievement of earlier stages will occur, and remedial action can be taken where required. For example, for one contract, as part of its reporting requirements for the previous contract, the contractor used photo-points to record changes on site over time. These records were found on the CMA file.
- The CMA has a system for reporting the achievement of contracted outputs, but does not have a system for gaining reliable information that short-term targets have been met for each contract.
- The CMA files for some contracts reviewed do not identify how ongoing maintenance will be monitored and do not hold reports of any follow-up monitoring conducted.
- One contractor had reported against works undertaken during the previous contract and in that report included a section on project evaluation and recommendations in its reporting. It is unclear how the CMA used this information to assist with investment planning for subsequent works.
- The files of only one of the five contracts where site works were visited contained a clear understanding of the costs of the NRM action, and the need to promote future investment by the local government partner.
- The documentation on file for the other four contracts either did not contain information that would help the CMA to understand the ongoing costs of NRM on the site, or it was unclear how the filed information could be used by the CMA to gain new knowledge to inform future investments.

In respect to the Standard, the CMA:

- could not demonstrate it was implementing an MER system to monitor and report on project outputs and outcomes, and evaluate the effectiveness of its investments (collection and use of knowledge, monitoring and evaluation, and risk management)
- could not demonstrate it was monitoring and evaluating outcomes and capturing landholder knowledge that could inform future investments (collection and use of knowledge, and monitoring and evaluation).

---

### Recommended actions

9. Review and improve MER processes to:
  - i. Strengthen links between on-ground works and monitoring and evaluation actions so that project outputs inform future project selection decisions and improve outcomes
  - ii. Ensure contracts include post-implementation monitoring plans, enforce monitoring agreements with partners and ensure monitoring data is fed back into the MER system

---

to inform future decisions.

---

### CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

### Line of inquiry 3: Is the CMA actively engaging its communities?

**Criterion 3.1: The CMA has identified community groups and stakeholders it must consider in planning and undertaking work**

#### Findings

- The CMA has identified key community groups and stakeholders in its Community Engagement Strategy. Key stakeholder groups include local government, community NRM groups, non-government organisations, NRM networks, the Aboriginal community, government agencies and authorities, education and research institutions, and NRM industry and businesses. The CMA also identified 11 strategic catchment groups and networks to focus its engagement activities. This list included coastal CMAs.
- The CMA has analysed these stakeholder groups to determine how it can target its activities and identified council catchment-based groups as a key focus for consultation and engagement. The CMA Board and staff members have a shared understanding that the CMA has focused on engaging the broader community primarily through local councils.
- The CMA has not yet developed a systematic approach to identify the capacity of key partners and community groups to assist in the delivery of NRM outcomes as was agreed to by the CMA as an output from the previous audit.
- Stakeholder mapping that informed the CAP and Community Engagement Strategy was done during the development of the first CAP. It had not been updated since, thereby affecting the CMA's ability to maintain its understanding of stakeholder groups.
- The CMA has been using a range of tools to seek feedback such as community surveys.. However, it could not demonstrate how these tools were consistently used and effectively applied to assist the CMA with further improving its community engagement practices.
- The CMA recognises that there is a knowledge gap in how capacity building could be effectively measured. This gap was raised in the 2009 audit and continues to hinder the CMA's ability to evaluate its role.
- The CMA has made limited progress since the previous audit to promote its CAP and its role as a strategic NRM facilitator with all levels of local government, other stakeholders, and the broader community due to a lack of strategic engagement coordination within the CMA.

In respect to the Standard, the CMA:

- demonstrated a good understanding of community groups and stakeholders across the catchment, including their capacity, attitudes and values (collection and use of knowledge, and determination of scale)
  - could not demonstrate it had processes in place to develop and maintain knowledge over time and adapt its understanding to current emerging needs (collection and use of knowledge).
-

---

## Recommended actions

10. Adopt a Board-directed, coordinated approach to engagement at all levels of local government, other stakeholders and the broader community that promotes the CMA as a strategic NRM facilitator and embed this approach in its Community Engagement Strategy.
- 

## CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

## Criterion 3.2: The CMA is implementing an engagement strategy appropriate for different community groups and stakeholders

### Findings

- The CMA's approach to engaging with local and regional stakeholder groups has resulted in meaningful engagement, two-way knowledge-sharing and achievement of outcomes.
- The CMA has effectively engaged with councils at multiple levels through regional groups including the Sydney Coastal Councils Group, Parramatta River Catchment Group and George's River Combined Councils Committee.
- Responsibility for community engagement is satisfactorily embedded across all staff and is largely theme-based.
- However, there is a lack of an overarching coordination or strategic approach to community engagement within the CMA.
- An Aboriginal Advisory Committee has been established to inform and guide engagement with Aboriginal people. Difficulties in retaining committee members are being addressed by the CMA.
- The CMA has adopted various approaches to engage Aboriginal people in NRM, including training programs, NRM workshops and mentoring of Aboriginal youth. This engagement was found to be driven by individual staff members and lacked coordination with other engagement activities.
- The CMA has effectively engaged with stakeholders at the local and medium scale through approaches such as the Volunteer Coordinators Network and community forums. The CMA's ability to bring together such groups is a strength and has enabled it to build strong networks and relationships with stakeholders and use them as conduits for messages to a wider community.
- There is a consistent message from multiple stakeholders that the CMA could better leverage the stakeholder relationships and networks it has built over time, to improve coordination between diverse groups, thereby reducing competition for funding, identify further opportunities for funding and more effectively co-ordinate the achievement of catchment wide NRM outcomes.

In respect to the Standard, the CMA:

- demonstrated it has appropriate strategies to engage all key stakeholders or that it recognised their varying interests and capacities to engage, although this could be improved (collection and use of knowledge, community engagement and determination of scale)
  - demonstrated it has engaged with government and interstate agencies at the strategic
-

---

level, but this could be improved (determination of scale and risk management).

---

### Recommended actions

11. Review its Community Engagement Strategy to identify the most effective tools for engagement. Stakeholder mapping should be revisited as part of this process.
  12. Capitalise on stakeholder relationships, including Board member and CMA networks, to improve coordination, increase opportunities for funding through better partnering and more effectively deliver NRM outcomes.
- 

### CMA response

The CMA agrees with the recommended actions. Refer Attachment 1 for details.

---

**Criterion 3.3: The CMA is implementing a communications strategy that promotes collaboration, sustainable behavioural change and feedback**

### Findings

- The CMA's Community Engagement Strategy, which identifies priorities for engagement was approved by the Board in July 2010. This document is not action-based. Staff demonstrated limited awareness and implementation of the strategy and therefore had limited guidance in their engagement activities.
- The CMA is implementing a number of effective communication tools including its quarterly newsletter 'Mambara'. It has broad appeal and is well received. Broadening its distribution will help the CMA capitalise on existing stakeholder networks and relationships.
- The CMA's participation in the Bushcare Stall with Willoughby Council had raised the profile of the CMA among its stakeholders and the broader community.
- A lack of coordination of the CMA's networks and contacts has resulted in multiple mailing lists and contact databases. This has resulted in duplication of effort and missed opportunities to leverage existing relationships.
- Project related communication activities such as media releases are often delivered by stakeholders as part of their contractual obligations. Therefore, the CMA's dedicated Communications Officer had limited opportunity for input.
- The CMA does not have formal or systematic approaches in place to measure the impact of its communication activities and use feedback received.
- There are no formal or systematic approaches for staff to capture and share learnings about community engagement. This is also due to a lack of formal processes to capture, analyse and respond to stakeholder feedback. Community surveys used to seek feedback are also not representative of the CMA's stakeholders. Without appropriate mechanisms for evaluating community engagement activities, the CMA's ability to capitalise on its good work to date and identify broader catchment-wide issues and opportunities is limited.

In respect to the Standard, the CMA:

- could not demonstrate that it had effectively implemented a strategy that raises the CMA's profile and promotes feedback between the community and the CMA (collection and use of knowledge, and community engagement).
-



---

## Recommended actions

13. Embed effective mechanisms to seek feedback that is representative of all external stakeholders. Additionally, the CMA should embed mechanisms to capture, analyse and respond to this feedback and use it to improve stakeholder engagement.
14. In order evaluate the effectiveness of its programs, the CMA should analyse organisation-wide communication and engagement activities to identify common goals and gaps, and systematically capture and share lessons learnt.
15. Develop indicators for measuring and monitoring capacity building and use these indicators to evaluate the CMA's strength and value as a catchment-wide networker and facilitator

---

## CMA response

The CMA agrees with the recommended actions. Refer Attachment 1 for details.

---

### Line of inquiry 4: Is the CMA effectively using adaptive management?

**Criterion 4.1: The CMA has documented the practical application of adaptive management principles in its planning and business system**

#### Findings

- The CMA has not documented practical application of adaptive management principles in its planning and business systems.
- Senior management acknowledged that adaptive management principles were not documented and that an Adaptive Management Strategy which was raised as part of the previous NRC audit had not been progressed.
- Progress since the previous audit in the form of adaptive management training was not identified.
- No common understanding of the 'plan, implement, audit and respond' approach to adaptive management could be identified.
- The CMA has developed a Risk Management Strategy to manage uncertainties, but this strategy does not appear to be implemented consistently or effectively to manage risks, and mitigating actions are not being implemented or have been discontinued.
- There was confusion around the role of the Board in risk management.
- Application of risk management tools at project level was found to be inconsistent.

In respect to the Standard, the CMA:

- could not demonstrate that it had incorporated the principles of adaptive management into its planning and business systems (all required outcomes of the Standard)
- could not demonstrate that it had implemented its numerous strategies and tools in a consistent CMA-wide approach to drive continual improvement throughout the organisation (information management, risk management, and monitoring and evaluation).

---

## Recommended actions

16. Apply and integrate the 'plan, implement, audit and respond' adaptive management cycle identified in the *Standard for Quality Natural Resource Management* into all planning and business systems.
- 

## CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

**Criterion 4.2: The CMA has monitoring and evaluation systems that test underlying investment assumptions and employs appropriate expertise to assess planned and actual achievement**

## Findings

- The CMA could not demonstrate the use of monitoring and evaluation systems that test underlying investment assumptions and employ appropriate expertise to assess planned and actual achievements.
- The CMA has a draft MER strategy linked to the CAP MERI framework but this has not yet been approved nor has it been implemented.
- The CAP MERI framework clearly spells out the intention that monitoring systems are to test assumptions about how each management action will lead to changes in landscape function.
- While the CMA has developed some mechanisms to monitor, evaluate and report at the project level these were disconnected and not part of a coherent strategy.
- Information relating to performance has been captured at the project level and is currently being reviewed as part of the CAP upgrade. Prior to this, the CMA had been consistently focussed on delivering on-ground works rather than evaluating the effectiveness of investment. This focus has been limiting the CMA's capacity to apply new knowledge to increase the effectiveness of its investment.
- The CMA's systems cannot currently facilitate structured learning, generate new knowledge and increase the effectiveness of investment.
- The CMA could demonstrate only limited use of Board members knowledge. There is no identifiable strategy to incorporate the knowledge of Board members or independent experts in the assessment of achievements. Consequently, the CMA could demonstrate only limited use of experts with appropriate skills and knowledge in assessing its planned and actual results.

In respect to the Standard, the CMA:

- could not demonstrate that it has designed a comprehensive MER system or that it has begun implementing a consistent approach to monitoring and evaluating the effectiveness of its investments (monitoring and evaluation, collection and use of knowledge, and risk management)
  - could not demonstrate that the MER system is testing the underlying investment assumptions and employing appropriate expertise to assess planned and actual achievements (monitoring and evaluation, collection and use of knowledge, and risk management).
-

---

### Recommended actions

17. Finalise and implement the MER Strategy and ensure monitoring, evaluation and reporting processes are incorporated into the CMA's business systems at all levels so that underlying investment assumptions can be tested and the effectiveness of investment can be improved.

---

### CMA response

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

### Criterion 4.3: The CMA maintains an information management system necessary to support adaptive management

#### Findings

- The CMA does not maintain integrated information management systems necessary to support adaptive management processes. While the CMA has implemented a number of tools such as Objective, SCIMS and a Land Management Database, these are characterised by a lack of data protocols, limitations in functionality and poor linkages between databases.
- The CMA maintains multiple contact databases. There is no requirement that staff maintain their contacts in a common database and there is no primary record so that duplication of effort is needed to keep databases updated. There is no overall responsibility for coordinating or maintaining the CMA's stakeholder contact lists.
- Existing MER information is being collected within the information management system; however, progress against targets was not accessible other than by reviewing individual files. As a result, the CMA has needed to develop metrics as part of its CAP upgrade to assess its achievements between 2005 and 2012.
- The understanding of the information management system and its capabilities varies markedly between individuals.
- The CMA does not have a clear strategic approach to the improvement of its information management systems nor a key person responsible for decision-making with regard to coordination and upgrade of the systems.

In respect to the Standard, the CMA:

- could not demonstrate that it has developed a comprehensive information management system that supports the investment decisions and reporting requirements of the CMA (collection and use of knowledge, determination of scale, monitoring and evaluation, and information management)
- could not demonstrate that it has a clear strategy for continued improvement of its information system, and the quality and integrity of data (collection and use of knowledge, determination of scale, monitoring and evaluation and information management).

---

### Recommended actions

18. Review information management systems and develop a strategic approach to guide improvements that will support data integration and accessibility, to better allocate scarce resources to key priorities.
-

### **CMA response**

The CMA agrees with the recommended action. Refer Attachment 1 for details.

---

## Attachment 1 - Audit response table

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
Line of Inquiry 1: Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?	Criterion 1.1: The CMA has a commonly understood definition of what constitutes resilient landscapes in its region.	1 Further develop its understanding of the unique social-ecological systems operating in the urbanised catchment, develop strategies to improve landscape function and describe these in the revised CAP.	SMCMA is progressing with this as a priority and foundation for 2013 CAP. The link between dynamic socio-economic activity and landscape function is more complex in urban areas. SMCMA intends to do more original work because it does not benefit from relying on models/methods developed for other NRM regions.	Yes, implement by FEB 2013.
	Criterion 1.2: The CMA has a system that ranks investment options, which incorporates the best available information and multiple CAP target achievement	2 Review and streamline the investment prioritisation criteria to ensure that investment contributes to the achievement of multiple CAP targets and delivers improved long-term landscape function.	The SMCMA believes that it uses best available information to prioritise investment at a program level (eg: Greenweb and Wetlands) but accepts that this might not translate to whole of CMA level.  The review of the current CAP includes a process that links project outputs to multiple targets but SMCMA acknowledges that the current Catchment Information Management System (CIMS) does not readily facilitate tracking of multiple targets.  Since there was a recent review of the project and investment planning & implementation process, SMCMA will delay its review of investment prioritisation criteria until after CAP revision is completed.	Yes, implement but after CAP. Commence pilot of new project and investment planning & implementation process as part of 2013/14 Investment Program.  Implement across all themes by APRIL 2014 as part of the 2014/15 Investment Program.
		3 Review the prioritisation system to ensure that it:  i. is transparent, understood by all Board members and staff and informs	The next review of the project and investment planning and implementation process will incorporate the recommended review of the prioritisation system. A pilot process will commence as part of 2013/14 Investment Program. A more accessible process will be developed with	Yes, but after CAP. Commence pilot of new project and investment planning process as part of 2013/14 Investment Program.

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
		<p>organisation-wide decision-making</p> <p>ii. considers alternative options for investment at the landscape scale to achieve long-term outcomes and clearly documents these options for review and approval</p> <p>iii. incorporates projects that promote long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes</p> <p>iv. is documented and implemented consistently across the organisation.</p>	<p>documented options so that it can be consistently implemented across the CMA.</p>	<p>Implement across all themes by APRIL 2014 as part of the 2014/15 Investment Program.</p>
	<p>Criterion 1.3: The CMA has a system that ensures short and long-term investment priorities are consistent with each other and integrated with other planned natural resource management targets</p>	<p>4 As part of the CAP upgrade, refine targets and actions so they deliver improved long-term landscape function, are logically nested and able to be measured and reported on.</p>	<p>New/revised targets are being developed for the 2013 CAP. SMCMA accepts that they need to be logically nested, measurable and reflect the urban context and relevant socio-ecological systems.</p>	<p>Yes, implement by FEB 2013</p>

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation	
Line of Inquiry 1: (cont)		5	Build appropriate internal feedback loops and controls into the prioritisation system to enable the CMA to accommodate change and adaptively manage towards long-term goals.	The next review of the project and investment planning & implementation process will incorporate the recommended review of the prioritisation system. A pilot process will commence as part of 2013/14 Investment Program. Adaptive management will be incorporated.	Yes, implement, but after CAP. Commence pilot of new project and investment planning & implementation process as part of 2013/14 Investment Program. Implement across all themes by APRIL 2014 as part of 2014/15 IP.
		6	Develop a strategic plan that articulates the CMA's role, its organisational priorities and how it intends to effectively implement its CAP.	The recently completed draft SMCMA Strategic Plan articulates the CMA's role, organisational priorities and methods.	Completed. Adopted by Board on 27 August 2012.
Line of Inquiry 2: Are the CMAs vegetation projects contributing to improved landscape function?	Criteria 2.1: Whether the CMA has documented expected long-term project outcomes	7	Review its risk management planning and reporting protocols and ensure they are suited to effectively managing risks. Complete meaningful risk assessments, document them and use them in review and approval processes, and monitor mitigation actions, especially at the project scale.	This has commenced. Project Managers completed sessions with MER officer on risk and MERI aspects of the current Investment Program process to improve understanding, application and consistency and to inform development of project/investment management systems. Regular monitoring of risk mitigation will be built into the project management system.	Yes, implement, but after CAP. Commence pilot of new project and investment planning & implementation process as part of 2013/14 Investment Program. Monitor and document on going risk management of projects in 2012/13 Investment Program and incorporate learnings into project management system by DEC 2013.
	Criteria 2.2: Whether the CMA successfully achieves project outcomes, and maximised opportunities to add further value	8	Implement project management processes that consistently include and document:  i. consideration of alternative options for action at the project scale	The next review of the project and investment planning & implementation process will improve processes that consider alternatives/opportunities for achieving multiple outputs and long term partnerships. A pilot process will commence as part of 2013/14 Investment Program. Such partnerships will be considered on their merits in relation to their capacity to deliver improved long-	Yes, but after CAP. Commence pilot of new project and investment planning & implementation process as part of 2013/14 Investment Program. Implement across all themes by APRIL 2014 as part of the 2014/15

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
		<ul style="list-style-type: none"> <li>ii. prioritisation of multiple output achievement, to assist project managers to respond to changes as the project progresses</li> <li>iii. incorporation of long-term partnerships with stakeholders that have the resources and authority to achieve long-term outcomes</li> <li>iv. a leveraging target or ratio for additional resources attracted.</li> </ul>	<p>term landscape function. SMCMA already considers complementary investment as part of its EOI project assessment process and will incorporate this more explicitly into its revised processes, but will not base investment decisions solely on investment leveraging.</p>	Investment Program.
Line of Inquiry 2: (cont)	Criterion 2.3: The CMA's projects are attracting additional resources to match CMA funding	<p>9 Review and improve MER processes to:</p> <ul style="list-style-type: none"> <li>i. strengthen links between on-ground works and monitoring and evaluation actions so that project outputs inform future project selection decisions and improve outcomes</li> <li>ii. ensure contracts include post-implementation monitoring plans, enforce monitoring agreements with partners and ensure monitoring data is fed back into the MER system to inform future</li> </ul>	<p>The next review of the project and investment planning &amp; implementation process will improve processes for monitoring, evaluation, reporting and improvement. (MERI).</p> <p>A pilot process will commence as part of 2013/14 Investment Program. MERI effort will be selective to reflect priorities, risks and knowledge gaps.</p>	<p>Yes, implement, but after CAP. Commence pilot of new project and investment planning &amp; implementation process as part of 2013/14 Investment Program. Implement across all themes by APRIL 2014 as part of the 2014/15 Investment Program</p> <p>By July 2013, all relevant contracts for 2014/15 Investment Program to require post implementation monitoring plans.</p>



Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
		decisions.		
Line of Inquiry 2: (cont)	Criterion 2.4: The CMA has a system to monitor ongoing achievement of projects	See Recommendation 9	See comment for recommendation 9	Yes, implement, but after CAP. See Recommendation 9.
Line of Inquiry 3: Is the CMA effectively engaging its communities?	Criteria 3.1: The CMA has identified community groups and stakeholders it must consider in planning and undertaking work	10 Adopt a Board-directed, coordinated approach to engagement at all levels of local government, other stakeholders and the broader community that promotes the CMA as a strategic NRM facilitator and embed this approach in its Community Engagement Strategy.	A coordinated approach will be developed in conjunction with revised Community Engagement Strategy. SMCMA considers that it has embedded community engagement among its staff so well that each staff member takes responsibility for it with minimal supervision.	Yes, implement, but after CAP. Anticipate completion by FEB 2014. subject to adequate funding.
	Criterion 3.2: The CMA is implementing an engagement strategy appropriate for different community groups and stakeholders	11 Review its Community Engagement Strategy to identify the most effective tools for engagement. Stakeholder mapping should be revisited as part of this process.	As part of the CAP revision the SMCMA has again analysed its stakeholders and targeted consultation accordingly. Consultation has reflected the "places" identified for the revised CAP. A major source of community values for those places has been the extensive consultation undertaken by councils as part of their Community Strategic Plans. In addition to council and agency staff, the consultation has also included a survey of non-engaged community members. The SMCMA has received over 1000 responses for this consultation.  SMCMA believes that the Community Engagement Strategy needs to reflect the targets	Yes, but after CAP. Anticipate completion by FEB 2014, subject to adequate funding

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
			in the revised CAP. Some further stakeholder mapping may be required once interventions are identified following consideration of the relevant socio-ecological systems. Almost all staff working on the Community theme are grant-funded so review of strategy will be dependent on recurrent funding.	
		12 Capitalise on stakeholder relationships, including Board member and CMA networks, to improve coordination, increase opportunities for funding through better partnering and more effectively deliver NRM outcomes.	SMCMA always uses stakeholder relationships to help deliver better NRM outcomes. This is strengthening with the new Board (e.g.: co-funding for SHCWQIP). SMCMA will continue to work on improving its partnering .	Yes. Commence immediately but results not anticipated before 2013/14 Investment Program.
Line of Inquiry 3: (cont)	Criterion 3.3: The CMA is implementing a communications strategy that promotes collaboration, sustainable behavioural change and feedback	13 Embed effective mechanisms to seek feedback that is representative of all external stakeholders. Additionally, the CMA should embed mechanisms to capture, analyse and respond to this feedback and use it to improve stakeholder engagement.	SMCMA routinely measures the impact of its communication activities via public event feedback sheets and records satisfaction levels for its events and courses  Limited resources are the biggest impediment to seeking feedback that is representative of all external stakeholders.	Yes, implement but after CAP, subject to adequate funding. Link to the review of the Community Engagement Strategy and development of the MER Strategy.
		14 In order evaluate the effectiveness of its programs, the CMA should analyse organisation-wide communication and	The SMCMA evaluates its activities by capturing and sharing the lessons learnt. The MER Strategy and review of the Community Engagement Strategy, plus development of a Communication Strategy will offer opportunities to address	Yes, implement but after CAP. Anticipate completion after JUNE 2014..

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
		engagement activities to identify common goals and gaps, and systematically capture and share lessons learnt.	recommendation 14.	
Line of Inquiry 3: (cont)		15 Develop indicators for measuring and monitoring capacity building and use these indicators to evaluate the CMA's strength and value as a catchment-wide networker and facilitator	SMCMA agrees measuring and monitoring capacity building is valuable and MER officers will commence work to develop indicators for capacity-building and behaviour change in late 2012. It is expected to be mid 2014 before that work is completed unless direct funding becomes available.	Yes, implement, but after CAP. Anticipate completion after JUNE 2014.
Line of Inquiry 4: Is the CMA effectively using adaptive management?	Criterion 4.1: The CMA has documented the practical application of adaptive management principles in its planning and business system	16 Apply and integrate the 'plan, implement, audit and respond' adaptive management cycle identified in the <i>Standard for Quality Natural Resource Management</i> into all planning and business systems.	SMCMA accepts that MER needs to be designed into projects and systems and used to adaptively manage implementation of the CAP.	Yes, implement, but after CAP. Implement progressively, starting with projects. Commence pilot of new project and investment planning & implementation process as part of 2013/14 Investment Program.
	Criterion 4.2: The CMA has monitoring and evaluation systems that test underlying investment assumptions and employs appropriate expertise to assess planned and actual	17 Finalise and implement the MER Strategy and ensure monitoring, evaluation and reporting processes are incorporated into the CMA's business systems at all levels so that underlying investment assumptions can be tested and the effectiveness of investment can be improved.	The MER officer vacancy has been a significant contributor to slow progress in implementing findings of the 2009 NRC Audit. The MER Strategy will need to reflect both the CAP and project and investment process. The MER officer position relies on grant funding.	Yes, implement, but after CAP. Complete SEPT 2013

Line of Inquiry	Audit Criteria	NRC Recommendation	SMCMA Staff/Board Comment	Acceptance of Recommendation
	achievement			
Line of Inquiry 4: (cont)	Criterion 4.3: The CMA maintains an information management system necessary to support adaptive management	18 Review information management systems and develop a strategic approach to guide improvements that will support data integration and accessibility, to better allocate scarce resources to key priorities.	<p>The SMCMA's information management systems have improved in recent years but still need further improvement. The NRC's mid-term review of CMAs identified that lack of support from agencies for such systems as a significant risk for CMAs. While some progress has been made, the change of supporting department from DECCW to DPI/TIRIS has delayed state-wide progress.</p> <p>SMCMA has limited resourcing to undertake a substantial review of information management systems, but agrees that it is necessary.</p> <p>SMCMA intendeds to progressively review systems using internal staff where possible.</p>	Yes, implement, but after CAP. Complete JUNE 2014

## Attachment 2 - About the audit

### Audit mandate

The NRC is required to undertake audits of the effectiveness of the implementation of CMA CAPs in achieving compliance with the state-wide standards and targets for natural resource management, as it considers appropriate.

The NSW Government has adopted an aspirational goal to achieve healthy, productive and resilient landscapes that support the values of its communities. It intends to achieve this by encouraging natural resource managers, such as each CMA, to make high-quality decisions, focused through a coherent set of targets.

### Audit objective

This audit assessed the effectiveness of Sydney Metropolitan CMA in promoting resilient landscapes that support the values of its communities, within the scope of the CAP.

### Lines of inquiry

In order to assess the effectiveness of CMA work, the audit sought to answer the following questions:

- Is the CMA effectively prioritising its investments to promote resilient landscapes that support the values of its communities?
- Are the CMA's vegetation projects contributing to improved landscape function?
- Is the CMA effectively engaging its communities?
- Is the CMA effectively using adaptive management?

The NRC identified that these four key aspects of CMA work should strongly influence effectiveness in achieving state-wide targets and promote maximum improvement for the CMA. The NRC structured its analysis of audit evidence to be able to report on these lines of inquiry in a consistent and comparable way to the first-round CAP audits undertaken for all 13 CMAs.

### Audit criteria

Each line of inquiry was evidenced through three or four criteria identified in the findings.

These criteria address:

- expected documentation of the particular key aspect of CMA work
- expected implementation of plans and decisions
- expected evaluation and reporting of the performance of the CMA work.

The criteria were derived from the elements of each line of inquiry, and from the general criteria of the Standard and state-wide targets.

The NSW Government adopted the *Standard for Quality Natural Resource Management*, which identifies seven components that are used to reach high-quality natural resource decisions.

---

CMAs must comply with the Standard<sup>4</sup>, using it as a quality assurance standard for all planning and implementation decisions.

The audit identified the elements of the Standard that are most relevant for each criterion and then identified the behaviours and other outcomes it would expect the CMA to demonstrate if it is properly using the elements of the Standard, thus meeting the criteria to a level of quality consistent with the Standard.

### **Audit scope**

As a sample of the entire range of natural resource management investments, the audit work was focused on CMA programs and projects that use vegetation to improve landscape function.

The NRC considers this to be the appropriate focus as vegetation remains a key tool for CMAs to achieve integrated natural resource management outcomes. This is due to a number of factors, including the lack of certainty in the management framework for other aspects of natural resource management, such as water.

As most natural resource management programs and projects contribute to more than one target, the NRC expects audited projects to also contribute to other targeted outcomes, such as river health and threatened species. The audit sought to audit the effectiveness of these contributions as they arose.

### **Audit approach**

In June 2012, the audit team, which comprised three NRC staff members and three consultants, performed the following audit work:

- interviewed 37 representatives from the CMA Board, CMA staff, landholders and stakeholders external to the CMA
- reviewed a range of CMA and public documents such as annual reports, CMA and partner websites, strategic documents, investment plans, internal audits and five contract files
- reviewed the CMA's information management systems including the Sydney Metropolitan Catchment Information Management System (SCIMS)
- inspected five sites selected by the audit team where contracted works were being undertaken as part of CMA projects.

At the close of the audit field work, the audit team shared preliminary observations with the CMA.

### **Audit methodology**

To plan and conduct this audit, the audit team followed the methodologies set out in the *Framework for Auditing the Implementation of Catchment Action Plans, NRC 2007*, and the draft *NRC Audit Manual*.

### **Acknowledgements**

The audit team gratefully acknowledges the cooperation and assistance provided by the Sydney Metropolitan CMA and landholders in the region. In particular, we wish to thank the Sydney Metropolitan CMA Board and the General Manager, John Carse.

---

<sup>4</sup> Section 20 (c), *Catchment Management Authorities Act, 2003*

## Attachment 3 - About the CMA

### The Sydney Metropolitan Catchment

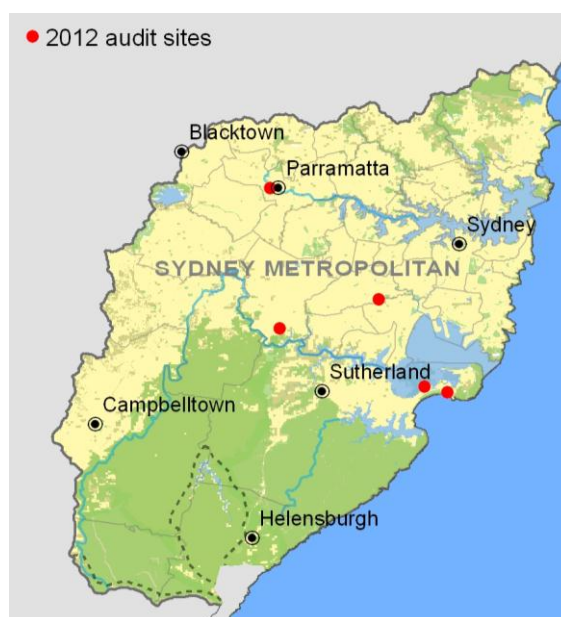
The Sydney Metropolitan Catchment covers an area of 1,860 square kilometres in eastern New South Wales and has thirty-nine local government areas located partly or wholly within the catchment.

Sydney Metropolitan CMA operates in a complex, highly urbanised environment. The CMA faces challenges unique to its catchment: competition with multi-institutional resource management interests; intensive urban, industrial, transport and recreational land use pressures on a sensitive system; demands of 4 million residents, millions of visitors and parties outside the region; and scrutiny from high national and international exposure. Within this context CMA staff continue to demonstrate motivation, energy and skills to deliver successful projects.

The region is bounded by the Hawkesbury-Nepean Catchment and includes iconic features such as Sydney Harbour and the internationally significant wetland Towra Point Nature Reserve, which is listed under the Ramsar Convention. Major rivers of the catchment include the Cooks, Duck, Georges, Hacking, Lane Cove, Parramatta and Woronora systems.

The catchment includes diverse coastal landforms including beaches, estuaries, wetlands, headlands and dune systems, low lying floodplains, and elevated sandstone plateaus. Vegetation has been largely cleared in the catchment with more than 90 per cent of riparian vegetation removed. There are a number of endangered ecological communities in the catchment including one which is critically endangered – Cumberland Plain Woodland. The Catchment supports industrial development, petroleum and chemical plants. There is a sand extraction industry based in the south-eastern part of the catchment at Kurnell Peninsula.

The CMA works to balance the needs of its communities with natural resource management issues. The Sydney Metropolitan Catchment Action Plan identifies targets for four CMA themes including community, biodiversity and native vegetation, soil and land use, water<sup>5</sup>.



<sup>5</sup> Catchment Action Plan, 2009

