natural resources commission

Assessment of the Hunter-Central Rivers upgraded Catchment Action Plan

March 2013

Enquiries

Enquiries about this report should be directed to:

Name	Lauren Tapp
Phone	(02) 8227 4300
Fax	(02) 8227 4399
E-Mail	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
NRC	Natural Resources Commission
NRM	Natural Resource Management
NSW	New South Wales

Document No. D13/0466

ISBN: 978 1 921050 80 0

Executive summary

The Natural Resources Commission (NRC) has reviewed the upgraded Hunter-Central Rivers Catchment Action Plan (CAP), and assessed its potential to improve the long-term health and productivity of local landscapes and communities.

The Hunter-Central Rivers region comprises a variety of landscapes that support diverse lifestyles, recreational activities and industries – including agriculture, mining, power generation, horse breeding, viticulture, fisheries and tourism. It faces considerable debate about the use and allocation of its natural resources.

Key findings

The upgraded CAP is a strong strategic plan that identifies the major issues facing the region and provides a government and community-wide approach for addressing these issues.

The CAP contains a broad range of aspirational goals that, if successfully implemented, could deliver substantial improvements in landscape health and community well-being. However, the ambitious nature of some of the goals means they go beyond what is realistically achievable by the Catchment Management Authority (CMA) and its partners, without significant central agency co-implementation.

As a plan to **guide investment and on-ground activity**, the CAP:

- presents **a vision, goals and strategies** that **address the big issues** in the region, which were identified with significant input from farmers, local businesses, landholders and interested community groups
- focusses on alignment with **government and community priorities**
- supports **localised delivery** of actions by including strategies related to knowledge and research, empowerment and capacity building
- identifies four landscapes to facilitate locally relevant **management options** focussed on ecosystem services that support productivity and community values
- includes a robust plan for ensuring the CAP can deal with future shocks and changes.

To improve the upgraded CAP, the CMA should:

- **prioritise strategies and outcomes** to ensure investment is directed to issues the CMA and its delivery partners can effectively influence
- accelerate its work to **specify priority actions** necessary to achieve strategies and outcomes
- **further integrate economic, social and environmental information** within strategies, to ensure that strategies will deliver multiple outcomes
- **develop specific and realistic targets** for each goal to improve accountability.

Recommendation

The NRC recommends approval of the upgraded Hunter-Central Rivers CAP with the following conditions to:

- **prioritise strategies and outcomes** to ensure investment is directed to issues the CMA and its delivery partners can effectively influence
- accelerate its work to **specify priority actions** necessary to achieve strategies and outcomes
- **review and adapt the CAP,** if required, to fit with Local Land Services boundaries, pending the final decision of the Minister.

Table of Contents

1 Introduction

The Natural Resources Commission (NRC) has reviewed the upgraded Hunter-Central Rivers Catchment Action Plan (CAP), and assessed its potential to improve the long-term health and productivity of local landscapes and communities.

The Hunter-Central Rivers region is located on the east coast of NSW, extending from Diamond Head in the north, to Gosford and the coastal waterways of the Central Coast in the south, and from Merriwa Plateau and the Great Dividing Range in the west to the Pacific Ocean in the east. The region has a population of approximately 1.26 million. Natural resources in the region support a wide range of industries, lifestyles and recreational activities. Key industries include agriculture, mining and extraction, power generation, horse breeding, viticulture, fisheries and tourism.

1.1 Background

CAPs are strategic regional plans for improving the health, productivity and resilience of landscapes and communities. CAPs identify what the community, industry, and government value about these landscapes, and explain what needs to be done to ensure long-term, sustainable management of a region's natural resources. Catchment Management Authorities (CMAs) have primary responsibility for effectively implementing the CAPs in collaboration with their partners.

Under the *Natural Resources Commission Act 2003* (NSW), the NRC is required to assess CAPs and recommends them to the Minister for approval.

1.2 Focus of assessment

The focus of the NRC's assessment is to determine whether a CAP is a quality strategic plan that promotes the state-wide targets for natural resource management (NRM) and complies with the *Standard for Quality Natural Resource Management*[1] (the Standard).

The *Framework for assessing and recommending catchment action plans*[2] details the assessment criteria, attributes and process used. The NRC examined three key criteria in its assessment:

1 Was the plan developed using a structured, collaborative and adaptable planning process?

2 Does the plan use best available information to develop targets and actions for building resilient landscapes?

3 Is the CAP a plan for collaborative action and investment between government, community and industry partners?

The NRC collected evidence through extensive analysis of available documentation, technical reviews, stakeholder surveys, interviews and assessment of the CMA's engagement with government, industry and community partners (see Attachment 2 for details).

[1] 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, using it as a quality assurance standard for all planning and implementation decisions.
[2] NRC, *Framework for assessing and recommending upgraded catchment action plans v2,* June 2012

2 Summary of assessment findings

2.1 Planning

The CAP upgrade was underpinned by a structured planning process and significant stakeholder input, providing a good foundation for whole-of-government and whole-of-community delivery of CAP actions. The CAP upgrade demonstrates a shift in strategic direction with a focus on guiding regional NRM actions that 'respond to the needs of communities, industries and individuals, as well as the natural resources of the region'. The upgraded CAP includes a sound plan to ensure that the CAP strategies and actions can be adapted to changing circumstances.

Strategic planning and capacity

The CAP upgrade improved the strategic capabilities of the CMA Board, staff members and delivery partners, increasing understanding of NRM in the region. A broad range of stakeholders conducted a robust assessment of strengths, weaknesses, opportunities and threats based on experience with the first CAP. The CMA held workshops around the region to identify trends in NRM, potential future scenarios and key risks for the region. As a result of these consultations, the CAP reflects an excellent understanding of the big issues, drivers and threats for the region and its landscapes.

The CAP upgrade was focussed on developing a whole-of-government and whole-of-community plan that addresses social, economic and environmental concerns. Stakeholders, CMA staff members and Board members understand and support this new strategic direction for the CAP. For instance, an industry representative indicated that in workshops there was a clear effort to '*bring community, environment and economics into balance*'. In interviews, CMA staff members indicated that the objective was to ensure the upgraded CAP could serve as the plan for regional NRM.

Collaborative CAP upgrade

The CMA carried out strong stakeholder consultation during the upgrade which will provide a good foundation for whole-of-government and whole-of-community CAP implementation. In the early stages of CAP development, the CMA performed a comprehensive assessment of regional stakeholders and delivery partners - including an evaluation of industry stakeholders - to inform consultation planning. The CMA invested considerable effort in specifically engaging the minerals and mining sector and planning agencies, which were identified early on as vital delivery partners for addressing key issues.

The CMA engaged a broad range of stakeholders through a variety of mechanisms including workshops, surveys, consultation with a community reference group, meetings with local and state agency groups, and targeted one-on-one meetings. Local input was obtained through 15 community values workshops held around the region. Additionally, the CMA surveyed community members who represented comprehensive geographical coverage of the region. Local-scale landscape workshops were held to identify strengths and vulnerabilities of local communities. Landholders, environmental organisations, industry, local government, and state representatives were specifically invited by the CMA to attend these workshops.

This engagement process positions the CMA better to deliver shared actions in the future. However, despite significant efforts by the CMA to consult with stakeholders, feedback indicates that some members of delivery partner organisations remain hesitant to engage with

them. This reflects in part the challenges of the new whole-of-government and whole-of-community approach.

The upgraded CAP would be strengthened by greater transparency regarding the process used to resolve competing priorities identified during consultation. Stakeholder input reflected diverse and often competing opinions regarding natural resource use, but it is not evident how they were resolved in developing the CAP. A clear demonstration of how conflicting views were addressed in selecting final CAP strategies would provide greater confidence for partners that a logical and objective process was used.

Adaptability

The CAP includes a robust plan for ensuring the CAP remains adaptable, although specific governance arrangements are yet to be developed. The adaptive management plan includes:

- a proposed planning framework to facilitate implementation of adaptive management through a four-year rolling implementation plan, an annual investment plan and review at the overall CAP level
- comprehensive identification of events or changes that would require adaptation of plans.

If implemented as specified, this plan should allow the CAP to remain flexible and relevant in changing circumstances.

2.2 Targets

The upgraded CAP sets ambitious goals, strategies and targets to address the key issues for the region, which were identified with significant scientific, community and industry input. Strategies are logically linked to key issues and are very likely to improve the natural resource function of the region if they are successfully implemented. However, the CAP requires further prioritisation of strategies and desired outcomes to reflect what may be realistically attainable by the CMA and its regional partners. The CAP would also be improved by stronger integration of social, economic and environmental outcomes.

Best-available information

The CAP uses best-available scientific knowledge and community input to address the key issues identified. The CMA sourced expert scientific input through workshops, consultation, and use of spatial data from partner organisations, providing confidence that the CAP is based on current science. The CMA gathered information on what the community most values through 15 workshops held across the region, which identified over 348 natural assets. The strategies and targets reflect community input and address several controversial NRM issues in the region, including tensions caused by competing land uses and water allocation.

The CAP includes a series of 'regional asset maps' that identify the key areas to take collaborative actions to address particular concerns. For instance, one map identifies 'where should we focus efforts for management of groundwater assets and groundwater dependent ecosystems?' These maps provide a very good starting point for guiding shared actions based on best-available information.

Hierarchy of goals, strategies and targets

The goals, strategies and targets in the CAP are logically nested and well presented, clearly communicating the plan's vision. Goals and targets incorporate a focus on ecosystem function and services, as well as community values. The nested structure allows the CAP to balance the broad drivers and regional natural resource concerns with the local level strategies necessary to address them.

Analysis of social, economic and environmental information

The CAP discusses social, economic and environmental factors, but would be improved by a clearer recognition of the importance of the social and economic factors in achieving environmental outcomes. The CAP identified four sub-regional landscapes based on biophysical attributes, community value surveys, and administrative boundaries. Landscapes are logically defined to allow local prioritisation of actions, and the CAP describes the important social, economic and environmental values of each. However, the CAP's goals and strategies were not derived from analysis of these landscapes as systems.

The CAP's goals and strategies are based on assessment of ecosystem functions and services that provide value to communities and industry. Key risks and drivers for the region - as well as strategies to address them - were identified through multi-stakeholder landscape workshops. Strategies in the CAP intuitively address the risks and drivers, and are likely to improve natural resource function. However, it is not evident how the extensive results of workshops were analysed to arrive at the final CAP strategies. Further, the CAP does not clearly describe cross-scale influences between landscapes, and links between social, economic and biophysical aspects. A technical reviewer noted that greater 'recognition of the role of community and economic sustainability in shaping ecological sustainability is required.' This reduces confidence that the strategies that will best deliver social, economic and environmental outcomes have been selected.

The goals and strategies selected show some integration of socio-economic and environmental considerations, which is evident in the three overarching goals relating to 'governance and planning', 'knowledge and research' and 'empowerment and capacity building'. The seven other regional goals focus on ecosystem services to improve social, economic and environmental conditions. However, due to the way strategies were derived, this integration at the goal level does not carry through to the majority of the strategies. Most of the CAP's strategies lack a focus on economic viability in particular. Additionally, the outcomes cover a broad range of issues and do not appear to be prioritised. Overall, the CAP would be improved by a clearer demonstration of how its strategies address the links between socio-economic and environmental components.

The NRC recommends approval of the Hunter-Central Rivers CAP with the following **suggested action**:

- to complete additional analysis of links between social, economic and environmental elements of the landscapes to better deliver multiple outcomes.

Prioritisation of strategies and actions

The CAP includes a wide range of strategies and outcomes with minimal prioritisation, and defers identification of specific actions, reducing its ability to provide meaningful guidance for delivery partners. The CAP includes 43 strategies aligned with 10 goals, 22 targets and 134 outcomes. The CAP provides some guidance to delivery partners on where to prioritise actions

by identifying key strategies for each land use, land type and land form and by providing spatial maps that identify the most important areas for collaborative actions. However further prioritisation of strategies and outcomes is needed.

The CMA was unable to negotiate a prioritisation strategy with delivery partners in the timeframe available. The CAP acknowledges the need to identify and prioritise specific actions and includes a comprehensive prioritisation process to be carried out during implementation. However, delivery partners do not yet appear to have made specific commitments to this process, creating a risk that the implementation may not be successful.

The CAP strategies and outcomes demonstrate a good understanding of important issues for the region, but some do not reflect a balance between aspirational goals and what can realistically be achieved through a CAP. The goals, targets, and outcomes are broad and highly ambitious, including for instance 'wealth generated from natural resources in the region is reinvested back into the region'. The effort, investment and coordination necessary to achieve such outcomes does not appear to have been fully and transparently assessed against the size of the task. While strategies are likely to allow the region to move towards the targets, it is not clear that the strategies can actually achieve the targets and outcomes set. Specifying which outcomes are realistic to achieve in the near-term (four to five years), and which are long-term aspirational objectives would help clarify CAP priorities.

The NRC recommends approval of the Hunter-Central Rivers CAP with the following **condition**:

- to prioritise strategies and outcomes to ensure investment is directed to issues the CMA and its delivery partners can effectively influence.

Accountability

The CMA has chosen not to quantify targets to allow the CAP to remain adaptable and relevant. This decision was made in response to lessons learned from the first CAP. The CMA intends to develop more specific targets as part of the implementation plans.

The CAP only sets targets for seven of the 10 goals, and these are very broad, for instance, 'Water use is efficient and sustainable'. Each strategy is supported by several outcomes, which are more specific, such as, 'The objectives of water sharing plans are achieved'. Some of these are easily measureable. However, there are 134 outcomes, reducing clarity regarding the key measurements for whether the CAP is achieving objectives. Consistent identification of specific, measurable targets for each goal would further improve accountability.

The NRC recommends approval of the Hunter-Central Rivers CAP with the following **suggested action**:

- to develop specific and realistic targets for each goal to improve accountability.

2.3 Action and investment

The upgraded CAP serves as a good foundation on which to base collaborative actions, but requires further prioritisation and specificity to meaningfully direct investment. The CMA plans to carry out further prioritisation during the development of the four-year implementation plan.

Alignment with partner plans and strategies

The upgraded CAP clearly indicates the degree of alignment with delivery partners' key policies and plans, recognising that there are some areas where strategies are not fully consistent. Key policies and plans of delivery partners were identified and prioritised with partner agency input, to ensure focus on the most important plans. The CMA comprehensively consulted with local government to identify shared plans and priorities. This included meetings with local council groups; direct engagement with local council general managers, environmental planners, and mayors; and individual workshops with 15 of the 17 local councils. As a result, the CAP's strategies reflect local government input and the CAP implementation planning process is based on a four-year rolling plan to facilitate coordination with local government planning timeframes. The CAP clearly identifies which strategies will contribute both directly and indirectly to the *NSW 2021* [3] goals and state-wide targets for NRM.

Partner plans indicated in the CAP to be 'not yet aligned' relate to regional planning and land use. The CMA has indicated that it will continue to work with planning agencies to align activities and address strong community feedback it has received regarding conflicts between NRM goals and land use planning. The Department of Primary Industries, Department of Planning and Infrastructure, Office of Environment and Heritage, and Aboriginal Affairs NSW have endorsed the CAP.

Roles and responsibilities

The upgraded CAP identifies key delivery partners for each of the strategies, providing a reasonable level of detail for a strategic plan. The range of partners identified is comprehensive, including local, state and federal government agencies, industry, water utilities, community and landholders. The CMA intends to develop more specific roles and responsibilities as part of the implementation process, and negotiations with lead agencies for each strategy are already underway. The CMA has indicated that all partners listed have agreed to participate in delivering the strategies in some capacity; however, some partners have been hesitant to agree to specific roles and responsibilities. Stakeholder feedback indicates mixed levels of interest in participating in collaborative delivery. This will present a continuing challenge for the CMA in successfully negotiating whole-of-government and whole-of-community delivery.

Implementation

The CAP defers several important steps to the implementation stage, including prioritisation of strategies and identification of specific actions. These steps were deferred to the implementation plan to allow for greater adaptability to the uncertain funding arrangements. While the CAP identifies which strategies contribute to each land use, land type and landscape, it indicates that most strategies contribute to nearly all categories, reducing the usefulness of this guidance. The CAP would be strengthened by further differentiating strategies, indicating which are most important for each region and land use, and indicating realistic actions that are most important for achieving them.

[3] www.2021.nsw.gov.au/sites/default/files/NSW2021_Plan%20Goals_0.pdf

The CAP proposes an implementation process that includes developing priority actions, additional measureable outcomes, and performance indicators for delivering priority actions. The CMA intends to develop these through a four-year rolling implementation plan, and an annual investment plan. Details for how this will take place are not provided. The CMA has begun to develop priorities with key delivery partners who have agreed in principle to the implementation process; however, the minimal detail and lack of specific commitments reduce confidence that implementation will be successfully carried out as planned.

The upgraded CAP outlines a comprehensive future prioritisation process. The prioritisation process includes consideration of whether an action provides multiple benefits and aligns with partner and investor preferences and plans. The completion of this process would provide clearer guidance for investors and stakeholders, and increase confidence that the CAP has selected actions that maximise outcomes. The 'regional asset maps' included in the CAP are a valuable means of directing investment and will provide a good starting point for identifying where to focus actions.

The NRC recommends approval of the Hunter-Central Rivers CAP with the following **condition**:

- accelerate its work to specify priority actions necessary to achieve strategies and outcomes.

3 Recommendation

3.1 Approval

In accordance with section 13 (b) of *the Natural Resources Commission Act 2003* (NSW), the NRC recommends that the Minister approve the upgraded Hunter-Central Rivers Catchment Action Plan with conditions.

3.2 Conditions of approval

The NRC recommends approval of the Hunter-Central Rivers upgraded CAP with the following conditions to:

- prioritise strategies and outcomes to ensure investment is directed to issues the CMA and its delivery partners can effectively influence
- accelerate its work to specify priority actions necessary to achieve strategies and outcomes
- review and adapt the CAP, if required, to fit with Local Land Services boundaries, pending the final decision of the Minister.

The CMA should report to the NRC on how it has met these conditions of approval in its Strategic Progress Letters. Commencing September 2013, the CMA should provide the NRC with a Strategic Progress Letter annually, or as conditions are met.

3.3 Additional suggested actions for the CMA

The following suggested actions should be considered by the CMA to strengthen the effective delivery of the CAP:

- complete additional analysis of links between social, economic and environmental elements of the landscapes to better deliver multiple outcomes
- develop specific and realistic targets for each goal to improve accountability.

3.4 Readiness for transition to Local Land Services

Some aspects of the Hunter-Central Rivers CAP upgrade will assist the CMA to manage the transition to the new Local Land Services structure:

- the identification of local landscapes which reflect community input and are largely supported by stakeholders
- the indication that implementation plans will be developed collaboratively with neighbouring regions where landscapes cross borders
- the scientific, industry, and community knowledge supporting the CAP, which is a valuable resource for new regional organisations.

To provide clearer guidance to a new Local Land Services Board, the CMA should address the conditions and suggested actions for the CAP outlined above.

Attachment 1 - Detailed assessment findings

Criteriaon1 - Plan was developed using a structured, collaborative and adaptable planning process

Attribute 1A: Strategic planning process was logical, comprehensive and transparent

The CAP upgrade process reflected a shift in focus from what the CMA can deliver internally towards establishing a guiding document for all regional NRM activities. To this end, the CMA made concerted efforts to ensure that the plan was informed by feedback from a range of key stakeholders and to obtain 'buy-in'. These efforts better position the CMA to deliver collaborative actions during the implementation phase. The CMA undertook extensive activities to evaluate the strategic direction of NRM activities in the region, including projecting possible future scenarios and alternative management responses, and evaluating lessons learned from the first CAP. This led to a clear understanding of the 'big issues' for the region. However, there is a lack of transparency around how the CMA assessed and prioritised the results of engagement activities when developing the upgraded CAP.

Strengths:

- Strong efforts to ensure that whole-of-government and whole-of-community approach led to a shared CAP for which partners could take ownership and responsibility.
- A broad range of stakeholders – including the Board, CMA staff members, community members and agencies – performed a robust assessment of strengths, weakness, opportunities and threats based on experience with the first CAP.

Weaknesses/gaps

- There is a lack of transparency regarding how conflicting opinions identified via stakeholder engagement efforts were assessed in developing the upgraded CAP. This creates a potential risk to stakeholder relationships if partners don't understand how issues were prioritised and feel that their 'issue' received low priority.

Attribute 1B: Planning process meaningfully engaged the community, Governments and other stakeholders

The evidence indicates that the planning process meaningfully engaged a wide range of stakeholders including community members, industry representatives, farmers, landholders and government. The CMA implemented a strong process for identifying key stakeholders and attempting to engage them. This included an analysis of regional industries to ensure it had engaged with those most affected by NRM decisions. Through considerable efforts, the CMA was able to improve engagement with the mining and minerals sector as well as the Department of Planning and Infrastructure, both of which the CMA identified as critical stakeholders. Stakeholder surveys and interviews reflect engagement with a diverse set of stakeholders with differing goals and objectives that need to be balanced in delivering the CAP. The evidence indicates that the CMA has made progress in expanding and improving relationships but still face challenges in

Strengths:

- There was a strong focus on improved engagement with the mining and minerals sector as well as Department of Planning, both of which play key roles in NRM for the region.
- There was a robust process for identifying stakeholders, including a comprehensive assessment of regional industries that most affect or are most affected by NRM.
- The extensive engagement process involved a wide-range of key stakeholders through surveys, workshops and targeted meetings.

gaining commitment and cooperation from partner organisations. In addition, there is still work to be done in expanding community engagement beyond those community members already historically engaged, which will be essential to implementing the shared delivery model underpinning the CAP. The CMA has recognised the importance of this going forward in the upgraded CAP's 'over-arching' goals and strategies related to community empowerment and capacity building.	
Attribute 1C: An adaptive planning process is in place to evaluate the effectiveness of the plan and to guide improvements as knowledge improves and/or circumstances change	
The CMA has indicated through the upgraded CAP, support documents and interviews, that it intends to implement an adaptive management process through an annual review of the a four-year rolling implementation plan and an annual investment plan. The CMA has identified a broad set of events and changes that would require adaptation of actions based on the results of extensive workshops. The upgraded CAP includes a strong section on what would trigger adaptive management actions, and identifies for each whether the CAP itself must be adapted or if the issue can be addressed through changes to the implementation plan or annual plan. The CAP upgrade was informed by a broad review of the experiences with the previous CAP. Furthermore, there is evidence that adaptive management will be employed at both the CAP and project level. CMA representatives acknowledge that the details of the adaptive management plan have not yet been developed. Supporting documentation indicates the intent to leverage existing advisory groups to develop a governance framework for adaptive management. The adaptive management plans provide confidence that the CAP is sufficiently flexible, able to incorporate new knowledge and data, and will remain relevant in changing circumstances.	**Strengths:** ▪ A proposed planning framework includes implementing adaptive management through a four-year rolling implementation plan and an annual investment plan, as well as at the overall CAP level. ▪ The CMA comprehensively identified triggers for adapting the CAP and mechanisms for assessing and adapting to each trigger.

Criterion 2 - Plan uses best available information to develop targets and actions for building resilient landscapes

Attribute 2A: Plan describes the social-ecological systems operating in the catchment using best available science and knowledge of community values

The process for identifying boundaries for social-ecological systems (landscapes) was logical and incorporated scientific and community input as well as administrative boundaries. The analysis supporting the upgraded CAP is based on substantial input from internal and external experts, as well as an extensive assessment of community values identified through surveys and workshops. Incorporation of knowledge from a variety of sources is consistently evident throughout the upgraded CAP. The supporting documentation demonstrates some incorporation of scientific literature. There is still work to be done in identifying key knowledge gaps.

Strengths:

- The CAP integrates community values and scientific and administrative considerations in identifying logical social-ecological systems (landscapes).
- The upgraded CAP strongly incorporates relevant expert and local knowledge, providing confidence that regionally relevant knowledge has been considered.
- The CAP makes strong use of spatial data to describe biophysical aspects of landscapes and to define socio-ecological systems.

Weaknesses/gaps:

- There is minimal identification of knowledge gaps, which is deferred to implementation.

Attribute 2B: Plan integrates biophysical and socio-economic information to analyse the systems operating in the catchment and develop strategies for improving landscape function and resilience

The goals and strategies in the upgraded CAP demonstrate some integration of environmental and socio-economic information; although the strategies were not derived from socio-ecological systems analysis and the logic for selecting the chosen strategies over others is unclear. The CAP analysis is primarily based on an assessment of system components in isolation. While the analysis later seeks to integrate the components at the landscape scale, there is still a risk that the interactions between the social, economic and environmental components may not have been fully explored. The CAP's goals reflect environmental influences on social and economic outcomes, but the strategies show less integration of social, economic and environmental aspects.

The goals and strategies logically relate to the 'big issues' identified, and are intended to address key threats and drivers. However, confidence in the strategies chosen could be improved by a clearer explanation of how the long list of threats and drivers identified was analysed and prioritised to arrive at the chosen

Strengths:

- The three 'overarching system goals' reflect an understanding of how social and institutional factors influence environmental outcomes.

Weaknesses/gaps:

- The CMA's systems analysis is primarily based on systems components (such as soil, freshwater and community) in isolation with little explicit discussion of the relationship between them at the landscape scale, making it difficult to ascertain whether the most effective strategies were chosen.
- The logic for arriving at the specific strategies included in the CAP is not described in the upgraded CAP or supporting documents; therefore, it is difficult to assess whether the CMA has identified the best strategies for addressing the specified threats.
- While the goals demonstrate a good focus on ecosystem services and function

strategies.

Some integration of social and biophysical information is evident in the three 'whole system' goals related to 'governance and planning', 'knowledge and research', and 'empowerment and capacity building', which show good integration of social and environmental concerns and potential interventions. However, the link to economic impacts is less clear. The inclusion of a conceptual model of landscape function would demonstrate that key links have been fully assessed and would provide greater confidence that the CMA has selected the most efficient strategies for achieving goals.

and reflect socio-economic outcomes, the strategies show less integration. In particular, they lack a focus on improving economic outcomes for private landholders acting as environmental stewards.

Attribute 2C: Plan proposes targets and actions that are logically nested and supported by the available evidence

The strategies, targets and outcomes are presented in a logical, nested structure, and there is an implementation process outlined to refine them as necessary. Several of the strategies and outcomes in the upgraded CAP are highly ambitious and cannot be achieved without first succeeding in the whole-of–government approach. This demonstrates the genuine strategic nature of the plan, but does increase the risk that goals will not be achieved. Targets are only presented for the environmental, social and economic theme based goals, leaving it unclear how progress towards the three over-arching goals will be assessed. The targets are quite general and employ language such as 'improve', 'maintain', and 'reduce'. These targets would be difficult to assess without specific baseline measures, which are not provided. Outcomes are provided for each strategy. Many of these provide clearer guidance for operational planning and some could be reasonably assessed, effectively serving as sub-targets. For instance, 'Minimum of 70 per cent groundcover is maintained'. However, as was discussed in Attribute 1B, it is unclear how the targets and strategies were informed by analysis of the many proposed options, somewhat reducing confidence that the interventions identified will achieve the goals and targets.

Strengths:

- The upgraded CAP clearly articulates a logical, nested hierarchy for targets and outcomes focussed on ecosystem functions and assets or values.

Weaknesses/gaps:

- The CAP's targets are too broad to meaningfully guide actions and are difficult to measure progress against.
- It is unclear how specific strategies were derived from analysis, increasing the risk that the proposed targets and strategies will not achieve goals.
- Several outcomes are highly ambitious and seem to go beyond what the CMA can effectively influence.

Criterion 3 - CAP is a plan for collaborative action and investment between Government, community and industry partners

Attribute 3A: Plan aligns with relevant policies and community aspirations

The CMA used strong engagement activities to pursue alignment with partner agencies at all scales. This engagement clearly identified areas where some community aspirations are in conflict with government policies. These conflicts primarily surround land use planning policies and the CMA made a concerted effort to engage the Department of Planning and Infrastructure to improve the degree of alignment. The upgraded CAP proposes strategies identified as important through community and scientific input even where they are not fully aligned with current land use planning proposals. This keeps the focus on advancing better alignment, although it does create some risk that some of the CAP objectives will be unachievable.

The upgraded CAP has a good series of spatial maps intended to answer key questions about where to focus interventions for biophysical aspects. The maps are based on data provided by a range of partner organisations, which should improve alignment with and between stakeholders and provides good guidance to partners on where to focus their actions. The upgraded CAP also identifies how strategies overlap to help address multiple key questions and multiple targets. The upgraded CAP includes a table is included in the upgraded CAP that clearly identifies which strategies will contribute both directly and indirectly to the *NSW 2021* targets and state-wide NRM targets.

Strengths:

- The CAP clearly identifies areas where community aspirations and partner agency policies and actions need further attention if they are to be reconciled.
- The CAP demonstrates strong use of partner agency spatial data to guide alignment between agency actions in CAP implementation.
- The CAP provides a clear demonstration of the expected level of contribution to *NSW 2021* goals and state-wide targets for NRM.

Attribute 3B. Plan can meaningfully guide Governments, industry and the community to align effort across the region

The CAP includes robust spatial maps identifying key areas on which to focus efforts to address biophysical condition concerns. The CMA has prepared a database that generates a report of all strategies related to a particular topic, agency or region, which allows stakeholders to identify overlapping strategies for non-biophysical aspects. This information is also available in the upgraded CAP through a series of tables identifying how strategies link to partners, land uses, landforms, and landscapes. The result is that stakeholders largely agree that the CAP is a good tool for guiding collaborative actions. However, the upgraded CAP would be improved by further integrating regional asset maps to identify areas where actions can maximise social, economic and biophysical outcomes. The CAP would also benefit from more prioritisation of strategies, as most are currently

Strengths:

- The spatial mapping identifying contributing strategies for the mapped NRM questions provides a good foundation for identifying where to take collaborative actions.
- The comprehensive prioritisation process included in the upgraded CAP could provide further guidance to delivery partners on where to focus actions.

identified as applicable to all land uses and land types.

The upgraded CAP incorporates broad strategies, and defers further prioritisation, and identification of specific actions and roles and responsibilities to the implementation stage. The upgraded CAP that this allows for greater adaptability, and is necessary due to the 10-year timeframe of the CAP and uncertain funding arrangements. A draft proposed prioritisation plan is included in an appendix to the CAP, but the evidence indicates that partner organisations have not yet agreed to the implementation or prioritisation processes. Therefore, there is a risk that collaborative CAP delivery may not occur as planned.

Weaknesses/gaps:

- The strategies are too general to meaningfully guide partners on their own. The CMA needs to address this during the implementation stage, but there remains a risk that strategies won't be refined as planned.
- The current lack of commitment by some key partners to the implementation process reduces confidence that it will be carried out as proposed in the CAP.
- The CAP does not identify priority actions necessary to implement the strategies and achieve outcomes.

Attribute 3C: Plan specifies agreed roles and responsibilities for partners in the catchment

The upgraded CAP identifies delivery partners for each strategy. Definition of specific roles and responsibilities is deferred to the implementation and prioritisation stage. The CMA indicated that it has prepared a table identifying the 'lead agency' for delivering each strategy but that some partners were unwilling to endorse the CAP if it assigned them specific responsibilities. Planning for the implementation stage appears to be in the early stages. While the CMA has made significant efforts to build a whole-of-government, whole-of-community approach the evidence indicates continued resistance from some key partner organisations due to the complex operating environment. In addition, partners have not yet committed to the implementation process outlined. This results in reduced confidence that the roles and responsibilities for collaborative action will be successfully defined as proposed in the upgraded CAP. It also creates a risk that significant efforts may be expended by the CMA and its regional partners to influence central agency policy directions to little or no avail.

Strengths:

- The upgraded CAP identifies delivery partners for each of the strategies developed, and has begun attempts to identify lead agencies for each strategy.
- There are clear plans to develop further roles and responsibilities through the four-year rolling implementation and annual investment plans, as outlined in the CAP.

Attachment 2 - About the assessment

Assessment objective

The objective of the NRC's assessment is to determine whether a CAP is a quality strategic plan that promotes the state-wide targets for NRM and complies with the *Standard for Quality Natural Resource Management*[4] (the Standard).

Assessment criteria

Following extensive consultation, the NRC developed the *Framework for assessing and recommending catchment action plans*[5] which was endorsed by the NSW Government Senior Officer Group for NRM. To define the criteria and expectations, the NRC examined the external context (institutional, spatial and temporal). It identified elements expected of a high quality strategic NRM planning process and final plan, within the context of the Standard. The NRC trialled and refined the criteria through a pilot process involving CMAs and agencies.

The NRC then determined what represents an acceptable level of performance against the criteria at a specific point in time, considering factors and risks specific to the CAP and the region it covers as well as the maturity and development of the regional model as a whole, including the comparative performance of other CMAs.

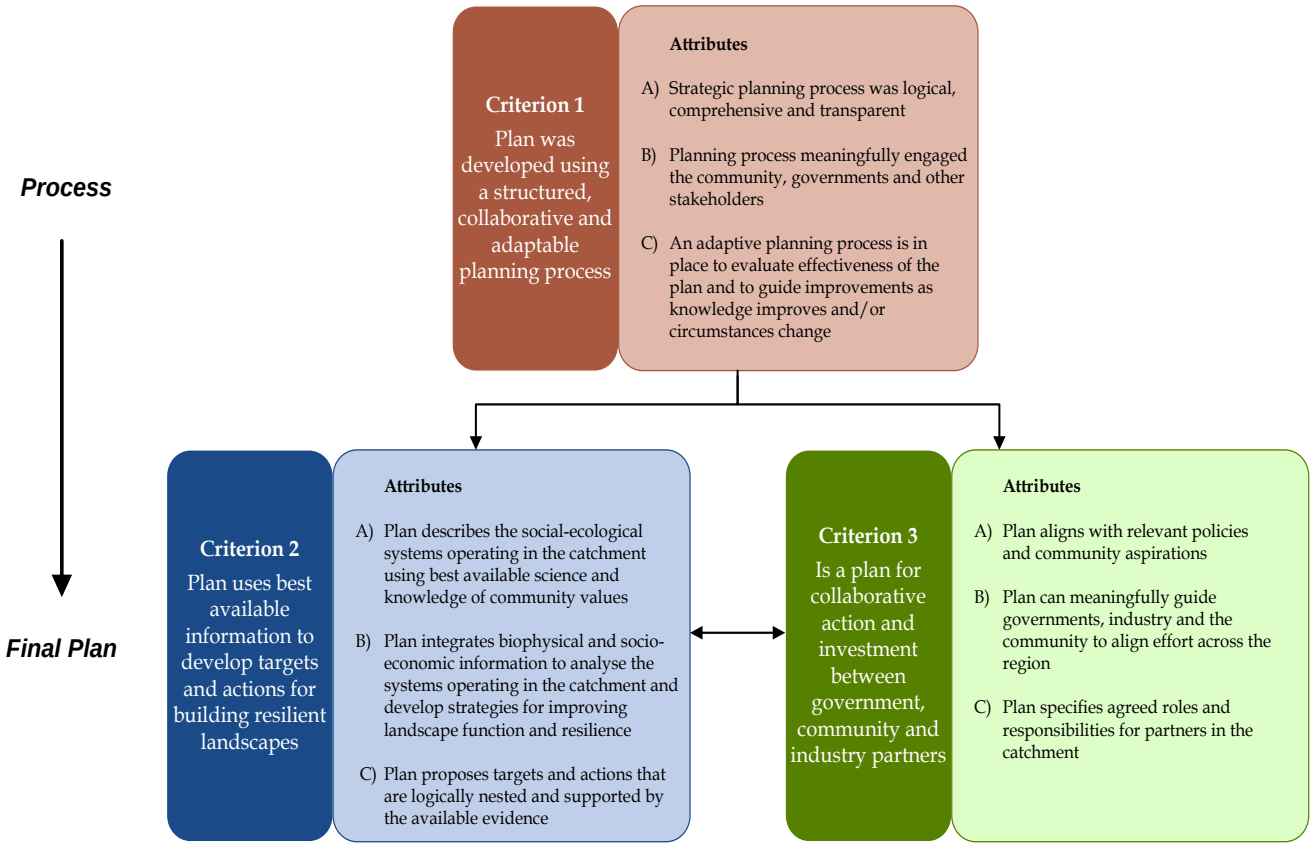


Figure 2.1: Criteria to assess whether the CAP is a quality, strategic natural resource management plan

[4] 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 using it as a quality assurance standard for all planning and implementation decisions.

[5] NRC, *Framework for assessing and recommending upgraded catchment action plans v2,* June 2012

Assessment methodology

The NRC assessment team followed the methodologies set out in the *Framework for assessing and recommending catchment action plans v2, June 2012.*

The CAPs were assessed in progressive phases, including preliminary assessment of evidence prior to formal submission and a full review when the CAP was formally submitted. The NRC sent the assessment reports to CMAs for consultation before they were finalised.

Assessment approach

The NRC's assessment of the CAP involved collecting evidence and consulting with government agencies, CMAs and other stakeholders. The methods and activities used to collect and analyse evidence against the criteria for the Hunter-Central Rivers CAP included:

- pre-assessment engagement with the CMAs to identify characteristics of the region that influence CAP development, such as major issues and institutional structures
- desktop analysis of the plan, planning approach, community consultation and scientific knowledge used in developing the plan
- interviews with three CMA Board members, three senior managers and one staff
- nine surveys and five interviews with stakeholders including representatives of industry groups, local government, landholders and non-government groups
- government agency consultation
- four external reviews of the analysis underpinning the targets, conducted by consultants with expertise in ecology and environmental science, social science and environmental economics.

Acknowledgements

The audit team gratefully acknowledges the cooperation and assistance provided by the Hunter-Central Rivers CMA, and agencies and stakeholders in the region. In particular, we wish to thank the Hunter-Central Rivers CMA Board, General Manager and staff

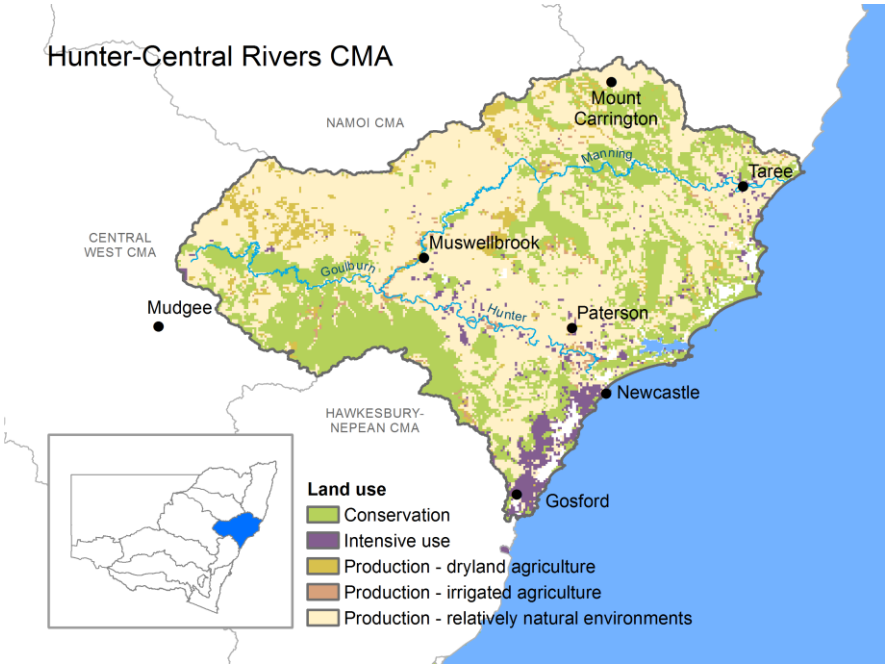
Attachment 3 - About the region

The Hunter-Central Rivers region is a very diverse landscape covering 37,000 square kilometres on the east coast of NSW, and includes an additional 1,500 square kilometres of marine area It extends from Diamond Head in the north, to Broken Bay and the coastal waterways of the Central Coast in the south, and from the Merriwa Plateau and Great Dividing Range in the west to the Pacific Ocean in the east, extending three nautical miles into marine waters.

The region is home to approximately 1.26 million people and supports a large range of land uses. The main industries in the region that directly utilise natural resources are: grazing, cropping, dairy, viticulture and horticulture, equine, fisheries, aquaculture, forestry, tourism, mining and extraction, and power generation. There is also a range of other industries that are indirectly dependent on natural resources and ecosystem services.

The majority of the region (44 per cent) is managed for grazing of modified pastures. More than 17 per cent of the region is reserved and 20 per cent has minimal use. Eight per cent of the region is used for production forestry. Just over one per cent of the area is used for dry land cropping and 0.2 per cent for horticulture. Urban settlements cover three per cent of the region and rural residential areas account for two per cent. The region, in particular the upper Hunter landscape, is a major centre for coal mining. Coal seam gas exploration is increasing.

The population is growing, especially in coastal areas. In 2011, the Lake Macquarie and Newcastle local government areas experienced the largest population growth outside Sydney. Growth inland is also significant. However, there are also areas of declining rural populations in the region, which challenges the economic viability of agricultural enterprises and rural communities; the provision of infrastructure and services; and community well-being in these areas. The region is made up of 13 local Aboriginal Land Councils, numerous traditional owner groups and various Aboriginal organisations engaged in natural resource management.[6]



[6] Source: Hunter-Central Rivers Catchment Action Plan 2013-2023