



## CASE STUDY

# SOUTHERN RIVERS CATCHMENT MANAGEMENT AUTHORITY

## Application of draft state-wide standards and targets

November 2004

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## List of acronyms

CAP	Catchment Action Plan
CMA	Catchment Management Authority
NRC	Natural Resources Commission
NSW	New South Wales

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## 1 Introduction

This case study has been developed to accompany the public release of draft state-wide standards and targets. It demonstrates that:

- the catchment scale natural resource management processes Southern Rivers CMA is likely to use in developing its CAP relate to the natural resource management process areas for which the NRC is developing state-wide standards
- existing catchment-scale targets developed by the former Southern and South East Catchment Management Boards may contribute to the draft state-wide targets.

Similar case studies have been developed for the Murrumbidgee and Western CMAs.

## 2 Application of state-wide standards

Table 1 gives examples of the catchment scale natural resource management processes Southern Rivers CMA uses in each of the process areas for which the NRC intends to develop state-wide standards.

The natural resource management processes applied by Southern Rivers CMA may fulfil some of the requirements of the state-wide standards.

The natural resource management processes applied by the CMA will not necessarily all be addressed in a state-wide standard. There would be little value in developing a state-wide standard to guide CMA action where processes are appropriately determined at the regional level or are already ingrained in CMA processes.

Table 1 provides some insight into how Southern Rivers CMA's natural resource management processes might compare to state-wide standards. However, a formal assessment can only be done when the NRC's proposed standards are fully developed.

**Table 1: Proposed matters for state-wide standards and examples of natural resource management processes applied by Southern Rivers CMA**

Proposed matters for state-wide standards	Natural resource management processes used in the development of the Southern Rivers CAP*
<p><b>Investment planning and prioritisation</b></p> <p><i>To ensure transparent and increasingly informed investment decisions which contribute to the environmental, social and economic health of NSW.</i></p>	<ul style="list-style-type: none"> <li>▪ Working groups of experts and community members prioritise programs considering the full range of benefits across resource types</li> <li>▪ Developing targets based on input from technical working groups, literature reviews and local knowledge</li> <li>▪ Principles of adaptive management applied to ensure monitoring and evaluation informs future decisions</li> <li>▪ Modelling tools that compare benefits different actions have on landscape health</li> <li>▪ Analysis tools such as 'Driver-Pressure-State-Impact-Response'</li> <li>▪ Developing a risk management plan</li> <li>▪ Convening a risk management committee of Board members and a designating a risk management officer</li> </ul>
<p><b>Coordination</b></p> <p><i>To reinforce partnerships and guide CMAs in coordinating activities to achieve outcomes at the state scale.</i></p>	<ul style="list-style-type: none"> <li>▪ When setting priorities the CMA engages with all stakeholders, including community, local government, Landcare groups, Indigenous groups, industry and agencies</li> <li>▪ Strong emphasis on project planning and management clarifies roles, responsibilities and cost sharing arrangements</li> <li>▪ Agreements developed with partners to document responsibility for certain actions</li> <li>▪ A Memorandum of Understanding is being negotiated with Local Councils to identify opportunities for joint program development and implementation</li> <li>▪ Inter-CMA group established for coastal CMAs to ensure coordination and maximise cross-CMA opportunities</li> </ul>
<p><b>Socio-economic assessment</b></p> <p><i>To ensure adequate consideration of socio-economics in CMA decision making.</i></p>	<ul style="list-style-type: none"> <li>▪ Community and industry are engaged as key partners in decision making</li> <li>▪ Obtaining regional socio-economic data sets in partnership with local government</li> <li>▪ An expert panel will help define the social and economic information needs for Southern Rivers</li> <li>▪ Broad-scale regional economic profiles are available</li> </ul>
<p><b>Information management</b></p> <p><i>To encourage the development and maintenance of coherent, accessible and relevant state scale information and datasets.</i></p>	<ul style="list-style-type: none"> <li>▪ Data exchange with agencies is based on working relationships rather than defined protocols</li> </ul>
<p><b>Monitoring and evaluation</b></p> <p><i>To ensure chosen indicators and data collection protocols permit state scale evaluation &amp; development of datasets.</i></p>	<ul style="list-style-type: none"> <li>▪ Evaluating the effectiveness of its biodiversity incentive programs to help inform future program development</li> <li>▪ Following data collection protocols where they exist</li> </ul>

\*These are examples of processes used by Southern Rivers and do not comprise all activities of Southern Rivers CMA that would contribute to meeting the requirements of the state-wide standards.

At this early stage the NRC believes there is potential for state-wide standards to add value to Southern Rivers CMA's natural resource planning processes in the following areas:

- A state-wide standard for 'Investment planning and prioritisation' may help provide working groups with structure when prioritising management actions in the development Southern Rivers' CAP.
- Southern Rivers CMA's ability to coordinate natural resource management across catchment and state boundaries could be strengthened and the outcomes of these processes improved through the additional support of a state-wide standard.
- A state-wide standard for 'Monitoring and evaluation' could provide protocols for ensuring that there is consistency in the level of support provided by state government agencies and in data sharing arrangements with the CMA.
- A state-wide standard for 'Monitoring and evaluation' could also assist the CMA as it develops a monitoring and evaluation framework by providing consistent criteria which will allow state-scale evaluation, where appropriate.

The implementation of state-wide standards is likely to require some additional processes and documentation in the development of the Southern Rivers CAP where state-wide standards introduce more rigour in natural resource management planning processes.

Working with Southern Rivers and other CMAs has demonstrated to the NRC that there is considerable variation in the process applied. The state-wide standards will provide a mechanism for continual improvement in quality processes and consistency across CMAs.

### **Issues for developing state-wide standards**

During preparation of the case study, Southern Rivers CMA identified the following issues that need to be addressed when developing state-wide standards.

- State-wide standards need to allow for regional priorities to be addressed.
- State-wide standards need to encourage innovation in natural resource management at the regional level.
- An audit framework needs to be developed to illustrate how the CMAs will be expected to demonstrate their compliance with state-wide standards.
- The state-wide standards need to strike the right balance between ensuring quality processes and best practice within CMAs and the time and resources the CMAs will have to spend ensuring they are compliant with the standards. The CMA is concerned that the audit of compliance with state-wide standards may require onerous documentation of process to demonstrate compliance with standards.

### 3 Application of draft state-wide targets

Catchment-scale targets defined in CAPs will ultimately need to be assessed for their contribution to state-wide targets. This will be achieved through an audit framework and assessment method to be developed by the NRC in consultation with CMAs and other stakeholders.

During the CAP approval process, the NRC will assess the extent to which catchment-scale targets are expected to promote the state-wide targets relevant to each region. Subsequently, the NRC will use defined indicators to assess progress in promoting state-wide targets. In both assessment processes, the contribution of catchment-scale targets across multiple state-wide targets will be considered.<sup>1</sup>

Figure 1 uses a specific example from the South East Blueprint to illustrate how on-ground actions contribute to regional targets, which in turn contribute to the draft state-wide targets and national matters for targets.

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<sup>1</sup> As the Southern Rivers CMA intends to build on the Blueprints' targets in the development of their CAP, catchment and management targets from the Blueprints were used as existing catchment-scale targets for comparison with the draft state-wide targets.

**Figure 1: Links between on-ground actions and targets at different scales**

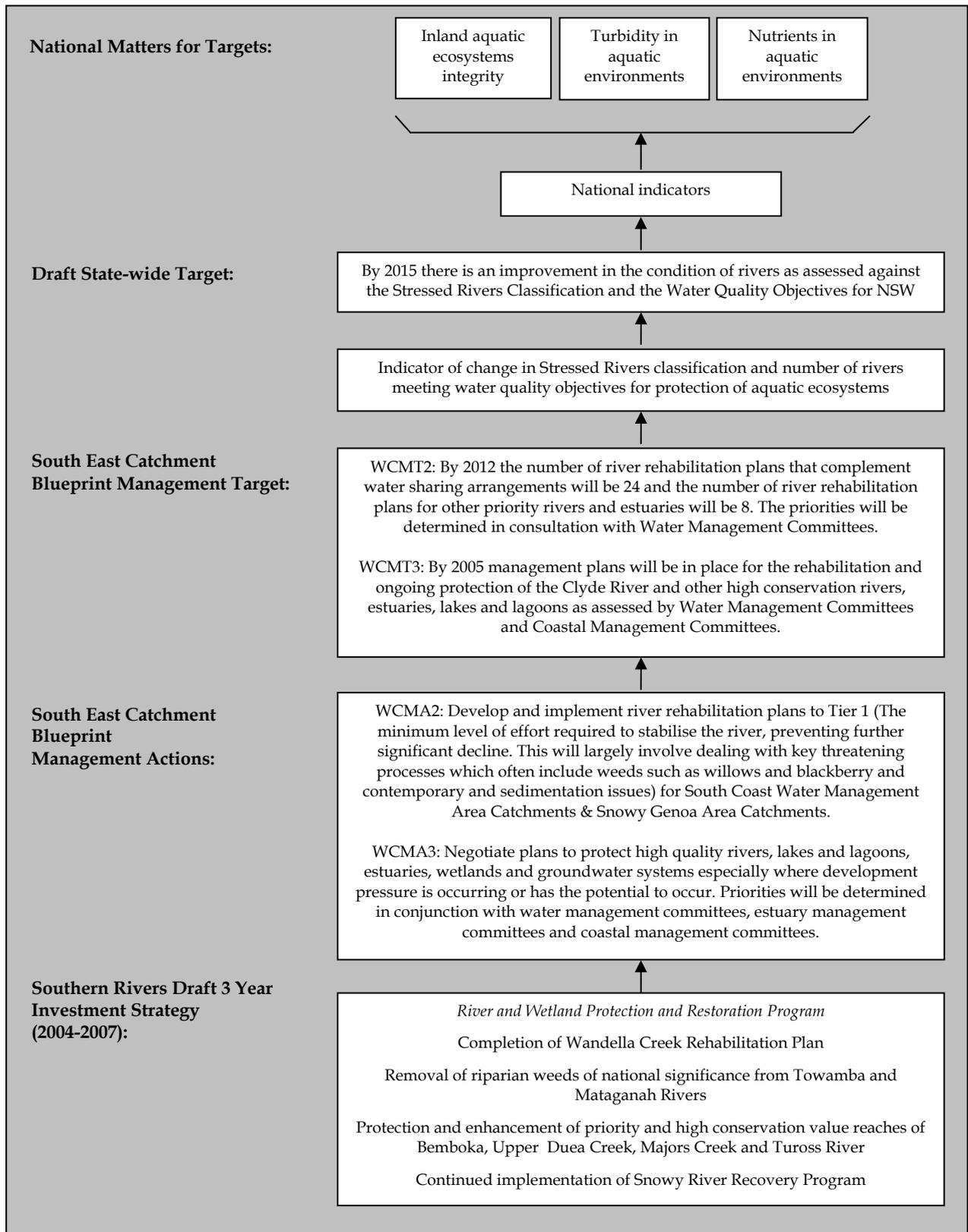


Table 2 shows the regional catchment and management targets that may contribute to promoting the draft state-wide targets. To assist in identifying the specific activities Southern Rivers CMA might seek to implement relative to each draft state-wide target the full catchment targets and management targets are provided in Appendix 1.

The existing catchment-scale targets generally align with the draft state-wide targets. Exceptions arise where catchment-scale targets address regionally-specific issues or draft state-wide targets address natural resource management issues that are not relevant to the Southern Rivers catchment.

Southern Rivers CMA believe the draft state-wide targets will help to ensure their CAP addresses priority state issues and help them engage with their community and partners by setting some parameters around what the Southern Rivers CAP will achieve. However, they do not believe the scope of their CAP will be greatly altered by the draft state-wide targets.

### **Issues for developing state-wide targets**

During preparation of the case study, Southern Rivers CMA identified the following issues that need to be addressed when developing state-wide targets.

- Indicators and baselines that the CMAs' progress will be measured against need to be well developed as they provide extra direction for the actions of the CMA.
- CMAs need to be supported by a whole of government approach including the provision of decision support tools, provision of baseline data, undertaking monitoring and assessing progress against targets. Commitment of government agencies will ensure CMA performance can be assessed against state-wide targets, demonstrate commitment to the process and help the CMA engage partners who are committed to achieving the CMA targets.

**Table 2: Alignment of catchment and management targets with draft state-wide targets**

State-wide resource condition targets	Relevant catchment or management targets*
By 2015 there is a net improvement in the condition of rivers and wetlands as assessed against the Stressed Rivers Classification and the Water Quality and River Flow Objectives (WQO and RFO) for NSW	SnCTW, SnCTCL&E, SECTBio, SECTW, SECTSoil, SECTSEcon, W1, W2, W3, W4, BMT3, BMT4, BMT5, BMT6, WCMT1, WCMT2, WCMT3, WCMT5, WCMT6, WCMT8, WCMT9, WCMT10, WCMT11, SMT1
By 2015 there is a net improvement in the condition of estuaries as assessed against the National Land and Water Resources Audit (NLWRA) classification of estuaries	SnCTW, SnCTCL&E, SECTBio, SECTW, SECTSoil, SECTSEcon, W1, W2, W3, W4, C1, C3, C4, C5, B5, BMT3, BMT4, BMT5, BMT6, WCMT1, WCMT2, WCMT3, WCMT5, WCMT6, WCMT7, WCMT8, WCMT9, WCMT10, SMT1, SMT4
By 2015 the condition of all coastal lakes is maintained and those classified as 'Targeted Repair', according to the former Healthy Rivers Commission's classification, are improved	SnCTW, SnCTCL&E, SECTBio, SECTW, SECTSoil, SECTSEcon, W1, W2, W3, W4, C1, C2, C3, C4, C5, B5, BMT3, BMT4, BMT5, BMT6, WCMT1, WCMT2, WCMT3, WCMT5, WCMT6, WCMT8, WCMT9, WCMT10, SMT1, SMT4
By 2015 there is a net improvement in the condition of marine waters as assessed against the Marine Water Quality Objectives for NSW Coastal Waters	SnCTW, SnCTCL&E, SECTW, CECTSoil, SECTSEcon, W2, W4, C1, C3, C4, C5, BMT3, BMT6, WCMT1, WCMT2, WCMT3, WCMT5, WCMT6, WCMT7, WCMT8, WCMT9, SMT1
By 2015 extractions from aquifers are within identified sustainable yields	W3, WCMT1, WCMT2, WCMT4
By 2015 there is reduced risk of species, populations and ecological communities becoming threatened	SnCTW, SnCTSoil, SnCTBio, SECTBio, SECTSEcon, W4, C3, C5, L1, B1, B2, B3, B4, B5, BMT1, BMT2, BMT3, BMT4, BMT6, WCMT8, WCMT10, WCMT11
By 2015 there is a net reduction in the abundance of and area affected by invasive species and no new invasive species have become established	SnCTCL&E, SnCTSoil, SnCTBio, SECTBio, SECTW, SECTSEcon, W4, C3, C5, L1, B1, B2, B4, B5, BMT1, BMT2, BMT3, BMT4, BMT5, BMT6, WCMT8, WCMT11
By 2015 there is a net increase in connectivity across terrestrial and aquatic ecosystems	SnCTSoil, SnCTBio, SECTBio, SECTSEcon, W4, C3, C5, B1, B2, B3, B4, BMT1, BMT2, BMT6, WCMT1, WCMT10, WCMT11
By 2015 there is a net increase in extent and diversity of native vegetation cover	SnCTBio, SECTBio, SECTSoil, SECTSEcon, W4, L2, B1, B2, B3, B4, BMT1, BMT2, SMT1
By 2015 there is no net loss of native seagrass, saltmarsh and mangroves	SnCTCL&E, SnCTBio, SECTBio, SECTSEcon, C1, C3, C4, C5, BMT1, BMT6, WCMT11
By 2015 there is an increase in the extent and diversity of native vegetation cover of riparian zones	SnCTBio, SECTBio, SECTSEcon, W4, B1, B2, B3, BMT2, WCMT2, WCMT3
By 2015 there is a net reduction in productive capacity lost due to salinity; acidity; erosion; acid sulphate soils; invasive species	SnCTSoil, SECTSoil, SECTSEcon, L2, B5, BMT3, BMT4, BMT5, WCMT6, WCMT8, SMT1, SMT2, SMT3, SMT4, SMT5
By 2015 all critical recharge zones are vegetated with deep-rooted perennial vegetation	Not addressed in the Blueprints. Salinity is not a major natural resource issue on the South Coast.
By 2010 information systems and training programs are in place that meet CMAs' identified needs to deliver better NRM outcomes	This target is not proposed to be the responsibility of the CMAs.
By 2010 communication networks and other strategies are established that lead to strong community commitment to better NRM outcomes	Generally addressed at the scale of management actions within programs rather than at the level of Catchment or Management Targets.

\* These include targets from the Southern and South East Catchment Blueprints, outlined in full in Appendix 1.

## Appendix 1: Catchment and management targets from the Southern and South East Catchment Blueprints

### Catchment Targets (CT) for Southern (Sn) and South East (SE)

SnCTW	By November 2012, each priority stream within the Southern Catchment will meet river flow objectives and water quality objectives for at least 80% of the time
SnCTCL&E	By 2011, the condition of coasts, lakes, wetlands and estuaries in the Southern Catchment will be maintained or improved from current classifications as assigned by the National Land and Water Resources Audit and the NSW Comprehensive Coastal Assessment
SnCTSoil	By 2012, the area of land affected by land degradation problems including weed infestations, will not exceed the 2003 baseline
SnCTBio	By 2012, protect, connect, enhance and manage for biodiversity conservation, a minimum of 30% of the original distribution of each native vegetation community type of the Catchment
SECTBio	By 2012, through voluntary participation, the area of private land managed to conserve vulnerable ecosystems presently under-represented in the formal reserve system will increase: <ul style="list-style-type: none"> <li>- from the present 6,500 ha to 20,000 ha for connections between ecological communities, especially along rivers</li> <li>- from 100 ha to 5,000 ha for the conservation of rare and threatened ecological communities</li> </ul>
SECTW	By 2012 river flow objectives will be met in the 24 priority catchments and the health indicators in priority rivers; coastal areas and estuaries will be improved by a minimum of 10%
SECTSoil	By 2012 the rate of soil loss across the South East region will be reduced by 10% and the health of the soil resource will be maintained at current levels or enhanced
SECTSEcon	By 2012 a mix of incentives, regulations and extension programs will be in place to achieve the biophysical targets of the Blueprint for the priority natural resource management areas of: <ul style="list-style-type: none"> <li>- biodiversity conservation</li> <li>- weed control</li> <li>- water quality improvement</li> </ul>

### Management Targets (MT)

#### Southern Management Targets

W1	By 2007, water sharing plans for Kangaroo River, Shoalhaven River Scheme, Minnamurra River and Broughton Mill Creek will be completed in accordance with the <i>Water Management Act 2000</i> and the Interim River Flow Objectives
W2	By 2012, water quality in all waterways will meet ANZECC 2000 guidelines for the main environmental values for at least 80% of the time
W3	By 2012, the unit of water consumption will have reduced below 2002 levels
W4	By 2012, the length/area of riverine corridors and wetlands protected and/or rehabilitated will increase
C1	By 2012, coastal zone management plans will be developed for all priority estuarine and coastal environments

## Management Targets (MT)

C2	From 2002, the development of all coastal zone management plans shall involve participation of Aboriginal communities and reflect local Aboriginal community values and interests
C3	From 2002, implement the priority actions of coastal zone management plans and other on-ground works that protect and rehabilitation coastal and estuarine environments
C4	By 2004, a baseline monitoring system will be established to determine the health of marine ecosystems, coastal lakes, wetlands and estuaries
C5	By 2012, high conservation value marine areas shall be protected or managed to conserve their aquatic biodiversity
L1	By 2005, a regional weed control strategy will be prepared and implemented for priority weeds
L2	By 2012, there will be a reduction in the area of moderately to severely degraded land
B1	By 2012, the vegetation communities with greater than 30% of their original distribution remaining will have at least 30% of the area of original distribution managed for conservation
B2	By 2012, the vegetation communities with less than 30% of their original distribution remaining will be actively managed via conservation and restoration activities to achieve the 30% target
B3	By 2012, increase connectivity by 10% and reduce fragmentation of priority vegetation community types in targeted areas
B4	By 2012, areas of high conservation value will be managed for conservation and priority actions for threatened species recovery plans will be implemented
B5	By 2005, collaborative programs will be in place to manage targeted pest species
U1	From 2003, local government will be supported to develop and implement integrated programs of natural resource information collection, storage and accessibility to support better natural resource management decision making
U2	From 2002, local government will be supported through improved information exchange and collaboration on natural resource management
BC1	From 2002, ensure that natural resource management planning lights a path towards reconciliation between Aboriginal and other Australians
BC2	By 2012, the community is better aware and understanding of natural resource management issues
BC3	From 2002, the community has increased skills, support and resources to implement on-ground works to address natural resource management issues
BC4	From 2002, the Board will oversee and publicly report on the implementation of the Blueprint
<b>South East Management Targets</b>	
BMT1	Identify and conserve high and medium conservation value ecological communities by establishing and funding comprehensive biodiversity conservation schemes

## Management Targets (MT)

BMT2	By 2012 identify all Crown lands (using the Crown land assessment process) with significant biodiversity values and implement appropriate reservation and management actions
BMT3	By 2012 the area of public and private land and waters (within specified sub regions) infested with following high priority weeds will not exceed year 2000 levels
BMT4	By 2005 the processes will be in place to maintain the weed and pest-free status of all areas that are free of pests and weeds.
BMT5	By 2005 the following pest animal levels will be reduced, Management plans will be developed to control some pest animals and developed by 2012 for alien fish
BMT6	By 2002 there will be no deterioration in the status of listed endangered, vulnerable and potentially threatened species and communities
WCMT1	By 2012 the number of high priority rivers with formalised and implemented water sharing arrangements will be 24
WCMT2	By 2012 the number of river rehabilitation plans that complement water sharing arrangements will be 24 and the number of river rehabilitation plans for other priority rivers and estuaries will be 8
WCMT3	By 2005 management plans will be in place for the rehabilitation and ongoing protection of the Clyde River and other high conservation rivers, estuaries, lakes and lagoons
WCMT4	By 2012 groundwater management plans will be in place for 3 high use aquifer systems
WCMT5	By 2012 primary faecal coliform inputs to priority rivers and lakes will be reduced by at least 40%
WCMT6	By 2012 primary sediment inputs to priority rivers and streams from roads, tracks and laneways will be reduced by at least 50%
WCMT7	By 2012 the 9 estuary management plans currently being developed or implemented will have been audited to ensure their implementation is complete and their revision is being undertaken
WCMT8	By 2003 coastal management committees will be established for Eurobodalla and Bega valley shires to determine priorities for coastal management plans; preparation of plans for additional high priority areas will be undertaken by 2012
WCMT9	By 2006 best management practice implemented for stormwater and sewage management and best management achieved greater than 90% of the time
WCMT10	By 2012 80% of actions are implemented from existing flood plain management plans
WCMT11	By 2012 all wetlands in the SE region are mapped and rapid assessment of current status and management priorities are completed and the 25 top priority wetlands will be fenced and managed
SMT1	By 2012 80km extreme/serious gully erosion and 60km minor/moderate priority erosion will be rehabilitated and stabilised using proven soil conservation techniques
SMT2	By 2006 prepare an alpine erosion rehabilitation plan, identifying priority areas
SMT3	By 2012 the baseline for soil acidity will be established and maintained at year 2001 levels

## Management Targets (MT)

SMT4	By 2012 control and remediate all exposed acid sulphate soils
SMT5	By 2012 a sustainable soils strategy will have been developed and implemented that aims to enhance soil quality
SEMT1	Develop a package of the most effective combination of incentives, regulation and extension programs to achieve catchment targets in the face of rural adjustment and demographic change
SEMT2	By 2005 there will be greater use of mechanisms such as statements of commitment, memorandums of understanding and regional and local agreements between local councils, state government agencies, regional organisations and Aboriginal communities to facilitate negotiation and Indigenous involvement in natural resource planning processes
SEMT3	By 2003 sustainable resourcing of community support and capacity building will be achieved in accordance with the regional Landcare and community support strategy
SEMT4	By 2008 strategies for sustainable resource use will be developed. This includes settlement strategies for all coastal areas to be developed in accordance with draft Coastal Settlement Strategy