

# BIODIVERSITY: MANAGING A NATIONAL ASSET

An assessment of the alignment of the  
*1996 National Strategy for the Conservation of Australia's  
Biological Diversity and the National Objectives and Targets for  
Biodiversity Conservation 2001-2005*

with

relevant national, state/territory and industry biodiversity strategies,  
natural resource management policies and codes of practice.

Griffin NRM Pty Ltd

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**Please note:** this document was commissioned in 2006 to inform the review of the National Biodiversity Strategy and it does not necessarily reflect the current state of biodiversity strategies, policies and codes of practice nationally.

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# The study

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## Background

Biodiversity is an acknowledged fundamental underpinning of Australian societal wellbeing. Its conservation is sought through a raft of national, state, territory and, increasingly, industry policies and strategies. The overarching national policy instruments are the National Biodiversity Strategy 1996-2006 (NBS) and the National Objectives and Targets for Biodiversity Conservation 2001-2005 (the National Objectives).

Much has changed in the policy environment since these instruments came into effect, including our understanding of the natural environment and our interactions with it. The timeframes of the NBS and National Objectives are coming to a close and the instruments are due for review. It is appropriate that the review takes account of the state, territory and industry biodiversity and related policy and strategies evolving around the nation.

This report outlines the findings of an assessment of the alignment of the NBS and the associated National Objectives, with relevant national, state, territory and industry biodiversity policy and codes of practice.

The assessment was carried out for the Department of Environment and Heritage (DEH) in April-July 2006. It will inform an upcoming review of the NBS, to be conducted by the Natural Resources Management Ministerial Council (NRMMC).

## Scope of services

### Purpose

The purpose of the study is to provide advice to DEH on the alignment of national biodiversity policy with other relevant policy to conserve biodiversity in place around the nation.

### Tasks

The study will:

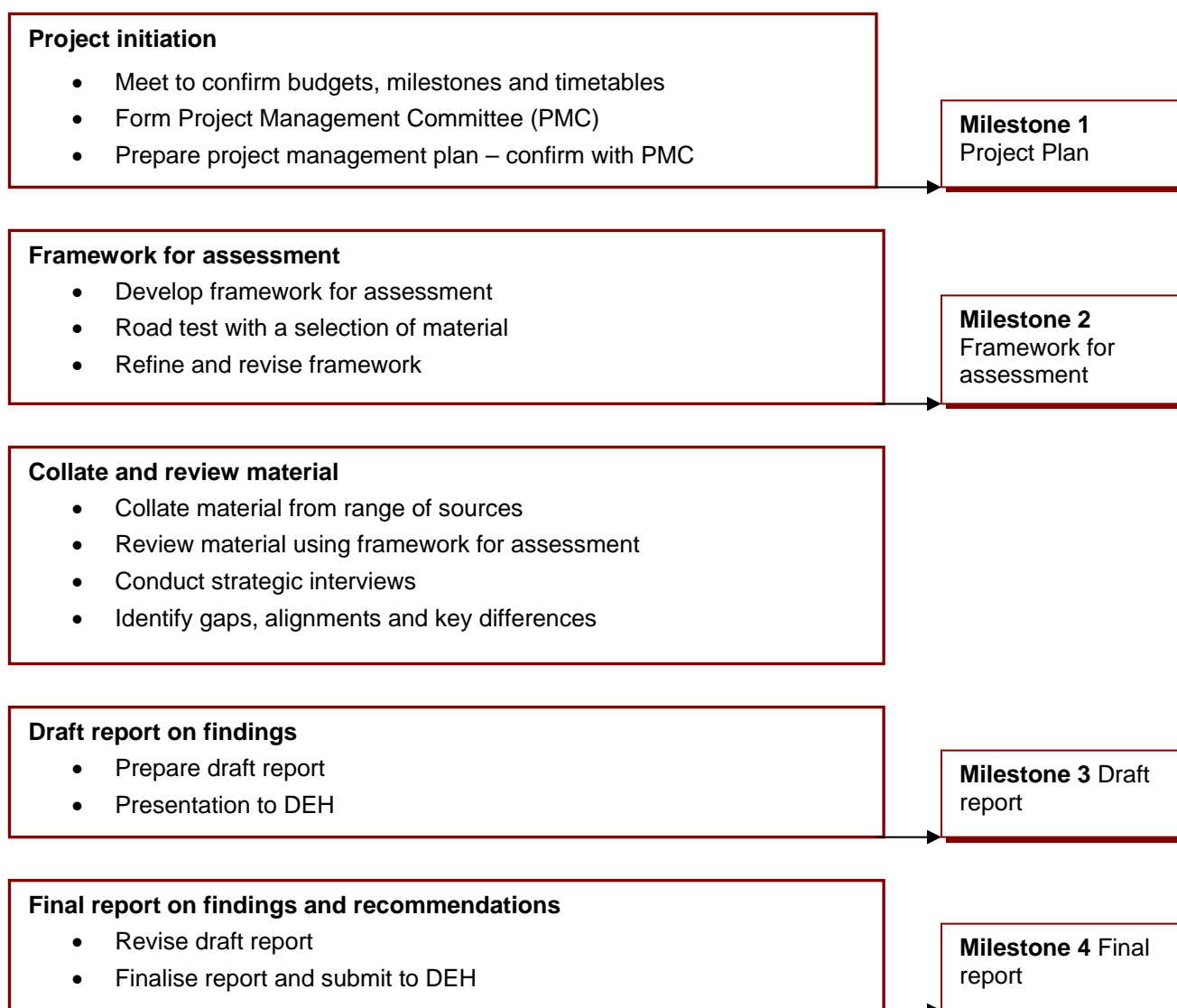
1. Assess the degree of alignment between the current NBS, the National Objectives and relevant state/territory biodiversity/conservation strategies;
2. Assess the degree of alignment between the current NBS, the National Objectives and relevant national natural resource management strategies and industry policies and codes of practice;
3. Identify industry natural resource management (NRM) strategies and codes of practice that are relevant to the implementation of the NBS and National Objectives;
4. Assess the extent to which the current NBS and National Objectives have informed the development of the state and territory's biodiversity/conservation strategies;
5. Provide a final report (written and electronic) on all of the above to DEH by 31 July; and
6. Give two presentations on the findings of the study.

## Approach and methodology

The study was based on a conceptual methodology outlined in Figure 1. The methodology involved five major tasks and four milestones:

1. Develop an agreed project management plan;
2. Establish a clear and transparent process for assessment to meet the objectives (framework for assessment);
3. Collate and review material from a range of sources including:
  - Desktop review of documents backed up by
  - Structured interviews as required.
4. Evaluate the results and prepare a draft report for DEH; and
5. Finalise the report and recommendations to DEH.

**Figure 1 Conceptual methodology**



Most of the material reviewed for the study was available in the public domain. A list of primary references is provided in Annex 1 of this report. We reviewed these documents to provide an initial overview and background for the assessment.

However, we also employed strategic interviews with key players to obtain further information and perspective, and to develop examples and case studies that illustrate the findings of the study. The cooperation and contributions of these people are gratefully acknowledged.

## Key findings

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### **The key findings of the study are presented below.**

1. The NBS was developed for the period 1996-2006. It was one of the earliest biodiversity strategies to be produced in Australia. Since then, the states and territories have developed a raft of biodiversity policy for their own jurisdictions, and the Australian Government has implemented a suite of related national policy that impacts on biodiversity conservation (including the NRM policy and programs). Industry groups have also produced a wide range of strategies and programs that address or impact on biodiversity conservation in their particular spheres.
2. A review of the NBS in 2001 found that the national strategy needed to be more focussed and targeted. As a result, the National Objectives were produced to provide time-bound objectives and targets for biodiversity conservation across the nation. Not all states and territories have signed on to the National Objectives (the NT, Tasmania and Queensland have not agreed to meet these specific targets and objectives), although all jurisdictions have programs in place to meet many of the objectives and targets.

### **Are the state and territory biodiversity policies aligned with the NBS and National Objectives?**

3. This study found a high level of consistency between national biodiversity policy (the NBS and the National Objectives) and state and territory biodiversity strategies, at the level of overarching goals. It is clear that at this level, the national policy guided development of the state and territory strategies. Several of the jurisdictions make reference to the goals of the NBS and some follow the general themes of the National Objectives.
4. The state and territory biodiversity strategies begin to diverge from national biodiversity policy below the level of the overarching goals. Below this level, the state and territory strategies vary considerably in focus, emphasis, strategic objectives and implementation programs. For instance, few of the strategies contain the targets and objectives of the National Objectives. The differences reflect state and territory assessments of risks and threats, and result in a range of responses and implementation programs.
5. Historically, the states and territories have exercised their mandate in management of natural resources and biodiversity. Several have maintained a strongly independent stance (e.g. NT, Queensland and Tasmania), arguing that their particular circumstances and development pressures warrant state level control. This led to large variation across the nation in the priority given to biodiversity conservation. For example, while some jurisdictions, such as Victoria and NSW, developed specific biodiversity strategies shortly after the NBS was released, several others have only recently drafted specific biodiversity policy (e.g. WA, SA). The ACT and NT still do not have a strategy that specifically addresses biodiversity conservation. Instead, their biodiversity conservation goals and objectives form part of a more general conservation strategy.
6. However, in recent years, there has been a strong trend towards increasing commonality between state, territory and national biodiversity policy. This

trend is in a large part driven by national NRM programs, such as the NHT and NAP, and the CoAG water reform. These programs act to bring the jurisdictions more closely into line with national policy on biodiversity. For example, under the bilateral agreements for NHT, the jurisdictions undertook to update and strengthen their biodiversity strategies, particularly in relation to key national threats such as clearing of native vegetation. As a result, most of the jurisdictions have significantly broadened and strengthened clearing controls, especially the key states still involved in broadscale clearing; NSW and Queensland.

7. Today, all jurisdictions afford high priority to biodiversity conservation. They vary primarily in focus (e.g. on private or reserved land, or both), the emphasis given to particular threats (e.g. clearing vs. threatened species); and in the mix of mechanisms for implementation of strategies (e.g. legislation, public awareness, funding programs etc.).
8. Much of the departure of state and territory biodiversity strategies from national policy noted in this review is actually less significant than it appears. At face value, the state biodiversity strategies, particularly the early ones (e.g. Victoria, NSW), appear to be less comprehensive than the NBS and National Objectives. But the states and territories have also produced a range of related policy and strategies relating to water, vegetation, coasts, threatened species etc. that, when combined, address most of the aspects of biodiversity conservation encompassed in national policy.
9. Further, the state and territory strategies appear to be less concerned with some key threats to biodiversity conservation; a key component of national policy. On closer examination, it is apparent that these threats, particularly clearing, invasive species and wildfire, are dealt with in most jurisdictions under dedicated policy and programs that specifically address them, rather than under the biodiversity policy *per se*. When the whole raft of policy and strategies relating to biodiversity is considered in the states and territories (See Annex 2), it is apparent that most jurisdictions comprehensively address the threats to biodiversity.
10. The range of related policy needs to be considered in an assessment of alignment between state and national policy on biodiversity conservation.
11. Other differences relate to changes in thinking around biodiversity conservation since the NBS and National Objectives were developed. For instance, the more recent state strategies give greater emphasis to climate change than is evident the national policy; the status of climate change as a threat to biodiversity having been elevated in current thinking relative to the other key threats underpinning the national policy in 1996.
12. Evolution in thinking in other aspects of biodiversity conservation also gives rise to differences between state, territory and national biodiversity policy. Thinking has evolved in relation to community engagement, engagement of indigenous people, partnerships in general, implementation mechanisms, targets, and monitoring and evaluation. Although the national policy was well advanced for its time, the more recent state and territory strategies tend to reflect more of the current thinking in these areas.

## **Are the national NRM strategies aligned with the NBS and the National Objectives?**

13. One key area of increasingly commonality between the jurisdictions stems from the devolution of responsibility and programs for biodiversity conservation to regional NRM groups. The national NRM policy and programs driving this trend are broadly consistent with the NBS and the National Objectives in that biodiversity conservation is one of the primary objectives. Both the NAP and NHT afford high priority to biodiversity and require that it be managed as a key asset in regional NRM programs. The accreditation process for regional plans ensures that this focus is reflected at regional level planning.
14. As a result, the vast majority of regional groups have biodiversity conservation as a key theme in their accredited plans and investment strategies. While the plans vary considerably in focus and targets, all have projects that conserve biodiversity (e.g. species recovery and iconic species protection, conservation covenants) and/or that have significant biodiversity outcomes (e.g. riparian rehabilitation, native vegetation conservation, best practice). Together, these projects account for a significant proportion of regional investment overall. Therefore, although regional investment in biodiversity falls well below that required for sustained long-term conservation of biodiversity, it is high relative to regional investment in other themes (e.g. land resources).
15. These particular national NRM policies (NHT, NAP and the regional delivery framework) are key drivers in strengthening biodiversity policy overall through the bilateral agreements (requiring the states and territories to address biodiversity policy and enabling legislation), and at regional level, via the accreditation of regional plans and investment strategies. Through such mechanisms, it could be argued that the national NRM policies have had greater influence on state, territory and regional biodiversity strategies and plans, and have been more influential in bringing about a national approach, than the NBS and National Objectives.
16. The CoAG water reform framework and more recently, the National Water Initiative (NWI) are strongly influencing state and territory management of aquatic habitat, bringing them into line with national water management policy and the National Objectives, and apparently securing outcomes for biodiversity through environmental flows and other initiatives.
17. Other national NRM policies, relating to invasive species, native vegetation, the national reserves system, firewood etc. (see Table 12), are cited in the National Objectives as policy mechanisms for meeting the biodiversity targets and objectives. These national policies are broadly consistent with the NBS and are closely linked to the National Objectives. The jurisdictions may refer to these policies in their overarching strategies for biodiversity conservation but at an implementation level, the states and territories overwhelmingly focus on their own related programs (e.g. for management of invasive species, firewood, national parks and reserves etc.).
18. The National Biodiversity and Climate Change Action Plan, released in 2004, raises the profile of climate change as a threat to biodiversity. The focus of the 2004 policy is more strongly on building knowledge and adaptation to change than is evident in the NBS and the National Objectives.

## **Are emerging industry policies aligned with NBS and the National Objectives?**

19. The period since NBS and the National Objectives were developed has seen greater, proactive involvement of industry in biodiversity conservation. However, in general, industry environment strategies do not refer directly to national biodiversity policy; nor do they explicitly adopt the objectives and targets of the National Objectives.
20. Industry policy tends to be very focussed and specific to the needs of members. It operates at a level that is close to the ground. The natural partnerships in relation to environmental management are with groups of landholders and, more recently, with NRM groups. Their objectives and targets relating to biodiversity tend to be more closely aligned with biodiversity targets at this level than with national policy.
21. Industry programs relating to environmental management tend to contain large components of research and development (R&D). At the level of R&D, the initiatives of industry embody many of the strategic directions of the national biodiversity policy, such as integrating production and environmental management. Examples include the Grain and Graze R&D program; the Land, Water and Wool program, Integrated Area Wide Management in the cotton industry.
22. Among the industry strategies, there are notable examples of highly developed policies and codes of practice that stand out in relation to biodiversity (e.g. the rice industry: A Biodiversity Strategy for the Australian Rice Industry (2002); the dairy industry: Dairying for Tomorrow: A National Strategy for Sustainable Resource Management). These strategies specifically address biodiversity conservation as an issue (Table 13). They are linked to implementation programs such as best practice and accreditation systems.
23. It is common among industry environmental management programs to operate a tiered system for accreditation. For example, the rice industry Environmental Champions Program takes producers through 5 levels of development from basic industry standards, beyond industry standards, putting plans into action, trade, innovation and eco-efficiencies and regional/catchment partnerships. Biodiversity conservation comes into effect in the third tier.
24. Industry monitoring indicates that the majority of growers participating in these programs do not progress to the higher levels of accreditation i.e. the levels that more fully encompass biodiversity conservation. While there are exceptions, most industry associations are satisfied that their members meet the needs of their businesses and comply with legislation. The drivers to encourage producers to extend to higher levels of accreditation seem to remain relatively weak in many industries.
25. Although there have been significant advances, the drivers for engaging in biodiversity conservation as part of best practice and accreditation still tend to be weak in many industries. Strong market signals and associated branding remain rare, and even where they are strong, they tend to relate to chemical use and produce quality (e.g. the organic produce industries) rather than to production practices that conserve biodiversity.

26. In the absence of strong market signals, or regulation (such as the clearing controls in NSW and Queensland), there is little pressure on producers to take part in biodiversity components of industry best practice programs, as illustrated cotton industry examples. In the cotton industry, Annual Pest Application Management Plans are compulsory for all growers and there are stringent chemical registration procedures. However, the biodiversity elements of the best practice program are voluntary and best practice audits are voluntary.
27. In many industries, biodiversity conservation is widely assessed as providing little net return to the producer relative to other practices such as water conservation and soil management. This perception has important implications for the place of biodiversity conservation in industry accreditation systems. It highlights the importance of cost sharing between governments and industry to ensure that biodiversity is affordable as part of industry best practice, particularly while markets for environmentally sound production (as opposed to produce) remain relatively weak across key industries.
28. In fact, the last decade has seen the development of substantial, wide ranging partnerships between industry, government and the non-government sector to achieve adoption of best practice on-farm that takes account of the range of public benefit as well as private environmental issues.

**Are the national objectives cascading through state/territory/regional and industry levels?**

29. The states and territories have developed a wide range of responses to the threats to biodiversity. Their responses are driven by their own assessments of risk, and their obligations under various national strategies and agreements. The Australian Government is exerting influence on the states and territories largely through funding and other arrangements under the national agreements.
30. It is clear that the NBS and National Objectives have influenced state and territory biodiversity policy, particularly at the level of overarching goals and strategic directions. Below this level, the approaches and specific focuses of the states and territories diverge.
31. However, there is a strong evidence of increasing uniformity between jurisdictions in the way risks to biodiversity are assessed and managed. The overwhelming trend in all jurisdictions and across the nation is towards increasingly stringent and comprehensive regulation of threats to biodiversity and increasing consistency with Australian national policy and objectives. In some aspects, such as native vegetation management and threatened species/ecological communities, biodiversity emerges as a major theme driving policy. In others, including water reform and integrated regional NRM, biodiversity is one of the key themes but not a major driver of policy.
32. In the past decade, partnerships have evolved and strengthened between governments at different levels, and between governments and industry. The developments in NRM are among the most significant of these partnerships for biodiversity conservation. The CoAG agreements in water management that include environmental flow allocations as a central tenet, and the bilateral agreements between the Australian, state and territory governments for implementation of the NHT2 and NAP are key examples.

33. The new regional delivery model for NHT2 and NAP integrates many of the national and state/territory programs that impact on biodiversity under a regional framework. The programs funded under NHT2 and NAP are largely being delivered through accredited regional NRM plans and investment strategies, and several of the jurisdictions are integrating their NRM programs at regional level (e.g. NSW native vegetation arrangements).
34. The regional model is becoming increasingly important in the on-ground implementation of biodiversity programs, as the states and territories channel more and more of their NRM and biodiversity investment programs through the regional groups.
35. The regional model has the potential to integrate national, state/territory biodiversity policy and objectives with regional investment in on-ground implementation. Capacities to target high priority biodiversity issues, resources to develop and adopt management practices that achieve the regional biodiversity targets, and secure long term funding are the key constraints.

### **The future**

36. Knowledge and thinking around the issues of biodiversity conservation have advanced considerably since the NBS was developed in 1996. Some of the more recent state and territory policies reflect these changes, particularly in their more wide-ranging approaches to partnerships and engagement, and in their more flexible and robust links to implementation mechanisms.
37. The states and territories, through the national programs and their own strategies, are largely conforming with national biodiversity policy and there are strong foundations for a national approach to biodiversity conservation across Australia. However, there is also a need for flexibility, particularly in implementation and investment programs, to accommodate the wide variation in environments, development and threats between the jurisdictions.
38. Partnerships with industry are emerging and strengthening. These partnerships need to be supported by strong biodiversity policy that promotes proactive collaboration and cost sharing to achieve integration of biodiversity conservation in industry best practice and accreditation programs.

## The NBS and National Objectives in profile

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The NBS was developed by the Australian Government in response to the International Convention on Biological Diversity, ratified by Australia in 1993.

The NBS provided a national approach to biodiversity conservation spanning the period 1996 to 2006. It recognised the responsibilities and interests of the states and territories while acknowledging the need for a national policy and a more consistent approach to protect biodiversity values across the country, including those of national and international significance. The NBS was endorsed in 1996 by all state and territory governments.

The NBS drew strongly on the principles of ecologically sustainable development that underpinned Australian Government strategic approaches to environment and development in the 1990s. The NBS sought progress in a number of key directions including:

- Conserve Australian biodiversity overall by expanding representation in the reserves system and through mechanisms to encourage conservation off reserves;
- Provide higher levels of protection for at risk and high value biodiversity;
- Integrate biodiversity conservation and natural resources management across the range of primary industry sectors;
- Identify and manage threatening processes;
- Improve the knowledge base;
- Involve communities, including indigenous communities;
- Meet international obligations; and
- Support institutional reforms and other actions to enable implementation of the strategy.

A review of the NBS conducted in 2001 found that there had been significant progress towards the goals of the national strategy but that there was a need for greater focus and for specific thematic objectives and targets. The National Objectives were developed to provide a set of time-bound objectives and targets across the major biodiversity themes:

- Native vegetation;
- Freshwater ecosystems; and
- Coastal, marine and estuarine ecosystems.

The National Objectives also elevated the profile of some key threatening processes:

- Clearing of native vegetation;
- Invasive species;
- Salinity;
- Grazing; and
- Climate change.

The National Objectives linked the biodiversity conservation targets to other closely related national policy and intergovernmental agreements that were in place or were being negotiated at the time (2001), including:

- The CoAG agreements on water reform and the National Water Initiative;
- The bilateral agreements for regional delivery of the Natural Heritage Trust (NHT2) and the National Action Plan for Salinity and Water Quality (NAP);
- The National Water Quality Management Strategy;
- The National Biodiversity and Climate Change Action Plan;
- The National Weeds Strategy;
- The National Forest Statement;
- The National Framework for Management and Monitoring of Australia's Native Vegetation;
- The National Tourism Strategy;
- The CAR principles of the National Reserves System; and
- The international conventions and treaties covering wetlands and migratory birds (Ramsar, CAMBA, and JAMBA).

These strategies include commitments that are intended to have significant direct or spin off benefits for biodiversity. Together, they contribute to a whole of government response to the threats to biodiversity across jurisdiction and geographic boundaries and across a range of sectors.

Not all jurisdictions have signed up to National Objectives (NT, Tasmania and Queensland). However, all jurisdictions have made significant progress towards meeting many of the targets set in the National Objectives, particularly in relation to clearing, protected areas and water reform (Griffin NRM, 2004).

### **Australian biodiversity conservation legislation**

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC) was developed by the Australian Government to clarify commonwealth involvement in environment assessment and approvals processes. The Act provides for listing and protection of nationally significant threatened species and communities, and listing and abatement of threatening processes. It enables:

- Environmental protection and an integrated framework for the conservation of biodiversity;
- Environmental assessment and approvals of nationally significant issues;
- Development of bilateral agreements between the Australian Government and State/Territory governments for the accreditation of State assessment and approval processes;
- Cooperative identification and monitoring of biodiversity and bioregional planning;
- Listing of threatened species, ecological communities and threatening processes and development and implementation of recovery/threat abatement plans;
- Management of Australian Government reserves, conservation zones, World Heritage Areas and wetlands of international importance; and

- Protection for international migratory species and Commonwealth marine protected areas.

## Alignment with state and territory biodiversity strategies

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**Key study question:**

1. *Are the state and territory biodiversity policies aligned with the NBS and National Objectives?*

### State and territory biodiversity policy

Table 1 lists the primary biodiversity policy in each state and territory. All of these were developed after the NBS (1996) but some predate the release of the National Objectives in 2001 (ACT, Victoria and NSW).

**Table 1 Biodiversity policy in the Australian states and territories**

<b>Jurisdiction</b>	<b>Strategy</b>	<b>Date</b>
National	National Biodiversity Strategy 1996-2006 National Objectives and Targets for Biodiversity Conservation 2001-2005	1996 2001
ACT	The ACT Conservation Strategy 1997	1997
Victoria	Victoria Biodiversity Strategy 1997	1997
NSW	New South Wales Biodiversity Strategy	1999
Queensland	Queensland Biodiversity Framework 2003 Wet Tropics Conservation Strategy 2004 The Regional Nature Conservation Strategy for South East Qld 2003-2008	2003 2004 2003
Tasmania	Nature Conservation Strategy 2002-2006	2003
South Australia	No Species Loss 2006-2016 (draft)	2006 Draft
Western Australia	Towards a Biodiversity Conservation Strategy (draft)	2006 Draft
Northern Territory	Draft Northern Territory Parks and Conservation Masterplan 2005 (Draft) Integrated NRM Plan for the Northern Territory 2005	2006

## Overarching objectives and strategic directions

A broad assessment of the state and territory biodiversity strategies shows a reasonably strong alignment with the primary objectives of the NBS (Table 2). At this strategic level, the overarching biodiversity policies are closely aligned. Several of the state and territory strategies refer directly to the NBS and it is clear that the national strategy was used to guide development of biodiversity policy in the jurisdictions.

**Table 2 Alignment of state and territory policy with the objectives of NBS**

NBS objectives	Conservation of biological diversity across Australia	Integrating biological diversity conservation and NRM	Managing threatening processes	Improving our knowledge	Involving the Community	Implementation
ACT	✓	✓	✓	✓	✓	✓
Victoria	✓	Pre-dates NRM framework	✓	Not specific	✓	✓
NSW	✓	✓	✓	✓	✓	✓
Qld	✓	✓	✓	✓	✓	✓
Tasmania	✓	✓	✓	✓	✓	✓
SA	✓	✓	Addressed but not as key theme	✓	✓	✓
WA	✓	✓	Addressed but not as key theme	✓	✓	✓
NT	✓	✓	Addressed but not as key theme	✓	✓	✓

Source: state and territory policy documents

The majority of state and territory strategies closely follow the NBS central themes and strategic directions. The overarching goals and language of many of the documents are similar.

A number of important themes are common across the national and state/territory policies. All undertake to:

- Manage protected areas;
- Promote off-reserve conservation through management of risks and provision of incentives;
- Provide special protection for at risk biodiversity;
- Promote community awareness;
- Promote whole of government and cross sectoral partnerships;
- Build knowledge and assess risks; and
- Carryout bioregional planning.

Even at this very broad level, however, there are differences in emphasis between the national strategy and the state and territory policies. Some specific examples are:

- Most jurisdictions have a specific overarching biodiversity strategy (WA-draft, Victoria, SA-draft, NSW, Queensland); others (NT-draft, Tasmania and ACT) manage biodiversity under a more general conservation strategy/plan and therefore tend to be less detailed in relation to biodiversity.
- Victoria/ACT predates the evolution of regional NRM initiatives; recent policy integrates strongly with regional NRM (Tasmania, NT, WA, SA).
- Queensland and NT policies are focused on managing biodiversity in a resource management context. Others (Victoria, SA, WA) are more aspirational and focused on the intrinsic values of biodiversity.

The variations in approach cited above reflect the timing, judgements and responses in the states and territories to the perceived risks to biodiversity in their jurisdictions. Differences such as these are to be expected given the diversity in threats across the nation. They do not fundamentally constitute departures from the broad goals and strategic directions of the NBS.

### Thematic objectives and targets

The policies begin to diverge below the level of overarching objectives and strategic directions. Table 3 shows the alignment of the state and territory policies with the National Objectives. At this level, diversity in emphasis and focus between the jurisdictions is readily apparent.

**Table 3 Alignment with the National Objectives**

NOs	Native veg.	Freshwater	Marine	Invasive species	Grazing	Climate change	Ethno. knowledge	Info	Instit. reform
ACT	✓	✓	NA	✓✓	Broadly	Not specific	Not specific	✓	✓
Vic	✓	✓	✓	✓	Broadly	Not specific	Not specific	✓	✓
NSW	Flora/ fauna	Water	Coastal	✓	✓	✓	✓✓	✓	Limited
Qld	Not specific	Not specific	Not specific	✓	Broadly	✓	✓✓	✓	✓✓
Tas	Forest	Not specific		✓	Broadly	Emerging issue	Broadly	✓	✓
SA	✓	✓	✓	✓		✓	✓✓	✓	✓✓
WA	✓	Broadly	Broadly	✓	✓	✓	✓	✓	✓✓
NT	✓	✓	✓	✓	✓	✓	✓✓	✓	✓✓

Source: government policy documents and websites

## **Comprehensiveness**

The NBS and the National Objectives are reasonably comprehensive across the key biodiversity themes (e.g. native vegetation, freshwater ecosystems, marine and coastal ecosystems, threatened species and communities, threatening processes, knowledge base). The state and territory strategies vary in their comprehensiveness:

- The most recent strategies (SA, WA) tend to be more comprehensive than the earlier state policies (Victoria, ACT and NSW).
- Of the jurisdiction strategies, the draft SA, and WA strategies are the most comprehensive across the main biodiversity themes.
- Some policies tend to focus on native vegetation and threatened communities; other policies are more comprehensive across biodiversity themes.
- Marine, coastal and estuarine areas tend to be underrepresented in the state/territory strategies but largely because the coast and marine areas and coastal wetlands tend to be managed under separate state level strategies (see case studies in Annex 2).

## **Off and on-reserve conservation**

The NBS and the National Objectives highlight the need to expand the reserves system under CAR principles and also the need to encourage off-reserve conservation on private land and to protect biodiversity off-reserves through integrating biodiversity in NRM. Not all states and territories specifically refer to the CAR principles in their biodiversity strategies. NSW, Victoria, Tasmania, and SA specifically agree to the CAR principles in their strategies. Queensland, ACT, NT and WA do not refer to CAR principles in relation to their reserves systems.

Some jurisdictions implement off-reserve biodiversity protection primarily through the state/territory environment assessment and approvals processes (Queensland, Victoria). Others provide state level mechanisms specifically for integration of biodiversity conservation in regional NRM programs (NSW, Tasmania).

## **Legislative frameworks**

Most jurisdictions have some form of overarching legislation for protection of biodiversity (Table 4). The NBS and National Objectives are supported by the EPBC Act (1999), which also applies to the states and territories. The states and territories are at various stages in development/updating of biodiversity protection legislation:

- Some states and territories have biodiversity protection legislation that post-dates their biodiversity strategy (Victoria, NSW). In others, the legislation predates the strategy and has a narrower focus (Tasmania, Queensland, ACT, SA and WA). SA and WA have proposed new legislation to bring them into line with the EPBC Act.
- In most jurisdictions, biodiversity policy is enacted through specific biodiversity legislation to protect threatened species and communities, and through general environment protection legislation that addresses development impacts (NSW, Victoria, Queensland, Tasmania). Most jurisdictions also have a range of other Acts to manage biodiversity in specific areas (eg coastal management legislation), or to address certain threats (e.g. clearing controls, pest and weed regulations).

**Table 4 Legislation to protect at risk biodiversity**

<b>Jurisdiction</b>	<b>Legislation</b>	<b>Protection and recovery planning</b>
Australian Government	<i>Environment Protection and Biodiversity Conservation Act (1999)</i>	Enables listing of threatened species, communities, critical habitat and threatening processes. Recovery planning required. Provides for abatement plans for threatening processes.
NSW	<i>Threatened Species Conservation Act (1995)</i> <i>Threatened Species Conservation Amendment Act (2002)</i>	Threatened species and endangered and vulnerable ecological communities, critical habitat can be listed under the NSW legislation. Recovery planning is required. Threatening processes can be listed.
Tasmania	<i>Threatened Species Protection Act (1995)</i> <i>Tasmanian Regional Forest Agreement (1997)</i> <i>Nature Conservation Act (2002)</i>	The Tasmanian legislation presently only enables listing of threatened species. There is an agreed process to prepare guidelines for the listing of threatened ecological communities under the Act. The Tasmania Regional Forest Agreement(RFA) provides for listing of and recovery planning for threatened species.
Queensland	<i>Nature Conservation Act (1992)</i> <i>Wet Tropics World Heritage Protection and Management Act 1993 (Qld) (WTWHPM Act)</i> <i>Vegetation Management Act 1999 (Qld)</i>	Act enabling protected areas also provides for listing of threatened species and critical habitat as well as areas. Also threatening processes. Recovery planning is not specifically required under the <i>Nature Conservation Act (1992)</i> and would normally only be in place if the species was also listed nationally under the <i>EPBC Act (1999)</i> .
Victoria	<i>Flora and Fauna Guarantee Act (1988)</i>	Enables listing of threatened species, communities and threatening processes. Listings are not specifically related to pre 1750 extent. Action plans are required for listed communities and threatening processes under the Act. Net gain determinations however, take account of pre European extent.
ACT	<i>Nature Conservation Act (1980)</i> <i>Environmental Protection Act (1997)</i>	Enables listing of threatened species and ecological communities. One community is listed as endangered (<10% pre 1750 extent) and an action plan has been developed.
NT	<i>Territory Parks and Wildlife Act (1977)</i> <i>Territory Parks and Wildlife Conservation Act (2000)</i> <i>Territory Parks and Wildlife Conservation Amendment Act (2006)</i>	Does not specifically list endangered species or communities. Dealt with through the reserves system.
SA	<i>National Parks and Wildlife Act (1972)</i> ; proposed new Biodiversity Conservation legislation	Provides for listing of threatened species. Have a provisional list of species. No provision for listing of threatened communities. New legislation will address. Revegetation programs take account of pre European extent.
WA	<i>Wildlife Conservation Act (1950)</i> – to be replaced by the Biodiversity Conservation Bill (2003)	There is no legal requirement in WA for recovery planning although at risk biodiversity may be protected under a special Environmental Protection Policy. The proposed Biodiversity Conservation Bill will provide for listing and recovery planning for threatened species and ecological communities.

Source: state and territory laws and government websites

## At risk biodiversity

The NBS and National Objectives have protection of threatened species and communities as a key theme (e.g. Target 1.3.1). The states and territories take different approaches to protection of at risk biodiversity:

- The states and territories vary in how they define threatened biodiversity and how they respond (Table 3). Some provide a regulatory framework for comprehensive listing and recovery of at risk species and communities (NSW, Victoria, ACT). In others, threatened species and/or communities are not comprehensively protected and/or provided with recovery planning under legislation but can be afforded protection through the reserves system and environmental impact assessment processes or special provisions. Queensland provides for protection of at risk communities under clearing laws but not under biodiversity protection laws. WA and SA have proposed legislation that will enable comprehensive listings and recovery planning at State level.
- Only Queensland defines at risk biodiversity according to a pre-1750 baseline as per the National Objectives.

## Threatening processes

The NBS and National Objectives have a strong focus on managing threatening processes. The National Objectives, in particular, highlight clearing of native vegetation, invasive species and climate change as key threatening processes for which specific objectives and targets are provided. Table 5 summarises the responses in the state and territory strategies to threatening processes.

**Table 5 Responses to threatening processes**

Jurisdiction	Does the strategy/policy address key threatening processes? <sup>1</sup>
Australia	NBS refers to climate change and clearing, other areas mentioned in National Objectives
Queensland	Threats not addressed in detail, climate change acknowledged as threatening process. Strategy for SE Qld includes threats as 'direct pressures' on biodiversity that the strategy as a whole addresses, not as a separate action area
ACT	Clearing and invasive species, as well as fire regimes. Strategies to address threats form the bulk of the strategy
NSW	Threatening processes one of key areas for action. Decline in native vegetation, weed and pest management, fire management, sustainable grazing and climate change mentioned
Victoria	Threatening processes not specified as separate action area, but range of threats documented for different ecosystems
Tasmania	Reducing threats one of 8 key areas for action. Clearing, salinity, climate change and invasive species addressed
South Australia	Climate change one of 5 key strategic areas, threats biodiversity addressed as a category, but no specific mentioning of salinity, grazing and clearing

<sup>1</sup> Salinity; grazing; climate change; clearing; invasive species (National Objectives)

Jurisdiction	Does the strategy/policy address key threatening processes? <sup>1</sup>
Western Australia	Threatening processes are addresses as part of ecosystem management, climate change, invasive species, and fire regimes. Sustainable grazing addressed in NRM section
NT	Threats identified: uncontrolled fire, introduced plants and animals, climate change, land clearing, pollution, threats to the marine environment

Source: Government documents and websites

The main differences can be highlighted:

- In the states and territories, threatening processes such as salinity, fire and invasive species tend to be addressed by specific policy rather than under overarching biodiversity conservation policy. In some jurisdictions, these specific policies are key elements of government approaches to NRM and are strongly administered and well advanced (e.g. salinity strategies in NSW, Victoria and WA; and clearing controls in Queensland and NSW). The more recent state and territory biodiversity strategies link actions and implementation mechanisms to the other policies that address threatening processes, as per the National Objectives.
- The policy adopted for clearing of native vegetation varies among the states and territories (Table 6). The NBS and National Objectives adopt a “reversal of decline” policy. Some jurisdictions adopt a no net loss or net gain policy (Victoria, SA, WA, ACT) while others permit clearing for development with appropriate risk assessment (NT, Tasmania). The jurisdictions where the bulk of clearing took place in the last decade are both phasing out broadscale clearing (NSW, Queensland).
- Some jurisdictions (NSW, Queensland) undertake to prevent broadscale clearing in communities with an extent below 30% of a pre-1750 baseline as per the National Objectives. Others undertake to protect vegetation communities through clearing controls that assess impact on regional biodiversity (NT; WA; Vic; SA).
- Climate change is also addressed in some jurisdictions by specific policy and actions and the profile of climate change as a threatening process is higher in the more recent state biodiversity policy than in the NBS. The national Biodiversity and Climate Change Action Plan was only recently developed (post dating the target set in the National Objectives). Queensland, Victoria and NSW for example, have climate change strategies that preceded the development of the National Biodiversity and Climate Change Action Plan as required by the NBS and National Objectives. The links to biodiversity are implicit under these strategies.
- Of the threatening processes, invasive species is perhaps the least well linked to biodiversity conservation policy in the jurisdictions. At state/territory level, there is a long tradition of management of invasive species threats to agriculture and produce. However, management of environmentally threatening weeds and pests is receiving increasing attention. For example, the states and territories have signed on to the National Weeds Strategy and list Weeds of National Significance.

- In relation to invasive species, the national level risk assessment process is still based on a permitted system rather than on an exclusion system as required by the National Objectives.

**Table 6 Policy on clearing of native vegetation**

Jurisdiction	Policy on clearing
Victoria	Net gain
SA	Clearing only approved where a net gain is demonstrated.
WA	No net loss
ACT	No net loss
Queensland	Phase out broadscale clearing
NSW	Phase out broadscale clearing
Tasmania	Clearing for plantation development will continue net loss
NT	Clearing for agricultural development will continue net loss

Source: government documents and websites

### Targets and objectives

The National Objectives provide time-bound objectives and targets to the NBS. The jurisdictions vary in their identification of specific targets for implementation (Table 7).

- Some state policies are strongly action oriented and contain specific time-bound objectives, targets and actions (WA, SA, Queensland regional strategies). Other policies are more aspirational and do not contain specific targets (Victoria).
- Queensland provides an overarching biodiversity strategy but also carries out regional biodiversity/conservation planning which is strongly action oriented.
- The NT, WA and SA strategies are in draft form and are still under negotiation. The final versions are likely to be more specific in relation to objectives and targets (WA and SA are already very action plan oriented)

**Table 7 Targets and timeframes for implementation**

Jurisdiction	Does the strategy/policy include targets and timeframes?
Australia	NBS lists objectives and actions, list of priorities to be reached by 2000 (in the implementation section only). Targets and timeframes up to 2005 provided in National ObjectivesS
Queensland	Qld Biodiversity Framework contains no targets or timelines. Regional strategy for SE Qld has timeframes in action plans but not targets
ACT	Performance targets but not timeframes
NSW	Yes, some targets and timeframes, but mainly short-term
Victoria	Broad timeframe 2020, but no clear targets with individual timeframes

<b>Jurisdiction</b>	<b>Does the strategy/policy include targets and timeframes?</b>
Tasmania	No specific targets and timeframes
South Australia	Yes, targets and recommendations in 5 strategic areas, with timeframes up to 25 years
Western Australia	Visions for next 100 and 25 years, targets and timelines in the respective action areas, output targets by 2006, 2010 and within 25 years
NT	Masterplan mentions key initiatives, but not specific targets or timelines. Integrated NRM Plan contains targets and timelines

Source: government policy and websites

### Links to implementation programs

The NBS and the National Objectives emphasise implementation programs as a major theme (e.g. through institutional reforms, markets, incentives etc.) and provide clear links to other strategies for implementation of programs to achieve the objectives and targets for biodiversity conservation (e.g. The National Reserves Program, CoAG water reforms and the National Water Initiative, National Weed Strategy, National Forest Policy Statement, NHT2, NAP, National Framework for Monitoring and Management of Australia's Native Vegetation, National Climate Change Action Plan etc.).

Table 8 shows where the state/territory strategies specifically refer to the national strategies included in the National Objectives.

**Table 8 Reference to national NRM strategies**

<b>Jurisdiction</b>	<b>Forest Policy</b>	<b>Tourism Strategy</b>	<b>Weeds Strategy</b>	<b>NWQM Strategy</b>	<b>Climate Change Plan</b>	<b>CoAG Water</b>	<b>Ramsar /internat</b>
Australia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Queensland	No	No	No	No	No	No	Yes
ACT	Yes	No	Yes	Yes	Yes*	No	No
NSW	Yes	No	Yes	Yes	Yes*	No	Yes
Victoria	No	No	No	No	No	No	No
Tasmania	Yes	No	No	No	Yes*	Yes	No
South Australia	No	No	Yes	Yes	Yes	No	Yes
Western Australia	Yes	No	Yes	Yes	Yes	No	Yes
NT	No	No	No	No	No	No	No

\*refer to Greenhouse Response Strategy- Climate Change Action Plan not developed at time

Some of the state and territory strategies refer to these national policies and plans as drivers for implementation. More commonly, implementation in the jurisdictions is driven through related state and territory level strategies such as native vegetation management frameworks, salinity action plans, water reforms etc. (Table 9).

The state implementation plans tend to be highly consistent, however, with the relevant national policy. For example, the state level strategies for water reform are driven by the CoAG agreements, and the state and territory initiatives under NHT2 and the NAP are tailored through the bilateral agreements for these programs.

**Table 9 Links to implementation programs**

Jurisdiction	Is the biodiversity strategy/policy clearly linked to implementation programs? <sup>2</sup>
Australia	State and bioregional strategies, local government planning and need for effective legislation mentioned. Partnerships, cost sharing agreements and market mechanisms understated
Queensland	Partnerships with government, community and industry highlighted, Engagement of the private sector emphasised. Appropriate institutional arrangements. Importance of enabling legislation understated
ACT	Relevant management plans and policy development incorporate conservation requirements, off-reserve incentive scheme
NSW	Yes. Strategic and legislative review, effective management structures, Partnerships with community, committees, NGOs and the private sector
Victoria	Financial incentives to speed the adoption of biodiversity conservation practices, public authorities to develop explicit and well-documented strategies. Mentions need for markets that account for biodiversity,
Tasmania	Yes, incentives, market instruments (e.g. eco-labelling), new legislations, partnerships integrated government planning and management
South Australia	Statutory mechanisms, biodiversity legislation to be developed, state-wide biodiversity network involving government and non-government actors, State biodiversity council, community and industry participation, policy mechanisms and incentives, MBIs mentioned but underemphasised
Western Australia	Integration of biodiversity into government processes and institutional reforms, off-reserve incentive packages, policy and legislation requirements specified for each action area, partnerships among government, private sector, community, incentive packages, MBIs
NT	Improving legislation and regulation; new directions for parks and reserves management Integrated NRM Strategy: Review of NRM legislation and policy

Source: government policy documents and websites

Many of the strategies promote incentives programs and other mechanisms to encourage conservation of biodiversity off reserves (Table 10).

<sup>2</sup> Institutional reform; enabling legislation; partnership agreements; cost sharing arrangements; market-based instruments (MBIs) for biodiversity conservation.

**Table 10 Incentives programs for off-reserve conservation**

<b>Jurisdiction</b>	<b>Does the strategy include incentives and other cost sharing arrangements for protection of biodiversity off reserves?</b>
Australia	Economic instruments and incentive-based policies (National Objectives), incorporation of biodiversity conservation in whole farm or property management, bioregional and catchment planning
Queensland	Promoting range of measures that will give recognition to land managers and achieve positive biodiversity outcomes. Strategy for SE Qld contains action area for off-park conservation and management.
ACT	Incentives scheme for off-reserve conservation proposed; property management agreements; ANZECC-sponsored Benchmarking & Best Practice Program
NSW	Develop and implement policies and management practices to achieve ecologically sustainable development, agricultural management practices, and conserve biodiversity. Implement cooperative programs, e.g. Farming for the Future.
Victoria	Planning processes and cooperative agreements on private land in the context of Regional Vegetation Plans
Tasmania	Private land incentives and financial packages MBIs, e.g. certification and eco-labelling
South Australia	Landowner duty of care as baseline to inform public investment decisions by 2011. Incentive-based policy mechanisms by 2011, removal of perverse incentives
Western Australia	Expansion of off-reserve conservation incentive programs, MBIs, voluntary approaches, direct financial incentives for on-ground works, industry driven approaches
NT	Enhancing biodiversity conservation on urban and semi-rural land is a key strategic area

Source: government policy documents and websites

### **Partnerships with communities and Indigenous people**

While all of the state and territory strategies are consistent with the NBS and the National Objectives in that they more or less highlight the need for community awareness and involvement in conservation of biodiversity, not all give high priority to engagement of Indigenous communities (Table 11)

**Table 11 Indigenous community partnerships**

<b>Jurisdiction</b>	<b>Does the strategy enable partnerships with Indigenous people?</b>
Australia	Broad recommendation safeguarding traditional knowledge and cooperative conservation management arrangements National Objectives: Focus on ethnobiological knowledge, possibilities for wider-reaching partnerships understated
Queensland	Partnerships with Aboriginal and Torres Strait Islander peoples to develop policies and procedures for the appropriate sharing of cultural and traditional knowledge. Strategy for SE Qld emphasises involvement of Indigenous Traditional Landowners and long-term partnerships

<b>Jurisdiction</b>	<b>Does the strategy enable partnerships with Indigenous people?</b>
ACT	No
NSW	As part of community partnerships; consultation of Aboriginal community in bioregional planning, opportunities for Aboriginal involvement mentioned consistently across recommendations for action
Victoria	No
Tasmania	Provide opportunities for greater mutual learning, sharing and involvement, encourage forums and collaborative projects
South Australia	Indigenous lands mentioned as target area, but partnerships not specifically emphasised
Western Australia	Establishment of Indigenous protected land areas
NT	Biodiversity conservation on aboriginal lands forms a key strategic area

Source: government policy documents and websites

### **Related state and territory policy and legislation**

State and territory biodiversity policies and strategies have advanced considerably since the NBS was developed in 1996. For example, in a 2000 evaluation carried out of progress towards the National Framework for Management and Monitoring of Australia's Native Vegetation for ANZECC, we found that the states and territories faced many significant challenges in meeting the required objectives of the Framework.

In a later 2004 review of progress towards the National Objectives<sup>3</sup>, we found that most jurisdictions had strengthened their native vegetation management instruments, including controls on clearing.

The states and territories have introduced a range of policy, strategies and legislation that impacts on biodiversity conservation. The overarching biodiversity strategies provide only part of the picture. The case studies of NSW and Queensland presented in Annex 2 describe the typical situation in the jurisdictions.

Typically, the overarching state biodiversity strategy provides policy directions. The detailed objectives and targets are more fully developed in a wide range of more specific policy and instruments that address threatening processes, or apply special protection to high value or at risk areas.

The NSW and Queensland case studies enable a more balanced view of the alignment of state and territory policy and programs with the NBS and National Objectives. The jurisdictions are by and large tackling the range of biodiversity issues and are introducing a raft of reforms and measures to implement change on-ground.

Viewed overall, aside from the expected diversity in approaches, the state and territory approaches to biodiversity conservation are more or less well aligned with the intent and directions of the NBS, and with many of the targets and objectives of the National Objectives.

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<sup>3</sup> Griffin NRM Pty Ltd, 2004. Small Steps for Nature: A review of progress towards the National Objectives and Targets for Biodiversity Conservation

## Alignment with national natural resource management strategies

### Key study question:

#### 2. *Are the national NRM strategies aligned with the NBS and the National Objectives?*

A number of major national natural resource management (NRM) strategies are closely linked with biodiversity conservation. Many of these are referred to in the National Objectives. Others were developed after NBS and the National Objectives.

**Table 12 National NRM policies reviewed for the study**

Strategy	Date
National Weeds Strategy (1999)	1999
The CoAG Water Reform Framework (1994)	1994 (CoAG)
National Water Quality Management Strategy	1994
National Framework for Management and Monitoring of Australia's Native Vegetation (2001)	2001 (ANZECC)
National Approach to Firewood Collection and Use in Australia (2001)	2001 (ANZECC)
National Framework for Environmental Management Systems in Australian Agriculture (2002)	2002 (NRMMC)
National Natural Resource Management Monitoring and Evaluation Framework (2003)	2003 (NRMMC)
Guidelines for Indigenous Engagement in Natural Resource Management	2004
National Biodiversity and Climate Change Action Plan (2004-2007)	2004 (NRMMC)
Directions for a National Reserves System: A partnership approach (2005)	2005 (NRMMC)
Framework for a National Cooperative Approach to Integrated Coastal Zone Management	2006 (NRMMC)
Draft National Water Policy Agenda	Draft

### **National Biodiversity and Climate Change Action Plan 2004-2007**

The development of the National Biodiversity and Climate Change Action Plan (NBCCAP) was included as a target in the National Objectives. This Action Plan raises the profile of climate change in relation to biodiversity impacts, relative to the NBS and National Objectives. Apart from this, the biggest change is the shift in emphasis from understanding and prevention of impacts to understanding and adapting to impacts.

- The NBCCAP is consistent with the intent of the NBS in that it provides an overarching national strategy and in that it advocates implementation at a range of levels. Both promote integration of actions with other biodiversity

conservation and NRM policies and actions, and advocate improved knowledge, communication and education to general public. The emphasis on the reserves system is probably stronger in the Action Plan.

- The NBCCAP is consistent with the National Objectives in that it is organised around key biodiversity themes: aquatic systems, marine, coastal and estuarine, terrestrial systems, invasive spp., and it promotes integration in NRM.
- The NBCCAP elevates the threat posed by climate change relative to NBS to the key threat to biodiversity.
- The NBCCAP places greater emphasis on risk management and on adaptation and enhancing resilience, building institutional capacities of governments and industry etc. to respond. The overriding response is adaptation.
- There are no targets for either addressing the risks or protecting biodiversity from the risks.
- Is more strongly R&D oriented- because there is a lot to learn about how to manage adaptation to conserve at risk species and communities.

#### **Directions for a National Reserves System- A Partnership Approach 2005**

The Directions document is consistent with the NBS and National Objectives in that:

- The key principles are consistent with and aim to achieve NBS objectives- e.g. regional framework; CAR; threat management; precautionary principle, integration in regional NRM for off-reserve conservation; consultation, partnerships, indigenous involvement, higher protection/priority for at risk biodiversity;
- It goes a long way towards meeting the National Objectives relating to reserves
- It crosses themes of both terrestrial and marine reserves and adds emphasis to freshwater ecosystems;
- It develops the Australian Guidelines for Establishing a National Reserves System (ANZECC 1999) and the Interim Biogeographic Regionalisation for Australia (Thackway and Cresswell, 1995);
- It acknowledges the role of indigenous protected areas and the complimentary role of protected areas on private lands;
- It provides targets for all strategic directions;
- It is based on bioregions and subregions;
- It is based on progressing CAR principles across the nation;
- It gives priority to endangered and critically endangered species and ecosystems;
- It is linked to the Climate Change Action Plan;
- Many of the targets are ambitious (2005-2006 timeframes); and
- The direction on community involvement is focused on communication and awareness.

The main differences are:

- The biodiversity targets in the Directions document are based on a number of sources and are reasonably consistent with, but are not drawn directly from the National Objectives (e.g. the Janis reserve criteria of 15% of pre 1750 distribution for each forest ecosystem and 10% or less is classed endangered);
- The National Objectives aim for 100% comprehensiveness and representativeness. Comprehensiveness in the Directions document is defined as “at least 80% by 2010-2015 with 100% desirable”; Representativeness- “at least 80% by 2010”;
- Management plans coverage target for reserves is not 100% as in the National Objectives, but management plan or statement of management intent to be in place within 3 yrs of establishment of a new reserve;
- The Directions places greater emphasis on best practice codes for management of reserves;
- The Directions places greater emphasis on funding partnerships and working with NGOs and private conservation;
- The Directions has a stronger emphasis on monitoring and evaluation (M&E); and
- The Directions has a stronger emphasis on partnerships.

#### **Draft National Water Policy Agenda**

The Draft National Water Policy Agenda builds on the CoAG Framework that underpinned the National Objectives in relation to water, and seeks integration with NRM initiatives. The key areas of difference are:

- The CoAG Framework gave priority to environmental flow demands in new allocations. The Draft Agenda provides for guidelines for making environmental allocations and for costing externalities (environmental costs of production). The primary focus is on freeing up water markets and institutional reform to support this.
- The Draft National Water Policy Agenda suggests some relaxation of the national water quality guidelines targets in the National Objectives by indicating that lower standards can be negotiated at catchment/regional levels and that the investment to achieve the agreed water quality standards must be raised at this level.

The National Water Initiative (NWI) is more strongly focussed on environmental outcomes than the Draft Policy Agenda. Like the Draft Policy Agenda, the NWI is designed to build resource security and efficiency, and to develop nationally consistent ways to measure, plan for, price and trade water but there is also a strong commitment to restoring over-allocated systems and a statutory provision for environmental and other public benefit outcomes. However, there are no targets for these outcomes.

#### **Australia’s National Framework for EMS in Agriculture 2002**

The National Framework for EMS in Agriculture is consistent with the NBS and National Objectives in that it promotes a consistent approach to environmental standards across the nation. The key features are:

- Consistent approach across Australia;
- Supply chain and across landscape opportunities to address environmental issues such as biodiversity conservation and native vegetation management;
- Voluntary;
- One size fits all approach; and
- No targets.

EMS is a learning, planning and implementation mechanism. It can assist landholders to understand and meet best practice, industry guidelines, legislative requirements and other accreditation standards by implementing a range of practices that are linked to achieving these standards. EMS potentially enables links between on-farm management practices and national and regional targets.

At present, biodiversity is not a key focus in the majority of EMS. Most EMS are scaled to enable landholders to achieve a basic and then progressively higher levels of accreditation. Biodiversity conservation tends to be addressed at the higher levels of accreditation. The majority of landholders engaged in EMS tend to stop at the lower levels because it is at this level that the benefits are more tangible (e.g. in achieving residue free produce, better pest and weed control, soil productivity etc.).

The National Framework is reasonably consistent with the NBS and National Objectives but is currently not a strong mechanism for achieving biodiversity targets.

#### **National Cooperative Approach to Integrated Coastal Zone Management 2006**

The National Cooperative Approach to Integrated Coastal Zone Management (NCAICZM) raises the profile of the coastal zone as a national issue. Biodiversity and habitat protection in the coastal zone are highlighted as key issues of national interest. The NCAICZM encompasses several priority themes. Action under these themes will contribute to achievement of the NBS and National Objectives. The NCAICZM does not set implementation targets but there is an implementation plan with set timeframes.

#### **Guidelines for Indigenous Participation in NRM 2004**

All regional NRM groups recognise the need to consult and work with Indigenous groups in NRM but most find effective engagement challenging. The Guidelines provide advice to enable more effectively engagement. They are consistent with the NBS and National Objectives in that they should advance the involvement of Indigenous groups in management of biodiversity through the regional NRM initiatives. The key features are:

- Linked to regional NRM process; and
- Advances indigenous engagement beyond simply obtaining indigenous knowledge.

#### **National Approach to Firewood Collection and Use in Australia 2001**

The National Approach to Firewood Collection and Use in Australia (NAFCU) is closely aligned with the NBS and the National Objectives. It:

- Provides a national approach – 6 strategies each with objectives and actions with suggested timeframes;
- Targets at risk ecosystems;

- Integrates approaches of the NBS, National Framework for Management and Monitoring and Australia's Native Vegetation, NHT, vegetation management frameworks, forest policy etc.;
- Includes biodiversity conservation as a key theme and targets at risk biodiversity;
- Investigates a code of practice such as the ACT model. The ACT model is accredited under the Environment Protection Act 1997 and includes a mandatory licensing system; it has standards for environment protection and provides education material to purchasers; and
- Is delivered through jurisdiction workplans.

It would be more closely aligned with national biodiversity policy if it included a code of practice that was tailored to protect biodiversity, and included provisions for monitoring and evaluation of the outcomes for biodiversity.

### **National NRM Monitoring and Evaluation Framework 2003**

The National NRM Monitoring and Evaluation Framework provides guidelines for monitoring and evaluation of outcomes through the regional NRM investment model.

Matters for targets relating to biodiversity include native vegetation extent and condition, river condition including species assemblages, wetland extent and condition, indicators of threats to native communities and habitat including salt, turbidity, and ecologically significant invasive spp. These do not directly align with the National Objectives but are reasonably consistent.

Most regions have developed more specific biodiversity targets that generally align with the National Objectives. These targets relate primarily to conservation of terrestrial biodiversity, restoration of freshwater systems and recovery of threatened species.

### **National Weeds Strategy 1999**

The National Weeds Strategy (NWS) is built into the National Objectives. It aims to address failings in the current legislation that provides for risk assessment of only those species that are not on a permitted list. This would bring weed management more into line with the NBS and National Objectives.

Like the National Objectives, the NWS is focussed on weeds of national significance and has a strong emphasis on environmentally threatening weeds as opposed to agricultural weeds. Like the Firewood policy, it is delivered through jurisdiction action plans. There are no targets.

### **The National Framework for the Management and Monitoring of Australia's Native Vegetation 2001**

The National Framework for the Management and Monitoring of Australia's Native Vegetation is designed to provide a mechanism through which the native vegetation management commitments agreed to by all Australian Governments can be progressed.

The agreed outcomes are closely aligned with the NBS and the National Objectives in relation to native vegetation management; and include:

- Limiting broad-scale clearance of native vegetation to those instances in which the proponent can clearly demonstrate that regional biodiversity objectives are not compromised, and
- No clearing of endangered or vulnerable vegetation communities, critical habitat for threatened species, or other threatened species or communities listed under State or Commonwealth legislation, or identified through other government processes.

### **The Bilateral Agreements for the NHT2 and the NAP**

The negotiations for the bilateral agreements for the NHT2 and the NAP resulted in a number of important commitments from the states and territories in relation to biodiversity conservation.

Programs funded under NHT2 and the NAP are delivered through accredited regional catchment plans. The bilateral agreements between the Australian Government and the jurisdictions to implement NHT2 and the agreements to implement the NAP include specific commitments to biodiversity conservation. For example:

- Under the bilateral agreements for implementation of the NAP, regional NRM plans are required to address biodiversity including nationally threatened species and key threatening processes.

The agreements also include undertakings to identify and protect communities that are vulnerable and to limit broadscale clearing to areas where regional biodiversity objectives are not compromised.

The agreements bring the jurisdictions into line with the Australian Government EPBC Act (1999) in relation to biodiversity policy and protection, and include commitments to implement an effective regulatory regime to control clearing where this was not already in place or sufficiently comprehensive.

For example, WA agreed to develop biodiversity protection policy and legislation that is consistent with the EPBC Act (1999) and to put in place a more comprehensive regulatory system for controlling clearing.

The NT agreed to introduce measures that would:

- Allow the broadscale clearing of native vegetation only where the proponent can clearly demonstrate that regional biodiversity objectives are not compromised; and
- Prevent clearing of endangered or vulnerable vegetation communities and critical habitats for threatened species and communities listed under the NT or Australian Government legislation.

The NT has also agreed to progress the conservation, restoration and management of native vegetation through the agreed actions in the Northern Territory Work Plan under the National Framework for the Management and Monitoring of Australia's Native Vegetation and within the context of an integrated approach to natural resource management.

The agreements for implementation of NHT and NAP in NSW include commitments by NSW to:

- Pursue measures, consistent with the National Objectives and Targets for Biodiversity Conservation 2001-2005;

- Prevent clearance of ecological communities with an extent below 30% of that present pre-1750;
- Assess native vegetation condition;
- Contribute to reducing the national net rate of land clearance to zero;
- Prohibit clearance of native vegetation where it would lead to unacceptable land and water degradation;
- Improve quality and quantity of native vegetation, as well as protection of wildlife habitat and threatened species, populations and ecological communities on private land; and
- Accelerate development of an integrated native vegetation information system.

The Tasmanian government agreed to a range of initiatives to strengthen the regulation of non-forest native vegetation.

The Western Australian government agreed to:

- Implement more effective regulatory controls for protection of native vegetation through amendments to the Environmental Protection Act 1986, including the requirement for proponents to apply for a permit to clear and the ability to refuse applications on the grounds of biodiversity, protection of threatened flora and fauna, land conservation, salinity hazard and aesthetics, and implement a monitoring program to report on effectiveness and compliance with the Act, and
- Develop and introduce a Biodiversity Conservation Bill. This Bill will provide for the development of strategies and policies for the delivery of a prioritised strategic approach to biodiversity conservation, management and protection, including management of key threatening processes, recovery of threatened species and ecological communities, establishment of a comprehensive, adequate and representative reserve system, and functional conservation networks.

The South Australian government commitments include:

- A continued commitment to water reforms and native vegetation clearance controls; and
- Development of a biodiversity strategy and legislation.

## Emerging industry policy and codes of practice

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**Key study question:**

3. *Are emerging industry policies aligned with NBS and the National Objectives?*

### **Background**

In the past few decades, industries across all sectors have been proactive in development of strategies to address environmental issues and to implement environmental management. Several industries are at the forefront of developing accreditation and best management practice systems, many of which involve practices that impact positively on biodiversity. Examples include:

- The mining industry in relation to protection of the surrounding environment and rehabilitation post mining;
- The cotton industry in relation to management of chemicals;
- Intensive animal industries in relation to waste and water quality management; and
- The rice industry in relation to groundwater accessions and efficient water management.

The environmental management activity in the manufacturing sectors is driven largely by legislation to reduce pollution and environmental impact, as assessed under Australian, state and territory environment assessment laws. In the service industries including tourism, the trend towards eco-markets and environmentally sound management is strong in response to an increasingly discerning market and a demand for environmental values.

In the primary industries, the growing commitment to environmental management is also driven to some extent by new legislation, particularly relating to chemicals, product safety, health and safety, water management, off-farm pollution from intensive industries, resource security and vegetation management. But there is also a strong stewardship ethos among landholders and a common desire to look after both the natural resources and the farm environmental values.

Several primary industries have developed best practice guidelines and are implementing programs to encourage adoption by members. Some have progressed to accreditation systems that provide incentives for members to achieve higher levels of environmental management. A few industries have been able to capitalise on premium prices for produce produced under accredited branding that requires meeting environmental management standards.

The organic produce industry, growing at an estimated 30% per annum globally, has successfully developed a premium market based on consumer preference for food grown with minimal chemicals. Despite problems with accreditation systems, including a lack of consistent standards, the organic produce industries have responded to and further promoted a rapidly growing premium market.

Some of the major buying chains are also responding to growing consumer demand for higher quality produce and a preference for food and other products produced without degrading natural resources, including water and land. Buying chains are

expanding their accreditation systems to include environmental performance criteria and are increasingly seeking to secure suppliers who can become accredited to produce food that meets environmental standards.

While far from mainstream yet, a commonly cited example of buyer-led environmental accreditation is the case of the UK supermarket retailer TESCO and the Tasmanian onion industry; the state's second most valuable agricultural crop worth an estimated \$30 million per annum, primarily through exports. TESCO developed a code of practice and food labelling system (Natures Choice) and sought accredited growers through a Tasmanian supplier Field Fresh in 1998. With government assistance and a small price premium, Field Fresh attempted, ultimately unsuccessfully to have enough growers accredited to supply the TESCO market.

The market signals that could drive stronger environmental management for many industries, however, are currently weak and poorly developed. In these industries, codes of practice and environmental management systems (EMS) are driven by other signals. They are developed to assist growers to meet regulatory requirements, to strengthen resource security, to demonstrate environmental credentials and negate further regulation or as a voluntary response triggered by a stewardship ethos. There are numerous examples of each<sup>4</sup>.

Intensive agriculture industries, including the range of irrigation industries, are currently leading the development and adoption of fully accredited systems that include environmental management criteria. These industries include cotton, rice, sugar, wine and other horticulture. This trend is motivated by well-supported, strong and effective industry associations. The accreditation systems focus on codes of practice to meet industry best practice and regulatory requirements. However, several industries take the process further to embrace higher levels of environmental management including biodiversity conservation.

Accreditation systems for broadacre agriculture, which accounts for so much of the Australian landscape, have proven more difficult to achieve because of the diverse nature of the industries and their environmental settings. There has been measured success through EMS in some key grain growing and grazing areas (eg southern Queensland) but getting widespread adoption of practices that conserve biodiversity also requires the types of policy and legislative frameworks that are gradually being implemented across the country (eg for native vegetation management).

Some key industries are working closely with governments to develop practical systems that will enable their businesses to meet environmental and NRM legislative requirements through best practice accreditation. The cotton industry is one example. In Queensland, the state government and peak industry body, the Queensland Farmers Federation (QFF) have signed a Memorandum of Understanding (MOU) that sets the basis for development of industry accreditation to meet the raft of state regulations relating to water, threatened species and vegetation management. Other partnerships to meet regulatory requirements include:

- The Victorian vegetable growers and the Victorian EPA;
- Members of the Greenhouse Challenge and the Australian Government;

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<sup>4</sup> For example, Gunningham, N. and D. Sinclair (2002). Environmental Partnerships: combining sustainability and commercial partnerships in the agriculture sector. URS (2004) EMS National Pilot Program Mid-Term Report for DAFF.

- Rice growers and the NSW EPA; and
- Individual landholders and state governments/regional NRM groups engaged in negotiated agreements relating to native vegetation.

A range of industry policies were reviewed to examine how well they align with national biodiversity policy and objectives. These are listed in Table 13.

**Table 13 Industry biodiversity/environment policy reviewed for the study**

<b>Industry/industry association</b>	<b>Biodiversity Policy</b>
Cotton industry	Sustainability policy relating to health rivers, vegetation management, soil health, salinity, climate change and biotechnology
Rice industry	A Biodiversity Strategy for the Australian Rice Industry (2002)
Diary industry	Dairying for Tomorrow: A National Strategy for Sustainable Resource Management
Seafood industry	Australian Seafood Industry Council Policy Statement 2004 includes environmental issues -protected areas, marine pests and diseases, resource security, competition from seals
Wine industry	1. Sustaining Success: The Australian Wine Industry's Environment Strategy (2002). Advocates a national approach, integrated across industry component, proactive and focus on education 2. Water to Wine- a policy for water management in the wine industry. Advocates building knowledge re water use and requirements in the industry; water conservation, efficiency measures and re-used options.
Tourism industry	Independent accreditation systems include nature conservation standards and monitoring
Sugar industry	Cane Growers Public Environment Report 2005 Biodiversity issues include impacts on the reef and fisheries
Forest industries	Biodiversity a key element of the Australian Forestry Standard Report: 20 Years of improvement in Australian Forest Practices
Coal industry	No specific biodiversity policy Coal in a Sustainable Society (CISS) Co-operative Research Centre for Coal in Sustainable Development Australian Coal Association Sustainable Development Program
Meat and livestock	No overall environmental policy or specific biodiversity policy Various programs have biodiversity objectives e.g. Grain and Graze R&D project has joint aims of increasing profits and improving environmental management.
Wool	Land, Water and Wool program of Australian Wool Innovation Ltd. and Land and Water Australia, supports R&D into sustainable landscapes including biodiversity conservation, through the Biodiversity and Native Vegetation Program
National Farmers Federation	Not specific biodiversity Have policy relating to native vegetation management
Queensland Farmers	QFF Environment and Natural Resources Committee (1994)

Industry/industry association	Biodiversity Policy
Federation	

Source: Industry group representatives and documents

### Key features in relation to biodiversity

The industry policies and strategies reviewed for the study give a reasonably representative view of the range of responses emerging in recent times. While highly variable in breadth and focus, they share a number of features in common that can be summarised as:

- They target issues of perceived highest risk (e.g. resource security; product health and safety, operational health and safety);
- They are generally focused on production parts of chain where legislation is operating;
- Cradle to grave approaches are rare;
- Mechanisms for implementation include best practice, EMS, accreditation/branding;
- There is a strong focus on demonstrating credentials and lobbying;
- There is a push pull response to legislation;
- There is a very strong focus on R&D and strong links with R&D agencies such as Cooperative Research Centres and CSIRO; and
- The programs are primarily voluntary and regulation is resisted;

In relation to biodiversity specifically, the industry policies and strategies have the following characteristics:

- They tend to be aspirational;
- The use of targets is very limited;
- There is a reticence to create green markets;
- Almost all industry development in this area is co-sponsored by government; and
- There is growing integration with regional NRM groups in linking best practice on farm with incentives to achieve regional biodiversity targets.

### Alignment with national biodiversity policy

A brief assessment of alignment of the industry policies reviewed for this study with national biodiversity policy is presented in Table 14. This assessment further highlights some important features of industry responses to biodiversity conservation. Table 15 indicates where industry policies contain specific biodiversity objectives and targets.

In general, industry environment strategies do not refer directly to national biodiversity policy; nor do they explicitly adopt the objectives and targets of the National Objectives.

Industry policy tends to be very focussed and specific to the needs of their members. It operates at a level that is close to the ground. Their natural partnerships in relation

to environmental management are with groups of landholders and, more recently, with NRM groups. Their objectives and targets relating to biodiversity tend to be more closely aligned with biodiversity targets at this level than with national policy.

All of the industry programs in relation to environmental management contain large components of R&D. At the level of R&D, the initiatives of industry embody many of the strategic directions of the national biodiversity policy such as integrating production and environmental management. Examples include the Grain and Graze R&D program; the Land, Water and Wool program, Integrated Area Wide Management in the cotton industry.

**Table 15 Industry biodiversity targets**

<b>Industry</b>	<b>Targets</b>
Cotton industry	BMP criteria and accreditation. No specific biodiversity targets
Rice industry	Participation targets; Best practice targets Specific biodiversity targets in the level 3 of the Environmental Champions Program
Diary industry	Dairying for Tomorrow best practice targets encompass a range of water, land, soil and vegetation management practice that will impact on biodiversity
Seafood industry	No specific biodiversity targets
Wine industry	No specific targets but actions plans proposed could have targets
Tourism industry	No specific targets
Sugar industry	Yes – especially in relation to riparian vegetation conservation and reduced nutrient and soil runoff to the reef
Forest industries	No specific biodiversity targets
Coal industry	No specific biodiversity targets
Meat and livestock	No specific biodiversity targets
Wool	No specific biodiversity targets
National Farmers Federation	No specific biodiversity targets
Queensland Farmers Federation	No specific biodiversity targets

Source: Industry interviews and documents 2006

**Table 14 Alignment of industry environment policy with NBS and National Objectives**

<b>Industry</b>	<b>Key focus and links to biodiversity policy</b>	<b>Mechanisms for implementation</b>
<b>Cotton</b>	Primarily focussed on: chemical residues, weeds and diseases, water use efficiency To a lesser extent: protection of native plants and animals and soil health; linked to state water management legislation and development controls; linked with pesticide residue standards	BMP criteria and accreditation No specific biodiversity targets
<b>Rice</b>	Integrating production and biodiversity conservation Ultimately will be linked to water licence conditions and state water sharing plans and catchment targets	Environmental Champions Program to integrate environmental management and productive rice farming including R&D, piloting and implementation Flexible, voluntary, industry based EMS
<b>Dairy</b>	Effluent management and water use efficiency; to a lesser extent: grazing and soil management, greenhouse emissions and management of riparian areas. Linked with state pollution control and water quality legislation	Dairying for Tomorrow partnerships between industry, farmers assoc., government and regional NRM groups Murray Dairy Action Plan proposes an Environmental Quality Assurance System
<b>Seafood industry</b>	Minimising bycatch and improving technology to target cohort/size and maximise recruitment to breeding Includes environmental issues- protected areas, marine pests and diseases,	EMS supported by partnership between DAFF, Fisheries R&D Corporation and the industry
<b>Wine</b>	Water quality and waste water; waste management and chemicals Priority issues include enhancing ecological systems and protecting biodiversity	Propose environmental standards and guidelines and a national environment wine reporting system Propose benchmarking
<b>Tourism</b>	Independent accreditation systems include nature conservation standards and monitoring	Accreditation systems for tourism e.g. EarthCheck system used by Green Globe
<b>Sugar</b>	Biodiversity issues include impacts on the reef and fisheries Raising awareness and increasing engagement by farmers in the codes of practice and FMS Specific targets in relation to riparian veg conservation and reduced nutrient and soil runoff to the reef	Code of Practice (1998)- need new program to promote more change Proposed development of a Farm Management System
<b>Forests</b>	Biodiversity a key element of the Australian Forestry Standard Consistent with Regional Forest Agreements and National Forest Policy Statement	Comprehensive codes of practice and regulations apply in each jurisdiction Independent accreditation systems: e.g. Joint Accreditation System of Australia and New Zealand
<b>Coal</b>	No specific biodiversity policy Broadly consistent with Aust govt climate change policy	Emphasis on R&D and communication Greenhouse Challenge partner

Industry	Key focus and links to biodiversity policy	Mechanisms for implementation
	Greenhouse; improve image of coal; and produce clean coal	Extensive partnerships in the CRC
<b>Meat and Livestock</b>	Focus is strongly industry based Key issue is product safety and quality. Various programs have biodiversity objectives e.g. Grain and Graze R&D project	R&D into grazing systems, pasture management and NRM Product quality standards
<b>Wool</b>	Improvements in productivity while retaining native vegetation and habitat Consistent with policy for development of industry best practice that includes biodiversity conservation	It is an R&D program. Aims to develop best practice guidelines and provide inputs to an accreditation scheme in future There are several documented case studies (2005) showcasing ways woolgrowers are conserving biodiversity and increasing productivity. Eg Traprock Wool Association has an EMS- the Traprock Integrated Management System (TIMS)

Sources: industry interviews and documents 2006

Among the industry strategies, there are notable examples of highly developed policies and codes of practice that stand out in relation to biodiversity. These include:

- The rice industry: A Biodiversity Strategy for the Australian Rice Industry (2002);
- The dairy industry: Dairying for Tomorrow: A National Strategy for Sustainable Resource Management;
- The wine industry: Sustaining Success: The Australian Wine Industry's Environment Strategy (2002); and
- The forest industry standard: Report: 20 Years of improvement in Australian Forest Practices.

These strategies specifically address biodiversity conservation as an issue (Table 13). They are linked to implementation programs such as best practice and accreditation systems.

It is common among industry environmental management programs to operate a tiered system for accreditation. For example, the rice industry Environmental Champions Program takes producers through 5 levels of development from basic industry standards, beyond industry standards, putting plans into action, trade, innovation and eco-efficiencies and regional/catchment partnerships. Biodiversity conservation comes into effect in the third tier.

Similarly, the environmental framework of the wine industry includes a tiered approach to environmental accreditation, beginning with identification of the various elements of a grower's operations that can impact on the environment and an analysis of the impacts, and culminating in an independently certified EMS. The viticulture framework focuses on ensuring that growers are confident they have reached a tier that meets their business needs.

Industry monitoring indicates that the majority of growers participating in these programs do not progress to the higher levels of accreditation i.e. the levels that more fully encompass biodiversity conservation. While there are exceptions, most industry associations are satisfied that their members meet the needs of their businesses and comply with legislation. The drivers to encourage producers to extend to higher levels of accreditation seem to remain relatively weak in many industries.

This highlights a key feature in relation to biodiversity that is further illustrated by the dairy industry and cotton industry examples. In the cotton industry best practice program, the primary focus is on chemical use. Annual Pest Application Management Plans are compulsory for all growers and there are stringent chemical registration procedures. These measures have helped to bring about an overall reduction in pesticide use among cotton growers by 70% in the past decade<sup>5</sup>. However, other elements of the best practice program, including biodiversity conservation, are voluntary and best practice audits are voluntary.

An examination of the dairy industry example provides interesting insight into this issue. The dairy industry strategy: Dairying for Tomorrow: A National Strategy for Sustainable Resource Management, identifies industry best practice targets encompassing a range of water, land, soil and vegetation management practice that

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<sup>5</sup> Rice industry sources 2006

will impact on biodiversity. As part of the program, the dairy industry recently funded a study that examined how to convert regional NRM targets into on-farm practice<sup>6</sup>. The study then ranked the practices according to cost/benefit estimates of implementing the practices. The cost/benefit rankings resulted in all but one of the biodiversity targets being dropped from the priority list because the practices to achieve them (e.g. fencing remnants, off-stream watering, etc.) were deemed to be high cost to the producer relative to the benefits on-farm.

This study has important implications for the place of biodiversity conservation in industry accreditation systems. It highlights the mandatory requirement for cost sharing between governments and industry to ensure that biodiversity is affordable as part of industry best practice, particularly while markets for environmentally sound production (as opposed to produce) remain relatively weak across key industries.

In fact, the last decade has seen the development of substantial, wide ranging partnerships between industry, government and the non-government sector to achieve adoption of best practice on-farm that takes account of the range of public benefit as well as private environmental issues. Examples include:

- Partnerships in regional NRM to meet catchment targets in which biodiversity is a key element. Many industries are engaging with regional groups to develop on-farm programs to achieve the targets. Notable examples include the NSW Property Vegetation Planning system which enables landholders and regional NRM groups to negotiate agreed plans for conservation of native vegetation, including conservation offsets for permitted clearing;
- Partnerships between governments and individual landholders to conserve high value biodiversity through cost shared covenanting arrangements;
- A Memorandum of Understanding between the Queensland Government and the Queensland Farmers Federation to develop farm management systems that will assist landholders to meet a suite of regulatory requirements including those relating to conservation of native vegetation and threatened species;
- The Greenhouse Challenge partnership between the Australian Government and a number of partner industries (e.g. coal); and
- Integrated Area Wide Management in the cotton industry. Groups of farmers work together on pest control, pesticide reduction and broader catchment issues. IAWM funded through NHT in partnership with regional NRM groups (e.g. FBA, Condamine and QMDC) and industry.

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<sup>6</sup> Dairying for Tomorrow Targets for Change: Guidelines for setting NRM targets to convert catchment targets into land management targets. Published by Dairy Australia

## Influence of national policy and objectives

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### Key study question:

4. *Are the national objectives cascading through state/territory/regional and industry levels?*

### The influence of national policy

The states and territories have developed a wide range of responses to the threats to biodiversity. Their responses are driven by their own assessments of risk, and their obligations under various national strategies and agreements. The Australian Government is exerting influence on the states and territories largely through funding and other arrangements under the national agreements.

It is clear that the NBS and National Objectives have influenced the state and territory biodiversity policy, particularly at the level of overarching goals and strategic directions. Below this level, the approaches and specific focuses of the states and territories diverge.

The states and territories base their biodiversity policy on their assessments of risks and threats. There is a strong evidence of increasing conformity between jurisdictions in the way risks to biodiversity are assessed and managed. The overwhelming trend in all jurisdictions and across the nation is towards increasingly stringent and comprehensive regulation of threats to biodiversity and increasing consistency with Australian national policy and objectives. In some aspects, such as native vegetation management and threatened species/ecological communities, biodiversity emerges as a major theme driving policy. In others, including water reform and integrated regional NRM, biodiversity is one of the key themes but not a major driver of policy.

In the past decade, partnerships have evolved and strengthened between governments at different levels, and between governments and industry, that will impact positively on biodiversity conservation. The developments in NRM are among the most significant of these partnerships. The CoAG agreements in water management that include environmental flow allocations as a central tenet<sup>7</sup> and the bilateral agreements between the Australian, state and territory governments for implementation of the NHT2 and NAP are key examples.

The bilateral agreements for the NHT2 and NAP (2002) attempt to bring the jurisdictions more sharply into alignment on biodiversity. The NHT2 and NAP agreements contain fundamental objectives and undertakings relating to biodiversity conservation. Biodiversity is a key focus of both programs. In the agreements, the jurisdictions have undertaken to develop and implement enabling policy, strategies and legislation to meet national biodiversity objectives.

For example, the Framework for the Extension of the NHT (2002) commits the jurisdictions to implement effective measures to control clearing of native vegetation including:

- Preventing clearing of endangered and vulnerable vegetation communities and critical habitat for threatened species; and

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<sup>7</sup> CoAG Water Reform Framework, 1994

- Limiting broadscale clearing to those instances where regional biodiversity objectives are not compromised.

Further, under the NAP, the jurisdictions agree to prohibit clearing of native vegetation where this would lead to unacceptable land and water degradation.

As a result, states that previously did not have a specific biodiversity strategy have developed or are in the process of developing them (e.g. SA, WA, Tasmania), and several states and territories have strengthened their legislative frameworks for management of native vegetation and water.

There have been a number of recent reviews of national, state and territory responses in these key areas of NRM. For example, CoAG recently conducted a review of state and territory progress towards achieving agreed objectives in water resources management, and the Productivity Commission (PC) in 2004 reviewed policy, strategies and legislation in the jurisdictions for management of native vegetation. The reviews indicate steady progress and some inequities, but large variations between jurisdictions in relation to policies, strategies and the speed of implementation.

### **Integration at regional level**

The new regional delivery model for NHT2 and NAP integrates many of the national and state/territory programs that impact on biodiversity under a regional framework. The programs funded under NHT2 and NAP are largely being delivered through accredited regional NRM plans and investment strategies, and several of the jurisdictions are integrating their NRM programs at regional level (e.g. NSW native vegetation arrangements).

The regional model is becoming increasingly important in the on-ground implementation of biodiversity programs, as the states and territories channel more and more of their NRM and biodiversity investment programs through the regional groups.

The accreditation process for the regional plans seeks to ensure that they reflect and incorporate the national, state and territory biodiversity goals and objectives. However, it is widely acknowledged that there are potential risks for biodiversity in the regional delivery model, and there is some concern that regional investment is not currently reflecting the priority given to biodiversity in national and (increasingly) state and territory policy.

We recently conducted a national evaluation of the Biodiversity Outcomes of Regional Investment for NHT/NAP, which focused on how well the regional plans and investment strategies reflected national biodiversity policy and strategies<sup>8</sup>.

The evaluation found that the national goals, themes and strategic directions for biodiversity conservation cascade through state/territory and regional planning. The regional NRM plans and investment strategies generally contain a significant focus on biodiversity conservation. Within this framework, the regional objectives and targets are negotiated locally and reflect regional priorities. They vary considerably between regions.

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<sup>8</sup> (Griffin NRM Pty Ltd 2006 Biodiversity Conservation in Regional NRM: An evaluation of the biodiversity outcomes of the regional investment model)

State and territory governments are proactively engaging with the regional model and are channelling mainstream NRM programs through the regional NRM plans. Examples include the NSW framework for management of native vegetation. These partnerships enable the state and territory policies to be implemented at regional level.

At regional level, there is a strong emphasis on negotiated planning and implementation. Regional NRM groups are developing and testing a range of mechanisms to deliver biodiversity targets. These include property management planning, incentive schemes and partnership programs with industry associations and groups of landholders.

The evaluation found that the regional model had the potential to integrate national, state/territory biodiversity policy and objectives with regional investment in on-ground implementation. Capacities to target high priority biodiversity issues, resources to develop and adopt management practices that achieve the regional biodiversity targets, and secure long term funding are the key constraints.

## Trends in biodiversity policy

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The NBS and the National Objectives were groundbreaking documents for biodiversity conservation when they were developed. There have been significant advances in thinking around biodiversity conservation since then. Many of these advances are embodied in the more recent state and territory policy.

The following examples attempt to illustrate the progress in thinking along a number of key themes in biodiversity conservation. The development in thinking is presented in the grey text boxes. Examples from biodiversity policy and strategies are provided below in the red text boxes to illustrate the change. The examples of the newer thinking are not necessarily from the most recent policies and strategies.

### Community participation



#### **National Strategy for the Conservation of Biodiversity 1996**

“Involving the community”

- Increase public awareness and involvement in the conservation of biological diversity
- Expand biological diversity studies in educational curricula

#### **Western Australia – Engaging people in biodiversity conservation**

Founded in 1989/90, the CALM volunteer program has grown from 900 to 6300 participants. In 2003/2004, volunteers invested 355,000 of work in 511 conservation programs. The programs encourage the involvement of students as well as collaborative management of parks and public land, for example with community advisory committees and friends of parks groups.

The Marine Community Monitoring Program is a collaborative project between CALM and the Commonwealth’s Coastcare program under the NHT. The program aims to build a constituency for marine conservation in WA, through increasing general community participation in the management of the marine environment. It involves community-based monitoring programs to measure changes in marine ecological and social values across the state.

## Partnerships



### **ACT Nature Conservation Strategy, 1997**

Community involvement

Implementation: Cooperation between governments NSW, ACT and sub-regional level

Partnerships with industry, private sector, regional and national organisations not explored

Specific mechanisms for cooperation, cost sharing etc not examined

### **Regional Nature Conservation Strategy for South East Queensland, 2003-2008.**

Regional partnerships

Develop strategies and agreements between individuals, community groups, agencies and government bodies, e.g.

- Integration of biodiversity and management priorities, increase effective participation by key stakeholders in existing NRM, and incentive schemes
- Building partnerships and negotiation management agreements between EPA and Indigenous Traditional Landowners
- Use existing groups and forums to identify relevant and effective implementation strategies

Mechanisms for implementing economies of scale in conservation program delivery by government, Indigenous Traditional Landowners, industry and other groups, through cost sharing arrangements sharing environmental officers, biodiversity auditing and mapping, integrated statutory instruments and monitoring/reporting programs

## Partnerships with indigenous groups

Identified as need; get hold of the knowledge; generally part of overall community engagement



Develop specific partnerships; value knowledge; acknowledge different values; partnerships to conserve biodiversity on indigenous lands; co-management of land

### **No Species Loss. A Biodiversity Strategy for South Australia 2006-2016**

Indigenous knowledge that contributes to biodiversity management is captured, retained and promoted; indigenous values to be integrated in conservation

Indigenous involvement as part of overall community involvement:

- Develop and enhance existing partnerships to improve Indigenous participation in management of species and ecological communities

### **Northern Territory Integrated NRM Strategy, 2005**

By 2008, non-scientific knowledge is valued and mechanisms are in place to enable Indigenous people and other landholders to contribute their ecological knowledge more effectively to planning and management arrangements relevant to NT's biodiversity. Finding new collaborative approaches to NRM that acknowledge differences in belief systems, values and knowledge systems of various land owners

By 2008, there are greater levels of participation by Aboriginal people in culturally appropriate marine and coastal monitoring and management programs.

### **National Strategy for the Conservation of Biodiversity, 1996**

Broad recommendation safeguarding traditional knowledge and cooperative conservation management arrangements

#### **National Objectives, 2001-2005**

Focus on ethnobiological knowledge

## Knowledge

Fill data gaps through surveys etc; work done by technical agencies; not readily accessible; wide range of data standards

Collate available knowledge; use expert panels; strategically fill in gaps; partnerships with R&D agencies; broker sharing arrangements; identify different types and sources of knowledge; engage indigenous knowledge

**WA, Towards a Nature Conservation Strategy (draft)** “ understanding biodiversity and conservation requirements”

Improvement of knowledge and understanding identified as crucial, need for adequately funded systematic program of research, including research in taxonomy, genetic diversity, species population viability, ecosystem function and structure, and threatening processes.

Loss of Indigenous knowledge of flora and fauna and land management practices continues in WA.

No specific research strategies, partnerships and knowledge sharing arrangements specified

**Regional Nature Strategy for South East Queensland 2003-2008**

“ To expand biodiversity research and monitoring”

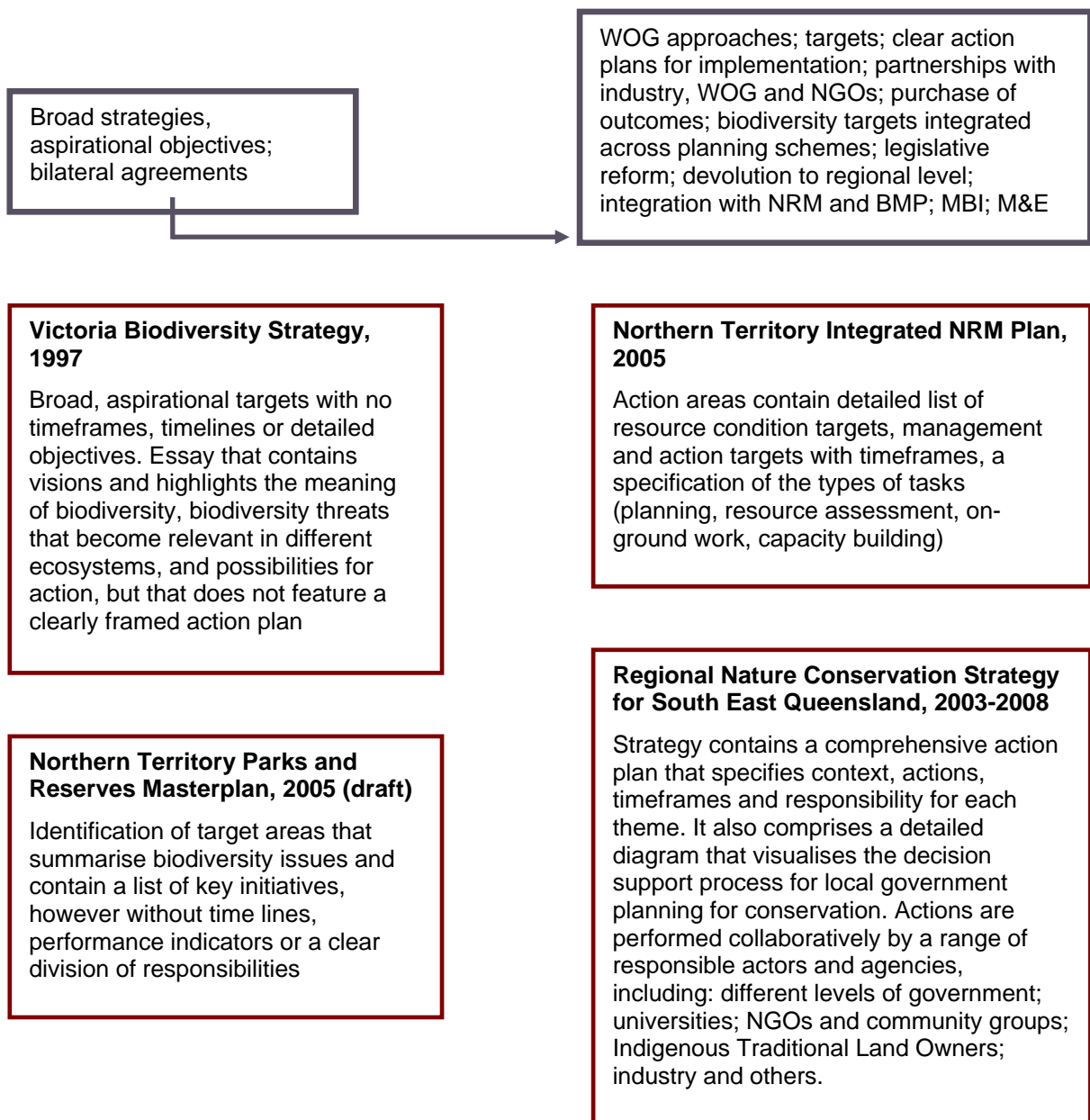
Facilitate networks of people with expertise to identify and research the region’s research priorities, review conservation tools/mechanisms, review implementation of RNCS actions (EPA, NR&M, DMR, ROCs, Premier’s, universities, research organisations, local governments and community groups)

Refine the CNCCS methodology, in particular including Indigenous Traditional Landowner values

Commonwealth and industry with environment groups and Indigenous Traditional Owners: Investigate and report on the range of impacts on biodiversity from human impacts on gene flow

EPA with universities and research organisations, local governments and Indigenous Traditional Land Owners: Undertake targeted surveys, improve quality of information available on selected ecosystems and populations of native plants and animals, investigate ecosystem processes in threatened habitats

## Mechanisms for implementation



## Targets

Aspirational targets with unrealistic timeframes, set by policy makers and progress not monitored

Aspirational, condition and management action targets negotiated by stakeholders; more appropriate timeframes, regularly monitored against indicators

The **National Strategy** provides a list of priorities and time frames to be reached by the year 2000 only in its implementation section, **National Objectives** contains targets and timeframes reaching up to 2005

### **WA – Towards a Biodiversity Conservation Strategy**

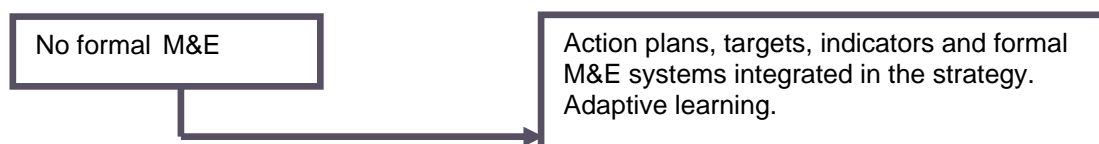
Each key strategic direction area contains a detailed list of objectives, outcomes, output targets by 2006, 2010, 25-year aspirational output targets and 25-year aspirational outcome targets, a list of primary actions, performance indicators (outcome/output related), performance measures (outcome/output related), benchmarks, and an overview of the relevant policy commitments and legislation. Many targets contain quantitative measurements, for example percentages, e.g. “ 90 per cent of area of the protected area network covered by management plans”

A range of plans contain no or only limited outline clear timeframes and targets. The state level framework for Queensland and the **Tasmanian Nature Conservation Strategy** and the **NT Draft Parks and Conservation Master Plan** contain no targets or timeframes. **Victoria** identifies a vision for the year 2020, but no clear target with individual timeframes to reach this vision. The **Regional Nature Conservation Strategy for SE Qld** contains a detailed action plan with timeframes, but no targets

### **No Species Loss – A Biodiversity Strategy for South Australia, 2006-2016 (draft)**

Identifies clear targets for each of its 5 strategic areas. Each strategic area contains a list of desired outcomes to be reached by 2030. Many targets contain individual timeframes from reaching from 2006 to 2011 and beyond. Some quantitative measurements for success within targets.

## Monitoring and evaluation (M&E)



### **Northern Territory Parks and Conservation Masterplan 2005 (Draft)**

Plan mentions the importance of monitoring and some established monitoring programs for individual areas (e.g. marine pest monitoring), but does not contain a formal, more overarching or integrated monitoring or evaluation process

### **ACT The ACT Conservation Strategy**

The strategy contains a formal review and reporting process for the strategy and its implementation through regular reports. The process involves the ACT Environment Advisory Committee and the public, e.g. through submission of forms. However, no mechanism to monitor and evaluate biodiversity achievements; M&E not integrated with targets and action areas.

### **SE Queensland**

Contains a separate action area on research and monitoring

Maintain and continue to develop a monitoring system based on GIS outputs. Investigate the suitability of methodologies to rapidly and cost-effectively assess the condition and growth stage of ecosystems, and implement appropriate monitoring systems, consider permanent monitoring sites. Monitor and evaluate ecological integrity of public lands

*Strategies that **integrate** benchmarks and performance indicators with all objectives and actions:*

### **WA – Towards a Biodiversity Conservation Strategy**

Key strategic directions match targets and actions with performance indicators, performance measures and benchmarks. Progress to be reported every 5 years through the minister, additional review by CALM every 10 years.

### **SA – No Species Loss**

Each objective is accompanied by targets and recommendations, as well as performance information.

One target in the strategic area contains the objective to establish a statewide monitoring, evaluation and reporting capability, using SMART indicators.

## **Common themes in recent biodiversity policy**

### **Key study question:**

5. *Drawing on the recent developments in thinking around biodiversity policy, what are the key ingredients of an overarching biodiversity policy?*

### **Strategic directions**

- Reverse the decline in extent and condition of populations and habitat of species and communities
- Improve preparedness for the impact of climate change
- Augment the national reserve system
- Integrate biodiversity conservation in management of private land
- Invest in maintaining biodiversity and reducing future decline in high value areas (biodiversity rich areas and at risk species and communities)
- Improve knowledge of biodiversity value and conservation
- Secure engagement across all sectors of the community

### **Policy directions**

- Build partnerships
- Negotiate cost sharing
- Build governance arrangements for national reserves system;
- Build and share knowledge

### **Mechanisms**

- Negotiated partnerships based on trust
- Negotiated objectives and targets
- Long term investment arrangements based on agreed outcomes and cost sharing
- Monitoring and evaluation of outcomes
- Consistent WOG regulation across all sectors that impact on biodiversity
- Invasive species control
- Halt broadscale clearing
- Long term WOG investment in recovery of listed species and communities
- Extend CAR principles in the reserve system
- Establish markets for conservation of biodiversity
- Education and science
- Regional and local level planning and implementation
- Flexible mechanisms to retain biodiversity- eg covenants

## **Australian Government responsibilities**

- To maintain a legal framework and to develop and deliver programs that identify and protect biodiversity values of international and national significance
- To facilitate consistency across jurisdictions in relation to biodiversity significance assessment, condition assessment, threat significance and program priorities
- To develop programs to assist governments, industry and landholders to achieve biodiversity conservation objectives
- As a land manager
- Promote and manage nationally listed threatened species and ecological communities

## Annex 1 References and sources of information

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<b>Relevant documents and instruments</b>
<b>State and Territory</b>
New South Wales Biodiversity Strategy (1999)
Victorian Biodiversity Strategy
The ACT Conservation Strategy (1997)
Tasmanian Conservation Strategy 2002-2006 (2001)
Tasmanian Conservation Strategy Governments Response (2002)
Draft Northern Territory Conservation and Parks Master Plan
Draft No Species Loss - a (draft) biodiversity strategy for South Australia (2006)
Western Australia: Towards a biodiversity conservation strategy (2005)
The Regional Nature Conservation Strategy for South East Queensland 2003-2008
Wet Tropics Conservation Strategy
The Regional Landscape Strategy
Queensland Pest Animal Strategy 2002-2006
<b>National NRM</b>
Directions for the National Reserve System: a partnership approach (2004)
National Approach to Firewood Collection and Use in Australia (2001)
National Biodiversity and Climate Change Action Plan 2004-2007
National framework for environmental management systems in Australian agriculture (2002)
National natural resource management monitoring and evaluation framework (2002)
Framework for a National Cooperative Approach to Integrated Coastal Zone Management
Guidelines for indigenous participation in natural resource management
Draft National Water Policy Agenda
National Framework for the Management and Monitoring of Australia's Native Vegetation
National Weeds Strategy (1997)
<b>Industry</b>
Rice growers Biodiversity Strategy
The Yalumba Wine Company: Commitment to Sustainable Winemaking
Australian Institute of Petroleum Environment Policy Statement
Environmental code of practice for agriculture (Queensland Farmers Federation)
Code of Practice for Sustainable Cane Growing 1998

## Annex 2 Case studies of biodiversity related policy in New South Wales and Queensland

### New South Wales

Policy/legislation	Link to biodiversity conservation
NSW Biodiversity Strategy (1999)	Implementation of the Strategy will focus on the achievement of a core set of priority actions by 2001. The priority actions are primarily targeted at addressing the major threats to biodiversity and maximising conservation benefits. They are also intended to meet NSW commitments under the National Strategy for the Conservation of Australia's Biological Diversity.
Environmental Protection and Assessment Act (1979)	Provides for assessment and management of development impacts on the environment.
Native Vegetation Act (2003)	Regulates clearing. Ends broadscale clearing except in cases where environmental outcomes are enhanced or maintained. Landholders may only clear native vegetation under agreement from their regional Catchment Management Authority. Protects remnant vegetation (older than January 1 1990 (or 1983 in Western Division) and protected regrowth. Based on negotiated Property Vegetation Plans. Applies to private forestry also- to be supported by a Code of Practice that will require improvement or maintenance of environmental outcomes.
Native Vegetation Management Fund,	\$15 million over three years has been committed to help landholders who enter into property agreements to protect and maintain native vegetation and to encourage revegetation of land with native species.
Threatened Species Conservation Act (1995) Threatened Species Conservation Amendment Act (2002) Threatened Species Conservation in NSW: reform proposal (2004)	Provides protection for threatened species, communities and critical habitat in NSW. Endangered and vulnerable ecological communities can be listed under the NSW legislation. Recovery planning is required. A small number of NSW ecological communities are listed. Not all are covered by adopted recovery plans
Local and Regional Environmental Plans under the Environmental Planning and Assessment Act, 1979	Integrates local and regional planning with environment protection.
Recent amendments to the Local Government Act 1993	Provide for land subject to a conservation agreement to be exempted from rates and charges.
National Parks and Wildlife Act (1974)	Enables protected areas and management plans under the CAR principles of the National Reserves System.
Rivers and Estuaries Policy 1993. Water Management Act (2000) Water Management Amendment Act (2004) Draft NSW Implementation Plan for the National Water Initiative (2005) State Water Management Outcomes Plan (2002).	Outlines implementation plan for water reforms including water access, entitlements, planning, markets, pricing and trading, environmental water, water resource accounting, partnerships. Addresses over-allocation, floodplain harvesting. Enables catchment, community based River Management Plans/Water Sharing Plans that will be in place for 10 years and will be reviewed after 5 years. Local, representative Water Management Committees are formally charged under the Act with developing the management plans. The plans will be gazetted, legally binding and will direct water allocation.

Policy/legislation	Link to biodiversity conservation
<p>NSW Water Reforms: A secure and sustainable future NSW Water Conservation Strategy (2000) NSW Groundwater Dependent Ecosystem Policy Water Quality and River Flow Interim Environmental Objectives Groundwater Structural Adjustment program (2002)</p>	<p>Under the new Act, environmental flow allocations have been established for all major regulated river systems in NSW. The allocations reduce the historical usage by an estimated 5-6%. Environmental allocations for unregulated systems are in progress.</p> <p>Provides for development of floodplain management plans for key river systems: the Gwydir; Namoi; Macquarie; Lachlan; Murrumbidgee and Murray Rivers.</p>
<p>Living Murray and Snowy Initiatives</p>	<p>Cooperative Australian/State government programs to improve the health of these systems by returning water to the rivers.</p>
<p>Wetlands Management Policy (1996) State Wetlands Advisory Council produced a Wetlands Action Plan (2002-03)  Ramsar wetlands program</p>	<p>The policy aims to encourage sustainable management and rehabilitation of wetlands. Wetlands Action Plan focuses on implementation of the Wetlands Management Policy. The NPWS implements the Ramsar Convention on Wetlands of International Importance in NSW, on NPWS-managed lands and on an array of private and state lands.</p>
<p>NSW Wetlands Management Policy (1996)</p>	<p>Promotes conservation and sustainable use of wetlands in NSW, giving specific consideration to the biophysical requirements of wetlands.</p>
<p>NSW is a major partner in the salinity National Action Plan (NAP) through the NAP bilateral agreement.</p>	<p>The NAP will provide \$396 million (including \$298 million from NSW) over seven years. The NSW Salinity Strategy will compliment the NAP in NSW.</p>
<p>NSW Salinity Strategy (2000)</p>	<p>Designed to slow the increase in salinity over ten years and lay the foundation for salinity management into the future.</p>
<p>Estuary Management Program</p>	<p>Enables local communities to develop and administer their own plans to restore and protect estuaries.</p>
<p>NSW Total Catchment Management Policy (1987) Catchment Management Act (1989) Natural Resources Management Reforms (2003) Natural Resources Commission (2003) Natural Resources Advisory Council</p>	<p>Established to facilitate the devolution of responsibility for NRM to the regional CMAs. NSW is implementing a regional NRM package that will support regional biodiversity initiatives, including regional and property Vegetation Management Plans. The regional CMA will have access to support through NAP and NHT2 for projects to protect biodiversity on private land and in the indigenous estates. The emphasis given to biodiversity objectives relative to other regional NRM objectives will depend largely on regional priorities (and to a lesser extent on Commonwealth funding criteria).</p>
<p>Voluntary conservation on private land</p>	<p>Formalised Voluntary Conservation Agreements on private land in NSW covered 9,569 ha at June 30 2003, up from 4,875 ha in 1998. The less formalised Land for Wildlife and Wildlife Refuges on private land are much more extensive (1.65 million ha) but these are not covered by formal management plans Various other initiatives for private land including Bushcare, Land for Wildlife and the Native Vegetation Management Fund, provide financial support to landholders to protect areas of remnant vegetation and to revegetate degraded areas.</p>

Policy/legislation	Link to biodiversity conservation
The NSW Weirs Policy (1997)	Aims to reduce the impact of weirs on fauna.
Cap and Pipe Bores program in the Great Artesian Basin	\$12 million from 1999-2004
<p>Invasive species policies and programs:</p> <ul style="list-style-type: none"> <li>• Noxious Weeds Act 1993</li> <li>• Threatened Species Conservation Act 1995</li> <li>• Rural Lands Protection Act 1998</li> <li>• Fisheries Management Act (1994)- marine pests</li> </ul>	<p>NSW has adopted the National Weeds Strategy (1997), which identifies weeds of national significance. Several species occurring in NSW are listed as key threatening processes under the <i>Threatened Species Conservation Act (1995)</i>. NPWS develops and implements Threat Abatement Plans for these threats (eg predation by foxes; predation by feral cats, competition from the plague minnow).</p> <p>NSW is a key partner in implementation of the National Bitou Bush and Boneseed Strategic Plan, Invasive species managed by NPWS in parks and reserves under management plans.</p> <p>Invasive species on private agricultural land addressed by programs under Department of Agriculture.</p> <p>NPWS tends to focus on reducing threats to biodiversity in parks and reserves (e.g. bitou bush in coastal ecosystems; salvinia in aquatic systems), while NSW Agriculture focuses on threats to agricultural production in farm and grazing systems (e.g. Paterson's curse, parthenium weed, rabbits, foxes).</p>
<p>Climate change:</p> <ul style="list-style-type: none"> <li>• Voluntary emissions targets</li> <li>• Electricity Supply Amendment (Greenhouse Gas Emissions Reduction) Act (2002)</li> <li>• Sustainable Energy Development Authority (SEDA) 1996</li> </ul>	<p>Voluntary greenhouse emission benchmarks for electricity sold in NSW were introduced in 1997. This aimed for a 5% per capita reduction in the emission levels recorded in 1989–90. Subsequent analyses, however, found low levels of compliance with the target.</p> <p>In late 2002, the NSW Government introduced the Electricity Supply Amendment (Greenhouse Gas Emissions Reduction) Act (2002) under which the previously voluntary benchmarks are enforceable<sup>9</sup>. This is the first legislated greenhouse gas emission target in Australia.</p> <p>NSW established the Sustainable Energy Development Authority (SEDA) in 1996 to reduce greenhouse gas emissions and facilitate and encourage commercialisation of sustainable energy technologies. SEDA's Energy Smart Business Program focuses on reducing energy use and greenhouse gas emissions across all sectors of business.</p>

<sup>9</sup> EPA (2003) NSW State of the Environment Report 2003

## Queensland

Policy/legislation	Link to biodiversity conservation
Biodiversity Policy Framework: Sustaining Our Natural Wealth	Released as a discussion paper for public comment (March 2004).
Nature Conservation Act (1992)	Overarching biodiversity conservation legislation. Act enabling protected areas but also provides for listing of threatened species, critical habitat and threatening processes. Recovery planning is not specifically required under the <i>Nature Conservation Act (1992)</i> and would normally only be in place if the species was also listed nationally under the <i>EPBC Act (1999)</i> .
Master Plan for Queensland Parks (2001)	Provides directions and strategies for managing our parks responsibly over the next twenty years and into the future. Commits to the CAR principles of the NRS and adopts a no net loss strategy for biodiversity in the protected areas system. The Plan undertakes to increase the representation of REs in the protected areas system from 70% to 80% through acquisitions. Further protection of under-represented REs will be pursued through conservation agreements and covenants on private land.
The 1999 South East Queensland Forests Agreement	Provides a planned 25-year transition to a timber industry based on plantation timber. As a result, some 425,000 hectares of former crown native forest are to be added to the protected area estate <sup>10</sup> . Within 25 years this figure will be increased to more than 1 million hectares, providing security for some of the State's areas of highest conservation value.
Queensland Parks Area Strategies (2 produced to March 2004).	Policy-level plans that deal with management and planning issues of wide applicability to a cluster of parks and forests that have - similar management arrangements, similar policy needs; similar stakeholder catchments or similar legal situations (for example Native Title claims).
Vegetation Management Act (1999) administered through the Integrated Planning Act (1997) The Vegetation Management and Other Legislation Amendment Act (2004) <sup>11</sup>	Regulates clearing of native vegetation through codes that take account of regional natural resource diversity within a consistent state-wide framework. Regulates one of the key processes threatening biodiversity in Queensland. Integrates tree clearing in both freehold and leasehold land under one policy and legislative framework.

<sup>10</sup> Queensland EPA (2003) Queensland Biodiversity Policy Framework: Sustaining our Natural Wealth. Govt of Queensland

<sup>11</sup> Queensland is the only jurisdiction that aims, under the general clearing regulatory regime, to specifically protect ecosystems that are endangered regionally according to the pre 1750 baseline. Assessment of clearing applications in Queensland is based on regional ecosystems (REs) mapping. REs are assessed relative to pre-clearing native vegetation extent. Those with <10% pre-clearing extent are highly protected under legislation in both leasehold and freehold land (classed as "endangered"). This category also includes small remnants within an RE even if the whole RE is not "endangered". Clearing is not specifically prevented in the "endangered" category but would not normally be approved.

Policy/legislation	Link to biodiversity conservation
State Policy for Vegetation Management (2004)	<p>Prevents further decline in the conservation status of endangered, of concern and not of concern regional ecosystems.</p> <p>Provides special protection for areas of high biodiversity value.</p> <p>Phases out broadscale clearing of remnant vegetation</p> <p>Retains at least 30% of pre clearing extent of remnant vegetation within a bioregion.</p> <p>Assessment and approval of applications to clear remnant vegetation is based on Property Maps of Assessable Vegetation.</p>
Code for Native Forest Practices on Private Land (2005)	<p>Regulates forest practice to prevent environmental degradation.</p> <p>Applies to remnant vegetation- not to plantations.</p> <p>Requires assessment and approval by Department of Natural Resources and Management.</p> <p>Assessment is based on Property Maps of Assessable Vegetation.</p>
Nature Conservation Regulations and Plans	<p>Regulate protected areas, protected or at risk species, and a range of species including wildlife in recreation and commercial uses.</p> <p>Includes regulation of commercial and recreational use of wildlife and control of threatening processes.</p>
<p>Codes of Practice, Permits and Licensing for:</p> <p>Aviculture</p> <p>Crocodile farming</p> <p>Captive reptile and amphibian husbandry</p> <p>Emu farming</p> <p>Exhibiting wildlife</p> <p>Humane shooting of kangaroos</p> <p>Orphaned, sick or injured wildlife</p> <p>Protected plants</p>	<p>Provide specific protection for native wildlife in commercial and other circumstances.</p>
<p>Environmental Protection Act (1994)</p> <p>Environmental Protection Regulation (1998)</p> <p>Environmental Protection (Waste) Policy and Regulation (2000)</p> <p>Environment Protection (Water) Policy (1997)</p>	<p>Protects the environment by providing for assessment and management of impacts of proposed development.</p> <p>Regulates and licences development activities in relation to environmental impacts.</p> <p>Based on principles of ecologically sustainable development.</p> <p>Water Policy (1997) adopts the NWQMS approach in establishing:</p> <ul style="list-style-type: none"> <li>• environmental values of waterways for protection;</li> <li>• water quality objectives to protect environmental values; and</li> <li>• protocols for monitoring.</li> </ul>

<b>Policy/legislation</b>	<b>Link to biodiversity conservation</b>
State Interest Planning Policy for Nature Conservation in Planning Schemes (2000)	Ensures that local government planning schemes will not adversely affect and must take account of state interests in nature conservation, and provides for state involvement in planning scheme making. Provides protection for areas of ecological, amenity and cultural significance. Based on the Nature Conservation Act (1992) and other related Acts, state and regional plans, state and national strategies and international agreements relating to nature conservation.
State Interest Planning Policy for State Forests, Timber Reserves and Forest Reserves in Planning Schemes	Ensures that planning schemes for forest management are consistent with and take account of state interests in forest planning and conservation.
Wet Tropics World Heritage Protection and Management Act (1993) Wet Tropics Conservation Strategy Marine Parks Act (1982) The Regional Nature Conservation Strategy for South East Queensland 2003-2008 (2003) South East Queensland Regional Water Quality Management Strategy The Great Barrier Reef Water Quality Protection Plan The Great Artesian Basin Sustainability Initiative (capping pipes and bores)	Provide specific protection for areas of high conservation and biodiversity significance. Approximately 200 000 ha of forests in Queensland's Wet Tropics have been transferred to the protected area estate
Coastal Protection and Management Act (1995)	Provides specific protection for coastal areas, particularly those under pressure from development and population growth.
Biodiversity Planning Assessment and Mapping Methodology	Assists EPA to identify state, regional and local areas of biodiversity significance.
Nature Refuges	Voluntary conservation agreement between a landholder and the Queensland Government. A Nature Refuge is a category of protected area under the Nature Conservation Act (1992). . Financial incentives are provided (reimbursement of transfer duty on land purchases; reimbursement of land tax on the proportion of the property under protection) for landholders who meet certain criteria. The landholders must enter into a Conservation Agreement with the EPA. The Conservation Agreement requires the landholder to create a Nature Refuge over all or part of the land. As at 2003 there were 97 Nature Refuge covenants accounting for 61,948 ha.
Water Act (2000)	Regulates water management and underpins the water reform process. Provides for environmental flows, planning, allocation, pricing and improved water use efficiency. Reformed water management and enables environmental flows to be allocated through water resource plans (implemented through Resource Operation Plans) for the major river systems. Plans have been finalised for

Policy/legislation	Link to biodiversity conservation
	some systems and are in progress for others.
Environment Protection and Biodiversity Conservation Act (1999)	Australian legislation providing protection through listing and recovery of matters of national significance: e.g. Ramsar wetlands, threatened species and communities, world heritage areas, Commonwealth marine areas, threatened species listed under international treaties (such as CAMBA and JAMBA). Any action likely to have a significant impact on an item of national environmental significance must be assessed under the Act.
Strategy for Management of Queensland's Wetlands (1999),	Queensland: Wetlands are mapped through the Queensland Wetland Inventory, which is ongoing and is now focussing on South East Queensland, the Brigalow Belt, Desert Uplands and Einasleigh Uplands. A total of 181 wetlands are listed as nationally or internationally (Ramsar) significant. There are six Ramsar sites in Queensland (Bowling Green Bay; Currawinya Lakes; Moreton Bay, Shoalwater Bay and Corio Bay.
Queensland Greenhouse Policy Framework: A Climate of Change (2001)	Identifies the key actions and future directions the Queensland Government is taking to tackle this important global issue.
Land Protection (Pest and Stock Route Management) Act (2002) <ul style="list-style-type: none"> <li>• Queensland Weeds Strategy 2002-2006</li> <li>• Queensland Pest Animal Strategy 2002-2006</li> </ul>	Includes consideration of impacts of pests and weeds on the environment. Queensland is lead agency for development of national Strategic Plans for nine of the 20 weed species listed under the Commonwealth Weeds of National Significance (WONS). <sup>12</sup> The Strategies are completed. The National Weeds Program (under NHT) funds implementation of the Strategic Plans.
The National Action Plan for Salinity and Water Quality (NAP)	State and Commonwealth governments will contribute \$162 million to the NAP in Queensland over the seven years of the program.

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<sup>12</sup> Environment Australia (1991) Weeds of National Significance.