ENVIRONMENTAL DEFENDERS OFFICE (SA) INC.

LAND BIODIVERSITY & THE LAW:

THE CASE FOR REFORM

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ENVIRONMENTAL DEFENDERS OFFICE (SA) INC

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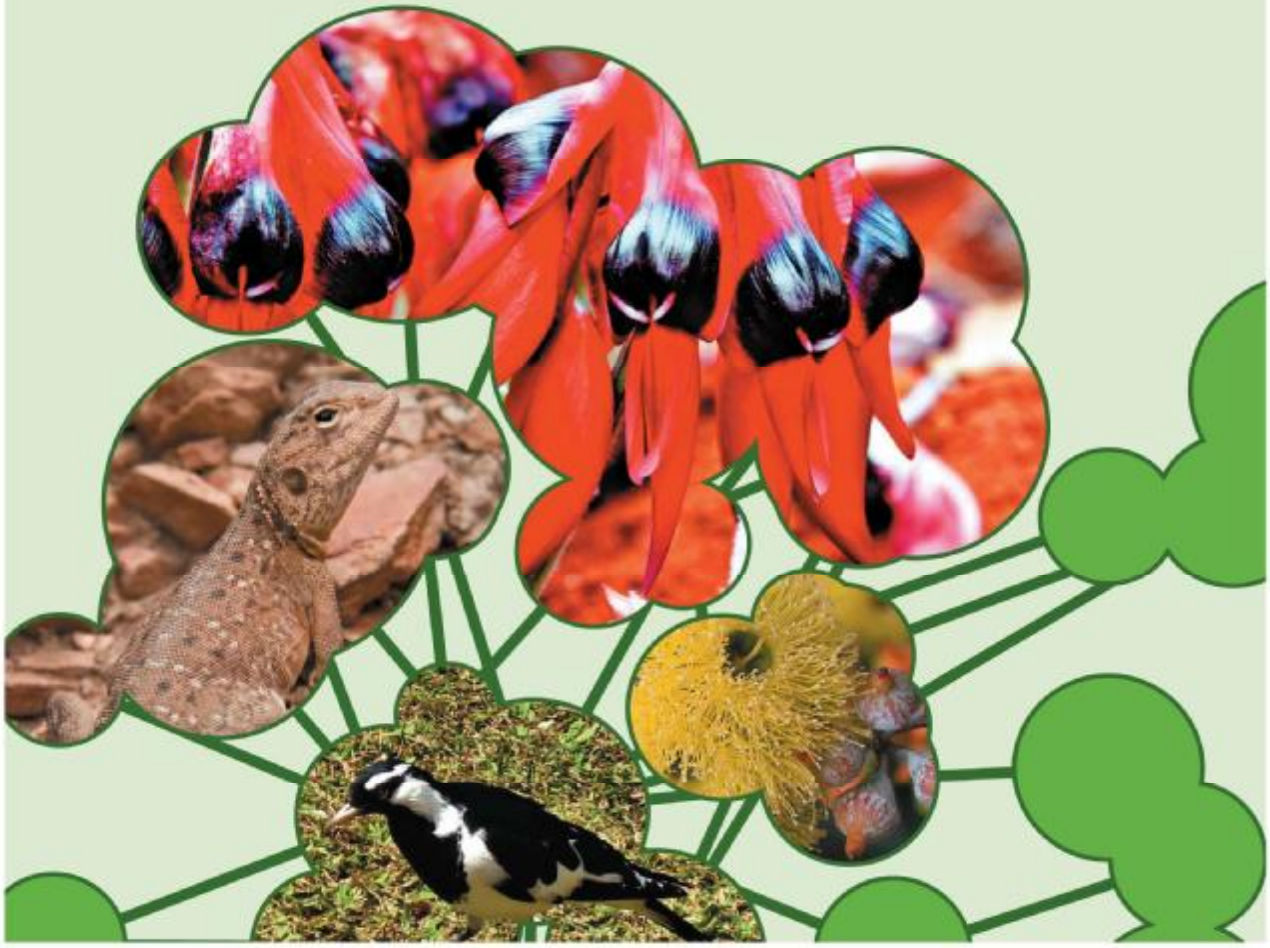

FOREWORD

Biodiversity across the world is in serious decline. In South Australia's agricultural region only 13% of the native vegetation is left. Fundamental changes need to be made to the way we protect and enhance what remains of our precious native vegetation and the biodiversity in it including the impact of our laws and legal system generally.

The starting point is that biodiversity is inherently important and that if we do not arrest the impact of society on biodiversity we will significantly impact what we have left.

There are many people to thank for their assistance in writing this report, including our researchers, Emma Carmody, who was largely responsible for the chapter on planning for which we are grateful and who provided other valuable research at a national and international level; Lucy Velkos, who provided valuable assistance with research and comment on local and interstate legislation; and Richard Cook, Duncan Hartshorne and Claire Williams who assisted with researching and proof reading drafts, our administrator, Gabrielle Bond who helped with many matters (including roping in her sister Annie at times); helpful suggestions on content from various members of the Management Committee of this office and Brett Caines whose fabulous artwork on the front cover provides a fitting tribute to the subject matter of this report. In preparing this report we have also consulted with those who have experience in the field and we thank them for giving willingly of their time.

The report is, however, the work of the solicitors of the Environmental Defenders Office (SA) Inc (EDO). The views ultimately expressed in this report are ours alone.

Finally, we must acknowledge the Department of Environment and Natural Resources who provided funding to produce the original version of this work. Without this funding, the report would not have been produced.

Contents

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ENVIRONMENTAL DEFENDERS OFFICE (SA) INC.
A Community Legal Centre specialising in public interest environmental law

CHAPTER 1: INTRODUCTION AND EXECUTIVE SUMMARY

Background

There has been recognition of biodiversity at an international level with the 2010 Human Rights International Year of Biodiversity and now in 2011, the Human Rights International Year of Forests. Such is the importance of this issue the United Nations has declared 2011-2020 to be the International Decade of Biodiversity.

South Australia's biodiversity is under threat. The State of the Environment Report 2008, indicates that in the agricultural region of the State, (the part of the State where there is relatively reliable rain) 29.5% of the state remains uncleared[1] and 16.5% of the State has some form of protected area status[2]. It can be adduced to mean that in the agricultural region of the State, 13% of the land (without some form of protected area status) remains uncleared[3]. Given this, it is critical that this remaining vegetation, and the biodiversity inherent within it, is protected.

South Australia does not have any legislation dedicated to biodiversity protection and enhancement. Instead, this important matter is scattered throughout 20 pieces of legislation and lacks a streamlined approach to this important issue. It is in this context that there is a strong case for reform. This report considers the *Natural Resources Management Act 2004* (SA), the *Native Vegetation Act 1991* (SA), the *National Parks and Wildlife Act 1972* (SA), its national counterpart, the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), the *Pastoral Land Management and Conservation Act 1989* (SA) and the South

[1] *State of Environment Report for South Australia Report 2008*, p174

[2] This information was provided by the Department of Environment and Natural Resources on 11 August 2011. Protected area status in this analysis includes Conservation Parks, Game Reserves, National Parks, Recreation Parks, Regional Reserves under the *National Parks and Wildlife Act 1972*, Wilderness Protection Areas under the *Wilderness Protection Act 1992*, Conservation Reserves under the *Crown Land Management Act 2009*, Heritage Agreements under the *Native Vegetation Act 1991*, Indigenous Protected Areas which are a voluntary agreement with the Federal Government, Native Forests under the *Forestry Act 1950.*

[3] However, the Annual Report of the Native Vegetation Council 2009/2010 (at page 1) states to the contrary that, "the majority of remnant native vegetation is outside the formal National Parks and Wildlife parks and reserve system."

Australian planning scheme and proposes the reforms necessary to better enhance and protect biodiversity in this State.

In 2007, the South Australian government recognised the legislative gap on biodiversity and proposed revision in its 2007 No Species Loss Policy[4].

Reform of the planning system

This report considers the critical need to reform the planning system as development is one of the greatest threats to native vegetation and the biodiversity inherent within it[5]. In particular, urgent legislative reform is needed to require:

- appropriate biomapping in order to ensure that there are areas where no development or where limited development can occur;
- a referral to the National Parks and Wildlife Council and the Native Vegetation Council which would be empowered to refuse or place conditions on development when listed matters are likely to be significantly impacted or when development contravenes the Principles of Clearance under the *Native Vegetation Act*. This power of direction should operate at the following stages:
    - development plan amendment stage as a change in zoning may enable the clearance of vegetation;
    - with respect to the assessment of development applications, major projects, crown development, infrastructure developments and ancillary development under Part 4 of the *Development Act*;
    - with respect to the approval of environmental authorisations under the *Environment Protection Act 1993* (SA).

Natural Resources Management Act

This year, the South Australian Department of Environment and Natural Resources has held workshops to consider whether legislative reform for biodiversity is best placed in the *Natural Resources Management Act.* As a result, in this report we consider that Act first in this report and from that perspective. That is, we ask: is the *Natural Resources Management Act* the best vehicle for biodiversity reform in this state? Our conclusion is no.

[4] Department of Environment and Heritage, *No Species Loss: A Nature Conservation Strategy for South Australia 2007-2017,*Objective 5.2, p65
[5] Annual Report of the Native Vegetation Council, 2008/9, p3.

We do not see legislative reform in relation to biodiversity protection sitting within the legislative structure of the *Natural Resources Management Act* because:

- natural resources management is innately contrary to the protection, restoration and enhancement of biological diversity in that the management of natural resources is commercially based and aims at a commercial return. The *Natural Resources Management Act* has been written with this commercial end in mind. Whilst we acknowledge that a value needs to be placed on biodiversity, the need to obtain a commercial gain must not override the conservation aim. Biological diversity is intrinsically valuable. This value exists regardless of any commercial gain. If biodiversity legislation is subsumed within natural resources management legislation there is concern that the economic aim of the Act will overtake the environmental protection aim of such legislation;
- the Act protects the environment so that it can be used and enjoyed by people. If biodiversity legislation is subsumed within natural resources management legislation, there is concern that some parts of biodiversity (possibly substantial parts) which people do not enjoy or use may not be preserved;
- despite the understanding that this Act takes a whole of landscape approach it none the less appears to be an anthropocentric approach;
- were the Act to include a part covering biodiversity it is likely that the Natural Resources Management Boards would be responsible for administering and achieving biodiversity protection. Such responsibility is better placed within a government agency;
- there is no clear interstate precedent for integrating natural resources management and biodiversity legislation.

More details on these matters are set out in the chapter of this report dealing with the *Natural Resources Management Act.*

In order to determine where legislative reform on biodiversity is best placed we then consider the *Native Vegetation Act*, the *National Parks and Wildlife Act* (Parts 1, 2, 4, 5, 5A and 6[6]) and its more comprehensive counterpart at the federal level, the *Environment Protection and Biodiversity Conservation Act*, the *Pastoral Land Management and Conservation Act* and the planning and development scheme in this State and how it impacts biodiversity protection and enhancement.

[6] Regrettably, our resources have not extended to a consideration of the reserves scheme (as set out in the balance of the National Parks and Wildlife Act) in this State.

Legislative Reform: options

Our conclusion is that there are two potential methods by which legislative reform could be undertaken. These are to:

- firstly, combine existing legislation; or

- secondly, enact new legislation.

Legislative Reform: Combine existing legislation

Combining existing legislation involves a two-part process which is that:

- firstly the Acts which primarily deal with biodiversity in this State, namely the *National Parks and Wildlife Act* and the *Native Vegetation Act* be amended[7] and combined into a new Act called, for example, the Biodiversity Protection and Enhancement Act comprising:

  - biodiversity protection, restoration and enhancement *within* reserves[8]; and

  - biodiversity protection, restoration and enhancement *outside* reserves.

  It would not be sufficient to simply combine these two Acts (with the amendments proposed in this report) as new legislation also needs to cover additional matters as set out below. [9]

- Secondly, other related legislation be amended in order to better protect biodiversity. In this Report, detailed consideration is given to how the *Natural Resources Management Act*, the *Native Vegetation Act* and the *Pastoral Land Management and Conservation Act*[10] could be amended to better protect biodiversity.

  Further, consideration is also given as to how the *Development Act 1993* (SA) and the *Environment Protection Act 1993* (SA)[11] could be amended to better protect biodiversity.

[7] Proposed amendments are set out in the section of the Report on the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act* and the section of this report on the *Native Vegetation Act*
[8] Unfortunately, the legislation dealing with reserves was beyond the scope of this report.
[9] As indicated above, further details on this issue are set out in the chapter of this report on the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act*.
[10] Details of proposed amendments are set out in each section of the Report covering these Acts
[11] Details of proposed amendments are set out in the Planning section of the Report.

Legislative Reform: enact new legislation

Alternatively, consideration could be given to enacting a completely new Biodiversity Act (rather than combining the *Native Vegetation Act* and the *National Parks and Wildlife Act* and other legislation as set out above). Again, this is a two-step process as follows:

- enact the new legislation, for example, calling it the Biodiversity Protection and Enhancement Act;
- amend other related legislation to better protect biodiversity as set out above.

Recommendation: Combine National Parks and Wildlife Act and Native Vegetation Act

In this report, we recommend the first option above, that is, the *National Parks and Wildlife Act* and the *Native Vegetation Act* be combined and the Acts reformed to better protect biodiversity. This option proposes to make use of existing structures such as the National Parks and Wildlife Council and the Native Vegetation Council by combining them to form a Biodiversity Council. In addition to adopting the functions of the previous two Councils, the Biodiversity Council would take on additional responsibilities with respect to listing, wildlife, recovery and threat abatement planning, strategic assessments, regional planning, permits, conservation on private land and bioprospecting.

Biodiversity Protection and Enhancement Legislation

Regardless of which option is chosen, Biodiversity Protection and Enhancement Legislation requires the following matters to be included in it:

- Objects, Definitions, Principles, Climate Change Impacts, Duty of Care and Administration;
- Listing Categories and Processes;
- Recovery, threat abatement and wildlife conservation planning;
- Landscape Scale Assessments;
- Site Scale Assessments;
- Conservation Mechanisms on Private Land;
- Licencing - Permits;
- Bioprospecting;
- Reporting and Review;
- Compliance Enforcement and Court Processes;
- Integration with other legislation;

In addition amendments are required to related legislation including:

- *Development Act;*
- *Environment Protection Act;*
- *Natural Resources Management Act;*
- *Native Vegetation Act;*
- *National Parks and Wildlife Act;*
- *Pastoral Land Management and Conservation Act;* and

Finally, at the outset, we wish to note that in writing this report we are implicitly referring to activities and actions undertaken by appointees and staff of various Councils, Boards and Departments. We acknowledge the high level of service provided by these people and do not wish to be seen to be criticising this service. Instead, it is our intention to critically analyse the legislation under which these people provide their valuable service.

Please note that, as this report is a legislative review generally, policy has not been considered. However, there has been greater consideration of policy with respect to the planning and development section of this report given the critical nature of this topic.

Further, while this report does give some consideration to funding issues, we wish to emphasise that protection of biodiversity should not be subject to the whims of the Treasury Department, rather it should be a mandatory fixture on the budget. Once biodiversity is gone, it is gone. There is no return.

Finally, the content of this report is limited by time constraints and the legislation considered. In order to properly streamline and integrate legislation, we recommend review of the following relevant legislation be undertaken: the *Coast Protection Act 1972* (SA), *Dog Fence Act 1946* (SA), the reserves sections of the *National Parks and Wildlife Act 1972* (SA), *Marine Parks Act 2007* (SA), *Wilderness Protection Act 1992* (SA), *Adelaide Dolphin Sanctuary Act 2005* (SA), the *Upper South East Dryland Salinity and Flood Management Act 2002* (SA), the *River Murray Act 2003* (SA), the *Development Act 1993* (SA), the *Environment Protection Act 1993* (SA), the *Fisheries Management Act 2007* (SA), the *Aquaculture Act 2001* (SA), the *Mining Act 1971* (SA), the *Petroleum Act 2000* (SA), the *Crown Lands Act 1929* (SA) *and* the *Heritage Act 1993* (SA).

CHAPTER 2: SUMMARY OF NEW LEGISLATION AND RECOMMENDATIONS

Legislative reform

There are two potential methods by which legislative reform could be undertaken. These are to:

- firstly, combine existing legislation; or
- secondly, enact new legislation.

Legislative Reform: Combine existing legislation

Combining existing legislation involves a two-part process which is that:

- firstly, the Acts which primarily deal with biodiversity in this State, namely the *National Parks and Wildlife Act 1972* (SA) and the *Native Vegetation Act 1991* (SA) be amended[1] and combined into a new Act called, for example, the *Biodiversity Protection and Enhancement Act* comprising:
    - biodiversity protection, restoration and enhancement *within* reserves; and
    - biodiversity protection, restoration and enhancement *outside* reserves.

    The "reserves" legislation is currently the most proactive protection for biodiversity in South Australia. This legislation includes Parts 2, 3 and 3A of the *National Parks and Wildlife Act*, the *Wilderness Protection Act*, the *Dolphin Sanctuary Act* and the relevant parts of the *Marine Parks Act*. Further consideration needs to be given to whether any other legislation should be included within this Part. Unfortunately, legislation dealing with reserves was beyond the scope of this report.

[1] Proposed amendments are set out in the section of the Report on the Environment Protection and Biodiversity Conservation Act (Cth) 1999 and the National Parks and Wildlife Act (SA) 1972 and the section of the Report on the Native Vegetation Act (SA) 1991.

Of course, the reserves legislation clearly does not sufficiently deal with biodiversity, because it does not cover the 74.2%[2] of the State which is located outside reserves. As a result, another Part of the new legislation encompassing biodiversity protection on non-reserve land could incorporate the *Native Vegetation Act* and the balance of the *National Parks and Wildlife Act*. As the *Native Vegetation Act* is the principal Act protecting biodiversity on non-reserve land, its contents are best placed within an Act which has as its centrepiece the preservation, restoration and enhancement of biodiversity.

Incorporating the legislation as set out above has the following advantages:

- all Acts primarily comprising biodiversity matters are within the one Act;
- operational structures currently in place can be adapted for the purposes of the Act and so new structures (with the associated expense) do not need to be created. For example; the Native Vegetation Council and the National Parks and Wildlife Council could be reconstituted as the Biodiversity Council to consider issues currently dealt with by the Councils and also planning referrals with respect to both freehold and leasehold land, the listing of threatened matters and natural resource issues as set out in the recommendations.

It would not be sufficient to simply combine these two Acts (with the amendments proposed in this Report) as new legislation also needs to cover additional matters with respect to the objects, definitions, principles, duty of care, administration, listing (categories and process), wildlife, recovery and threat abatement planning, strategic assessments, regional planning, conservation on private land, permits, bioprospecting, reporting, review, compliance, enforcement and court processes. The proposed content of this new legislation is detailed in the chapter on the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and the *National Parks and Wildlife Act 1972* (SA) and summarised below. If the *Native Vegetation Act 1991* (SA) were to be included in this Act, then we recommend that it be included with the amendments proposed in the chapter on the Native Vegetation Act and the recommended changes are listed below.

- secondly, other related legislation be amended in order to better protect biodiversity. In this report detailed consideration is given to how the *Natural Resources Management*

[2] *State of Environment Report for South Australia Report 2008* at p174.

Act, the *Native Vegetation Act* and the *Pastoral Land Management and Conservation Act*[3] could be amended to better protect biodiversity.

Some consideration is also given to how the *Development Act* and the *Environment Protection Act*[4] could be amended to better protect biodiversity. These amendments are critical to the better protection of biodiversity as development is one of the major threats to land clearance and therefore to biodiversity[5].

Legislative Reform: enact new legislation

Alternatively, consideration could be given to enacting a completely new *Biodiversity Protection and Enhancement Act* (rather than combining the *Native Vegetation Act* and the *National Parks and Wildlife Act* as set out above). Again, this is a two-step process as follows:

- enact the new legislation, for example, calling it the *Biodiversity Protection and Enhancement Act;*
- amend other related legislation to better protect biodiversity as set out above.

This is not the preferred option as:

- biodiversity matters would be spread across yet another piece of legislation, creating difficulties for laypeople operating under the regime; and
- additional bureaucracy would be created instead of consolidating current operational structures (for example, under the Native Vegetation Council and National Parks and Wildlife Council).

Combine National Parks and Wildlife Act and Native Vegetation Act

In this report, we recommend the first option above, that is, the *National Parks and Wildlife Act* and the *Native Vegetation Act* be combined and the Acts reformed to better protect biodiversity. This option proposes to make use of existing structures such as the National Parks and Wildlife Council and the Native Vegetation Council by combining them to form a Biodiversity Council. In addition to adopting the functions of the previous two Councils, the Biodiversity Council would take on additional responsibilities with respect to listing, wildlife,

[3] Details of proposed amendments are set out in each section of the Report covering these Acts.
[4] Details of proposed amendments are set out in the Planning chapter of the Report.
[5] Annual Report of the Native Vegetation Council, 2008/9, p3.

recovery and threat abatement planning, strategic assessments, regional planning, conservation on private land and bioprospecting.

Recommendation

- The *National Parks and Wildlife Act* and the *Native Vegetation Act* be combined and the Acts reformed to better protect biodiversity.
- The National Parks and Wildlife Council and the Native Vegetation Council be combined to form a Biodiversity Council with a role that includes the functions of the previous two Councils in addition to adopting responsibilities with respect to listing, wildlife, recovery and threat abatement planning, strategic assessments, regional planning, conservation on private land and bioprospecting.
- Other legislation reviewed in this report be amended, namely, the *Natural Resources Management Act,* the *Pastoral Land Management and Conservation Act,* the *Development Act* and the *Environment Protection Act* be amended in the manner set out in this report.

Summary of recommendations: New Legislation and other legislation

Regardless of which option is chosen, as indicated above:

- new legislation also needs to cover additional matters and this is detailed in the chapter of the report on the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act*. A summary of the recommendations from that chapter follows;
- Other legislation reviewed in this report should be amended, namely, the *Natural Resources Management Act,* the *Pastoral Land Management and Conservation Act,* the *Development Act* and the *Environment Protection Act*. A summary of the recommendations relating to those Acts follows after the recommendations on new legislation.

Objects, Definitions, Principles, Climate Change Impacts, Duty of Care, Administration

- Primary object to be the conservation, restoration and enhancement of biodiversity.
- Objects which acknowledge the national and international context for biodiversity conservation.
- Objects similar to those in the *Threatened Species Conservation Act* or in the proposed Western Australian biodiversity legislation.
- Require decision makers to perform their functions in a way which best achieves the stated objects.
- Include a definition of biodiversity and biodiversity value terminology as provided for in the *Threatened Species Conservation Act.*
- Include and prioritise the application of principles of ecologically sustainable development.
- Include the following principles:
    - maintain or improve the extent and condition of natural habitats, including critical habitat;
    - protect or restore ecosystem services, processes and function;
    - maintain or improve ecosystem integrity, resilience and resistance;
    - maintain or improve connectivity within and between ecosystems;
    - protect multiple representative examples of ecosystem types;
    - facilitate adaptation to environmental change, including climate change;
    - recognise uncertainty and plan for adaptive management and
    - maintain or improve the conservation status of listed species, populations and communities.
- Requirement decision makers to consider climate change impacts.
- Duty of care provisions which:
    - are linked to an incentive based scheme to encourage landholders to improve biodiversity;
    - set an accepted minimum standard for biodiversity management;
    - are supported by guidelines or codes which articulate how the duty of care should be enacted and

- are phased in or assistance is provided to landholders with costs for a limited time.

- Establishment of a Biodiversity Council and a Biodiversity Scientific Advisory Committee to advise the Minister and the Biodiversity Council on a range of biodiversity issues.

Listing Categories and Processes

- List threatened species, populations and ecological communities.
- List key functional groups of species and susceptible species.
- Definitions and criteria for threatened species and ecological communities provided for in the *Environment Protection and Biodiversity Conservation Act* and *Regulations*.
- Definition of threatened populations in *Threatened Species Conservation Act* and criteria in the *Threatened Species Conservation Act Regulations*.
- Scientific Committee indicates in the listing process the areas necessary for an ecological community to persist and maintain its ecological function.
- List critical habitat, at the same time as listing species and adopt the criteria in *Environment Protection and Biodiversity Conservation Act Regulations* for defining critical habitat together with the definition of critical habitat in section 13(2) *Nature Conservation Act 1992* (Qld).
- List key threatening processes and use a definition which identifies processes at a range of scales.
- List migratory and marine species.
- Include a listing process with the following features:
  - duty to list;
  - requirement for public nominations to be sought and consultation;
  - decisions based only on scientific evidence;
  - Scientific Committee made up solely of scientists to set themes, assess nominations and make decisions. In the alternative, if it is determined that the Minister makes the decisions (which we do not recommend), then there be merits review of those decisions;

- publication of reasons for decisions;
- timely decision making;
- emergency listing;
- regular reviews of lists, perhaps every two years;
- as soon as practicable after a species, population or ecological community indigenous to South Australia becomes a listed threatened species or ecological community under the *Environment Protection and Biodiversity Conservation Act*, the Scientific Committee should consider whether it should be incorporated into State listings;
- When deciding whether to list a threatened species or ecological community, the Minister must take the principles of ESD into account only in exceptional situation where social or economic costs associated with listing are overwhelming and the environmental benefits are known to be slight; and
- Link listing to conservation measures such as conservation advices and recovery plans.

Planning

- With respect to recovery planning:
  - incorporate *Environment Protection and Biodiversity Conservation Act* provisions with additional requirements that plans are focussed, flexible and incorporate risk;
  - allow plans to cover state significant threatened species, communities and populations;
  - provide for mandatory public comment;
  - allow plans to focus on a number of species, communities and populations;
  - have a prioritisation system which includes four factors namely species value, cost of management, benefit of management and likelihood of success of management. All of these factors should take into account the impacts of climate change;
  - provide for flexible recovery plans to allow for their development at a regional scale and
  - grant power to the Biodiversity Council to direct any statutory planning or approval function which may affect a threatened species, population or ecological community with respect to any relevant recovery plan.

- With respect to threat abatement planning incorporate *Environment Protection and Biodiversity Conservation Act* provisions insofar as they allow for:
    - identification of the key threatening process to which it applies,
    - descriptions of the manner in which the process threatens or may threaten the survival, abundance or evolutionary development of a listed species, population or ecological community,
    - identification of the actions that must be taken to abate the threatening process,
    - identification of the persons or public authorities who are responsible for the implementation of the actions identified in the plan; and
    - identification of the performance indicators to measure whether the actions identified in the plan are being implemented and are successfully abating the threatening process;
    - allow plans to cover state significant threatened species, ecological communities and populations;
    - allow plans to cover key state threatening processes;
    - provide for flexible threat abatement plans to allow for their development at a regional scale; and
    - grant power to the Biodiversity Council to direct any statutory planning or approval function which may detrimentally affect a threatened species, population or ecological community with respect to any relevant threat abatement plan.
- Adopt the *Environment Protection and Biodiversity Conservation Act* provisions for wildlife planning.

Landscape Scale Assessments

- Provide for a strategic assessment process for state specific policy, plans and programmes with the following features:
    - clearly defined set of criteria to guide decision making;
    - clear guidelines to determine the proper level of information required to undertake an assessment;
    - an “improve or maintain” test for the approval of a class of actions in accordance with an endorsed plan, policy or program;

- significant public involvement; and
- a performance audit power.

- Provide for a system of regional plans in order to set targets for the preservation of biodiversity.
- Provide that regional planning be influenced by the following principles:
  - maintain or improve the conservation status of listed species, populations and communities,
  - maintain or improve the extent and condition of natural habitats, including critical habitat,
  - protect or restore ecosystem services, processes and functions,
  - maintain or improve ecosystem integrity, resilience and resistance, maintain or improve connectivity within and between ecosystems,
  - protect multiple representative examples of ecosystem types and facilitate adaptation to environmental change, including climate change; and
  - recognition of uncertainty and planning for adaptive management.

Conservation Mechanisms on Private Land

- Promote use of conservation agreements and covenants, wildlife refuges and stewardship programmes.
- Development and regular review of the use of incentives such as payments for ecosystem services, carbon sequestration and other management activities which seek to conserve biodiversity together with tax and rate exemptions.

Licencing

- Permit scheme which deals with permits to kill, harm, possess or detrimentally affect. Such a system would cover native fauna, protected native flora, threatened species, populations and ecological communities, marine species, key functioning species and species with susceptibility traits.

- Offences covering to kill, harm, possess or detrimentally affect native species except in accordance with an approval or commercial and non-commercial use permit or land clearance permit.
- Permits must be consistent with any relevant plan and there must be environmental impact assessment of any activities proposed.
- Reasonable public consultation.
- Provide that any taking pursuant to a licence, permit, or any other authorisation, be granted only if there will be no significant adverse effect to the wildlife in question and its habitat or ecological community (along the lines of the QLD and *Environment Protection and Biodiversity Conservation Act*s).
- System of sustainable use plans.
- Broad definition of take which includes habitat disturbance and unlawful removal
- Equitable sharing of the benefits arising from the use of biological resources, the facilitation of access to such resources, the right to deny access to such resources and the granting of access to such resources and the terms and conditions of such access.
- Amend *National Parks and Wildlife Act* to:
    - provide for the monitoring of *National Parks and Wildlife Act* Schedule 10 animals by a scientific committee on an annual basis to ensure that their exclusion from protection is warranted;
    - remove provisions covering open seasons;
    - provide that permits can only be granted after public consultation and appropriate EIA and;
    - provide for reviewable and binding decisions.

Reporting and Review

- Mandatory reporting on progress in achieving biodiversity conservation goals and the efficacy of strategies and policies used to further these goals (with appropriate integration with existing reporting requirements, such as the State of the Environment Report under the *Environment Protection Act*).
- Mandatory review of legislation every 5 years.
- Establishment of a Biodiversity Commission and Commissioner whose roles include overseeing the preparation of a Biodiversity Conservation Strategy and preparation of regional biodiversity plans, advice to the Minister regarding decisions on planning matters and auditing of statutory reports.

Compliance, Enforcement and Court Processes

- Range of enforcement measures including audits, warning notices, infringement notices, remediation, conservation, interim conservation, compensation, injunctions, enforceable undertakings and stop work orders.
- Authorised officers with wide powers to inspect, search, seize and arrest.
- Criminal and civil penalty amounts set at or above those under the *Environment Protection and Biodiversity Conservation Act* and an ability to recover financial benefits arising from contraventions.
- Possession prima facie evidence of an offence being committed.
- Review rights as currently provided for in the *National Parks and Wildlife Act.*
- Open standing.
- Discretionary power to the courts to consider granting an order that each party to a proceeding bear their own costs and/or a protective costs order to a party to the proceedings.
- Prohibition on courts from making orders for security for costs and undertakings as to damages.
- Rewards scheme which provides for the payment of penalties, fines, or forfeitures of property for any legislative breaches to persons who furnish information which leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property in respect of legislative breaches. Such persons may also receive monies to cover the reasonable and necessary costs incurred in providing temporary care for any fish, wildlife, or plant pending any legal action relating to that fish, wildlife, or plant.
- Environment, Resources and Development Court to hear disputes.
- Private prosecutions.
- Publication of contraventions.
- Compliance and enforcement audits.

Summary of recommendations: other legislation

Planning: Development Act

Objects

The *Development Act* be amended to include:

- an object analogous to section 5(a)(vi) of the *Environmental Planning and Assessment Act* (NSW);
- an object that specifically provides for 'the maintenance of biological and genetic diversity and
- a variation of section 5(1)(a)(ii) of the *Sustainable Planning Act 2009* (Queensland), namely an object that requires ALL decision-makers to take into account the short and long-term effects of development on climate change, and by extension biodiversity. This object should also be incorporated into development plans.

Biodiversity Mapping

The *Development Act* be amended to require Development Plans to:

- Include biodiversity conservation overlay maps or refer to State maps indicating the various classes of biodiversity across the local government area including 'no go' areas where no development is allowed; and
- Zone their local government area so as to provide an adequate level of protection to various classes of biodiversity identified on biodiversity conservation overlay maps.

- Identification of biodiversity features within each local council area is necessary to ensure concrete conservation and planning outcomes. This can be achieved by:

    - Using appropriate technology to map biodiversity across the State which include 'no go' areas where no development is allowed;
    - Attaching biodiversity map overlays to Development Plans and Natural Resource Management plans;
    - Creating classes of habitat, species and ecosystems in addition to threatened species, etc. Each class would be accorded a specific level of protection.

Biodiversity map 'overlays' would indicate the location of classes of habitat etc.

- Timeframes should be developed in respect of mapping across the State.
- All existing biodiversity mapping for South Australia should be consolidated into a central web portal. This would facilitate local government access to relevant maps and information until more accurate, high-scale mapping has been completed. Once in place, maps must be regularly reviewed to ensure that they are accurate (as per NSW's Vegetation Information System).

Planning schemes

The *Development Act* be amended to include:

- a section that requires Development Plans to advance the objects of State and Federal biodiversity conservation legislation;
- to require Development Plans to include specific, enforceable provisions relating to biodiversity conservation including, but not limited to the protection and conservation of native animals and plants, critical habitat, ecosystems, and threatened species, populations, communities and their habitat;
- to require Development Plans to be consistent with State and Federal biodiversity conservation legislation. This would include a duty for local councils to implement threat-abatement plans, management plans for species and ecological communities, and recovery strategies relevant to their local area;
- all proposed Development Plans and any amendments to be referred for direction to the:
    - National Parks and Wildlife Council or the proposed Biodiversity Council which must then refer the matter to the scientific working group for appropriate scientific assessment of significant adverse impacts on biodiversity (including, but not limited to threatened species, populations, ecological communities and critical habitat).
    - Native Vegetation Council where as a consequence of rezoning it is likely that there will be clearance of native vegetation in contravention of the principles of clearance under the *Native Vegetation Act.*

- A section that *requires* the Minister to amend draft Development Plans and proposed amendments to Development Plans to ensure that they include adequate biodiversity

conservation measures and adequate measures protecting remnant native vegetation;

- A section that *requires* the Minister to prohibit the making of a Development Plan or an amendment to a Development Plan that is likely to impact biodiversity and remnant vegetation to an unacceptable degree and is incapable of being made environmentally-acceptable.

Environmental and species impact statements

The *Development Act* should be amended:

- to require a statement of environmental effects to accompany a development application where:
    - the proposed development is likely to cause significant adverse impacts on matters listed under biodiversity legislation including, but not limited to threatened species, populations, ecological communities and critical habitat; and/or
    - native vegetation is likely to be cleared in contravention of the principles of clearance under the *Native Vegetation Act*.
- the statement of environmental effects should identify the likely environmental impacts of the proposal (including impacts on biodiversity) and measures taken to reduce or eliminate these impacts.
- to include a section specifying how 'significance' is to be judged. The 7-Part test used in NSW could serve as a model.
- to require consent authorities to refer for direction all development applications accompanied by a statement of environmental effects or environmental impact statement to the proposed Biodiversity Council, Native Vegetation Council or National Parks and Wildlife Council, as the case may be.
- for greater transparency, to require statements of environmental effects and environmental impact statements to be prepared by independent assessors funded via government and developer contributions. In the alternative, developers be required to consult with the proposed Biodiversity Council when completing the statements.
- to require statements of environmental effects and environmental impact statements to be prepared in accordance with guidelines developed with advice from the proposed Scientific Committee. Statements of environmental effects and environmental impact statements should explicitly recognise all types of impacts, including cumulative impacts.

- to amend section 48E of the *Development Act* to remove reference to judicial review.

Planning: Environment Protection Act

Environmental authorisations be referred to the proposed Biodiversity Council (or the Native Vegetation Council or the National Parks and Wildlife Council as the case may be) which would be empowered to refuse authorisations under the Environment Protection Act (SA) 1993 where granting an authorisation is likely to result in:

- clearance of native vegetation in contravention of the principles of clearance under the Native Vegetation Act;
- a significant adverse impact on listed matters.

Natural Resources Management Act

- Consideration of a requirement that fifty per cent of the members of the Councils and Boards bring skills relating to the conservation, restoration and enhancement of the environment including knowledge of biodiversity.
- Amend section 9(2) to include reference to biodiversity and the removal of paragraph (h) as set out above
- The wording of the duty be broadened to enable it to apply to inherited degradation of natural resources
- Consider the application of civil and criminal penalties for a breach of the duty
- Build incentives into the Act for those who improve biodiversity by acting in a manner over and above that required under the duty.
- Strengthen section 123 by increasing the penalty to create a deterrent rather than simply a business expense.
- Section 74 (regarding the State NRM Plan) be altered to provide better protection for biodiversity by:
    - *"the environment, including protection of biodiversity and the interest of the community through the operation of this Act…"*
    - Requiring the inclusion of biodiversity targets in the State and Local NRM plans.

- The Act be amended to expressly require the State and regional NRM plans to set out:
    - the impact of the use and management of natural resources on biodiversity; and

    - methods or targets for addressing how this impact is to be remedied to avoid breach of section 122 of the Act (which requires the land to be used no unreasonable degradation of the land (including in relation to biodiversity).
- An environmentally sustainable diversion limit be adopted.
- Water allocation plans include the environmentally sustainable diversion limit and compliance with the plans be mandatory and subject to substantial penalties for non-compliance.
- Water management authorisations under the Act be subject to:
    - an environmental watering plan which include water conservation measures and which protects and enhances biodiversity;
    - an environment improvement program which protects and enhances biodiversity;
    - financial bonds, so that if the any of the above are not complied with, the bond is forfeited;
- The revision of the stock exception to prevent stock from taking water before the needs of the environment.
- The Minister should be required to refuse a water licence, water allocation, water resource works approval, site use approval and delivery capacity entitlement if the relevant water instrument is likely to significantly impact biodiversity.
- The Minister should be required to consider the WAP in the granting a licence.
- Penalties regarding the maintenance of a watercourse or lake and in relation to water restrictions should be increased.
- Consideration be given to expanding the application of section 164P (the revocation of a licence) to other sections and to any action which has a significant impact on biodiversity
- Consideration be given to including incentives to comply with the duty to care for a watercourse or lake.
- Mandating the revocation of the permit when the level of groundwater is damaging soil, rock or ecosystems and requiring this issue to be considered before a permit is granted.
- The protection of ecosystems afforded in sections 155, 164O, 166, 169 and 170 be expanded to include the protection of other aspects of the biodiversity, not just the watercourses on which ecosystems depend and be made mandatory requirements.
- If the Biodiversity Act is legislated, the proposed Biodiversity Council (or its equivalent) direct the actions under the *Natural Resources Management Act* where the action under the *Natural Resources Management Act* is likely to have a significant adverse impact on biodiversity.

- Where there is an application for clearance of remnant native vegetation as a result of an action under the Natural Resources Management Act, the NVC should be given a power of direction where such clearance breaches the Principles of Clearance under the Native Vegetation Act.

Native Vegetation Act

- Consideration be given to increasing the application of the Act to include:
    - in regulation 3A plants which provide habitat for matters listed under the State;
    - dead plants which form habitats for species.
- The application of the Act be broadened to include those areas of Adelaide currently excluded.
- Reconsider the operation of part of section 6(c) which provides for clearance to facilitate the sustainable use of land for primary production and any strengthening of this clause be coupled with incentives provisions for farmers who keep and maintain their native vegetation.
- The inclusion of additional aims within the objects clause such as:
    - preventing impact on listed matters (such as listed species, populations) and threatening processes;
    - reducing greenhouse gas emissions;
    - recognising the contribution of native vegetation to not only biodiversity and land degradation but also such matters as water quality and the prevention of salinity impact on biodiversity.
- Better links be made between the objects clause and the operational sections of the Act.
- 50 per cent of the Council's members have experience in or adequate training in the management of native vegetation, including its ecosystems and biodiversity
- Reference to management of native vegetation in section 14(1)(b)(i), (b)(ii) and (e) including management of native vegetation and its ecosystems and biodiversity
- Biodiversity mapping which prohibits development from areas of high environmental significance and limits development in areas of environmental significance.
- Native vegetation assessment should be a mandatory requirement:
    - at the development plan amendment stage as a change in zoning may enable the clearance of vegetation;
    - with respect to the assessment of development applications and major projects under Part 4 of the Development Act;

- with respect to the approval of environmental authorisations under the Environment Protection Act.

- Funding to the NVC be increased so that the power of delegation under the Act can be removed.

- Alternatively, if the power of delegation remains:
  - local government not be a delegate of the NVC;
  - the Act be amended to provide that:
    - § the register of delegations be a public document;
    - § delegates be given adequate training in the management of native vegetation, ecosystems and biodiversity on an ongoing basis;
    - § delegates' decisions be audited by the NVC for a probationary period of say three months following the delegation and then at six monthly intervals thereafter.

- More funds be allocated to enforcement in marine waters given the clearance which appears to occur.
- Consideration be given to:
  - clearance fees be substantially increased;
  - grading the rate of clearance fees;
  - substantially increasing the dollar value of the SEB to reflect the real value of the environment and its ecosystem services;
  - substantially increase expiation fees and penalties.
- Consideration be given to:
  - reinstating incentives to encourage Heritage Agreements as follows:
    - § exemption from stamp duty and goods and services tax for land transactions which are conditional on the entry into a Heritage Agreement;
    - § reconsider the remission of rates or taxes allowed under section 23 and more particularly:
      - allow exemption from land tax for properties protected by a heritage agreement;
      - negotiate with Councils to allow an exemption from Council rates for properties protected by a heritage agreement.

    - amending section 24(1)(a) to refer to indigenous animals (and not simply animals);
    - revising the terms of heritage agreements to encourage their uptake;
    - speeding up the process of entering into heritage agreements including engaging on-ground facilitators;
    - protecting heritage agreements protected from mining.
- If there are to be guidelines we recommend that they are:
    - accessible to the public;
    - drafted by an independent committee such as the scientific committee
    - set out in subordinate legislation, such as a schedule to regulations.
- Consideration be given to increasing the dollar value of penalties in the light of the decisions and the principle of deterrence.
- The make good provision in section 26(2a) (and the corresponding enforcement sections) remain.
- That the Act be amended to include reference to the requirement for accreditation and that the accreditation process is set out in, for example, a schedule to the regulations.
- The accreditation process include a requirement that the consultant be independent.
- The term “principles of clearance” be changed to “Principles of Protection of Native Vegetation”
- The principles be altered as set out in the report to better protect biodiversity
- The definition of “wildlife” be included in this Act
- If offsets are to be allowed (as intimated in section 29(2)), then that should only occur under very strict regulation set out below
- The considerations under section 29(12) (which enables clearance) be reviewed
- The Native Vegetation Act should have priority over the Natural Resources Management Act and the Pastoral Land Management Conservation Act and section 29(5) and (6) of the Native Vegetation Act be altered to reflect this
- Section 29(12) be deleted.
- That the methodology for SEB be reassessed to ensure that it achieves its purpose
- Consideration be given to making the SEB metrics calculation publically available
- An offsets scheme (if any) be properly regulated to achieve a net gain (based on the criteria set out above)

- The NVC should not have any discretion to allow or refuse to hear from a person with respect to the application for clearance. Rather, any person should be entitled to appear before the NVC to make submissions regarding the application for clearance.
- The NVC should be required to provide reasons for allowing consent to clear as well as reasons for refusal and section 29(16) should be altered to this effect.
- The exemptions relating to the following be removed:
    - regulations 5(1)(i), (j) and (ja) regarding dams as these are covered by "water affecting activities" in the Natural Resources Management Act and an application be made for them given the substantial clearance involved;
    - regulation 5(1)(k) Clearance near a building or structure be deleted as it appears to be a duplication of regulation 5A(1)(a);
    - regulation 5(1)(lb) be deleted or its operation be limited by a definition of "public safety";
    - regulation 5(1)(q) regarding firewood, or if this exemption remains, as with fence posts it be subject to a more limited threshold than currently operates;
    - regulation 5(1)(r) regarding fences posts, or if this exemption remains, it be subject to a more limited threshold;
- A referral with a power of direction be given to the NVC pursuant to section 37 of the Development Act, regulation 23 and schedule 8 of the Development Regulations so that development applications including those for housing, subdivision, major developments, crown development, infrastructure developments and ancillary development be considered in the light of the principles of clearance potentially resulting in the refusal of the development if those principles are contravened.
- Amendments be made to the following regulations:
    - regulation 5(1)(s) regarding fence lines be substantially reduced by only allowing clearance of up to 1 metre on one side of the fence and up to 2.5 metres on the other side of the fence;
    - regulation 5(1)(t) vehicle track consideration be given to reducing the exemption from 5 to 3 metres wide;
- With respect to the balance of the exemptions that:
    - the operation of an automatic exemption by way of self-assessment be removed and instead, there be a requirement that an applicant give fourteen[1] days written notice to the NVC of his or her intention to clear. In that period, the NVC makes an assessment as to whether the claimed exemption is legitimate or whether a more suitable (less damaging) option is available. If the exemption is not legitimate or if

there is a better option, an application for clearance must be submitted for consideration by the NVC.

- this assessment be paid for by an appropriately priced application fee. If the fee was high enough it would in itself operate as a deterrent to clearance or at least a consideration;
- all orders granting clearance:
  - only be allowed if there is no other practicable alternative;
  - be accompanied by a requirement that:
    - a SEB be achieved;
    - a management plan approved by the NVC is entered into;
    - the need to preserve biodiversity is taken into account.

- The Regulations Guidelines be rewritten with a view to the avoidance of clearance.
- The cumulative impact of the regulations be addressed.
- Consideration be given to there being a biodiversity rate charged to all rate payers in South Australia and that this money be used to fund biodiversity protection, restoration and enhancement. In this way farmers are not solely liable for preserving native vegetation on private land.
- There is concern that farms are rated differently by councils, that is, at a lesser amount, there may be an implication that there is an incentive to be a "farm" and therefore potentially an implicit incentive to clear for that purpose. If that is the case, we recommend there be an incentive such as a rate discount to farmers who keep and maintain their native vegetation.
- The exemptions be removed from the Regulations and instead be included in the Native Vegetation Act.
- Amend section 29A of the Native Vegetation Act (which reduces duplication of procedure between the Environment Protection and Biodiversity Conservation Act and the Native Vegetation Act to ensure the NVC can still make an independent assessment of such an application for clearance.
- Increase the jurisdiction of the Environment Resources and Development Court to enable it to order penalties under the Native Vegetation Act for amounts above $300,000.

Pastoral Land Management and Conservation Act

- Amend the *Pastoral Act* to include principles of ESD and other principles as follows:
    - maintain or improve the conservation status of listed species, populations and communities;
    - maintain or improve the extent and condition of natural habitats, including critical habitat;
    - protect or restore ecosystem services, processes and functions;
    - maintain or improve ecosystem integrity, resilience and resistance;
    - maintain or improve connectivity within and between ecosystems;
    - protect multiple representative examples of ecosystem types;
    - facilitate adaptation to environmental change, including climate change; and
    - recognise uncertainty and plan for adaptive management.
- Composition of the Board includes 50% of members with biodiversity expertise.
- Remove delegation powers or in the alternative provide delegates with appropriate training and facilitate regular audits of decisions made under delegation.
- Require reporting on the objects of the *Pastoral Act* and the measures undertaken to further these objects; and
- Require review of the *Pastoral Act* every five years.
- Amend section 9 to provide for the option of using fund monies for biodiversity conservation projects.
- Amend section 20(a) to include biodiversity protection as a more appropriate purpose and to provide for the creation of management agreements.
- Amend section 22 to provide criteria for decision making regarding change of use including but not limited to biodiversity protection and conservation criteria.
- Alternatively a permit system could be developed for non-pastoral uses.
- Consultation with the Biodiversity Council should occur in respect of:
    - Grant of Leases;
    - Conditions of Pastoral Leases;
    - Extension of term of pastoral lease;
    - Variation of Land Management Conditions;
    - Dealing with pastoral leases;
    - Property Plans;
    - Notices to destock;

- Establishment of public access routes and stock routes ; and
- Travelling with stock;

- Consideration be given to including similar lease conditions as provided for in section 263A of the repealed Crown Lands Act 1929 in pastoral leases under the *Pastoral Act* in order to enhance urgent environmental (habitat) protection.

- Consideration could be given to making breaches of lease conditions an offence.

- Transfer functions of the Tribunal to the Environment, Resources and Development Court.

CHAPTER 3: NATURAL RESOURCES MANAGEMENT ACT

Introduction

This year, the South Australian Department of Environment and Natural Resources has held workshops to consider whether legislative reform for biodiversity is best placed in the *Natural Resources Management Act 2004* (SA). As a result, in this chapter we consider the Act from that perspective. That is, we ask: is the *Natural Resources Management Act* the best vehicle for biodiversity reform in this state? With this objective in mind, we conclude that it is not.

This chapter then considers possible amendments to the Act in order to better protect biodiversity under the following headings:

1. Direct References to Biodiversity in the *Natural Resources Management Act* including:
    - Objects*;*
    - Biodiversity Expertise on the Natural Resources Management Council and Natural Resources Management Boards;
2. Indirect References to Biodiversity in the *Natural Resources Management Act* including:
    - State and Regional Natural Resources Management (NRM) Plans;
    - Section 9 Duty and Management and Protection of Land;
    - Responsibilities of the NRM Council and NRM Boards or Councils and Boards and Plans;
3. Water Allocation Plans and Management:
    - Management and Protection of Water Resources;

- NRM Regulations;

4. Management and Protection: Native Animals and other animals and plants;
5. Integration with other legislation.

Is the Natural Resources Management Act the best vehicle for biodiversity protection?

The *Natural Resources Management Act* came into operation in late 2004 and introduced "a new legislative approach to the management of natural resources in South Australia"[1]. Its long title states that it is:

"An Act to promote sustainable and integrated management of the State's natural resources; to make provision for the protection of the State's natural resources".

Commentators at the time the Act was introduced acknowledged the emphasis on sustainability and integration within the Act. For example, in his second reading speech on the bill, the Hon John Hill, Minister for Environment and Conservation said:

"*Complementary management of natural resources is the only way to ensure ecological sustainability. And ecological sustainability is the most basic necessity to safeguard the communities that rely on the productive capacity of our land and water resources…*"[2]

He indicated that the Act would provide *"a whole of landscape approach ... taking into account links within and between natural systems, and the interaction of economic, social and environmental factors that influence decision making."*

We note at this point that whilst ecological sustainability is not the same as biological diversity, there is at the outset recognition of the need to protect the resources at stake in the Act.

Paul Leadbeter, another commentator at the time, stated that in the system proposed under the *Natural Resources Management Act*, "*not only will there be natural resources*

[1] Avey, S, "Natural Resources Management", presented at the Law Society 25 October 2005.
[2] Government Gazette, 180204 at 1260.

management in the sense of sustainable management of natural resources that incorporate economic, social and environmental values and involve the community, industry and government in planning and decision making, but there will also be integration of that management. To integrate natural resources management there needs to be the co-ordination of policies, programs, plans and projects and co-ordination in the exercise and performance of administrative and statutory powers and functions by Government agencies, statutory authorities, local government bodies and the broader community relate to the management of the State's natural resources.

This legislation is recognition of the fact that natural resources cannot be managed in isolation and the links between natural systems and with economic and social factors must be taken into account."[3] (emphasis added)

There is clear acknowledgement in the preamble and in the above statements that the management of natural resources cannot operate in isolation, that is, there must be an integrated system and it must be sustainable.

How should this integration occur? Can an Act dealing with the sustainability and integrated management of natural resources include the protection and enhancement of biodiversity? This section of the Report will examine the *Natural Resources Management Act* and:

- whether it currently encompasses sufficient biodiversity protection and enhancement;
- whether it can be adapted sufficiently to incorporate biodiversity protection and enhancement;
- whether new legislation is needed; and/or
- whether a combined approach is preferable.

This report is concerned with the protection, restoration and enhancement of biodiversity as simply protecting biodiversity is not enough (and even this has not been done satisfactorily, as evidenced by loss of species despite valiant attempts of relevant

[3] Leadbeter, P: "Changes to natural resources management law in SA and its impact on local government" (2005) 10 LGLJ 144 at 145.

departments and others involved). Protection alone is reactive and unless proactive action is taken by means of governmental and other incentives to encourage the enhancement of biological diversity, there will be nothing left to protect.

This is acknowledged in the No Species Loss policy[4]. Further, the figures themselves evidence the fact that proactive action is needed[5].

At the outset, however, it is noted that the very concept of the term "natural resources" is innately and fundamentally contrary to "biological diversity". The term "natural resources" is entirely anthropocentric in philosophy. It implies an economic based or commercial usage of the "resources". Such an understanding is often likely to be in conflict with the protection, restoration and enhancement of the diversity of biological systems and processes. The need to achieve a commercial gain or benefit overrides conservation aims.

For example, if I am using land to plant a crop or to extract minerals, I will, in clearing the land or digging the mine, of necessity destroy some plants and animals and the biodiversity surrounding them. Once the land is cleared or the mine dug, the commercial aim is partly achieved and the biodiversity gone.

As a result, at the outset it appears that incorporating the protection and enhancement of biological diversity into the *Natural Resources Management Act*, as the sole means of protection for biodiversity, is not appropriate as the fundamental aims of both terms are in conflict.

Further, the fundamental purpose of the *Natural Resources Management Act* is not the protection of biodiversity, but rather:

- in the objects:

[4] Department for Environment and Heritage, "No Species Loss: A Nature Conservation Strategy for South Australia 2007-2017" For example, it is acknowledged that better incentive and investment mechanisms are needed to bring about conservation on private lands, in terms of ordinary landholders and industry, at 48.
[5] It is estimated that since European settlement at least 23 mammal species, 2 bird species and 26 plant species have become extinct in South Australia. Furthermore, to date, 'about one quarter (over 1000 species) of all terrestrial and vascular plants and vertebrate animals in South Australia are considered to be threatened – 63% of the State's mammals and 22% of the State's vascular plants are formally listed as threatened at State level', "No Species Loss" Strategy 29.

"*to assist in the achievement of ecologically sustainable development in the state by establishing an integrated scheme to promote the use and management of natural resources in a manner that:*

(a) recognises and protects the intrinsic values of natural resources; and

(b) seeks to protect biological diversity and, insofar as is reasonably practicable, to support and encourage the restoration or rehabilitation of ecological systems and process that have been lost or degraded;

(c)provides for the protection and management of catchments and the sustainable use of land and water resources and, insofar as is reasonably practicable, seeks to enhance and restore or rehabilitate land and water resources that have been degraded; and

(d)seeks to support sustainable primary and other economic production systems with particular reference to the value of agriculture and mining activities to the economy of the State; and

(e)provides for the prevention or control of impacts caused by pest species of animals and plants that may have an adverse effect on the environment, primary production or the community…"[6] (emphasis added);

Whilst sub-paragraph (b) gives some protection to biological diversity, this sub-paragraph is in direct conflict with other subparagraphs, particularly subparagraph (d) which has as its focus economic production of agriculture and mining in the State. Whilst the paragraph provides that such production must be sustainable, this does not guarantee biodiversity protection.

- in section 9 which provides for a duty to "*act reasonably in relation to the management of natural resources within the State" (*emphasis added). This is the management of natural resources for commercial gain.

These provisions do not provide for the protection, restoration and enhancement of biological diversity for its own sake, but rather the underlying premise is the achievement of the sustainable use and management of natural resources. Further, sustainability is not the same as protection, restoration and enhancement. Given this fundamental divergence of purpose, it is not possible to simply amend the *Natural Resources Management Act* to

[6] Section 7.

include biodiversity protection as one of its goals. This would result in a forced rather than a neat fit. Rather, we see biodiversity legislation better placed elsewhere.

This is further reinforced by the reference to ecologically sustainable development (ESD) within the Act. As indicated above, whilst the objects refer to biodiversity, this is not the overarching aim of the Act, but rather it is a requirement in the achievement of ecologically sustainable development[7] (ESD) under the Act. ESD principles are at odds with biodiversity conservation[8] but no viable alternative has been suggested[9]. Section 7(2) and (3) define "ecologically sustainable development". They provide:

s7(2) *For the purposes of subsection (1), ecologically sustainable development comprises the use, conservation, development and enhancement of natural resources in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical well-being while—*

- *(a) sustaining the potential of natural resources to meet the reasonably foreseeable needs of future generations; and*
- *(b) safeguarding the life-supporting capacities of natural resources; and*
- *(c) avoiding, remedying or mitigating any adverse effects of activities on natural resources.*

(3) *The following principles should be taken into account in connection with achieving ecologically sustainable development for the purposes of this Act:*

- *(a) decision-making processes should effectively integrate both long term and short term economic, environmental, social and equity considerations;*
- *(b) if there are threats of serious or irreversible damage to natural resources, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;*
- *(c) decision-making processes should be guided by the need to evaluate carefully the risks of any situation or proposal that may adversely affect the environment and to avoid, wherever practicable, causing any serious or irreversible damage to the environment;*

[7] Section 7.
[8] The term ESD has commonly been referred to as an oxymoron.
[9] Hawke, Allan, Report of the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (2009) 53.

(d) *the present generation should ensure that the health, diversity and productivity of the natural environment is maintained or enhanced for the benefit of future generations;*

(e) *a consideration should be the conservation of biological diversity and ecological integrity;*

(f) *environmental factors should be taken into account when valuing or assessing assets or services, costs associated with protecting or restoring the natural environment should be allocated or shared equitably and in a manner that encourages the responsible use of natural resources, and people who obtain benefits from the natural environment, or who adversely affect or consume natural resources, should bear an appropriate share of the costs that flow from their activities;*

(g) *if the management of natural resources requires the taking of remedial action, the first step should, insofar as is reasonably practicable and appropriate, be to encourage those responsible to take such action before resorting to more formal processes and procedures;*

(h) *consideration should be given to Aboriginal heritage, and to the interests of the traditional owners of any land or other natural resources;*

(i) *consideration should be given to other heritage issues, and to the interests of the community in relation to conserving heritage items and places;*

(j) *the involvement of the public in providing information and contributing to processes that improve decision-making should be encouraged;*

(k) *the responsibility to achieve ecologically sustainable development should be seen as a shared responsibility between the public sector, the private sector, and the community more generally;*

(l) *the local government sector is to be recognised as a key participant in natural resource management, especially on account of its close connections to the community and its role in regional and local planning.*

As set out above, in defining ESD the aim of section 7(2) is the:

"use, conservation, development and enhancement of natural resources in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical well-being".

Further, this *"use, conservation, development and enhancement of natural resources"* is for the "economic, social and physical well-being" of people and communities as opposed to the environment. That is, this *"use, conservation, development and enhancement of natural resources"* is to achieve a gain (whether economic, social or physical) for people and communities. The aim is not the conservation and enhancement of the environment for itself. This is a fundamental difference between natural resources legislation and biodiversity conservation legislation.

In making these comments, we acknowledge the following definitions:

- 'natural resources' is defined broadly to include soil, water resources, geological features and landscapes, native vegetation, native animals and other native organisms and ecosystems;
- 'biodiversity' is defined as *'the variety of life forms represented by plants, animals and other organisms and micro-organisms, the genes that they contain, and the ecosystems and ecosystem process of which they form a part'*.
- 'ecosystem' is defined as *'a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit'*.

Whilst these definitions include reference to biodiversity and the things that constitute it, they do not detract from the fact that the legislation is anthropocentric and clearly commercially oriented and founded.

However, anecdotally, it has been said that the Act does not put human use first in a hierarchy but recognizes its presence, the inevitability of human use and its impact and seeks to integrate it holistically using the whole of landscape approach. Further, it is argued that the recognition and protection of the intrinsic values of natural resources as enshrined in section 7(a) (see above) is evidence of this holistic approach. It may be that the policy behind the Act details this whole of landscape approach more clearly. However, the anthropocentric nature of the Act impacts its operation and function. As a result, it is not best placed for legislation focused on biodiversity protection and enhancement.

Biodiversity legislation should protect the environment for the environment's sake. Compare the French slogan from the early nineteenth century, "*l'art pour l'art*" meaning "art for art's sake"[10]. The environment has intrinsic value in and of itself.

On the other hand, natural resources legislation is protecting the environment so that it can be used (and that may include enjoyed) by people. If biodiversity legislation is subsumed in natural resources legislation there is a concern that some parts of biodiversity (possibly substantial parts) which people do not wish to enjoy or use may not be preserved.

Further, there is a concern that the economic aim of the natural resources legislation may overtake the environmental protection aim of such legislation.

Subparagraphs (a), (b) and (c) of section 7(2) are limited by the words in the preamble of section 7(2), that is, "*enable people and communities to provide for their economic, social and physical well-being"* and so the earlier intent (as set out in the objects) is continued, that is, the aim is for the sustainable use of natural resources so that they can continue to be used and enjoyed by future generations, not the environment.

Subsection 7(3) sets out the principles to consider in achieving ESD. This includes the conservation of biological diversity as a consideration (not an obligation).

Can this emphasis on the use of natural resources by people be changed in order to include the protection of biodiversity? Consider the objects clauses of the New South Wales biodiversity legislation, the *Threatened Species Act 1995* (NSW) and the New South Wales reserves legislation, the *National Parks and Wildlife Act 1974* (NSW), both of which aim at the *"conservation of biological diversity"*[11] or the "*conservation of nature"*[12]*.*

[10] The notion of art having intrinsic value (as opposed to serving church or state) rose to prominence in the 19th century. Numerous writers of the period referred to this concept in their critical works, including the French poet Théophile Gautier, who is credited "with the formulation and practice of the idea of l'art pour l'art". See Schaffer, Aaron, *Théophile Gautier and "L'Art Pour L'Art"*, The Sewanee Review, Vol. 36, No. 4 (Oct., 1928), p 406.

[11] Section 3 *Threatened Species Act (NSW) 1995.*

[12] Section 2A *National Parks and Wildlife Act (NSW) 1974.*

The objects of the *Threatened Species Act 1995* (NSW) not only aim to "conserve biological diversity" but also aim to protect and conserve threatened matters. Section 3 of that Act provides:

> *(a) to conserve biological diversity and promote ecologically sustainable development, and*
> *(b) to prevent the extinction and promote the recovery of threatened species, populations and ecological communities, and*
> *(c) to protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and*
> *(d) to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and*
> *(e) to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and*
> *(f) to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.*

Such objects do not fit within the promotion of *"sustainable and integrated management of the State's natural resources"* as set out in the preamble of the *Natural Resources Management Act* or the *"ecologically sustainable development in the State ….. [promoting] the use and management of natural resources"* as set out at the commencement of the objects clause in the *Natural Resources Management Act*[13].

Anecdotally, it has been commented that biodiversity legislation fits within the *Natural Resources Management Act* because it is a natural resource, not necessarily for economic gain, but it is a necessity for social and environmental gain and that therefore it should be appropriately valued within the NRM structure. We agree that biodiversity needs to be appropriately valued in real dollar terms by, for example, assessing the value of biodiversity and ecosystem services to the State. We do not agree, however, that the NRM framework is the best one for this purpose.

[13] Section 7(1)

It has also been commented that, there is too much legislation already and adding another layer of biodiversity legislation would unnecessarily swamp farmers[14]. However, biodiversity protection in this State is in urgent need of reform and some form of new legislation or legislative amendment is needed in any event. The vehicle for this reform, that is, whether this reform occurs in the *Natural Resources Management Act*, in a combination of the *Native Vegetation Act* and *National Parks and Wildlife Act* or in a new Act, is peripheral to the fact that reform (and so legislative change) needs to occur.

Finally, in practical terms, were biodiversity protection included with the *Natural Resources Management Act,* the agency for achieving biodiversity protection would potentially be placed in the hands of regional NRM Boards rather than government agencies[15]. This is difficult as Boards are currently overloaded, but in addition it potentially places landholders and other locals (who are members on Boards) in the difficult position of fining colleagues and fellow community members for a biodiversity breach. Such a responsibility is better placed in a government agency[16].

There is no clear interstate precedent for integrating NRM and biodiversity legislation. This is difficult to clearly determine as no other State has a consolidated *Natural Resources Management Act*. In New South Wales, for example, relevant natural resources management provisions can be found in at least five different Acts namely the *Natural Resources Commission Act 2003*[17], Catchment *Management Authorities Act 2003*[18], *Native Vegetation Act 2003*[19], *Environmental Planning and Assessment Act 1979*, and *Sydney Water Catchment Management Act 1998*.

Some jurisdictions incorporate natural resources management into their planning and development legislation. In Queensland the purpose of the *Sustainable Planning Act 2009* is to achieve ecological sustainability by managing the process of development,

[14] Dr Bruce Mundy, "SA's natural advantage – The State of SA's natural environment, the roles of resource management and the challenges ahead", presented at Department for Environment and Heritage' Nature Conservation Legislative Review Seminar, November 2007.
[15] As occurs under the *Native Vegetation Act* and the *National Parks and Wildlife Act.*
[16] Conversation Ms VJ Russell AM, Conservation Policy Coordinator, Conservation Ark, Zoos SA.
[17] This Act is concerned with establishing the Natural Resources Commission and setting out its functions, section 3.
[18] Likewise, this Act merely establishes the Catchment Management Authorities of New South Wales and their functions, section 3.
[19] Native vegetation is dealt with later in this report.

managing the effects of development on the environment, and integrating planning throughout the State[20]. Advancing the purposes of the Act requires:

'ensuring the sustainable use of renewable natural resources and the prudent use of non-renewable natural resources by, for example, considering alternatives to the use of non-renewable natural resources'.[21]

In Tasmania, the objectives of resource management are set out in Schedule 1 of the Land Use Planning and Approvals Act 1993 and include promoting sustainable development of natural and physical resources and maintaining ecological processes and genetic diversity[22]. In New South Wales, the objects of the Environment Planning and Assessment Act includes encouraging development and resource management in an ecologically sustainable manner[23].

This report proposes the enactment of biodiversity legislation, whilst at the same time updating the biodiversity protection in the balance of the legislation (Natural Resources Management Act, Native Vegetation Act, National Parks and Wildlife Act, Pastoral Land Management and Conservation Act, Development Act and Environment Protection Act) and integrating the operation of the Acts so that there is cross referral between them where appropriate.

Having said this, it is acknowledged that a recent commentator, Anne Pye[24], asserts that there is no point in having legislation enacted specifically for the purpose of protecting and enhancing biodiversity, because, to put it simply, there is not enough money in Government coffers to support such a scheme. Instead, she suggests that the *Natural Resources Management Act* and the framework supporting it should be used as the vehicle for reform.

It is now three years since Anne Pye's comments went to print and her comments are all the more prescient given the recent round of government cut backs which so severely hit

[20] Section 3.
[21] Section 5(b).
[22] Schedule 1(1)(a).
[23] Section 5(a)(vii).
[24] Pye, A, "Effective Protection of Regional BD in SA: Some Suggestions" (2008) 12 AJNRLP 35.

what was then the Department of Environment and Heritage, now the Department of Environment and Natural Resources. Whilst we acknowledge there is much merit in this pragmatic approach, it is not ecologically realistic in that it does not address the fundamental commercial conflict between natural resources and environmental protection. No matter where legislative reform on biodiversity protection sits, there needs to be more investment. We understand that, in fact, funding for NRM has declined and so will not provide the bottomless purse that some perceive it to be[25], but this is an issue for Treasury to determine.

If we are to have natural resources in this State to manage, we need to protect the biological diversity of the ecosystems which surround those resources. As indicated above, ecosystems do not operate in isolation and in order to build in protection and indeed enhancement of biological diversity, overarching legislation (which may be a combination of existing Acts[26]), is needed.

In summary, this legislation needs to be supported by integration with other Acts[27] so that there is cross referral between them where appropriate and hopefully the operation of the new legislation with these Acts in tandem will better protect and enhance biodiversity. Further, updating the biodiversity protection in the balance of the legislation by amending current legislation[28] is also needed in order to better protect biodiversity. Suggested amendments are set out in the content of the report.

Can the *Natural Resources Management Act* be amended to better protect biodiversity?

This section contains an analysis of the *Natural Resources Management Act* as it currently pertains to biodiversity protection and enhancement. Suggested amendments to the Act are set out below.

[25] Conversation Ms VJ Russell AM, Conservation Policy Coordinator, Conservation Ark, Zoos SA.
[26] This combination of Act would incorporate, update and streamline other existing legislation such as the such as the Native Vegetation Act, *the National Parks and Wildlife Act*, potentially the *Wilderness Protection Act* and the *Adelaide Dolphin Sanctuary Act*. Details are set out in the new legislation section of the report.
[27] The Development Act, the *Environment Protection Act* and the *Natural Resources Management Act.*
[28] *Development Act, Environment Protection Act, Natural Resources Management Act*. We have also included suggested amendments to the *Native Vegetation Act* and the *National Parks and Wildlife Act* in case our proposal for reform is not adopted.

The *Natural Resources Management Act* contains direct and indirect references to biodiversity and so provides some direct and indirect protection of biological diversity. This report will cover these references in the topics set out below.

1. Direct References to Biodiversity in the Natural Resources Management Act

Objects

The objects and the section on ESD include direct references to biodiversity and this has been detailed above.

Biodiversity Expertise on the Natural Resources Management Council and Natural Resources Management Boards

Under the Natural Resources Management Act, the role of the NRM Council includes advising the Minister with respect to the administration and operation of the Act; auditing, monitoring and evaluating the state of natural resources across the state; preparing, monitoring and evaluating State and regional NRM Plans and contributing to the adoption of NRM practices under other Acts including the Development Act[29].

Pursuant to section 13 of the Act, the composition of the NRM Council must include one person, nominated by the Minister who is guaranteed to have conservation experience[30] and the Minister is to give consideration to people with a diverse range of skills[31] of which one is biodiversity management[32]. Note that biodiversity skills are not a mandatory requirement.

The Act establishes NRM regions and Boards to take care of them[33]. Whilst the NRM Council's role is advisory only, the Boards, on the other hand, have a wide range of operational functions and powers as set out in section 29, in particular, the preparation of

[29] s17.
[30] s13(2)(c) provides that one person must be nominated by the Minister from a panel submitted by the Conservation Council of South Australia.
[31] 11 different sectors are named in the section including for example, primary production, pastoral land management, soil conservation, water resources management.
[32] s13(5)(a)(iii).
[33] Part 3 of the Act.

NRM Plans (the key instrument which sets out the strategies for managing and improving natural resources in the region and which affects landowners activities and rights) and the implementation of the Plans by carrying out projects[34], raising levies and entering agreements with landowners. Further, the Boards assess the projects and activities undertaken.

In a similar vein to the NRM Council, in establishing the NRM boards, the Minister is required to give consideration to people with a broad range of skills one of which is experience in biodiversity management[35]. Further, the Minister can consider people who can demonstrate an interest in ensuring the sustainable use and conservation of natural resources[36].

Regional NRM Boards can also establish NRM groups for a designated area. There is no requirement that membership of such groups include biodiversity expertise[37] and we query whether it would be available at a local level in any event.

Even if it was a mandatory requirement that the Minister include a person with biodiversity expertise on the Council and Boards, given that the person could well be a lone voice seeking to protect or enhance biodiversity conservation, this cannot necessarily ensure that the interests of biodiversity would be adequately represented at either of these forums. The quality of the biodiversity protections would also depend greatly on the individuals who constitute the Council and the Boards and the expertise which they bring. Ultimately, it is arguable, (despite the best intentions of those involved), whether the current constitution of the Boards would have any real impact without strong biodiversity protection measures in place in the Act.

In order to better protect biodiversity conservation at a natural resources management level, we recommend that consideration be given to a requirement in the Act that fifty per

[34] For example, prickly pear eradication or fencing to keep deer out of a property. Projects depend on the region. The Board assesses the main threats to natural resources and biodiversity and then manages projects accordingly.
[35] Section 25(4)(a)(iv) Note that the Minister need not consult the Conservation Council of South Australia with respect to these appointments.
[36] Section 25(4)(b).
[37] Section 46.

cent of the members of the Councils and Boards bring skills relating to the conservation, restoration and enhancement of the environment including knowledge of biodiversity.

Recommendation

We recommend consideration of a requirement that fifty per cent of the members of the Councils and Boards bring skills relating to the conservation, restoration and enhancement of the environment including knowledge of biodiversity.

2. Indirect References to Biodiversity in the *Natural Resources Management Act*

There are arguably three levels of indirect protection of biodiversity under the Natural Resources Management Act. These are the general statutory duty under section 9, the responsibilities of the NRM Council and NRM Boards, and the management and protection of land, water resources, and native animals and vegetation. Each will be considered in turn.

Section 9 Duty and Management and Protection of Land

Indirect biodiversity protection may occur by virtue of the provisions relating to the management and protection of land, water resources and native animals and vegetation.
A consideration of the management and protection of land begins with the general duty established in section 9 and which is then applied, for example, in section 122 of the Act. Section 9 provides that:

"*A person must act reasonably in relation to the management of natural resources in the State."*

We consider the nature of the duty below, but note that in determining what is reasonable regard must be given to the objects of the Act and to eight wide ranging factors set out in

subsection 9(2) below. We have added phrases, in underlining, to enable the better protection of biodiversity. These are:

> *"(a) the need to act responsibly in relation to the management of natural resources including the protection of biodiversity, and the potential impact of a failure to comply with the relevant duty; and*
> *(b) any environmental, social, economic or practical implications, including the current state of matters pertaining to biodiversity, any relevant assessment of costs and benefits associated with a particular course of action, the financial implications of various measures or options, and the current state of technical and scientific knowledge; and*
> *(c) any degrees of risk that may be involved including risk to the environment and the state of biodiversity; and*
> *(d) the nature, extent and duration of any harm include harm to biodiversity; and*
> *(e) the extent to which a person is responsible for the management of the natural resources; and*
> *(f) the significance of the natural resources, including in relation to the environment and its biodiversity and to the economy of the State (if relevant); and*
> *(g) the extent to which an act or activity may have a cumulative effect on any natural resources and the environment including a loss of biodiversity; and*
> *(h) any pre-existing circumstance, and the state or condition of the natural resources"*
> Deletion of paragraph (h) recommended.

We recommend that consideration be given to deleting subparagraph (h) as it diminishes the utility of the duty by abrogating a person's duty with respect to past wrongs or past (pre-Natural Resources Management Act) degradation of the land. This is particularly relevant with respect to biodiversity given the losses which have been incurred in the last 200 years.

Whilst we appreciate that this may be contentious, as indicated in the Native Vegetation Act section, there is precedent for such retrospective operation in the site contamination provisions of the Environment Protection Act[38] due to the serious nature of that matter.

[38] Part 10A.

Loss of biodiversity is equally serious and so consideration should be given to deleting paragraph (h).

Without the proposed amendments the duty and the factors in section 9(2) do not of themselves protect or enhance biodiversity. Subparagraph (f) considers the significance of the natural resource with respect to the environment but this only indirectly involves protection of biodiversity by virtue of the inclusion of the objects within the section.

No automatic civil or criminal action follows[39] upon a breach of the duty and the duty is limited by this. We recommend consideration be given to amending this section to enable civil or criminal action should a breach of duty occur[40]. In addition, we recommend consideration be given to broadening the wording of the duty to enable it to apply to inherited degradation of natural resources[41] and to improve the condition of the land where it is degraded. This could be linked with incentives as discussed below.

Section 7 of the *Pastoral Land Management and Conservation Act* 1989 (SA) imposes a general duty on pastoral lessees throughout the term of a pastoral lease, to carry out the enterprise under the lease in accordance with good land management practices, to prevent land degradation, and to endeavour, within the limits of financial resources, to improve the condition of the land. Section 7 goes further than the *Natural Resources Management Act* in that it requires improvement in the condition of land[42].

We recommend in the chapter of this report on the *Pastoral Land Management and Conservation Act* that consideration be given to integrating that Act with the *Natural Resources Management Act.* An advantage of doing so may be that this may ease the application of the strengthened duty (as set out in the Pastoral Act) given that it will be clear that pastoral lessees already comply with those obligations.

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[39] s9(4).

[40] No such penalties apply under the *Environment Protection Act*, but breach of the duty is required to be considered in the application of administrative orders and in civil action (as occurs in the *Natural Resources Management Act* pursuant to section 9(5) as detailed below) and is considered in the prosecution of offences.

[41] We again note the contentious nature of retrospectivity but refer to our comments regarding site contamination above.

[42] The equivalent duties in other State legislation do not appear to assist. For example, section 20 *Catchment Land Protection Act* (Vic) 1994, section 5 *Land Use Planning and Approvals Act* (Tas).

However, such penalties and a duty to repair past wrongs raises the issue of making the private person pay for protecting the natural resources when everyone may receive advantage of those resources. For example, a stand of trees (which is protected by a farmer) provides benefit to all passers-by who see them.

Underlying this is an issue analogous to the tragedy of the commons, that is, where resources are exploited for personal gain, to the detriment of all[43].

This may be best dealt with by the provision of incentives so that, in addition to using a "stick" (by deleting paragraph (h) above, by introducing civil and criminal sanctions for breach of the duty and by broadening the duty) the amendment of the duty to enable beneficial environmental performance, (performance which is more than the duty), be rewarded in some way, for example by a reduction in Council rates[44]. Consideration needs to be given as to how this would be achieved and then particular standards to be met would be set out in legislation.

Such a duty would work in tandem with a duty in a *Biodiversity Act*. As indicated above, both the *Natural Resources Management Act* (which relates to the sustainable use and management of natural resources) and a *Biodiversity Act* (which relates to the protection restoration and enhancement of the environment) have different aims and intentions and so the duty in each Act would be complimentary.

As indicated above, section 122 applies the duty to practical scenarios. The section places an obligation on landowners to comply with the statutory duty and sets out further consequences where there has been a breach of the duty. It provides that the owner of land must ensure that "land management practices or activities" do not result in or could

[43] The issue was first raised by Garrett Hardin, "The Tragedy of the Commons", *Science*, Vol. 162, No. 3859 (December 13, 1968), pp. 1243-1248, 1244.The key elements of the tragedy of the commons are: the exploitation of the commons (in Hardin's example this is herdsmen keeping as many cattle as possible on an open field), by various rational individuals acting independently with a view to maximise their gain or self-interest. Consequently, this leads to the depletion, through unlimited use, of a limited resource and this is not in anyone's long term interest. Hardin concludes this example by stating that 'freedom in a commons brings ruin to all'.

[44] Note that section 114 of the *Natural Resources Management Act* allows for a reduction in the levy if certain practices are undertaken (this can also be done via management agreements). The above proposal relates to a reduction in the balance of all Council rates in the State for undertaking practices which benefit biodiversity. This would mean that the entire community takes responsibility for biodiversity rather than the NRM community. Incentives are discussed in the *Environment Protection and Biodiversity Conservation Act* chapter of this report.

not reasonably be expected to result in unreasonable degradation of land or an unreasonable risk of degradation of land.

Section 121 defines degradation of land to mean:

> *"any change in the quality of land, or any loss of soil, that has an adverse effect on water, native vegetation or other natural resources associated with, or reliant on, land, any other aspect of the environment, or biological diversity".*

As a result, if the land management practices have resulted in an adverse effect on biological diversity, the relevant authority must take the next step of requiring an action plan as set out below.

If there has been a breach of the general duty, a person may be:

- required to implement an action plan[45] where the person is to set out:
    - the measures the owner will take to address breach of statutory duty; and
    - the measure the owner will take to comply with the duty in future; and
    - the periods within which the land management practices will be undertaken; or
- be subject to:
    - a protection order[46] such as requiring the person to discontinue or not commence action, carry out specific action at all or at specific times, take remedial action,
    - a reparation order[47] requiring the person to repair damage or pay a sum to enable this to be done or both; or
    - one or more of a range of orders that may be made by the ERD Court requiring particular action and or payments[48].

Whilst the law reports show that such orders have never been litigated[49], orders such as soil orders and weed and pest control orders (for both plants and animals) are applied to landowners.

[45] s122 and 123.
[46] s193.
[47] s195.
[48] s9(5).

The Act provides that no breach of duty will occur if it is shown that the action plan was consistent "with best practice methods" or the "standard applying in the relevant industry as accepted by regional NRM board"[50]. This means that the regional NRM Board sets the standards for compliance with duty. Further, a person cannot be held responsible for any condition or circumstance existing before the operation of the Act[51]. We recommend that this be reconsidered simultaneously with other matters regarding the duty set out above. These provisions again reflect the conflict that arises in placing a positive obligation on landowners to carry the burden on behalf of society to improve the state of their land which often has been degraded as a result of past practises which were acceptable at the time.

The combination of the section 121 definition with sections 122 and 123 is likely to result in some indirect and reactive protection of biodiversity. It does not place a positive obligation on the owner to protect biodiversity, but penalises the owner if degradation of *inter alia* biodiversity is discovered.

By way of example, soil on a property is subject to erosion. As the section 9 duty requires a person to act reasonably, the duty may require the landowner to prevent further erosion by taking certain measures, for example, by gradually decreasing the intensity of grazing. Whilst such a matter is likely to result in the loss of biodiversity, enforcing a case of loss of biodiversity for over-grazing is difficult given that it requires proof of that the loss was caused by over-grazing and evidence of farm practice over a considerable number of years.

If the landowner burned the understorey of native grasses on the land, this may result in a loss of biodiversity and a breach of the duty both alone and in conjunction with the definition of degradation in section 121.

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[49] There are no cases which impact on the interpretation of section 9. Note that both Rowe v Lindner and Ors [2006] SASC 176; Lindner and Whetstone v Goyder Council (No 2) [2006] SAERDC 67 refer to section 9 as part of the statutory outline but do not analyse the provision. It may be that land owner cooperation may be generally obtained (resulting in little litigation) because it is in the landowner's interest to improve the soil condition.
[50] s9(7).
[51] s9(8).

Are action plans required in these circumstances? Whilst the law reports show that action plans have never been litigated[52], anecdotally action plans are required to be prepared by landowners in examples such as these and such a plan can operate successfully.

Even if a notice to produce an action plan was issued, the penalties for failure to comply with the notice to produce the action plan are a maximum of $20,000; a minimal amount which can easily be factored into the operational costs of a business enterprise.

As a result, we recommend strengthening this section by increasing the penalty to create a deterrent rather than simply a business expense.

Recommendations

- Amend section 9(2) to include reference to biodiversity and the removal of paragraph (h) as set out above
- The wording of the duty be broadened to enable it to apply to inherited degradation of natural resources
- Consider the application of civil and criminal penalties for a breach of the duty
- Build incentives into the Act for those who improve biodiversity by acting in a manner over and above that required under the duty.
- Strengthen section 123 by increasing the penalty to create a deterrent rather than simply a business expense.

Responsibilities of the NRM Council and NRM Boards or Councils and Boards and Plans

The responsibilities of the NRM Council and NRM Boards should be considered in conjunction with the objects of the Act[53]. One of the key responsibilities of the Council

[52] A notice to produce an action plan has never been litigated. s123 is mentioned in passing only in the case of ROWE v LINDNER & ORS [2006] SASC 176.
[53] Section 8 requires administrators of the Act to have regard to and seek to further the objects of the Act.

and the Boards is to prepare and implement NRM plans[54]. They must do this in accordance with the objects of the Act[55] and so it is an indirect requirement that they take the matter of biodiversity into account and NRM plans certainly refer to and take biodiversity into account. Consideration should be given to expressly stipulating that the NRM Plans must take biodiversity into account.

The State NRM Plan sets out the principles and policies for achieving the objects of the Act[56]. It must take into account the planning strategy and identify changes needed to that strategy.

Section 74(3) sets out the requirements for the plan, but the only relevant provision in terms of biodiversity protection is section 74(3)(c) which requires the plan to adopt policies in relation to the protection of the environment. We recommend the section be altered as follows to provide better protection for biodiversity:

"*set out policies with respect to the protection of the environment, including protection of biodiversity and the interest of the community through the operation of this Act…"*

The proposed amendment is as underlined above.

The State plan is essentially a policy statement. It is not binding[57] and does not contain binding targets. To be more effective this is required.

Regional Plans are the local working document by which decisions in the region are assessed. As indicated above, there is no express statutory provision requiring consideration of biodiversity in regional plans, but rather an indirect requirement. Further, the environment is to be considered generally along with social and economic considerations[58]. In addition, the health of the environment is considered so far as it impacts natural resources[59] and the proper management of wetlands[60].

[54] Section 17(1)(c) for the Council and s 29(1)(b) for the boards.
[55] Section 8: See footnote 55.
[56] Section 74(2).
[57] Section 74(12) which provides that: "*The State NRM Plan is an expression of policy and does not in itself affect rights or liabilities (whether of a substantive, procedural or other nature)."*
[58] Section 75(3).
[59] Section 75(3)(b(i) Section 75(3)(b(iv).
[60] Section 75(3)(b(iv).

Regulation 10[61] refers to prescribed information or material which must be present in Regional NRM plans. Regulation 10(2)(a) states that for the purposes of s 75(3)(a)(i) of the Act a plan must include a description of soils, water resources, geological features and landscapes, native vegetation, animals or other organisms, ecosystems and other significant natural resources[62].

Even though there is indirect reference to biodiversity in the preparation and implementation of NRM plans, the NRM Boards tend to consider biodiversity[63]. By way example, the Adelaide and Mount Lofty Ranges NRM Plan considers biodiversity in chapter 8 of its State of the Region Report. Biodiversity is also considered in the Ten Year Plan for the Region, but its impact is limited due to:

- targets which are for periods too far in advance. This Plan includes 20 year and 50 year targets. It does include some 3 year targets which appear more achievable;
- targets which are too general[64];
- insufficient targets.

We recommend that the Act be amended to expressly require the State and regional NRM plans to set out:

- the impact of the use and management of natural resources on biodiversity; and

- methods or targets for addressing how this impact is to be remedied to avoid breach of section 122 of the Act (which requires the land to be used no unreasonable degradation of the land (including in relation to biodiversity).

[61] *Natural Resources Management Regulations*
[62] Section 75(3)(a)(i) states that a regional NRM board must prepare and maintain a plan for the purposes of its operations, the plan must be in a form determined or approved by the Minister, and that the plan must include, amongst other things, information regarding the natural resources within the relevant regions.
[63] As this is a legislative review, comprehensive consideration of the plans has not been undertaken.
[64] In this regard we refer you to Appendix A of the Ten Year Plan at http://www.amlrnrm.sa.gov.au/Portals/2/board_policy/2_corp_strat/vol_b_final_june08.pdf.

Recommendations

- Section 74 (regarding the State NRM Plan) be altered to provide better protection for biodiversity by:
    - *the environment, including protection of biodiversity and the interest of the community through the operation of this Act…"*
    - Requiring the inclusion of biodiversity targets in the State and Local NRM plans.

- We recommend that the Act be amended to expressly require the State and regional NRM plans to set out:

    - the impact of the use and management of natural resources on biodiversity; and
    - methods or targets for addressing how this impact is to be remedied to avoid breach of section 122 of the Act (which requires the land to be used no unreasonable degradation of the land (including in relation to biodiversity).

3. Water Allocation Plans and Management

The access and availability of water is fundamental to the maintenance of biological diversity[65]. As a result, the water requirements for the maintenance of biodiversity should be considered paramount to all others. If the environment is malfunctioning, then, as a general principle, natural resources will usually not function well, but likewise, if the environment is working well, natural resources will also usually flourish. Given this, we recommend that:

[65] Possingham et al 'Setting our Biodiversity Priorities' Possingham H P, Ryan S, Baxter J, and Morton S R, Setting Biodiversity Priorities (2002), 10.

- the requirement for an environmentally sustainable level of take known as a sustainable diversion limit[66] operate with respect to natural watercourses in the same way as that proposed in the *Water Act*[67]. This would bring the Act in line with the mechanisms applying in the Murray Darling Basin. It would appear that some Water Allocation Plans (WAPs) have considered the sustainable diversion limit in their planning in any event[68].
- water allocation plans include the sustainable diversion limit and compliance with the plans be mandatory and subject to substantial penalties for non-compliance;
- water management authorisations under the Act be subject to:
    - an environmental watering plan which include water conservation measures[69] and which protects and enhances biodiversity;
    - an environment improvement program which protects and enhances biodiversity;
    - financial bonds, so that if the any of the above are not complied with, the bond is forfeited.

When water allocations are considered under the *Natural Resources Management Act,* the environment and biodiversity in particular are not the paramount considerations. Section 76(1) provides that a regional NRM Board must prepare a water allocation plan for the prescribed water resources in the region. Section 76[70] provides that, *inter alia*, the WAP must:

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[66] Section 4 of the *Water Act* (Cth) 2007 provides that an "environmentally sustainable level of take for a water resource means the level at which water can be taken from that water resource which, if exceeded would comprise: (a) key environmental assets of the water resources; or (b) key ecosystem functions of the water resources; or (c) the productive base of the water resource; or (d) key environmental outcomes for the water resource". Section 23 provides that a long-term average sustainable diversion limit must reflect an environmentally sustainable level of take.

[67] It is proposed under the *Water Act* that the sustainable diversion limit will form binding limits on the amount of water that can be extracted from the Murray-Darling Basin (s 22(1) Item 6 states that setting an SDL is a mandatory requirement for the Basin Plan. The sustainable diversion limit must reflect the amount of water that can be diverted on an environmentally sustainable basis from water resources (s 23). Section 3(d) provides that returning over-allocated/overused water resources to environmentally sustainable levels and protecting and restoring and providing ecological values in the Murray Darling Basin are to be considered before economic returns for the use and management of the resources. Due to protests by farmers, this is now being considered by parliamentary review .

[68] For example, the Water Allocation Plan for the Northern Adelaide Plains Prescribed Wells Area, http://www.amlrnrm.sa.gov.au/Portals/2/WAPs/nap_wap_july07.pdf.

[69] Section 169 of the Act enables the Governor (and in the Natural Resources Management (Review) Amendment Bill, the Minister) to introduce water conservation measures, but it is not a mandatory requirement.

[70] Note that the Natural Resources Management (Review) Amendment Bill is currently before the South Australian Parliament and it appears to require allocation for environmental water. It provides that:

- include an assessment of the quantity and quality of water needed by ecosystems and their biodiversity[71]. As indicated above, 'ecosystem' is defined in section 3 of the Act as *'a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit'*;
- achieve equitable balance between environmental, social and economic needs for the water and a sustainable rate of take[72]. There is an inherent conflict between environmental, social and economic needs and as indicated above, environmental protection should be paramount. As a result, we recommend that the environment first receive water as determined under a sustainable diversion limit and then social and economic needs follow;
- assess the capacity of the resource to meet demands for water[73]. As indicated above this assessment should first include a paramount assessment of the needs for the environment;
- identity and assess methods for the conservation, use and management of water in an efficient and sustainable manner[74]. This provision is potentially contrary to the needs for biodiversity as biodiversity needs are not always efficient and sustainable. Again, as indicated above a sustainable diversion limit is needed;
- take into account ecosystem needs[75]. As indicated above, assessment of ecosystems needs to include an assessment of biodiversity.

Further, it should be mandatory for the Minister to comply with the water allocation plans. This will be discussed further below.

"76(9) *For the purposes of this section, environmental water requirements are those water requirements that must be met in order to sustain the ecological values of ecosystems that depend on the water resources, including their processes and biodiversity, at a low level of risk."* In order to ensure the environment is protected, this should be amended to state that: "*environmental water requirements are those water requirements that must <u>first</u> be met in order to sustain the ecological values of ecosystems*…." (emphasis added).

[71] Section 76(4)(a).
[72] Section 76(4)(b).
[73] Section 76(4)(d).
[74] Section 74(4)(e).
[75] Section 76(6).

Management and Protection of Water Resources

The *Natural Resources Management Act* enshrines, in section 124, a general statutory right for a person with lawful access to take water from a watercourse[76] unless the watercourse is subject to:

- an authorisation under section 128 by the Minister to take the water;
- the water is allocated[77] (note it first must be prescribed)[78];
- the taking of water is contrary to the applicable NRM plan[79].

Further fetters on such rights apply where the taking of the water would detrimentally affect:

- another's rights to take water; or
- the enjoyment of the amenity of the water by adjoining land owner who shares the watercourse[80],

unless the water is used for domestic purposes or for watering stock[81].

The right to take prescribed water may only be exercised by:

- a water allocation relating to the watercourse such as the Minister's authorisation via a water licence[82]; or
- a notice of authorisation under section 128;

unless the water is for domestic purposes or for watering stock or via a permit[83].

The stock exception set out in the two paragraphs above needs revision. It is possible to remove this exception via regulation but given the length of the previous drought which resulted in extreme pressure on water supplies and the adverse effect this has on biological diversity, stock should not be allowed to take water before the needs of the

[76] Watercourse is defined in section 3 of the Act to mean a river, creek or other natural watercourse (whether modified or not) in which water is contained or flows whether permanently or from time to time and includes a dam or reservoir; a lake water flows; a channel; part of a watercourse; an estuary.
[77] S124(3)(a)(ii).
[78] S127.
[79] S124(7).
[80] S124(3) Note that there are certain further exceptions in s124(6) and (6a).
[81] S124(4) Note that there are certain further exceptions in s124(5).
[82] S124(3) and S146.
[83] S127.

environment. Further, the total amount of water available needs to be estimated for the purposes of allocations and this cannot be done without knowing stock water[84].

The above rights to water and their exceptions are subject to some environmental protections summarised as follows:

- NRM Plan

  The sections listed below indicate that water must be dealt with according to the NRM Plan, so if the NRM Plan considers biodiversity (and as indicated above some do, but there is no requirement to[85]) there is some biodiversity protection built into these sections. The relevant sections which provide the protection given under the NRM Plan (if any) are:

  - section 124(2a) and (7) provides that a person cannot "take" water if this is contrary to an NRM Plan;
  - section 127(2) provides that a person must not take water from a watercourse, lake or well that is not prescribed or take surface water from land that is not in a surface water prescribed area in contravention of relevant NRM plan;
  - section 127(5) provides that a person cannot undertake activities contrary to an NRM plan and this includes the use of water resources;
  - section 129(1)(b) provides that permits are not required where an NRM plan which includes guidelines recommendations or directions in relation to the erection or construction of contours banks is in force;
  - section 135(3) & (4) provides that permits can only be granted subject to State and regional NRM plan;
  - 164R provides that the applicable law for an application for a water management authorisation, variations and transfers includes the regional NRM Plan.

[84] Avey, op cit, p15.
[85] Note that, as this report is a legislative review a comprehensive search of NRM plans has not been undertaken to ascertain how completely they deal with biodiversity.

Given these sections, it is critical that the NRM plan consider biodiversity protection. Alternatively, consideration could be given to these sections not being contrary to biodiversity mapping.

- WAP

The sections listed below indicate that water must, or in some cases may, be dealt with according to the relevant WAP, so if the WAP considers biodiversity (and some do, but there is no requirement to[86]) then there is some biodiversity protection built into these sections. The relevant sections which provide the protection given under the WAP (if any) are:

- the following must be consistent with the WAP:
  - variation of licence[87];
  - transfer of licence[88];
  - water allocation[89];
  - transfer of water allocation[90];
  - transfer of delivery capacity entitlement[91]
- the following must not be seriously at variance with the WAP:
  - water resource works approval[92]
  - site use approval[93];
  - variation of delivery capacity entitlement[94],

With respect to each of the above matters, it is in the Minster's discretion to refuse the matter if it is contrary to the WAP. This discretion should be changed to a mandatory consideration if the relevant water instrument is likely to significantly impact biodiversity.

[86] As indicated above, given that this report is a legislative analysis, a comprehensive search of WAPs has not been undertaken to ascertain how completely they may or may not deal with biodiversity.
[87] Section 149.
[88] Section 150.
[89] Section 153.
[90] Section 157.
[91] Section 164K.
[92] Section 161(3).
[93] Section 164C.
[94] Section 164J(3).

Further, it is not mandatory to consider the WAP in the granting of a licence[95]. This should be changed to a mandatory consideration.

- Section 131: Maintain Watercourse or Lake

Section 131 provides that an owner may be required by a relevant authority (the NRM Board) to maintain a watercourse or lake in good condition. Failure to do so is an offence, but the maximum penalty is only $25,000 or $50,000 for companies.

This provision indirectly benefits biodiversity but it could be improved by increasing the amount of the penalty. The environmental sentencing principle of deterrence provides that the penalty must be high enough to deter a breach. Justice Duggan of the Supreme Court of South Australia was cited in the case of Piva v Maynard (2000) 112 LGERA 165 as saying that,

"in order for legislation to succeed … there must be effective means of enforcement … emphasis on general and individual deterrence remains a vital consideration."[96]
Without a sufficiently high penalty, businesses can view the penalty merely as a business expense and not treat the provision seriously.

- Section 132: Water Restrictions

Section 132 provides some protection for biodiversity. It provides for water restrictions in circumstances such as where the water is running out or the quality of the water or the watercourse is affected (or likely to be affected). Whilst a breach of the section is an offence, the penalty is the same as that in section 131 above and our comments there regarding penalties are the same for this provision.

Further, in determining the water available the Minister must consider the water needed for the ecosystems that depend on water resource[97]. The Minister may issue

[95] Section 146 and 147(3).
[96] See also *Environment Protection Authority v Gardner* (unreported, LEC (NSW), Lloyd J, August 14 and November 7 1997) and *DPP v TransAdelaide* [2004] SAERDC 92.
[97] S132(2).

a notice directing action if such damage to ecosystems is occurring[98]. Given this section 132 is likely to result in some protection of biodiversity in the water ways. We recommend it be altered to reflect an environmentally sustainable diversion limit.

Section 132 is enforced via s164P which provides that the licence is cancelled if the section is breached. Consideration should be given to expanding the application of section 164P to other sections[99] and to any action which has a significant impact on biodiversity.

- Section 133: Duty regarding watercourse or lake

Section 133 takes a step further in the protection of biodiversity by placing a duty on the owner of land to take reasonable measures to prevent damage to the bed and banks or shores of a watercourse or lake and to any dependent ecosystems. However, the section does not allow for civil or criminal liability. Instead, there are options for the issuing of a protection order, reparation order or ERD Court order. As indicated above, to create sufficient deterrence, civil and criminal liability is needed, but this is still reactive and to give incentives to those who comply with the duty. We recommend that the legislation include incentives to comply with these provisions.

- Section 134 dam removal

Section 134 enables the Minster to order the removal of a dam or other object. This is a valuable provision provided that it is utilised.

- Section 135 permits

Retrospective biodiversity protection is provided where the relevant authority becomes aware that the rising level of groundwater is damaging soil, rock or ecosystems then it may revoke a permit under section 135(15). This can be improved by:

  - mandating the revocation of the permit in these circumstances; and

[98] S132(5).
[99] For example: sections 131, 133, 134, 135.

- requiring this issue to be considered before a permit is granted.

- Licensing and water allocations

With respect to licensing and water allocations**:**

- the Minister may reduce water allocations pursuant to section 155 if there is a need to prevent the reduction in water quality or quantity or to prevent damage or further damage to ecosystem which depends on water. We recommend that this also include significant loss of biodiversity.
- the Minister may suspend licence if water in excess of entitlements taken pursuant to section164O;
- the Minister may reserve excess water pursuant to section 166;
- pursuant to section 169 the governor may introduce water conservation measures**;**
- pursuant to section 170, the Minister must to take into accounts need of ecosystem when making a decision under chapter 7 (which includes the above bullets) which relates to water management.

Whilst these provisions are beneficial they have the following limitations:

- they only relate to the protection of water resources for, amongst other things, the preservation of ecosystems. While this is a significant attempt at preserving these ecosystems, it does not provide a holistic approach to the preservation of biodiversity. This means that their effect is diminished. We recommend that these provisions could be expanded to include the protection of other aspects of the biodiversity, and not be limited to the watercourses on which ecosystems depend;
- except for section 170, they all operate at the Minister's discretion. We recommend that they all be made mandatory requirements.

NRM Regulations

The NRM Regulations provide for:

- an 'environmental donations entitlement'[100] which enables donations of water to be made on a fee free basis. This is commendable. Further, incentivised uses of this provision should be considered;
- 'water efficiency plans' are required for any site use approval relating to water. These should be prepared in conjunction with an environmental watering plan which protects and enhances biodiversity.

Recommendations

- An environmentally sustainable diversion limit be adopted.
- Water allocation plans include the environmentally sustainable diversion limit and compliance with the plans be mandatory and subject to substantial penalties for non-compliance.
- Water management authorisations under the Act be subject to:
    - an environmental watering plan which include water conservation measures and which protects and enhances biodiversity;
    - an environment improvement program which protects and enhances biodiversity;
    - financial bonds, so that if the any of the above are not complied with, the bond is forfeited;
- The revision of the stock exception to prevent stock from taking water before the needs of the environment.
- The Minister should be required to refuse a water licence, water allocation, water resource works approval, site use approval and delivery capacity entitlement if the relevant water instrument is likely to significantly impact biodiversity.

[100] Regulation 42.

- The Minister should be required to consider the WAP in the granting a licence.
- Penalties regarding the maintenance of a watercourse or lake and in relation to water restrictions should be increased.
- Consideration be given to expanding the application of section 164P (the revocation of a licence) to other sections[1] and to any action which has a significant impact on biodiversity
- Consideration be given to including incentives to comply with the duty to care for a watercourse or lake.
- Mandating the revocation of the permit when the level of groundwater is damaging soil, rock or ecosystems and requiring this issue to be considered before a permit is granted.
- The protection of ecosystems afforded in sections 155, 164O, 166, 169 and 170 be expanded to include the protection of other aspects of the biodiversity, not just the watercourses on which ecosystems depend and be made mandatory requirements.

4. Management and Protection: Native Animals and other Animals and Plants

Section 75 provides that an NRM plan should, as far as is practicable, be consistent with any relevant plan of management under the *National Parks and Wildlife Act*[101]. If, in the opinion of the Minister, the implementation of a plan would adversely affect any native animal or native plant that is subject to any form of control under the *National Parks and Wildlife Act*, the Minister must not adopt the NRM plan without the consent of Minister overseeing the *National Parks and Wildlife Act.*

We propose a power of direction from a proposed *Biodiversity Act* with respect to the creation, operation and amendment of NRM plans and the above section accords with this.

[101] Section 75(5)(d).

Furthermore, the Minister may declare that a specified provision applies to a specified class of animals or plants and may declare that certain controls or prohibitions apply in relation to that class[102] and this affords biodiversity protection. In addition, animal proof fences help control biodiversity[103].

As for the individual, a person must, in taking control of animals or plants, comply with any requirement set out in the regional NRM plan or prescribed by the regulations with respect to the identification or reporting of any habitat or native animal and comply with any requirement with respect to the protection, preservation or relocation or any habitat or native animal[104].

5. Integration with other legislation

Native Vegetation Act 1991 (SA)

Certain provisions in the Act relate to the management and protection of native vegetation which is one of the elements of biodiversity as follows:

- section 75(5)(e) provides that an NRM plan when adopted should, as far as practicable, be consistent with the principles of clearance of native vegetation under the *Native Vegetation Act* and any guidelines relating to the management of native vegetation adopted by the Native Vegetation Council. However, if, in the opinion of the Minister the implementation of a plan would result in the clearance of any native vegetation, the Minister must not adopt the plan without the consent of the Minister administering the *Native Vegetation Act*[105].
- In relation to watercourses and lakes, a person must not destroy vegetation growing in the watercourse or lake, subject to the *Natural Resources Management Act*. However, a permit is not required to destroy vegetation growing in a watercourse or lake pursuant to an obligation with respect to the control of plants and animals under

[102] Section 174(1).
[103] See the Dog Fence Act (SA) 1946.
[104] Section 192(2).
[105] Section 88(3).

Chapter 8 of the Act or in accordance with consent granted under the *Native Vegetation Act*[106]. This is considered in the section on the *Native Vegetation Act*.

- in terms of enforcement, section 192(1) states that a person must take all reasonable steps to ensure that native vegetation must be cleared only in accordance with guidelines prepared by the Native Vegetation Council and that damage to or destruction of other vegetation is kept to a minimum unless the vegetation is subject to destruction or control under Chapter 8. Failure to comply with this could incur a penalty.

As indicated in the Native Vegetation Report, given the parlous state of native vegetation in this State, consideration should be given to conferring the Native Vegetation Council with a power of direction over matters covered by the *Natural Resources Management Act* with respect to clearance applications to the extent that the matter is contrary to the Principles of Clearance.

The Development Act 1993 (SA)

With the exception of the objects provision (Object 3), which is not strongly worded for biodiversity protection anyway, the cross-references to the *Natural Resources Management Act* in the *Development Act* and *Regulations* are limited to a handful of specific or technical circumstances. They relate mainly to the water resources aspect of the *Natural Resources Management Act* and a reader could be forgiven for thinking that they constitute merely an exercise in "crossing 't's and dotting 'i's", that is, that since bodies exist with authority over certain areas, they should be consulted to avoid administrative turf war. Furthermore, none of these provisions deal directly with biodiversity issues.

Of the current provisions of the *Development Act* which relate to the *Natural Resources Management Act*, the potentially most useful is section 24(1)(fc), which allows the Minister to act to amend a council's plan where an NRM board has requested the council to make a change, but it has not.

[106] Section 129(1)(c).

Environment Protection Act 1993 (SA) and Regulations

As with the *Development Act*, the critical lack in the relationship between the *Natural Resources Management Act* and the *Environment Protection Act* is that neither piece of legislation has substantive provisions relating to biodiversity. A partial exception to this is the reference to environmentally sustainable development in the *Environment Protection Act,* which can feed through to the *Natural Resources Management Act* through section 75(5) which requires NRM plans to be consistent with Environment Protection policies as far as possible. Again, however, the reference to 'environmentally sustainable development' is not as robust as protection of biodiversity would require.

Recommendations

- If the Biodiversity Act is legislated, we recommend that the proposed Biodiversity Council (or its equivalent) direct the actions under the *Natural Resources Management Act* where the action under the *Natural Resources Management Act* is likely to have a significant adverse impact on biodiversity.

- Where there is an application for clearance of remnant native vegetation as a result of an action under the Natural Resources Management Act, the NVC should be given a power of direction where such clearance breaches the Principles of Clearance under the Native Vegetation Act.

CHAPTER 4: NATIVE VEGETATION ACT

Introduction

The maintenance of native vegetation is fundamental to the preservation, restoration and enhancement of biodiversity. As a result, the *Native Vegetation Act 1991* has had and will continue to have an important role to play in the protection of biodiversity.

South Australia was the first State to attempt to regulate native vegetation and its clearance[1]. Anecdotally, there was a huge amount of clearance in the lead up to its introduction[2]. This is particularly devastating in South Australia, being the driest state in the driest continent, as this fact means that it does not recover from clearance as quickly as States which receive more rain.

This clearance is evidenced in the following statistics which show that in the agricultural region of the State, (the part of the State where there is relatively reliable rain) 29.5% of the state remains uncleared[3] and 16.5% of the State has some form of protected area status[4]. This appears to mean that in the agricultural region of the State, 13% of the land without some form of protected area status remains uncleared[5]. Given this, it is critical that this remaining vegetation is protected.

This is further reinforced by the fact set out in the Greater Adelaide Plan that:

[1] This was done initially by an expansion of the term "development" in the then Development Control Regulations and later after a High Court challenge introduced the Native Vegetation Management Act 1985. See Bates, G, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, pp 457-8.
[2] Bates, G, Ibid.
[3] *State of Environment Report for South Australia Report 2008*, p174.
[4] This information was provided by the Department of Environment and Natural Resources on 11 August 2011. Protected area status in this analysis includes Conservation Parks, Game Reserves, National Parks, Recreation Parks, Regional Reserves under the *National Parks and Wildlife Act 1972*, Wilderness Protection Areas under the *Wilderness Protection Act 1992*, Conservation Reserves under the *Crown Land Management Act 2009*, Heritage Agreements under the *Native Vegetation Act 1991*, Indigenous Protected Areas which are a voluntary agreement with the Federal Government, Native Forests under the *Forestry Act 1950.*
[5] However, the Annual Report of the Native Vegetation Council 2009/2010 (at page 1) states to the contrary that, "the majority of remnant native vegetation is outside the formal National Parks and Wildlife parks and reserve system."

"*Global studies across a variety of environments have shown that native vegetation cover of less than 30 per cent appears to be inexorably linked to significant species loss, especially in birds and mammals."*[6]

The *Native Vegetation Act* includes some important principles, such as:

- the principles of clearance of native vegetation, which includes protection of certain plant communities[7];
- the notion of a stratum (or strata) of substantially intact vegetation[8];
- heritage agreements[9];
- the Native Vegetation Fund[10];
- the Native Vegetation Council's (NVC's) ability to comment on applications under the Development Act, although these provisions are not mandatory and need widening[11];
- the make good provisions[12].

Regrettably however, as has been well documented[13], the extensive exemptions to the Act as set out in the regulations have severely limited the positive impact of the legislation. These issues are considered in this report below.

This report considers the majority of the *Native Vegetation Act* and Regulations under the following topics and makes recommendations with respect to those topics:

1. Definitions: what does the Act protect?
2. Application of the Act;
3. Objects;

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[6] *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p126.
[7] Schedule 1 *Native Vegetation Act*.
[8] Section 3A.
[9] Sections 23, 23A and 23B.
[10] Sections 21 and 22.
[11] Section 29(17).
[12] Sections 26 and 31A.
[13] Parnell, M, "*Endangered Species Law Reform in South Australia: The Adequacy of Existing Legislation"* South Australia's Threatened Species: Is Law Reform Needed? Proceedings of the workshop held on 26 February 1999 at Black Hill Flora Centre, South Australia pp18-28; Jury, T, *Threatened flora and 'the law' in South Australia: more issues than tissues?* Australasian Plant Conservation, 17(2) August-September 2008, pp 36-8.

4. Administration: Native Vegetation Council;
5. Administration: Native Vegetation Council – Delegation;
6. Native Vegetation Fund;
7. Heritage Agreements;
8. Guidelines;
9. Clearance Control;
10. When can native vegetation be cleared?
11. When is native vegetation not to be cleared?
12. Applying for clearance;
13. Considerations in allowing clearance;
14. Principles of clearance;
15. Significant environmental benefit and offsets;
16. Consultation and public participation;
17. Exemptions;
18. Bushfire regulations;
19. Duplication of procedures;
20. Enforcement;
21. Interrelationship with other Acts.

An Addendum is attached to this chapter covering the Native Vegetation (Miscellaneous) Amendment Bill 2011 recently introduced into the South Australian House of Assembly on 22 June 2011 and which deals with proposed amendments on the following topics:

- Application of the Act;
- Native Vegetation Council;
- Native Vegetation Fund;
- Section 26: The offence of clearance – expiation fees and time limits;
- Offsets: A Credit for Environmental Benefit Scheme;
- Section 31AE: Make good provision proposed to be deleted for "minor matters".

As indicated in the New Legislation chapter of this report[14], we propose that the *Native Vegetation Act* and the *National Parks and Wildlife Act* be combined to form a new *Biodiversity Protection and Enhancement Act* so that all matters pertaining to biodiversity are under the one umbrella. Such legislation is envisaged in the No Species Loss Policy[15].

[14] Chapter 2.
[15] Department of Environment and Heritage, *No Species Loss: A Nature Conservation Strategy for South Australia 2007-17,* Objective 5.2 p 65.

However, in order to better protect biodiversity, amendments are needed to both Acts. These recommended amendments with respect to the *Native Vegetation Act* are set out in the report below.

At the outset, we also note the relevant targets set out in South Australia's Strategic Plan as follows:

- Target 3.1 No Species Loss: Lose no species – lose no known species as a result of human impacts.
- Target 3.2 Land Biodiversity – establish five biodiversity corridors aimed at maximising ecological outcomes particularly in the face of climate change by 2010[16].

These targets are further adopted in the No Species Loss Policy as part of its overall goal of preventing further loss of known native species from human impacts.[17] The clearance of native vegetation impacts these targets.

Where this Act results in the maintenance, enhancement and planting of native vegetation it is also likely to result in the protection, restoration and enhancement of biodiversity. However, given the operation of certain provisions set out below, the protection of native vegetation and thus of biodiversity is not always sufficient.

1. Definitions: What does the Act protect?

Native vegetation is defined in section 3 of the Act to mean:

"a plant or plants of a species indigenous to South Australia including a plant or plants growing in or under waters of the sea but does not include:

(a) a plant or part of a plant that is dead unless the plant, or part of the plant, is of a class declared by regulation to be included in this definition; or

(b) a plant intentionally sown or planted by a person unless the person was acting—

[16] See *Summary of Targets*, *South Australia's Strategic Plan*, www.saplan.org.au.
[17] Department of Environment and Heritage, *No Species Loss: A Nature Conservation Strategy for South Australia 2007-17,* p 14.

(i) in compliance with a condition imposed by the Council under this Act or by the Native Vegetation Authority under the repealed Act, or with the order of a court under this Act or the repealed Act; or
(ii) in pursuance of a proposal approved by the Council under Part 4 Division 2; or
(iii) in compliance with a condition imposed by a Minister, statutory authority or prescribed person or body under—

(A) the River Murray Act 2003; or
(B) the Water Resources Act 1997; or
(C) any other Act prescribed by the regulations for the purposes of this paragraph.

This definition is expanded by regulation 3A which provides:

"For the purposes of paragraph (a) of the definition of native vegetation in section 3(1) of the Act, the class of plants, or parts of plants, comprising trees of a species indigenous to South Australia—

(a) that have a trunk circumference (measured at a point 300 millimetres above the base of the tree) of—

(i) in the case of a tree located on Kangaroo Island—1 metre or more; or
(ii) in any other case—2 metres or more; and

(b) that provide or have the potential to provide, or are a part of a group of trees or other plants (whether alive or dead) that provide or have the potential to provide, a habitat for animals of a listed threatened species under the Environment Protection and Biodiversity Conservation Act 1999 of the Commonwealth,

is declared to be included in that definition."

This definition of native vegetation limits the operation of the Act to indigenous plants. It does not cover:

- dead plants which form habitat for species other than those protected under the *Environmental Protection and Biodiversity Conservation Act*. We recommend that the Act cover threatened species and other threatened matters under the State legislation;
- native vegetation which is planted without an order of the NVC or without a condition of the Minister;

- exotics which form critical habitat. We note, however, biodiversity legislation incorporating critical habitats would cover such vegetation.

Recommendation

Consideration be given to increasing the application of the Act to include:

- in regulation 3A plants which provide habitat for matters listed under the State;
- dead plants which form habitats for species.

2. Application of the Act[18]

The application of the Act is complex, but in essence, pursuant to section 4, it applies to the whole of the State except, the metropolitan area of Adelaide (subject to some exceptions set out below). Where the *Native Vegetation Act* applies, native vegetation cannot be cleared unless the consent of the NVC is obtained or unless the exemptions apply. In addition, in the following areas of metropolitan Adelaide any clearance is also subject to the consent of the NVC:

- those parts in the Hundreds of Adelaide, Munno Para and Noarlunga that are designated as Metropolitan Open Space System or Hills Face Zone in the Development Plan;
- areas that are east of the Hills Face Zone;
- the City of Onkaparinga;
- the north western portion of Port Adelaide bounded by Port Wakefield Road.

Exempting metropolitan Adelaide[19] is incongruous with the objects of the legislation which includes conserving, protecting and enhancing native vegetation in this state[20] and we

[18] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous). Amendment Bill 2011* currently before the South Australian Parliament.
[19] It appears that country towns are covered by the Act.
[20] Section 6(a).

recommend that the application of the Act be broadened to include those areas of Adelaide currently excluded. Under the current application vegetated areas as significant as the following are not protected:

- Thornlands reserve;
- Linear bike path;
- St Helen's Park Prospect;
- Hazelwood Park.

Extending the operation of the Act in this way would assist the preservation of biodiversity within Adelaide and would complement the protection currently afforded to significant trees under the Development Act. The current protection of significant trees is limited and it represents an individualistic approach to the preservation of biodiversity which as indicated elsewhere in this paper[21] is outmoded and ineffective. It is preferable to preserve, restore and enhance ecological communities of species.

Recommendation

The application of the Act be broadened to include those areas of Adelaide currently excluded.

3. Objects

Section 6 of the Act sets out the objects of the Act which include:

(a) the conservation, protection and enhancement of the native vegetation of the State, in particular, remnant native vegetation, to prevent further-

(i) reduction of biological diversity and degradation of the land and its soil;

(ii) loss of quantity and quality of native vegetation in the State;

(iii) loss of critical habitat;

[21] See the chapter of this report on the *Environment Protection and Biodiversity Conservation Act (Cth) 1999*.

(b) the provision of incentives and assistance to landowners to encourage the … [preservation, enhancement and proper management] of native vegetation on their land;
(c) [limiting] clearance of native vegetation to clearance in particular circumstances including circumstances in which the clearance will facilitate the management of other native vegetation or … the sustainable use of land for primary production;
(d) [encouraging] … research into the preservation, enhancement and management of native vegetation; and
(e) [encouraging] … re-establishment of native vegetation where native vegetation has been cleared or degraded.

Section 6(a)(i) refers to biological diversity which, along with the term biodiversity, is defined in section 3 to mean:

"*the variety of life forms represented by plants, animals and other organisms and micro-organisms, the genes that they contain, and the ecosystems and ecosystem processes of which they form a part."*

Importantly, these objects include:

- not only the conservation and preservation of native vegetation but also proactive aims such as the proper management and enhancement of native vegetation;
- prevention of the reduction of biological diversity and in including this terminology the legislation was ahead of the rest, when it is remembered that the Convention on Biological Diversity was only agreed in 1993;
- loss of critical habitat (a term which is not defined in the Act), which provides for a broader approach than a species based approach;
- the aim of providing incentives to landowners and assistance to landowners without which cooperation may well be hampered;
- the re-establishment of native vegetation. This is important given the parlous condition of vegetation in this state set out above and the difficulty in achieving natural regrowth of native vegetation.

Of concern is paragraph (c) which enables clearance to facilitate the sustainable use of land for primary production. There is concern that this paragraph is contrary to protection and enhancement of native vegetation and may need amendment. On the other hand, there is concern that the paragraph accords with the sustainable use provisions of the Convention on

Biological Diversity[22] and is the paragraph of the objects clause which enables the exemptions. However, the Convention primarily encourages conservation and if we are to preserve the remaining native vegetation in this State, then we need to consider such changes.

Further, there is a concern that farmers not pay the collective 'bill' for maintaining rather than clearing native vegetation[23]. Given these comments, any strengthening of sections such as paragraph 6(c) need to be undertaken in conjunction with incentives provisions for farmers who keep and maintain their native vegetation. Such incentive provisions and other issues relating to farmers are discussed in the applicable exemption clauses below.

The objects should also include the aims of:

- preventing impact on listed matters (such as listed species, populations) and threatening processes[24]*;*
- reducing greenhouse gas emissions[25];
- recognising the contribution of native vegetation to not only biodiversity and land degradation but also such matters as water quality and the prevention of salinity which also impact on biodiversity[26].

The objects are linked to the operation of the NVC in the assessment of clearance applications[27] and the production of the Annual report[28]. However, the value of the objects section is limited as they are not better linked to the operation of the Act. We recommend that better links be made between the objects clause and the operational sections of the Act such as with respect to the operation of the Native Vegetation Fund, heritage agreements, the approval of revegetation, the production of guidelines under section 25 and the enforcement of the Act.

[22] In particular, Articles 1, 7 and 10 of the Convention.
[23] See footnote 177 below.
[24] This aim is included in section 3 of the *Vegetation Management Act (Qld) 1999.*
[25] Ibid.
[26] This aim is included in section 3 of the *Native Vegetation Act (NSW) 2003.*
[27] Section 14(2) *Native Vegetation Act.*
[28] Section 17.

Recommendations

- Reconsider the operation of part of section 6(c) which provides for clearance to facilitate the sustainable use of land for primary production and any strengthening of this clause be coupled with incentives provisions for farmers who keep and maintain their native vegetation.
- The inclusion of additional aims within the objects clause such as:
    - preventing impact on listed matters (such as listed species, populations) and threatening processes*;*
    - reducing greenhouse gas emissions;
    - recognising the contribution of native vegetation to not only biodiversity and land degradation but also such matters as water quality and the prevention of salinity impact on biodiversity.
- Better links be made between the objects clause and the operational sections of the Act.

4. Administration: NVC[29]

Part 3 of the Act establishes the NVC which administers the operations of the Act. Of the 7 members of the Council:

- only the one appointment of the Conservation Council is guaranteed to have a conservation perspective and this may not include experience in issues surrounding biological diversity;
- the balance of the appointments are from the South Australian Minister, the South Australian Farmers Federation[30], the NRM Council, the Local Government Association[31] and the federal minister for the environment;
- whilst there is a requirement that members *"have some knowledge of, and experience in, the preservation and management of native vegetation"*[32] this in itself does not necessarily guarantee the protection of biodiversity.

[29] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous) Amendment Bill 2011* currently before the South Australian Parliament.
[30] And this member must be a currently working primary producer as set out in section 8(3).
[31] And this member must be a currently working primary producer as set out in section 8(3).
[32] Section 8(2).

We note, however, that in 2006, the Commonwealth Minister advised the Minister for Environment and Conservation that the Commonwealth will no longer nominate a member for the NVC[33] and that this position has been the subject of a Bill before Parliament[34] and so there are only six members of the Council. The Bill, now lapsed, proposed that the current section 8(1)(f) be deleted and substituted with a new section 8(1)(f) which states that one member of the Council must be a person with extensive knowledge of and experience in planning or development, that person being nominated by the Minister. This is of concern given that development is considered one of the major threats to native vegetation[35] and experience in planning and development is not relevant to the application of the principles of clearance.

If only one member of the Council has a perspective of conserving, restoring and enhancing the environment, the ability to protect biodiversity is likely to be limited.

We recommend that there be a requirement in the Act that 50 per cent of the Council's members have experience in or adequate training in the management of native vegetation, including its ecosystems and biodiversity.

The functions of the Council (as set out in section 14(1)) include:

(a) to keep the condition of native vegetation under review;
(b) to advise the Minister on—
(i) preserving, enhancing and managing existing native vegetation;
(ii) re-establishing native vegetation where it has been cleared or degraded;
(iii) research into the preservation, enhancement and management of native vegetation and re-establishment of native vegetation on cleared land;
(c) keeping the principles of clearance of native vegetation under review and advising the Minister of any changes it considers necessary or desirable;
(d) determining applications for consent to clear native vegetation (Part 5) in line with the objects and the principles of native vegetation and not seriously at variance with them;
(da) to assess and respond to applications referred to the Council under the Development Act 1993;
(e) encouraging research into the preservation, enhancement and management of existing

[33] Annual Report of the Native Vegetation Council, 2008/2009 p5, Annual Report of the Native Vegetation Council, 2009/2010 p4.
[34] Section 7 Native Vegetation (Miscellaneous) Amendment Bill 2008.
[35] Annual Report of the Native Vegetation Council, 2008/9, p3.

native vegetation;
(f) encouraging the re-establishment of native vegetation where it has been cleared;
(g) to administer the Fund (Division 3); and
(h) other functions assigned to it under this or other Acts[36]*.*

We endorse the fact that these functions include the review, preservation and re-establishment of native vegetation.

In line with our comments above, to better protect biodiversity, we recommend reference to management of native vegetation in section 14(1)(b)(i), (b)(ii) and (e) include management of native vegetation and its ecosystems and biodiversity.

We endorse the fact that a function of the Council is "*to assess and respond to applications referred to the Council under the Development Act 1993"*, but are concerned that the assessment and response to development applications:

- are not linked with the referral provisions under the Development Act[37] in that a development application may be approved by the relevant authority and then rejected by the Council (where applicable) resulting in duplication of process[38];
- the Council's assessment is not mandatory and so many applications for development approval are allowed and native vegetation cleared in inappropriate circumstances;

In order to better preserve native vegetation any assessment by the NVC should be a mandatory requirement:

  - at the development plan amendment stage as a change in zoning may enable the clearance of vegetation;
  - with respect to the assessment of development applications, major projects, crown development, infrastructure developments and ancillary development under Part 4 of the *Development Act*;
  - with respect to the approval of environmental authorisations under the *Environment Protection Act*.

However, the Greater Adelaide Plan[39] proposes that Structure Plans be developed for new

[36] Note that this is a summary of section 14.
[37] Section 37 *Development Act*, reg 23 and Schedule 8 of the *Development Regulations*. This is considered further below.
[38] Developers also express concern at this duplication.
[39] *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127. This issue is

growth areas in order to "determine and assess environmental significance thereby removing the need for end-of-process assessment or referral under schedule 8 of the *Development Regulations* or the *Native Vegetation Act*." Appropriate biomapping is an important element for conserving biodiversity to ensure that "no go"[40] areas exist. This concept is supported by the Greater Adelaide Plan which proposes:

- areas of high environmental significance be mapped and protected from development. This does not currently exist under the *Development Act* and the Development Plans which support the Act;
- areas of environmental significance where higher impact land uses should be avoided;
- areas designated for human use where human use is the principle consideration[41].

However, given that we have very little native vegetation left, a referral giving the Native Vegetation Council a power of direction is essential to ensure that native vegetation is protected where possible so that so that urban living in the built environment is improved.

The functions of the Council also include reviewing the principles of clearance of native vegetation as set out in schedule 1 of the Act. These principles are discussed under section 29 below.

Recommendations

- 50 per cent of the Council's members have experience in or adequate training in the management of native vegetation, including its ecosystems and biodiversity
- Reference to management of native vegetation in section 14(1)(b)(i), (b)(ii) and (e) including management of native vegetation and its ecosystems and biodiversity
- Biodiversity mapping which prohibits development from areas of high environmental significance and limits development in areas of environmental significance.

discussed further in the Planning chapter.

[40] In "no go" areas development would not be allowed.

[41] *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127.

- Native vegetation assessment should be a mandatory requirement:
    - at the development plan amendment stage as a change in zoning may enable the clearance of vegetation;
    - with respect to the assessment of development applications and major projects under Part 4 of the Development Act;
    - with respect to the approval of environmental authorisations under the Environment Protection Act.

5. Administration: NVC - Delegation

The Council also has:

- the obligation to investigate any breaches of the Act pursuant to section 14(3);
- the power to delegate its function under section 15 to:
    - a member of the Council;
    - a committee established by the Council;
    - a local council;
    - any other person.

This power of delegation is controversial in that it is not satisfactory for an experienced and qualified Council to pass on its power to potentially just one person[42] or to a group of people.

This controversy is not alleviated by the fact that there is a requirement for certain delegates to hold skills in the field of natural resources management or biology[43]. The functions of the Council are important and we recommend that the power of delegation be removed.

The delegation of the Council's role to the CFS[44] is arguably an abrogation of the Council's responsibilities. The Guidelines to the Regulations ("Regulations Guidelines") provide that:

"This regulation recognises that specialist expertise within the SACFS is required in the provision of advice and direction in accordance with clearance for fire protection around

[42] Regulation 5A delegates NVC functions to the Chief Fire Officer.
[43] Section 15(5b).
[44] Regulations 5A(1)(a) and 5A(c).

houses."[45]

However, the regulation does not appear to acknowledge the specialist expertise required for native vegetation and biodiversity protection.

The NVC Annual Report 2009/2010 provides that an accredited training manual and training program has been developed for Country Fire Service Regional Prevention Officers, Regional Planning Officers and Metropolitan Fire Service Officers regarding the then new Guidelines for the Management of Native Vegetation and Bushfire, but the Report only refers to two training sessions and does not refer to ongoing training[46].

The 2008/2009 Annual Report of the NVC[47] notes delegations to the Native Vegetation, Biodiversity and Land Management Unit, in the then Department of Water, Land and Biodiversity Conservation, the Department of Transport Energy and Infrastructure, Department of Primary Industries and resources, Forestry SA, ElectraNet and the City of Whyalla[48]. The Annual Report refers to Reference to the Standard Operating Procedure for delegations[49].

Anecdotally, we understand that delegation under this section was granted to the Director of Fisheries in the early 1990s with respect to the Act's application to marine vegetation[50]. Native vegetation is defined in section 3 of the Act to include "*a plant or plants growing in or under waters of the sea",* but despite this it appears that fishing boats still conduct trawling in the gulf. It is not clear how applications for clearance of marine native vegetation are dealt with or whether enforcement action is taken against breaches of the Act in this regard[51]. In addition, it is not clear whether the application of the Act in relation to marine vegetation is limited by the operation of section 4 of the Act, that is, it is not clear whether the Hundreds of Adelaide, Munno Para and Noarlunga cover parts of the gulf and so exclude those parts from the Act.

[45] Native Vegetation Council, "A Guide to the Regulations under the Native Vegetation Act" updated 10 September 2009, page 35.
[46] Annual Report of the Native Vegetation Council 2009/2010 at p7.
[47] The Annual Report of the Native Vegetation Council 2009/2010 indicates that no delegations were made in that year is not available on the website, but it has now been provided by the NVC, but still to be considered.
[48] Annual Report of the Native Vegetation Council, 2008/2009 pp9-10.
[49] These are not available on the website.
[50] This appears to be confirmed in the Kingston District Council Agenda Ordinary Council Meeting 23 October 2009 at page 51 where information is sought as to the actions being taken by the Department of Fisheries to ensure clearance of sea grass.
[51] It is not clear from the 2008/2009 NVC Annual Report whether enforcement occurs with respect to marine plants: see p14.

This issue will continue to be of importance given the operation of the proposed Port Stanvac desalination plant, the proposal to build a desalination plant at Point Lowly and the impact of prawn trawlers in the State's waters.

In principle, we do not support a delegation of the NVC powers given the expertise required to undertake the task. The Act gives the NVC power to judge matters. Appointments to the NVC are made in the light of the experience of the appointee. There is concern that (with all due respect to the delegates) some delegates may not have the expertise to manage native vegetation, ecosystems and biodiversity, given that their area of expertise is, for example, transport, primary industries, mining, forestry, electricity, local government matters or fire management and control. This is of particular concern when the delegate's area of expertise is in conflict with the management of native vegetation, ecosystems and biodiversity.

There is concern that further delegations from the NVC may result in local or regional authorities having a significant role in decision making[52]. This is of serious concern as development is seen as one of the greatest threats to native vegetation[53] and local councils are primarily responsible for enabling development. As a result, local councils would have an inherent conflict of interest in acting as delegate of the NVC and so we do not recommend a delegation to local councils.

If such delegations are to continue we recommend that:

- the register of delegations be a public document;
- delegates be given adequate training in the management of native vegetation, ecosystems and biodiversity on an ongoing basis;
- delegates' decisions be audited by the NVC for a probationary period of say three months following the delegation and then at six monthly intervals thereafter.

In recommending this, we acknowledge that a training and an audit process may be in place at the NVC[54], but there is no statutory requirement that such a process take place and given the considerable number of exemptions and given that the particular concern of many of the delegates potentially conflicts with the management of native vegetation, we recommend that the legislation should be amended to ensure that appropriate training and auditing are in

[52] Conversation Ms VJ Russell AM, Conservation Policy Coordinator, Conservation Ark, Zoos SA. The *Native Vegetation (Miscellaneous) Amendment Bill* 2011 recently introduced into Parliament in June 2011 proposes such a delegation. Analysis is contained in the Addendum to this chapter.
[53] Annual Report of the Native Vegetation Council, 2008/9, p 3.
[54] 2008/9 Annual report p7 indicates that training occurs.

place. This would enable transparency of process and it would ensure the process occurred. Further, we recommend that funding to the NVC be increased to alleviate the need for delegation.

Recommendations

- Funding to the NVC be increased so that the power of delegation under the Act can be removed.
- Alternatively, if the power of delegation remains:
    - local government not be a delegate of the NVC;
    - the Act be amended to provide that:
        - § the register of delegations be a public document;
        - § delegates be given adequate training in the management of native vegetation, ecosystems and biodiversity on an ongoing basis;
        - § delegates' decisions be audited by the NVC for a probationary period of say three months following the delegation and then at six monthly intervals thereafter.
- More funds be allocated to enforcement in marine waters given the clearance which appears to occur.

6. Native Vegetation Fund[55]

The Native Vegetation Fund, established under section 21, is an advantageous concept which can be used to protect biodiversity and should be maintained.

Pursuant to section 21, where consent has been given for removal of vegetation (and this includes amounts paid pursuant to achieve a significant environmental benefit[56] or where it has been removed illegally), the part of the Council-administered Native Vegetation Fund derived from fines and similar levies is to be used to establish or regenerate native

[55] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous). Amendment Bill 2011* currently before the South Australian Parliament.
[56] Section 29 Significant Environmental Benefit is discussed below.

vegetation in the same region as the land involved. The Council must also have regard to any applicable Regional Biodiversity Plan. The same parts of the Fund must be used to preserve and maintain the vegetation once established or reinstated[57].
The Fund is made up of:

- money appropriated by Parliament;
- clearance fees;
- amounts paid in place of a significant environmental benefit;
- expiation fees and penalties;
- amounts ordered by the ERD Court;
- interest.

This Fund is as useful as the amount of money paid into it (and, of course, the manner in which it is used) and so we set out below numerous options for increasing revenue. However, we note at the outset that native vegetation protection is fundamentally a responsibility of Treasury and should be funded appropriately. We recommend that consideration be given to:

- substantially increasing clearance fees. From a conservation perspective we would wish to increase the current application fee from $499 at present to, for example, $5,000 for individuals and $10,000 for companies[58]. There may be a concern that such an increase may result in illegal clearance occurring. Further, for fear that this suggestion may not be treated seriously, we conservatively recommend that consideration be given to increasing fees and applying graded fees. For example, a higher application fee could be charged to companies or commercial enterprises given that the current fee of $499 (and indeed $5,000 for some operations) is probably may well be treated as a business expense.

  If there is concern that this may catch too many farms, this could be changed to applying a higher fee to developers, whether this be residential, commercial (such as vineyards) or mining development or by applying a discounted rate to farmers. The NVC recognises that development is the biggest major threat to native vegetation[59] and increasing the fees substantially may mean that greater consideration is given to more appropriately locating development.

[57] Section 21(6).
[58] For many developers, this amount is little more than trifling.
[59] Annual Report of the Native Vegetation Council, 2008/9, p 3.

- substantially increase the dollar value of the SEB. The NVC Annual Report 2008/9[60] provides for a minimum *"SEB payment of $500 for all Regulation matters and clearance application where the payment option is exercised. This policy provided consistency with the Dwelling and Associated Structure policy for Regulation 5(1)(a)."* With respect, this is a trifling amount which does not act as a deterrent to offsetting. A fundamental principle in an offsetting scheme is to seek to avoid clearance in the first instance[61]. A minimal SEB payment provides little incentive to avoid clearance.

  Appendix 1 of the NVC Annual Report 2009/2010 indicates that consent was given to clear 1074.24 hectares. This area had an SEB of 320.24 hectares and an SEB Payment of $39,804.59. This amounts to $52.78 per hectare[62]. We note that Appendix 1 concerns a range of 8 different matters[63] and the SEB rate is not the same across these matters. It is beyond the scope of this report to analyse the SEB calculation, but we note that given these rates, there appears to be opportunity to increase the rate.

- substantially increasing expiation fees and penalties. This is discussed further below.

Whilst these considerations may appear contentious, they send a very clear message that native vegetation, and the protection of biodiversity that this entails, is critical to the ongoing protection of biodiversity of this State.

Recommendation

Consideration be given to:

- clearance fees be substantially increased;
- grading the rate of clearance fees;
- substantially increasing the dollar value of the SEB to reflect the real value of the environment and its ecosystem services;
- substantially increase expiation fees and penalties.

[60] Page 6.
[61] This is discussed further below.
[62] Total area of 1074.24 hectares less SEB of 320.24 hectares leaving 754 hectares with a total payment of $39,804.59.
[63] Brush cutting, farm management, orchard, irrigation, recreational, aquaculture, structures and miscellaneous clearance).

7. Heritage agreements

As at June last year, there were more than 1445 heritage agreements in place comprising about 620,800 hectares[64] with some agreements covering less than one hectare and others 60,000 hectares[65]. This is a considerable achievement.

The Act allows for heritage agreements to be entered into in order to preserve or enhance native vegetation or areas re-vegetated with indigenous plants[66] and in return the owner may:

- receive pursuant to section 23A:
    - remission of rates or taxes;
    - payment of an amount relating to the decrease in the value of the land as a result of the heritage agreement once in force;
    - payment as an incentive to enter into the heritage agreement;

  We understand that the last two incentives are no longer offered but recommend that consideration be given to reinstating them in order to encourage the protection of biodiversity.

- apply to the Council pursuant to section 24 for financial or other assistance in:
    - managing the land, native vegetation on the land or any animals living on or visiting the land. We presume that the reference to animals is meant to be indigenous animals and if so this should be clarified by amendment;
    - preserving or enhancing native vegetation on the land;
    - establishing native vegetation on the land;
    - undertaking research in relation to the preservation, enhancement or management of native vegetation on the land or of animals living on or visiting the land;
    - re-vegetating the land in accordance with indigenous species. This is despite the fact that section 4 only applies to previously existing native vegetation. These provisions[67] apply to encourage revegetation, which as indicated is not normally protected by the clearance control provisions of the Act.
- The Council must draw up guidelines in relation to financial and other assistance,

[64] Annual Report of the Native Vegetation Council 2008/2009 p9 and Annual Report of the Native Vegetation Council for 2010 p9.
[65] Whisson, C, Paper at Environmental Defenders Office (SA) Inc Seminar titled *Biodiversity: Building Blocks for Life*, May 2010.
[66] Section 23.
[67] Sections 23E-23I.

management of native vegetation and decisions to remove native vegetation in contravention of principles of clearance of native vegetation. In drawing up these guidelines, the Council must submit them to the Conservation Council (amongst others) for comment[68].

Tasmania has a similar system under the Private Land Conservation Program, pursuant to which, a landowner may enter into a Conservation Covenant which is legally binding under the *Nature Conservation Act*. The landowner may apply for any compensation relating to the compliance with the covenant[69]; however to qualify for this the Minister must be satisfied that the landowner exercised a higher duty of care for conservation of natural and cultural values on the land than is normally required[70]. The standard duty of care includes all measures that are necessary to protect soil and water values and the reservation of other significant natural and cultural values which is a level of up to 5% of the existing and proposed vegetation on the property for areas totally excluded from operations[71].

A conservation agreement under the *Environmental Protection and Biodiversity Conservation Act*[72] is equivalent to a heritage agreement. As has been stated in the *Environmental Protection and Biodiversity Conservation Act* chapter of this report, the uptake of conservation agreements has been limited, especially because of the fact that current and future landowners are bound by the agreement.

Whilst a heritage agreement enables and encourages the protection of native vegetation which results in a positive impact on biodiversity, some concerns in relation to the agreements are:

- the terms of the agreements may be unpalatable (but further consideration of agreements is needed to confirm this) and lawyers generally advise against encumbering the land with what is effectively a charge or limitation on the land as it decreases the value of the land and the independence of use;
- there are a limited number of conservationists who have sufficient money to dedicate land to nature and those who had funds have entered into the agreements;
- section 24(7) and (8) provides that an amount demanded by the council is a “debt due”

[68] Section 25.
[69] Section 41(1).
[70] Section 41A(1)(a).
[71] *Forest Practices Code 2000*, 52. Can be accessed at http://www.fpa.tas.gov.au/index.php?id=81, at 4 May 2011. Incentives are discussed further in the EPBC and the NRM Act chapters of this report.
[72] Section 307C.

by the person and, although this provision is somewhat ameliorated by subsection (8)[73], an advising lawyer may well advise against receiving funds on such terms;

- mining may still be undertaken on the protected land[74];
- anecdotally, there is a concern that entering into a heritage agreement takes too long and that uptake may be improved with the help of a facilitator similar to Bush Management advisors[75].

Changes are being proposed to the current framework relating to heritage agreements in the context of conservation on private land. Pursuant to the proposed framework, the Department of Environment and Natural Resources intends to offer more effective protection and management of land for biodiversity outcomes[76]. It proposes to achieve this through a four-tiered approach which consists of reserves on private lands, heritage agreements, updated heritage agreements, and sanctuaries[77].

Updated heritage agreements differ from existing heritage agreements in that they require active management and reporting as part of the agreement and they encompass a broader range of conservation outcomes such as ecosystem function, and geological, cultural, spiritual and educational values[78]. The Department of Environment and Natural Resources states that while current heritage agreements satisfy all of the establishment criteria for the National Reserve System, compliance with the system is voluntary because management and reporting activities are undertaken voluntarily by landowners[79]. It is intended that updated heritage agreements, on the other hand, would set out management and reporting criteria as mandatory components of the agreement[80].

[73] *Section 24(8) provides that: "A court that is considering a claim for payment of a debt referred to in subsection (7) may refuse to order payment of all or part of the amount claimed if, in its opinion, the person to whom the financial assistance was granted has applied it in accordance with the conditions on which it was granted or in accordance with what he or she genuinely believed to be the conditions on which it was granted.*

[74] Regulations 5(1)(zc), (zd), (ze) provide that those exemptions, which apply to mining, extend to native vegetation that is on land that is subject to a heritage agreement.

[75] Ms Vicki-Jo Russell AM, Conservation Policy Coordinator, Conservation Ark, Zoos SA, indicates that heritage agreements can take up to 2-3 years to finalise and typically only then will funding (which is not a lot of money) follow. She believes that this is too long bearing in mind that the occasions when a person is most likely to enter a heritage agreement is soon after purchase or just before sale and on both occasions, time is of the essence. Trust for Nature (in Victoria) has a facilitator to assist with such agreements. Ms Russell recommends the reinstitution of positions like the Bush Management advisors (defunded about 5 years ago) who provided assistance in this regard.

[76] Department of Environment and Natural Resources, *Protected Areas on Private Land Discussion Paper* (2011) p 3.

[77] Ibid pp 10-11.

[78] Ibid p10.

[79] ibid p11.

[80] Ibid p10.

This requirement of active management and reporting is the fundamental difference between existing heritage agreements and the proposed updated heritage agreements. There is concern that the new requirement for management plans may become standard, that is, that the current heritage agreement will be phased out in future and that the new management plans will become a standard requirement for all heritage agreements. Whilst this should not impact current holders of heritage agreements, if this occurs it may result in onerous obligations on private landholders which potentially last in perpetuity and so may not encourage but rather may reduce support for protected areas on private land.

If the proposed scheme is introduced, heritage agreements should remain in operation in order to capture those landholders who do not wish to be bound by the more stringent requirements of the proposed scheme (and we acknowledge that this is part of the current proposal). Further, if the proposed scheme is to operate successfully, then appropriate measures should be put in place in order to ensure compliance. As indicated earlier in this report, of particular importance is the provision of substantial technical and financial support. Lack of such support appears to have impacted the uptake of heritage agreements and in many cases it is not possible for land owners to bear the costs inherent in a heritage agreement without such adequate support.

Recommendation

- Consideration be given to:
    - reinstating incentives to encourage Heritage Agreements as follows:
        - § exemption from stamp duty and goods and services tax[1] for land transactions which are conditional on the entry into a Heritage Agreement;
        - § reconsider the remission of rates or taxes allowed under section 23 and more particularly:
            - allow exemption from land tax for properties protected by a heritage agreement;
            - negotiate with Councils to allow an exemption from Council rates for properties protected by a heritage agreement[1].
    - amending section 24(1)(a) to refer to indigenous animals (and not simply animals);
    - revising the terms of heritage agreements to encourage their uptake;

- speeding up the process of entering into heritage agreements including engaging on-ground facilitators;
- protecting heritage agreements protected from mining.

8. Guidelines

Section 25 allows the Council to prepare draft guidelines on the:

- management of native vegetation; and
- the operation of section 29(4a) which applies where such guidelines are in place.

The guidelines have a substantial impact on clearance applications. As discussed further below, section 25 enables the NVC to create guidelines for the purpose of providing consent to clearance. This is contrary to the Westminster system of government which provides for checks and balances between the executive, the legislature and the judiciary. However, pursuant to section 25, the NVC (the executive) can make its own guidelines (a function of the legislature and in this case a quasi-legislative function) and then apply them as it sits in judgment on matters (a function of the judiciary and in this case a quasi-judicial function[81]). As a result, the usual and appropriate checks and balances are not in place.

Further, there appear to be numerous guidelines but they are not readily available on the website[82] and there is no index of guidelines to give an indication of the matters which are the subject of guidelines. We understand that the NVC website is currently being upgraded and so this problem may soon be rectified. An individual's duty to protect and improve the environment is based on the right to have satisfactory access to information[83]. Without this, there is a lack of transparency of process and a lack of accountability.

[81] Describing the NVC as a judge is to use the lay understanding of this term. In fact, the NVC does not make judicial decisions in the strict legal sense of the term as it is a statutory authority which makes administrative decisions based on fact; it does not make decisions on the law. This is reserved for the Environment Resources and Development Court which enforces the decisions of the NVC. Likewise, the Council does not make legislation and so its function is described as quasi-legislative.

[82] We understand that the Native Vegetation Council website is currently being upgraded and so this problem may soon be rectified. Further, members of the NVC were willing to provide information. Whilst the Secretariat indicated that SEB information was not available to the public because of the concern that the public could dispute SEB values, other information was made available.

[83] The United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters was adopted on 25 June 1998 at Aarhus, Denmark.

Recommendation

If there are to be guidelines we recommend that they are:

- accessible to the public;
- drafted by an independent committee such as the scientific committee
- set out in subordinate legislation, such as a schedule to regulations.

9. Clearance control[84]

Sections 26 establishes that it is an offence to:

- clear native vegetation unless the consent of the NVC is obtained;
- contravene or fail to comply with a condition attached to the consent to clear.

Clearance is broadly defined to mean in relation to native vegetation:

> "*(a) the killing or destruction of native vegetation;*
> *(b) the removal of native vegetation;*
> *(c) the severing of branches, limbs, stems or trunks of native vegetation;*
> *(d) the burning of native vegetation;*
> *(e) any other substantial damage to native vegetation,*

and includes the draining or flooding of land, or any other act or activity, that causes the killing or destruction of native vegetation, the severing of branches, limbs, stems or trunks of native vegetation or any other substantial damage to native vegetation."[85]

The maximum penalty is the greater of $100,000 or a sum calculated considering the increase in value of the land. This is significant and section 26 has been successfully enforced by the Council. Most recently in the case of *Overland Station Corner Pty Ltd v Gould* [2010] SASC 61 fines of $80,000 were imposed for illegal clearance. The magistrate imposed a $60,000 fine on the Station and $20,000 on the owner. The Supreme Court

[84] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous) Amendment Bill 2011* currently before the South Australian Parliament.
[85] Interstate legislation does not provide a better definition.

upheld this but held that the penalty imposed was 'modest' and that a 'fine of greater amount would not have been unreasonable'[86].
The NVC Annual Report 2009/2010[87] refers to three successful prosecutions in the Magistrates' Court with penalties ranging from $9,000-$244,000 and a total of $333,000 and that these matters include "one of Australia's largest-ever actions for unlawful clearance" relating to the clearance of 244 hectares near Barmera in the Riverland[88].

In the case of *Lamattina v Gould* [2009] SASC 130, the Supreme Court considered the unlawful clearance of 350 hectares and upheld the decision of the Magistrates Court to order fines of $68,000 against the company and $51,000 against the individual.

At the federal level, in the *Lamattina* case, however, where matters of national environmental significance had been significantly impacted under the *Environmental Protection and Biodiversity Conservation Act*, these same facts attracted fines of $200,000 and in applying this fine, Justice Mansfield doubled the fine from the amount of $100,000 agreed to by the parties.

The Supreme Court of South Australia has made it clear that it will adopt the principle of deterrence (a principle in environmental sentencing) in judging the enforcement provisions of the Act and as a result has applied significant penalties. In 2000, Justice Duggan in the Supreme Court in *Piva v Maynard* (2000) 112 LGERA 165 described a fine for unlawful clearance of $100 awarded by the Magistrates Court as "manifestly inadequate" and replaced with a fine of $17,000.

Further, Chief Justice Trenordan in *Director of Public Prosecutions v Transadelaide* [2004] SAERDC 92 said that *"The fine should be such as will make it worthwhile that costs of precautions be undertaken."*[89]

This can be compared to NSW, where to clear native vegetation a person needs development plan consent or a property vegetation plan[90]. Contravention of this means that a person is guilty of an offence. The maximum penalty that can be imposed is $1,100,000 for the offence and a further penalty of $110,000 for every day the offence continues[91].

[86] At [101].
[87] at page 19.
[88] The case which appears to be based on the same facts as *Native Vegetation Council v Overland Corner Station Pty Ltd & Anor* [2010] SAERDC 70.
[89] At page 96.
[90] Section 12 *Native Vegetation Act 2003.*
[91] Section 12 provides that the maximum penalty is as is provided for in section 126(1) of the *Environmental*

The penalty scheme in Victoria does not include as great a deterrent as New South Wales, but it does include a daily penalty. In Victoria under the *Planning and Environment Act 1987*, non-compliance with a scheme, permit or agreement is an offence[92]. General penalty is a maximum of 1200 penalty units and a further 60 penalty units for each day the offence continues[93].

Given these decisions, we recommend that consideration be given to increasing the dollar value of penalties in the light of the decisions and the principle of deterrence.

Section 26(2a) provides that where the Court convicts someone for illegal clearance, the Council must initiate civil proceedings requiring the breach to be rectified or 'made good". This is a critical section. Without a "make good" requirement there is a real risk that a person will clear the land and accept the fine. This is particularly the case where the commercial gain is far greater than the fine.

An equivalent section applies under the Victorian Planning Provisions which provides for native vegetation clearance, in accordance with the *Planning and Environment Act 1987*. An enforcement order under section 119 of that Act may provide, inter alia, for the restoration of land 'as nearly as practicable to its condition immediately before the use or development started'[94]. An enforcement order is made when any person makes an application to the Victorian Civil and Administrative Tribunal for consideration[95].

For example, if the land is cleared for a vineyard, for cropping, for development or for mining it may be that the commercial gain is far greater than the expected fine and so the cleared native vegetation becomes a casualty of the commercial venture. However, if landholders know that illegal clearance will result in the requirement to make good, then there is real disincentive to clear. So, if the viticulturist knows that the vines will need to be removed and the land returned to its former state there is substantial disincentive to clear. Equally, if the landowner knows that if the crop will need to be removed or the mine removed or the

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Protection Act. That section provides that the maximum penalty does not exceed 10,000 penalty units and a further daily penalty not exceeding 1,000 for every day the offence continues once detected. Section 17 of the *Crimes (Sentencing Procedure) Act* states: multiply the penalty units by $110. Thus the maximum penalty is $1,100,000 and a daily penalty of $110,000.

[92] Section 126.

[93] Section 127. Section 110 of the *Sentencing Act 1991* provides that the monetary value of one penalty unit is $100. Thus, the maximum penalty is $120,000 and the daily penalty is $6,000 which is not as stringent as the NSW penalties.

[94] Section 119(b)(iv)(A).

[95] Section 114(1).

development removed and the land reinstated, then there is real disincentive to clear. A fine alone does not achieve this.

In *NVC v Overland Corner Station Pty Ltd & Anor* [2010] SAERDC 70, the NVC initiated proceedings pursuant to s 26(2a). The parties subsequently agreed to participate in a conference and arrived at a settlement in relation to a number of matters, except for two. The first of these was as to publication in the local and State newspapers of an advertisement to be placed in a newspaper and which would include details of the breach, environmental and other consequences flowing from the breach and the terms of the Orders made against the respondent (pursuant to s 36A(6)(h)). In relation to this, the court held that the publication would have a deterrent effect on the respondents and that the greater value of the publication is to provide the public with information as to the orders that can be made in relation illegal clearance of native vegetation[96]. The second was as that respondents should pay the costs of the Council and this the Court upheld.

Recommendation

- Consideration be given to increasing the dollar value of penalties in the light of the decisions and the principle of deterrence.
- The make good provision in section 26(2a) (and the corresponding enforcement sections) remain.

10. When can native vegetation be cleared?

Despite the offence established in the Act, native vegetation may be cleared in many circumstances and specifically if (as set out in section 27):

- consent has been given by the Council under section 29;
- clearance is allowed under the regulations, which is detailed further below.

Regrettably, section 27 (by virtue of the application of section 29 and the exemptions) provides many opportunities for clearance. This has significant consequences for biodiversity. This is detailed below.

[96] At [11].

11. When is native vegetation not to be cleared?

The Act provides in section 27(2) and (3) that native vegetation cannot be cleared, where:

- the vegetation is part of a substantially *intact stratum,* that is, a plant community of similar growth habit which is largely untouched by humans (apart from fire) for the previous 20 years[97], unless the consent relates to harvesting and it can be shown that lasting damage, significant soil damage or erosion or long-term loss of biodiversity are unlikely[98];

- clearance of land subject to a heritage agreement cannot be cleared unless the minister also consents or unless the regulations creating the exemption explicitly extends to land covered by heritage agreements[99].

These two provisions only provide very limited circumstances in which native vegetation must not be cleared, and even then, they still allow clearance in certain circumstances. These provisions are further prescribed by the exceptions in section 29 and by the 45 exemptions set out in the regulations. Given this, it would appear that the prohibition against clearance (which is proposed in the objects) is dwarfed in the Act by provisions enabling clearance. This is of major concern for the future of biodiversity, particularly given that the amount of native vegetation in the agricultural region without some form of protected area status is only 13%[100]. As a result, we propose below that the opportunities for clearance allowed by the Act be further limited.

Despite the objects, there is no positive obligation within the terms of the Act for people to protect native vegetation[101] and such an obligation is likely have an impact in decreasing clearance. For this reason a duty is proposed within the new legislation[102].

12. Applying for clearance

An application for clearance must be accompanied by:

- a native vegetation management plan prepared by the applicant under guidelines adopted by the Council;

[97] Section 3A.
[98] Section 27(2) & (3).
[99] Section 27(5).
[100] See page 1 and footnotes 3 and 4 above.
[101] Heritage agreements are not mandatory.
[102] See the chapter of this report on the *Environment Protection and Biodiversity Conservation Act.*

- information establishing that:
    - planting and maintenance of native vegetation after clearance will result in a significant environmental benefit (SEB); or
    - if a significant environmental benefit cannot be provided, the applicant will make payment by way of compensation into the Fund;
- a report[103] prepared by the agency of the crown and the agency may be any organisation or person approved by the NVC[104]. Regulation 8(4) provides that the Council may remit the fee payable for this report. We understand that this report is prepared by a consultant by way of a site assessment report which provides the data, but no assessment against the Act[105]. The assessment is then carried out by staff at the NVC.

  We understand that consultants under section 28(5) must be accredited, however, that there is no information on the website regarding that accreditation[106]. We recommend that the Act be amended to include reference to the requirement for accreditation and that the accreditation process is set out in, for example, a schedule to the regulations.
  This process should include a requirement that the consultant be independent of the applicant for clearance to avoid any concern that the consultant is a "tool" of the applicant.

Recommendation

- That the Act be amended to include reference to the requirement for accreditation and that the accreditation process is set out in, for example, a schedule to the regulations.
- The accreditation process include a requirement that the consultant be independent.

[103] s28(3)(b)(iia) and 28(5).
[104] Regulation 8(5).
[105] Conversation Dr Tim Milne, Ecological Consultant.
[106] As indicated above, we understand that the website is being updated.

13. Considerations in allowing clearance

A central function of the NV Council is the granting of **consent** to clear native vegetation as set out in 29. In doing so, the Council:

- *"must have regard to the principles of clearance of native vegetation …; and*
- *must not make a decision that is seriously at variance with [the] principles".*

14. Principles of Clearance

The Principles of Clearance are set out in Schedule 1 of the Act which provides as follows:

> ***"Schedule 1: Principles of clearance of native vegetation***
> *Native vegetation should not be cleared if, in the opinion of the Council—*
> *(a) it comprises a high level of diversity of plant species; or*
> *(b) it has significance as a habitat for wildlife[107]; or*
> *(c) it includes plants of a rare, vulnerable or endangered species[108]; or*
> *(d) the vegetation comprises the whole, or a part, of a plant community that is rare, vulnerable or endangered; or*
> *(e) it is significant as a remnant of vegetation in an area which has been extensively cleared; or*
> *(f) it is growing in, or in association with, a wetland environment; or*
> *(g) it contributes significantly to the amenity of the area in which it is growing or is situated; or*
> *(h) the clearance of the vegetation is likely to contribute to soil erosion or salinity in an area in which appreciable erosion or salinisation has already occurred or, where such erosion or salinisation has not yet occurred, the clearance of the vegetation is likely to cause appreciable soil erosion or salinity; or*
> *(i) the clearance of the vegetation is likely to cause deterioration in the quality of surface or underground water; or*
> *(j) the clearance of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding; or*

[107] The term "wildlife" is as defined under the *National Parks and Wildlife Act* which defines it as "all native plants and animals indigenous to Australia existing apart from cultivation or domestication."
[108] The definitions of "rare, vulnerable or endangered species" from the *National Parks and Wildlife Act* are adopted here, that is, the species listed in schedules 7, 8 and 9 are those protected under these principles.

(k) —

(i) after clearance the land will be used for a particular purpose; and

(ii) the regional NRM board for the NRM region where the land is situated has, as part of its NRM plan under the Natural Resources Management Act 2004, assessed—

(A) the capability and preferred uses of the land; and

(B) the condition of the land; and

(iii) according to that assessment the use of the land for that purpose cannot be sustained; or

(l) the clearance of the vegetation would cause significant harm to the River Murray within the meaning of the River Murray Act 2003; or

(m) the clearance of vegetation would cause significant harm to the Adelaide Dolphin Sanctuary.

The principles include within them the protection of the habitat of endangered or threatened species which accords with the concepts set out in the Convention on Biological Diversity. Further, the principles are the only legislative provisions in this State with the principle aim of protecting biodiversity and they are reasonable.

However, the term, "Principles of Clearance", is erroneous in that the term itself appears to support the concept of clearance rather than the protection, restoration and enhancement of vegetation and thereby its biodiversity. Arguably, it allows for or even encourages a clearance mentality. As a result, we recommend that instead of principles of clearance, the principles be referred to as "Principles of Protection of Native Vegetation".

Obviously, however, changing the name of the Principles will not be enough to better preserve native vegetation and the biodiversity it encompasses.

As a result, we recommend the following alterations to the principles:

Native vegetation should not be cleared if, in the opinion of the Council—

(a) it comprises a high level of diversity of plant <u>or animal</u> species; or

(b) it has significance as a habitat for <u>plants and for</u> wildlife; or

(c) it includes plants <u>or animals</u> of a rare, vulnerable or endangered species[109];

(d) the vegetation comprises the whole, or a part, of a ~~plant~~ <u>ecological</u> community that is rare, vulnerable or endangered; or

[109] The definitions of "rare, vulnerable or endangered species" from the *National Parks and Wildlife Act* are adopted here, that is, the species listed in schedules 7, 8 and 9 are those protected under these principles.

The term "wildlife" (referred to in paragraph (b)) is as defined under the *National Parks and Wildlife Act* which defines it as "all native plants and animals indigenous to Australia existing apart from cultivation or domestication" and we recommend that this definition be included in this Act.

An obvious difficulty with these changes is that some relate to animals and are potentially outside the scope of the objects and the Act. However, this can be countered on the basis that protection of animals within the principles is contemplated by paragraph (a)(i) of the objects which seeks to prevent the reduction in biodiversity.

If the Council's decision making power was limited to the application of the Principles of Clearance, the Act would be in a better position to protect biodiversity. The greatest problem with the Principles of Clearance is that they are not used in a large number of cases. The NVC 2009/2010 Annual Report provides as follows[110]:

Year	Clearance approved pursuant to section 28 (consent required)	Clearance pursuant to *Native Vegetation Regulations*
2008-2009	• 58 applications approved • 3841 ha^2	• 233 clearance matters
2009-2010	• 38 applications approved • 1074.24 ha^2	• 259 clearance matters

As can be seen, many cases do not need to proceed by way of application for clearance to the NVC (pursuant to the principles of clearance), but rather proceed via the regulations which are discussed further below.

In addition, the Council's decision making power is further limited by the balance of the provisions in section 29 which provide certain exemptions from the operation of the principles. The section sets out that any decision to consent to clearance must accord with the principles of clearance, but this is subject to:

- primary production considerations where clearance may be allowed to enable the operation of efficient businesses[111] and the removal of isolated plants in certain circumstances[112];

[110] At p10.
[111] Section 29(3).
[112] Section 29(4).

- if the Council has adopted guidelines under section 25, it is satisfied that a significant environmental benefit of clearing the vegetation outweighs the value of retaining it and the circumstances justify consent[113];
- consultation with certain other agencies including the NRM Board and the Pastoral Board[114];
- the requirement of a significant environmental benefit in addition to certain conditions that the applicant establishes and manages native vegetation on the land, builds a fence, enters into a heritage agreement or makes payment into the Native Vegetation Fund[115].

However, subsection 29(12) provides that the clearance consent can be unconditional if the Council is satisfied that:

(a) clearance would not result in any loss of biodiversity;
(b) the attachment of a condition under section 29(11) would place an unreasonable burden on the applicant.

Sub-paragraph (a) is incongruous given that it is likely that all clearance will result in a loss of biodiversity (given that trees, even dead trees, provide habitat) and so we recommend that it be reconsidered.

Given that sub-paragraph (b) is not in accord with the intention of the Act set out in the objects, which fundamentally aim to conserve, protect and enhance native vegetation[116] and we also recommend it be reconsidered.

Section 29(17) refers to the NVC's consideration of an application referred under the *Development Act.* Elsewhere in this report we recommend that there be a referral for direction to the NVC for all development applications.

[113] Section 29(4a) comments are made above in relation to the operation of Guidelines.
[114] Section 29(6)-(9c).
[115] Section 29(11) This is considered further below.
[116] Section 6(a).

Recommendations

- The term "principles of clearance" be changed to "Principles of Protection of Native Vegetation"
- The principles be altered as set out above to better protect biodiversity
- The definition of "wildlife" be included in this Act
- If offsets are to be allowed (as intimated in section 29(2)), then that should only occur under very strict regulation set out below
- The considerations under section 29(12) (which enables clearance) be reviewed
- The Native Vegetation Act should have priority over the Natural Resources Management Act and the Pastoral Land Management Conservation Act and section 29(5) and (6) of the Native Vegetation Act be altered to reflect this
- Section 29(12) be deleted.

15. Significant environmental benefit and Offsets[117]

Section 29(11) provides that the NVC may only consent to clearance if "the applicant achieves an SEB that results in environmental gain"[118] by:

- establishing and managing native vegetation;
- protecting (such as fencing off) native vegetation;
- entering into a heritage agreement together with a management plan; or
- making payment to the Native Vegetation Fund[119].

Given the operation of section 29(1), however, if the SEB is contrary to the principles of clearance, the SEB should not be allowed. There is a concern that there is a move towards allowing clearance if there is an offset by way of an SEB[120]. This appears to be evidenced

[117] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous) Amendment Bill 2011* currently before the South Australian Parliament.
[118] South Australian Department of Water, Land and Biodiversity Conservation, *How the Native Vegetation Group Undertakes its Clearance Application Assessments* (2007) Final Draft, 28 November 2007.
[119] This is also subject to section 29(12) as set out above.
[120] Conversation: Mr T Milne, Ecological Consultant.

in, *"How the Native Vegetation Group Undertakes its Clearance Application Assessment*"[121] which provides that *"if the clearance of scattered trees is considered to be seriously at variance with one of more the Principles, the NVC may approve clearance provided they are satisfied that the SEB outweighs the value of retaining the vegetation under the application."* This is contrary to section 29(1).

Notably, the term "significant environmental benefit" is not defined under the Act and there are no cases which clarify the meaning[122]. The 2007 Guidelines for SEB for Scattered Trees indicates that:

- the aim is achieving environmental gains;
- vegetation is rated as follows:
    - maintaining existing remnant native vegetation has the highest value, provided that it has the potential to achieve gains;
    - improving degraded blocks as second highest;
    - the third preference is for existing remnant trees which may be improved;
- "revegetating cleared land is less desirable, because of the time that it will take to re-establish useful habitat, than offsets built on remnant vegetation"[123].

Whilst the above principles are aiming to achieve a gain, which is critical to a successful offsets scheme, the highest value native vegetation set out above appears to operate in the nature of a "lending bank"[124], that is, where clearance of trees is approved for a purpose on site A and that clearance approval is on the basis that site B, which already has trees on it, is preserved. This means that nothing additional is gained by the SEB. Rather, the SEB is simply stopping the trees on site B from being cleared, but no extra trees are planted. This is preserving the status quo, but not achieving an environmental gain (as required by the above Guideline) because the trees already existed.

Whilst we acknowledge that the guideline provides that "maintaining existing remnant native vegetation has the highest value, <u>provided that it has the potential to achieve gains</u>"

[121] Department of Water, Land and Biodiversity Conservation, *"How the Native Vegetation Group Undertakes its Clearance Application Assessment"* 28 November 2007 p4 and provided by the NVC on 5 May 2011 but marked draft.
[122] Meedeniya v Adelaide Hills Council [2004] SAERDC mentions the term but does not analyse it.
[123] Department of Water, Land and Biodiversity Conservation "*Guidelines for a Native Vegetation Significant Environmental Benefit Policy for the clearance of scattered trees"* August 2007 Whilst this Guideline is not necessarily indicative of all SEB Guidelines, it appears to provide an indication of the process involved and the only other Guideline available on the website is the mining SEB dated 2005.
[124] Bekessy , S, Wintle, B, Lindenmayer, D, McCarthy, M, Colvyn, M, Burgman, M, Possingham, H, "The Biodiversity bank cannot be a lending bank", *Conservation Letters* 3 (2010) 150-158.

(emphasis added), anecdotally there is concern that this may not be a sufficient offset given that in this circumstance pre-existing remnant vegetation may well operate as a lending bank[125]. For example, if the offset site has, in reality, no capacity or insufficient capacity for improvement when compared to the land cleared.

The lending bank scheme is limited according to the commentators[126] because it does not consider the fact that the vegetation already existed and results in potentially no or limited future gain and potential future loss if the area is not properly managed.

Compare a savings bank[127] approach where, *inter alia,* ecological assets (eg trees and understory on a block) are set aside or banked for the future and the block is managed over and above the standard set in a proposed duty of care. The block is only tradeable once a mature stage (which is measurable) is reached, that is, once the gain has been achieved with the trader bearing the onus of proof to show a statutory body (which measures or audits the gain) that the gain has been achieved. Further, the principle is based on fundamental "no go areas" which cannot be used for development and biomapping would inform this[128].

Critics claim that such a scenario requires too much time to achieve the gain, the concern being that developers will not want to wait a long period of time for the gain to be achieved. This is where government incentives can assist to encourage the establishment of properties for trading purposes. This can be linked with the carbon offset schemes currently being contemplated[129] and would be likely to improve those schemes to ensure that carbon offset sites are biodiversity friendly and not mono-cultures.

In the United States there is a system of private, profitable wetland mitigation bankers who operate commercially by creating, enhancing and restoring wetlands and then selling the resulting credits to developers[130]. There are an estimated 400 wetland banks throughout the United States and the market for wetland mitigation is apparently worth more than $3 billion annually.

Again anecdotally, we understand that the SEB metric's calculation operates on the basis

[125] Dr T Milne, Ecological Consultant.
[126] Bekessy et al, Op Cit p154.
[127] Bekessy et al, Op Cit, p154.
[128] This is endorsed in *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127. This issue is discussed further in the Planning chapter.
[129] For example, the Federal Government has introduced a *Carbon Credits (Carbon Farming Initiative) Bill 2011*. This scheme is designed to recognise greenhouse gas abatements in the land sector.
[130] Bayon, Ricardo, *State of the World, Innovations for Sustainable Economy, The World Watch Institute* (2008). at 127-128.

that where there is high quality native vegetation, then less of this type of vegetation is needed for an SEB[131]. This appears to operate in a contrary manner to the implicit requirement that an SEB produce a gain. Further assessment of the metrics methodology by ecologists is needed of this and the above issue.

In addition, consideration should be given to making such information publically available as, for example, occurs in NSW[132]. We understand that there is concern that this will enable landowners to better dispute a calculation, but this should not prevent this information being made publically available, given that it will result in a more transparent and therefore potentially robust system.

Briefly, commentators raise the following issues with offsets:

- There must be no net loss; or how much gain will be achieved when compared to the loss from clearance?
- Is this gain equivalent to what was lost? Even if there is some gain the new species planted it may not be equivalent in terms of the age and maturity of the species and habitat impact on the biodiversity. Research indicates that there is a difference in habitat between 9 and 20 years later and the vegetation is not guaranteed[133].
- The metrics may measure various attributes of biodiversity (for example: habitat type) which may not be easily comparable. How can one replace large trees with woody debris and call it "like for like"?[134]
- Like for like cannot be achieved because "biodiversity in scientific terms is intrinsically complex [and] any attempt to quantify it in the same manner a carbon emission or water resources, for example, will result in gross oversimplification and a loss of information"[135].
- How do we compensate for the time lag between the loss and the gain? There can be a considerable time until the gain is reached or until the species and ecosystems reach equivalent maturity which may have major consequences for some biota.
- The gain is not guaranteed due to the difficulties with ecological aspects and if legal protections are not palatable.

[131] Dr T Milne, Ecological Consultant.
[132] http://www.environment.nsw.gov.au/biobanking/assessmethodology.htm.
[133] Gibbons, P and Lindenmayer, D "Offsets for land clearing: No net loss or the tail wagging the dog?" Ecological Management and Restoration Vol 8 No 1 April 2007 26-28.
[134] Ibid.
[135] Ives C, Taylor M, Nipperess D, Davies P, "New Directions in Urban Biodiversity Conservation: The Role of Science and its Interaction with Local Environmental Policy" (2010) 27 EPLJ 249 at 256.

- For schemes to work they need to be properly enforced. This has been a problem with some schemes internationally and locally[136].

Nonetheless, there is support for offsets schemes[137] and Victoria's Bushbroking and New South Wales' Biobanking are the two major Australian schemes[138].

If an offsets scheme is to be considered[139], it must not result in loss of quantity and quality of vegetation and the scheme must be appropriately rigorous to combat the threat posed by development and the profit opportunity it affords, that is, it is important that any scheme is not a simple economic exercise to "pay enough" in order to facilitate development. For the scheme to operate successfully, it is critical that the scheme be properly regulated via legislation.

Plott et al[140] suggest that a successful offset scheme include:

- "*A regulation that requires parties that create an environmental impact to obtain an offset;*
- *A metric to define a property right and measure/differentiate the environmental goods being traded;*
- *Trading rules that ensure offset will meet environmental objectives;*
- *Contracts designed to ensure that he environmental offset is delivered over time;*
- *A market mechanism."*

If an offsets scheme is considered, greater analysis is needed. At the outset, we recommend that an offset scheme operate under a mitigation hierarchy as follows:

- **avoid** removal of vegetation, that is, clearance is last resort;
- if the clearance of native vegetation cannot be avoided, then any impact on biodiversity must be mitigated or **minimised** through appropriate planning and design provisions;
- **only then** is any loss of vegetation **offset**.

[136] Ibid.
[137] Bekessy et al Op Cit conditionally support offsets (to the extent that they result in a net gain in biodiversity). The Wentworth Group of concerned scientists also supports Australia adopting 'full terrestrial carbon offsets' and 'a well-designed carbon offsets scheme. See their Submission on the Carbon Credits (Carbon Farming Initiative) Bill 2011, p 1. Further, in 2008 the Native Vegetation (Miscellaneous) Amendment Bill dealing with offsets was introduced into Parliament of South Australia. To date the Bill is yet to be passed, after being at the Committee stage in May 2009.
[138] Queensland also has an offsets scheme.
[139] And the SEB is a nascent version of such a scheme.
[140] Plott C, Nemes V, Stoneham G, "Electronic Bushbroker Exchange: Designing a combinational double auction for native vegetation offsets", Victorian Department of Sustainability and Environment, July 2008 at p9.

These ideas area best exemplified by clause 52.17 of the Victorian Planning Provisions[141]. The Regional Vegetation Management Codes in Queensland follow similar principles[142].

Further, we recommend an offsets scheme comply with the following criteria:

- all applications be considered under the principles of clearance;
- there be "no go areas" informed by appropriate biomapping[143];
- a net gain approach. For example, Victoria's BushBroker scheme which requires that the clearing of native vegetation and also requires that planning approval must be offset by a gain in native vegetation somewhere else[144]. Net gain is identified as '*where, over a specified area and period of time, losses of native vegetation and habitat, as measured by a combined quality-quantity measure*[145] *are reduced, minimised and more than offset by commensurate gains*'[146]*;*
- like for like: For example, the BioBanking Assessment Methodology, in New South Wales, states that the number and class of credits obtained from a BioBank site must be compatible with those required at a development site. In this respect, relevant considerations are the region in which the development is to take place, the area of surrounding vegetation cover, and the vegetation type and formation[147]. Under the Victorian Framework there is a graded approach from a direct link between loss and offset for higher significance offsets, down to more flexibility for lower significance offsets[148];
- consider all direct and indirect impacts of the development in establishing the scheme[149];
- ensure offsets are in place before any time lag occurs, unless such time lag is unlikely to materially impact biodiversity;
- prohibit offsets for listed matters or threatening processes;
- appropriate management planning which allows for adaptive management and includes appropriate conditions[150] and which is supported by legal, financial and

[141] These provisions relate to clearing pursuant to planning and not other types of vegetation clearance.
[142] http://www.derm.qld.gov.au/vegetation/offsets/offsets_policy.html.
[143] This is endorsed in *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127. This issue is discussed further in the Planning Chapter.
[144] Information Sheet No 1. This is the savings bank approach outlined above.
[145] Known as the habitat hectare measure.
[146] Native Vegetation Management Framework for Action, 57.
[147] New South Wales Office of Environment and Heritage, "BioBanking Assessment Methodology", p41-42
[148] Native Vegetation Management Framework for Action, 23.
[149] Clarke, P, "Proposed Western Australia Biodiversity Legislation", WWF, 2010.
[150] Judge Preston in *Gerroa Environment Protection Society Inc v Minister for Planning and Clearly Bros (Bombo) Pty Ltd* [2008] NSWLEC 173 ensured these offsets worked by including monitoring and compliance conditions

institutional arrangements including monitoring. Under the BushBroker scheme a landowner is required to enter into a Landowner Agreement which contains a Management Plan and has a duration of ten years[151]. The Landowner Agreement provides standard mandatory commitments including that a landowner must not permit any native vegetation on the site to be cleared or otherwise interfered with, must not apply for a permit to clear native vegetation, and allow indigenous flora or habitats to be adversely affected[152];

- secured for the long term. The only secure way of doing that is by charge on the title as occurs in both the New South Wales and Victorian schemes[153]. This is usually in perpetuity. This should also include security or protection of the offset sites from mining and from development which would need to be achieved legislatively;
- methodology for calculating the offset, that is, the metrics, must be rigorous[154];
- if money is to be paid in place of an offset, a rigorous program to ensure appropriate pricing;
- adequate compliance[155] and sufficient resources to ensure adequate compliance. This is a critical aspect. As Chief Justice Preston said *Gerroa Environment Protection Society Inc v Minister for Planning and Clearly Bros (Bombo) Pty Ltd* [2008] NSWLEC 173, "*the efficacy of offsets is dependent on adequate compliance.*"[156] The BushBroker Scheme provides excellent support to landowners through use of Project Officers who assess the relevant land and provide information and advice as to how to properly manage their land[157]. Furthermore, the BushBroker system requires annual reporting to assess compliance through Land Agreements. The Department of Sustainability and Environment provides assistance (not financial) to help landowners to remedy any inability to properly manage their land pursuant to a Land Agreement[158]. Also, financial support is offered to landowners in New South Wales via the BioBanking Trust fund[159];

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that the developer obtain insurance for fire and vandalism and in order to mitigate impacts, and he required the establishment of a corridor of veg on site before the development could take place, in order to mitigate the native vegetation loss.

[151] BushBroker Information Sheet No 5.
[152] BushBroker Information Sheet No 5.
[153] *Threatened Species Conservation Act 1995 (NSW),* s 127J; BushBroker Information Sheet No. 5.
[154] An example of this is the BioBanking Assessment Methodology, which has been created pursuant to s127B(2) of the *Threatened Species Conservation Act 1995 (NSW).*
[155] The stick.
[156] At [134].
[157] BushBroker Information Sheet No. 5.
[158] BushBroker Information Sheet No. 5.
[159] *Threatened Species Conservation Act 1995 (NSW),* s 127ZW(3)(a) However, the high upfront costs ($50,000 - $60,000) for landholders in establishing a BioBank site are somewhat of a deterrent to landowners, Madsen, B, Carroll, N and Moore Brands K, *State of Biodiversity Markets Report: Offsets and Compensation Programs Worldwide* (2010), 52 available at http://www.ecosystemmarketplace.com/documents/acrobat/sbdmr.pdf.

- incentives[160] be put in place to encourage bush blocks;
- mandatory satisfactory risk assessment before permission to clear and then compliance audit regularly afterward.

This needs to be accomplished via legislation. Gunningham and Young confirm that, "Financial instruments are rarely adequate on their own and need to be reinforced by precautionary instruments, and ultimately, by a regulatory safety net to address recalcitrant resource users."[161]

Recommendations

- That the methodology for SEB be reassessed to ensure that it achieves its purpose
- Consideration be given to making the SEB metrics calculation publically available
- An offsets scheme (if any) be properly regulated to achieve a net gain (based on the criteria set out above)

16. Consultation and public participation

Public consultation with respect to an application for clearance is allowed in section 29(10) where it provides that any person can make a representation and the NVC may allow the person to appear before it. There is no provision for notice of an application for clearance[162] and so it is unclear how anyone other than the applicant would be aware of the application.

So that the process is more transparent, consideration could be given to giving notice of clearance applications and allowing any person who makes a representation to appear before the Council.

Further, section 29(14) provides that the NVC must apply the rules of natural justice to an applicant for consent.

[160] The carrot.
[161] Gunningham N and Young MD, "Toward Optimal Environmental Policy: The Case of Biodiversity Conservation" (1997) 24 iEcology Law Quarterly 243 at 276-277 as quoted by Webb ibid at p247.
[162] Either in the Act or the regulations.

Section 29(16) makes it mandatory for the NVC to provide reasons for refusal of consent to clear. Reasons for allowing consent should also be provided.

Recommendation

- The NVC should not have any discretion to allow or refuse to hear from a person with respect to the application for clearance. Rather, any person should be entitled to appear before the NVC to make submissions regarding the application for clearance.

- The NVC should be required to provide reasons for allowing consent to clear as well as reasons for refusal and section 29(16) should be altered to this effect.

17. Exemptions

As indicated above, the greatest mischief of the Act is that the regulations allow many matters to be determined by self-assessment and this results in many cases of clearance being exempted from the Act's operation[163]. Such a system relies on honesty (which is difficult if not impossible to enforce) and it means that the exemptions allow the Act to operate in many cases without an external arbiter giving consideration as to whether clearance should occur. Therefore, the principles of clearance (or the principles of protection) which require the consideration of important issues such as the protection of biodiversity, listed species and habitat protection may not be fully considered or may not be considered at all. The exemptions "punch holes" in the principles of clearance.

The exemptions are an *ad hoc* delegation of the NVC functions to individuals on a case by case basis. As indicated above, the NVC brings specialist expertise with respect to native vegetation and biodiversity protection. Such expertise is not available to the lay person who is required to apply the Act pursuant to the exemptions. For these reasons we recommend that consideration be given to limiting the automatic operation of the exemptions as detailed further below.

Regulation 5 and 5A provide for 45 exemptions relating to house sites, fence lines, bushfire

[163] It is not possible to tell how many as the self-assessment allowed under the regulations means that there is no way to determine exactly how much clearance is occurring.

protection, planning, infrastructure including roads, mining and public safety. Land subject to heritage agreements is not protected from the exemptions[164]. Thirteen exemptions require management plans. Eleven require there to be no other practicable alternative to the clearance. Four exemptions require biodiversity be taken into account. As stated above, the fact that there are so many exemptions seriously erodes the usefulness of the Act to protect, restore and enhance biodiversity.

As the exemptions are included in the *Native Vegetation Regulations* they can be changed administratively by the Governor[165]. Whilst the making or amendment of regulations is subject to disallowance by Parliament, disallowance occurs after the regulation is operational and so is necessarily more difficult in that it is after the event. In recent years many additional exemptions have been introduced and the main purpose of the Act and the Principles of Clearance have been further diminished as a result. In order to enable greater transparency and scrutiny of any new exemption and the impact it may have we recommend that the exemptions be removed from the Regulations and instead be included in the *Native Vegetation Act*. Any additional exemptions would then be considered by both houses of parliament before the exemptions are enacted enabling appropriate scrutiny of an exemption which if allowed may result in substantial clearance.

The exemptions are summarised below.

Development

The following exemptions relate to developments which require authorisation pursuant to the *Development Act.* It is a condition of the exemptions that development authorisation first be obtained. All these exemptions (except regulation 5(1)(b) regarding ancillary buildings) require a management plan that has been approved by the NVC and the achievement of and SEB or, alternatively, a payment into the Native Vegetation Fund which reflects the substantial environmental benefit[166]. In some of these exemptions, the need to preserve biodiversity or the needs of the land owner are considered[167] and there must be no other practicable alternative[168]. These exemptions are:

[164] Regulations 5(e), (f), (g), (la), (lb), (p), (s), (zc), (zd), (ze), (zi), (zk).
[165] Section 41 *Native Vegetation Act.*
[166] With the exception of reg 5(1)(b) which relates to clearance to erect a building or structure that is ancillary to a building (but not a dwelling).
[167] For example reg 5(1)(a)(ii)(B) regarding dwellings, (ab)(ii)(A) regarding residential subdivision, (d)(iii) regarding buildings or infrastructure.
[168] For example reg 5(1)(a)(ii)(B) regarding dwellings, (ab)(ii)(A) regarding residential subdivision, (d)(iv) regarding buildings or infrastructure, (da)(iii) regarding incidental clearance.

- Reg 5(1)(a) Dwellings and 5(1)(ab) residential subdivision: Clearance in relation to a proposal to erect dwellings or subdivide land for residential purposes. In relation to the proposal to erect dwellings (but not to subdivide the land), it is necessary that the vegetation does not comprise a stratum of native vegetation that is substantially intact and does not include eucalypts of a certain size[169];
- Reg 5(1)(b) Ancillary buildings: Clearance in relation to erecting buildings which are ancillary to buildings other than dwellings but the vegetation must not:
    - comprise part of a stratum that is substantially intact; and
    - include certain eucalypts unless the building is within a tourist, business, centre, commercial, industrial, or office zone.
- Reg 5(1)(c) Section 48 Development: Clearance is incidental to a proposed development to which section 48 of the *Development Act* applies[170]. Such clearance requires an environmental impact statement, public environment report or development report and an Assessment Report to be prepared and clearance may only be undertaken subject to consent from the Governor.
- Reg 5(1)(d) Building or infrastructure: Clearance relates to construction or provision of infrastructure[171].
- Reg 5(1)(da) Incidental clearance: Clearance is incidental to a proposed development to be undertaken on land. Among other things, this requires that the Council is satisfied that the vegetation to be cleared is not significant.

The NVC recognises development as one of the greatest threats to native vegetation[172]. In the following example, the cumulative impact of a number of regulations, results in tree covered land being virtually cleared. In particular, the operation of regulation 5(1)(a) and (ab) regarding dwellings and subdivisions, regulation 5(1)(b) regarding ancillary buildings, regulation 5(1)(f) regarding electricity matters and regulation 5(1)(s) regarding fence lines, is likely to result in treed land being predominantly cleared as indicated below.

[169] "Stratum of native vegetation" is defined in s3A(2) of the *Native Vegetation Act* to mean 'a layer of a plant community consisting of plants that comprise native vegetation and that have a similar growth habit'.
[170] Regulation 5(1)(c): Development under s48 of the *Development Act* relates to major development (s46(1)), Crown development or public infrastructure (s 49(16a)) or electricity infrastructure development (s49(20)(a)), all of which require an environment impact statement, public environment report or development report and which require subsequent declaration from the Governor.
[171] There are two exemptions encompassed in this: firstly that clearance is incidental to the construction or expansion of a building or infrastructure and the Minister is satisfied that the clearance is in the public interest (reg 5(1)(d)(i)(A)) or secondly that the clearance is required in connection with the provision of infrastructure to a building, (reg 5(1)(d)(i)(B)).
[172] Annual Report of the Native Vegetation Council 2008/9 p3.

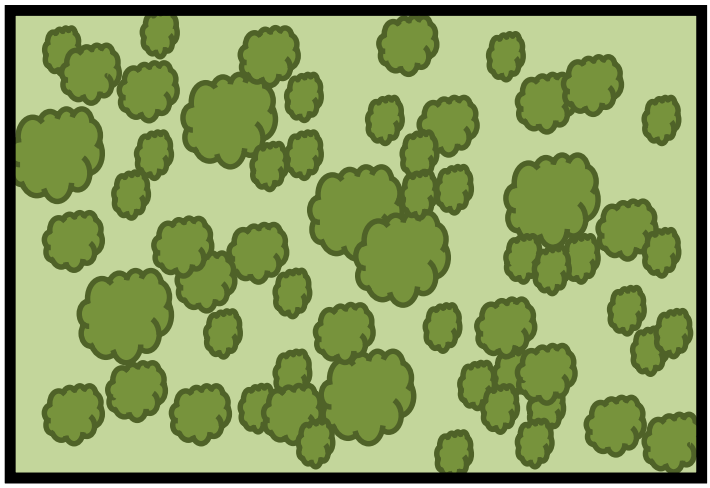

Figure 1: Tree covered land

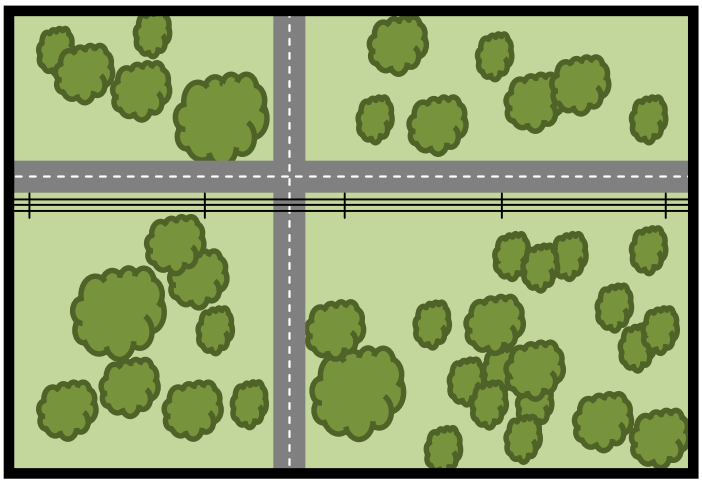

Figure 2: Trees cleared for infrastructure

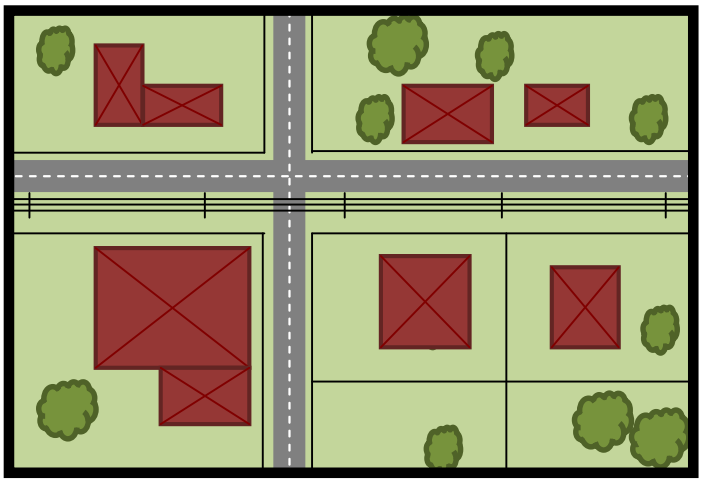

Figure 3: Land subdivided for housing with clearance around dwellings, buildings and fence lines and few trees remaining.

We note that section 27(1) which precludes clearance of intact stratum applies to this

example. However, the definition of intact stratum[173] is quite specific and unlikely to apply to many sites thereby still allowing vegetation to be cleared. Further, as the exemptions operate by way of self-assessment the NVC may not be given an opportunity to apply the definition.

The Greenfields sites around Mt Barker and Gawler which have recently been approved for sub-division are likely to face similar losses. Further, similar issues have been reported around Melbourne, where the two main threats to native vegetation are industrial and urban expansion and the subdivision of rural blocks into smaller blocks with the loss caused by the associated infrastructure such as roads, houses, sheds, fences and dams[174]. These threats exist despite the native vegetation plans in place in Victoria[175].

We recommend that the cumulative impact of the regulations be addressed.

As indicated above, in order to better streamline procedures, clearance matters involving a development application should be dealt with at the referral stage of the development application. We recommend that pursuant to the *Development Act* and regulations, the NVC be given a power of direction in relation to development applications. In particular, we recommend that a power of referral with direction should be given to the NVC pursuant to section 37 of the *Development Act*, regulation 23 and schedule 8 of the *Development Regulations* so that development applications including those for housing, subdivision, major developments, crown development, infrastructure developments and ancillary development would be considered in the light of the principles of clearance potentially resulting in the refusal of the development if those principles are contravened. This would enable the better protection of biodiversity. In addition, this may be advantageous to developers[176].

Note that with respect to regulation 5(1)(ab) which deals with residential subdivision, the

[173] S3A(1) *A stratum of native vegetation will be taken for the purposes of this Act to be substantially intact if, in the opinion of the Council—*

(a) the stratum has not been seriously degraded by human activity during the immediately preceding period of 20 years; or

(b) the only serious degradation of the stratum by human activity during that period has been caused by fire

(2) In this section ***stratum*** *of native vegetation means a layer of a plant community consisting of plants that comprise native vegetation and that have a similar growth habit.*

[174] Port Phillip and Westernport Catchment Management Authority, Regional Catchment Strategy (2004-2009) http://www.ppwcma.vic.gov.au/publicaitons_plans.htm referred to in Webb, R, "Victoria's Native Vegetation Framework – achieving "net gain" at the urban growth boundary?" (2009) 26 EPLJ 236 at 237.

[175] See them at p238.

[176] Developers can spend a lot of resources obtaining development approval only to later be rejected at the NVC. See the heading Administration: NVC above and the Planning Chapter.

Regulations guidelines[177] provide that:

*"This regulation provides **certainty** that once sub-division approval has been granted native vegetation may be cleared for a house site and associated structures at the land division stage….*
*The NVC, **might not restrict the reasonable clearance for a house site**, but will negotiate with the developer to ensure that the loss of significant vegetation is avoided or minimised.*

*…the NVC **will not restrict reasonable clearance for infrastructure**; however, the location of the works must minimise the impact on areas of native vegetation…"* (emphasis added)
These Regulations Guidelines do not appear to have been written with the avoidance of clearance or the protection of native vegetation in mind, but rather with the aim of facilitating the exemption in this case for development. We recommend that they be rewritten with a view to the avoidance of clearance.

Public Utilities

The following exemptions relate to public utilities and only one requires a SEB[178]:

- Reg 5(1)(e) Crown repair or maintenance works: Clearance is incidental to the repair or maintenance work of the Crown;
- Reg 5(1)(f) Electricity: Clearance is undertaken or incidental to the works of an electrical entity under the *Electricity Act* 1996[179]. An important difference to note between this exemptions and the others mentioned here is that under section 55 of the *Electricity Act* it is the electricity entity's duty to follow the principles of vegetation clearance;
- Reg 5(1)(g) Infrastructure: Clearance is incidental to the repair and maintenance of infrastructure;
- Reg 5(1)(h) Commissioner of Highways: Clearance is incidental to work being undertaken by the Commissioner of Highways.

Public utilities are often undertaking works on public land which has the last remaining native

[177] South Australian Department of Water, Land and Biodiversity Conservation *A Guide to the Regulations under the Native Vegetation Act 1991* September 2009.
[178] Clearance under regulation 5(h) by the Commissioner of Highways requires an SEB.
[179] Regulation 5(f)(i). Pursuant to s 55 of the *Electricity Act,* an electricity entity has a duty to take reasonable steps to keep vegetation of all kinds clear of public power lines and to keep naturally occurring vegetation clear of private power lines, in accordance with the principles of vegetation clearance.

vegetation on it in the locality. Often there is cleared private land in the vicinity which could be negotiated for the siting of the service. Therefore, clearance should be avoided by, for example, the requirement that an appropriately priced SEB be achieved to enable the clearance. If the SEB is priced in the hundreds of thousands of dollars, there is an incentive to consider private land acquisition through which to operate the service.

Dams

Several exemptions relate to dams and these include:

- Reg 5(1)(i) Existing dam: Clearance incidental to the maintenance of an existing dam;
- Reg 5(1)(j) New dam: Clearance incidental to lawful construction of a new dam if less than 500m^2 or 200m^2 (depending on the area of the State), as long as the site is already been cleared and has been used for cultivation or pasture for the previous 5 years;
- Reg 5(1)(ja) Dam on pastoral land: Clearance incidental to the lawful construction or expansion of a dam on pastoral land provided that the NVC standard operating procedures are applied or a management plan approved by the NVC is adopted and an SEB is achieved if there is clearance.

These last two exemptions also require consideration of the need to preserve biodiversity and the needs of the owner. Vegetation listed under Schedule 1, namely river red gums, is not covered by the exemption.

We understand that the Department for Water now requires dams to be off-stream[180], whereas previously they were required to be on-stream where there is often remnant native vegetation. Given this, there is greater flexibility for placing dams on cleared land and so we recommend that these exemptions be removed.

Public safety

This category of exemption enables the clearing of vegetation for the purpose of maintaining public safety. There is no requirement that these achieve a substantial environmental benefit. These exemptions relate to:

[180] see http://www.epa.sa.gov.au/xstd_files/Water/Brochure/waterwise5.pdf.

- Reg 5(1)(k) Clearance near a building or structure: Clearance of vegetation that is growing not more than 20 metres from a prescribed building or 5 metres from a prescribed structure;
- Reg 5(1)(l) Safety of person or property: Clearance of a plant is more than two metres in height and there is a danger that it or a limb of it will fall over and there is real risk of personal injury or damage property;
- Reg 5(1)(la) Limbs: Clearance that involves the limb of a plant that is overhanging a building;
- Reg 5(1)(lb) Public safety: Clearance is necessary to protect public safety;
- Reg 5(1)(p) State disaster: Clearance is by the State Coordinator or an authorised officer acting pursuant to section 15 of the *Emergency Management Act 2004.*

The provision in regulation 5(1)(k) overlaps to some extent with the bushfire regulations and in particular regulation 5A(1)(a) which allows clearance more than 20 metres beyond a building or more than 5 metres beyond a structure with the approval of the Chief Officer of the Country Fire Service (CFS). As a result, consideration should be given to rationalising these two provisions and we recommend deleting this regulation.

Regulation 5(1)(lb) concerning public safety is far too broad to remain as a stand-alone provision. The term, "public safety" is not defined and so its application could be limitless. This provision was introduced particularly to deal with concerns regarding trees along roads and rail corridors but the term "public safety" has far broader application and so for example, could result in native vegetation being removed in a forest. Such protection is not needed given the application of regulation 5(1)(l) and (la).

Clearance of roadside vegetation is also of particular concern. It is often only the roadside which contains reasonable stands of native vegetation and clearance of it would severely reduce the beauty and biodiversity of our State.

The Nature Conservation Society echoes these concerns where it states:

"As it currently stands the framework could allow for the clearance of a substantial amount of native vegetation on the State's road network, in many cases without the requirement for a Significant Environmental Benefit offset…
By removing the requirement for a Significant Environmental Benefit offset when vegetation is cleared for road safety purposes, the disincentive for vegetation clearance is removed,

making it more likely that vegetation clearance is the cheapest option and thus will be preferred in place of more expensive alternative road safety risk mitigation measures (eg barriers). The draft framework does not require road managers to exhaust all other potential risk mitigation measures prior to instigating clearance. Thus the removal of the requirement for Significant Environmental Benefit offsets in these circumstances undermines the effectiveness of the offset scheme which is intended to minimise the loss of native vegetation, and the framework does not in any way compensate for this."[181]

It is said that trees don't jump into the road and kill people. It is the driver's obligation to drive responsibly. If there is concern regarding particular trees on roadsides and rail corridors, we recommend that issues such as reducing the speed limit and the condition and design of the road and rail corridor be considered first in order to avoid clearance where possible. Further, consideration could be given to providing better driving training or increasing the age that teenagers are able to obtain a licence to 18[182]. Roadside vegetation clearance is already adequately covered in regulation 5(1)(v) and could easily be broadened to include vegetation along rail corridors.

We recommend that consideration be given to regulation 5(1)(lb) be deleted or alternatively that a limited definition of public safety be applied and the achievement of an SEB and other matters set out below be included.

Private Firewood and fencing

A general requirement of these is that the clearance of vegetation does not kill the vegetation or prevent regrowth. There is a further requirement that only plants with a diameter of 300mm or less at the base may be cleared. These exemptions include:

- Reg 5(1)(g) Firewood: Clearance is solely for the purpose of providing firewood on private land for domestic use;
- Reg 5(1)(r) Fence posts: Clearance is solely for the purpose of providing fence posts for construction of a permanent fence or repairs to an existing fence for the owner's personal use;

[181] http://www.ncssa.asn.au/index.php?option=com_content&task=view&id=234&Itemid=1 See also Mark Parnell's question in Parliament which again reiterates these concerns on 5 April at http://www.markparnell.org.au/speech_prn.php?speech=1022.

[182] Teenagers, especially males, are known to be susceptible to engaging in risky behaviour such as driving fast or under the influence of alcohol. Recent research suggests that the teenage brain is not fully mature and that risk assessment and impulse control are particularly poorly developed. See, for example, Choudhury et al, *Development of the Teenage Brain*, Mind, Brain and Education, September 2008, Volume 2, Issue 3, p 142.

- Reg 5(1)(s) Fence line: Clearance of not more than 5 metres on both sides of a fence and is solely for the purpose of constructing or maintaining owner's existing fence.

It is extremely difficult to police clearance for these purposes. Anecdotally, trees are cut down for "firewood"[183] when in fact it appears that the trees are being cut down for clearance purposes. Plantation timber should be used for firewood and fencing purposes, not native vegetation, given the scarcity of our native vegetation. For these reasons we recommend that regulation 5(1)(q) and 5(1)(r) be deleted or if there is concern that the trees will be cut down anyway, that the regulations be given more limited application by the operation of a threshold with a reduced limit.

We recommend that the impact of regulation 5(1)(s) be reduced by only allowing clearance of up to 1 metre on one side of the fence and up to 2.5 metres on the other side of the fence. This would still enable trucks and vehicles to access the fence area and animals to travel through (should that be necessary).

Roads and tracks

Certain clearance exemptions relate to roads and tracks. For the most part, the principle of SEB is not mentioned as consideration that must be taken into account. These exemptions are:

- Reg 5(1)(t) Vehicle track: Clearance for the purpose of establishing or maintaining an existing track that is no more than five metres wide for use by vehicles with four wheels;
- Reg 5(1)(u) Walking track: Clearance for the purpose of establishing or maintaining a walking track for use by pedestrians that is no more than one metre in width;
- Reg 5(1)(v) Roadside vegetation: Clearance by a council if vegetation is growing on a road reserve in the area of the council.

A vehicle track of five metres wide appears to be excessive. Given the average width of a four wheel drive is in the vicinity of 2 metres, the track need only be about 3 metres wide. There is concern that the walking track exemption allows motorbikes and horse to travel through regions of native vegetation further degrading and impacting biodiversity. However, if this exemption was removed, it may result in larger tracks being cut unnecessarily. Clearance of roadside vegetation is also of concern and these concerns are set out above.

[183] Dr C Reynolds, Retired University Lecturer.

Taking a plant or part of a plant

Regulation 5(zb) provides for three exemptions relate to the taking of a plant or part of plant but only if this does not cause substantial damage to it. Clearance comprises:

- The taking of a specimen;
- The taking of a cutting for propagation;
- The taking of part of a plant in order to obtain its seeds.

Mining

Certain exemptions relate to mining.

- Reg 5(1)(zc) Mining exploration: Clearance incidental to exploratory operations authorised under the *Mining Act*[184] or the *Petroleum and Geothermal Energy Act*. Clearance is undertaken in accordance with accepted industry environmental management practices for facilitating regrowth of native vegetation;

- Reg 5(1)(zd) Mining operation: Clearance incidental to operations authorised under the *Mining Act*. In the case of the *Mining Act*, operations must be undertaken in accordance with a management plan under that Act and the Council has signified that there will be an SEB on the site or payment into the Fund[185].
  In the case of the *Petroleum Act*, clearance in authorised operations must be in accordance with a statement of environmental objectives and the Council has signified that there will be an SEB on the site or payment into the Fund[186].

- Reg 5(1)(zda) Mining operation before 25 Aug 2003: clearance incidental to operations under a *Mining Act* which is defined as:

  - *Mining Act 1971;*
  - *Opal Mining Act 1995;*
  - *Petroleum Act 2000;*
  - *Offshore Minerals Act;*

[184] Section 30 of the *Mining Act* states that the Minister, when granting an exploration licence, shall give proper consideration to the protection of the natural beauty of a locality, flora and fauna that may be endangered or disturbed, etc.
[185] Regulation 5(zd)(ii)(A).
[186] Regulation 5(zd)(ii)(B).

- *Roxby Downs (Indenture Ratification) Act 1982;*

- Reg 5(1)(ze) Private Mine: clearance incidental to operations at a private mine.

Guidelines located have been prepared pursuant to the *Mining Act*, which must be complied with. These include the Preparation of a Mining Lease Proposal or Mining Rehabilitation Program[187]. The Mineral Regulatory Guidelines MG8 set out requirements for the SEB[188].

Under the *Petroleum Act*, a licensee must not carry out regulated activities unless a statement of environmental objectives is in force[189]. The statement of environmental objectives must contain provisions relating to the rehabilitation of land which has been adversely affected[190].

These provisions (apart from those regarding mining operations since 25 August 2003 as set out in regulation 5(1)(zd)) allow mining exploration and operations with little consideration for native vegetation. We recommend that mining be treated in the same way as users as set out below. It is appropriate that such conditions apply to exploration, existing and privates mines given the substantial damage which can be caused by these operations.

Agriculture

Certain exemptions relate to the cultivation of land for agriculture and other purposes. There is no requirement to consider substantial environmental benefit. These exemptions include, amongst other things:

- Reg 5(1)(zf) Cultivation, pasture or forestry: Clearance of regrowth, which is less than 5 years old and less than 150 mm in width, on land which has been used for cultivation, pasture or forestry;
- Reg 5(1)(zfa) Regrowth > 5 years old: The vegetation to be cleared consists of plants that have regrown on land previously cleared and land consistently used for agricultural purposes as part of commercial enterprise. The NVC must approve a management plan before clearance is undertaken;

[187] This can be accessed at http://www.pir.sa.gov.au/minerals/forms_and_guidelines/guidelines, accessed 14 April 2011.
[188] It was not possible to locate these documents. We understand that the NVC website is being updated.
[189] Section 96.
[190] Section 100(2) Existing SEOs are located on the Environmental Register of the Primary Industries and Resources website: http://www.pir.sa.gov.au/petroleum/environment/register accessed 14 April 2011.

- Reg 5(1)(zfb) Degraded land: Clearance to enable agricultural use on land which has been degraded over time, subject to a NVC approved management plan;
- Reg 5(1)(zg) and (zh) Domestic stock: Clearance by or for domestic stock, subject to a management plan.

Farmers appear to be treated differently under the Act[191] perhaps because they are most affected by the application of environmental laws on private land[192]. As indicated in the NRM chapter of this report, site contamination provisions have retrospective operation due to the serious nature of that matter. Loss of biodiversity is equally serious and so consideration should be given to whether the above are reasonable land management activities that should be covered by way of exemption or whether their application can be limited.

Consideration should be given to the provision of incentives for farmers who keep and maintain their native vegetation. We recommend that consideration be given to there being a biodiversity rate charged to all rate payers in South Australia[193] and that this money be used to fund biodiversity protection, restoration and enhancement. In this way farmers are not solely liable for preserving native vegetation on private land.

There is concern that farms are rated differently by councils[194], that is, at a lesser amount, there may be an implication that there is an incentive to be a "farm" and therefore potentially an implicit incentive to clear for that purpose. If that is the case, we recommend there be an incentive such as a rate discount to farmers who keep and maintain their native vegetation.

Miscellaneous

Miscellaneous exemptions relate to:

- Regulations 5(zi) and (zj) Ecological processes: Clearance for the purpose of enhancing ecological processes or protecting certain native vegetation, such as

[191] See section 29.
[192] Debate on the Threatened Species Conservation Amendment Bill in the New South Wales Legislative Assembly included comment that the preservation of threatened species was being borne by landholders. See New South Wales Legislative Assembly Hansard 25 September 2002.
[193] In a similar manner as the emergency services levy which is on all fixed and some mobile property to help fund emergency services across South Australia as indicated at: http://www.sa.gov.au/subject/business,+industry+and+trade/Licensing+and+regulation/Taxation/Emergency+services+levy.
[194] This is the case in New South Wales as indicated in Kelly A and Stoianoff N, "Biodiversity Conservation, Local Government Finance and Differential Rates: The good, the bad and the potentially attractive" (2009) 26 EPLJ 5. Pursuant to section 156 and regulation 10 of the *Local Government Act (SA) 1999* and Regulations local councils may charge differential rates depending on the categories of land use. Further consideration of gazetted council rate charging is required to confirm this.

regenerative burning or clearance of mistletoe subject to a management plan;

- Reg 5(zk) Pest control: If it is not reasonably practicable to comply with the *Natural Resources Management Act* in relation destroying or controlling plants or animal without at the same time clearing native vegetation;
- Reg 5(zl) Upper South East Water Management Works: Clearance for the purposes of construction or maintenance of water management works in certain counties and hundreds the Upper South East;
- Reg 5(zm) Streaky Bay/Port Lincoln water: Clearance for the purpose of augmenting or preserving an underground water supply in the County of Flinders or Robinson.

Regulation 5(zi), 5(zj) and 5(zk) enable the removal of native vegetation if necessary for the purpose of enhancing biodiversity, for example, by regenerative burning) or by controlling threats to biodiversity by for example the removal of weeds or installing deer fencing or other methods to counteract the impact of feral animals.

18. Bushfire regulations

The bushfire regulations were introduced following recent devastating bushfires in South Australia and Victoria. The recommendations to the inquest of the Wangary fires on the Eyre Peninsula in 2005 included Recommendation 33 which provided that the Minister for Emergency Services, the Minister for Environment, the Chief Officer of the CFS and the NVC collaborate to develop a Code of Practice relating to the management of native vegetation as it affects bushfire prevention[195].

The regulations provide that native vegetation may be cleared if for a purpose related to fire prevention or control as follows:

- Reg 5A(1)(a) Near buildings or structures: Clearance more than 20 metres beyond a building or more than 5 metres beyond a structure with the approval of the Chief Officer of the Country Fire Service (CFS);
- Reg 5A(1)(b) Combustible material: Clearance to reduce combustible material if in accordance with a bushfire prevention plan or with the approval of the Chief Officer of the CFS;
- Reg 5A(1)(c) Fire legislation: Clearance undertaken under direction of fire and SES

[195] Finding of Inquest into the deaths of SE Borlase, JM Borlase, HK Castle, JM Griffith, JM Kay, GJ Russell, Z Russell-Kay, TA Murname and NG Richardson.

officers under various provisions of the *Fire and Emergency Services Act* to control a running fire;

- Reg 5A(1)(d) Fire track: Clearance for establishing or maintaining a fire access track, not more than 15 metres wide, with the approval of the Chief Officer of the CFS;
- Reg 5A(1)(e) Fuel break: if for a fuel break of not more than 5 metres along a fence line, 7.5 metres in the Mallee or 20 metres on a farm and with an authorized bushfire prevention plan unless the break is already within 200 metres of a cleared area;
- Reg 5A(1)(f) Bushfire Prevention Plan: if carried out in accordance with a bushfire prevention plan. The bushfire prevention plan is one prepared by the district bushfire prevention committee under the *Fire and Emergency Services Act.*

The Fire Regulations are very broad and may well result in the destruction of much native vegetation in this State, with an obvious biodiversity, amenity and environmental cost.

There is a concern that the provisions appear to be misconceived in that the destruction of native vegetation, if not properly managed, is likely to be replaced by exotic and other native vegetation. The Taylor Report into the Victorian bushfires relevantly indicates that there is "evidence fire spreads more readily in modified and disturbed vegetation"[196].

As a result, it is important that this is monitored and we recommend that consideration be given to reducing the impact of these regulations on native vegetation and therefore biodiversity protection.

Further, as indicated above[197] we are also concerned at the delegation of the Council's role to the CFS[198] if such delegation is to continue (and we do not support this) we recommend that appropriate training and auditing of decisions be undertaken[199].

[196] Taylor C, "Victorian 2009 February Fires: A Report on Driving Influences and Land Tenures Affected" at p67.
[197] See discussion under section 15 on delegation above.
[198] Regulations 5A(1)(a) and 5A(c).
[199] See complete recommendations under section 15 on delegation above.

Recommendations

- In making recommendations, we would like to propose the removal of all exemptions and the requirement that any clearance be done by application, but we are concerned that this may be not be treated seriously. Such a position, however, would be equivalent to the operation of exemptions under the Environment Protection Act[1] which are only granted upon application and proper assessment.
- We are concerned that the number of exemptions has increased substantially and as indicated above, dwarf the operation of the Act and so recommend that consideration be given to reasonable land management activities that should be covered by way of exemption. With this in mind, we recommend that the exemptions relating to the following be removed:
    - regulations 5(1)(i), (j) and (ja) regarding dams as these are covered by "water affecting activities" in the Natural Resources Management Act and an application be made for them given the substantial clearance involved;
    - regulation 5(1)(k) Clearance near a building or structure be deleted as it appears to be a duplication of regulation 5A(1)(a);
    - regulation 5(1)(lb) be deleted or its operation be limited by a definition of "public safety";
    - regulation 5(1)(q) regarding firewood, or if this exemption remains, as with fence posts it be subject to a more limited threshold than currently operates;
    - regulation 5(1)(r) regarding fences posts, or if this exemption remains, it be subject to a more limited threshold;

- We recommend that a referral with a power of direction be given to the NVC pursuant to section 37 of the Development Act, regulation 23 and schedule 8 of the Development Regulations so that development applications including those for housing, subdivision, major developments, crown development, infrastructure developments and ancillary development be considered in the light of the principles of clearance potentially resulting in the refusal of the development if those principles are contravened.
- We recommend amendments to the following regulations:
    - regulation 5(1)(s) regarding fence lines be substantially reduced by only allowing clearance of up to 1 metre on one side of the fence and up to 2.5 metres on the other side of the fence

- regulation 5(1)(t) vehicle track consideration be given to reducing the exemption from 5 to 3 metres wide;

- With respect to the balance of the exemptions[1] we recommend that:
  - the operation of an automatic exemption by way of self-assessment be removed and instead, there be a requirement that an applicant give fourteen[1] days written notice to the NVC of his or her intention to clear. In that period, the NVC makes an assessment as to whether the claimed exemption is legitimate or whether a more suitable (less damaging) option is available. If the exemption is not legitimate or if there is a better option, an application for clearance must be submitted for consideration by the NVC.
  - this assessment be paid for by an appropriately priced application fee[1]. If the fee was high enough it would in itself operate as a deterrent to clearance or at least a consideration;
  - all orders granting clearance:
    - only be allowed if there is no other practicable alternative;
    - be accompanied by a requirement that:
      - a SEB be achieved[1];
      - a management plan approved by the NVC is entered into;
      - the need to preserve biodiversity is taken into account.

- The Regulations Guidelines be rewritten with a view to the avoidance of clearance.
- We recommend the cumulative impact of the regulations be addressed.
- We recommend that consideration be given to there being a biodiversity rate charged to all rate payers in South Australia[1] and that this money be used to fund biodiversity protection, restoration and enhancement. In this way farmers are not solely liable for preserving native vegetation on private land.
- There is concern that farms are rated differently by councils[1], that is, at a lesser amount, there may be an implication that there is an incentive to be a "farm" and therefore potentially an implicit incentive to clear for that purpose. If that is the case, we recommend there be an incentive such as a rate discount to farmers who keep and maintain their native vegetation.
- The exemptions be removed from the Regulations and instead be included in the Native Vegetation Act.

19. Duplication of procedures

Section 29A provides for the avoidance of duplication of procedures where approval is also required under a Commonwealth Act and this is generally appropriate. However, the wording Section 29(4) appears to assume that where the Commonwealth Minister has given approval to a controlled action the NVC will also approve the simultaneous application for clearance. This is inappropriate and the section could be worded to clarify as follows:

(4) Where a controlled action under the Commonwealth Act comprises or includes the clearance of native vegetation, the Council, if it determines to consent to the clearance of native vegetation—
(a) must, if the Commonwealth Minister has given his or her approval to the controlled action, consider whether the conditions (if any) to be imposed on the consent should be consistent with the conditions (if any) attached to the Commonwealth Minister's approval under the Commonwealth Act;
(b) may impose a condition on the consent that requires compliance with all or some of the conditions attached to the Commonwealth Minister's approval under the Commonwealth Act.

20. Enforcement[200]

We note that there is no appeal from the decision of the NVC. Appeals are discussed in the *Environmental Protection and Biodiversity Conservation Act* Report.

Under section 31A, persons with specified interests (Council, person with a legal or equitable interest in land affected or a party to a heritage agreement) may apply to the ERD Court for an order to remedy or restrain a breach of the Act (which includes a breach of a heritage agreement: section 31, and includes threatened breaches). If an action is brought by someone other than the Council, the Council must be notified and be allowed to join the action if it applies.

The powers of the Court include to:

- require the respondent to refrain, temporarily or permanently, from the act, or course of action, that constitutes the breach;

[200] See also the Addendum to this Chapter which comments on the *Native Vegetation (Miscellaneous) Amendment Bill 2011* currently before the South Australian Parliament.

- require the respondent to make good the breach or to take other action the Court thinks appropriate taking into account the nature and extent of the original vegetation;
- compensation to any person who has suffered loss or damage or incurred costs or expenses as a result of the breach;
- require the respondent to pay into the Fund an amount on account of the financial benefit the respondent has gained, or can reasonably be expected to gain, by the breach;
- require the respondent to pay into the Fund an amount in exemplary damages;
- require the respondent to take specified action to publicise—
    (i) the breach; and
    (ii) its environmental and other consequences; and
    (iii) the other requirements of the order made against the respondent;
- require the respondent to refrain from an act or course of action, or to undertake an act or course of action, to ensure that the respondent does not gain an ongoing benefit from the breach.

These are important deterrents to those considering breaching the Act. It is important to have processes discouraging native vegetation clearance in order to avoid a proponent budgeting for penalties as a 'cost of development'[201].

Pursuant to section 31B where the Court is satisfied that a respondent has cleared vegetation illegally or has failed to comply with a condition, it must make an **order to make good** the breach or other appropriate action. The order must direct:

- removal of buildings works or vegetation put in place since clearance;
- establishment of species of plants as specified;
- nurture, protect and maintain the plants till fully established or as long as specified.

As indicated above, this is an important provision as it provides a substantial disincentive to clear. This power should remain as a fine alone can be seen as "a cost of development".

Ancillary orders may also be made. Obstruction of a person carrying out such an order is an offence with a maximum penalty of $10,000. However, if an owner or occupier did not know

[201] Annual Report of the Native Vegetation Council 2009/2010 p19.

of the illegal clearance and will suffer financial loss by the carrying out of a required order, the Court may order the respondent to pay the amount of loss to the owner or occupier or refuse to make an order or modify the order (including ordering the planting of vegetation on other land owned by the respondent). It may also refuse to make an order if compliance would not be reasonably practicable (not including financial grounds unless unduly harsh).
Under section 31C, the Court has power to make interim orders. Anybody failing to comply with an order under sections 31A-31C is guilty of an offence with a maximum penalty of $100,000 as well as being liable for contempt of the order and the Council may have the ordered work carried out at the respondent's expense[202].

Under section 31E, officers expressly authorised to issue directions by way of an enforcement notice may do so where the officer has reasonable grounds to believe that a person has breached or is likely to breach the Act. Section 31E(9) provides that a direction can only be given if the breach of the Act occurred within the previous 12 months. This decreases the number of likely prosecutions and the limitation should be extended by two years, which brings it in line with contractual law.

As indicated above consideration should be given to increasing penalties. Also note legislative change is needed to the *Environment Resources and Development Court Act* which does not allow the Environment Resources and Development Court to order penalties above $300,000[203].

Under section 32, appeals may be made to the Land & Valuation Court of the Supreme Court.

Under section 40, there is a general defence against offences under the Act if the defendant proves it was not done intentionally or from a failure to take reasonable care to avoid committing the offence. There is concern that this defence such as this offer too much protection.

[202] Section 31D(1) & (2).
[203] Section 7 See also *Director of Public Prosecutions v TransAdelaide* [2004] SAERDC 92.

Recommendations

- Amend section 29A of the Native Vegetation Act (which reduces duplication of procedure between the Environment Protection and Biodiversity Conservation Act and the Native Vegetation Act to ensure the NVC can still make an independent assessment of such an application for clearance.
- Increase the jurisdiction of the Environment Resources and Development Court to enable it to order penalties under the Native Vegetation Act for amounts above $300,000.

21. Interrelationship with other Acts

There is no direct cross-reference between the *Native Vegetation Act* and regulations and the *Natural Resources Management Act* and regulations, the *Environment Protection Act* and regulations or the *Development Regulations*. There is minor reference to NRM boards in the *Native Vegetation Act*[204]. There is a degree of cross-reference between the *Native Vegetation Act* and the *Development Act*, as discussed below and elsewhere in this report.

Development Act 1993 (SA)

The links with the *Development Act* as set out above and in the Planning chapter are urgent. They have been sought for more than ten years and would better streamline the development process and the better protect biodiversity. As indicated above we recommend that a referral with a power of direction be given to the NVC pursuant to section 37 of the *Development Act*, regulation 23 and schedule 8 of the *Development Regulations* so that development applications including those for housing, subdivision, major developments, crown development, infrastructure developments and ancillary development would be considered in the light of the principles of clearance potentially resulting in the refusal of the development if those principles are contravened.

Environment Protection Act 1993 (SA)

Once the power of referral is in place under the *Development Act*, the links with the

[204] Section 29(5) and regulations Regulation 5(9).

Environment Protection Act will operate by virtue of schedule 8 of the *Development Regulations*.

However, where there is no development application, and instead an environmental authorisation is being sought[205], the Environment Protection Authority should be required to refer the matter to the NVC who should have a power to direct the authority with respect to the authorisation**.**

Natural Resources Management Act 2004 (SA)

Currently, the *Native Vegetation Act* and the *Natural Resources Management Act* have limited regard for each other. Given the parlous state of native vegetation in this state, as indicated above, consideration should be given to whether the NVC be given a power of direction over the matters covered by the *Natural Resources Management Act* with respect to clearance applications where the clearance breaches the Principles of Clearance.

ADDENDUM TO NATIVE VEGETATION ACT

Native Vegetation (Miscellaneous) Amendment Bill 2011

On 22 June the *Native Vegetation (Miscellaneous) Amendment Bill 2011* was introduced into the House of Assembly and is currently in the Legislative Council. The Bill sets out a number of proposed amendments which may impact the protection and enhancement of native vegetation, and also may have wider implications for biodiversity in South Australia. A summary of the significant amendments follows.

Application

The *Native Vegetation Act* does not apply to the metropolitan area of Adelaide. There are a number of exemptions to this general rule set out in section 4 of the Act. So, for example, the *Native Vegetation Act* applies to protect the areas that are east of the Hills Face Zone, the City of Onkaparinga, the north western portion of Port Adelaide and the areas designated metropolitan open space in the hundreds of Adelaide, Munno Para, Noarlunga and the Hills Face Zone.

[205] A works approval under section 35, a licence under section 36 or an exemption under section 37. The provisions dealing with application for and granting of these environmental authorisations are ss.38-40.

The Bill now extends the application of the Act to the City of Mitcham consisting of Belair, Bellevue Heights, Blackwood, Coromandel Valley, Craigburn Farm, Eden Hills, Glenalta and Hawthorndene. This amendment accords with the original intention of the Act and we support it.

In fact, exempting metropolitan Adelaide is incongruous with the objects of the *Native Vegetation Act* which includes conserving, protecting and enhancing native vegetation and we recommend the application of the Act be broadened to include the areas currently excluded by the Act.

The Native Vegetation Council

In relation to the Native Vegetation Council, the Bill stipulates firstly that the Council be subject to the general direction and control of the Minister but stipulates that the Minister cannot give direction with respect to any advice or recommendation of the Council or in relation to a particular application that is being assessed by it[206].

This amendment is of concern as it has the potential to compromise the operations of the Native Vegetation Council[207]. Robust decision making is less likely where the influence of government (even if only indirect) is present and so we do not recommend the change.

Of more concern, however, is the amendment to section 8 of the *Native Vegetation Act*, which will result in a mandatory requirement that the membership of the Council include a person nominated by the Minister with extensive knowledge and experience in planning and development. Given that the Native Vegetation Council acknowledges that development is a major threat to native vegetation[208], this amendment is at odds with the objects of the Act to preserve native vegetation and we do not support the amendment.

Native Vegetation Fund

The Act sets up the Native Vegetation Fund and section 21(6) of the Act currently enables the Native Vegetation Council to use money to establish, regenerate, preserve or maintain

[206] A new proposed section 7(3).
[207] This concern remains despite the safeguards inherent in the proposed amendment.
[208] Native Vegetation Council Report 2008/2009 p3.

native vegetation on land that is within the same region of the State as the land on which native is or has been cleared. The Bill introduces a new subsection 21(6a) which gives the Council added flexibility in that it may use the fund to establish, regenerate or maintain native vegetation in a region other than the region where the land which is to be cleared is located.
The Bill lists the criteria that the Council must satisfy before deciding to enable revegetation in another region as follows:

- the environmental benefit in the proposed region must outweigh the significant environmental benefit which would be achieved in the original region where the land it to be cleared;
- the native vegetation in the other region includes or supports rare, vulnerable or endangered species, habitats or communities;
- the establishment, regeneration and management of the native vegetation is carried out in accordance with section 25 guidelines prepared for this purpose;
- such matters as the Native Vegetation Council thinks fit.

There is concern that:

- there is a trend towards allowing clearance if there is an offset by way of a significant environmental benefit;
- the regulation of the criteria governing the significant environmental benefit is not sufficiently rigorous to guarantee the quantity and quality of native vegetation being preserved in the face of the threat posed by development and the profit opportunity it affords.

  This is particularly the case where the regulation of the significant environmental benefit is predominantly through guidelines which are not easily accessible to the public which should be drafted by an independent committee such as a scientific committee and which should be set out in subordinate legislation such as a schedule to the regulations to aid transparency.

If an offset scheme in the form of a significant environmental benefit is to continue to operate, then adding flexibility by increasing the location of the land on which the offset can be planted is sensible but the criteria to be considered should include the Principles of Clearance.

Section 26: The offence of clearance - expiation fees and time limits

Section 26 of the Act creates the offence of clearing native vegetation. The Bill proposes that the expiation fees in section 26 be increased from $500 to $750. These fees are in addition to penalties (which may be substantial) which apply under section 26. Expiation fees and penalties in the Act are generally lower than they should be if they are to provide sufficient disincentive to those considering clearance in contravention of the Act. We recommend a greater increase in both the expiation fee and the penalty.

The Bill increases the time within which the Native Vegetation Council can initiate proceedings for clearance from 21 days to six months. This is a welcome change.

Offsets: A Credit for Environmental Benefit Scheme

The Bill proposes to include a new section 28A to the Act which relates to credit for an environmental benefit. Under this proposed section, if a person has achieved an environmental benefit or has, in accordance with a consent to clear native vegetation, achieved an additional environmental benefit, and the Council is satisfied that the benefit is significant, the Council may credit the person with having achieved an environmental benefit. This is a positive in that it enables people to build up credits for the establishment of native vegetation. However, this proposed section along with the significant environmental benefit scheme presently operating under the *Native Vegetation Act* is essentially a nascent offsets scheme in which the nature and value of the offsets is to be determined by the Native Vegetation Council without any other guidance from the legislature.

If there is to be an offsets scheme (and our concerns are set out in our Biodiversity Report) then it must be properly regulated. We propose that an offsets scheme comply with the following criteria:

- all applications be considered under the principles of clearance;
- there be “no go areas” informed by appropriate biomapping;
- a net gain approach be applied. Net gain is identified as ‘*where, over a specified area and period of time, losses of native vegetation and habitat, as measured by a*

combined quality-quantity measure[209] *are reduced, minimised and more than offset by commensurate gains*'[210]*;*

- like for like: For example, the BioBanking Assessment Methodology, in New South Wales, states that the number and class of credits obtained from a BioBank site must be compatible with those required at a development site;
- consideration of all direct and indirect impacts of the development in establishing the scheme[211];
- ensure offsets are in place before any time lag occurs, unless such time lag is unlikely to materially impact biodiversity;
- prohibit offsets for listed matters or threatening processes;
- appropriate management planning which allows for adaptive management and includes appropriate conditions[212] and which is supported by legal, financial and institutional arrangements including monitoring. Under the BushBroker scheme a landowner is required to enter into a Landowner Agreement which contains a Management Plan and has a duration of ten years[213];
- the offset vegetation be secured for the long term such as by a charge on the land title (to operate in perpetuity) as occurs in both the New South Wales and Victorian schemes[214].;
- the methodology for calculating the offset, that is, the metrics, must be rigorous[215];
- if money is to be paid in place of an offset, a rigorous program to ensure appropriate pricing;
- sufficient resources to ensure adequate compliance;
- incentives[216] be put in place to encourage bush blocks;
- mandatory satisfactory risk assessment before permission to clear and then compliance audit regularly afterward.

[209] Known as the habitat hectare measure.
[210] Native Vegetation Management Framework for Action, 57.
[211] Clarke, P "Proposed Western Australia Biodiversity Legislation", WWF, 2010.
[212] Judge Preston in *Gerroa Environment Protection Society Inc v Minister for Planning and Clearly Bros (Bombo) Pty Ltd* [2008] NSWLEC 173 ensured these offsets worked by including monitoring and compliance conditions that the developer obtain insurance for fire and vandalism and in order to mitigate impacts, and he required the establishment of a corridor of veg on site before the development could take place, in order to mitigate the native vegetation loss.
[213] BushBroker Information Sheet No 5.
[214] *Threatened Species Conservation Act 1995* (NSW), s 127J; BushBroker Information Sheet No. 5
[215] An example of this is the BioBanking Assessment Methodology, which has been created pursuant to s 127B(2) of the *Threatened Species Conservation Act 1995* (NSW).
[216] The carrot.

Section 31EA: Make good provisions proposed to be deleted for "minor matters"

Section 31E(1)(b) of the Act allows an authorised officer to direct a person who has committed a minor breach of the Act to require that person to "make good" the breach. This is an important provision. Without this requirement there is a real risk that the person will clear the land and pay the fine. This is particularly the case where the commercial gain is far greater than the fine.

The proposed section 31EA enables a person who has received a make good order for a minor breach to apply to the Native Vegetation Council for a substituted direction to:

- take such action as appears appropriate to the Native Vegetation Council;
- pay an amount (as determined appropriate by the Council) into the Native Vegetation Fund;
- refrain from or take such action which ensures that the person does not gain an ongoing benefit from the breach.

There is concern that such a section will result in many applications to avoid the make good provisions which were put in place to deter clearance. Without a "make good" requirement there is a real risk that a person will clear the land and accept the fine. This is particularly the case where the commercial gain is far greater than the fine. As a result, this provision should not be allowed.

CHAPTER 5: PASTORAL LAND MANAGEMENT AND CONSERVATION ACT

Introduction

This chapter deals with biodiversity protection pursuant to the *Pastoral Land Management and Conservation Act 1989* (SA) (the *Pastoral Act*).

Pastoral lands are that area of the State outside of the incorporated (council) districts which have been classified as suitable for the grazing of stock. They comprise about 80% of the State's land area. There are 328 pastoral leases configured into 222 pastoral properties, covering 409,000 km^2 of South Australia's rangelands.

The *Pastoral Act* is primarily concerned with the management of sheep and cattle grazing on native vegetation on pastoral land.

Pastoral lands are a significant public asset and need to be managed with a view to the protection of biodiversity.

The *Pastoral Act* provides that a pastoral lease is the only form of tenure that can be granted over Crown land that is to be used wholly or principally for pastoral purposes[1].

A pastoral lease means a lease granted under this Act over Crown land for pastoral purposes, crown land means land held by the Crown that has not been alienated in fee simple and is not part of a reserve under the *National Parks and Wildlife Act 1972 (SA)* or subject to any lease (other than a mining lease), agreement to purchase or dedication and pastoral purposes means the pasturing of stock and other ancillary purposes[2].

[1] Section 8.
[2] Section 1.

The *Natural Resources Management Act 2004* (SA) covers all land within the definition of natural resources in that Act. In this chapter of the report, we recommend streamlining land and resource management processes by incorporating the provisions of the *Pastoral Act* with those in the *Natural Resources Management Act 2004*. This could include the combining of the Pastoral Board and the Arid Lands Natural Resources Management Board. The constitution of the Board could reflect the percentage of freehold land owners to pastoral lease holders in the region.

This would have the advantage of enabling proactive management of private land on the basis or under the guise of streamlining the obligations across all land categories. Combining the Acts has the added advantage that the administration can come under the State NRM Board and preparation of plans can do the same.

Joining the two pieces of legislation is not of critical importance, but rather for streamlining purposes and for the other advantages set out above. However, there may be other reasons for not adopting this approach and if that is the case, maintaining a separate *Pastoral Act* is satisfactory.

1. Objects and Principles

The *Pastoral Act* has both resource exploitation and conservation objectives. While the major goal of pastoral land management is the production of cattle in a sustainable fashion, a secondary goal is the maintenance of biodiversity values off reserve. Unfortunately much pastoral land only contains isolated fragments of biodiversity due to past farming practices.

The goal of sustainable pastoral management can help to maintain biodiversity values, including the maintenance of native grasses and control of invasive weeds and feral animals. However action to protect particularly important habits or species is vital and we consider this further in the context of section 20 of the *Pastoral Act*.

Conservation objectives are primarily met through a statutory program of scientific assessment of the condition of land prior to granting or renewal of a lease. Maximum stocking rates are set on the basis of the capacity and condition of the land.

Section 4 provides that the objects of the *Pastoral Act* are:

> *"(a) to ensure that all pastoral land in the State is well managed and utilised prudently so that its renewable resources are maintained and its yield sustained; and*
>
> *(b) to provide for—*
>
> *(i) the effective monitoring of the condition of pastoral land; and*
>
> *(ii) the prevention of degradation of the land and its indigenous plant and animal life; and*
>
> *(iii) the rehabilitation of the land in cases of damage; and*
>
> *(c) to provide a form of tenure of Crown land for pastoral purposes that is conducive to the economic viability of the pastoral industry; and*
>
> *(d) to recognise the right of Aboriginal persons to follow traditional pursuits on pastoral land; and*
>
> *(e) to provide the community with a system of access to and through pastoral land that finds a proper balance between the interests of the pastoral industry and the interests of the community in enjoying the unique environment of the land."*

Whilst the *Pastoral Act* has a conservation objective it is out of step with modern environmental legislation in that it does not enunciate guiding principles such as ecologically sustainable development[3].

Recommendation

Amend the *Pastoral Act* to include principles of ESD and other principles as follows:

- maintain or improve the conservation status of listed species, populations and communities;
- maintain or improve the extent and condition of natural habitats, including critical habitat;
- protect or restore ecosystem services, processes and functions;

[3] Elsewhere in this report we refer to the unresolved tension between ESD and protection of biodiversity.

- maintain or improve ecosystem integrity, resilience and resistance;
- maintain or improve connectivity within and between ecosystems;
- protect multiple representative examples of ecosystem types;
- facilitate adaptation to environmental change, including climate change; and
- recognise uncertainty and plan for adaptive management.

2. General Duty

Lessees are under a general duty to prevent degradation of the land. Section 7(b) provides that:

"*...it is the duty of a lessee throughout the term of a pastoral lease—*

(a) to carry out the enterprise under the lease in accordance with good land management practices; and

(b) to prevent degradation of the land; and

(c) to endeavour, within the limits of financial resources, to improve the condition of the land."

This duty may be compared with the duty in section 9 of the *Natural Resources Management Act* which, when combined with sections 121 and 122 of that Act, creates a duty on landholders under the *Natural Resources Management Act* to prevent the degradation of the land. Section 7 of the *Pastoral Act* goes further than the *Natural Resources Management Act* in that it requires "good land management practices" and improvement in the condition of the land, albeit within financial limits.

The objects in section 4 and general duty in section 7 could provide more emphasis on biodiversity conservation and enhancement. There is an inherent conflict here between biodiversity conservation and resource management.

Other Duties

Generally a lessee[4] must comply with the provisions of the *Natural Resources Management Act 2004,* the *Dog Fence Act 1946,* the *Mining Act 1971,* the *Petroleum Act 2000* and any other prescribed Act. Acts currently prescribed by regulation are the *National Parks and Wildlife Act 1972,* the *Native Vegetation Act 1991* and the *Noxious Insects Act 1934.*

3. The Pastoral Board

The Pastoral Act sets up a six member Pastoral Board with landholder and conservation interests represented. The Board oversees the monitoring of stocking rates[5]. Board members have expertise in the areas of lease administration, ecology, pastoral management, land and water resource management, soil conservation, animal husbandry, conservation and management of biodiversity. To better protect biodiversity we recommend having 50% of the Board with biodiversity expertise.

Recommendation

Composition of the Board includes 50% of members with biodiversity expertise.

Duties of the Board

The *Pastoral Act* provides that the Minister and the Board must act consistently with, and have regard to, plans and guidelines established by government agencies, resource and planning authorities. They must also have regard to the terms of relevant indigenous land use agreements[6].

Functions of the Board

The functions of the Board are:

[4] Section 22.
[5] Section 12.
[6] Section 5.

- to advise the Minister on the policies that should govern the administration of pastoral land;
- to advise the Minister on any other matter referred to the Board by the Minister;
- to perform the other functions assigned to the Board by or under the Act or another Act or by the Minister[7].

Delegation of Powers by the Board

The Pastoral Board may delegate their powers[8]. We note that the power to approve transfers and sub-leases of pastoral leases have been delegated to program managers or in their absence the Senior Pastoral Inspector and/or the Senior Scientific Officer. This is on the proviso that that they are being transferred and sub-leased for pastoral or associated purposes. In 2009/10 ten lease transfers were approved[9].

There is similar provision for delegation of powers by the Native Vegetation Council and this power of delegation is discussed in the Native Vegetation Act part of the report. We are concerned that there is potential for delegation to occur too frequently and those with delegated powers may not give proper consideration to biodiversity matters in decision making.

Recommendation

Remove delegation powers or in the alternative provide delegates with appropriate training and facilitate regular audits of decisions made under delegation.

Delegation of Powers to the Board

The Pastoral Board has a legally delegated responsibility from the Native Vegetation Council to administer the Act with respect to the clearance of native vegetation by grazing on pastoral leases[10]. The Board has powers in relation to the development of guidelines for the

[7] Section 17.
[8] Section 18.
[9] Pastoral Board Annual Report 2009/10 p17.
[10] *Native Vegetation Act* 1991 s25, Division 1 Part 5.

management of native vegetation with respect to clearance by grazing on lands held under pastoral leases.

Therefore, the Board is required to consider matters including the formulation of a significant environmental benefit in the context of pastoral lease management. Issues associated with the exercise of powers and functions under the *Native Vegetation Act* are discussed in that part of the report.

Provisions concerning the Board's administrative processes are provided for in sections 13-17. The Board must report annually on its activities[11]. However, there is no requirement specifically to report on whether the *Pastoral Act* is meeting its objects, including conservation goals. Furthermore there is no provision for review of the Act

Recommendations

Amend the *Pastoral Act* to:

- Require reporting on the objects of the *Pastoral Act* and the measures undertaken to further these objects; and
- Require review of the *Pastoral Act* every five years.

4. Pastoral Land Management Fund

The *Pastoral Act* provides for the establishment of the Pastoral Land Management Fund which provides funding for projects including:

- research into techniques for pastoral land management, for prevention or minimisation of pastoral land degradation and for rehabilitation of degraded pastoral land and
- the publication of research findings and dissemination of information relating to those techniques[12].

[11] Section 18A.
[12] Section 9.

Recommendation

Amend section 9 of the *Pastoral Act* to provide for the option of using fund monies for biodiversity conservation projects.

5. Pastoral Leases, Land Management and Protection, Access to Pastoral Land

Parts 4, 5 and 6 set out the main provisions covering the administration of pastoral leases, land management and protection and access to pastoral land. We discuss the operation of key provisions below.

Grants and Extensions of leases

The Pastoral Board can grant and extend leases provided there is an assessment of the condition of the land prior to doing so and they are satisfied that the land is suitable for pastoral purposes[13]. The Board sets the term of a pastoral lease and oversees the process to extend leases to a maximum 42 year term[14]. When extending a lease is if an assessment had been carried out in the previous fourteen years an assessment of the land is not required.

A provision which has the potential to protect biodiversity is section 20(a). This provides that "the Minister cannot grant a pastoral lease over Crown land if the Governor has determined that the land should be set aside or used for some other more appropriate purpose". We recommend that this provision be amended to include the words "including biodiversity conservation and protection".

Biodiversity protection purposes could include fencing off sensitive areas such as wetlands or breeding colonies, and leaving selected areas of a property with little or no grazing pressure in order to protect decreased species.

This section could be further amended to enable landholders to enter into management agreements with the Department of Environment and Natural Resources in order to protect

[13] Sections 19, 20 and 25.
[14] Sections 24 and 25.

certain areas. Pastoral managers can play an important stewardship role in maintaining the health of large areas of pastoral land. Regional planning which balances the requirements of production and conservation is very important in this regard.

Recommendation

Amend section 20(a) of the *Pastoral Act* to include biodiversity protection as a more appropriate purpose and to provide for the creation of management agreements.

Conditions of Pastoral Leases

The Pastoral Board sets the land management conditions subject to a pastoral lease (including the number and type of stock to be run)[15] and can impose penalties for a breach of lease conditions[16]. A number of conditions can be attached to leases. These include pasturing of particular species and maximum stock levels.

Variations from these can be allowed[17]. The Board, at the request or with the consent of the lessee, can approve the use of the pastoral land set aside for the primary purpose of traditional Aboriginal pursuits, conservation or other purposes[18]. This is a key biodiversity protection provision and allows leaseholders to take an active role in conservation.

Change of use is an important variation in terms of impacts on biodiversity. Due to increasing interest in developing pastoral areas for non-traditional uses we are of the view that there needs to be clarification regarding the criteria and process by which the Pastoral Board makes decisions in this area. Alternative uses include commercial uses such as forestry and ecotourism but can also include the conservation of biodiversity. However the *Pastoral Act* is silent on how decisions are made in this regard and therefore lacks transparency. This has the potential to create uncertainty and inconsistent outcomes not only for lessees but also for the general public. We recommend amendment to section 22 to provide for criteria to be considered in decision making including biodiversity protection.

[15] Section 22.
[16] Section 43.
[17] Section 26.
[18] Section 22.

Alternatively a permit system could be developed for non-pastoral uses. The use of such permits may provide greater transparency than *ad hoc* changes to lease conditions. However such permits have the disadvantage that they are short term and cannot be transferred with the lease. However we recommend that consideration be given to a permit system which could work in tandem with a referral to the Biodiversity Council as discussed below.

Recommendations

- Amend section 22 to provide criteria for decision making regarding change of use including but not limited to biodiversity protection and conservation criteria.
- Alternatively a permit system could be developed for non-pastoral uses.

6. Property plans, Notices to Destock and other Actions

If the Pastoral Board is of the opinion that pastoral land has, from any cause, been damaged, or is likely to suffer damage or deteriorate, and that in order to prevent, arrest or minimise damage to or deterioration of the land, or to rehabilitate the land, they can require that necessary action be taken[19].

The *Pastoral Act* does not define "damage", but defines "degradation" to mean "a decline in the quality of the natural resources of the land resulting from human activities on the land[20].
The Pastoral Board may require the lessee to remove a specified number of stock from the land or a particular part of the land, keep the amount of stock on the land or a particular part of the land to a specified level, or to keep no stock at all on that land, carry out specified improvements to or land treatment works on the land or adopt or desist from specified land management practices[21].

[19] Section 41(1).
[20] Section 3.
[21] Section 43.

The Pastoral Board can also require the lessee to submit a property plan detailing the proposed management of the land[22]. Whilst there are these specified sanctions, as pastoral leases consist of rights over public land the ultimate sanction always exists of cancelling or refusing to renew a lease. Decisions can be appealed to the Pastoral Land Appeal Tribunal[23].

However in our view there is insufficient consideration of biodiversity protection in these provisions and others. We therefore the make recommendations as set out below.

Recommendations

Consultation with the Biodiversity Council should occur in respect of:

- Grant of Leases[24];
- Conditions of Pastoral Leases[25];
- Extension of term of pastoral lease[26];
- Variation of Land Management Conditions[27];
- Dealing with pastoral leases[28];
- Property Plans[29];
- Notices to destock[30];
- Establishment of public access routes and stock routes[31] ; and
- Travelling with stock[32].

A further recommendation arises out of the historical management of Crown lands.
The *Crown Land Management Act 2009* replaced the *Crown Lands Act 1929*. The 1929 Act had provisions which had the effect of imposing certain protective provisions on all or all large scale Crown land holdings (including pastoral leases). These provisions do not exist in the current legislation.

Section 263 of the 1929 Act provided that every lease and agreement over 100 hectares in size should include a condition that at least 2 out of every 100 hectares should be set apart and reserved for the growth of timber and that no timber trees should be destroyed in that reserved area. Section 263A made it a condition of every lease or agreement … that areas of

[22] Section 41.
[23] Section 54(1) (c).

land covered with natural scrub growth, notified by the Minister …, should be set apart and reserved for soil erosion prevention purposes. The lessee or purchaser could not destroy or permit to be destroyed any natural scrub growth in such areas. The total area so reserved could not exceed one-tenth of the total, unless the Minister determined on a greater area, on the recommendation of the Board. The Minister could grant exemptions to both section 263 and section 263A.There were similar provisions in relation to special development lands.

The original rationale of Crown land protection was to maintain certain unalienated lands under protective Crown supervision. That rationale has weakened under modern legislation; indeed, present policy is to alienate Crown land much more than in the past.

Recommendation

Consideration be given to including similar lease conditions as provided for in section 263A of the repealed Crown Lands Act 1929 in pastoral leases under the *Pastoral Act* in order to enhance urgent environmental (habitat) protection.

7. Compliance and Enforcement

The Pastoral Act provides for the appointment of authorised officers[24] and sets out their powers[25]. Sections 35-40, 57 and 63 contain offences. Evidentiary and defence provisions are also included[26].

Recommendation

Consideration could be given to making breaches of lease conditions an offence.

[24] Section 11.
[25] Sections 60 and 61.
[26] Sections 68 and 69.

8. Appeals

There are appeal rights[27] for lessees to the Pastoral Land Appeal Tribunal[28] although we understand the Tribunal has never been constituted[29].

There are also appeal rights to review valuations in the Land and Valuation Court[30].

Recommendation

Transfer functions of the Tribunal to the Environment, Resources and Development Court.

[27] Section 54.
[28] Sections 50-56.
[29] Pastoral Board Annual Report 2009/2010 p18.
[30] Section 56.

CHAPTER 6: BIODIVERSITY PROTECTION AND THE PLANNING SYSTEM

Introduction

Development is regularly cited as a 'threatening process' to biodiversity[1]. Environmental law Professor Gerry Bates is clear about the implications of this, noting that:

> *'unless protection of biodiversity is linked with planning and development, then the regulatory authorities responsible for biodiversity management and protection are fighting a losing battle*'[2].

With this in mind, we can no longer afford to ignore the importance of integrating biodiversity conservation measures into development and planning laws in South Australia.

A comprehensive analysis of planning and development legislation in New South Wales, Victoria, Tasmania, Western Australia and Queensland was therefore conducted with a view to assessing the extent to which these Acts provide for biodiversity conservation. Based on this assessment, we devised a series of amendments to the South Australian *Development Act 1993* designed to integrate biodiversity conservation goals into our planning system. For the purposes of clarity, we have therefore included a summary of the relevant sections of the *Development Act* at the beginning of each part of this paper.

The relevant interstate planning and development Acts are:

- *Environmental Planning and Assessment Act 1979* (NSW)

[1] See, for example the *Annual Report Native Vegetation Council 2008-2009* (SA), p 3.
[2] Bates, Gerry, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 523.

- *Planning and Environment Act 1987* (Vic)
- *Land Use Planning and Approvals Act 1993* (Tas) and the *Environmental Management and Pollution Control Act 1994* (Tas)
- *Planning and Development Act 2005* (WA) and *Environmental Protection Act 1986* (WA)
- *Sustainable Planning Act 2009* (QLD)

Comparative analysis of the aforementioned Acts is centred around:

1. Objects;
2. Biodiversity mapping;
3. Planning schemes; and
4. Environmental and species impact statements[3].

Further, environmental authorisations issued pursuant to the *Environment Protection Act 1993 (SA)*[4] impact the environment. Currently, there is no requirement in the Act that these environmental authorisations[5] be assessed in the light of any impact on listed matters or on native vegetation. As a result, consideration is given to this issue.

1. Objects

We have examined the objects of the following planning Acts with a view to ascertaining whether, and to what extent, they promote biodiversity conservation.

South Australia

The *Development Act* includes three general objects pertaining to the environment, but not relating to biodiversity. Specifically, the objects of the Act provide for the creation of Development Plans to:

- Enhance the proper conservation, use, development and management of land and buildings; and

[3] Please note that our analysis only draws on those Acts that are relevant to each section.
[4] A works approval under section 35, a licence under section 36 or an exemption under section 37. The provisions dealing with application for and granting of these environmental authorisations are ss.38-40.

[5] Even where development is involved.

- Facilitate sustainable development and the protection of the environment; and
- Encourage the management of the natural and constructed environment in an ecologically sustainable manner[6].

New South Wales

The *Environmental Planning and Assessment Act* contains an object that refers specifically and exclusively to biodiversity conservation:

- 5(a) (VI) *'to encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats*.

Victoria

The *Planning and Environment Act 1987* contains an object that seeks to both protect resources and conserve biodiversity:

- 4(1) (b), '*to provide for the protection of natural and man-made (sic) resources and the maintenance of ecological processes and genetic diversity*'.

Tasmania

The *Land Use Planning and Approvals Act 1993* also contains an object that on its plain reading seeks to both protect resources and conserve biodiversity:

- Schedule 1, Part 1, 1(a), '*to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity*'.

Queensland

The recently created *Sustainable Planning Act 2009* includes a section requiring delegated authority (other than an assessment manager or referral authority that is not

[6] *Development Act*, section 3 (c) (i), (ii), (iia).

local government) to be exercised in such a way as to advance the Act's purpose[7]. This is defined to include a number of environmentally-oriented factors. For example, advancing the Act's purpose includes:

- 5(1)(a)(ii) 'ensuring decision-making processes take account of short and long-term environmental effects of development at local, regional, State and wider levels, including, for example, the effects of development on climate change'.

Analysis

While the objects of the aforementioned Acts expressly promote biodiversity conservation, the *Development Act* only includes three general objects relating to the environment, one of which encourages '*the management of the constructed and natural environment in an ecologically sustainable manner'.*

Ecologically sustainable development is not necessarily compatible with biodiversity conservation goals. To that extent, the objects of the South Australian Act do not acknowledge the importance of integrating biodiversity conservation into the planning process.

Recommendations

We therefore propose that the *Development Act* be amended to include:

- an object analogous to section 5(a)(vi) of the *Environmental Planning and Assessment Act* (NSW);
- an object that specifically provides for 'the maintenance of biological and genetic diversity and
- a variation of section 5(1)(a)(ii) of the *Sustainable Planning Act 2009* (Queensland), namely an object that requires ALL decision-makers to take into account the short and long-term effects of development on climate change, and by extension biodiversity. This object should also be incorporated into development plans.

[7] *Sustainable Planning Act*, section 4.

2. Biodiversity mapping

Introduction

Proper biodiversity mapping is critical to the protection and enhancement of biodiversity[8]. Used appropriately, mapping should inform the placement of zones within development plans. Once the land is zoned, a landholder has a right to develop in accordance with the objectives and principles of development control set out in the Development Plan for that zone[9]. The placement of zones must therefore be informed by accurate biodiversity mapping in order to prevent development from taking place in inappropriate places. Given this, and despite the fact that this report is a legislative review, it is important to compare mapping policy around the country. This view also has a practical basis: a great deal of mapping direction and information is contained in policy and strategy documents, however, the time has come to create laws requiring local councils to attach biodiversity maps to planning schemes.

South Australia

The *Development Act* does not require local councils to include biodiversity maps in their *Development Plans*[10]. We have therefore examined relevant strategy documents with a view to understanding the extent and quality of mapping in South Australia.

No Species Loss: A Nature Conservation Strategy for South Australia 2007-17 includes two broad goals that require mapping to occur for the purposes of achieving certain sub-objectives. Goal 1: 'Conservation of South Australia's biodiversity', includes amongst its sub-objectives 'to maintain, improve and reconstruct species and ecological communities'. Performance information with respect to this sub-object includes '[a]reason for restoration mapped and targets established'[11].

Goal 3, 'Ecological knowledge that can influence decision making' includes amongst its sub-objectives '[t]o identify and fill key gaps in knowledge to influence biodiversity management'. 'Targets and recommendations' with respect to this sub-objective include

[8] See Connolly, Isabelle and Fallding, Martin, *Biocertification of local environmental plans – promise and reality*, (2009) 26 EPLJ 128.
[9] Bates, Gerry, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 252.
[10] There is nothing in the Development Act which would prevent councils from including such maps if they wished.
[11] *No Species Loss: A Nature Conservation Strategy for South Australia 2007-17*, p 44.

'identification and mapping – at an appropriate scale - of 'priority INBR (Interim Biogeographic Regionalisation for Australia) and IMCRA (Interim Marine and Coastal Regionalisation for Australia) bioregions for biodiversity planning'. This is to be completed by 2012. Several other 'Targets and recommendations' attached to this sub-objective pertain to surveying and mapping[12].

South Australia's Regional Biodiversity Plans also provide for the identification of habitats, species and areas of significance. However it is arguable that the maps and records relied upon for this purpose (including pre-European maps) lack the detail necessary to make informed decisions regarding biodiversity conservation.

Finally, *Planning the Adelaide we all want: Progressing the 30 year Plan for Greater Adelaide,* includes a 'Draft policy' with respect to biodiversity. Its two chief priorities are to 'introduce a clear hierarchy of environmental assets to be protected' and to 'incorporate the protection of these areas into Development Plans'[13]. Environmental assets are marked on a map attached to the policy[14].

Further, the Greater Adelaide Plan supports the concept of biomapping where it proposes:

- areas of high environmental significance be mapped and protected from development. This does not currently exist under the *Development Act* and the Development Plans which support the Act;
- areas of environmental significance where higher impact land uses should be avoided;
- areas designated for human use where human use is the principle consideration[15].

Queensland

Biodiversity mapping in Queensland is informed by a combination of legislation, planning principles and strategy. It is carried out by the Queensland Environmental Protection Agency.

[12] *No Species Loss: A Nature Conservation Strategy for South Australia 2007-17*, pp 54, 55.
[13] Draft Policy D 12 'Biodiversity' in *Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide*, p 126.
[14] Draft Policy D 12 'Biodiversity' in *Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide*, p 128.
[15] *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127.

Legislation

The *Vegetation Management Act 1999* provides for regional ecosystem mapping[16], remnant mapping[17], regrowth mapping,[18] essential habitat mapping[19] and property mapping of assessable vegetation[20] to take place across the State. These maps are the first point of reference for anyone seeking to clear vegetation and are readily available online,[21] thereby providing developers and the broader community with certainty as to whether clearing and development is permissible in a particular area.

These maps are referred to in Schedule 24 of the *Sustainable Planning Regulation 2009* (which concerns clearing of native vegetation), thus signalling parliament's intention to integrate biodiversity mapping and protection into the planning system. On a practical level, these maps are indeed widely used by local and regional planning authorities for the purposes of regulating development and protecting biodiversity[22].

Planning Principles

The *Sustainable Development Act 2009* provides for the creation of Planning Principles (QPP), standard planning provisions that provide a consistent structure to local planning schemes across the State[23]. Review of the QPP is expected to take place every six months for three years following the Act's introduction. QPP version 2 is currently available and includes a standard set of discretionary 'overlays' that may be incorporated by local council into their planning scheme. Three overlays that are relevant for our purposes are:

- Priority species overlay – deals with areas supporting priority species of flora or fauna identified as requiring special consideration in planning and development assessment. Priority species may be identified in state planning policies, or plans, or regional plans or by a local government. Mapping is available from the Department of Environment and Resource Management.
- Biodiversity overlay – deals with biodiversity areas and corridors of significance.

[16] *Vegetation Management Act 1999*, section 20A.
[17] *Vegetation Management Act 1999*, section 20AA.
[18] *Vegetation Management Act 1999*, section 20AB.
[19] *Vegetation Management Act 1999*, section 20AC .
[20] *Vegetation Management Act 1999*, section 20AK .
[21] www.yarramine.com.au/index.php?option=com_content&view=article&id=99&Itemid=17.
[22] www.yarramine.com.au/index.php?option=com_content&view=article&id=99&Itemid=17.
[23] *Sustainable Planning Act 2009*, s 50.

- Vegetation management – deals with land identified as locally significant vegetation[24].

The Pine Rivers planning scheme (prepared by the Moreton Bay Regional Council) includes biodiversity overlays in respect of remnant vegetation, biodiversity corridors, koala habitat and biodiversity (protected) vegetation[25]. A review of this scheme was conducted in order to understand the relationship between these overlays and local maps. Our research indicates that the biodiversity overlays are indicated on 'Overlay Code Maps' included on the Council's website[26]. For example, remnant vegetation is marked on 'Overlay Code Map 1A'.

Strategy

'*Building Nature's Resilience: A Draft Biodiversity Strategy for Queensland*'[27] (December 2010) identifies mapping as a fundamental component of knowledge building and responsive management, respectively. Specifically:

- 'Building knowledge' strategy 4(a) 'Improve knowledge and understanding of Queensland's biodiversity' is to be achieved via four key priority actions. Priority action 1 is to '[u]pdate marine estuary and estuarine habitat mapping and classification of the Wide Bay area of the Tweed Moreton Bioregion to enable more effective biodiversity protection conservation measures'.
- 'Managing Responsively' strategy 5(c) 'Ensure that State planning instruments are progressively reviewed, updated and developed to address the protection of biodiversity values' is to be achieved via 8 key priority actions. Priority action number 4 is to 'identify and map areas of ecological significance at suitable scales and include as appropriate in relevant planning instruments'.

Victoria

Biodiversity mapping in Victoria is expressly integrated into the planning system via Victorian Planning Provisions. These Provisions are supported by strategy, to be discussed below.

[24] Queensland Planning Provisions Version 2 – Zones, Overlays and Schedule 1, all on p 32.
[25] PineRiversPlan, Chapter 5 – Overlay Codes, p 5-1.
[26] All maps for the Pine Rivers Plan are centrally located at: http://www.moretonbay.qld.gov.au/subsite.aspx?id=75186.
[27] http://www.derm.qld.gov.au/wildlifeecosystems/biodiversity/pdf/biostrategy.pdf.

Victorian Planning Provisions

Section 4A of the *Planning and Environment Act 1987* enables the preparation of standard planning provisions called 'Victoria Planning Provisions', the purpose of which is to 'provide a consistent and coordinated framework for planning schemes in Victoria'.[28] Victoria Planning Provisions that must be included in **all** planning schemes include the 'State Planning Policy Framework'[29], 'Local Planning Policy Framework', 'Zones', 'Particular Provisions' and 'General Provisions'.

Victoria Planning Provisions also includes a list of standard 'overlays' that may be included at the discretion of each council. Overlays generally apply to a single issue or related set of issues (such as wildlife management, public acquisition, flooding and vegetation management). Land to which an overlay applies is marked on the local planning scheme. For example, land subject to the 'Vegetation Protection Overlay' is shown on the planning scheme map as 'VPO with a number'[30]. Any local council that chooses to include the Vegetation Protection Overlay in their planning scheme must also include a schedule specifying the nature and significance of the vegetation to be protected, and the vegetation protection objective to be achieved.

State strategic Victoria Planning Provision 'Landscape and Environment' (which must be included in all planning schemes) also contains information regarding mapping. Specifically, it requires councils to 'consider as relevant' [m]apped information available from the Department of Sustainability and Environment to identify areas of significant native vegetation and biodiversity'[31].

These two Provisions are complemented by Victorian Planning Provision Practice Note on Biodiversity which is designed to (*inter alia*) 'identify the role of planning schemes in achieving biodiversity objectives'[32]. This Practice Note outlines what planning authorities can do to integrate biodiversity conservation objectives into their local planning framework. For example, it encourages local councils to locate all reliable data – including biodiversity maps – available for their municipality[33]. Further to this, Appendix 1

[28] *Planning and Environment Act 1987*, section 4A.
[29] The State Planning Policy Framework 'contains strategic issues of State importance which must be considered when decisions are made'. See http://www.dse.vic.gov.au/planningschemes/VPPs/index.html.
[30] Vegetation Protection Overlay 42.02.
[31] Clause 12.01-1 'Protection of Habitat' (Policies to be considered).
[32] Victoria Planning Provision Practice Note *Biodiversity* (2002), p 1.
[33] Victoria Planning Provision Practice Note *Biodiversity* (2002), p 2.

comprises an '[e]xample schedule to the Environmental Significance Overlay'. According to this schedule, known sites of biological significance within a local council area may be identified on the planning scheme map and accorded additional protection[34].

Strategy

Victoria's latest *Biodiversity Strategy* includes new priorities with respect to mapping. Specifically, it introduces 'NaturePrint', which will 'provide a framework to integrate current biodiversity datasets and define parameters for the collation of new biodiversity data'[35]. A detailed timeline[36] outlining the development and implementation of NaturePrint is included in the Strategy. For example, mapping of functional connections between terrestrial and aquatic/marine systems is to take place in 2013[37].

The success of NaturePrint is to be measured against a specific set of criteria, including '[n]umbers of organisations routinely referring to NaturePrint in statutory (e.g. planning overlays, development approvals) and investment (e.g. public land management, incentives for private land management) processes'[38].

New South Wales

Information pertaining to biodiversity mapping in NSW can be divided into two categories, namely strategies and resources. This report focuses on those strategies and resources that either encourage local councils to integrate biodiversity conservation measures into their local planning schemes, or may be useful for that purpose.

Strategies – Biodiversity Planning Guide

The New South Wales Office of Environment and Heritage have prepared a 'Biodiversity Planning Guide for Local Government' pursuant to a 'priority action' contained in an early incarnation of the New South Wales Biodiversity Strategy[39]. The Guide encourages local councils to integrate biodiversity conservation measures into their local planning framework. For example, it states that local planning schemes 'may be used to delineate

[34] Victoria Planning Provision Practice Note *Biodiversity* (2002), p 9.
[35] See 3.7, *NaturePrint*, in *Victoria's Biodiversity Strategy 2010-15: Consultation Draft*
[36] Beginning in 2010 and ending in 2013.
[37] See 3.7, *NaturePrint*, in *Victoria's Biodiversity Strategy 2010-15: Consultation Draft.*
[38] See 3.7, *NaturePrint*, in *Victoria's Biodiversity Strategy 2010-15: Consultation Draft.*
[39] NSW Biodiversity Strategy 1999.

areas according to their relative significance for biodiversity conservation…These may 'overlay' across conventional zone boundaries'[40].

Mapping resources

Office of Environment and Heritage – mapping resources for local councils

The aforementioned Guide is supplemented by a web page entitled 'Biodiversity and threatened species resources for local government'[41] which contains links to various tools and resources. These include biodiversity mapping tools and guidelines.

Vegetation Information System

The Office of Environment and Heritage is currently developing a NSW Vegetation Information System (VIS) designed to provide integrated, coordinated access to vegetation maps and data across the State. Stage 1 (of 2), which focussed on consolidating information under three themes[42], was intended to be completed by June 2010.

Threatened species maps

The NSW Department of Environment and Conservation[43] maintains a website about threatened species. The site includes maps of NSW divided into Catchment Management Authority Regions and Subregions, with a comprehensive list of threatened species attached to each Region and subregion. It also includes a search function enabling a town by town search for threatened species (based on subregional maps and lists), while threatened species lists for each local council area are in preparation.

[40] Fallding, Martin, Kelly, Andrew. H.H., Bateson, Paul and Donovan, Ian (NSW National Parks and Wildlife Service), *Biodiversity Planning Guide for Local Government*, 2001, p 27.
[41] http://www.environment.nsw.gov.au/biodiversity/BiodiversityResources.htm#02.
[42] Survey plots, Community Classification and Maps. See http://www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm.
[43] http:// www.threatenedspecies.environment.nsw.gov.au.

Western Australia

While biodiversity mapping is underway in Western Australia, it is 'still inadequate'[44]. A single portal consolidating biodiversity-related information has, however, been created pursuant to the Department of Environment and Conservation's NatureBank Strategy. The NatureBank portal[45] is intended to help a wide range of users (including planners, conservationists and researchers) and includes tools for querying species distributions on maps.

Analysis

There is broad consensus that appropriately detailed biodiversity mapping is indispensable if habitat, species and ecosystems are to be identified and protected[46]. Local councils have an important role to play in this process, notably in ensuring that zoning affords adequate protection to biodiversity within a local area, and that biodiversity features are properly represented on maps attached to planning schemes.

While most States acknowledge at a policy level the importance of integrating biodiversity mapping into local planning processes, some have taken a more proactive approach and applied this principle to legislation, binding planning provisions and planning overlays.

Given that detailed mapping is the foundation upon which strategic planning and biodiversity conservation is built, one cannot overstate the importance of planning legislation requiring councils to reference accurate biodiversity maps and appropriate zoning into their planning schemes.

Hence, while South Australia is taking steps at a policy level to extrapolate the connections between biodiversity conservation and planning, there must be a shift to legislative reform if we wish to create certainty for developers and minimise impacts on threatened species, populations, their habitats and so on.

While we acknowledge that this is a costly and time consuming process, any cost-benefit analysis must take into account the absolutely vital role mapping plays in properly

[44] www.naturemap.dec.wa.gov.au.
[45] Created in partnership with the Western Australian Museum.
[46] Webb, Rachael, *Victoria's Native Vegetation Framework – achieving "net gain" at the urban growth boundary?*, EPLJ, 20, 2009, p 244.

protecting South Australia's biodiversity. Furthermore, strategies can be developed to measure out or offset the cost. For example, the proposed law could allow for the inclusion of biodiversity maps in planning schemes to be phased-in over a specified time period. Additionally, a levy could be imposed on specific categories of development in order to finance a biodiversity mapping fund.[47] Mapping is also proposed in the Plan for Greater Adelaide in particular in the development of Structure Plans which identify vegetation of varying levels of significance.

Our recommendations concern both legislation and strategy and comprise features drawn from each of the surveyed States. In some cases these features have been amended to maximise the chances of achieving concrete biodiversity outcomes in South Australia.

Recommendations

Legislation

We recommend that the *Development Act* be amended to require Development Plans to:

- Include biodiversity conservation overlay maps or refer to State maps indicating the various classes of biodiversity across the local government area including 'no go' areas where no development is allowed; and
- o Zone their local government area so as to provide an adequate level of protection to various classes of biodiversity identified on biodiversity conservation overlay maps.

Strategy

- Identification of biodiversity features within each local council area is necessary to ensure concrete conservation and planning outcomes. This can be achieved by:

[47] Environmental levies are not uncommon. See for example section 88 of the *Protection of the Environment Operations Act 1997* (NSW) which requires licensed waste facilities to pay a contribution for each tonne of waste received for disposal in the facility. The object of the levy is to reduce the amount of waste being disposed of and to promote recycling and resource recovery.

- Using appropriate technology to map biodiversity across the State which include 'no go' areas where no development is allowed;
- Attaching biodiversity map overlays to Development Plans and Natural Resource Management plans;
- Creating classes of habitat, species and ecosystems in addition to threatened species, etc. Each class would be accorded a specific level of protection. Biodiversity map 'overlays' would indicate the location of classes of habitat etc.

- Timeframes should be developed in respect of mapping across the State.
- All existing biodiversity mapping for South Australia should be consolidated into a central web portal. This would facilitate local government access to relevant maps and information until more accurate, high-scale mapping has been completed. Once in place, maps must be regularly reviewed to ensure that they are accurate (as per NSW's Vegetation Information System).

3. Planning schemes

Overview

While planning systems vary from State to State, each of the five Acts listed in the Introduction enables the creation of schemes, policies or strategies intended to regulate planning at a local, regional and State level (planning schemes). These Acts further provide for planning schemes to include clauses pertaining to environmental protection and in some instances biodiversity conservation. The specificity of what they must (or may) provide for varies from Act to Act.

Planning schemes must advance objects of relevant planning Act

South Australia

While the *Development Act* does not require Development Plans to advance its objectives, section 23 does state that a Development Plan should 'seek to promote the

provisions of the Planning Strategy'.[48] The Planning Strategy currently comprises seven volumes, with each volume corresponding to a particular region in South Australia. Each volume varies in the extent to which it addresses matters pertaining to biodiversity conservation.

Interstate legislation

With the exception of Western Australia, the relevant Act in each State expressly requires planning schemes to advance the Act's objectives. These include, as noted at 3.1, environmentally-oriented matters ranging from sustainable resource management to biodiversity conservation.

The degree to which a given Development Plan is required to promote biodiversity conservation depends on which volume of the Planning Strategy applies to the local government area in question. We therefore propose introducing a simple, yet rigorous requirement which would promote uniform biodiversity conservation standards across the State.

Recommendation

We recommend that the *Development Act* be amended to include a section that requires Development Plans to advance the objects of State and Federal biodiversity conservation legislation.

Planning schemes may also provide for other environmental matters

The relevant planning Act in certain States also provides for planning schemes to address other matters. These include environmental matters and in some instances matters pertaining specifically to biodiversity conservation. The following States include noteworthy examples:

[48] *Development Act*, section 23.

South Australia

Section 23 of the *Development Act* states that a Development Plan may include 'objectives or principles relating to…the natural or constructed environment and ecologically sustainable development'; it also provides for Development Plans to declare a tree or group of trees to be 'significant'. It does not, however, expressly provide for the inclusion of matters pertaining to biodiversity conservation. Nor is it mandatory.

On a practical level, Development Plans vary considerably in the extent to which they address biodiversity conservation.

New South Wales

The *Environmental Planning and Assessment Act 1979* (NSW) states that a planning scheme may make provision for or with respect to the following:

1. 26(1)(e) 'protecting or preserving trees or vegetation'.

2. 26(1A) 'protecting and conserving vulnerable ecological communities'

Victoria

As noted above**,** Section 4A of the *Planning and Environment Act 1987* enables the preparation of standard planning provisions called 'Victoria Planning Provisions', the purpose of which is to 'provide a consistent and coordinated framework for planning schemes in Victoria'[49].

Examples of Victoria Planning Provisions that relate to environmental protection and biodiversity conservation include the *State Planning Policy Provision 12.00: Environmental and Landscape Values*. This policy, which must be included in all Victorian planning schemes, begins with a series of general principles. It is then divided into a number of subsections dealing with specific areas of environmental management, including biodiversity conservation.

[49] *Planning and Environment Act* 1987, section 4A.

General principles

This policy states that:

'*Planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape value.'*

'Planning must implement environmental principles for ecologically sustainable development that have been established by international and national agreements.'

Biodiversity

The policy includes a section entitled *Biodiversity*[50], which in turn includes a number of sub-sections relating to habitat protection, native vegetation management, coastal protection and so on. Each sub-section includes a list of relevant strategies and policies 'that planning must consider as relevant'. For example, the subsection entitled *Protection of habitat*[51] lists three specific policy/strategy documents as well as any other strategies, plans etc. that may be prepared under the *Flora and Fauna Guarantee Act 1988* and *Catchment and Land Protection Act 1994*. The entire 'Biodiversity' section requires councils to consider a total of 10 named policies/strategies as well as any other policies, strategies, plans etc. created pursuant to five State Acts[52].

Native vegetation

As noted above, the policy includes a subsection entitled 'Native vegetation management'[53] which requires local councils to have regard to Victoria's Native Vegetation Framework.[54] This Framework incorporates a 'three-step approach' designed to result in a 'net gain' in native vegetation across the State. These three steps are:

- to **avoid** the removal of native vegetation.
- if the removal of native vegetation is unavoidable, to **minimise** removal through appropriate planning and design.

[50] Landscape and Environment, 12.01 : Biodiversity, pp 1 – 7.
[51] Landscape and Environment, 12.01-1 : Habitat Protection.
[52] *Flora and Fauna Guarantee Act 1988*; Catchment and Land Protection Act 1994; *Coastal Management Act 1995*; *Native Parks Act 1975*; *Crown Land (Reserves) Act 1978 .*
[53] Landscape and Environment, 12.01-2: Native Vegetation Management.
[54] Victoria's Native Vegetation Management: A Framework for Action, 2002.

- to appropriately **offset** the loss of native vegetation[55].

Under 12.02-2, Councils *should* follow the three-step approach when a permit is required to remove native vegetation, or if an amendment to the planning scheme or an application for a subdivision could result in the removal of native vegetation.

Particular Provision 52.17: Native Vegetation

This Provision forms part of the 'Native Vegetation Framework'.

The objects of this Provision are: to protect and conserve native vegetation to reduce the impact of land and water degradation and to provide habitat for plants and animals, and to achieve the objectives of 'avoid, minimise and offset'.

It also requires that a permit be obtained to remove, destroy or lop native vegetation on a parcel of land of 0.4 hectares of land or more. Certain exemptions apply.

Overlay 42.02: Vegetation Protection

The purpose of this overlay is to (*inter alia*): protect areas of significant vegetation; ensure development minimises the loss of vegetation; maintain and enhance habitat and habitat corridors for indigenous fauna; and encourage the regeneration of native vegetation.

42.02-1 stipulates that a schedule be attached to the overlay. The schedule must include a statement of the nature and significance of the vegetation to be protected, as well as a 'vegetation protection objective '.

<u>Queensland</u>

Under *the Sustainable Planning Act 2009*, the preparation of local planning schemes is to be based on three core matters, one of which is 'valuable features' (79(1) (c)). 'Valuable features' include, (but are not limited to):

[55] Victoria's Native Vegetation Management: A Framework for Action, 2002, p 23.

'(a) resources or areas that are of ecological significance, including, for example, habitats, wildlife corridors, buffer zones, places supporting biological diversity or resilience, and features contributing to the quality of air, water (including catchments or recharge areas) and soil'.

Analysis

Interstate planning legislation and planning provisions (as the case may be) expressly provide for the inclusion of matters pertaining to biodiversity conservation in local planning schemes. For example, VPP '*Landscape and Environment'* contains a broad range of biodiversity-related strategies that must be considered by local council when making decisions, while Queensland requires planning schemes to be based (in part) on 'resources or areas that are of ecological significance…including….places supporting biological diversity or resilience'.

As local council is the consent authority for the vast majority of development applications, Development Plans must be required to include specific, enforceable clauses designed to protect biodiversity. To that end, vague objects and principles which are only designed to 'inform' the decision-making process are insufficient for this purpose.

Recommendations

We therefore recommend that the *Development Act* be amended:

- to require Development Plans to include specific, enforceable provisions relating to biodiversity conservation including, but not limited to the protection and conservation of native animals and plants, critical habitat, ecosystems, and threatened species, populations, communities and their habitat.

- to require Development Plans to be consistent with State and Federal biodiversity conservation legislation. This would include a duty for local councils to implement threat-abatement plans, management plans for species and ecological communities, and recovery strategies relevant to their local area.

Referral of proposed planning schemes and amendments to planning schemes to outside agencies

South Australia

We note that under section 24 of the *Development Act*, where an amendment to a Development Plan 'relates to any part of' the Murray-Darling Basin, Adelaide Dolphin Sanctuary or a marine park, the Minister must 'consult with and have regard to the views of' the relevant (second) Minister.

Further, the Greater Adelaide Plan proposes that Structure Plans be developed for new growth areas in order to "determine and assess environmental significance thereby removing the need for end-of-process assessment or referral under schedule 8 of the *Development Regulations* or the *Native Vegetation Act*."[56]

New South Wales

When a planning authority resolves to prepare an environmental planning instrument under the *Environmental Planning and Assessment Act 1979,* it must, in certain circumstances, consult with the Director-General of the Department of Environment, Climate Change and Water. Specifically:

- 'Before an environmental planning instrument is made, the relevant authority [planning authority] must consult with the Director-General of the Department of Environment, Climate Change and Water if, in the opinion of the relevant authority, critical habitat or threatened species, populations or ecological communities, or their habitats, will or may be adversely affected by the proposed instrument'[57].

- 'The consultation required by this section is completed when the relevant authority has considered any comments so made'[58].

[56] *"Planning the Adelaide we all want: Progressing the 30-year Plan for Greater Adelaide"* at p127.

[57] *Environmental Planning and Assessment Act*, section 34A (2).
[58] *Environmental Planning and Assessment Act,* section 34A (6).

Western Australia

The *Planning and Development Act 2005* requires the creation or amendment of a local planning scheme to take place in accordance with the following steps:

- The local government must refer the proposed scheme or amendment to the Environmental Protection Authority (EPA)[59];
- The EPA must then decide whether to conduct an environmental assessment of the scheme[60];
- Alternatively, the EPA may decide that the scheme is incapable of being made environmentally acceptable[61]. If this happens, the Minister may either direct the EPA to assess the scheme notwithstanding their findings, or may consult with the Minister for planning before advising the EPA and local government that the scheme cannot be approved[62].
- If assessment of the scheme is required, the local government may be required to undertake an environmental review of the scheme and provide a contaminated sites auditor's report. The EPA may also independently investigate the scheme and consider existing information on the scheme or the area[63].

Analysis

Environmental assessment of draft planning schemes and amendments to planning schemes is necessary to ensure that these instruments do not place undue weight on social and economic factors at the expense of biodiversity conservation including the clearance of native vegetation. More specifically, once the land is zoned, a landholder has a right to develop in accordance with the objectives and principles of development control set out in the Development Plan for that zone[64]. Therefore, it is important that the placement of zones is undertaken with appropriate consideration for the protection of biodiversity and native vegetation.

[59] *Planning and Development Act* , section 81.
[60] *Planning and Development Act*, section 81; the assessment process is governed by *Environmental Protection Act 1989* (Environmental Protection Act), section 48A (1).
[61] *Planning and Development Act*, s 81, *Environmental Protection Act*, section 48A (1).
[62] *Environmental Protection Act,* section 48A.
[63] *Environmental Protection Act*, section 48C (1).
[64] Bates, Gerry, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 252.

For environmental assessment of planning schemes and their zones to be meaningful, it must be performed by appropriately qualified individuals within specialist agencies[65]. It must also apply to all schemes to ensure biodiversity across the State is afforded appropriate protection.

It is with these principles in mind that we note the failings of section 24-26 of the *Development Act,* namely that they do not empower the relevant environmental agency or Minister to reject a draft Development Plan or amendment that is likely to result in unacceptable harm to the environment.

We have selected certain features from the aforementioned interstate legislation and adapted them to maximise our chances of achieving concrete biodiversity conservation outcomes in South Australia. The recommendations refer to a proposed scientific working group which is outlined in detail in the chapter on the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act.*

Recommendations

We recommend that the *Development Act* include:

- all proposed Development Plans and any amendments to be referred for direction to the:
    - National Parks and Wildlife Council or the proposed Biodiversity Council which must then refer the matter to the scientific working group for appropriate scientific assessment of significant adverse impacts on biodiversity (including, but not limited to threatened species, populations, ecological communities and critical habitat).
    - Native Vegetation Council where as a consequence of rezoning it is likely that there will be clearance of native vegetation in contravention of the principles of clearance under the *Native Vegetation Act.*

[65] See Connolly, Isabelle and Fallding, Martin, *Biocertification of local environmental plans – promise and reality*, EPLJ, 26 (2009) who note at 130 that councils often lack staff with the training and experience to make decisions with respect to biodiversity conservation matters.

- A section that *requires* the Minister to amend draft Development Plans and proposed amendments to Development Plans to ensure that they include adequate biodiversity conservation measures and adequate measures protecting remnant native vegetation.

- A section that *requires* the Minister to prohibit the making of a Development Plan or an amendment to a Development Plan that is likely to impact biodiversity and remnant vegetation to an unacceptable degree and is incapable of being made environmentally-acceptable.

4. Environmental Impact Assessment

South Australia

The *Development Act* does not provide for mandatory environmental impact assessment in respect of all developments. Rather, the Development Assessment Commission determines the level of environmental impact assessment to be undertaken for any proposed development or project of major environmental, social or economic importance (major development)[66]. Crown development and electricity infrastructure development are not required to undergo environmental assessment unless directed by the Minister[67]. Where the Minister makes such a direction, the development cannot go ahead without the Governor's approval.[68] Decisions regarding major development are protected from judicial and merits review[69]. Such a privative clause is arguably unconstitutional in part[70]. Further, the Minister's decision regarding Crown development or electricity infrastructure development cannot be appealed.

Conversely, interstate legislation provides for mandatory environmental impact assessment to be undertaken in respect of major development. Depending on the nature of the development, environmental impact assessment may involve assessing the

[66] *Development Act*, section 46 (7),(8).
[67] Development Act, section 49 and section 49A .
[68] Development Act, section 49 (16a), section 49A (20). The Governor may issue his or her approval under section 48.
[69] *Development Act*, section 48E.
[70] *Kirk v WorkCover NSW (and Ors)* [2010] HCA 1.

impacts of the proposed development on biodiversity. In NSW, certain development applications must be accompanied by a species impact statement (see below at 4.4).

New South Wales

The NSW environmental impact assessment system has been described as 'the most detailed, and the most judicially scrutinised, scheme'[71].

Development and environmental assessment are regulated under Parts 3A, 4 and 5 of the *Environmental Planning and Assessment Act 1979.* Most development – including 'designated development' - is assessed under Part 4 of the *Environmental Planning and Assessment Act*. Parts 3A and 5 regulate major projects, and high-impact activities that do not require consent, respectively.

Development categories and environmental impact assessment

Part 4 - Development permissible with consent

All development applications (apart from those for the forms of development discussed below) must be accompanied by a statement of environmental effects[72].

Significant projects

This includes several categories of large-scale development regulated under Parts 3A, 4 and 5 of the Act.

- Part 3A 'Major Projects' are projects identified in State Environmental Planning Policy (Major Development) 2005 or by ministerial declaration as such. Examples include the Kurnell Desalination Plant[73] and certain forms of large-scale subdivision[74]. Major Projects must be assessed by the Minister for Planning and may be required to be accompanied by an environmental impact statement or in the

[71] Bates, Gerry, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 331.
[72] *Environmental Planning and Assessment Regulation*, clause 50, Schedule 1, Parts 2 (1)(c) and 2(4)(a).
[73] State Environmental Planning Policy (Major Development) 2005, Schedule 5 Critical Infrastructure Projects.
[74] State Environmental Planning Policy (Major Development) 2005, Schedule 5 Critical Infrastructure Projects, Schedule 2 Part 3A Projects – Specified Sits.

alternative a form of environmental assessment designated by the Director-General DG for planning[75].

- Part 4 'Designated Development' comprises high-impact development listed in Schedule 3 of the Regulations or so declared under an Environmental Planning Instrument. Examples include aquaculture, petroleum works and wood or timber milling (above a certain scale of production)[76]. Development applications to carry out designated development must be accompanied by an environmental impact statement[77]. Local council is usually the consent authority for designated development, unless Part 3A applies to the project (in which case the Minister for Planning is the consent authority), or a State Environmental Planning Policy declares someone other than the council to be the consent authority.

- Part 5 applies to any other approval or decision of a government agency or authority to undertake an activity that does not require approval under either Parts 3A or 4 and is not listed as exempt development in an environmental planning instrument. Examples include mining exploration and electricity infrastructure by public authorities. While Part 5 activities do not necessarily require an environmental impact statement, the 'determining authority'[78] must take into account to the fullest extent possible all matters that are likely to affect the environment if the project goes ahead[79]. Furthermore, the determining authority may not carry out an activity or grant an approval to carry out an activity that is likely to significantly affect the environment unless they have obtained or been provided with an environmental impact statement[80]. In practice, all Part 5 development must undergo some form of rigorous environmental assessment.

[75] *Environmental Planning and Assessment Act*, section 75F.
[76] *Environmental Planning and Assessment Regulation*, clause 50, Schedule 1, Part 2 (1)(e).
[77] *Environmental Planning and Assessment Act*, section 78A(8)(a).
[78] *Environmental Planning and Assessment Act*, section 110 defines a 'determining authority' as 'a Minister or public authority…by or on whose behalf the activity is or is to be carried out or any Minister or public authority whose approval is required in order to enable the activity to be carried out'. It does not include Commonwealth authorities or ministers: *Council of the Municipality of Botany v Federal Airports Corporation (1992)*.
[79] *Environmental Planning and Assessment Act*, section 111.
[80] *Environmental Planning and Assessment Act*, section 112.

Western Australia

Under the *Environmental Protection Act*, environmental impact assessment applies to all 'significant proposals' and 'strategic proposals'[81]. 'Significant proposal' means a proposal that is likely to have significant effect on the environment[82], while a strategic proposal is a proposal that identifies future development that is a significant proposal, or future proposals likely, in combination with one another, to have a significant effect on the environment[83].

Tasmania

The key piece of legislation governing impact assessment in Tasmania is the *Environmental Management and Pollution Control Act 1994.* This Act interfaces with the *Land Use Planning and Approvals Act 1993* which divides development (or 'activities') into several levels.

Development categories and environmental impact assessment

Level 1 Activities

Level 1 activities are activities that are permissible with consent from local council[84]. No formal environmental assessment is required unless the Director of Environmental Management directs the proposal to be referred to the Environmental Protection Authority (EPA) Board and the Board determines that environmental assessment must take place[85].

Level 2 Activities

These activities, which include high-impact projects such as coal processing works, oil refineries and wood processing works[86], must undergo environmental assessment unless the Board determines otherwise or the application is for development that is

[81] *Environmental Protection Act*, section 38.
[82] Part IV, *Environmental Protection Regulations* 1987, reg 2C.
[83] *Environmental Protection Act*, section 37B.
[84] *Land Use Planning and Approvals Act*, section 24.
[85] *Environmental Management and Pollution Control Act*, section 24.
[86] Listed in Schedule 2 of the *Environmental Management and Pollution Control Act*.

ancillary to an existing level 2 activity and no serious and material environmental harm is likely to result from the proposal[87].

Level 3 Activities (integrated assessment)

Level 3 activities comprise projects declared to be of 'state significance'[88]. Level 3 activities are assessed by the Tasmanian Planning Commission (the Commission)[89] against terms of reference determined by the Minister for the Environment[90]. The Commission's assessment report and recommendations (which may include a recommendation that the project be regulated by several agencies) are submitted to the Minister for a decision, which must in turn be approved by resolution in both Houses of Parliament[91].

New South Wales

Species impact statements

The NSW *Environmental Planning and Assessment Act 1979* requires certain development applications to be accompanied by a species impact statement.

Development categories and species impact statement

Part 3A major projects

As noted above, environmental assessment of Part 3A projects depends on the requirements issued by the Director-General rather than matters prescribed under the *Environmental Planning and Assessment Act* or Regulation. Nevertheless, the Minister is empowered to issue consents requiring participation in the 'BioBanking scheme,'[92] which for the purposes of the *Environmental Planning and Assessment Act* is interchangeable

[87] *Environmental Management and Pollution Control Act*, section 25.
[88] *State Projects and Policies Act 1993*, section 18 (2).
[89] This is known as 'integrated assessment'. See *State Projects and Policies Act*, section 20 (1).
[90] *State Projects and Policies Act*, section 20 (3).
[91] *State Projects and Policies Act*, section 26.
[92] *Environmental Planning and Assessment Act*, section 75JA.

with a species impact statement[93]. BioBanking schemes are discussed in further detail at 4.5.5.

Part 4 'designated development'

As noted above, all designated development must be accompanied by an environmental impact statement. If the proposed development is taking place on land containing critical habitat or which is likely to significantly affect threatened species, populations or ecological communities, it must be accompanied by a species impact statement[94].

Other development under part 4

Development on land containing critical habitat, or which is likely to significantly affect threatened species, populations or ecological communities, must be accompanied by a species impact statement[95].

Part 5 activities

A determining authority must not carry out an activity, or grant an approval in relation to an activity on land that contains critical habitat or is likely to significantly affect threatened species, populations or ecological communities, or their habitats, unless a species impact statement, or an environmental impact statement that includes a species impact statement, has been prepared[96].

Meaning of 'significantly affect'

As noted above, a species impact statement is required where the proposed development is to take place on land containing critical habitat, or where it is likely to **significantly affect** threatened species, populations or ecological communities. Section 5A of the *Environmental Planning and Assessment Act* contains criteria against which 'significance' is to be judged. This is known as the 'seven part test' and includes *(inter alia)*:

[93] *Environmental Planning and Assessment Act*, section 78A (8) (Note: this section interacts with Part 7 of the *Threatened Species Conservation Act 1995*).
[94] *Environmental Planning and Assessment Act*, section 78A (8) (b).
[95] *Environmental Planning and Assessment Act*, section 78A (8) (b).
[96] *Environmental Planning and Assessment Act*, section 112 1B.

- whether a viable local population of the species is likely to be placed at risk of extinction;

- whether habitat will be removed or modified;

- whether habitat is likely to become fragmented or isolated from other areas.

Contents of a species impact statement

A species impact statement must be prepared in accordance with Part 6, Division 2 of the *Threatened Species Conservation Act 1995*[97]*.* It must address an extensive range of matters. These include:

- An assessment of which threatened species or populations known or likely to be present in the area are likely to be affected by the action;

- A full description of the type, location, size and condition of the habitat (including critical habitat) of those species and populations and details of the distribution and condition of similar habitats in the region[98].

Critical habitat register

Each planning authority must have regard to the register of critical habitat kept by the Director-General of the Department of Environment, Climate Change and Water under the *Threatened Species Conservation Act* when exercising its functions under the *Environmental Planning and Assessment Act*[99].

Analysis

Interstate planning legislation imposes significantly more stringent environmental assessment requirements than the *Development Act*, thereby affording the environment (including critical habitat, threatened species etc.) a much higher degree of protection.

[97] *Environmental Planning and Assessment Act*, section 78A (8) (b).
[98] *Threatened Species Conservation Act*, section 110.
[99] *Environmental Planning and Assessment Act*, section 5B (1).

We propose that it be mandatory for a statement of environmental effects to accompany a development application where:

- the proposed development is likely to cause significant adverse impacts on matters listed under biodiversity legislation including, but not limited to the threatened species, populations, communities and their habitat and/or;
- native vegetation is likely to be cleared in contravention of the principles of clearance under the *Native Vegetation Act*.

In order to better protect biodiversity, we propose that the *Development Act* be amended:

- to include a section specifying how 'significance' is to be judged. The 7-Part test used in NSW could serve as a model.
- to require consent authorities to refer for direction all development applications accompanied by a statement of environmental effects or environmental impact statement to the proposed Biodiversity Council, Native Vegetation Council or National Parks and Wildlife Council, as the case may be;
- for greater transparency, to require statements of environmental effects and environmental impact statements to be prepared by independent assessors funded via government and developer contributions[100]. An alternative may be that developers be required to consult with the proposed Biodiversity Council when completing the statement. However, to the extent that this is not best practice we do not recommend pursuing this option in favour of the former.
- to require statements of environmental effects and environmental impact statements to be prepared in accordance with guidelines developed with advice from the proposed Scientific Committee. Statements of environmental effects and environmental impact statements should explicitly recognise all types of impacts, including cumulative impacts.

Finally, the *Development Act* provides that no judicial review is permitted with respect to decisions on major projects[101]. However, in light of Kirk's case[102], it is now clear that this provision should be amended to remove the reference to judicial review.

[100] Developers currently fund environmental impact assessments. The above proposal uses those funds in a more transparent manner.

[101] Section 48E provides that no proceedings for judicial review or for a declaration, injunction, writ, order or other remedy may be brought to challenge or question a decision or determination under Division 2 (the major projects or developments Division) of the *Development Act*.

Recommendations:

In light of the above analysis, the *Development Act* should be amended:

- To require a statement of environmental effects to accompany a development application where:
    - the proposed development is likely to cause significant adverse impacts on matters listed under biodiversity legislation including, but not limited to threatened species, populations, communities and critical habitat; and/or
    - native vegetation is likely to be cleared in contravention of the principles of clearance under the *Native Vegetation Act*.
- The statement of environmental effects should identify the likely environmental impacts of the proposal (including impacts on biodiversity) and measures taken to reduce or eliminate these impacts.
- To include a section specifying how 'significance' is to be judged. The 7-Part test used in NSW could serve as a model.
- To require consent authorities to refer for direction all development applications accompanied by a statement of environmental effects or environmental impact statement to the proposed Biodiversity Council, Native Vegetation Council or National Parks and Wildlife Council, as the case may be.
- For greater transparency, to require statements of environmental effects and environmental impact statements to be prepared by independent assessors funded via government and developer contributions. In the alternative, developers be required to consult with the proposed Biodiversity Council when completing the statements.
- To require statements of environmental effects and environmental impact statements to be prepared in accordance with guidelines developed with advice from the proposed Scientific Committee. Statements of environmental effects and environmental impact statements should explicitly recognise all types of impacts, including cumulative impacts.
- To remove reference to judicial review in section 48E.

[102] Kirk v WorkCover NSW (and Ors) *[2010] HCA 1.*

Environment Protection Act

Environmental authorisations under the *Environment Protection Act (SA) 1993* include works approvals, licences and exemptions with respect to matters prescribed under the Act[103]. Once the power of referral is in place under the *Development Act*, the links with the *Environment Protection* Act will operate by virtue of schedule 8 of the *Development Regulations*.

However, where there is no development application, and instead an environmental authorisation is being sought[104], there is no requirement in the Act that these environmental authorisations be assessed in the light of any impact on listed matters or on native vegetation.

As a result, in order to better protect biodiversity, we recommend that environmental authorisations be referred to the proposed Biodiversity Council (or the Native Vegetation Council or the National Parks and Wildlife Council as the case may be) which would be empowered to refuse authorisations under the *Environment Protection Act (SA) 1993* where granting an authorisation is likely to result in:

- clearance of native vegetation in contravention of the principles of clearance under the Native Vegetation Act;
- a significant adverse impact on listed matters.

Recommendations

Environmental authorisations be referred to the proposed Biodiversity Council (or the Native Vegetation Council or the National Parks and Wildlife Council as the case may be) which would be empowered to refuse authorisations under the Environment Protection Act (SA) 1993 where granting an authorisation is likely to result in:

- clearance of native vegetation in contravention of the principles of clearance under the Native Vegetation Act;
- a significant adverse impact on listed matters.

[103] Schedule 1. There are many prescribed matters under Schedule 1 such as chemical works, oil refineries, wood processing works.

[104] A works approval under section 35, a licence under section 36 or an exemption under section 37. The provisions dealing with application for and granting of these environmental authorisations are ss.38-40.

CHAPTER 7: THE ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT AND THE NATIONAL PARKS AND WILDLIFE ACT

Introduction

This chapter provides an analysis of the operation of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (the *Environment Protection and Biodiversity Conservation Act*) and its South Australian counterpart the *National Parks and Wildlife Act 1972* (the *National Parks and Wildlife Act*) in conserving and protecting terrestrial and marine biodiversity.

The *Environment Protection and Biodiversity Conservation Act* operates in conjunction with State and Territory laws to fulfil Australia's obligations under the Biodiversity Convention for *in situ* conservation through both protected areas and the protection and management of species' habitats and ecological communities. As the *Environment Protection and Biodiversity Conservation Act* is limited to protecting matters of national environmental significance and Commonwealth land, biodiversity protection in this State is also limited and hence there is a crucial role for broader State biodiversity legislation.

The *National Parks and Wildlife Act* is one of the key pieces of nature conservation legislation in South Australia. It provides for the protection and management of certain native animals and plants. However, the legislation is outmoded. It was enacted almost 40 years ago in 1972 and its terminology does not include the language of the Biodiversity Convention which was adopted to a large extent by the legislators of the *Environment Protection and Biodiversity Conservation Act*. As a result the *National Parks and Wildlife Act* contains neither modern terminology such

as ‘biodiversity’ nor modern concepts including key conservation measures such as listing of ecological communities, populations, critical habit and threatening processes. Important tools such as recovery and threat abatement planning are also absent. In addition, the *National Parks and Wildlife Act* lacks transparency and accountability as it confers a significant amout of decision making power on the Minister for the Environment without detailing the processes and criteria to be used in making critical decisions such as the listing of threatened species. The *National Parks and Wildlife Act* is in need of urgent and significant reform if it is to adequately assist in stemming the rapid decline of biodiversity across the State.

This chapter also considers key international and interstate counterparts and makes reference to the Biodiversity Convention and particular recommendations in the Hawke Report. We do not cover provisions relating to the establishment and management of protected areas and ex situ conservation.[1]

An issues approach to analysing the two Acts is taken rather than considering each and every section. Recommendations which follow the discussion of each issue propose that new legislation be streamlined with the *Environment Protection and Biodiversity Conservation Act* process (or streamlined with an amendment/improvement to that Act) for logistical and economic reasons.

The following topics are discussed:

- International Context
- Objects
- Definitions
- Principles
- Climate change impacts
- Duty of care
- Administration
- Listing categories - threatened species, populations and ecological communities, critical habitat, key threatening processes, migratory and marine species
- Listing processes

[1] Covers biodiversity conservation in scientific establishments and the like.

- Plans: recovery, threat abatement and wildlife conservation plans
- Landscape-scale assessments; strategic assessments and bioregional plans
- Site scale assessments
- Mechanisms for conservation on private land
- Licencing – permits and sustainable use plans, bioprospecting
- Reporting and review
- Compliance, enforcement and court processes
- Interrelationship with other legislation

1. International context

The *Environment Protection and Biodiversity Conservation Act* is Australia's primary piece of legislation aimed at protecting and conserving biodiversity. Amongst other matters, the Act seeks to protect environmentally sensitive areas such as Ramsar wetlands, threatened species and communities and the marine environment generally. The *Environment Protection and Biodiversity Conservation Act* covers both private land and reserves, a feature we recommend be adopted in any new state legislation.

As Commonwealth legislation, the *Environment Protection and Biodiversity Conservation Act* is limited to the powers granted by the Australian Constitution, which does not expressly refer to the environment. As such, key provisions of the Act are largely based on a number of treaties including the World Heritage Convention, the Ramsar Convention, the Convention on Biological Diversity, the Japan-Australia Migratory Bird Agreement (JAMBA), the China-Australia Migratory Bird Agreement (CAMBA), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The most relevant of these for our purposes is the Convention on Biological Diversity (the Biodiversity Convention).

Australia is a signatory state to these treaties including the Biodiversity Convention. South Australia is not a signatory and is therefore not bound by the obligations under it. However the Convention is still an important consideration in the development of state biodiversity conservation legislation as it details a range of contemporary conservation management practices.

As a signatory state, Australia's biodiversity conservation legislation should be interpreted and administered in accordance with the Biodiversity Convention and other treaties. In addition, decisions made pursuant to these international instruments, for example, the Biodiversity Convention's COP10 adoption of Decision X2 on a Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets, need to be incorporated into domestic legislation.

In force since 1993, the Biodiversity Convention has three objectives namely the conservation of biodiversity, sustainable use of its components and fair and equitable sharing of benefits arising from genetic resources[2]. It also covers biotechnology by virtue of the Cartagena Protocol. The Biodiversity Convention's goals are to be realised via the development of national strategies, plans or programmes for the conservation and sustainable use of biodiversity[3]. Signatory states shall as far as possible and as appropriate integrate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

At the outset, we note the tension between sustainable use and biodiversity conservation and protection. This tension has been transferred into the *Environment Protection and Biodiversity Conservation Act* and also exists in the *Natural Resources Management Act* (and we have discussed this in detail in that part of the report) and the *Pastoral Land Management and Conservation Act*. It exists due to the attempt to marry protection of biodiversity and the use of biodiversity and so the principles of ecologically sustainable development are adopted as a means to try to achieve conformity, albeit futile. For this reason, in this report, we propose that new legislation accord with the objects of interstate legislation concentrating solely on protecting biodiversity rather than the *Environment Protection and Biodiversity Conservation Act.*

A number of sections or Articles in the Biodiversity Convention set out Australia's obligations, with the primary obligations set out in Articles 7 and 8. Article 7 covers identification and monitoring primarily through the reporting, monitoring and listing of components of biodiversity together with identifying processes and activities which have, or are likely to have, significant adverse impacts on the conservation and sustainable use of biodiversity.

[2] Article 1.
[3] Article 6.

We will discuss the key provisions of the *Environment Protection and Biodiversity Conservation Act* which seek to meet Australia's obligations under the Biodiversity Convention (apart from those which relate to protected areas) and which South Australia should consider adopting.
Article 8 obliges signatory states, as far as possible and where it is appropriate to do so, to:

> *(c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use;*
>
> *(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;*
>
> *(e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas;*
>
> *(f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies;*
>
> *(g) Establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health;*
>
> *(h) Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species;*
>
> *(i) Endeavour to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and the sustainable use of its components;*
>
> *(j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge,*

innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices;

(k) Develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations;

(l) Where a significant adverse effect on biological diversity has been determined pursuant to Article 7, regulate or manage the relevant processes and categories of activities; and

(m) Cooperate in providing financial and other support for in-situ conservation outlined in subparagraphs (a) to (l) above, particularly to developing countries.

Further key obligations in the Biodiversity Convention are contained in the following Articles:

- Article 9 - *ex situ* conservation - outside the scope of this part of the report
- Article 10 - Sustainable use of components of biological resources – further discussed in the section of this chapter covering permits and commercial uses
- Article 11 - Incentive measures – further discussed in the section of this chapter covering mechanisms for conservation of biodiversity on private land
- Article 12 - Research and training
- Article 13 - Public education and awareness
- Article 14 - Impact assessment and minimizing adverse impacts.

The *Environment Protection and Biodiversity Conservation Act* requires the Minister to "not act inconsistently" with Australia's obligations under international treaties when making decisions whether to approve proposed actions likely to have a significant impact on matters of national environmental significance[4]. The Hawke Report observes that this double negative has weakened the operation of the section. Consequently the Report recommends that the *Environment Protection and Biodiversity Conservation Act* be amended so that the Minister is required to "act consistently" with Australia's international obligations[5]. Whilst this is an improvement there is still too much discretion associated with decision making under the *Environment Protection and Biodiversity Conservation Act* (and indeed other legislation). We

[4] For example, s 334.
[5] Dr A Hawke**, "**Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999 , Department of Sustainability, Environment, Water, Population and Communities, 2009 (The Hawke Report), p14.

recommend that there be a legislative requirement for sustainable decision making, in other words decision making which prioritises principles of ecologically sustainable development. This is discussed in more detail in the following sections.

2. Objects

Environment Protection and Biodiversity Conservation Act

Whilst legislative objects are for the most part aspirational, they are also directions to decision makers and therefore need to be clearly defined so as to identify what is within and without the ambit of each object. If there is potential conflict, either within or between objects, priorities should be assigned[6]. In addition, the objects should be made operational through the substantive provisions of the legislation.

Consistent with Australia's international obligations, primarily the Biodiversity Convention, the *Environment Protection and Biodiversity Conservation Act* has as a key objective to promote the conservation of biodiversity as set out in section 3(1). It is not, however, the primary object of the *Environment Protection and Biodiversity Conservation Act.* This would appear to be inappropriate as the fundamental aim of the *Environment Protection and Biodiversity Conservation Act* is to protect and conserve biodiversity.

The objects in section 3(1) are:

> *(a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and*
> *(b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and*
> *(c) to promote the conservation of biodiversity; and*
> *(ca) to provide for the protection and conservation of heritage; and*
> *(d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples; and*

[6] Hawke Report, p17 recommends a recast objects clause which has as the primary object the protection of the environment through the conservation of ecological integrity and nationally important biological diversity and heritage.

(e) to assist in the co-operative implementation of Australia's international environmental responsibilities; and

(f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and

(g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

The primary object of biodiversity conservation legislation should be the conservation, restoration and enhancement of biodiversity. This is in line with the Hawke Report recommendation to revise the *Environment Protection and Biodiversity Conservation Act's* objects in order to promote conservation of ecological integrity and nationally important biodiversity[7].

We recommend that any new legislation contain objects which seek to prevent wildlife species from becoming threatened, endangered or extinct. Similar objects should be included in relation to threatened ecological communities, populations and critical habitat. The objects should also emphasise species, community and habitat protection, recovery and enhancement.

The *Environment Protection and Biodiversity Conservation Act's* objects can be contrasted with those in the Preamble to the Canadian *Species at Risk Act 2002* which recognises, inter alia, the intrinsic value of wildlife, as well as its aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific value. By acknowledging the intrinsic value of wildlife, the Preamble reinforces the central purpose of biodiversity conservation, as opposed to ecologically sustainable development or resource management.

The Canadian Act also acknowledges that Canada's wildlife is part of the world's heritage. In this respect, it takes a broader approach to species conservation and considers Canada within a global context. South Australia could similarly acknowledge that its species, populations and ecosystems exist within a broader national and international context.

The objects provided for in section 3 of the NSW *Threatened Species Conservation Act 1995 (Threatened Species Conservation Act) are* in our view a preferable set of objects to those in the *Environment Protection and Biodiversity Conservation Act.* They clearly put the conservation

[7] The Hawke Report, Recommendation 3.

of biological diversity as the primary object and furthermore include critical aspects of biodiversity to be protected such as threatened species, populations, ecological communities and critical habitat.

The objects in section 3 are:

(a) to conserve biological diversity and promote ecologically sustainable development, and
(b) to prevent the extinction and promote the recovery of threatened species, populations and ecological communities, and
(c) to protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and
(d) to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and
(e) to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and
(f) to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.

Consideration could also be given to adopting the objects below. They are modelled on the objects provided for in proposed Western Australian biodiversity legislation[8] (drafted by WWF) which in turn were based on the Hawke Report recommendation in relation to revised objects.
Objects

(1) The primary object of this Act is to protect, conserve, restore and enhance biological diversity and ecological integrity in South Australia.

(2) The primary object is to be achieved by applying the principles of ecologically sustainable development as enunciated in the Act.

(3) The Minister and all agencies and persons involved in the administration of the Act must have regard to, and seek to further, the primary object of this Act.

(4) In pursuing the primary object, the Minister must:

[8] Clarke P, " Proposed Western Australia Biodiversity Legislation", WWF, 2010, section 3.

(a) encourage public participation in the making of decisions that impact on biological diversity;

(b) promote cooperation with federal and local governments in environmental protection and biodiversity conservation;

(c) assist in the co-operative implementation of Australia's international environmental responsibilities;

(d) recognise the role of Indigenous people in the conservation and ecologically sustainable use of South Australia's biological diversity;

(e) promote fair and efficient decision making[9]*.*

National Parks and Wildlife Act

The *National Parks and Wildlife Act* is deficient as it does not include an objects clause setting out the purpose and intention of the Act. The long title gives no indication of an intention to preserve biodiversity per se, but rather focuses on the species to be conserved. The long title refers in part to biodiversity conservation as it provides that the *National Parks and Wildlife Act* is:

"An Act to provide for establishment and management of reserves for public benefit and enjoyment; ***to provide for the conservation of wildlife in a natural environment****; and for other purposes."* (emphasis added).

Interestingly though, various sections require decision making to be consistent with the objectives of the Act even though these are not set out expressly. For example, section 53(1)(d) provides that " *the Minister may grant to any person a permit to take protected animals or the eggs of protected animals, if satisfied that it is desirable to grant the permit for any other purpose (other than for sale) that the Minister considers proper and not inconsistent with the*

[9] Clarke P, "Proposed Western Australia Biodiversity Legislation", WWF, 2010, section 3.

objectives of this Act". Thus conservation objectives appear to be implied rather than expressed.

The major focus of the *National Parks and Wildlife Act* is on protected areas. The *National Parks and Wildlife Act* also protects native animals by classifying them as protected animals, and then placing prohibitions on the taking and killing of protected species without a permit. If the survival of a species is under a particular threat, it may be further classified as endangered, vulnerable or rare. The *National Parks and Wildlife Act* ostensibly protects native plants in a similar way but, as discussed later in this chapter, currently such protection only covers plants found in protected areas, not on private land. Regulations can be made for the preservation or conservation of wildlife[10].

Objects clauses are important as they set out the main concerns and aims of the legislation in which they are found. However, there is generally no specific duty to abide by an objects clause, and the objects by themselves have little regulatory force for biodiversity protection. The legal principle of legislative interpretation states that the more specific provision overrides the more general provision[11]. As a result, later specific provisions may well override the general terms of an objects clause in relation to a particular issue such as a permit. Despite this, an objects clause may be used in proceedings to reinforce a particular interpretation and hence in this respect their wording is important.

Objects clauses can be linked with substantive provisions by the inclusion of terminology such as the requirement for decision makers to advance the purposes of the Act, such as in section 4 of the *Sustainable Planning Act 2009 (Qld)*. This technique appears at a state level in the *Natural Resources Management Act 2004* where section 9 provides that the statutory duty to act reasonably in relation to the management of natural resources is furthered by requiring a person carrying out the duty to *"have regard to the objects of the Act"*. There are numerous other provisions in the Act which seek to "have regard to the objects"[12], "promote"[13] the objects, "further"[14] the objects and to review a regional plan to ensure the objects are achieved[15].

[10] S80(x).
[11] The *generalia specialibus non derogant* rule.
[12] ss8 and 9.
[13] ss10, 29(1)(ea), 74(2)(f) and (fa).
[14] ss8, 30(1), 53(1), 64(2)(b), 74(2)(g), 205, 210.
[15] s74(2).

Further, the *Environment Protection Act 1993* provides that the administrators of the Act are required to "*have regard to and promote* the objects of the Act."[16]

This concept could be extended by requiring decision makers to perform their functions in a way that best achieves the objects, an example of which is found in the *Environmental Protection Act 1994 (Qld)*[17]. We recommend that this type of clause be included in biodiversity legislation.

Recommendations

Biodiversity legislation should:

- Have as its primary object the conservation, restoration and enhancement of biodiversity;
- Contain objects which acknowledge the national and international context for biodiversity conservation;
- Contain objects similar to those in the *Threatened Species Conservation Act* or in the proposed Western Australian biodiversity legislation; and
- Require decision makers to perform their functions in a way which best achieves the stated objects.

3. Definitions

Clear objects need to be supported by an inclusive definition of biodiversity namely one which includes all components of biodiversity. Internationally, the components of biodiversity which are important for conservation and ecologically sustainable use are identified having regard to the matters set out in Annex 1 of the Biodiversity Convention:

> *1. Ecosystems and habitats: containing high diversity, large numbers of endemic or threatened species, or wilderness; required by migratory species; of social, economic,*

[16] Section 10.
[17] Section 5.

cultural or scientific importance; or, which are representative, unique or associated with key evolutionary or other biological processes;
2. Species and communities which are: threatened; wild relatives of domesticated or cultivated species; of medicinal, agricultural or other economic value; or social, scientific or cultural importance; or importance for research into the conservation and sustainable use of biological diversity, such as indicator species; and
3. Described genomes and genes of social, scientific or economic importance.

Environment Protection and Biodiversity Conservation Act

The definition of biodiversity in the *Environment Protection and Biodiversity Conservation Act*, is as follows:

Biodiversity *means the variability among living organisms from all sources (including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part) and includes:*

(a) diversity within species and between species; and
(b) diversity of ecosystems[18]*.*

National Parks and Wildlife Act

As noted above, neither the term 'biodiversity', nor a definition, appears in the *National Parks and Wildlife Act.* However there are references in various provisions to species and ecosystems[19]. The native animals to which the *National Parks and Wildlife Act* applies include mammals, birds and reptiles[20]. Native plants are also covered.

In contrast, the *Threatened Species Conservation Act* has a comprehensive definition of biodiversity. Specifically the components of biodiversity are:

(a) genetic diversity—the variety of genes (or units of heredity) in any population,
(b) species diversity—the variety of species,

[18] *Environment Protection and Biodiversity Conservation Act* s528.
[19] For example, s 60I.
[20] Section 5.

(c) ecosystem diversity—the variety of communities or ecosystems[21]*.*

This definition is preferred as it clearly includes genetic diversity. Furthermore, the *Threatened Species Conservation Act* specifically provides a separate definition of biodiversity values under s4A, which indicates the importance placed on biodiversity by this legislation:

*(1) For the purposes of this Act, "**biodiversity values**" includes the composition, structure and function of ecosystems, and includes (but is not limited to) threatened species, populations and ecological communities, and their habitats.*

Recommendation

Biodiversity legislation should adopt a definition of biodiversity and biodiversity value terminology as provided for in the *Threatened Species Conservation Act.*

4. Principles

Environment Protection and Biodiversity Conservation Act

Section 3A outlines the primary principle underlying the *Environment Protection and Biodiversity Conservation Act,* namely ecologically sustainable development (ESD). The principles of ESD as formulated in the *Environment Protection and Biodiversity Conservation Act* are:

(a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;

(b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation[22]*;*

(c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

[21] *Threatened Species Conservation Act* s 4.
[22] This is the precautionary principle.

(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

(e) improved valuation, pricing and incentive mechanisms should be promoted.

The ESD principles may be considered as not entirely consistent with the objective of biodiversity conservation. However, as the Hawke Report observes, no viable alternative has been suggested[23].

The principles of ESD outlined in section 3 must be taken into account when the Minister is considering whether or not to approve actions under the *Environment Protection and Biodiversity Conservation Act*[24]. These are considered in tandem with other factors listed in the same section. The Commonwealth Department of the Environment must also have regard to principles of ESD when formulating various biodiversity plans such as recovery plans, threat abatement plans and wildlife conservation plans.

However these provisions only require consideration of ESD in decision making. There is no substantive implementation of ESD or a requirement for sustainable decisions to be made. Such decisions integrate environmental, social and economic factors. We recommend that biodiversity legislation require sustainable decision making.

Precautionary Principle

The precautionary principle, as set out in section 3A (b) provides:

'if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.'

This principle is one of the key elements of ESD. It is largely derived from the intergovernmental Agreement on the Environment 1992 and the 1993 International Rio Declaration on the Environment and Development.

[23] Hawke Report, p14.
[24] *Environment Protection and Biodiversity Conservation Act* s136.

The *Environment Protection and Biodiversity Conservation Act's* formulation of the precautionary principle is arguably flawed. In particular, Peel has observed that the use of the word "should" instead of "must" suggests decision makers are authorised rather than obliged to take precautionary action. There are also strict criteria for invoking the principle, that is, the existence of "threats of serious or irreversible environmental damage"[25].

However section 391(1) of the *Environment Protection and Biodiversity Conservation Act* does provide for a strong obligation on the Minister with regard to the precautionary principle by requiring him or her to take the principle into account in making certain decisions. This includes decisions on whether a development proposal falls within the definition of a controlled action and therefore requires approval under the *Environment Protection and Biodiversity Conservation Act*. As Peel has observed the principle can be of great importance as it instructs "the Minister not to discount environmental threats simply because there is scientific uncertainty over the exact nature and/or extent of possible impacts"[26].

Peel[27] notes that whilst there is a fairly wide scope to implement the precautionary principle there has been only cautious use to date. Certain issues create difficulties including uncertain knowledge about species and ecosystems. The courts have tended to construe the principle in a threshold fashion. In other words, if threats of serious or irreversible damage cannot be established then the principle has no application in the circumstances[28]. This approach appears to undermine the purpose of the principle which is to consider the effects of scientific uncertainty in decision-making. The current threshold of establishing serious or irreversible environmental damage can be very difficult to achieve especially where there is extensive scientific uncertainty concerning particular environmental risks.

ESD principles including the precautionary principle are found in a number of Australian jurisdictions. For example, the objects of the *National Parks and Wildlife Act 1974* (NSW) are to be achieved by applying ESD principles[29].

[25] Peel, J , *Implementation of the Precautionary Principle in the Environment Protection and Biodiversity Conservation Act*, Biodiversity Summit 2006: Proceedings p34.
[26] Peel, p34.
[27] Peel,p35.
[28] For example the Wildlife Whitsunday case [2005] FCA 1219.
[29] Section 2A (2).

National Parks and Wildlife Act

The *National Parks and Wildlife Act,* unlike many modern pieces of biodiversity conservation legislation does not enunciate any underlying principle such as the precautionary principle. The proposed Western Australian biodiversity legislation sets out a list of principles[30]. The list below is a modified version of this as the formulation of the precautionary principle at 2(c) now includes the word "must" instead of "should." The clause requires decision makers to act in a manner consistent with the principles. We recommend adoption of this clause:

(1) Decision-makers must exercise functions under this Act in a manner that is consistent with the following principles[31]:

(a) maintain or improve the conservation status of listed species, populations and communities;

(b) maintain or improve the extent and condition of natural habitats, including critical habitat;

(c) protect or restore ecosystem services, processes and functions;

(d) maintain or improve ecosystem integrity, resilience and resistance;

(e) maintain or improve connectivity within and between ecosystems;

(f) protect multiple representative examples of ecosystem types;

(g) facilitate adaptation to environmental change, including climate change;

(h) recognise uncertainty and plan for adaptive management; and

(i) the principles of ecological sustainable development.

(2) The following principles are principles of ecologically sustainable development:

[30] Clarke P, "Proposed Western Australia Biodiversity Legislation", WWF, 2010, section 4.
[31] Hawke Report, Recommendation 43.

(a) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

(b) decision-making processes should effectively integrate both long-term and short-term environmental, social, economic and equitable considerations;

(c) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty must not be used as a reason for postponing measures to prevent environmental degradation;

(d) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(e) improved valuation, pricing and incentive mechanisms should be promoted.

The Hawke Report recommends that the *Environment Protection and Biodiversity Conservation Act* be amended to emphasise that environmental considerations are to be considered first in decision making and that the Act emphasise ESD as a principle[32]. We make similar recommendations for any new state legislation.

Recommendations

Biodiversity legislation should:

- Include and prioritise the application of principles of ecologically sustainable development;
- Include the following principles
    - maintain or improve the extent and condition of natural habitats, including critical habitat,
    - protect or restore ecosystem services, processes and function,

[32] Hawke Report, Recommendation 2.

- maintain or improve ecosystem integrity, resilience and resistance,
- maintain or improve connectivity within and between ecosystems,
- protect multiple representative examples of ecosystem types,
- facilitate adaptation to environmental change, including climate change,
- recognise uncertainty and plan for adaptive management and
- maintain or improve the conservation status of listed species, populations and communities.

5. Climate change impacts

An important issue for biodiversity conservation is that of threat minimisation. South Australia is particularly vulnerable to the effects of climate change. To that extent any new legislation should include an appropriate clause regarding the prevention or minimisation of the impacts of climate change on biodiversity.

The *Environment Protection and Biodiversity Conservation Act* refers to threatening processes but climate change is not listed as such. Whilst considered in a number of contexts, for example in the preparation of threat abatement plans there is no stand alone provision requiring decision makers to particularly consider the impacts of climate change.

The proposed Western Australian biodiversity legislation[33] provides for the consideration of climate change impacts and could be considered for adoption. The relevant section states:

(1) In exercising functions under this Act, decision-makers must have regard to the current and predicted impacts of climate change on biological diversity and ecological integrity, including, but not limited to:

(a) changes in the geographic range of species;

[33] Clarke P, "Proposed Western Australia Biodiversity Legislation", WWF, 2010, section 5.

(b) changes to the timing of species' lifecycle events;

(c) changes in population dynamics and survival;

(d) changes in the location of species' habitats;

(e) increases in the risk of extinction for species that are already vulnerable;

(f) increased opportunity for range expansion of invasive species;

(g) changes in the structure and composition of ecosystems and communities;

(h) changes in coastal and estuarine habitat due to rising sea levels; and

(i) changes in the intensity and magnitude of existing pressures, including fire and invasive species.

The Hawke Report addresses this issue in part, by recommending an amendment to the *Environment Protection and Biodiversity Conservation Act* requiring the Minister to consider where relevant the ability of a protected matter to respond to current and emerging threats and the reasonably foreseeable impacts of the decision on that ability[34].

Recommendation

Biodiversity legislation should require decision makers to consider climate change impacts.

[34] Hawke Report , Recommendation 43

6. Duty of Care

There is no duty of care provision in either the *Environment Protection and Biodiversity Conservation Act* or the *National Parks and Wildlife Act*. In South Australia the *Natural Resources Management Act* provides for one, with all landholders having a statutory obligation of duty of care for the land. This means that those responsible for managing natural resources must take all reasonable and practical steps to prevent harm to the environment[35]. There is a similar duty in the *Environment Protection Act (SA) 1993*[36]. The *Pastoral Land Management and Conservation Act (SA) 1989* provides for a duty of care with a higher threshold as it requires a lessee:

(a) to carry out the enterprise under the lease in accordance with good land management practices; and
(b) to prevent degradation of the land; and
(c) to endeavour, within the limits of financial resources, to improve the condition of the land.[37]

A number of other Australian states have introduced a general duty of care to the environment through statutory legislation. Examples include the *Catchment and Land Protection Act 1994* in Victoria, the *Environmental Protection Act 1994* and the *Land Protection (Pest and Stock Route Management) Act 2002* in Queensland.

Target 53 of the South Australian "No Species Loss" proposes that the *"current duty of care for biodiversity on all land tenures is clarified and defined, agreed benchmarks that reflect an agreed minimum standard of future care for biodiversity are set in consultation with landholders, and an baseline to inform incentive based policy mechanisms and public investment decisions is established by 2010".*

A legislative duty of care for biodiversity is important as it confirms that priority is to be given to the conservation and protection of biodiversity. Such a duty can be utilised as an incentive

[35] s9.
[36] s25.
[37] s7.

mechanism to encourage landholders to improve the biodiversity on their land. This could be further encouraged by linking it with a reward scheme for those landholders who improve their land beyond the standard of the duty.

Bates[38] distinguishes between the two different types of duty of care that could be imposed in relation to biodiversity, namely a duty owed to other individuals or a duty owed to the environment. He notes that where a duty is owed to other individuals "…the focus is on the financial penalties of breaching the duty, rather than encouraging individuals to consider their impacts on the environment."[39] Instead, he prefers a duty of care owed to the environment because it can provide an active standard by which land managers can gauge what is expected of them and what practices are acceptable[40]. It therefore fulfils an educative role. It can also allow positive measures for biodiversity preservation to be stipulated[41].

A duty of care owed to the environment also effectively creates a minimum standard for biodiversity protection. A safety net could be particularly valuable in instances where significant ecosystem or other environmental harm may be threatened, but which might fall through the gaps of existing legislation[42].

Bates suggests that a statutory duty of care should be outcome-focused and at least guarantee a minimum standard of biodiversity protection. The benchmark should be set around 'best practice' for a particular industry or activity. Caution is needed though to ensure that the benchmarks do not limit the process.

However he notes that a duty of care would be insufficient to protect biodiversity on its own, and would need to be supported by complementary approaches, particularly those encouraging voluntary action.

Earl *et al* recommend that supporting guidelines or codes on ecological processes should be developed articulating how the duty of care should be enacted. The commentators observed that resistance to the concept of a duty in rural areas would increase where there were high

[38] Bates, G *A duty of care for the protection of biodiversity on land.* (2001) Report to the Productivity Commission.
[39] Bates, G, p7.
[40] Bates G, p25.
[41] Bates G, p8.
[42] Bates G, p26.

levels of uncertainty about what the duty would involve, and therefore recommended that there should be early involvement of farmer groups at the planning stage of new legislation[43].

It has been noted by other commentators that the most vocal arguments against a statutory duty typically come from the agricultural sector and involve what they perceive as a loss of property rights over their land. There is also concern about whether it is fair to burden the cost of biodiversity protection solely on landholders[44]. Bates[45] recommends phasing in standards or assisting with costs for a limited time in order to provide some relief to landholders.

A useful example of where a duty of care has been used is Tasmania. This scheme is referred to in the chapter on the Native Vegetation Act but essentially landowners who have entered in to conservation covenants can receive compensation if they exercise a higher duty of care for the land than is normally required.

Recommendations

Biodiversity legislation should contain duty of care provisions which:

- Are linked to an incentive based scheme to encourage landholders to improve biodiversity;
- Set an accepted minimum standard for biodiversity management;
- Are supported by guidelines or codes which articulate how the duty of care should be enacted; and
- Are phased in, or assistance is provided to landholders with costs for a limited time.

[43]The Social acceptability of a duty of care for biodiversity' (2010) *Australasian Journal of Environmental Management* 17:8-17; G. Earl, A. Curtis, C. Allan.
[44] Towards a duty of care for biodiversity' (2010) *Environmental Management* 45:682-696;Earl,G, Curtis,A, Allan,C.
[45] Bates, G *A duty of care for the protection of biodiversity on land* (2001)Report to the Productivity Commission,p32.

7. Administration

Environment Protection and Biodiversity Conservation Act

The Australian Environment Minister is responsible for administration of the *Environment Protection and Biodiversity Conservation Act*. He or she is advised by a range of consultative committees including the Threatened Species Scientific Committee (the TSSC) and the Biological Diversity Advisory Committee (the BDAC). The Hawke Report recommends that the BDAC be disbanded and its functions be transferred to the TSSC. The TSSC would then be renamed as the Biodiversity Scientific Advisory Committee[46]. We recommend a similar body for South Australia and will discuss potential functions later in this report.

National Parks and Wildlife Act

The administration of the *National Parks and Wildlife Act* is largely within the power of the Minister who is advised by the National Parks and Wildlife Council[47] and any advisory and consultative committees[48] the Minister establishes.

Each member of the Council must be a person who, in the opinion of the Minister is committed to the conservation of animals, plants and other natural resources[49]. Further, it is mandatory for some members to have conservation and ecosystem qualifications[50]; whilst this may include biodiversity experience, it must be implied from the legislation as it is not explicit. The term 'natural resources' is not defined and reflects the overall tenor of the *National Parks and Wildlife Act* which is the tendency to facilitate the *use* of wildlife (for example the taking, selling, hunting, etc) as opposed to the preservation, restoration and enhancement of it.

The purpose of the Council is to advise the Minister as set out in section 19C. Once again, there is no specific mention of biodiversity matters and so any protection must be inferred from other terms used such as "the conservation of wildlife". Further, the topics do not provide a

[46] Hawke Report, Recommendation 68.
[47] ss15-19D.
[48] ss19E-19O.
[49] s15(5).
[50] s15(4)(a), (b) (which allows for the appointment of a person nominated by Conservation SA) and (d).

holistic approach to biodiversity and so the Council is only required to aid biodiversity in an incomplete and piecemeal fashion.

The giving of any 'advice' to the Minister on the above topics is only discretionary and as the section indicates, the role of the Council is merely advisory and so there is no guarantee of direct positive impact on biodiversity matters. This is especially the case when section 19C is coupled with section 18 which states that the Council is under the control and direction of the Minister, which clearly indicates that the Council is not an independent advisor.

This is insufficient, particularly when compared to current international obligations and trends and national and interstate legislation. Sections 19E and 19M allow the Minister to establish advisory and consultative committees. Advisory committees are specialist bodies whose members hold office for a term of three years[51] and relevantly advise on, amongst other functions, the extinction of species and the management of endangered, vulnerable and rare species[52]. The value of the committees is potentially limited though as a committee's role is merely advisory and subject to the direction and control of the Minister[53] (rather than independent).

Appointments on consultative committees represent community knowledge on the conservation of animals, plants and ecosystems but the independence of members is compromised as they hold office "at the pleasure of the Minister"[54], and so unfavourable advice need not be followed. This may be at the expense of biodiversity protection.

We recommend the establishment of a Biodiversity Council which could amalgamate the current National Parks and Wildlife Council and Native Vegetation Council. This Council could have various functions and powers as discussed below and in other chapters of this report**.**

[51] s19F.
[52] s19E(4).
[53] s19I.
[54] s19M(3).

Recommendation

Biodiversity legislation should establish a Biodiversity Council and a Biodiversity Scientific Advisory Committee to advise the Minister and the Biodiversity Council on a range of biodiversity issues.

8. Listing categories - threatened species, populations and ecological communities, critical habitat, key threatening processes, migratory and marine species

In this section we will critique both the *Environment Protection and Biodiversity Conservation Act* and *National Parks and Wildlife Act* listing categories.

Environment Protection and Biodiversity Conservation Act

The listing of threatened species is one of the most important mechanisms in the *Environment Protection and Biodiversity Conservation Act* for off-park conservation. A number of key processes are triggered by a decision to list species including approvals, permits, licences, recovery plans, threat abatement plans and strategies, key threatening processes, declarations of critical habitats, interim protection orders, environmental impact assessment, offences and a range of duties and functions.

The *Environment Protection and Biodiversity Conservation Act* process is similar to regimes used in many jurisdictions both domestically and internationally. An exception is New Zealand where listing of all species occurs with an exemption list of species. Species are removed from the list once they are healthy. Whilst this approach is consistent with the precautionary principle it is out of step with other states and national and global standards.

We recommend that South Australia have a comprehensive legislatively based listing system as listing is a key response to biodiversity conservation in many international and domestic legislation, treaties and policies, for example the *Environment Protection and Biodiversity*

Conservation Act, the Biodiversity Convention and the IUCN Red List. This is on the proviso that listing is linked to positive steps such as recovery planning which seek to protect, conserve and enhance biodiversity.

The purpose of this section is to explain and critique definitions of listed species and communities provided for under the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act*. The section is divided into three parts:

- IUCN Red List Criteria;
- Definitions and Listing Categories under the *Environment Protection and Biodiversity Conservation Act* and *National Parks and Wildlife Act*; and
- Definitions: Problems and Challenges.

Listing categories in a number of jurisdictions, as detailed below, have been influenced by the IUCN Red List Criteria[55]. The Red List Criteria classifies species into nine groups determined by criteria such as rate of decline, population size, area of geographic distribution, and degree of population and distribution fragmentation.
These are:

- Extinct(EX) – no individuals remaining;
- Extinct in the wild (EW) - known only to survive in captivity, or as a naturalised population outside its historic range;
- Critically endangered (CR) - extremely high risk of extinction in the wild;
- Endangered (EN) - high risk of extinction in the wild;
- Vulnerable (VU) - high risk of endangerment in the wild;
- Near threatened (NT) - likely to become endangered in the near future;
- Least concern (LC) - lowest risk, which applies to biota which do not qualify for a more 'at risk' category. Widespread and abundant taxa are included in this category.
- Data deficient (DD) - not enough data to make an assessment of its risk of extinction; and
- Not Evaluated (NE) - has not yet been evaluated against the criteria[56].

[55] IUCN Red List Categories and Criteria Version 3.1. See http://www.iucnredlist.org.
[56] IUCN Red List Categories and Criteria Version 3.1. See http://www.iucnredlist.org.

Under the IUCN Red List, the official term "threatened" is a grouping of three categories: critically endangered, endangered, and vulnerable. Distinctions between the three threatened criteria turn on percentage reduction in population size. The aim is to achieve consistency when making assessments. Criterion A looks at trends over a specified period of time. Criterion B turns primarily on estimates of current limits to geographic range. Criterion C is based on estimated numbers of mature individuals. B and C have sub-criteria. Criterion D is based on estimated number of mature individuals at only one point in time. E looks at listing based on a quantitative analysis, such as population viability analysis showing the probability of extinction in the wild within a specified time period, for example a probability of 50% over ten years[57].

Environment Protection and Biodiversity Conservation Act

An entity must qualify as a 'species' to be eligible for listing. Species is defined under the *Environment Protection and Biodiversity Conservation Act* as a group of biological entities that (a) interbreed to produce fertile offspring and (b) possess common characteristics derived from a common gene pool. A species is further defined to include sub-species and distinct populations of biological entities[58]. A population may only be classified as a species (and thereby become eligible for listing) if the Minister makes a special determination to that effect, [59] a power that is yet to be utilised. Problems arising from this definition will be discussed below.
The *Environment Protection and Biodiversity Conservation Act* divides listing into two key categories: threatened species and ecological communities, respectively[60]. Whilst these categories are based on the IUCN criteria, the *Environment Protection and Biodiversity Conservation Act* does not require conformity with them.

The Minister must publish a list of threatened species divided into six sub-categories:

- Extinct;
- Extinct in the wild;
- Critically endangered;
- Endangered;
- Vulnerable; and

[57] IUCN Red List Categories and Criteria Version 3.1. See http://www.iucnredlist.org.
[58] *Environment Protection and Biodiversity Conservation Act* s 528.
[59] *Environment Protection and Biodiversity Conservation Act*, s 517.
[60] *Environment Protection and Biodiversity Conservation Act* ss 178, 181.

- Conservation dependant[61].

The *Environment Protection and Biodiversity Conservation Act* sets out the circumstances in which a native species may be classified under one of these six sub-categories[62]. The *EPBC Regulations 2000* (the Regulations) provides further, specific guidance regarding the classification of critically endangered, endangered and vulnerable native species. Specifically, criteria such as geographic distribution, estimated total number of mature individuals and probability of extinction in the wild are to be used to assess the status of the species[63].

As a further point of interest, a species may be listed as critically endangered if it so closely resembles a species eligible for listing under that category that it is difficult to differentiate between the two, thereby posing an additional threat to the listed species. Listing the non-threatened species must also substantially promote the objects of the *Environment Protection and Biodiversity Conservation Act*[64].

Threatened ecological communities[65] are divided into three listing categories, namely critically endangered, endangered and vulnerable[66]. The three categories are determined by following criteria prescribed by the *Environment Protection and Biodiversity Conservation Act*:

- Critically endangered: facing an extremely high risk of extinction in the wild in the immediate future;
- Endangered: not critically endangered, but facing a very high risk of extinction in the wild in the near future; and
- Vulnerable: neither critically endangered nor endangered, but facing a high risk of extinction in the wild in the medium-term future[67].

As with threatened species, the Regulations state the prescribed assessment criteria for the different categories of listed threatened ecological communities. These include a range of

[61] *Environment Protection and Biodiversity Conservation Act* ss 178.
[62] *Environment Protection and Biodiversity Conservation Act* s 179.
[63] EPBC Regulation 7.01.
[64] *Environment Protection and Biodiversity Conservation Act* s186 (3).
[65] *Environment Protection and Biodiversity Conservation Act* s181.
[66] *Environment Protection and Biodiversity Conservation Act* s182.
[67] *Environment Protection and Biodiversity Conservation Act* s182.

factors connected to geographic distribution[68]. Following recommendations made by the threatened species scientific committee in the 2006 State of the Environment Report, the Regulation was amended to also include regional variation in the condition and state of ecological communities[69].

National Parks and Wildlife Act

The current threatened species schedules are divided up into animals, mammals, birds, reptiles and amphibians in Part 1. Part 2 lists native plants. For each taxon listed in the schedules, details are provided on its class, family, genus, specie and common name. This includes sub-species in some cases.

Schedule 7 lists endangered species which includes critically endangered and extinct species, Schedule 8 lists vulnerable species and Schedule 9 lists rare species. The animals listed in these schedules are collectively known as “protected animals”. Plants are listed using the same criteria.

We understand that the criteria used by the Department of Environment and Natural Resources to define threatened species are only generally based on categories and definitions from the IUCN Red List Categories and Criteria and are therefore not fully consistent with those used in the *Environment Protection and Biodiversity Conservation Act.* Also, as the use of the IUCN criteria is not a legislative obligation, there is no requirement to use these categories. We recommend the statutory use of the IUCN categories in biodiversity legislation to achieve consistency with other jurisdictions including the federal jurisdiction.

The rare category is not recognised in the IUCN structure and therefore criteria have been developed for this category. These criteria are generally consistent with current IUCN definitions for the 'near threatened' category and include species in decline and those with a natural limited presence.

[68] Regulation 7.02, Environment Protection and Biodiversity Conservation Regulations 2000 (Cth).
[69] Regulation 7.02, Environment Protection and Biodiversity Conservation Regulations 2000 (Cth); 2006 State of the Environment Committee, *State of the Environment 2006: Independent Report to the Australian Government Minister for the Environment and Heritage*, 2006. http://www.environment.gov.au/soe/2006/publications/report/biodiversity-1.html.

It is of great concern that populations, communities and critical habitat are not listed. Thus threats other than those that directly damage a protected animal or plant such as habitat destruction are not addressed by the *National Parks and Wildlife Act.* In addition there is no protection for native plants on private land unless the species is prescribed. No species have to date been prescribed under the *National Parks and Wildlife Act.* However, the *Native Vegetation Act 1991* affords protection to native plant species on private land subject to various exclusions, as discussed in the chapter of the report addressing that legislation.

Definitions: Problems and Challenges

Different definitions across Australia

Listing in Australia is fragmented and poorly integrated. Specifically, different definitions across Australian jurisdictions mean that an entity may be listed in a State but not by the Commonwealth and vice versa. It may also be listed in one State but not another. Furthermore, different definitions have led to different levels of protection and on occasion litigation. For example, in the case of *Murlan Consulting Pty Ltd v Ku-ring-gai Council*[70]*,* the applicant argued that Blue Gum High Forest on a site in New South Wales did not meet the *Environment Protection and Biodiversity Conservation Act's* definition of a critically endangered community and therefore should not be afforded protection under the *Threatened Species Conservation Act*. The Hawke Report recommends a single system of listing to avoid these difficulties[71].

However, there are definitional problems associated with listing ecological communities. These go to issues of both condition and recognition. For example, the components of communities are constantly changing due to climate change, human intervention and fire. In addition, communities can exist naturally in a range of states and across different topographies. Furthermore, unlike threatened species, there is no consensus as to what hierarchical level – that is, level of organisational complexity - is most appropriate for the definition and management of ecological communities[72].

[70] [2007] NSWLEC 374.
[71] Hawke Report, Recommendation 5.
[72] RJS Beeton and C McGrath, *'Developing an Approach to the Listing of Ecological Communities to Achieve Conservation Outcomes'* The Australasian Journal of Natural Resources Law and Policy (Vol 13, No 1,2009)p61 at p73.

The Hawke Report recommends that the *Environment Protection and Biodiversity Conservation Act* be amended to require the Scientific Committee to indicate in the listing process the areas necessary for an ecological community to persist and maintain its ecological function[73]. This is a helpful suggestion and we would suggest it be used in any South Australian listing scheme.

As noted above in 'Definitions', the *Environment Protection and Biodiversity Conservation Act* breaks species into two categories: sub-species and distinct populations of biological entities[74]. This definition fails to take into account the true nature and distribution of biota and in turn variations in genetic diversity across populations. Specifically, distribution of genetic diversity throughout these levels varies from species to species. For example, it may be entirely represented in each individual organism (as with the Wollemi Pine), across a number of discrete populations or across a number of interrelated populations.

The *Environment Protection and Biodiversity Conservation Act's* narrow listing criteria for populations therefore overlook all but one possible population structure, thereby undermining the preservation of genetic diversity. As Whelan *et al* have concluded:

"[f]ocusing attention on populations is critical if we are to conserve genetic diversity within species and to maintain evolutionary potential with populations and species"[75].

Species are more likely to survive in a group than on their own. Therefore, by listing populations, there is greater chance that species will survive. This, in turn, reduces the number of listed species and so reduces the effort required to protect biodiversity.

The *National Parks and Wildlife Act* does not explicitly provide for the listing of populations. In contrast the *Threatened Species Conservation Act* provides for listing not only of species and ecological communities but populations as well[76]. Section 4 defines a population as:

"a group of organisms, all of the same species, occupying a particular area".

[73] Hawke Report, Recommendation 13.
[74] *Environment Protection and Biodiversity Conservation Act* s 528.
[75] R J Whelan, J Sumner, C Mooney and D Farrier- " *A State is not an Island: Conserving Evolutionary Potential in the Face of Climate Change by Listing Populations Under Current Threatened Species Legislation'*, The Australasian Journal of Natural Resources Law and Policy (Vol 13, No 1, 2009) p146.
[76] S11.

Part 2 of the *Threatened Species Conservation Act* provides for the identification and classification of species, populations and ecological communities, as well as the identification of key threatening processes that are most likely to affect the survival of these. This is achieved via lists which set out endangered, critically endangered and vulnerable matters as well as key threatening processes. The lists are attached in the Schedules. Schedule 1 lists endangered species, populations and ecological communities. In terms of animals, the list includes vertebrates and invertebrates. In relation to ecological communities, it appears to be implicit that it adopts an ecosystem approach with such areas as the Blue Mountains Shale Cap Forest and the Hunter Floodplain Red Gum Woodland, amongst many others, being afforded endangered status. This Schedule also provides for species presumed to be extinct.

Schedule 1A lists critically endangered species and ecological communities and Schedule 2 lists vulnerable species and ecological communities. Schedule 3 lists key threatening processes, examples of which include clearing of native vegetation, invasion of certain plant and animal species, and predation of introduced species such as feral cats and foxes. Sections 10 and 12 provide for the listing of species and ecological communities and section 11 provides for the listing of populations. Division 3 of the *Threatened Species Conservation Act Regulations 2010* provide comprehensive criteria for the listing of endangered populations.

11 Criteria for listing determinations by Scientific Committee

(a) it is disjunct or near the limit of its geographic range,
(b) it is or is likely to be genetically, morphologically or ecologically distinct,
(c) it is otherwise of significant conservation value.

12 Large reduction in population size

The size of the population has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo, within a time frame appropriate to the life cycle and habitat characteristics of the taxon, a large reduction based on either of the key indicators.

13 Highly restricted geographic distribution of population and other conditions

The geographic distribution of the population is estimated or inferred to be highly restricted and either:

(a) a projected or continuing decline is observed, estimated or inferred in either of the key indicators, or
(b) at least 2 of the following 3 conditions apply:
(i) the population or habitat is observed or inferred to be severely fragmented,
(ii) all or nearly all mature individuals are observed or inferred to occur within a small number of locations,
(iii) extreme fluctuations are observed or inferred to occur in either of the key indicators.

14 Low numbers of mature individuals in population and other conditions

The estimated total number of mature individuals in the population is low and either:

(a) a projected or continuing decline is observed, estimated or inferred in either of the key indicators, or
(b) at least 2 of the following 3 conditions apply:
(i) the population or habitat is observed or inferred to be severely fragmented,
(ii) all or nearly all mature individuals are observed or inferred to occur within a small number of locations,
(iii) extreme fluctuations are observed or inferred to occur in either of the key indicators.

15 Very low numbers of mature individuals in population

The estimated total number of mature individuals of the population is observed, estimated or inferred to be very low.

We recommend similar criteria could be adopted for the listing of threatened populations in South Australia.

Key functional groups of species

Key functional groups of species possess traits specifically adapted to their unique ecosystem[77]. The definitions of species in the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act* lack any reference to key functional groups. As these groups play a pivotal role in maintaining ecosystem functioning, failure to protect them may not only result in species loss, but impair key ecosystem processes[78].

Species not currently threatened

The *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act* do not provide for the inclusion of species that are not currently threatened but susceptible to becoming so. This is valuable because listing species on the basis of vulnerability assessments or "susceptibility traits" pre-empts and prevents more serious depletion[79].
Vulnerability assessments or susceptibility traits can be also be taken into account in the listing process for threatened species and ecological communities.

Recommendations

Biodiversity legislation should:

- List threatened species, populations and ecological communities;
- List key functional groups of species and susceptible species;
- Use the definitions and criteria for threatened species and ecological communities found in the *Environment Protection and Biodiversity Conservation Act* and Regulations;

[77] For example, species particularly adapted to arid desert conditions.
[78] Zackrisson, O and Warldle, D, Effects of species and functional group loss on island ecosystem properties, *Nature* 435, 806-810 (9 June 2005).
[79] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009 p36.

- Use the definition of threatened populations in the *Threatened Species Conservation Act* and criteria in the *Threatened Species Conservation Act Regulations*; and
- Provide that the Scientific Committee indicate in the listing process the areas necessary for an ecological community to persist and maintain its ecological function.

Other Listings

Listing of Critical Habitat

Listing critical habitat is important as one of the key threats to listed species and communities is loss of habitat through human intervention. The Federal Minister is required to keep a register listing critical habitat. In deciding to list a habitat, he or she must take into account the potential conservation benefit of listing the habitat and is required to consider scientific advice in identifying the habitat[80]. The Minister is not limited to only considering the potential conservation benefit of listing the habitat[81]. This is a weakness of the provisions as the Minister can consider socio-economic decisions when making a listing decision. Listing is an expensive process, but fundamental to the protection of biodiversity (as set out in the Convention) and so whilst economics is always a factor, it should not be intrinsically linked to considerations regarding biodiversity protection.

The Regulations to the *Environment Protection and Biodiversity Conservation Act* provide criteria for identifying critical habitat:

7.09 Identification of critical habitat

(1) For subsection 207A (1) of the Act, the Minister may, in identifying habitat, take into account the following matters:

(a) whether the habitat is used during periods of stress;

Examples of period of stress

Flood, drought or fire.

[80] *Environment Protection and Biodiversity Conservation Act* s207A(1A).
[81] *Environment Protection and Biodiversity Conservation Act* s207A(1B).

(b) whether the habitat is used to meet essential life cycle requirements;

Examples

Foraging, breeding, nesting, roosting, social behaviour patterns or seed dispersal processes.

(c) the extent to which the habitat is used by important populations;

(d) whether the habitat is necessary to maintain genetic diversity and long-term evolutionary development;

(e) whether the habitat is necessary for use as corridors to allow the species to move freely between sites used to meet essential life cycle requirements;

(f) whether the habitat is necessary to ensure the long-term future of the species or ecological community through reintroduction or re-colonisation;

(g) any other way in which habitat may be critical to the survival of a listed threatened species or a listed threatened ecological community.

(2) The Minister must, when making or adopting a recovery plan, consider whether to list habitat that is identified in the recovery plan as being critical to the survival of the species or ecological community for which the recovery plan is made or adopted.

(3) Before listing habitat in the register, the Minister must:

(a) consider any advice from the Scientific Committee about whether the habitat is critical to the survival of a listed threatened species or listed threatened community; and

(b) if the habitat is not in a Commonwealth area, be satisfied that reasonable steps have been taken to consult with the owner of the property where the habitat is located.

If the Commonwealth sells or leases land on which there is critical habitat a covenant must be attached to the land protecting the habitat. It is an offence if a person takes an action knowing that the action significantly damages or will significantly damage critical habitat for a listed threatened species or threatened ecological community[82]. It is also an offence to knowingly take an action which significantly damages a critical habitat (other than one relating to a conservation dependant species) unless the action is specifically exempted by the *Environment Protection and Biodiversity Conservation Act*[83].

[82] *Environment Protection and Biodiversity Conservation Act* s207B.
[83] *Environment Protection and Biodiversity Conservation Act* s270B.

The Canadian *Species at Risk Act 2002* recognises in its preamble that the habitat of species at risk is a key element in the conservation of that species. A comprehensive listing and planning regime for the critical habitat of threatened species is included.

However there have only been a handful of listings to date under the *Environment Protection and Biodiversity Conservation Act.* In addition, most of the areas listed are currently managed by governments. Consequently, there is little additional protection to that already provided under other provisions of the *Environment Protection and Biodiversity Conservation Act* and reserve management plans.

Nevertheless we strongly recommend that state significant critical habitat be listed and, if relevant, listing should occur at the same time as species listing. As noted above the *National Parks and Wildlife Act* is significantly flawed as it does not provide for the listing of critical habitat.

The object of listing should be to identify critical habitat within a specified time frame. There should be publication of the listing specifying which critical habitat pertains which threatened species. This is in line with recommendation 12 in the Hawke Report.

Areas not currently habitat

The Environmental Defenders Office of New South Wales[84] have observed that the definition of critical habitat implies that to be listed the habitat must be current habitat for a threatened species. This would appear to exclude habitat likely to be required by a threatened species in the future particularly as a result of climate change. Such habitats could include habitat corridors, climate refuges, or appropriate habitat types covering future dispersal of a species. It is therefore unclear whether buffer areas which are not habitat for the threatened species could be declared to be critical habitat. Such buffer areas can be important in protecting biodiversity suffering the impacts of climate change.

[84] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009 p39.

The definition of critical habitat should include areas which, whilst not presently containing threatened entities, are still essential for their conservation. This is currently the case in Queensland, and we recommend the use of the following definition:[85]

(2) A ***critical habitat*** may include an area of land that is considered essential for the conservation of protected wildlife, even though the area is not presently occupied by the wildlife.

Recommendations

Biodiversity legislation should:

- List critical habitat;
- List critical habitat at the same time as listing species;
- Adopt the criteria in *Environment Protection and Biodiversity Conservation Act Regulations* for defining critical habitat together with the definition of critical habitat in section 13(2) *Nature Conservation Act 1992 (Qld;) ;* and
- Provide that environmental considerations be given greater weight in decision making than socio-economic considerations.

Key Threatening Processes

The *Environment Protection and Biodiversity Conservation Act* also allows for the listing of key threatening processes. The Minister is required to establish a key threatening processes list[86]. A process is defined as a threatening process if it threatens, or may threaten, the survival, abundance or evolutionary development of a native species or ecological community[87]. These processes may include pest animals, land clearing or excessive grazing.

[85] *Nature Conservation Act (Qld) 1992, S13 (2).*
[86] *Environment Protection and Biodiversity Conservation Act* s183.
[87] *Environment Protection and Biodiversity Conservation Act* s188 (4).

Any person may nominate a threatening process for listing under the *Environment Protection and Biodiversity Conservation Act.* Threatening processes may be nominated in accordance with clause 7.06 of the *Environment Protection and Biodiversity Conservation Regulations 2000*. The Threatened Species Scientific Committee then considers whether nominations should be included on a proposed priority assessment list. Processes included in the final priority assessment list are released for public comment before the Minister decides whether the process should be included on the Key Threatening Processes list.

The *National Parks and Wildlife Act is* seriously deficient as it does not provide for the listing of key threatening processes.

Listing of key threatening processes should be considered. The Hawke Report recommends a better definition of key threatening processes which allows their identification at a range of scales[88]. We support this recommendation.

Recommendations

Biodiversity legislation should:

- List key threatening processes ; and
- Use a definition which identifies processes at a range of scales

Listing of Migratory Species

The *Environment Protection and Biodiversity Conservation Act* requires the Minister to establish a list of migratory species. The Hawke Report recommends some changes to this list[89] but it must include native species that are included in the appendices to the BONN convention/in the annexes to JAMBA and CAMBA and any other relevant international agreement[90]. Such species might be listed under the *National Parks and Wildlife Act* but there is no requirement to do so.

[88] Hawke Report, Recommendation 19.
[89] Hawke Report, Recommendation 17
[90] *Environment Protection and Biodiversity Conservation Act* s209

Recommendation

Biodiversity legislation should list migratory species.

Listing of Marine Species

The Federal Minister is required to establish a list of marine species. It is noted that listing of such species at a state level takes place primarily under the *Fisheries Management Act SA 2007*. This Act, inter alia, provides for the conservation and management of the aquatic resources of the state, protection of aquatic habitats, aquatic mammals and aquatic resources and control of exotic aquatic organisms and disease in aquatic resources.

Some of these species have been identified as threatened and recommended for listing under the *National Parks and Wildlife Act* but at the present time they do not have a legal conservation status. The Action Plan for South Australian Freshwater Fishes 2009 identifies five categories for different levels of extinction risk to freshwater fish namely extinct in the wild (EX), critically endangered (CR), endangered (EN), vulnerable (VU) and rare (RA).

We recommend that the listing of marine species be streamlined by having marine species listed with terrestrial species in the one piece of biodiversity conservation legislation. Threatened freshwater and marine fish, together with aquatic invertebrates should be listed.

Recommendation

Biodiversity legislation should list marine species.

9. Listing processes

The purpose of this section is to explain and critique the process for listing biota provided for under the *Environment Protection and Biodiversity Conservation Act* and the *National Parks and Wildlife Act.*

Environment Protection and Biodiversity Conservation Act

The usual listing process involves an annual cycle which revolves around twelve month periods known as assessment periods. In any given assessment period the Minister may determine conservation themes[91] and must recommend annual priorities. Nominations are given to the Threatened Species Scientific Committee (the Scientific Committee) which produces a priority assessment list in each twelve month period[92] and advises the Minister on the listing[93]. It is the Minister who makes the decision on whether or not to list[94]. The *Environment Protection and Biodiversity Conservation Act* requires reasonable steps to update inventories and surveys[95].
In practice, the Minister calls for public nominations each year for listings of species, ecological communities and threatening processes. Any person can make a nomination. Nominations that are included on the final priority assessment list are released for public comment before a listing decision is made.

When including or deleting any species, the Minister must not consider any matter that does not relate to the survival of that species[96]. Therefore socio-economic factors are specifically excluded from consideration by the Minister.

This can be contrasted with the Canadian listing process which specifically considers other sources of data. Listing decisions must be based on "the best available information on the biological status of a species, including scientific knowledge, community knowledge and aboriginal traditional knowledge[97]. The risk here is that use of other sources of data could result in the intrusion of irrelevant values and loss of objectivity.

[91] *Environment Protection and Biodiversity Conservation Act*, s194D.
[92] *Environment Protection and Biodiversity Conservation Act* Part 13, Subdivision AA.
[93] *Environment Protection and Biodiversity Conservation Act* s189.
[94] *Environment Protection and Biodiversity Conservation Act* s184.
[95] *Environment Protection and Biodiversity Conservation Act* s174.
[96] *Environment Protection and Biodiversity Conservation Act* s186 (2).
[97] *Species at Risk Act 2002 s15.*

The Minister determines the composition and qualifications of the Scientific Committee[98] and therefore persons other than scientists may be members. This feature sets the *Environment Protection and Biodiversity Conservation Act* apart from most other jurisdictions. In our view the Committee should only comprise appropriately qualified scientists as they are best placed to understand and evaluate the research submitted with listing nominations.

Once it receives a nomination the Committee must prepare and give its advice to the Minister within twelve months or any longer period the Minister specifies[99]. The Minister may request further information from the person who has made the nomination within a specified period[100].

The Committee may obtain advice from an expert and, in relation to threatened species or ecological communities, must not consider any matter not relating to their survival[101]. The Scientific Committee also invites people to make comments about the item in the finalised list[102].

The Scientific Committee can reject a nominated item if it thinks it is unlikely to be eligible to be included on a relevant list or transferred from one list to another. The Minister can only undertake amendments after considering the advice of the Scientific Committee in accordance with any regulations[103]. The only exception is the removal of a species from the extinct category to another category if it has been definitely located in nature since it was last listed as extinct[104].

If the Committee's advice is that a species or community is not eligible to be listed under any of the categories, it may nonetheless give the Minister advice about actions necessary to prevent that species or community becoming threatened and the Minister's actions under the *Environment Protection and Biodiversity Conservation Act* must have regard to that advice[105].

The Minister decides whether an item that has been assessed should be included in the list. If the Minister decides to amend the list, this must be publicised[106].

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[98] *Environment Protection and Biodiversity Conservation Act* s502.
[99] *Environment Protection and Biodiversity Conservation Act* s189 (4).
[100] *Environment Protection and Biodiversity Conservation Act* s191 (5).
[101] *Environment Protection and Biodiversity Conservation Act* ss189 (2) & (3).
[102] *Environment Protection and Biodiversity Conservation Act*, s194M.
[103] *Environment Protection and Biodiversity Conservation Act* s189.
[104] *Environment Protection and Biodiversity Conservation Act* s192.
[105] *Environment Protection and Biodiversity Conservation Act* s190.
[106] *Environment Protection and Biodiversity Conservation Act* s189 (5).

Under the *Threatened Species Conservation Act* the Scientific Committee makes a preliminary determination following the submission of a nomination. It publishes notice of its preliminary determination in a newspaper, which effectively allows people to make written submissions to the Committee about the determination. The Committee must then consider all written submissions received by it[107].

Following this procedure, the Scientific Committee then makes a final determination. It does so by accepting or rejecting a proposal for inclusion, amendment or omission of any matter from Schedules 1, 1A, 2 or 3. The Scientific Committee, before making the final determination, must give the Minister notice in writing of the proposed final determination and the reasons for it and the Minister then has 2 months in which to decide whether to refer the proposed final determination back to the Committee for further consideration. A final determination must be made within 6 months[108].

In response to the notice from the Scientific Committee, the Minister may decide to refer or not refer the matter back to the Committee for further consideration. Importantly, the Minister may only refer a matter back to the Committee for 'reasons of a scientific nature'. Upon referral, the Committee may decide to proceed with the final determination, change the final determination or not proceed with it at all. This decision is final and the Minister cannot refer the matter back to the Committee a second time[109].

The lists are to be kept under review by the Scientific Committee and the review must occur at least every two years[110]. In our view this is preferable to the provisions for review under the *Environment Protection and Biodiversity Conservation Act.*

There is also a link in the NSW legislation to the *Environment Protection and Biodiversity Conservation Act*. As soon as practicable after a species or ecological community indigenous to New South Wales becomes a listed threatened species or ecological community under the *Environment Protection and Biodiversity Conservation Act*, the Scientific Committee is to

[107] s 22.
[108] s23.
[109] s23a.
[110] s25A.

consider whether it should be incorporated into the listings under the Act[111]. We recommend a similar provision in state legislation.

Analysis

Requirement to list

A fundamental difficulty with listings across Australian jurisdictions is that there is no duty on any person or authority to list. This affects the timeliness of listings and as a result the community is put at risk of losing further species. Furthermore, there are no statutory duties to reveal information which discloses that a species is in fact threatened, or to identify such species, or to even trigger the process of listing.

Public Involvement

Whilst it is customary for the Minister to regularly call for nominations there is no requirement under the *Environment Protection and Biodiversity Conservation Act* for them to do so. The establishment of a duty would assist this process by instituting an obligation to list. However, the Minister does have a duty to consult both the Scientific Committee and any affected or interested State or Territory Government under section 270A.

We recommend that public involvement be a legislative requirement. The nature and extent of public involvement including nomination and consultation processes need to be clearly articulated and be subject to reasonable timeframes.

Timeliness of Decision Making

The *Environment Protection and Biodiversity Conservation Act* does not specify a time frame for the Minister to make a decision. This is contrast to the Canadian situation where the *Species at Risk Act 2002* requires that decision maker must within nine months of receiving a status report from their equivalent of the Scientific Committee, either follow their recommendation and list the species, not list the species or send the report back. If the latter two options are chosen, the

[111] SS9(1).

reasons must be set out in the public registry. If the Council does nothing within nine months, they must amend the public registry in accordance with the Committee's recommendations[112].

Decision maker

The Scientific Committee should play a significant role in the listing process. The Committee should have the authority to develop priority themes and assess nominations. Most importantly, in our view, the Committee should have responsibility to make final decisions on what should be listed as this is a scientific question. We agree with Jenkins and Gardner[113] that scientists are best qualified to evaluate scientific research and less likely to be influenced by factors not related to the risk status of the species, namely political considerations. In New South Wales the Scientific Committee may determine whether an entity is eligible for listing[114].

Whilst there may be concerns that the Scientific Committee is not politically accountable, safeguards could be put in place. For example the Committee could have the power to make decisions whilst the Minister directs the Committee based upon clearly legislated criteria. In addition, the Minister's directions could be tabled in Parliament for notice or disallowance. A further possibility is that the Minister could develop listing guidelines and criteria[115].

In New South Wales, the body which is responsible for managing the listing process is the Scientific Committee, which is established under section 128 of the *Threatened Species Conservation Act*. The Committee is a specialist body constituted only of persons with scientific expertise[116]. Importantly, the Committee is not subject to Ministerial control or direction. Its principle functions are:

> *(2)(a) to determine which species are to be listed under this Act as threatened species,*
> *(b) to determine which populations are to be listed under this Act as endangered populations and to advise the Director-General on the identification of their critical habitat,*

[112] s27.
[113] M Jenkins, A Gardner, *Conservation of Biodiversity through the Listing of Threatened Species and Ecological Communities- A Comparative Review*, The Australasian Journal of Natural Resources Law and Policy [Vol 10, No 1, 2005].
[114] *Threatened Species Conservation Act (NSW) 1995 s17.*
[115] Jenkins and Gardner p13.
[116] Section 129.

(c) to determine which ecological communities are to be listed under this Act as endangered, critically endangered or vulnerable ecological communities and to advise the Director-General on the identification of their critical habitat,

(d) to determine which threatening processes are to be listed under this Act as key threatening processes,

(e) to review draft joint management agreements and the performance of parties under executed joint management agreements,

(f) to advise the Director-General on the exercise of the Director-General's functions under this Act,

(g) to advise the Minister and the [Natural Resources Commission] on any matter relating to the conservation of threatened species, populations or ecological communities that is referred to the Committee by the Minister or that the Committee considers appropriate[117]*.*

Emergency listing

The *Environment Protection and Biodiversity Conservation Act* does not currently provide for emergency listing. The *Endangered Species Act (US) 1973*[118] has such a provision. Where there is an emergency posing a significant risk to the well-being of any species of fish or wildlife or plant this may initiate an emergency listing. Such a provision could be very useful in the event of a proposed development that is likely to impact as yet unlisted threatened or endangered species. The Hawke Report recommends that the Minister have the power to make emergency listings of species and communities[119].

It is recommended that new biodiversity conservation legislation provide for emergency listing of species and communities.

Reviews of Lists

As referred to above the *Environment Protection and Biodiversity Conservation Act* requires that the Minister must take reasonable steps to ensure that inventories are maintained in an up to date form. We are of the view that review should occur on a regular basis, perhaps every two

[117] Section 128A.
[118] s4.
[119] Hawke Report, Recommendation 16.

years, as is the case in New South Wales**,** to ensure currency, particularly in the face of mounting threats to biodiversity such as the impacts of climate change.

National Parks and Wildlife Act

The *National Parks and Wildlife Act* listing system is seriously flawed for a number of reasons. Lists of protected species are in Schedules to the *National Parks and Wildlife Act*. There is no legal requirement for listing. The Governor may, by regulation, amend Schedule 7, 8, 9 or 10 by deleting species of animals or plants from, or including species of animals or plants in, the Schedule[120]. Essentially the Environment Minister makes a decision on listing upon receiving advice from the Department of Environment and Natural Resources.

In addition the *National Parks and Wildlife Act* lacks any formal process for listing. For example, there are no requirements for a nomination process, public involvement and review. Listing processes are informal and lack timeframes. Listing processes must occur in a timely fashion to protect our State's dwindling biodiversity. We note that a review submitted to the Minister in 2003 was not gazetted until 2008. With no legislative requirements for listing the process lacks transparency and accountability.

Furthermore, listing has limited impact for biodiversity protection on private land. The taking of native plants is an offence in protected areas. However as noted above it is only an offence on private land if a species has been prescribed[121]. This is in contrast to the offence of taking of protected animals and eggs which is an offence with respect to both protected areas and private land[122]. Nevertheless the clearance of native plants on private land is regulated, with various exemptions, through the *Native Vegetation Act* (as discussed further in the chapter of the report dealing with that Act).

Finally, listing does not create any obligations. For example, there is no requirement to undertake recovery programs or other actions. The only legal implications apart from the take provisions of the Schedules is that listed species are taken into consideration when a clearance application is before the Native Vegetation Council. Section 29 of the *Native Vegetation Act*

[120] s80.
[121] s47(1).
[122] s51(1).

1991 provides that the Council must have regard to and make a decision that is not seriously at variance with the principles of clearance. These principles are listed in Schedule 1 of the Act.
The relevant principles in relation to biodiversity conservation are:
Native vegetation management should not be cleared, if, in the opinion of Council:

- It comprises a high level of diversity of plant species; or
- It has significance as a habitat for wildlife; or
- It includes plants or a rare, vulnerable or endangered species; or
- The vegetation comprises the whole, or a part, of a plant community that is rare, vulnerable or endangered; or
- It is significant as a remnant of vegetation in an area which has been extensively cleared; or
- It is growing in, or in association with, a wetland environment.

The *Native Vegetation Act* has prevented broad acre clearing in South Australia and in doing so has assisted in the preservation of critical habitat. However when making decisions on applications to clear native vegetation the Council considers a number of other principles in Schedule 1 besides those relating to biodiversity management.

In our view biodiversity legislation should focus directly on the protection of critical habitat.
In addition, listing should automatically trigger a requirement for biodiversity conservation measures such as the preparation of conservation advices and recovery plans, as well as *Environment Protection and Biodiversity Conservation Act* measures (discussed in more detail later in this part of the report).

There are two key recommendations regarding listing in the Hawke Report. Recommendation 5 provides that all Australian jurisdictions move to a single national list covering threatened species, including marine species and ecological communities, through accreditation of State processes for listing endemic species. The process should include:

- Agreed accreditation for listing;
- Agreed protocols;
- Minimum procedural standards; and
- Consistent documentation standards.

If this recommendation is adopted then we recommend a listing process as set out below.

Recommendation 15 of the Hawke Report is also important as it relates to decision making. It provides that in deciding whether to list a threatened species or ecological community the Minister must take the principles of ESD into account only in exceptional situations where social or economic costs associated with listing are overwhelming and the environmental benefits are known to be slight. We support this recommendation.

Recommendations

Biodiversity legislation should include a listing process with the following features:

- Duty to list;
- Requirement for public nominations to be sought, and have consultation;
- Decisions based only on scientific evidence;
- Scientific Committee made up solely of scientists, to set themes, assess nominations and make decisions. In the alternative, if it is determined that the Minister makes the decisions (which we do not recommend), then there be merits review of those decisions;
- Publication of reasons for decisions;
- Timely decision making;
- Emergency listing;
- Regular reviews of lists, perhaps every two years;
- As soon as practicable after a species, population or ecological community indigenous to South Australia becomes a listed threatened species or ecological community under the *Environment Protection and Biodiversity Conservation Act*, the Scientific Committee should consider whether it should be incorporated into State listings;

- When deciding whether to list a threatened species or ecological community, the Minister must take the principles of ESD into account only in exceptional situations where social or economic costs associated with listing are overwhelming and the environmental benefits are known to be slight; and
- Link listing to conservation measures such as conservation advices and recovery plans.

10. Plans – Recovery Plans, Threat Abatement Plans and Wildlife Conservation Plans

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act* provides for the preparation and implementation of a number of localised environmental plans. These include:

- Recovery Plans for listed species and communities;
- Threat Abatement Plans for listed key threatening processes;
- Wildlife Conservation Plans for listed migratory species, listed marine species, conservation dependent species and cetaceans that occur in the Australian Whale Sanctuary; and
- Management Plans for protected areas including World Heritage properties, National Heritage places, Commonwealth Heritage places, Ramsar wetlands, Commonwealth Reserves and Biosphere Reserves, which are not covered in this report.
-

As noted previously the *National Parks and Wildlife Act* does not provide for recovery or threat abatement planning.

Recovery Planning

The *Environment Protection and Biodiversity Conservation Act* provides that once a species or threatened community is listed this can trigger recovery planning. However the implementation of plans is limited to areas within States owned or leased by the Commonwealth thereby excluding land in private ownership. The exception to this is where the Commonwealth implements a plan jointly with a State or Territory,[123] otherwise plans are discretionary[124]. Whilst recovery plans are not mandatory for most threatened species and communities the Minister must ensure that there is an approved conservation advice for such species and communities[125]. Conservation advices are shorter and more succinct versions of recovery plans. The public and the Scientific Committee can have input into draft recovery plans.

NSW legislation provides for recovery planning. The process is similar to that contained in the *Environment Protection and Biodiversity Conservation Act.* Part 4 of the *Threatened Species Conservation Act* is concerned with recovery plans for threatened species, populations and ecological communities and their habitats. It makes further provision as to the protection of their critical habitat. Section 56 grants the Director-General the power to prepare a recovery plan for each endangered, critically endangered or vulnerable species, population and ecological community. Section 57 provides for those matters which must be considered in the preparation of recovery plans which include the objects, using resources efficiently and the likely social and economic consequences of making the plan.

Section 59 provides that recovery planning must state:

- The threatened species and matters;
- The threatening process or processes;
- Methods by which adverse social and economic consequences of the making of the plan can be minimised;
- What must be done to ensure the recovery of the threatened species, population or ecological community;
- What must be done to protect the critical habitat (if any) identified in the plan;

[123] *Environment Protection and Biodiversity Conservation Act* s269.
[124] *Environment Protection and Biodiversity Conservation Act* s269AA.
[125] *Environment Protection and Biodiversity Conservation Act* s226B.

- The performance indicators that are to be applied to measure whether the actions identified in the plan are being implemented and are successfully promoting the recovery of the species, population or ecological community;
- State the way in which the objects are to be implemented or promoted for the benefit of the threatened species, population or ecological community and the method by which progress towards achieving those objects is to be assessed;
- Identify the persons or public authorities who are responsible for the implementation of the measures included in the plan; and
- State the date by which the recovery plan should be subject to review.

We recommend the use of similar provisions in state biodiversity legislation.

Threat Abatement Planning

Part 5 provides for the preparation and implementation of threat abatement plans to manage key threatening processes with the aim of abating, ameliorating or eliminating them. The *Environment Protection and Biodiversity Conservation Act* provides that the Minister may decide whether to have a threat abatement plan for a threatening process in the list. Such plans may be made jointly with a State or Territory[126].

A threat abatement plan sets out the actions necessary to reduce the impact of a listed key threatening process on native species and ecological communities[127]. The aim of such plans is to assist the long term survival of the affected entities[128].

The criteria for making a plan are whether having and implementing a plan is the most "feasible, effective and efficient way to abate the process"[129]. The Minister must consider the advice of the Scientific Committee and consult with relevant government agencies[130]. The content of a threat abatement plan is outlined in section 271. Importantly, section 271(3) (a) stipulates that the plan must have regard to the objects of the *Environment Protection and Biodiversity Conservation Act,* which include the principles of ecologically sustainable development.

[126] *Environment Protection and Biodiversity Conservation Act* s270A.
[127] *Environment Protection and Biodiversity Conservation Act* s271.
[128] *Environment Protection and Biodiversity Conservation Act* s271.
[129] *Environment Protection and Biodiversity Conservation Act* s270A(2).
[130] *Environment Protection and Biodiversity Conservation Act* s270A (3), 270B (5),274.

Both the Minister's decision and reasons for listing (or choosing not to list) a threatening process must be published[131]. If the Minister decides against establishing a threat abatement plan, this decision must be reviewed every five years[132]. Further, section 278 stipulates that threat abatement plans be made publicly available as soon as practicable and a notice must be published of the making or adopting of such plan.

Listing a key threatening process is not an automatic trigger for the creation of a threat abatement plan; the Minister has 90 days from the process being listed as threatening to decide whether an abatement plan will feasibly reduce the threat.

Threat abatement planning is important for identifying and coordinating the management of threats across landscapes. The actions described in such plans look to benefit multiple species rather than a single species. This can make them more valuable than recovery plans.

Threat abatement planning is also provided for in the *Threatened Species Conservation Act.*

> *S 13 Threatening processes eligible for listing as key threatening processes*
>
> *(1) A threatening process is eligible to be listed as a key threatening process if, in the opinion of the Scientific Committee:*
>
> *(a) It adversely affects threatened species, populations or ecological communities, or*
>
> *(b) It could cause species, populations or ecological communities that are not threatened to become threatened.*

Wildlife Conservation Plans

The Federal Minister may prepare a wildlife conservation plan for the management of listed migratory species, listed marine species, species of cetacean that occur in the Australian Whale Sanctuary, and conservation dependant species[133].

The Federal Minister may seek advice from the Threatened Species Scientific Committee on the need for a Wildlife Conservation Plan and the order in which they should be made. The

[131] *Environment Protection and Biodiversity Conservation Act* s270A(8).
[132] *Environment Protection and Biodiversity Conservation Act* s270A(1)(b).
[133] *Environment Protection and Biodiversity Conservation Act* s285.

Scientific committee may also advise the Minister on its own initiative to make a Wildlife Conservation Plan for a particular species[134].

Wildlife Conservation Plans must be prepared in consultation with the States and Territories, unless the relevant species occurs only in a Commonwealth area.

Before making or adopting a Wildlife Conservation Plan the Minister must obtain and consider advice from the Threatened Species Scientific Committee on the content of the plan[135] and invite and consider public comment on the proposed plan[136].
Wildlife Conservation Plans are similar to recovery plans and must set out the research and management actions necessary to support survival of the migratory species, marine species, species of cetacean or conservation dependent species concerned. This includes identifying the habitats of the species concerned and the actions needed to protect those habitats. Plans can deal with one or more species[137].

Wildlife Conservation Plans are not legally binding, however the Commonwealth and Commonwealth agencies are required to take all reasonable steps to act in accordance with them.

Analysis

Recovery, threat abatement and wildlife conservation plans are useful for a number of reasons. As the Environmental Defenders Office Victoria has noted:

- "They can provide valuable information when trying to determine the potential impact of a proposed activity and whether the activity requires approval or a permit under the *Environment Protection and Biodiversity Conservation Act;*
- Plans are a valuable source of "free science" for the community to use when making submissions on referrals;
- The process of preparing and implementing plans can provide a means for initiating community involvement in the conservation of biodiversity and heritage;

[134] *Environment Protection and Biodiversity Conservation Act* s289(1A).
[135] *Environment Protection and Biodiversity Conservation Act* s289.
[136] *Environment Protection and Biodiversity Conservation Act* ss290-291.
[137] *Environment Protection and Biodiversity Conservation Act* s297.

- Plans will often establish processes for the distribution of funding and assistance. This funding may be provided via Australian Government funding programs;
- Plans can establish procedures for devising and implementing incentive schemes to assist stakeholders to conserve important elements of the environment (including the heritage values of places); and
- The preparation and implementation of plans for select elements of biodiversity and heritage areas can have beneficial flow-on effects for other aspects of the environment. For example, a management plan for a Ramsar wetland could determine the water allocations that are necessary to conserve the ecological character of the wetland. By ensuring that flows are allocated to the wetland, this could assist in addressing salinity and water issues in the surrounding area"[138] .

In addition threat abatement plans are particularly useful for emerging threats that may impact on a range of species and communities. For established threats, such as feral animals, it is important that threat abatement programs are prioritised, strategic and directed towards effective protection of important biodiversity assets.

Recovery and threat abatement plans can be useful tools to guide development impact assessment, for example through identifying critical habitat, important populations, impacts of threats and appropriate actions. The process and information required in developing plans including relevant ecology and biology, known and potential threats, and relevant stakeholders is generally a useful and effective process to go through in order to identify the priority actions and objectives.

However both recovery planning and threat abatement planning have deficiencies which are discussed below.

[138] Environmental Defenders Office (Victoria) Ltd http://www.edo.org.au/edovic/.

Issues with recovery planning

Coverage

Recovery plans do not cover threatened populations. This issue is dealt with more fully in the next section on issues with threat abatement planning under the *Environment Protection and Biodiversity Conservation Act.*

Cost and Lead Times

Recovery plans can cost several hundred thousand dollars each and can take two to three years to prepare and even longer to implement. Once approved they are difficult to alter. As Bates has observed:

> ***"****The long lead times and expense involved in preparing recovery plans obviously explains why, as at December 1999, only three recovery plans had been approved, with a further 97 in preparation, out of a total required, following listings, of 680. Since then further additions to the register, bringing the total close to 850 species, plus 35 populations and 75 ecological communities, triggering the necessity to prepare even more plans, has made the process of recovery planning effectively unworkable; and forced the government to prepare a Threatened Species Priorities Action Statement" [139].*

Plans are also difficult to alter once they are in place. As has been observed this makes them inflexible and therefore at odds with the ever increasing need to ensure that plans incorporate an adaptive management framework[140].

Consideration of socio-economic factors

The *Environment Protection and Biodiversity Conservation Act* allows for socio-economic issues to have an influence over the content of plans. Consideration must be given to minimising any significant adverse social and economic impacts[141]. The objects in section 3A are relevant as is the requirement that consideration be given to "the most efficient and effective use of the

[139] Bates, G, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 521.
[140] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009,p41.
[141] *Environment Protection and Biodiversity Conservation Act* s270 (3).

resources that are allocated for the conservation of species"[142]. This could allow for some listed species to be given priority over others.

Priority

Whether to require recovery planning or conservation advices following listing is contentious due to cost and timing factors. We recommend consideration be given to adopting a process which requires that upon listing the matter is referred to the scientific committee to determine within a short period of, say, one month, the priority for and the appropriate level of recovery planning.

Given limited conservation budgets and the high cost of preparing plans there is a need to prioritise plans and/or at the very least have conservation advices in place. Possingham *et al* have observed that there can be an inefficient allocation of limited resources if large amounts are put into recovery efforts for highly ranked species with little chance of success and other less threatened species which could be secured for a relatively small cost miss out on having resources allocated to them[143].

EDO NSW[144] has suggested that prioritisation processes need to have a clear objective and timeframe over which to achieve the objective. Objectives could include securing the greatest number of threatened species or the greatest number of threatened entity of highest social value or the greatest number of threatened or non-threatened species of highest functional value. A clear objective will determine the process to be used in particular where tradeoffs are identified. For example, on a given budget a decision could be made to secure one "expensive" species of high ecological value over half a dozen "cheaper" species of lesser value.

EDO NSW recommends that prioritisation processes take into account four factors. These are species value, the costs and benefits of management and the likelihood of success of management. Furthermore all of these factors should take into account the impacts of climate change. We recommend adopting these factors.

[142] *Environment Protection and Biodiversity Conservation Act* s270 (3).
[143] Possingham et al , *Limits to the Use of Threatened Species Lists*, Trends in Ecology and Evolution, November 2002, 17 (11): 503-507.
[144] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009 p43.

Consideration of Risk

Recovery planning does not currently incorporate risk. EDO NSW has suggested that recovery planning should accept risk as part of the process, for example, including programs intended to assist a species but which may have adverse and significant consequences on other aspects of the environment[145].

Scope

Farrier recommends that recovery planning in the main seek to cover a number of species, communities and populations[146]. This would enable the overlapping needs of different entities to be dealt with through the same process. Such plans have the potential to be more cost-effective and increase the number of species recovered. However, as Clark and Harvey have observed, it can be important to include species which face similar threats[147]. Joint recovery plans for species that extensively share habitat may also be appropriate.

Effect

The Federal Minister must not act inconsistently with a recovery plan when deciding whether or not to approve a development[148]. This is insufficient to protect biodiversity. We recommend that in South Australia, the Biodiversity Council direct any statutory planning or approval function which may detrimentally affect a threatened species, population or ecological community.

Flexibility

The Hawke Report recommends greater flexibility with recovery plans to allow their development at a regional scale[149]. We support this recommendation.

[145] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009, p44.
[146] Farrier, D , *Promoting consistent high national standards,* Biodiversity Summit 2006, Proceedings p16.
[147] Clark A and Harvey E (2002) " Assessing multi-species recovery plans under the Endangered Species Act " Ecological Applications 12 655-622.
[148] *Environment Protection and Biodiversity Conservation Act* s.139.
[149] Hawke Report, Recommendation 18.

Issues with threat abatement planning

No duty to plan

As with recovery plans there is no requirement to carry out threat abatement planning.

Effect

As with recovery plans the Minister must not act inconsistently with a threat abatement plan when deciding whether or not to approve a development[150]. Similar to recovery plans we recommend that in South Australia the Biodiversity Council direct any statutory planning or approval function which may detrimentally affect a threatened species, population or ecological community with respect to any relevant threat abatement plan.

Coverage

The *Environment Protection and Biodiversity Conservation Act* process does not cover threatened populations. We recommend that a state process should be able to cover populations as is the case in New South Wales[151]. The *Threatened Species Conservation Act* also provides for threat abatement planning in respect of threatened populations which we recommend for South Australia.

The Hawke Report makes two recommendations which have the potential to improve the strategic nature of the threat abatement plans:

- allow greater flexibility in the development of threat abatement plans, particularly to allow for their development at regional scales;
- allow transitions to regional planning approaches and strategic threat management[152].

A third recommendation provides for the development of threat abatement advices to be developed at the time of listing a key threatening process. This would appear to be similar to

[150] *Environment Protection and Biodiversity Conservation Act*, s139.
[151] *Threatened Species Conservation Act* s74.
[152] Hawke Report, Recommendations 18 and 20.

conservation advices in the recovery planning regime and hence could be prone to the same difficulties[153].

Comment has been made to the effect that recovery planning and threat abatement planning which is undertaken under the federally funded Environment *Protection and Biodiversity Conservation Act* process is done well in South Australia and that it is more important to spend scarce resources on enabling a power of referral under the planning system than setting up an additional planning process for listed matters in South Australia. In other states separate provisions operate to duplicate process in this regard. Where possible new legislation should streamline with the *Environment Protection and Biodiversity Conservation Act* process[154].

However, we are of the view that the Environment *Protection and Biodiversity Conservation Act* process requires amendment in order to work appropriately. Therefore we recommend adopting the *Environment Protection and Biodiversity Conservation Act* process for recovery and threat abatement plans with the additions set out below.

Recommendations

With respect to recovery planning biodiversity legislation should:

- incorporate *Environment Protection and Biodiversity Conservation Act* provisions with additional requirements that plans are focussed, flexible and incorporate risk;
- allow plans to cover state significant threatened species, communities and populations;
- provide for mandatory public comment;
- allow plans to focus on a number of species, communities and populations;
- have a prioritisation system which includes four factors namely species value, cost of management, benefit of management and likelihood of success of management. All of these factors should take into account the impacts of climate change;
- provide for flexible recovery plans to allow for their development at a regional scale and

[153] Hawke Report, Recommendation 21.
[154] Ms Vicki-Jo Russell,Conservation Policy Coordinator,Conservation Ark,Zoos SA.

- grant power to the Biodiversity Council to direct any statutory planning or approval function which may affect a threatened species, population or ecological community with respect to any relevant recovery plan.

With respect to threat abatement planning biodiversity legislation should:

- incorporate *Environment Protection and Biodiversity Conservation Act* provisions insofar as they allow for:
    - identification of the key threatening process to which it applies,
    - descriptions of the manner in which the process threatens or may threaten the survival, abundance or evolutionary development of a listed species, population or ecological community,
    - identification of the actions that must be taken to abate the threatening process,
    - implementation of the actions identified in the plan; and
    - identification of the performance indicators to measure whether the actions identified in the plan are being implemented and are successfully abating the threatening process;
- allow plans to cover state significant threatened species, ecological communities and populations;
- allow plans to cover key state threatening processes;
- provide for flexible threat abatement plans to allow for their development at a regional scale; and
- grant power to the Biodiversity Council to direct any statutory planning or approval function which may detrimentally affect a threatened species, population or ecological community with respect to any relevant threat abatement plan.

Biodiversity legislation should

- adopt the *Environment Protection and Biodiversity Conservation Act* provisions for wildlife planning.

11. Landscape – scale Assessments

Environment Protection and Biodiversity Conservation Act

Strategic Assessments

Strategic assessments provide an assessment of the impacts of a policy, plan or program on matters of national environmental significance[155]. Once completed the Minister can exempt certain future actions from a site-specific assessment if they are carried out in accordance with a plan or policy approved under the *Environment Protection and Biodiversity Conservation Act*[156].

These include but are not limited to regional-scale development plans and policies, large-scale industrial development and associated infrastructure, fire, vegetation/resource or pest management policies, plans or programs, water extraction/use policies, infrastructure plans and policies and industry sector policies. Within this context a strategic assessment normally applies to multiple-natured projects which would otherwise be assessed on a case-by-case basis under Part 8 of the *Environment Protection and Biodiversity Conservation Act.*

A summary of a proposed strategic assessment can be used to determine whether a strategic assessment is the best approach for a draft or existing policy, plan or program. We note that in South Australia there has been a specific strategic assessment process for a fire management policy.

There is no similar legislative process at a state level.

These assessments are intended to protect biodiversity by taking a landscape approach rather than focussing resources on site-specific assessments. They provide a broader, macro-level approach to biodiversity protection and incorporate principles such as connectivity in land-use planning.

[155] *Environment Protection and Biodiversity Conservation Act* s146.
[156] *Environment Protection and Biodiversity Conservation Act* s146B.

The mechanism focuses on planning for biodiversity processes. These are matters which maintain biodiversity such as pollination. This is in contrast to the more established process of planning for biodiversity patterns, in other words, mapping elements of biodiversity which are static in time and space.

The Australian Government has identified that these assessments may "be suitable for high growth areas with a large number of projects requiring assessment by the Australian Government Environment Minister and projects involving multiple stakeholders or complex, large-scale actions". Other opportunities where a strategic assessment is appropriate include "where projects are characterised by multiple values, a proactive and consistent approach to natural resource management across jurisdictions is considered effective, there is scope for developing regional capability and environmental protection is best integrated with higher level planning"[157].

The Australian Government may collaborate on assessments with state governments, local governments, urban development industry and mining and resource companies. A strategic assessment can take into account:

- how the policy, plan or program gives effect to relevant national, state and local plans, policies or programs and their inherent environmental protection objectives and/or actions;
- how, if appropriate, state and local plans, policies or programs can be modified/updated to achieve their objectives in the area being assessed;
- matters of national environmental significance, biodiversity conservation, and ecologically sustainable development objectives;
- how uncertainty is addressed and environmental risk managed;
- adaptive implementation and environmental monitoring.

Analysis

The Australian Government has suggested that strategic assessments have specific advantages including:

[157] http://www.environment.gov.au/epbc/assessments/strategic.html.

- "early consideration of matters of national environmental significance (MNES) in planning processes;
- greater certainty to the local communities and developers over future development;
- reduced administrative burden for proponents taking actions consistent with a policy, plan or program approved under a strategic assessment;
- capacity to achieve significant environmental outcomes including addressing cumulative impacts at the landscape level;
- flexible timeframes commencing early in the planning process"[158].

However, the EDO NSW has identified a number of difficulties with these assessments[159].

Discretion

The Minister has a wide discretion in deciding whether to grant approval to a policy, plan or program. The discretion is limited by the requirement that the Minister not act inconsistently with a range of international conventions and domestic policies.

However, except in the case of recovery plans the limits on the discretion are mostly broad principles which present difficulties around interpretation and implementation. To be successful careful consideration needs to be given to the criteria used and the process of assessment. The current process fails to clearly define the level of protection that the Minister must be satisfied is met prior to granting approval to a policy, plan or program.

Guidelines

The process does not have guidelines to determine the proper level of information required to undertake an assessment.

[158] http://www.environment.gov.au/epbc/assessments/strategic.html.
[159] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009 p50.

The Hawke Report recommends greater use of these assessments and some amendments to make them more robust[160]. Suggested changes to the process of strategic assessments include:

- mandatory required information;
- inclusion of an "improve or maintain" test for the approval of a class of actions in accordance with an endorsed plan, policy or program;
- increased public involvement;
- a performance audit power.

We would support similar changes if strategic assessments were to be included in state biodiversity conservation legislation.

Recommendations

Biodiversity legislation should provide for a strategic assessment process for state specific policy, plans and programmes with the following features:

- clearly defined set of criteria to guide decision making;
- clear guidelines to determine the proper level of information required to undertake an assessment;
- an "improve or maintain" test for the approval of a class of actions in accordance with an endorsed plan, policy or program;
- significant public involvement; and
- a performance audit power.

Bioregional Plans

Bioregional plans are another landscape planning mechanism under the *Environment Protection and Biodiversity Conservation Act*.[161] These plans only relate to Commonwealth areas but can cover other bioregions not wholly within a Commonwealth area through joint planning with a State or Territory. Bioregions are relatively large land areas characterised by broad, landscape

[160] Hawke Report, Recommendation 6.
[161] *Environment Protection and Biodiversity Conservation Act* s176.

scale natural features and environmental processes which influence the functions of entire ecosystems. Planning allows an opportunity for conserving biodiversity in sufficient numbers and maximising chances of long-term survival.

Bioregional plans can include provisions on the conservation status of biodiversity, important economic and social values, heritage values or places, objectives relating to biodiversity and other values, priorities, strategies and actions to achieve the objectives, community participation provisions and monitoring and review provisions. Bioregional plans can include important principles for the protection of biodiversity.

Once a plan is made the Minister must take it into account when making any decision under the *Environment Protection and Biodiversity Conservation Act* to which the plan relates[162].

Issues

As with strategic assessments, bioregional plans have limited influence under the *Environment Protection and Biodiversity Conservation Act* as they are a consideration only in decision-making. They cannot prevent an action with potential impacts on biodiversity from being approved.

Pursuant to the *Native Vegetation Act (SA) 1991*, South Australia has pre-European mapping and regional plans both of which do not provide sufficient detail for making decisions, for example, regarding whether a listed species is impacted in a planning matter. In the Planning section of this report we recommend that biomapping be undertaken as a priority to map the biodiversity of the State for the purpose of informing decision making under the *Development Act (SA) 1993* and *the Environment Protection Act (SA) 1993.*

South Australia would also benefit from updated bioregional plans which set targets and inform the government on matters pertaining to biodiversity. These would incorporate the vital information obtained through biomapping.

The need to use up to date and comprehensive information is reflected in the Hawke Report recommendation that that decision-makers have regard to the best available information[163].

[162] *Environment Protection and Biodiversity Conservation Act* s 176.

As with strategic assessments the Hawke Report supports greater use of regional plans and recommends strengthening the process for their creation so that they are more substantial and robust[164].

Recommendations

Biodiversity legislation should:

- provide for a system of regional plans in order to set targets for the preservation of biodiversity;
- provide that regional planning be influenced by the following principles:
    - maintain or improve the conservation status of listed species, populations and communities,
    - maintain or improve the extent and condition of natural habitats, including critical habitat,
    - protect or restore ecosystem services, processes and functions,
    - maintain or improve ecosystem integrity, resilience and resistance, maintain or improve connectivity within and between ecosystems,
    - protect multiple representative examples of ecosystem types and facilitate adaptation to environmental change, including climate change; and
    - recognition of uncertainty and planning for adaptive management.

12. Site Scale Assessments

Environment Protection and Biodiversity Conservation Act

The main way in which the *Environment Protection and Biodiversity Conservation Act* seeks to achieve its objects is through an environmental impact assessment process (EIA). Section 18 provides for certain threats to biodiversity to trigger federal environmental impact assessment and approval. An action which has or is likely to have a significant impact on a matter of national

[163] Hawke Report, Recommendation 43.
[164] Hawke Report, Recommendation 6.

environmental significance requires approval under the Act. Therefore, not all actions which affect a matter of national environmental significance need Commonwealth approval. It is illegal to undertake such an action without Commonwealth approval.

This process seeks to meet Australia's obligations pursuant to Article 14 of the Biodiversity Convention. This Article provides that signatory states are to introduce appropriate procedures requiring environmental impact assessment of proposed projects which are likely to have significant adverse effects on biodiversity with a view to avoiding or minimizing such effects and where appropriate allowing public participation in such procedures.

The *Environment Protection and Biodiversity Conservation Act* identifies eight matters of national environmental significance (MNES) which are: world heritage properties, national heritage places, wetlands of international importance, threatened species and ecological communities, listed migratory species protected under international agreements (JAMBA and CAMBA), Commonwealth marine areas, nuclear actions (including uranium mining) and the Great Barrier Reef Marine Park.

While all levels of government regulate activities to protect the environment, the federal government's role is specifically focused on protecting these matters.

However, the whole of the environment (not just the above matters) must be considered when activities take place within the Great Barrier Reef Marine Park, on Commonwealth land or in Commonwealth marine areas, or are carried out by Commonwealth agencies, or are nuclear actions.

With respect to threatened species and communities, only actions which are likely to have a significant impact on endangered communities classified as critically endangered and endangered are prohibited without approval[165]. This undermines the conservation prospects of vulnerable communities as they are not included.

Offsets may be provided for through an environmental approval but are not explicitly addressed by the *Environment Protection and Biodiversity Conservation Act*. There are currently a wide

[165] *Environment Protection and Biodiversity Conservation Act* s 18.

range of biodiversity offset schemes. However, many fail to achieve 'no net loss' of biodiversity. Offsets are discussed further in the chapter of the report dealing with the *Native Vegetation Act.*

There are several decision making options once a proposal has been submitted. A controlled action decision means that a significant impact on a nationally protected matter is likely, and the activity needs to undergo federal assessment. If determined that it is not a controlled action if carried out in a particular manner, then this means the activity does not need to be further assessed but must be carried out in the manner described in the decision. A decision that an action is not a controlled action means the activity does not need further assessment because it is not likely to have a significant impact on nationally protected matters. Finally, if an action is clearly unacceptable it means the activity cannot proceed because it is clear it will have an unacceptable impact on nationally protected matters. This is essentially a decision to refuse approval for the project if:

'*it is clear that the action would have unacceptable impacts on a matter protected by a provision of Part 3*[166].'

When making a clearly unacceptable impact decision the Minister rejects the proposal outright without requiring any further environmental effects studies.

When a proposed development is controlled, the Minister decides on the appropriate level of environmental assessment[167]. Part 8 of the *Environment Protection and Biodiversity Conservation Act* outlines the various assessment approaches. These are an accredited assessment process, assessment on referral information, assessment on preliminary documentation, a public environment report, an environmental impact statement and a public inquiry.

The complexity of a proposed action determines the approach chosen by the Minister. The chosen approach will have a bearing on biodiversity conservation insofar as some assessment approaches are likely to be more rigorous and/or more closely aligned with the objects of the *Environment Protection and Biodiversity Conservation Act* than others. This may be particularly relevant in the case of accredited assessment processes such as bilateral assessment

[166] *Environment Protection and Biodiversity Conservation Act* s74B.
[167] *Environment Protection and Biodiversity Conservation Act* s87.

agreements. Pursuant to the Bilateral Assessment Agreement between the Commonwealth and South Australia the assessment process used is that set out in the major development provisions of the *Development Act (SA) 1993.* However in our view this process is flawed as discussed further in the planning chapter of this report.

When making a decision the Minister considers the environmental assessment documentation, public submissions and other social and economic factors. If he or she decides to approve an action they can attach conditions to protect, repair or mitigate damage to a matter of national environmental significance.

Issues

Triggers

The list of triggers, (that is, the matters of national environmental significance), for environmental impact assessment is limited and this in turn limits the reach of the *Environment Protection and Biodiversity Conservation Act*. The Commonwealth can add new matters to this list by regulation. The list must be reviewed every five years to see whether further matters should be included. The Hawke Report recommends adding greenhouse gas emissions and ecosystems of national importance as matters of national environmental significance[168]. Other triggers have been suggested including water abstraction, land clearing and noxious weeds[169]. Consequently most land use planning decisions do not trigger an EIA process and thus the *Environment Protection and Biodiversity Conservation Act* has relatively little impact on private landholders

Even where it is triggered, approvals are still required under State and Territory laws.

[168] Hawke Report, Recommendations 8 and 10.
[169] For example, Australian Network of Environmental Defenders Offices, Submission to the 10 year review of the *Environment Protection and Biodiversity Conservation Act 1999, January* 2009.

Ad hoc process

As the process primarily relies on developers to refer their proposals where appropriate[170], it is largely reactive and has resulted in an ad hoc assessment of development activities. Amendments to the *Environment Protection and Biodiversity Conservation Act* in 2006 attempted to address this criticism. These facilitate strategic application of the *Environment Protection and Biodiversity Conservation Act.* As noted in the previous section the Minister can exempt a proposed action from the need for assessment and approval under the *Environment Protection and Biodiversity Conservation Act* if it is undertaken in accordance with a bioregional plan or where the Commonwealth has endorsed a policy, plan or program following a strategic EIA[171]. As noted by Pye, these processes allow earlier Commonwealth involvement in planning, regional and sector based strategic assessments. In addition *Environment Protection and Biodiversity Conservation Act* requirements can be incorporated into local land use planning schemes[172].

Operational focus on species

In addition, the operational focus has been on species protection. Meyers argues that taking a species by species approach to site development is fundamentally and structurally flawed as it fails to comprehend biodiversity as a relationship among species diversity, genetic diversity and habitat diversity[173]. Thus it fails to protect entire habitats and ecosystems.

The use of large amounts of resources for threatened species programs reduces the resources available for other biodiversity conservation strategies. As climate change increases species extinction risk, this puts an even greater burden on limited conservation budgets.

[170] Noting that under the Act referrals are also able to be made by a State or Territory where it has administrative responsibilities relating to an action or requested by the Federal Minister, *Environment Protection and Biodiversity Conservation Act* ss69-70.
[171] *Environment Protection and Biodiversity Conservation Act* ss37A, ss146, 146B.
[172] Pye A, Effective *Protection of Regional Biodiversity in South Australia: Some Suggestions*, The Australasian Journal of Natural Resources Law and Policy [Vol12,No 1 ,2008] at p39.
[173] Meyers, D; Biodiversity *Protection in Australia in the 21st Century: Where to from Here?* Biodiversity Summit 2006: Proceedings p20.

Furthermore, the process can lead to illogical outcomes. Developments with small impacts on listed species might be curtailed or blocked whilst developments with large impacts on non-listed species might proceed without mitigation requirements[174].

EDO NSW has noted[175] that as a result of the focus on species, areas important for connectivity for a wide range of species may not be properly considered in decision making without a connection to threatened species.

EDO NSW has also identified[176] several other problems with the process which affects its ability to play an important role in biodiversity conservation.

Defining significant impact

The term "significant impact" is a difficult concept to assess. This is due to a number of factors including lack of information about the state of the environment, difficulties in predicting impacts on complex ecosystems and uncertainty surrounding the effectiveness of mitigation measures.
Whilst the *Environment Protection and Biodiversity Conservation Act* is silent as to the meaning of "significant impact", the government has developed guidelines to help proponents decide if they are proposing the sort of action is one that the Department considers needs to be referred to the Minister for assessment and approval. While these provide some assistance to developers unfortunately the term remains a difficult one to define.

Cumulative impacts

Cumulative impacts are not considered under the EPBC Act and should be[177]. This is countered to some extent by the requirement that the Minister cannot approve activities where they are inconsistent with a recovery plan[178].

[174] Possingham et al "*Limits to the Use of Threatened Species List"*, Trends in Ecology & Evolution, November 2002, 17(11) 503.
[175] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper*, EDO (NSW), June 2009 p35-37.
[176] *Climate change and the Legal Framework for biodiversity protection in Australia: a legal and scientific analysis, Discussion Paper* , EDO (NSW), June 2009 p54-55.
[177] Brown v Forestry Tasmania (No 4)[2006} FCA 1729.
[178] *Environment Protection and Biodiversity Conservation Act* s139.

In relation to the environmental impact assessment decision making, the Hawke Report puts forward three possible changes regarding the matters to be considered in approval decisions[179]:

- whole of the environment, in other words all environment matters the project impacts upon;
- may call in the impacts on the whole of the environment for assessment if it is considered that the action is of "national importance";
- consider impacts on all protected matters affected by the project, including impacts that are not significant.

It is not possible to consider the full implications of these three options under the EPBC Act within the scope of this report. However, we consider that at the State level, all impacts including cumulative impacts should be considered to avoid anomalies as set out in the case law for the EPBC Act[180].

Standard of assessments

Assessments undertaken by proponents are often poorly done with the result that decision makers do not have all the information they need to make appropriate decisions.

Conditions

Conditions attached to approvals are often ineffective and there is a lack of monitoring and enforcement of these conditions.

Discretion

The wide discretion in approving development proposals means that no matter how significant the impacts on threatened entities, approval can still be given for particular social or economic reasons.

[179] Hawke Report , Recommendation 25.
[180] For example, Nathan Dam Case (2004) 21(5) EPLJ 325.

However site-scale assessments are still an important mechanism for biodiversity protection. They help to ensure that sites important for biodiversity, for example because they contain large populations, are afforded a level of protection as there is direct integration with planning, assessment and approval processes. The part of this report on biodiversity protection and the planning system makes a number of recommendations and in particular amendments to the *Development Act (SA) 1993* in an effort to better protect and enhance South Australia's biodiversity.

Recommendation

We refer to the recommendations set out in the planning chapter of this report.

13. Mechanisms for conservation on private land

Environment and Protection Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act* provides for the preparation and implementation of conservation agreements. These are an instrument much like a heritage agreement under State law, namely, an agreement sanctioned by statute in the nature of an easement which is effectively a property right binding successors in title to the land[181] and which protects some environmental interest. The interests refer to the protection and conservation of biodiversity, in particular the protection, conservation and management of any listed species or ecological communities or their habitats or the abatement of processes and the mitigation or avoidance of actions which might adversely affect biodiversity. Conservation agreements may provide for amongst other matters the provision of financial or technical assistance by the Commonwealth.

It is the Minister who may enter into conservation agreements on behalf of the Commonwealth and they are then legally binding on the Commonwealth, the person(s) (including indigenous persons and their representative bodies with whom the Minister made the agreement) and their

[181] *Environment Protection and Biodiversity Conservation Act* s307.

successors in title. However the Minister must not enter into an agreement unless satisfied that it will result in net benefit to the conservation of biodiversity, taking into account any matters which may be prescribed for this purpose and it is not inconsistent with a recovery, threat abatement or wildlife conservation plan. It is prohibited for an agreement to cover any part of a Commonwealth reserve.

In making an agreement, the Minister must take account of certain provisions of the Biodiversity Convention which relate to respect for indigenous communities and preference for customary and traditional cultural practices in protecting biodiversity, as well as the relevant provisions of Australia's Biodiversity Conservation Strategy 2010-2030.

Conservation agreements can be enforced specifically by injunction. Court orders can be sought requiring landowners to undertake positive acts such as repairing or mitigating damage.[182]
However there has been limited uptake to date. This is likely due to the fact that they bind current and future land owners and are difficult to revoke. However it is this very feature that provides significant protection for biodiversity. Take up is significantly affected by the financial incentives including funding and tax breaks usually associated with conservation agreements. Landowners may be reluctant to become part of a scheme if they believe there will be more advantageous financial arrangements in the future rather than what is currently on offer.

Despite this problem, schemes to protect biodiversity on private land need to be encouraged. The take up rate could be improved for example by greater use of short term flexible wildlife refuge agreements which have the benefit of applying over multiple-use land. These are currently in use in New South Wales. Consideration could also be given to promoting indigenous stewardship programmes. Appropriate consultation with community leaders would be necessary. To that end, legislation could include a non-specific provision to that effect, or require that an Indigenous Council be consulted for the purposes of creating these programmes.

Incentive schemes can also assist. The development of incentive measures is provided for in Article 11 of the Biodiversity Convention which states that signatory states shall, as far as possible and appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.

[182] *Environment Protection and Biodiversity Conservation Act* s476.

A number of signatory states have developed innovative measures in pursuance of this obligation. For example, Canada has established Stewardship Action Plans (SAP) which create incentives and other measures to support voluntary stewardship actions taken by any other government in Canada, organisation or person. The SAP must regularly examine incentives and programs which support actions taken by persons to protect species at risk. It must also include information about increasing public awareness, create awards and recognition programmes, provide information about scientific support available to people engaged in stewardship programmes. This may be a useful, incentive-driven mechanism to encourage members of the community to contribute to species conservation. Education and information dissemination would be necessary to ensure its efficacy. To that extent, local council involvement would be useful. This type of activity could be administered by a centralised council comprising State government, local council and representatives from the conservation sector.

Incentives used in Australia include heritage agreements and payments with respect to certified ecosystems services, carbon sequestration processes and other management activities aimed at protecting, conserving and enhancing biodiversity. In addition tax and rate exemptions are regularly used.

The concept used in South Australia with respect to load-based licensing for pollution could be adapted to provide incentives; that is, the more toxic a pollution load on the environment, the more the polluter will be required to pay for rights of emissions. The incentive here is to emit less, or not at all, in order to reduce the fees payable[183]. The economic incentive for protecting biodiversity could be formulated in a way that if damage to biodiversity is significantly lessened or avoided completely then there will be no fee. In addition fees could be paid into a fund for biodiversity protection.

The most common incentive-based mechanism in Australia would appear to be property agreements or conservation covenants,[184] For example, the NSW Southern Rivers Bush Incentives Program[185] is run by the NSW Southern Rivers Catchment Management Authority (SRCMA) in partnership with the NSW Department of Environment and Heritage. The program currently employs an auction or tender approach to provide funding incentives for environmental activities. In practice, this involves:

[183] *Environment Protection Regulations (SA), regulation 31.*
[184] Bates, G, *Environmental Law in Australia*, 7th edition, LexisNexis Butterworths, Australia, 2010, p 185.
[185] http://www.southern.cma.nsw.gov.au/our_programs-projects_biodiversity.php.

- placing advertisements in local papers calling for expressions of interest and inviting landholders to contact named project officers;
- the landholder then consults with an officer for the purposes of assessing the site and developing a property management plan;
- when the plan is finalised, the landholder has 21 days to determine the cost of implementing it and how much money they will bid for. The landholder then lodges their bid with the SRCMA;
- when the funding round is closed, an independent panel assesses each bid and ranks them for funding on the basis of best biodiversity value for money;
- the successful landowners are notified and received funding based on annual reporting and progress.

In Victoria, BushTender and EcoTender[186] use an auction or tender approach to improve the management of native vegetation on private land. These schemes are run by the Victorian Department of Sustainability and Environment. EcoTender is described as a more sophisticated version of BushTender, providing 'a more detailed way to evaluate tenders, based on potential improvements in salinity, biodiversity, carbon sequestration and water quality.

In Western Australia the *Carbon Rights Act 2003* establishes a statutory basis for the ownership and protection of carbon rights, in order to facilitate trading. It enables a carbon right to be registered on the land title as a separate interest in that land[187].

The Act also provides for the owner of a carbon right to enter into a covenant with any other person who may have an interest in the land (for example the owner or lessee of the land) for the purposes of protecting that right. This covenant may be in respect of any matter that may affect carbon sequestration or carbon release on the land[188].

Direct benefits from carbon sequestration will include income from the sale of carbon rights to parties who need to reduce their net emissions of greenhouse gases.

[186] http://www.dse.vic.gov.au (BushTender and EcoTender pages).
[187] *Carbon Rights Act, ss 5, 6.*
[188] *Carbon Rights Act, s 10.*

Other incentives are considered in the chapter on the *Native Vegetation Act* particularly in relation to heritage agreements.

National Parks and Wildlife Act

The declaration of sanctuaries is provided for in section 44. Sanctuaries can be created over both freehold and leasehold land. They serve as a useful method for landowners interested in conservation but are not created in perpetuity, that is it is not attached to the title to the land. The undertaking of any management activity and reporting is voluntary. A landowner applies to have a sanctuary created which if approved is then gazetted by the Minister for Environment and Conservation. The designation can remain with the new owner's consent and may be revoked by the Minister either unilaterally or by request of the landowner. We recommend that the concept of creating sanctuaries remain as it is a useful introductory mechanism for landowners wishing to undertake conservation activities.

Recommendations

Biodiversity legislation should:

- Promote use of conservation agreements and covenants, wildlife refuges and stewardship programmes;
- Provide for the development and regular review of the use of incentives such as payments for ecosystem services, carbon sequestration and other management activities which seek to conserve biodiversity together with tax and rate exemptions; and
- Retain concept of sanctuaries as provided for in the *National Parks and Wildlife Act.*

14. Licencing

Permits

Environment Protection and Biodiversity Conservation Act

A permit system operates under the *Environment Protection and Biodiversity Conservation Act*. The legislation prohibits any person from injuring or taking a member of a threatened species (except a member of a "conservation dependent" species) in a Commonwealth area without a permit, approval or relevant excuse[189]. Further stringent restrictions apply to the export of listed threatened species and specimens derived from listed threatened species.[190] Importantly, Section 212 lists certain actions that are not offences, with the onus of proof resting on the defendant. Section 197 lists defences to the offences of taking or damaging otherwise untouchable species or ecological communities.

Permits are granted under section 216. Section 217 allows the Minister to place conditions on the permits, as well as revoke or impose further conditions. The Minister must not issue a permit unless satisfied that, inter alia, the specified action will contribute significantly to the conservation of the species concerned[191]. Fees are attached to each permit. The composition of a fee, under regulation 18.01, is administrative, assessment and management – that is, costs of providing supervision or monitoring compliance with permit conditions. The fees vary according to the activity proposed, as set out in Schedule 11 of the Regulations. However, to date there has been no imposition of either an assessment or management fee on any of the activities listed in Schedule 11.

National Parks and Wildlife Act

The conservation of native plants and animals under the *National Parks and Wildlife Act* is based on the prohibition of "taking", "selling" and "possession" of native animals and native plants.

[189] *Environment Protection and Biodiversity Conservation Act*, s196, 196A, 196B, 196E.
[190] *Environment Protection and Biodiversity Conservation Act*, Part 13A.
[191] Section 216(3).

Section 45 provides that native plants, animals (as opposed to protected animals) or their eggs cannot be taken in a sanctuary without a permit or the authority of the owner.

Section 47 of the Act makes it an offence to "take" a native plant from a specified area, that is, a reserve, wilderness protection areas or wilderness protection zone as defined in the Wilderness Protection Act, crown land, land reserved for public purposes or a forest reserve. "Native plant" is defined in section 5 to mean *"any plant that is indigenous to Australia and includes any plant of a species declared by regulation to be a native plant."* "Plant" is defined widely to mean the vegetation of the plant including its flowers, seeds, or any other part of the vegetation. "Reserve" is defined in the same section to include a national park, conservation park, game reserve, recreation park or regional reserve constituted under the Act.

Section 47 also makes it an offence to take a prescribed native plant from private land but to date no species have been prescribed, thus this protection is illusory.

Section 48 prohibits the sale or gifting of a prescribed native plant, but again this protection is illusory as the regulations do not prescribe any native plants. Section 48A prohibits the "possession or control" of a native plant that has been illegally taken or acquired under this Act or any other Act. The onus of proof lies on the accused defendant, which would assist somewhat in reducing enforcement costs.

Sections 49 allows the Minister to grant a permit authorising the taking or selling of native plants and section 49A authorises permits for commercial purposes. Before granting commercial permits the Minister must prepare draft recommendations which must consider the impact on the species and the ecosystem and which allow for public consultation and therefore some biodiversity protection is incorporated in these provisions. Further, a person cannot "possess" or "control" an animal (as opposed to protected animal), their carcass or eggs which have been illegally taken or acquired. [192] Section 51 prohibits the taking of a protected animal or its eggs [193]

Section 5 defines "animal" to mean "any species of animal". However, the *National Parks and Wildlife Act* defines "protected animal" to mean:

> *"(a) any mammal, bird or reptile indigenous to Australia; or*

[192] s60.
[193] Whilst section 51(1) only refers to the "taking" of a protected animal, section 51(2) provides that it is a defence to show that the defendant did not wilfully or negligently take the animal.

(b) *any migratory mammal, bird or reptile that periodically or occasionally migrates to, and lives in, Australia; or*

(c) *any animal of a species referred to in Schedule 7, 8 or 9; or*

(d) *any animal of a species declared by regulation to be a species of protected animals,*

but does not include animals of the species referred to in Schedule 10 or any animals declared by regulation to be unprotected".

Despite this prohibition in section 51 the following provisions apply.

As indicated above in the definition of "protected animal", Schedule 10 animals and any animals declared in the regulations are excluded from protection. Schedule 10 currently lists the Zebra Finch, Budgerigar, Red wattlebird, Grey-backed Silvereye, Galah, Little Corella, Australian Raven, Little Crow, Australian Crow, Little Raven, Wild Dog (dingo). To date no animals have been declared to be unprotected.

Currently threatened fish, aquatic invertebrates and non-vascular plants are not specifically listed under the Schedules and therefore lack any protection.
The Minister may also declare open season on protected animals[194]. In our view this provision should be repealed.

Pursuant to section 53, the Minister may grant a permit for specific reasons such as scientific research, if the animals are causing or likely to damage to the environment, crops stock or property; or for other purpose consistent with the *National Parks and Wildlife Act*'s objectives. The Minister's decision is open to review by the National Parks and Wildlife Council, but there is no requirement that any decision is binding on the Minister. Furthermore there is no requirement for any plan to be developed, no public consultation and no third party review rights.

Killing magpies and poisonous snakes is allowed pursuant to section 54, in that it is lawful for anyone to kill (but not sell) a magpie or a poisonous reptile that has attacked or is attacking a person. In addition, a poisonous reptile may be killed if it is likely to attack someone or is in

[194] See s52 and National Park and Wildlife (Hunting) Regulations which relate to ducks and game. Note that this section does not apply to endangered species or animals in reserves, a wilderness protection area or zone or games reserves unless express mention is made to the contrary.

dangerous proximity to a person or such proximity as to cause reasonable anxiety. There is no need to hold a permit for this purpose.

The balance of the provisions of the *National Parks and Wildlife Act* are concerned with regulating the use of protected animals (or in certain cases animals) and their eggs and in some instances native plants. Some of the provisions deal with animals as resources and so are often inherently contrary to the protection of biodiversity.

With a permit a person may:

- "keep"[195] a protected animal or "possess or control" the eggs of a protected animal, or sell or give away a protected animal (unless for scientific research (58(8));
- *"export" or "import" 196 a protected animal, the eggs or a native plant;*
- *farm protected animals on a trial basis197; or an ongoing basis;*
- *"harvest" (which means killing or capturing a protected animal in the wild) certain kangaroos198;*
- *"poison" a protected animal199;*
- *"interfere with, harass or molest" a protected animal200;*
- *Hunt animals or have possession of firearm (unless the animal is endangering human life or causing damage to crops, stock or other property)201.*

Farming of protected animals is allowed but a Code of Management must be prepared. This covers species in Schedule 11 (only emus at this time). Section 60D 2(A)-(E) provides that in the preparation of such a Code the Minister must consider the effect of taking individual animals or eggs from the wild on the species concerned and on the ecosystem of which they formed part, the welfare of the animals in captivity, the need for research in relation to farming the species concerned, the identification of animals and animal products.

[195] s58 Note that the species may be exempt from these provisions by proclamation (s58 (4)).
[196] s59.
[197] ss60B-60F.
[198] ss60G-60L.
[199] s65.
[200] s68.
[201] ss68A-68E Except for aboriginal persons in certain circumstances.

The system does attempt to take a landscape approach by considering impacts on ecosystems. Furthermore there is a degree of transparency by requiring a minimum public consultation period of three months. However there is no provision for appeal rights including third party merit reviews.

Harvesting of protected animals on private land can only occur if the Minister is satisfied that the taking of animals of the species concerned will not adversely affect the ecosystems which animals of that species form part or the diversity of the species of animals and plants comprising those ecosystems and will not adversely affect the species as a renewable resource for harvesting in the future.

A Plan of Management must be prepared which looks to assess the likely impact of harvesting animals of that species on the species concerned on the ecosystems which animals of that species form part, on the diversity of the species of animals and plants comprising those ecosystems, on the ability of the species to maintain natural genetic diversity throughout its population. Furthermore the Plan needs to identify factors that are likely to reduce or increase the number of animals of the species to be harvested; identify any other factors that will affect the species as a renewable resource for the purposes of harvesting in the future; assess whether there is a need to reduce the number of animals of the species; to protect the environment, crops, stock or other property; and specify humane methods and procedures for the killing, capturing and killing and treatment after capture of animals pursuant to the permit.

As with farming of protected animals this system does attempt to take a landscape approach by considering impacts on ecosystems. There is also a degree of transparency through provision of at least three month public consultation on Plans of Management. However as with farming there is no provision for appeal rights including third party merit review appeal rights.

In our view a permit system should deal with permits to “kill, harm, possess or detrimentally affect”. Such a system would cover native fauna, protected native flora, threatened species, populations and ecological communities, marine species, key functioning species and species with susceptibility traits. Offences would include killing, harming, possessing or detrimentally affecting any of these except in accordance with an approval or commercial and non-commercial use permit or land clearance permit.

The system needs to be transparent, robust and accountable, and provide clear criteria and guidelines for the granting of permits; reasonable periods of public consultation; and review rights[202].

Consideration could be given to adopting a similar regime to that in Queensland as it takes a broader approach to biodiversity conservation. The commercial licences which may be issued in Queensland under the *Nature Conservation Act 1994 Regulations* will only be granted for a commercial licence if the activity associated with that licence does not adversely affect the conservation of animals[203].

A holder of any commercial licence is required to give a return to the Chief Executive of the Department of Environment and Resource Management[204]. For the wildlife harvesting licences there is an added proviso that an animal can only be taken from a location that is not visible to any other person, in a way that causes minimal damage or disturbance to other wildlife or environment, by using an approved method for taking the animal; if the animal is to be taken by killing, then to kill it quickly and humanely[205].

We recommend that a licence, permit, or any other authorisation, be granted only if there will be no significant adverse effect on the wildlife in question and its habitat or ecological community.

Sustainable Use Plans

Article 10 of the Biodiversity Convention provides for the sustainable use of components of biological diversity by adopting measures to reduce adverse impacts on biodiversity, protection and encouragement of customary use of biodiversity, supporting local populations to develop and implement remedial action in degraded areas and encouraging cooperation between all levels of government and the private sector in developing methods for sustainable use of biodiversity.

[202] Clarke P, " Proposed Western Australia Biodiversity Legislation", WWF, 2010, Part 15, Division 1.
[203] The different types of licences provided for in the Regulations are: general commercial wildlife licence, commercial wildlife licence for interaction with wildlife, commercial wildlife licence for taking wildlife using a mobile facility, recreational wildlife licence, commercial and recreational wildlife harvesting licences, wildlife demonstrator and exhibitor licences, wildlife farming licence, and museum licence.
[204] Regulations 191, 191E, 213, 222, 261.
[205] Regulations 213 and 220.

To further these objectives it has been suggested in the proposed Western Australian biodiversity legislation to provide for the preparation of sustainable use plans and prohibit the harvesting of protected native species without a sustainable use permit. The Minister could make sustainable use plans to ensure that the use of native species is ecologically sustainable. Permits would need to be consistent with a sustainable use plan or there would be approval based on case-by-case assessment. The Minister could have a broad discretion to make such plans.

Sustainable use plans could apply to one or more biota and/or to a specified area or areas. The Minister must be satisfied that the plan is consistent with the objects and principles of the relevant legislation. Assessment of the environmental impact of the activities covered by the plan should occur. This would include an assessment of the status of the species to which the plan relates in the wild, the extent of the habitat of the species to which the plan relates, the threats to the species to which the plan relates and the impacts of the activities covered by the plan on the habitat or relevant ecosystems.

Plans could include management controls directed towards ensuring that the impacts of the activities covered by the plan on any biota to which the plan relates are ecologically sustainable. The activities covered by the plan must not be detrimental to the survival or conservation status of biota to which the plan relates. Furthermore plans should not be detrimental to the survival of any relevant ecosystem, for example, detriment to habitat.

Plans could also include measures to mitigate and/or minimise the environmental impact of the activities covered by the plan, to monitor the environmental impact of the activities covered by the plan and to respond to changes in the environmental impact of activities covered by the plans[206].

Definition of Take

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act* defines “take” as follows:

[206] Clarke P, “ Proposed Western Australia Biodiversity Legislation”, WWF, 2010, Part 12.

- *in relation to an animal-harvest, catch, capture and trap;*
- *in relation to a plant-harvest, pick, gather and cut.*[207]

National Parks and Wildlife Act

The *National Parks and Wildlife Act* defines "take" in relation to both plants and animals. In relation to plants the definition of "take" means:
(i) to remove the plant or part of the plant, from the place in which it is growing; or
(ii) to damage the plant[208]*.*

There is a presumption that the defendant took the plant, subject to evidence to the contrary. This is likely to assist in reducing enforcement costs and should remain in legislation. Further, it is an offence to take a native plant of a prescribed species on private land[209] which appears to be a positive provision, but no such plant has ever been prescribed and so any biodiversity protection is illusory. Such a provision has merit if there was a mandatory requirement for the Minister to prescribe species nominated by an independent scientific committee.

In relation to animals, the definition of "take":

(a) *... includes any act of hunting, catching, restraining, killing or injuring, and any act of attempting or assisting to hunt, catch, restrain, kill or injure*[210]*.*

The definition of "take" in both Acts is limited. By comparison the Canadian Species at Risk Act 2002 contains a specific prohibition with regard to damaging or destroying the "residence" of a listed species. This means "a dwelling-place, such as a den, nest or other similar area or place that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging , wintering, feeding or hibernating" [211].

Similarly in the United States the US Supreme Court has interpreted "take" to include indirect activities such as habitat destruction[212].

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[207] *Environment Protection and Biodiversity Conservation Act* s528.
[208] s5.
[209] s47(2).
[210] s5.
[211] *Species at Risk Act 2002* s32-34.
[212] *Babbit v Sweet Home Chapter of Communities for a Great Or.,* 515 US 687 (1995) .

The word “take” has been interpreted broadly in other Australian jurisdictions to include habitat destruction. For example, in New South Wales the courts have held that ‘taking’ includes, “conduct that modifies habitat in a significant fashion thus placing the species of fauna under threat by adversely affecting essential behavioural patterns relating to feeding, breeding or nesting”[213]. This interpretation takes into consideration the fact that the destruction of habitat can result in the unintended ‘taking’ of plants and therefore clearly creates impact on land use.

South Australian courts have not considered this term, and the findings of the New South Wales Court and the US Supreme Court are persuasive only. There is no obligation on South Australian courts to follow these cases, although the principles enunciated are highly persuasive. In order to mandate the requirement that “take” include habitat destruction, legislative amendment is needed.

We recommend that any definition needs to include habitat destruction and a reference to unlawful removal in order that non-collection offences and unauthorised destruction are covered.

Bioprospecting

Environment Protection and Biodiversity Conservation Act

Section 11.2 of the *Environment Protection and Biodiversity Conservation Act* provides:

(1) In this Part: access to biological resources means the taking of biological resources of native species for research and development on any genetic resources, or biochemical compounds, comprising or contained in the biological resources (other than an activity mentioned in subregulation (3)).

Examples of access to biological resources include collecting living material or analysing and sampling stored material, for various purposes including taxonomic research, other research and potential commercial product development.

(2) A person is taken to have access to biological resources if there is a reasonable prospect that biological resources taken by the person will be subject to research and development

[213] *Corkill v Forestry Commission of NSW* (1991) 73 LGRA 126.

on any genetic resources, or biochemical compounds, comprising or contained in the biological resources.

(3) The definition, access to biological resources, in subregulation (1) does not include the following activities:

(a) the taking of biological resources by indigenous persons:

(i) for a purpose other than a purpose mentioned in subregulation (1); or

(ii) in the exercise of their native title rights and interests;

(b) access to human remains;

(c) the taking of biological resources that have been cultivated or tended for a purpose other than a purpose mentioned in subregulation (1);

(d) the taking of public resources for a purpose other than a purpose mentioned in subregulation (1);

(e) the taking of a biological resource that is:

(i) a genetically modified organism for the purposes of section 10 of the Gene Technology Act 2000; or

(ii) a plant variety for which a Plant Breeder's Right has been granted under section 44 of the Plant Breeder's Rights Act 1994;

(f) access to biological resources specified in a declaration under regulation 8A.05.

(4) For paragraph (3) (d), taking of public resources includes the following activities:

(a) fishing for commerce or recreation, game or charter fishing or collecting broodstock for aquaculture;

(b) harvesting wildflowers;

(c) taking wild animals or plants for food;

(d) collecting peat or firewood;

(e) taking essential oils from wild plants;

(f) collecting plant reproductive material for propagation;

(g) commercial forestry."

Article 15 of the Biodiversity Convention recognises the rights of signatory states to determine access to their genetic resources and this is subject to national legislation. The *Environment Protection and Biodiversity Conservation Act* provides for regulation of bioprospecting or access to biological resources for research and development. Taking includes fishing, harvesting wildflowers, taking wild animals or plants for food, collecting firewood, taking essential oils,

collecting plant reproductive material for propagation and commercial forestry. There are exclusions such as taking by indigenous persons[214].

Part 8A of *EPBC Regulations 2000* further details national regulatory control over access to native and non-native biological resources. The Hawke Report recommends that Part 8A of EPBC Regulations be incorporated into the Act and increased penalties for non-compliance[215]. Consideration could be given to including similar provisions in any new state legislation. It has been suggested in other draft legislation that such legislation could include the equitable sharing of the benefits arising from the use of biological resources, the facilitation of access to such resources, the right to deny access to such resources and the granting of access to such resources and the terms and conditions of such access[216].

Recommendations

Biodiversity legislation should:

- include a permit scheme which deals with permits to kill, harm, possess or detrimentally affect. Such a system would cover native fauna, protected native flora, threatened species, populations and ecological communities, marine species, key functioning species and species with susceptibility traits;
- include offences covering to kill, harm, possess or detrimentally affect native species except in accordance with an approval or commercial and non-commercial use permit or land clearance permit;
- provide that permits be consistent with any relevant plan and there must be environmental impact assessment of any activities proposed;
- provide for reasonable public consultation;

[214] *Environment Protection and Biodiversity Conservation Act* s11.
[215] Hawke Report, Recommendation 22.
[216] Clarke P, " Proposed Western Australia Biodiversity Legislation", WWF, 2010, Part 18.

- provide that any taking pursuant to a licence, permit, or any other authorisation, be granted only if there will be no significant adverse effect to the wildlife in question and its habitat or ecological community (as provided for in the *Nature Conservation Act 1994 (*Qld) and *Environment Protection and Biodiversity Conservation Act*s);
- provide for a system of sustainable use plans;
- adopt a broad definition of 'take' which includes habitat disturbance and unlawful removal; and
- provide for the equitable sharing of the benefits arising from the use of biological resources, the facilitation of access to such resources, the right to deny access to such resources and the granting of access to such resources and the terms and conditions of such access.

Amend *National Parks and Wildlife Act* to:

- provide for the monitoring of *National Parks and Wildlife Act* Schedule 10 animals by a scientific committee on an annual basis to ensure that their exclusion from protection is warranted;
- remove provisions covering open seasons;
- provide that permits can only be granted after public consultation and appropriate environmental impact assessment and ;
- provide for reviewable and binding decisions.

15. Reporting and Review

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act* requires the Minister to table a report in Parliament every five years on the State of the Environment (SoE)[217]. The report must deal with the matters prescribed by the regulations. The Minister must cause a copy of the report to

[217] *Environment Protection and Biodiversity Conservation Act* S516B.

be laid before each House of the Parliament within 15 sitting days of that House after the day on which he or she receives the report.

The Australian Government has described the process as follows[218]:

"The intent of this report is to capture and present, in as accurate and useful a format as practicable, key information on the state of the 'environment' in terms of: its current condition; the pressures on it and the drivers of those pressures; and management initiatives in place to address environmental concerns, and the impacts of those initiatives.

The 'environment' is defined broadly under the *Environment Protection and Biodiversity Conservation Act.* SoE reporting includes assessments across a wide range of biophysical and ecological elements of the environment, as well as social and cultural aspects of environmental issues.
The SoE report provides a definitive account of the national State of the Environment. It captures critical information about environmental issues - issues that are nationally significant and of interest to current and future generations.

The fundamental objectives of State of the Environment reporting are to:

- meet SoE reporting obligations in accordance with the requirements of the *Environment Protection and Biodiversity Conservation Act*
- make relevant and useful information on the state of the Australian environment available to the Minister, the department and more broadly to support decisions about environmental policies and management at national and regional scales
- give the public access to accurate, up-to-date information on the state of the Australian environment.

In the longer term, this will lead to:

[218] http://www.environment.gov.au/epbc/about/reports.html.

- increased awareness, among decision-makers and the public, of the status and implications of the condition of the Australian environment and pressures on it, and
- more informed environmental management decisions that lead to more sustainable use and effective conservation of environmental assets.

SoE reporting is used to:

- report on major causal factors that are influencing Australia's environment and heritage
- report on the effectiveness of responses designed
- highlight the issues most relevant to the sustainability of Australia's environment and heritage
- contribute to public understanding of the state of Australia's environment and heritage
- identify relevant gaps in information, and
- further develop and improve the SoE reporting process."

As a signatory state to the Biodiversity Convention and other treaties Australia has additional reporting requirements at that level.
There is also a requirement to review the operation of the *Environment Protection and Biodiversity Conservation Act* every 10 years[219].

National Parks and Wildlife Act

The *National Parks and Wildlife Act* does not have similar reporting and review requirements. However, South Australia's *Environment Protection Act* requires the preparation of a State of the Environment report at least every 5 years that "include[s] an assessment of the condition of the major environmental resources of South Australia" [220], and, in practice, biodiversity is discussed as a specific chapter in the report[221].

Biodiversity protection legislation must be sufficiently accountable. This includes the enunciation of clear biodiversity protection goals and the measures to be used in evaluating the level of attainment of these goals. Legislation needs to provide for regular review of goals and stringent reporting

[219] *Environment Protection and Biodiversity Conservation Act* , s522A.
[220] *Environment Protection Act 1993*, s112.
[221] See, for example, the 2008 report at http://www.epa.sa.gov.au/soe/soe_2008.

requirements to enable critical evaluation of the progress made in implementing key strategies and policies. Effective accountability mechanisms enhance transparency in the decision-making process which in turn fosters public confidence and greater efficiency.

Legislation should also undergo review perhaps at least every five years as provided for in the *Threatened Species Conservation Act*[222].

Reporting and review requirements could be overseen by an Environmental Commissioner. The *Environment Protection and Biodiversity Conservation Act* does not currently provide for the establishment of the position of an Environmental Commissioner and Commission. The Hawke Report recommends their establishment in order to advise the Minister regarding decisions on EIA and approvals and to promote the adoption of environmentally sustainable practices[223]. Potentially they could also have a "watchdog" role with regard to the content and timeliness of reports.

In Victoria legislation has established the position of Commissioner for Environmental Sustainability. The objectives of the Commissioner are to-

(a) report on matters relating to the condition of the natural environment of Victoria;
(b) encourage decision making that facilitates ecologically sustainable development;
(c) enhance knowledge and understanding of issues relating to ecologically sustainable development and the environment;
(d) encourage sound environmental practices and procedures to be adopted by the Government of Victoria and local government as a basis for ecologically sustainable development.[224].

The functions of the Commissioner are to-

(a) prepare the Report on the State of the Environment of Victoria;
(b) conduct annual strategic audits of, and prepare reports on, the

[222] s157.
[223] Hawke Report, Recommendation 71.
[224] *Commissioner for Environmental Sustainability Act (Vic) 2003, s7.*

implementation of environmental management systems by Agencies and public authorities;

(c) audit public education programs relating to ecologically sustainable development and advise the Minister as to the effectiveness of the programs in encouraging the community to adopt ecologically sustainable development principles and practices;

(d) advise the Minister in relation to any matter relating to ecologically sustainable development referred to the Commissioner by the Minister under section 10(2);

(e) administer this Act[225].

We recommend consideration be given to establishing such a position in South Australia with a similar role, objectives and functions except perhaps regarding the preparation of an SoE which could be prepared by the Department of Environment and Natural Resources. The Commissioner could oversee and audit the report and in addition provide strategic advice to the Minister including advice on EIA.

Recommendations

Biodiversity legislation should:

- require mandatory reporting on progress in achieving biodiversity conservation goals and the efficacy of strategies and policies used to further these goals (with appropriate integration with existing reporting requirements, such as the State of the Environment Report under the *Environment Protection Act*);
- require review of legislation every 5 years and
- provide for the establishment of a Biodiversity Commission and Commissioner whose roles include overseeing the preparation of a Biodiversity Conservation Strategy and preparation of regional biodiversity plans, advice to the Minister regarding decisions on planning matters and auditing of statutory reports.

[225] Ibid s8.

16. Compliance, Enforcement and Court Processes

Environment Protection and Biodiversity Conservation Act

Appointment and Powers of Authorised Officers

The *Environment Protection and Biodiversity Conservation Act* provides for the appointment of authorised officers who have a wide range of powers to deal with alleged breaches[226]. We recommend that consideration be given to adopting similar provisions in state biodiversity conservation legislation.

Environmental Audits

The Federal Minister has power to require a person who has been issued with a permit or an approval to undertake an environmental audit[227]. The Minister determines the matters to be covered, the form and timing of the audit and there are penalties for failing to carry out an audit when directed to do so, concealing information or including false or misleading information in audit reports[228]. The obligation to do an audit when directed by the Minister does not affect the obligation to do an audit if that is a condition of the permit or approval[229].

Conservation Orders

These are issued by the Federal Minister where necessary to protect a threatened species or ecological community but this is limited to situations arising on Commonwealth land only. The Minister may make conservation orders if of the opinion that it is necessary to protect a listed threatened species or ecological community, by prohibiting or restricting specified activities or requiring specified action to be taken in Commonwealth areas. Prior to making an order the Minister must be satisfied that the order is justified, having regard to economic and social matters consistent with principles of ecologically sustainable development and must seek the

[226] *Environment Protection and Biodiversity Conservation Act* Part 17, Divisions 1-11.
[227] *Environment Protection and Biodiversity Conservation Act* s458.
[228] *Environment Protection and Biodiversity Conservation Act* ss459-461.
[229] *Environment Protection and Biodiversity Conservation Act* s462.

advice of the Secretary of the Department and consult with other Commonwealth agencies, particularly those likely to be affected.

Conservation orders must be reviewed at least every five years and be confirmed, varied or revoked, subject to the Minister's being satisfied that the species or community originally protected by the order will remain adequately protected[230]. A person affected by a conservation order may apply to the Minister to reconsider the decision to make the order and the reconsideration process is subject to many of the same requirements as the making of an order[231].

Contravention of an order is an offence, but if upon request the Minister advises that the action would not contravene the order, no offence is committed if the person acts in accordance with that advice[232]. In formulating advice, the Minister must refer the request for advice to the Secretary of the Department and consider the Secretary's reply[233].

A party to a 'conservation agreement' can apply to the Federal Court for an injunction to stop another party from doing something (or the Minister can apply for the injunction)[234].

Remediation orders

The Federal Court can make remediation orders requiring a person to clean up if a person has or is engaged in conduct which contravenes the Act or regulations[235]. Only a Minister can apply for one of these. In making a decision the Federal Court can consider the cost of remedy, whether the person has done it before, circumstances, nature and extent of both the contravention and the damage. The remediation order can be in broad terms ("whatever is necessary"). A person may also be required to provide security. On the Ministers application the Federal Court can discharge or vary order.

[230] *Environment Protection and Biodiversity Conservation Act* ss463-466.
[231] *Environment Protection and Biodiversity Conservation Act* ss468-469.
[232] *Environment Protection and Biodiversity Conservation Act* s470.
[233] *Environment Protection and Biodiversity Conservation Act* s471.
[234] *Environment Protection and Biodiversity Conservation Act* s476.
[235] *Environment Protection and Biodiversity Conservation Act* s480A.

A Minister can make a specific remediation order, however this cannot be more than six years after the event occurred[236]. If a person does not comply with a remediation order the Minister can apply to the Federal Court for an order that the person comply.

Stop work orders and interim protection orders

Stop work orders could be a useful compliance measure. For example the *Threatened Species Conservation Act* provides for these together with powers to order interim protection orders. These are wide powers and may last up to two years[237].

The Hawke Report also recommends that the Minister have power to issue environment protection orders[238]. The above measures are a useful range of compliance measures and should be included in state biodiversity conservation legislation.

National Parks and Wildlife Act

The *National Parks and Wildlife Act* provides for the appointment of wardens [239] who have powers aimed largely at controlling the take and selling provisions of the *National Parks and Wildlife Act.* In terms of biodiversity protection however, this power is limited by the substantive provisions of the *National Parks and Wildlife Act*.

Penalties

Environmental offences tend to be characterised by relatively low risk of enforcement action and potentially large financial benefits from non-compliance. To deter environmental crime and prevent environmental harm, it is useful to provide for heavy criminal and civil penalties for non-compliance.

[236] *Environment Protection and Biodiversity Conservation Act* s480D.
[237] ss91D(1).
[238] Hawke Report, Recommendation 58.
[239] ss20-26.

Criminal Penalties

Environment Protection and Biodiversity Conservation Act

Many offences under the *Environment Protection and Biodiversity Conservation Act* attract substantial criminal penalties which range from fines to periods of imprisonment.

National Parks and Wildlife Act

There are a number of provisions in the *National Parks and Wildlife Act* with penalties. For example, in the case of rare plants penalties range from $10,000 or 2 years jail on a sliding scale down to $2,500 or six months jail, depending on the rarity of the plant involved. The penalties are relatively minimal and therefore unlikely to provide a deterrent. This is particularly inappropriate when it is remembered that these are the provisions which provide the most protection to biodiversity in the *National Parks and Wildlife Act*.

At a state level, the penalties are significantly lower than typical penalty levels established within the *Environment Protection Act* and *Natural Resources Management Act*.
We recommend adoption of penalties at or near those provided for in the *Environment Protection and Biodiversity Conservation Act*.

In addition, given the potentially large financial benefits to be gained from non-compliance, it is recommended that financial benefits from contraventions of the Act should also be able to be recovered – similar to section 133(1a) of the *Environment Protection Act.*

Civil Penalties

Environment Protection and Biodiversity Conservation Act

The Minister may apply to the Federal Court within six years of an alleged contravention of a remediation order for a pecuniary penalty. In determining the pecuniary penalty the Court must have regard to all relevant matters, including:

- the nature and extent of the contravention;

- the nature and extent of any loss damage suffered as a result of the contravention, the circumstances in which the contravention took place; and
- whether the person has previously been found by the Court in proceedings under the Act to have engaged in any similar conduct[240].

If a person has been convicted of a criminal offence for conduct which breaches the *Environment Protection and Biodiversity Conservation Act,* the Court cannot order civil penalties on top. Criminal proceedings can be instigated even if civil pecuniary penalty order proceedings have started.

There have been few examples of large civil penalties under the *Environment Protection and Biodiversity Conservation Act.* In one case fines were imposed on the respondents for taking action in a way which had a significant impact upon the ecological character of a declared Ramsar wetland. The respondent farmers ploughed 99% of a designated wetland in preparation for a wheat crop. This contravened section 16(1) of the *Environment Protection and Biodiversity Conservation Act*, which attracts maximum 5000 penalty units for individual and 50,000 penalty units for a body corporate. Greentree (first respondent) was ordered to pay a penalty of $150,000 while Auen Pty Ltd (eighth respondent) was ordered to pay $300,000[241].

National Parks and Wildlife Act

The *National Parks and Wildlife Act* does not provide for civil penalties. This could be considered for adoption.

Civil penalties can be problematic as the lack of criminal conviction may fail to stigmatise the wrongdoer sufficiently. The positives associated with civil penalties are that the reduced standard of proof means it may be quicker and easier to prove a person's liability and have a greater deterrence effect.

Consideration could also be given to including a list of factors to be used in determining the amount of a civil penalty. For example, in the case of *Trade Practices Commission v CSR*[242] a civil penalty was imposed for misuse of market power. In determining the appropriate penalty

[240] *Environment Protection and Biodiversity Conservation Act* s481.
[241] *Minister for the Environment and Heritage v Greentree* (No.3) 2004 FCA 1317.
[242] [1989] FCA 252.

the court took into account additional factors such as the size of the contravening company, the degree of power it has as evidenced by its market share and ease of entry into the market, the deliberateness of the contravention and the period over which it extended, whether the contravention arose out of the conduct of senior management or at a lower level, whether the company has a corporate culture conductive to compliance with this Act, as evidenced by educational programs and disciplinary or other corrective measures in response to an acknowledged contravention and whether the company has shown a disposition to co-operate with the authorities responsible for the enforcement of the Act in relation to the contravention.

Standing

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act provides* standing for interested parties who wish to seek injunctions to restrain offences against the Act or seek judicial review[243]. Interested persons are those whose interests "have been are or would be affected by the conduct or proposed conduct or the individual engaged in a series of activities for protection or conservation of, or research into, the environment at any time in the two years immediately before the conduct."

Booth v Bosworth[244] provided the first injunction granted under the *Environment Protection and Biodiversity Conservation Act*[245]. It followed a similar unsuccessful appeal a year earlier (due to Bosworth's potential pecuniary losses). Booth (an 'interested person') successfully argued that the electric fencing which Bosworth had erected on his lychee farm had, or was likely to have, a significant impact on the world heritage values of the adjacent Wet Tropics through adverse impacts on the spectacled flying fox -*Pteropus conspicillatus*- a key pollinator in the Wet Tropics, whose numbers had declined significantly following the erection of electric fencing designed to prevent the foxes from eating the lychees.

[243] *Environment Protection and Biodiversity Conservation Act* s475 (6).
[244] [2001] FCA 1453.
[245] *Environment Protection and Biodiversity Conservation Act* s475(2).

The standing provisions are supported but in our view could be improved by removing the criteria contained within them. Open standing would greatly improve environmental decision making.

There is a common misconception that open standing could result in a plethora of unfounded environmental law action taken by the public. However, given the commitment of time and resources involved in bringing public interest proceedings they are never undertaken lightly even in jurisdictions where each party bears their own costs. Further, if open standing only applies to judicial review, the likelihood of proceedings is limited in any event.

Environmental groups tend to prioritise only the most strategic cases for bringing public interest proceedings. Under the current regime, worthy cases with reasonable prospects of success are not brought because conservation groups are not prepared to expose themselves to the risk of adverse costs orders running to hundreds of thousands of dollars.

This being the case, it is essential that the legislative parameters which govern the eligibility of those parties who wish to become involved in public interest environmental litigation, are expanded rather than restricted.

Certain Australian and overseas jurisdictions have legislation containing open standing provisions. For example, section 123 of the *Environmental Planning and Assessment Act (NSW) 1979* confers standing on all members of the public for all actions. Section 11 of the *Endangered Species Act (US) 1973* provides that any person may commence civil proceedings on their own behalf for a violation of the Act. Locally, under section 85 of the *Development Act,* any person may apply to the Court for an order to remedy or restrain a breach of that Act. Also, any person can seek a civil order for a contravention of the *Environment Protection Act* or the *Natural Resources Management Act* with the permission of the Court[246].

[246] *Environment Protection Act*, s104 and *Natural Resources Management Act,* s201.

Costs

Environment Protection and Biodiversity Conservation Act

Despite the broad standing provisions incorporated into the *Environment Protection and Biodiversity Conservation Act,* the financial consequences associated with the litigation process equate to an obstacle that many environmental, public interest and community oriented parties are unable to overcome. The financial consequences of a potential adverse costs order is often such a sufficient disincentive that parties do not even initiate litigation.

The situation which currently exists in federal public interest environmental litigation in regard to costs is one where costs follow the event. In other words, in addition to paying their own legal costs, an unsuccessful litigant is additionally required to pay the legal costs incurred by the opposing party. This is generally accepted as being a fair and rational approach to managing the issue of costs where the matter is between two parties pursuing their own financial interests, but is totally inadequate when dealing with the issue of public interest litigation.

The Hawke Report recommends that the *Environment Protection and Biodiversity Conservation Act* be amended to allow the Federal Court to decide, as a preliminary matter, whether a case is a 'public interest proceeding' and, if so, to determine the appropriate form of 'public interest costs order'[247]. This approach has been supported by case law[248].

A further impediment to public interest litigation is the current ability of a party to make an application for security for costs against a public interest applicant. The Hawke Report recommends that the *Environment Protection and Biodiversity Conservation Act* be amended to prohibit the ordering of security for costs in public interest proceedings[249].

Undertakings as to damages

Previously, s478 of the *Environment Protection and Biodiversity Conservation Act* provided that:

[247] Hawke Report, Recommendation 53.
[248] For example Oshlack v Richmond River Council (1998) 152 ALR 83.
[249] Hawke Report , Recommendation 52.

The Federal Court is not to require an applicant for an injunction to give an undertaking as to damages as a condition of granting an interim injunction.

This provision was repealed in 2006 and so currently an applicant is generally ordered to provide an undertaking to pay damages in order to successfully obtain an interim or interlocutory injunction. As a result, (given the costs involved in such an undertaking) public interest litigants are unlikely to seek injunctions stopping damage to the environment while the Court proceedings are in place. This often means that any judgment obtained following a lengthy court hearing may well be useless, as the damage to the environment, which is most likely the subject of the injunction, may already have been done.

Public interest applicants seeking injunctions should not be required to provide undertakings as to damages. This is recommended in the Hawke Report for the EPBC Act[250], and should also apply in South Australian biodiversity legislation.

Rewards Scheme

The *Endangered Species Act (US)* 1973 provides for the payment of penalties, fines, or forfeitures of property for any violation of the Act to persons who furnish information which leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property for any violation of the Act. Such persons may also receive monies to cover the reasonable and necessary costs incurred in providing temporary care for any fish, wildlife, or plant pending any legal action relating to that fish, wildlife, or plant[251].

Consideration could be given to establishing a similar rewards scheme in South Australia.

Arbiter

The Administrative Appeals Tribunal and the Federal Court arbitrate disputes under the *Environment Protection and Biodiversity Conservation Act.*

[250] Hawke Report, Recommendation 51.
[251] s11.

The Environment Resources and Development Court is the most appropriate forum for determining disputes in South Australia. It is a specialised court and has the appropriate expertise to deal with cases relating to biodiversity.

Private prosecution

Whilst not provided for in the *Environment Protection and Biodiversity Conservation Act* or under the *National Parks and Wildlife Act* we recommend provision for private prosecutions in biodiversity conservation legislation. If a statute does not limit the ability to bring prosecutions to a specified body, then members of the public may be able to bring a "private prosecution". For example, a community group in South Australia took a private prosecution against a local government entity for allegedly illegally clearing a road verge contrary to the *Native Vegetation Act (SA) 1991*. The respondent, Kangaroo Island Eco Action Inc, was an incorporated association. It comprised citizens on Kangaroo Island who were interested in and concerned about ecology and general environmental issues. Generally speaking, the *Native Vegetation Act* is enforced by the Native Vegetation Council, a body established by the Act. In this case, the association instituted a private prosecution. Although the group lost the case on appeal, it was agreed that it could commence the prosecution[252].

In addition, we recommend that where an environmental offence is being committed, private legal action in the form of civil proceedings for an injunction and other orders be available. This form of civil proceeding is to be found in current South Australian legislation[253].

Publication of Contraventions

We recommend publication of contraventions as a deterrence measure.

[252] District Council of Kingscote v Kangaroo Island Eco Action Incorporated [1996] SASC 5819.
[253] For example s201 *Natural Resources Management Act (SA) 2004*, s104 *Environment Protection Act (SA) 1993.*

Recommendations

Biodiversity legislation should provide for:

- a range of enforcement measures including audits, warning notices, infringement notices, remediation, conservation, interim conservation, compensation, injunctions, enforceable undertakings and stop work orders;
- the appointment of authorised officers with wide powers to inspect, search, seize and arrest;
  - criminal and civil penalty amounts set at or above those under the *Environment Protection and Biodiversity Conservation Act* and an ability to recover financial benefits arising from contraventions;
  - possession prima facie evidence of an offence being committed;
  - review rights as currently provided for in the *National Parks and Wildlife Act;*
  - open standing;
  - a discretionary power to the courts to consider granting an order that each party to a proceeding bear their own costs and/or a protective costs order to a party to the proceedings;
  - a prohibition on courts from making orders for security for costs and undertakings as to damages;
  - a rewards scheme which provides for the payment of penalties, fines, or forfeitures of property for any legislative breaches to persons who furnish information which leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property in respect of legislative breaches. Such persons may also receive monies to cover the reasonable and necessary costs incurred in providing temporary care for any fish, wildlife, or plant pending any legal action relating to that fish, wildlife, or plant;
  - the Environment, Resources and Development Court to hear disputes;
  - private prosecutions;
  - publication of contraventions and
  - compliance and enforcement audits.

17. Interrelationship with other legislation

National Parks and Wildlife Act

Section 75A is the only provision which contains a link to other legislation and provides:

It is a defence to a charge of an offence against this Act to prove that the defendant—
(a) acted in a manner authorised by or under the Native Vegetation Act 1991; or
(b) acted in compliance with a requirement of the Natural Resources Management Act 2004; or
(c) acted in compliance with a requirement of any other Act.

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