



australian network of environmental defender's offices

**Submission on the *Consultation Draft -
Australia's Strategy for The National Reserve
System 2008 - 2030***

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The Australian Network of Environmental Defender's Offices (ANEDO) consists of nine independently constituted and managed community environmental law centres located in each State and Territory of Australia.

Each EDO is dedicated to protecting the environment in the public interest. EDOs provide legal representation and advice, take an active role in environmental law reform and policy formulation, and offer a significant education program designed to facilitate public participation in environmental decision making.

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Introduction

The Australian Network of Environmental Defender's Offices Inc (ANEDO) is a network of 9 community legal centres in each state and territory, specialising in public interest environmental law and policy. ANEDO welcomes the opportunity to provide comment on the Consultation Draft for Australia's Strategy for The National Reserve System 2008-2030.

The National Reserve System (NRS) is a cornerstone of the Australian Government's efforts to protect Australia's unique biodiversity and implement its international obligations under the *Convention on Biological Diversity 1992* (CBD). Article 8 of the Convention specifically requires parties to establish a system of protected areas where special measures need to be taken to conserve biological diversity. As Australia's Strategy for the National Reserve System (the strategy) is an important component of implementing Australia's international legal obligations, and in light of the recent work that some members of ANEDO have been undertaking in relation to climate change and its impacts on biodiversity, and the adaptability of current legislation to adequately protect biodiversity in light of predicted climatic changes, ANEDO wishes to provide brief comments on the draft strategy.

Strategic themes and directions

ANEDO supports the key directions outlined under the 6 strategic themes for the NRS.¹ Particularly, we are supportive of the focus on building resilience of ecosystems through the NRS, so that ecosystems and their component species can adapt to climate change. We are also supportive of the emphasis on the NRS as a foundation for landscape-scale conservation which will be required to enhance ecosystem resilience. These concepts and management goals are well supported in the scientific literature.²

We also support the focus on adaptive management, as well as ongoing scientific monitoring and reporting against well defined objectives. Climate change predictions for biodiversity are complex and often have high levels of uncertainty,³

¹ Australia's Strategy for the National Reserve System consultation draft page 8

² Halpin, P. (1997) 'Global climate change and natural-area protection: management responses and research directions' *Ecological Applications* 7(3): 828-843; Noss, R. (2001) 'Beyond Kyoto: Forest Management in a time of rapid climate change' *Conservation Biology* 15(3): 578-590; Hannah, L., Midgley, G. and Millar, D. (2002) 'Climate change-integrated conservation strategies' *Global Ecology and Biogeography* 11: 485-495; Fischer, J., Lindenmayer, D. and Manning, A. (2006) 'Biodiversity, ecosystem function, and resilience: ten guiding principles for commodity production landscapes' *Frontiers in Ecology and the Environment* 4(2): 80-86; Lindenmayer et al (2008) 'A checklist for ecological management of landscapes for conservation' *Ecology Letters* 11: 78-91

³ Walther, G., Post, E., Convey, P., Menzel, A., Parmesan, C., Beebee, T., Fromentin, J., Hoegh-Guldberg, O. and Bairlein, F. (2002) 'Ecological responses to recent climate change' *Nature* 416: 389-395; Hennesy, K., Fitzharris, B., Bates, B., Harvey, N., Howden, S., Hughes, L., Salinger, J. and Warrick, R. (2007) Australia and New Zealand. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, UK.

meaning that management options for biodiversity management will need to diversify. Adaptive management will be essential in this highly uncertain environment, to determine which management actions are able to achieve the specified objectives.⁴

The cooperative approach highlighted in the draft strategy is also a good one, with the recognition that private lands will become increasingly important for biodiversity conservation, and that the large scale maintenance of ecosystem processes will require cooperation between the NRS and other land managers.

The following sections outline our brief comments on some of the specific themes raised in the strategy.

Theme 2 - Protected Area Design and Selection

The priority action of protecting key refugia in the face of a changing climate is an important one, to maintain populations of species when the regional climate is no longer suitable, and for recolonisation by these species over the long term when conditions favourable for their survival and reproduction re-establish.⁵

The notion of adequacy and the need to understand the functional requirements of native ecosystems and their disturbance thresholds is particularly important, not only in the context of the NRS, but in the conservation of biodiversity more generally across the landscape. An approach to biodiversity conservation that focuses on maintaining ecosystems functionality, as opposed to one based solely on threatened species is more likely to have better outcomes for biodiversity generally, particularly in light of climate change.⁶

ANEDO also strongly supports the need for inter-agency collaboration on water allocations for inland wetland systems which are part of the NRS, and which are reliant on water allocations for continued ecological function.

Theme 4 - Protected Area Planning and Management

We support the approach outlined under this theme, ensuring effective, adaptive management and managing landscape level threats in a landscape context. Adaptive management is integral to the success of the NRS and its role in biodiversity

⁴ Walters, C. (1986) *Adaptive Management of Renewable Resources* McGraw-Hill, New York; Halpin, P. (1997) 'Global climate change and natural-area protection: management responses and research directions' *Ecological Applications* 7(3): 828-843; Bormann, B., Haynes, R. and Martin, J. (2007) 'Adaptive management of forest ecosystems: did some rubber hit the road?' *BioScience* 57(2): 186-190; Millar, C., Stephenson, N. and Stephens, S. (2007) 'Climate change and forests of the future: managing in the face of uncertainty' *Ecological Applications* 17(8): 2145-2151; CCSP, (2008) *Preliminary review of adaptation options for climate-sensitive ecosystems and resources*. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Julius, S.H., J.M. West (eds.), J.S. Baron, B. Griffith, L.A. Joyce, P. Kareiva, B.D. Keller, M.A. Palmer, C.H. Peterson, and J.M. Scott (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA, 873 pp.

⁵ Noss, R. (2001) 'Beyond Kyoto: Forest Management in a time of rapid climate change' *Conservation Biology* 15(3): 578-590

⁶ Walker, B. (1992) 'Biodiversity and ecological redundancy' *Conservation Biology* 6(1): 18-23; McIntyre, S., Barrett, G., Kitching, R. and Recher, H. (1992) 'Species triage – seeing beyond wounded rhinos' *Conservation Biology* 6(4): 604-606; Fischer, J., Lindenmayer, D. and Manning, A. (2006) 'Biodiversity, ecosystem function, and resilience: ten guiding principles for commodity production landscapes' *Frontiers in Ecology and the Environment* 4(2): 80-86

protection in Australia, particularly with climate change and the uncertain responses of many species. In the discussion of adaptive management on page 40 of the strategy, further emphasis should be placed on the most important step of adaptive management, which is the feedback loop of incorporating lessons learnt from undertaking various management actions into the next round of conservation planning and management. The vital importance of this step is not explicitly discussed in the strategy and is the key component of adaptive management that differentiates it from traditional management, although one that is often poorly done.⁷

Theme 6 - Strengthening partnerships and community support

ANEDO strongly supports the strategy's acknowledgement in this theme that the "Success of the National Reserve System depends on effective cooperative arrangements and collaboration with key stakeholders and partners for the purposes of acquiring, establishing, managing and monitoring protected areas."⁸ Undoubtedly one of the cooperative arrangements that ANEDO would like to see being developed through the strategy is the partnership between Government bodies and Indigenous peoples.

The unique relationship of Indigenous people with the lands and water brings with it a great wealth of knowledge, including an understanding of ecological interactions and the sustainability of natural systems. Some commentators have observed that the application of Aboriginal knowledge is essential to improve ecological management and inform environmental understanding.⁹ Collaboration with Indigenous peoples and the strengthening of partnerships is therefore essential to the success of the NRS, not only because of the unique position occupied by Aboriginal and Torres Strait Islander peoples as indigenous inhabitants, but additionally because it offers an opportunity to implement the knowledge, expertise and skills that has proven successful in managing this land for hundreds of thousands of years. It is important that the development of any such partnerships are not based merely on consultation, but additionally incorporate mechanisms of substantive collaboration and empowerment of Aboriginal and Torres Strait Islander communities with appropriate resources and autonomy.

Furthermore the strategy should work in conjunction with those initiatives that are currently being implemented by Federal, State and Local Governments to develop land management partnerships with Indigenous people. One such example is the Indigenous Protected Area (IPA) element of the Caring for our Country initiative; this aims to support "Indigenous communities to manage their land for conservation – in line with international guidelines – so its plants, animals and

⁷ Walters, C. (1997) 'Challenges in adaptive management of riparian and coastal ecosystems' *Conservation Ecology* online 1(2): 1 Available online at <http://www.consecol.org/vol1/iss2/art1/>; Bormann, B., Haynes, R. and Martin, J. (2007) 'Adaptive management of forest ecosystems: did some rubber hit the road?' *BioScience* 57(2): 186-190

⁸ Australia's Strategy for the National Reserve System consultation draft page 49

⁹ Horstman, M. and Wightman, G. (2001) 'Karpanti ecology: recognition of Aboriginal ecological knowledge and its application to management in north-western Australia.', *Ecological Management & Restoration* 2(2) at 99.

cultural sites are protected for the benefit of all Australians.”¹⁰ The initiative has proven highly successful in recent years with 25 IPA’s being established since 1990 and a further 10 new IPA’s expected to be created in the coming years as a result of a \$7 million contribution by the Indigenous Land Corporation in 2007. The coordination between such initiatives and the strategy would undoubtedly result in a mutually beneficial relationship, with the potential for very strong environmental, social and economic outcomes to be achieved.

ANEDO also supports the recognition by the strategy of the fundamental need to communicate to communities and stakeholders both the objectives and the subsequent environmental and socio-economic benefits arising from a successful implementation of the strategy. As already highlighted above, it is important to recognise that private lands will become increasingly important for biodiversity conservation, and that the large scale maintenance of ecosystem processes will require cooperation between the NRS and other land managers. Effective communication is crucial to the establishment of an integrated nationwide NRS that operates effectively despite the tenure of the land over which it operates.

Implementation

The strategy contains many sound principles based on scientific understanding of landscape scale biodiversity conservation, and recognises the unique role of indigenous people in biodiversity conservation; however a large amount of funding will be required to realise these grand objectives. Many ecosystems are still markedly under reserved,¹¹ and many more are inadequately managed to ensure that biodiversity conservation is occurring, or inadequately monitored to determine if management actions are actually conserving biodiversity. Adaptive management, including the monitoring and evaluation outlined in this draft strategy, is imperative to develop rigorous management strategies for protected areas and species of special significance that we can be reasonably certain will succeed. Landscape scale conservation planning and management are also of utmost importance, and require significant Commonwealth funding.

The ultimate success of the strategy will rest on its implementation, and the achievement of targets reflecting Australia’s commitments under the CBD, including the Program of Work on Protected Areas will be a firm measure of this success. ANEDO strongly urges Governments to provide adequate funding and resourcing to ensure this happens.

Conclusion

ANEDO strongly supports the draft strategy which is grounded in well established scientific principles to conserve biodiversity, and particularly to conserve

¹⁰ Department of the Environment, Water, Heritage and the Arts – Indigenous Communities and the Environment. Available at: <http://www.environment.gov.au/indigenous/ipa/index.html>

¹¹ Sattler, P and Creighton, C. (2002) ‘Australian Terrestrial Biodiversity Assessment 2002’ *National Land and Water Resources Audit*. Available online at http://www.anra.gov.au/topics/vegetation/pubs/biodiversity/bio_assess_reserves.html [Date accessed 23/12/08]

biodiversity in the face of a changing climate by building ecosystem resilience and managing for landscape scale ecosystem processes, and using adaptive management to do so. It is imperative that adequate Commonwealth funding is provided to properly implement this strategy and ensure that the NRS fulfils its goal of securing long-term protection for Australia's terrestrial biodiversity.