Submission No 188

INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN NEW SOUTH WALES

Organisation: BirdLife Australia

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Submission in response to the Inquiry into the management of public land in New South Wales

BirdLife Australia

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birds are in our nature

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Contents

Introduction

Thank you for the opportunity to make a submission to the Inquiry into the Management of public land in New South Wales. BirdLife Australia was created following the recent merger of Birds Australia and Bird Observation & Conservation Australia (BOCA). For more than 100 years, Birds Australia and BOCA have been powerful advocates for native birds and the conservation of their habitats. Now, we have joined forces to create BirdLife Australia, the country's largest organisation devoted to the future of our native birdlife. We are an independent, not-for-profit organisation with over 10,000 members and a single aim: creating a bright future for Australia's birds.

Our submission is framed around some general introductory comments, and then follows headings as per the Inquiry's terms of reference. Key points are highlighted in **bold text** throughout the submission.

General Introductory Comments

Two hundred and thirty eight taxa (types) of Australian Birds are either extinct, threatened with extinction or are near-threatened. The threats to birds and biological diversity are mostly still increasing. Even in the most optimistic scenarios, overnight improvement in the impacts on Australia's bushlands and wildlife will not be achieved (State of the Environment 2011 Committee 2011, p. 679).

An accepted tool for protecting nature is the establishment of protected areas such as national parks, which are set aside for the specific purpose of nature conservation. While this alone is not sufficient to reverse the trends in the decline of Australia's birds and biodiversity, a full, well-managed protected areas system is a necessary core element of Australia's nature conservation system (Commonwealth of Australia 2002).

Urban, agricultural, pastoral and timber production land uses have brought about significant land management challenges including soil erosion, dryland and irrigation salinity, altered environmental flows, introduction of weeds and the loss and degradation of native vegetation and of the habitat of the birds of New South Wales. Without sustainable land management around and between protected areas, the conservation management within the protected areas themselves will struggle to deliver ideal nature conservation outcomes.

Land management is challenging. Not all protected areas are adequately or ideally managed. Not all agricultural lands are adequately or ideally managed, and neither are all urban, timber production or other lands. Pest animal management, weed management, fire management and many other aspects of land management are common challenges across all lands. Depending on the purpose for which land is managed, different emphases will be placed on different aspects of land management (nature conservation will have greatest emphasis in the case of protected areas). No matter what the primary land use objective there are responsibilities and costs which must be met in carrying out sustainable land management. Private and public land managers alike may at times struggle in this regard, leaving a gap between what is considered best practice land management in their sector and the actual standard of land management which they are able to deliver at a given time and place.

Private landholders, pushed hard by market forces, often operate in a highly efficient manner in delivering productivity through their land management practices. This delivers agricultural outcomes (and sometimes nature conservation outcomes, where a landholder may also be looking after remnant vegetation or other conservation values on their land) within significant resource constraints.

Public land managers suffer similar constraints and achieve similar efficiencies. For many years now efficiency has been a watch-word for management within government departments and agencies. But as

any farmer knows, you can only deliver so much if you don't have the human and financial resources you need, no matter how efficient your operation may be.

Public investment in conservation land management, and in public land management more generally, is not yet sufficient in Australia. Despite high-profile programs such as the Natural Heritage Trust and Caring for Our Country, the budgets of those departments and agencies which have primary responsibility for management of conservation lands are comparatively small. With land estates running into the millions of hectares, agencies are set an impossible task in allocating resources "efficiently" towards delivery of best practice land management. Health, education, infrastructure and other budgets are routinely five to ten times larger than those of environment departments, and only a portion of the meagre environment budget is able to be spent on actual public land management.

Figure 1 depicts the relative proportion of NSW budget expenses allocated to the various policy areas. The 6% "other" category includes "environment" expenditure (part of which is for public land management) and also includes expenditure on several other policy areas.

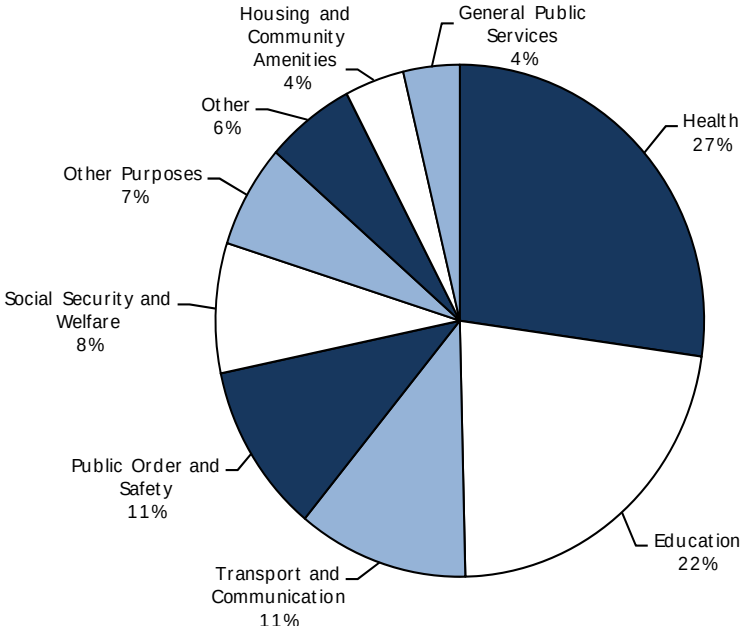

Figure 1: NSW budget expenses 2012-13 by policy area (Source: Government of New South Wales 2012)

With the increase in areas gazetted as protected areas over recent decades, anxiety about public land management is now sometimes directed at national parks, as if the gazettal itself had somehow diminished management standards. In fact, gazettal of a protected area in most cases is accompanied by an increase in land management funding and standards, albeit not a sufficient increase to in any way adequately cover the costs of best practice land management across the protected areas estate of NSW.

The answer to the tacit question underlying the terms of reference to this Inquiry "Why aren't our parks and protected areas better managed and better loved" is largely one of public investment in land management. Although Governments often work hard to allocate meagre resources more efficiently, the gap between actual and adequate public land management funding is only ever referred to in the most oblique and guarded terms. Good management of a protected areas estate which is around 40 times the area of Greater Sydney requires a significant investment. **BirdLife Australia urges the Committee to look at the "gap" in investment in all public land management compared with what is needed to deliver best practice conservation management, and to make recommendations for increased investment in this area.**

1 The conversion of Crown Land, State Forests and agricultural land into National Park estate or other types of conservation reserve…

Protected areas such as national parks are accepted as of central importance to nature conservation, and have been shown to improve conservation outcomes including reducing the extinction risk of birds (Butchart *et al.* 2012; Bruner *et al.* 2001; Nagendra 2008; Australian Government 2009b; Department of Environment and Conservation 2005; Secretariat to the Convention on Biological Diversity 2006; Natural Resource Management Ministerial Council 2010). The establishment of a system of protected areas, having nature conservation as their primary purpose and encompassing the full range of ecosystem types, is central to Australia's commitments under the United Nations Convention on Biological Diversity. It also underpins the participation of New South Wales in the National Reserve System program to which NSW subscribes and under which NSW receives considerable Australian Government funding each year.

The protected areas system is being created to redress an imbalance wherein too little land was historically allocated to nature conservation. Some 68% of NSW's land area is allocated for livestock grazing, while around 13% is used for dryland and irrigated agriculture. Public forestry reserves make up some 4% of land area and urban areas another 0.6% (1996/7 data, from ANRA 2009).

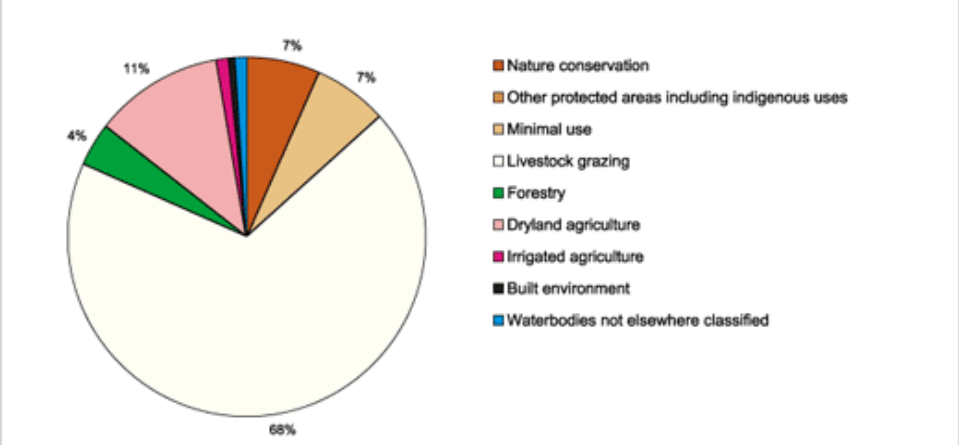

Figure 3: Land use in NSW (1996/7 data, from ANRA 2009)

This leaves only around 9% of land currently set aside for nature conservation purposes (CAPAD 2010). Figure 3 shows that this compares poorly with most other states and territories, and with the national situation where over 13% of the country's terrestrial area is included in protected areas.

Terrestrial Protected Areas in Australia by Jurisdiction						
Jurisdiction	Jurisdiction Area (ha)	Number	Protected Area (ha)	Average size (ha)	% of Jurisdiction Protected	Contribution to NRS
ACT	235,813	45	129,530	2,878	54.93%	0.13%
EXT	N/A	22	60,153	2,734	N/A	0.06%
NSW	80,121,268	867	7,081,783	8,168	8.84%	6.86%
NT	134,778,762	105	14,795,437	140,909	10.98%	14.32%
QLD	172,973,671	1,073	11,505,188	10,722	6.65%	11.14%
SA	98,422,137	1,946	27,246,888	14,001	27.68%	26.38%
TAS	6,840,133	1,202	2,845,157	2,367	41.60%	2.75%
VIC	22,754,364	2,897	3,991,600	1,378	17.54%	3.86%
WA	252,700,808	1,562	35,643,205	22,819	14.10%	34.51%
Australia	**768,826,956**	**9,717**	**103,298,940**	**10,630**	**13.43%**	**100.00%**

Figure 3: Australian protected areas by jurisdiction (CAPAD 2010)

This imbalance in land use has and is having severe impacts on nature. The biological diversity of New South Wales is in steep decline, as the following excerpt from the 2009 State of the Environment Report reveals (DECCW 2009, Chapter 7):

> "Just over a quarter of native terrestrial vertebrate species are monitored sufficiently in NSW to allow an assessment of sustainability at the statewide scale. The relatively large number of assessments of birds reflects the regular surveys conducted by Birds Australia [now BirdLife Australia] for the Atlas of Australian Birds …. The limited data available for other groups is sufficient to reliably describe the status of the individual species, but is not representative of their taxonomic groups.
>
> The sustainability assessments show that 64% of all fauna species that are assessable and 65% of birds have a moderate or greater risk of extinction …. The data for birds, based on 217 species (48% of all species), reflects clearly detectable contractions in range over the past 10 years for a majority of the species assessed.
>
> Prospects for the long-term sustainability of many of the bird species assessed are considered poor, and this data is the clearest evidence available that the decline in species appears to be ongoing. While there is insufficient data to describe recent trends in other vertebrate groups, there is little reason to expect outcomes to be dissimilar, especially as birds were the most resilient group in terms of historical declines ….
>
> The assessments of historical decline and the sustainability of fauna species described above reveal widespread gaps in the availability of data and limited capacity to reliably detect changes in the status of, and particularly the ongoing trends in, species distribution and abundance. While it would not be feasible to monitor outcomes for all species, there is a clear need for broader monitoring of a representative range of species (not just vertebrate fauna), in order to reliably report changes in the status and trends of species diversity."

The threats leading to this decline include pest animals and weeds, alteration of natural flow regimes of rivers, streams, floodplains and wetlands, competition from feral honeybees, loss of hollow-bearing trees, removal of dead wood and dead trees, clearing and changes to native vegetation and climate change (DEH 2012; State of the Environment 2011 Committee 2011). The gross alienation of land and its conversion to non-conservation land uses is behind much of this decline.

The biggest remaining gaps in the protected areas system and hence the highest priority for inclusion in protected areas are the ecosystems of the lowland areas of central and far western NSW (Thackway & Creswell 1995; DECC 2008).

This accounts for the emphasis on park acquisitions and establishment in these regions over recent years, encompassing ecosystems such as River Red Gum forests, Box and Ironbark woodlands and Acacia and Mallee woodlands and shrublands. Aside from gross under-representation in reserves, several other criteria and principles for additions to the protected areas estate have been designed and used through the years, including criteria such as rarity, irreplaceability, complementatarity, efficiency of representation, endemicity, species richness and ecological function (e.g. Pressey et al 1994; Kirkpatrick 1983; Habel *et al*. 1992; JANIS 1997).

New South Wales holds in trust a wonderful diversity of birds, native animals, wildflowers and biodiversity. This diversity of life gives the State character, colour, and forms the basis of its cultural identity, as can be seen in the priceless works of writers like May Gibbs and Norman Lindsay, Poets like Judith Wright, in the State's floral and faunal emblems those of football teams and even in the Sydney Olympics mascot.

It is a pity that NSW is "playing catch up" to most other states in establishing a comprehensive, adequate and representative reserve system, as without such a system it is unlikely that the decline of the State's unique biodiversity can be halted.

The conversion of public land and voluntary acquisition of private land for inclusion in the national reserve system is a proper, sensible and very balanced part of the land use system of New South Wales.

1 a. Process of conversion and the assessment of potential operational, economic, social and environmental impacts

The process of allocation of lands to protected areas has followed various paths over the years, from the establishment of Royal National Park in 1879, to more recent gazettals under today's legislation. Various different processes have preceded these declarations and gazettals, often including extensive public consultation, studies of social, community, economic and environmental implications and options, and, over more recent years, often including consideration by the independent Natural Resources Commission (NRC). Ultimately though, each protected area has been gazetted under legislation authorised by the Crown and reflecting the decisions of the Parliamentary representatives of the people of NSW, who have increasingly come to see environmental protection as a core responsibility of Government in the public interest.

Assessments of the anticipated operational, economic, social and environmental "impacts" (more properly, effects) of "conversion" (gazettal) of each protected area are conducted during the debates and studies leading up to gazettal, often at great length and involving wide community and expert input as well as Parliamentary debate. We also note that *ex-gratia* payments to affected industries often accompany decisions to establish new protected areas.

BirdLife Australia does not believe that retrospectively re-prosecuting every decision of NSW Parliament regarding the establishment of protected areas is possible in a submission such as this one, nor is it able to be conducted properly or adequately by the Committee. **Should the Committee wish to review all protected areas decisions in New South Wales and their potential and/or subsequent "impacts", along with the bases of the decisions, it might recommend that a state-wide review of the comprehensiveness, adequacy and representativeness of the protected areas system (and of the adequacy of funding for the management of the system) be conducted by the Natural Resources Commission.**

Such a review would help to inform the State's fulfilment of its role under Australia's Strategy for the National Reserve System (to which NSW is a party) and to strengthen the information base of, and case for sufficient resourcing of, protected area management.

1 b. Operational, economic, social and environmental impacts after conversion, and in particular, impacts upon neighbours of public land and upon Local Government

BirdLife Australia takes issue with the bias inherent in this term of reference, in the use of the negative term "impacts", as opposed to the less loaded term "effects" which would have been preferable in seeking to elicit balanced input and information as a basis for the Committee's deliberations.

It is important that the Committee redress this error by seeking out information regarding the *benefits* and other effects of protected areas and their management, as well as information about any negative impacts.

It will also be important to seek out *substantive data* regarding effects, as opposed to opinion (which may or may not relate to the *actual* effects). The Committee should seek out comparative data from both before and after gazettal of the protected areas in question, and data which will enable assessment of the land management investment, practices and outcomes relating to protected areas when compared with timber production reserves and other non-protected area public or private lands. That is to say, the effects of gazettal cannot be determined merely by seeking out the opinions of those who may perceive that they or their interests have suffered some impact. **The effects must be actually measured, and proven, including by comparing data relating to protected areas with data relating to private lands and to non-protected area public lands.**

Comparative data about the relative prevalence of pests and weeds, relative staffing levels, relative operational investment of government before and after gazettal of parks, relative health of riparian areas, and relative biological diversity will take time to generate, but will be very helpful not only in assessing the effects of current protected areas, but in planning for their management and for that of future protected areas as NSW completes its element of the NRS. **It would be especially useful and highly constructive if the inquiry were able to generate data about the conservation management needs of these areas and the related financial needs, and to put to Parliament a detailed case for on-going, full and adequate funding.**

1 c. That the following cases be considered in relation to 1a and 1b: River Red Gum State Forests in the southern Riverina; Native Hardwood State Forests in Northern NSW; Yanga Station in Wakool shire; Toorale Station in Bourke shire

BirdLife Australia does not have the resources to generate specific information regarding each of these specific cases for the Committee. We have considerable capacity to generate data about bird taxa and their use of given areas, given sufficient time and funding support.

We do note the “bias” in NSW’s reserve system wherein reservation of ecosystems of lowland central and far western NSW are less well represented in protected areas (Thackway & Cresswell 1995; DECC 2008). We reiterate the need to redress this imbalance by increasing the protection of ecosystems native to the flatter and more fertile land types of the inland areas, and other poorly represented ecosystems. An added imperative in this regard arises from the greater primary productivity (e.g. in nectar production and vegetative growth) of ecosystems on more fertile lands. These have been preferentially cleared for agriculture leaving predominantly poor areas for foraging birds and wildlife which are now struggling to survive.

We also note the great importance for biodiversity of the native hardwood forests of northern NSW, which are of national importance for threatened species. This is true of the hardwood areas of the coast and ranges, especially those comprising rainforest, old growth and high conservation value forests, as well of the hardwood ecosystems inland such as the Ironbark, Box and Callitris forests and woodlands.

We commend to the Committee the relevant NRC studies and reports, and the submissions from stakeholders to these processes (e.g. NRC 2009; NPA 2009). **We also commend to the Committee the submissions to this Inquiry of BirdLife Australia Branches and members, which will provide additional detail relating to some sites and issues.**

2 The adherence to management practices on all public land that are mandated for private property holders, including fire, weed and pest management practices

We note various publications and opinions over the last decade or so pointing toward a duty of care for sustainable land management incumbent on land managers (Industry Commission 1998; Aretino *et al*. 2001; Land & Water Australia 2002). We note that while much of the debate around this issue has arisen from controversy about regulation of private land management, there is an undoubted duty of care incumbent on managers of public land. This duty is if anything stronger and more explicit than that of private landholders, especially where protected areas are concerned. This is because the statutes, government strategies and program goals, multi-lateral agreements and specific area land management plans presiding over the management of public protected areas have been carefully described and explicated to ensure that the public know what their governments are committed to achieving.

BirdLife does not believe that the standards mandated for private landholders should be the benchmark for public land management. Although there may be similarities (such as a need to eradicate or control weeds), there will also be differences (such as a higher standard of conservation management for public protected areas than for non-covenanted private bushlands). **Public land management should be conducted to the standards set out for the specific purpose for which the land is reserved.**

The standards for public land management are set out in various agreements, statutes, regulations, strategies and plans. BirdLife Australia believes that public land managers should demonstrably meet the standards set out in these instruments and in management plans prepared for each protected area. We are aware that funding and staffing levels may often fall short of what is required in this regard, but we do not believe that this should excuse any shortfall in government meeting its responsibilities for public land management.

Investment in nature conservation and sustainable land management is good investment, bringing multiple benefits to the public and to the environment (PMSEIC; Parks Forum 2008; The Virtual Consulting Group & Griffin nrm Pty Ltd 2000; Secretariat of the Convention on Biological Diversity 2006). Adequate investment should therefore be made by government to ensure that government land management responsibilities are met in the public interest. **Public land management needs should be clearly defined, budgeted for and provided for, and the acquittal of land management responsibilities completed by the delivery of measurable and sufficient outcomes** (just as should happen on private land in accordance with private landholders' respective responsibilities).

BirdLife Australia notes the figures in the excellent 2004 NSW State of the Parks report which reveal that at that time the parks system comprised some six million hectares, with annual management funding of around $300m. This funding of around $50/ha per annum may at first glance compare favourably with expenditure on management of native vegetation on private lands. However at the time only $18m, or $2/ha/year, was targeted for feral animal and weed control programs, one of the greatest land management needs in the NSW protected area system. Meanwhile large amounts were targeted to maintenance and upgrade of historic heritage, wharves, visitor facilities and walking tracks. BirdLife Australia have not been able to tease out the overall amount per hectare spent on nature conservation *per se* within NSW parks, but the figure clearly falls significantly below $50/ha/year (for example, it has been suggested that $37/ha/year is the appropriate figure for 2004/5 (IUCN World Commission on Protected Areas (Australia and New Zealand) ?2006)).

For comparison, various figures have been published suggesting the expenditure on or cost of management of remnant native vegetation on private land. These vary widely (as will relative management costs for different parks under different circumstances). Miles *et al* (1998, described in Gillespie 2000) reported average private land native vegetation management expenditure of $16/ha/year in the NSW southern Riverina and $47/ha/year in northern Victoria, whereas Marsden Jacob

Associates (2010) found that the average cost of native vegetation management under stewardship programs (where covenanting was not part of the stewardship agreement) was $158/ha/year (in NSW and southern Queensland). The former figures represent management of vegetation for a range of different purposes so the latter, higher figure is likely to be a truer reflection of the actual costs of best practice conservation land management *per se*. This strongly suggests that the less than $50/ha/year allocated to public protected area management in NSW is inadequate to the task at hand.

Governments are rarely frank about this. It is not seen as being in their political interest to publish management expenditure and management effectiveness figures which indicate under-investment and less than ideal management outcomes.

Consistent and adequate monitoring and evaluation of park management outcomes is needed, particularly in relation to ecological management and conservation outcomes. In Canada, the park management agency, Parks Canada, is required *by law* to monitor, report on, and to maintain and improve parks' "ecological integrity". This statutory obligation drives the generation of data and strengthens the case for funding for improved management. **The Committee might explore the merits of statutorily requiring similar monitoring, evaluation and reporting on ecological land management and condition throughout the NSW parks estate, as one means of generating the data needed to inform, and the political case for funding of, park management to adequate standards.**

Details of BirdLife Australia's policy position on various more specific aspects of conservation and land management (including fire, native vegetation and pest bird management, for example) can be found on our website at http://www.birdlife.org.au/conservation/advocacy/policies.

3 Examination of models for the management of public land including models that provide for conservation outcomes which utilise the principles of "sustainable use"

There are many models for the management of public land. Protected areas are the generic model used to deliver nature conservation outcomes, and within that lie several categories or models. The internationally accepted guide to protected area categories, with associated management implications, is the protected area categories of the International Union for the Conservation of Nature and Natural Resources (Dudley 2008). In Australia, an area's inclusion in the National Reserve System relies on its meeting the IUCN definition of a protected area, along with the Standards for Inclusion in the NRS (Australian Government 2009b, p. 42).

On the topic of "sustainable use" it is important to recognise that parks and protected areas are already available for sustainable use, through tourism, recreation, cultural and research activities for example. Protected areas also have utility in water production, flood mitigation, carbon storage and sequestration and a range of other ecosystem services. Nature conservation itself is a sustainable land use.

IUCN category VI protected areas cater specifically for sustainable use, specifically:

> Category VI protected areas conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area. (Dudley 2008)

Several Indigenous Protected Areas in Australia fall into this category. It is important to note that this category employs the sustainable use of natural resources as a *means* to achieve nature conservation, and is in no way intended to suggest detraction from the primary land use intention of nature conservation.

The dedication, use and management of a comprehensive adequate and representative protected areas system is a critical, necessary, but not a sufficient action in attempting to protect the biodiversity and ecosystems of NSW, including from the impacts of climate change (Australian Government 2009a). Subjecting existing reserves to greater extractive or degrading use would be a retrograde step in this regard.

In this context, perhaps the most constructive approach to the concept of sustainable use is in promoting stewardship of remnant native vegetation on private land to increase the emphasis on nature conservation objectives in its management, with appropriate assistance for best practice management performance. In this way, the great majority of NSW land which is dedicated to agricultural and pastoral use can also increasingly contribute to conservation outcomes (as leading landholders are already doing).

4 Any other related matters

BirdLife Australia note the attacks on environmental laws in Australia currently occurring through CoAG and at both state and national level. **We urge that the fundamental statutory protections of the environment and biological diversity of NSW be retained and strengthened, and not wound back in contradiction of the views of Australians as expressed thorough many parliamentary processes leading to the establishment of these laws over recent decades.**

Thank you again for the opportunity to make this submission.

References

ANRA 2009, Australian Natural Resources Atlas, http://www.anra.gov.au/topics/land/landuse/nsw/index.html

Aretino, B., Holland, P., Matysek, A. and Peterson, D. 2001, Cost Sharing for Biodiversity Conservation: A Conceptual Framework, Productivity Commission Staff Research Paper, AusInfo, Canberra

Bruner, A. G., R. E. Gullison, R. E. Rice, and G. A. B. da Fonseca. 2001. Effectiveness of parks in protecting tropical biodiversity. Science 291:125–128.

Australian Government 2009a, Australia's Biodiversity and Climate Change, Summary for policy makers 2009, Summary of a report to the Natural Resource Management Ministerial Council commissioned by the Australian Government, Australian Government, Canberra.

Australian Government 2009b, Australia's Strategy for the National Reserve System 2009-2030, Australian Government, Canberra.

Butchart SHM, Scharlemann JPW, Evans MI, Quader S, Arico` S, et al. (2012) Protecting Important Sites for Biodiversity Contributes to Meeting Global Conservation Targets. PLoS ONE 7(3): e32529.

CAPAD 2010, Collaborative Australia Protected Areas Database, http://www.environment.gov.au/parks/nrs/science/capad/2010/index.html,

Commonwealth of Australia 2002 Australian Terrestrial Biodiversity Assessment 2002,

DECC 2008, NSW National Parks Establishment Plan

DECCW 2009, New South Wales State of the Environment 2009, Department of Environment, Climate Change and Water, Sydney.

DEH 2012, http://www.environment.nsw.gov.au/threatenedspecies/KeyThreateningProcessesByDoctype.htm

Department of Environment and Conservation 2005, State of the Parks 2004, http://www.environment.nsw.gov.au/sop04/index.htm accessed 30/07/2012

Dudley, N. (Ed.) (2008). Guidelines for Applying Protected Area Management Categories. Gland, Switzerland:

Figgis P. 2004, Conservation on Proivate Lands: the Australian Experience, IUCN, Gland, Switzerland and Cambridge, UK.

Gillespie R. 2000, Economic Values of the native Vegetation of New South Wales, Background paper number 4 of the Native Vegetation Advisory Council of New South Wales, DLWC, Sydney.

Government of New South Wales 2012, Budget Paper No. 2, http://www.budget.nsw.gov.au/budget_papers_2012-13/bp2/2012-13_budget_paper_2

Habel S.G, Nias R.C & Kennedy M 1992, A Protected Areas Strategy for the Conservation of Biological Diversity, WWF Australia, Sydney.

Hoffmann, Ary A & Sgro Carla M. February 2011, Climate Change and evolutionary adaptation, Nature, Vol 470, pp. 479-485, Macmillan.

Industry Commission 1998, A full repairing lease - Inquiry into ecologically sustainable land management, Report no. 60, 27 January 1998, Industry Commission, Canberra.

Industry Commission 1998, A full repairing lease - Inquiry into ecologically sustainable land management, Report no. 60, 27 January 1998, Industry Commission, Canberra.

IUCN World Commission on Protected Areas (Australia and New Zealand) ?2006, Submission to the Senate Inquiry into the funding and resources available to meet the objectives of Australia's National Parks, other conservation reserves and marine protected areas, ACIUCN, n.p.

JANIS 1997, Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia, Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee, Canberra.

Kirkpatrick J.B. 1983, An Iterative Method for Establishing Priorities for the Selection of Nature Reserves: An Example From Tasmania, Biological Conservation 25, pp. 127-134.

Land & Water Australia 2002, Property: Rights and Responsibilities Current Australian ThinkingLWA, Canberra.

Marsden Jacob Associates 2010, Review of the Environmental Stewardship Program, A report prepared for the Department of Sustainability, Environment, Water, Population and Communities.

Miles C, Lockhart M, Walpole S & Buckley E 1998, Assessment of the on-farm economic values of remnant native vegetation, Johnstone Centre Report no. 107, Charles Sturt University, Albury.

Nagendra H. Do parks work? Impact of protected areas on land cover clearing. Ambio. 2008 Jul;37(5):330-7.

Natural Resource Management Ministerial Council 2010, Australia's Biodiversity Conservation Strategy 2010-2030, Australian Government, Department of Sustainability, Environment, Water, Population and Communities, Canberra.

NPA 2009, Submission to the Preliminary Assessment Report of the Riverina bioregion regional forest assessment

NRC 2009, Riverina Bioregion Regional Forest Assessment River Red Gums and Woodland Forests Recommendations Report, Natural Resources Commission, Sydney.

Parks Forum 2008, The Value of Parks, Parks Forum, Fitzroy.

Pressey R.L, Johnson I.R & Wilson P.D 1994, Shades of Irreplaceability: towards a measure of the contribution of sites to a reservation goal, Biodiversity and Conservation 3, pp. 242-262.

Review of the Environmental Stewardship Program, Marsden Jacob Associates 2010

Secretariat of the Convention on Biological Diversity 2006, Global Biodiversity Outlook 2. Montreal.

State of the Environment 2011 Committee 2011,Australia State of the Environment 2011, DSEWPaC.

Thackway & Cresswell 1995 (Eds), An Interim Biogeographic Regionalisation for Australia: a framework for establishing the national system of reserves, Version 4.0 Australian Nature Conservation Agency, Canberra.

The Virtual Consulting Group & Griffin nrm Pty Ltd 2000, National Investment in Rural Landscapes An Investment Scenario, report prepared for the Australian Conservation Foundation and the National Farmers Federation with assistance from the Land and Water Resources Research and Development Corporation, unpub.