



Bird Observation & Conservation Australia

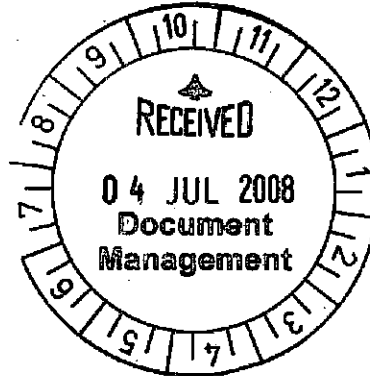
ABN: 24 005 068 842

183-185 Springvale Road, Nunawading
PO Box 185, Nunawading,
Vic 3131, Australia

Tel: 03 9877 5342 Fax: 03 9894 4048
Email: information@birdobservers.org.au
Web: www.birdobservers.org.au

2nd July 2008

Premier of Victoria
Climate Change Submission
GPO Box 4912 Melbourne 3001



A Climate of Opportunity Summit Paper

Bird Observation and Conservation Australia (BOCA) welcomes the opportunity to comment on the Government's *A Climate of Opportunity* Summit Paper.

BOCA is a national non-government organisation with more than 3000 members throughout Australia. BOCA's objectives may be summarised as appreciation, education and conservation relating to Australian birds and their habitat. Consequently this submission will be limited to issues relating to impacts on birds and their habitat.

Over the last 200 years populations of many native bird species have been significantly reduced, principally as the result of widespread loss, degradation and fragmentation of their habitat. Of the 277 vertebrate taxa listed as threatened in Victoria, 127 are birds (DSE Advisory list). Climate change is predicted to have significant effects on Victoria's ecosystems (Chambers *et al*, 2005; Hughes, 2003). The distributions of many species of birds are likely to be affected, resulting in geographical range contractions or expansions for species disadvantaged or advantaged by climate change, respectively. The combined effects of habitat loss and climate change are likely to accelerate the demise of many bird species.

While it is imperative that the Victorian Government undertake actions to reduce future carbon emissions and tackle the impacts of climate change, it is important that these actions do not further threaten bird species and that they are part of a state-wide strategy to protect and enhance Victoria's biodiversity. Habitat protection, restoration and connectivity must remain high on the Victorian Government's agenda. This requires a long-term vision for Victoria's biodiversity that is supported by strategic, well funded and targeted programs. We have attached our comments on the Government's *Land Biodiversity at a time of Climate Change* Green Paper for your reference, as many of the issues are also of relevance to the *A Climate of Opportunity* Summit Paper.

It is clear that Victoria must invest in renewable energy sources. However, BOCA has serious concerns about the impacts of wind farms on birds, particularly in western Victoria. The biggest impacts are likely to be on waterfowl, waders, raptors (Stewart, 2007) and on Victoria's threatened Brolga population. Wind farms must be sited away from major flyways and breeding grounds. The cumulative impacts of multiple wind farms must be assessed. The design, layout and position of new wind farms must be based on the precautionary principle.

BOCA believes that plantations established for carbon sequestration must incorporate biodiversity outcomes. The proliferation of blue gum plantations across Victoria occurred with little concern for the impacts they would have on local ecosystems. Carbon sequestration schemes should be based around indigenous species. Plantations that incorporate several layers of vegetation and a more diverse representation of Victoria's flora have the potential to provide lasting benefits to Victoria's biodiversity.

We hope that the above comments are useful and look forward to the release of the Green Paper. If you wish to have clarification or further information please contact BOCA's Conservation Officer, Jenny Lau on 9877 5342 or email conservationprojects@birdobservers.org.au.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Richard Hunter', written over a horizontal line.

Richard Hunter
Chief Executive Officer

Cited References:

Chambers, L., Hughes, L., & Weston, M. A. (2005). Climate change and its impact on Australia's avifauna. *Emu*, 105, 1-20.

Hughes, L. (2003). Climate change and Australia: Trends, projections and impacts. *Austral Ecology*, 28, 423-443.

Stewart, G. B., Pullin, A. S. & Coles, C. F. (2007). Poor-evidence-base for assessment of windfarm impacts on birds. *Environmental Conservation*, 34(1), 1-11



Bird Observation & Conservation Australia

ABN: 24 005 068 842

183-185 Springvale Road, Nunawading
PO Box 185, Nunawading,
Vic 3131, Australia

Tel: 03 9877 5342 Fax: 03 9894 4048
Email: Information@birdobservers.org.au
Web: www.birdobservers.org.au

30th June 2008

Project Director
Land and Biodiversity White Paper
Department of Sustainability and Environment
PO Box 500
East Melbourne VIC 3002

Land and Biodiversity at a time of Climate Change – Green Paper

Bird Observation and Conservation Australia (BOCA) welcomes the opportunity to comment on the Government's *Land and biodiversity at a time of climate change - green paper* (the Green Paper).

BOCA is a national non-government organisation with more than 3000 members throughout Australia. BOCA's objectives may be summarised as appreciation, education and conservation relating to Australian birds and their habitat.

Landscape Scale Conservation – A Bold Vision is Needed

The Green Paper clearly defines the context for addressing Victoria's land and biodiversity challenges in a time of climate change. The Victorian Government (Government) has recognised the urgent need to halt the decline in the health and biodiversity of Victoria's ecosystems and acknowledges that landscape-scale conservation is required to conserve biodiversity within healthy, functional ecosystems. This recognition must be matched by a White Paper that delivers a clearly articulated, long-term vision for Victoria's land and biodiversity.

The vision presented in the Green Paper is not nearly bold enough. The White Paper must define a clear set of conservation objectives accompanied by detailed strategic plans to protect, restore and re-connect Victoria's ecosystems. Implementation plans must be supported by a set of SMART (specific, measurable, appropriate, realistic and timebound) targets and must clearly outline the roles and responsibilities of key stakeholders. Adequate program funding is absolutely critical to the achievement of long-term conservation objectives.

The long-term vision must be to achieve connectivity at the landscape scale. The connections, or biolinks, must be sufficiently large to support healthy, functioning ecosystems. Species must be able to inhabit, rather than simply move through, biolinks. This may require connections that are several kilometres wide to provide suitable habitat for all species. Significant areas of private land will need to be revegetated to support this long-term vision. Short-term objectives must be to protect and restore all existing remnants. BOCA supports the Government's suggestion that riparian zones and roadsides are logical starting points for restoration and biolink activities, but these will not provide options for all species to adapt to a changing climate in the long-term.

BOCA provides the following comments as they relate to chapters of the Green Paper.

Chapter 5

BOCA agrees that Victorians should work together as active stewards of the environment (outcome 4). However Government rather than community and businesses must play the leading role in determining how these goals will be achieved. The Green Paper places too much emphasis on the role of communities in determining priorities to achieve improvements in ecosystem health and maintenance of biodiversity. Victorians need leadership on this issue. Government must provide the big picture and invest in the development of solutions that are derived from well funded research programs.

The statement that 'much of the knowledge, expertise and capacity to make change lies with the community' is likely to be incorrect in many instances. Good decisions are informed by good research and supporting systems which must be provided by Government.

It is worrying to see the emphasis placed on increasing agricultural productivity (without environmental harm). In recent decades we have seen huge increases in the productivity of our agricultural systems, often at the expense of the environment. Examples of this are the adoption of centre-pivot irrigation in western Victoria and the ongoing removal of rocks and destruction of remnant grasslands on the volcanic plains of western Victoria. Productivity cannot continue to increase in perpetuity. The widespread adoption of high input agricultural systems is pushing the limits of our ecosystems' capabilities. Long-term ecosystem health and viability must come before short-term agricultural productivity.

Chapter 6

Section 6.1

EcoMarkets are likely to be a useful but limited mechanism for achieving biodiversity outcomes on private land. Its limitations arise from the following assumptions.

1. That all landholders are able to participate equally in the process. It assumes that all landholders have equivalent skills and networks to access the tender process.
2. That the best environmental outcome can always be achieved at the lowest price. It relies heavily on inferences about the likely success of given techniques to produce particular outcomes.

If ecoMarkets are to form the basis of Government policy on the restoration of ecosystem health and connectivity, the present investment level of \$14 million over the next three years is completely inadequate. At this level of investment, ecoMarkets are unlikely to achieve significant, long-term biodiversity benefits. This is an abysmally low level of Government investment in biodiversity, especially in comparison with investment in infrastructure projects.

Trust for Nature

Trust for Nature has been successfully covenanting and managing significant areas of remnant vegetation on private land for more than 30 years with minimal support from Government. In recent years, numbers of landholders seeking to apply in-perpetuity covenants to remnant bushland have increased exponentially. Trust for Nature is well positioned to support the Government's objectives of achieving connectivity at a landscape scale. Government should invest in this existing program by providing adequate funding to Trust for Nature to allow it to continue and expand its important work. Government should make a substantial contribution (tens of millions of dollars) to Trust for Nature's Revolving Fund to increase the organisation's capacity and agility to participate in the property market.

Land for Wildlife

The Land for Wildlife scheme has been successfully promoting and supporting the voluntary protection and restoration of wildlife habitat on private land since 1981. At present more than 6000 properties are registered under the scheme. Many landholders prefer the voluntary, non-binding nature of Land for Wildlife agreements over Trust for Nature covenants, yet this does not necessarily represent a lower level of commitment to habitat protection and restoration and often leads to Trust for Nature covenants. Land for Wildlife is well recognised in the community and provides a strong base for increasing community acceptance and appreciation of private land conservation. It provides a forum for information sharing and community education. In light of its potential to make a significant contribution to biodiversity conservation in Victoria, BOCA believes that it deserves significantly increased funding and a renewed commitment from Government.

Government must investigate other incentives such as tax concessions and rate rebates to achieve conservation on private land. Sales of Trust for Nature covenanted land should be exempt from State land tax, stamp duty and GST. It is unclear how the other market based approaches (formal partnerships, employee-owner relationships, joint ventures and leasing) would facilitate private land conservation.

In some cases large-scale farming operations provide opportunities for significant investment in land health and biodiversity. However, in many instances it leads to an intensification of agriculture and the adoption of high input/ high output practices which often have deleterious impacts on the environment. Many large agri-businesses or corporate landholders are focussed on short-term returns, often at the expense of the environment.

In this and other sections of the Green Paper, vague allusions are made to the potential for public-private partnerships for management of public land. Any investigation of such partnerships must be well defined, transparent and be debated in public.

Section 6.2

BOCA supports the objective of ensuring that plantations established for carbon sequestration incorporate biodiversity outcomes. The proliferation of blue gum plantations across Victoria occurred with little concern for the impacts they would have on local hydrology and ecosystems. Carbon sequestration schemes should be based around indigenous species. Plantations that incorporate several layers of vegetation and a more diverse representation of Victoria's flora have the potential to provide lasting benefits to Victoria's biodiversity.

Section 6.5

BOCA strongly agrees with the following comments. We need ...

- 'new solutions to protect riparian zones and wetlands on Crown and privately owned land' (pg 48 para3).
- to 'increase the number of wetlands on private land managed for environmental values, improve the condition of riparian areas and protect habitat refuges ...'
- to 'improve the management of riparian area and encourage the development of stewardship arrangements with adjacent landholders and other potential managers.'

Section 6.6

We are in full agreement that landscape-scale conservation is required to conserve biodiversity and ensure continuance of ecological and evolutionary processes in the long term. BOCA agrees that priority should be given to the protection and restoration of existing remnant vegetation, irrespective of tenure.

It is suggested that connectivity can be achieved through the provision of wildlife corridors (although the width and extent of these is not defined) supplemented by mosaics/ patches of vegetation. This is unlikely to provide options for sedentary species or those lacking long distance dispersal mechanisms – including many species of plants. Many species require continuous, extensive tracts of vegetation to support their dispersal mechanisms. Biolink zones must provide continuous habitat to ensure that all species of plants and animals are catered for.

Government must develop a strategic, adequately funded program to support conservation on private land. Effective biolinks cannot be achieved through existing public reserves (including riparian zones and roadside vegetation). These areas may provide the backbone of biolinks but must be accompanied by the protection, restoration and re-establishment of habitat on significant areas of private land. Many ecological communities, such as grasslands, grassy woodlands and wetlands, are found predominantly on private land and are poorly represented in the public reserve system.

Emerging ecoMarkets are a blunt instrument for achieving lasting change, particularly at the present level of investment (see comments above). Government must investigate and adequately fund other programs and incentives to assist or reward private land managers to protect and re-establish habitat on their land. Trust for Nature is already set up to support landholders wanting to protect remnant habitat in Victoria, yet the organisation receives little funding from Government and only short-term funding through the federal Government's Natural Heritage Trust.

A Trust for Nature covenant is an encumbrance on a property's title, providing permanent habitat protection. In contrast, BushBroker agreements developed under the Native Vegetation Framework

(offsetting) only provide for the management of habitat for ten years; as a result, the impact of BushBroker will diminish over time.

The short term foci outlined in section 6.6 are sensible starting points for achieving connectivity provided that they are:

1. part of a targeted landscape-scale vision;
2. adequately funded; and
3. matched by programs for achieving connectivity on private land.

While the draft terms of reference for the VEAC Remnant Native Vegetation investigation indicate that Government will examine the potential for Crown and public authority lands to contribute to biolinks, the VEAC Act could be amended to allow a VEAC biolinks study that includes remnant vegetation on private land.

Section 6.7

Public land plays a central role in biodiversity conservation and will provide the core areas for any future biolinks. The Green Paper tacitly assumes that ecosystems within formal conservation reserves (Parks Victoria) are healthy and not highly threatened. This is not the case. In many instances ecosystems within Parks are in poor condition as a result of past land management practices such as logging, mining and grazing. Large areas are threatened by ongoing pressures from invasive species, inappropriate fire regimes, grazing pressure and fragmentation. These threats will be exacerbated by climate change. The importance of managing, protecting and conserving biodiversity on public land must be acknowledged in the White Paper. Government must increase recurrent funding for Parks Victoria to manage biodiversity and restore the ecological health of the public conservation estate. The White Paper must include details for the development of strategic plans for land managed by Parks Victoria including SMART targets and the allocation of adequate funding.

The suggested application of a market-based approach to investment on public land is flawed. The 'value' of biodiverse, healthy ecosystems to future generations is impossible to quantify. The emerging carbon market is testament to the fact that the intrinsic (and monetary) value of forests has been seriously undervalued in the past. Present day 'return to the community' is likely to be an extremely poor indicator of the long-term value of biodiverse, healthy ecosystems on public land to future generations. Present day 'value' cannot be used as the sole determinant of present day expenditure on public land. Government must invest directly in the maintenance of healthy, viable ecosystems on public land and not just 'visitor management and the provision of visitor services' as is so often the case.

Section 6.8

It is dangerous to suggest that we should somehow pick and choose between threatened species and communities. We have scant knowledge of the biology of individual species and even less knowledge of the intricate interdependence of species in a healthy ecosystem. We are not in a position to choose wisely. Government should apply the precautionary principle and attempt to conserve all species, preferably *in situ*.

BOCA agrees that investment in natural regeneration would allow genetically fit trees to recolonise areas. We also agree that investment should begin by restoring the health of and building connectivity out from existing remnants.

While the FFG Act is in need of review, changes will only be effective if they are adequately funded. More funds are needed to support the listing process and the development and implementation of recovery action plans. There must be a level of accountability ascribed to the targeted outcomes of action statements.

Section 6.9

To date, the Government's Native Vegetation Management Framework has failed to stop the destruction of significant habitat in Victoria. The Framework must be implemented to ensure that clearing is avoided more often than it is minimised or off-set. We are in desperate need of more information on the extent and quality of native vegetation on private land, particularly grasslands to the west of Melbourne and on the volcanic plains. Evidence suggests that some grasslands are being intentionally degraded to avoid inclusion in the Native Vegetation Management Framework. Other areas are being lost to development and cultivation because they have never been included in the native vegetation accounting systems.

Section 6.10

BOCA has serious concerns about present and suggested approaches to the use of fire as a tool for asset protection and managing biodiversity. We have little knowledge of the impacts of past/present burning regimes on biodiversity let alone the impact of increasing prescribed burning targets from two to five percent to four to ten per cent. We burn in ignorance. Government must allocate resources towards research into the impacts of prescribed burns on biodiversity and ecological functioning.

Drought and projected climate changes are likely to result in increasingly dry, stressed ecosystems. The added burden of undertaking prescribed burning at a time when species are unable to recover (in autumn before significant rainfall) may accelerate biodiversity losses.

The proposal to let some low risk fires 'run their course' has some merit. The impacts of fire control techniques, such as fire break construction, may have greater long-term, negative impacts on biodiversity than the impacts of a low risk, low intensity fire. This requires further investigation.

The contribution of large-scale fire-breaks to habitat fragmentation requires urgent investigation.

Section 6.11

BOCA supports the allocation of resources towards the early detection and eradication of pest plants and animals. However this should be accompanied by an increase in resources to control established pest plants and animals. This must include a commitment to undertake research into the biological control of weeds.

BOCA believes high priority must be given to the quick eradication of introduced bird escapees. BOCA reports sightings of potentially invasive species (eg. Barbary Dove and Indian Ringneck Parrot) to DSE. DSE must be provided with the resources to quickly follow up on these reports, particularly where breeding colonies are likely to become established.

While effective control of pest plants and animals requires the cooperation of communities, Government must play a leading role in establishing targets and providing resources that will assist community efforts.

Government must improve and enforce legislation to prevent the sale and distribution of identified weeds.

Chapter 7

Government has outlined a range of tools it may employ to achieve its vision for Victoria. The combination of tools required will be heavily dependent on the 'big picture' provided by Government. Too great an emphasis is placed on the use of ecoMarkets to achieve biodiversity outcomes on private land. Behavioural change derived from strong community education programs will be critical determinants of the success of any scheme to re-connect Victoria's ecosystems.

Chapter 8

BOCA is extremely disappointed at the suggested approaches to improving our knowledge base. We have scant knowledge of the basic biology and ecology of our ecosystems and a poor understanding of the impacts of our actions on long-term ecosystem health. Re-connecting our landscapes requires accurate knowledge of ecological and evolutionary processes occurring at the landscape scale. At the same time we require an understanding of species specific ecology. Government must invest in scientific, ecological studies to provide the knowledge that will underpin the re-connection of our ecosystems. The valuable work conducted by scientists at the Arthur Rylah Institute and those undertaking landscape scale projects, such as the 'Mallee Fire and Biodiversity Project', are vital in informing our understanding of landscape scale conservation.

The Green Paper places an emphasis on the use of modelling to inform our decisions, but our models are only as good as the basic data and science they are based on. The Green Paper also emphasises 'community' knowledge which while valuable, has biases and is socially constructed. Government must show greater commitment to the funding of fundamental, scientific research into the ecological and evolutionary processes that support biodiversity. This should include a significant increase in the ecological research capacity of Parks Victoria to provide meaningful information of relevance to the management, maintenance and enhancement of biodiversity values on public land.

BOCA is in agreement with the Green Paper where it states that 'Long-term and consistent data sets are crucial to understanding ecological processes that operate over many years'. However it is incomprehensible that it only includes the maintenance and extension of existing data sets on climate, water, fire and commercial production. These data sets can tell us very little about the status of Victoria's biodiversity. We must undertake long-term, strategic monitoring of species' distribution and abundance, otherwise we are making decisions about Victoria's biodiversity in a knowledge vacuum.

We hope that the above comments are useful and look forward to the release of the White Paper in September 2008. If you wish to have clarification or further information please contact BOCA's Conservation Officer, Jenny Lau on 9877 5342 or email conservationprojects@birdobservers.org.au.

Yours sincerely



Richard Hunter
Chief Executive Officer