Submission 045
Date received: 29/07/2011

NATIONAL PARKS ASSOCIATION OF NSW
protecting nature through community action

Submission to the House of Representatives Standing Committee on Climate Change, Environment and the Arts'
Inquiry into Australia's biodiversity in a changing climate

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1. Introduction

The National Parks Association of NSW (NPA) was formed in 1957 to promote the concept of a network of national parks in NSW under specialist national parks and wildlife legislation and managed by a professional agency. A major step forward in NPA's work was achieved with the passage of the NSW *National Parks and Wildlife Act 1974* and the establishment of the NSW National Parks and Wildlife Service (NPWS) in 1967. Today NPA continues to build on this work through a network of 18 branches and over 5,000 members and supporters.

NPA welcomes the opportunity to make a submission to the House Committee's inquiry into climate change and biodiversity. NPA recognises the significant threats posed by climate change to Australia's unique biodiversity, and the challenges that climate change poses for the management of ecosystems, flora and fauna. NPA is undertaking a number of projects, spanning a wide range of Australia's ecosystems, which provide a model for the role of community conservation organisations in:

- Protecting and supporting Australia's biodiversity in the face of a changing climate;
- Promoting and implementing connectivity conservation initiatives;
- Enhancing ecosystem resilience and ecosystem adaptation to climate change; and
- Engaging community groups in all of the above

NPA strongly believes that protecting Australia's biodiversity in the face of a changing climate will require strong conservation measures and wise land management across all tenures.

This submission highlights the vital role of protected areas as biodiversity adapts to threats such as climate change and habitat loss, and calls for the active involvement of the Federal Government. We then give two case studies of NPA projects in nationally important 'ecosystem networks' outside the national reserve system, focusing on connectivity. These studies are also intended to illustrate how community conservation organisations can work with a range of stakeholders to mitigate the effects of climate change on Australia's biodiversity.

2. This importance of the protected area system

Australia's protected area system plays a vital role in protecting Australia's biodiversity from a range of threats, including climate change. The maintenance and extension of protected areas, both in terrestrial and marine ecosystems, has always been one of NPA's key focuses. Protected areas provide core patches of intact habitat, which can then be linked and extended through cross-tenure connectivity conservation initiatives (as discussed in the next section). The role of Australian governments is critical in providing and supporting protected areas.

NPA has been greatly concerned by recent moves on the part of the new NSW Government to undercut the protected area system. This has been particularly severe for marine ecosystems, with the government weakening protection for the critically endangered Grey Nurse Shark, rolling back zoning plans at the Solitary Islands and Jervis Bay marine parks, and supporting a moratorium on the creation of marine parks in NSW for up to five years, all within just four months of its election. Such drastic weakening of protected areas flies in the face of all attempts to make Australia's biodiversity resilient to climate change through measures such as connectivity conservation.

The Federal Government can play a strong role in protecting Australia's biodiversity from a range of interest groups at the state level. The intervention of the Hon Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, in the Victorian government's decision to re-introduce cattle into the Alpine National Park, is a notable example.

3. Case studies of nationally important ecosystem networks

The terms of reference of the committee call for case studies of 'nationally important ecosystems'. NPA is involved in two notable conservation projects that focus on connectivity across the national landscape. These incorporate a range of ecosystems into nationally important 'ecosystem networks'.

Case study 1: the Great Eastern Ranges initiative

NPA is a lead partner on the Great Eastern Ranges (GER) initiative. The GER initiative is the foremost large-scale connectivity conservation project in Australia, working to achieve a vision of a continental-scale conservation corridor, over the length of the Great Escarpment and the Great Dividing Range from the mountains of Victoria to the Atherton Tablelands in Queensland.

The proposed GER corridor is of great national significance. It spans 28 degrees of latitude, encompassing some of the most biodiverse land in Australia, including significant tropical, subtropical and temperate woodland and forest ecosystems, and incorporating three World Heritage areas and three wetlands with Ramsar listing.[1] It contains 14 of the 85 bioregions in Australia, including areas with some of the highest concentration of bird, mammal, *Eucalyptus* and *Acacia* species in Australia.[2]

Connectivity conservation projects such as the GER initiative are vital for mitigating the effects of climate change on Australia's biodiversity. Although Australian species have been able to adapt to changes in climate in the past, the added stresses of invasive species, habitat loss, degradation and fragmentation and changes to hydrological and fire regimes decrease the resilience of ecosystems and threaten the ability of our biodiversity to adapt to the current climate change event.[3,4] The GER initiative's well co-ordinated corridor, linking intact and restored habitats across eastern Australia, provides a key opportunity for species to shift their ranges and habitat use to respond positively to changing climate and environments.

An example of a species that is likely to benefit from the GER corridor is the greater glider, which is relies on tree hollows and trees of a certain age for its survival, and consequently has

[1] Mackey B, Watson J, Worboys GL of ANU Enterprises Pty Ltd (2010) Connectivity conservation and the Great Eastern Ranges corridor: an independent report to the Interstate Agency Working Group (Alps to Atherton Connectivity Conservation Working Group) convened under the Environment Heritage and Protection Council/Natural Resource Management Ministerial Council.
[2] Mackey *et al.* (2010) *op. cit.*
[3] Mackey *et al.* (2010) *op. cit.*
[4] Doerr V, Doerr E and Davies M (2010) Does structural connectivity facilitate dispersal of native species in Australia's fragmented terrestrial landscapes? *Systematic Review No. 44,* Collaboration for Environmental Evidence.

declined in response to habitat loss through logging and land clearing.[5] Specialist species such as the greater glider will require suitable habitat connections, as provided by the GER corridor, in order to allow movement across the landscape in response to climate change.

Aside from its ecological value, the GER initiative is also important because it is a cross-tenure, socially inclusive project, involving government agencies, landholders, scientists and community groups. It draws in landholders who naturally understand the benefits of conservation management for their local areas, and links them with each other, with conservation and government groups and with the large-scale vision of connectivity conservation. In this way, it is able to engage a broad cross-section of the community with the challenge of preserving our biodiversity in the face of a changing climate.

Case study 2: the Travelling Stock Route and Reserve network.

NPA has been working to protect the Travelling Stock Route and Reserve (TSR) network in NSW for more than 50 years. This network is an excellent example of the way in which land with a variety of uses and values can be a vital resource for conservation and for mitigating the effects of climate change on Australia's biodiversity. TSRs contain remnants of woodland and grassland, especially in the highly-cleared landscape of Central West NSW. These remnants are vital for the survival of a range of threatened plant and animal species. In particular, they provide habitat for a broad range of woodland bird species, many of which are threatened or declining in Central West NSW.[6] The mature, hollow-bearing trees found along the TSRs provide vital habitat, nesting sites and protection for a range of birds, arboreal mammals and bats.[7]

In conjunction with the extensive system of stock routes in Queensland, the NSW TSR network form a 'ready-made' network for continental-scale connectivity conservation, particularly in

[5] Fischer J, Lindenmayer DB, Fazey I (2004) Appreciating ecological complexity: habitat contours as a conceptual model, *Conservation Biology*, **18**, 1245-1253

[6] Reid J. (1999) *Threatened and declining birds in the NSW sheep-wheat belt I: Diagnosis, characteristics and management.* Consultancy report to NSW National Parks and Wildlife Service. CSIRO Wildlife and Ecology: Canberra.

[7] Gibbons P., Lindenmayer D. (2002) *Tree hollows and wildlife conservation in Australia*. CSIRO Publishing: Victoria, Australia

heavily-cleared regions further west than those protected by the GER initiative. TSRs act as corridors and 'stepping stones', connecting fragmented vegetation across the landscape. In particular, they connect the remnants of a north-south corridor of woodland in eastern Australia. The links provided by TSRs allow animals to disperse between remnant vegetation areas, promoting interbreeding between populations and allowing species to colonise new or abandoned habitats.[8] The TSR networks in NSW and Queensland also extend across climatic gradients in eastern Australia, allowing species to move across the landscape in response to changing patterns of rainfall and temperature.

NPA's current TSR campaign has been focussing on raising public awareness of the environmental and other values of the TSR network, and campaigning to prevent the ongoing break-up of the network. NPA has produced a range of print and online documents to raise awareness of the environmental importance of TSRs. In early 2008, NPA NSW convened a national conference on TSRs. This conference gave rise to the Stock Routes Coalition, which is an association of environment, community and user groups in NSW and Queensland interested in the improved management and ongoing protection of stock routes in both states. A second conference has just be convened by NPA (on the 28th July 2011), bringing together a diverse range of stakeholders including Aboriginal groups, farmers and drovers, government authorities, recreational users of TSRs and conservation groups, to discuss how to manage TSRs in a shared and sustainable fashion.

Importance of the case studies

Both campaigns illustrate the role that community conservation organisations such as NPA can play in engaging the community to protect biodiversity in the face of climate change. The campaigns inform and connect individuals and organisations with a direct interest in connectivity conservation and protection of biodiversity. They also work with a broad range of interest groups to create management strategies that allow multiple uses of the TSR network,

[8] Reid J. (1999) *op. cit.*

which are compatible with preserving the network as a vital resource for helping native species adapt to a changing climate.

4. Conclusion

A changing climate brings new threats to Australia's biodiversity. Our ecosystems need urgent attention. They depend on protected areas and landscape-scale connectivity between habitat patches on public and private land. NPA is one of a number of community conservation organisations forming networks that both pursue these objectives and engage the community in them.

The active involvement of the Federal Government in supporting state governments acquiring land for protected areas, and through projects like the National Wildlife Corridors Plan, has proven very important and will continue to do so. In this submission, we have alerted the Committee to other relevant endeavours, such as the GER initiative and the project to preserve the TSR Network.