19/3/2006

Dr Jacqueline Dewar
The Secretary
Senate Environment, Communications Information Technology and the Arts References Committee
Parliament House
Canberra, ACT, 2600
Email: ecita.sen@aph.gov.au

Re: Senate inquiry into Australia's national parks, conservation reserves and marine protected areas

Dear Dr Dewar,
Please find attached my submission to the inquiry. It has been prepared in my capacity as an interested professional in the field of protected area management. It is based on my experience as an Australian and international protected area practitioner for 33 years, and as leader author of the Australian university text, *Protected Area Management, Principles and Practice (second edition) 2005*, (Oxford University Press). I also contribute in this field as a University lecturer on protected area management, as a member of the IUCN WCPA Steering Committee (Vice Chair IUCN WCPA Mountains Biome) and as a protected area management researcher.

I fully support the IUCN WCPA Australia-New Zealand Region submission prepared by Vice Chair Penny Figgis. This individual submission is supplementary, and emphasises some key points of national protected area management interest.

Thank you for the opportunity of contributing
Yours faithfully

Graeme Worboys (MAppSci)

(Submission: Attached.)

Submission to the Senate inquiry into Australia's national parks, conservation reserves and marine protected areas by Graeme Worboys, March 2006

This response has been prepared in the order of the Inquiry's terms of reference. It provides a number of Key Points of response.

Funding and resources available to meet the objectives of Australia's national parks, other conservation reserves and marine protected areas with particular reference to:

a) the values and objectives

KEY POINTS:

Significance of Australia's protected areas

- The intrinsic and cultural values of the current protected areas of Australia are locally, nationally and internationally significant as judged by a range of natural, social, and economic criteria
- The objectives of management for Australia's protected areas are consistent with IUCN Protected Area Category Types I-VI and a dominance of Categories I-IV assists Australia meet its obligations under the Convention on Biological Diversity

Increasing importance: changing values

As other Australian natural lands diminish in area and as climate change continues, Australian protected areas will be *increasingly valued* for their naturalness, including for their role in providing basic life support for species including humans. With time, natural protected areas will be:

- more important for their water supplies
- more important for clean air they help generate
- increasingly important for their life supporting ecological processes
- critical for the maintenance of sustainable (marine) fish stocks

b) sufficient resources

KEY POINTS

Inadequate resources available

There are too few resources allocated for the effective management of Australia's protected areas. My specific comments are:

- **Management is needed:** Active and effective management is required if Australia's protected areas are to be conserved for the purposes in which they are reserved.

- **Achievements:** There have been increases in protected area management organisation funding ($/ha), and important protected area conservation successes have been achieved
- **Formidable, dynamic threats:** The resources provided for managing threats are not indexed to the size of the issues nor the dynamic (growth and demise) of such issues. The key issues of fire, weeds, feral animals and tourism impacts are growing (see below). Often the resources provided fail to deal with threats over the long term
- **Tourism not paying its way:** Protected area organisations typically subsidise the tourism industry in providing infrastructure and support services for parks. This investment may mean the redirection of scarce funds from threat management and conservation management works.
- **Too few resources for science (research)**: There are insufficient resources available for essential research for protected areas. Effective management of protected areas is achieved by science and management working closely together including adaptive management and science based management effectiveness evaluation.

(Note: This response refers to all direct and indirect protected area management resourcing from protected area management organisations (staff and budgets), from national Government resourcing (grants and special programs), and from research initiatives from Universities and research organisations).

c) threats

KEY POINTS:

The dynamic of threats:

Protected areas are threatened by the invasion of weeds, impacts from introduced animals, and the effects of altered, non-natural fire frequencies. This is not a constant threat, and from current trends, threats can be expected to increase, not decrease.

More weeds and greater viability of weeds

- There are larger numbers of weeds impacting protected areas. In the Australian Alps park, Kosciuszko National Park (for example) in 1898, there were 10 non-native taxa recorded. In 1954 there were 69, and in 1997, there were 106 recorded despite active weed control programs over a long period (Johnston and Pickering 2001, Pickering *et al*. 2005).
- The national and international mobility of tourists provides vectors for the spread of weeds. The tourism village, Thredbo within Kosciuszko National Park for example recorded 103 non-native taxa in 1997 (Johnston and Pickering 2001, Pickering *et al*. 2005).
- Climate change with its hotter and drier conditions in the south-east of Australia is forecast to improve the viability of many weeds within protected areas.

Increased impacts of pest animals

- Improved (long term) national efforts are required for species such as the fox, cane toad, feral cat, rabbit, camel, wild horse, wild donkey, wild goat and other introduced species.
- Climate change is forecast to introduce hotter and drier conditions for southern Australia, and impacts of introduced species on native fauna and flora may be greater. Free ranging feral animals over large tracts of Australia need to be considered for their potential to cause soil loss and desertification.

More frequent fire

- Climate change induced hotter and drier conditions are forecast to increase the frequency and severity of fires in south –eastern Australia, particularly in mountain and other forested environments.

The loss of the Great Barrier Reef

- What actions being taken to manage for the forecast loss of the Reef?

The loss of alpine species and snowfields

- What coordinated efforts are being made to manage for the forecast loss of the snowfields and alpine fauna and flora species?

d) responsibilities of government-long term plans

KEY POINTS:

Establishing new protected areas: unfinished business

Good progress has been made by all Australian governments in establishing protected areas. However the National Reserve System is unfinished. Action that is required in the next 10 years includes:

Completing:

- a comprehensive, adequate, and representative reserve system for *all* Bioregions
- a national system of Indigenous Protected Areas
- a national system of Private Protected Areas
- a national system for Community Conserved Areas (Lockwood *et al*. 2006)
- a completed marine protected area system

Initiating

- continental scale conservation connectivity for lands such as the Great Escarpment of Eastern Australia and Australia Alps corridor, northern Australia and south-western Australia (Pulsford *et al*. 2004, Worboys *et al*. 2005), to minimise the effects of climate change and forecast biome shifts.

- a new approach for managing and protecting fauna and flora dependent on the episodic "boom and bust" cycles of the Australian environment, particularly in arid Australia

Managing protected areas: a new era of management required

The formative stage of Australia's protected area system and protected area management is drawing to an end and a new era of management is emerging, led by necessity and guided by international experience and trends. Considerations include:

Conservation at a national level: (within the context of the Australian constitution and featuring a cooperative approach between governments). Actions (including supportive legislation and policies) could include:

- national environmental water flows for river and wetland based protected areas
- connectivity conservation for terrestrial environments at a continental scale
- national strategies for dealing with threats to protected area
- a national approach to achieving greater involvement of science (research) in protected areas
- national baseline standards for protected area management for core evaluation subjects
- national biodiversity change in condition measurement for all bioregions of Australia
- adaptive management responding to the change in condition measurement

e) record of governments

KEY POINTS:

Australian governments have been supportive of protected areas and their management. They have a good record, but more needs to be done in the next 10 to 20 years if we are to retain an effective protected area management system.

REFERENCES

Johnston, F.M. & Pickering, C.M. (2001) Alien plants in the Australian Alps. *Mountain Research and Development,* 21(3): 284-91

Lockwood, M., Worboys, G.L., Kothari, A. (In press 2006). *Managing protected areas: A global guide.* IUCN World Commission on Protected Areas. Earthscan, London, United Kingdom.

Pickering, C.M., Hill, W. & Johnston, F. (2005). Weeds, tourism and climate change. In, Worboys, G.L., Lockwood, M., & De Lacy, T. (2005) *Protected area management principles and practice (second edition).* Oxford University Press, Melbourne.

Pulsford, I., Worboys, G.L., Gough, J., & Shepherd, T. (2004) The Australian Alps and the Great Escarpment of Eastern Australia conservation corridors. In David Harmon & Graeme L. Worboys (eds) *Managing Mountain Protected Areas: Challenges and Responses for the 21st Century.* Andromeda Editrice. Italy.

Worboys, G.L., Lockwood, M., & De Lacy, T. (2005). *Protected area management principles and practice (second edition).* Oxford University Press, Melbourne.