

Please attach the following **one-page summary** to your submission.

Comments on the Interim Report for the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Summary

Name of author/organisation: Robert Bertram- Friends of the Five Forests

Contact details: Bermagui 2546

Date: 3 August 2009
(date of your submission)

Which chapter(s) of the interim report are you commenting on?

(e.g. Chapter 11: Heritage) Forestry, Threatened species Biodiversity conservation, recovery planning and threats management

Key points of submission

(please identify up to three main priorities or focal points of your submission): Adaptive management, threatened species/ deforestation and climate change.

References (if possible, include a bibliography of any documents you may wish to make available)

Far South Coast Koala Management Framework (2008) **Eco Logical Australia Pty Ltd** - (02) 9542 5622
http://www.environment.nsw.gov.au/resources/threatenedspecies/sth_coast_koala.pdf

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Thank you for the opportunity to comment on options and choices raised in your excellent review of the EPBC and to present ideas about their implementation.

This submission is in support of ‘adaptive management systems’ at an appropriate bioregional scale as the best way forward, simply because such systems provide the only credible methods to effectively integrate science and the community into decision-making processes.

From that perspective and by way of highlighting some of the factors constraining such an approach I thought it may be helpful to provide some information on attempts to implement an adaptive management approach at a local scale

While noting the comments of the NSW Scientific Committee (para 12.1), my experience is that despite the theoretical separation of listing responsibilities and decision making on conservation actions, decisions about threatened species in NSW have led to perceptions that the system open to abuse.

For example, I nominated the only known koalas, constrained to forests on a soil landscape in the Murrumbidgee river catchment area on the far south coast of NSW as an endangered population in 2001. The area is part of the Southeast Corner Bioregion and located in the Bateman sub-bioregion that extends from Ulladulla in NSW to near Genoa in Victoria. The NSW Scientific Committee finally rejected the nomination and considerable further information in 2007 (Attachment 1), but did acknowledge ‘extensive canopy dieback’ as a factor that would lead to the extinction of the species.

However, it was not until recently that the NSW Minister for Primary Industries (Attachment 2) indicated that Forests NSW had provided the NSW Scientific Committee with undisclosed information suggesting koala numbers had not declined. At this time Forests NSW were also involved with developing the Far South Coast Koala Management Framework that stemmed from community protests and arrests in Murrumbidgee State Forest near Bermagui during 2005.

As documented in the Far South Coast Koala Management Framework consultant’s report, at a workshop held on 14 June 2006 representatives from Forests NSW, including their current representative on the NSW Scientific Committee, Dr Rod Kavanagh, also fully endorsed the following focus statement.

“ . . . The Far South Coast koala population has declined to very low levels and requires immediate, assertive actions to maintain and improve koala numbers in the area and avoid localised extinctions. It is very difficult to statistically determine the level of the current population and trends over the last 30 years (due to an absence of benchmark numbers). Anecdotal and scientific evidence suggests a significant decline and a lack of recovery.”

Public perceptions about the credibility of information and how this can be used to misinform the public on the status of Australia’s biodiversity, does not increase confidence. Regrettably concerns around the veracity of information about koalas at a local and regional scale lend credence to the perception that this information may have detracted from attempts to list koalas as vulnerable at a national scale.

In addition to areas set aside for conservation and timber production the Regional Forest Agreements provide for conservation on private land through catchment management authorities. On their website the Southern Rivers Catchment Management Authority indicates the Far South Coast sub-region includes 44 identified sub-catchments in three major catchment areas and describing this area as:

“ . . . the Murrumbidgee River catchment area in the North contains 6 identified catchments, including the catchment for Wallaga Lake (comprising Bobundra, Dignams and Narira Creeks), the Murrumbidgee River (including Dry River), Bermagui River and several smaller catchments running eastwards from the Mumbulla coastal range (including Barragoot, Cuttagee and Wapengo creeks).

Sediment studies in the Murrumbidgee catchment, approximately one third cleared and the balance native forest (Attachment 3), found most of the sediment had deposited in the past 30-40 years. However the advice on which catchment management authority acts would appear to contradict this information suggesting;

“ . . . Advice obtained from the Department of Water and Energy’s Principal Geomorphologist, Dr David Outhet, highlighted that erosion at the site was from a combination of factors including floods eroding the toe of the banks, a lack of vegetation on the banks, stock access, bank slumping and wave action. These factors also reduced fish habitat along this reach of the river. Erosion rates on the bend were estimated to exceed 20 m over the last 50 years. Without intervention, continuing erosion would have resulted in avulsion of the Murrumbidgee River (where the main river diverts into another channel) into a large flood channel draining the floodplain nearby. This would have isolated a section of productive grazing land, exacerbated erosion along the flood channel and sent a major slug of sediment into the estuary downstream

In 2001 and with the endorsement of Dr Peter Wallbrink from the CSIRO we applied for a Natural Heritage grant to implement an the ‘River Restoration Framework’ based on adaptive management principles and developed by National Rivers Consortium. While the proposal was successful at being approved by the regional and state assessment panels, the NSW National Parks and Wildlife Service advised Environment Australia that such an approach was not consistent the their management and funding was not forthcoming.

More recently Far South Coast Koala Management Framework has proposed an adaptive management approach to the koala issue. Unfortunately, government agencies tend to interpret an adaptive approach as being business as usual so none of the recommendations have been implemented.

Clearly it is important for federal and state legislation to have relevance at a local scale. Similarly legislators need credible feed back to reduce uncertainty about whether mechanisms aimed at protecting the environment are effective.

This would seem particularly the case given extensive canopy dieback has significant implications in terms of reducing carbon sequestration and increasing greenhouse gas emissions and may soon be considered a matter of National Environmental Significance.

I believe that in the absence of adequate scientifically based management systems the implementation of EBPC Act is fraught and ultimately doomed to fail. I look forward to Dr Hawks final report.

Robert Bertram
3 August 09

NSW SCIENTIFIC COMMITTEE

Mr R Bertram

PO Box 161

BERMAGUI NSW 2546

Dear Mr Bertram,

Thank you for your submission in regard to the Preliminary Determination by the NSW Scientific Committee not to support a proposal to list a population of the Koala *Phascolarctos cinereus* occupying coastal sub-catchments between Dignam's Creek and Wapengo Lagoon near Bega in south-eastern New South Wales as an endangered population in Part 2 of Schedule 1 of the Threatened Species Conservation (TSC) Act (1995). The criteria for listing determinations of an Endangered Population are prescribed by the TSC Regulation 2002. The Committee found that this population did not satisfy any of the paragraphs in Clause 19 of Division 2 of the TSC Regulation (2002), specifically that the population (a) is not disjunct or near the limit of its geographic range, (b) is not likely to be genetically, morphologically or ecologically distinct, or (c) is not otherwise of significant conservation value.

As previously advised in the Committee's letter of 4th December 2006 the Scientific Committee, in consultation with koala experts from NSW, Victoria and Queensland, subsequently developed a set a guidelines for defining 'disjunct populations' and populations of 'significant conservation value' in the context of the TSC Act. In regard to the nomination of Koalas occupying the coastal sub-catchments between Dignam's Creek and Wapengo Lagoon near Bega, these guidelines indicate that this population is sufficiently connected by habitat to the broader Koala population of south-east NSW so as not to be a disjunct population. Moreover, there is no evidence that the nominated population is likely to be genetically, morphologically or ecologically distinct. Nor does the population satisfy the guidelines in regard to a population of significant conservation value.

The Committee's rejection of this nominated koala population does not imply that the longterm viability of this Vulnerable Species is not at high risk of extinction in the medium-term future. Koalas in the area of the nominated population are threatened by ongoing degradation in the quality of their habitat because of extensive canopy dieback, clearing due to rural residential development and commercial forest harvesting. Further measures are needed to mitigate these threatening processes and provide for the recovery of this iconic species in south-east NSW and elsewhere in its range.

Yours sincerely

Professor Lesley
Hughes
Chairperson
Scientific Committee

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Attachment 2

MINISTER FOR PRIMARY INDUSTRIES
MINSTER FOR ENERGY
MINSTER FOR MINERAL RESOURCES
MINSTER FOR STATE DEVELOPMENT

The Hon Mike Kelly MP
Federal Member for Eden Monaro
PO Box 214
QUEANBEYAN NSW 2620

5 JUN 2009

Dear Dr Kelly

I refer to your representation dated 28 march 2009 on behalf of Mr Robert Bertram, PO Box 161, Bermagui 2546 concerning the Eden Regional Forest Agreement (RFA) and a range of forest management issues in southern NSW.

In his letter Mr Bertram asks whether the State and Federal governments are in dispute over compliance issues related to the Integrated Forestry Operations Approval (IFOA) for the Eden region and about the management of koalas. It is my understanding that there are no areas of dispute between the Federal and NSW Governments in relation to the Eden RFA. Issues associated with the IFOA under any RFA are managed and regulated by the State agencies.

Similarly, issues of koala protection in south coast forests are matters that lie within the responsibility of the State and should be raised with the appropriate State authorities. Forests NSW has advised that information placed before the NSW Scientific Committee indicated there has not been a decline in regional koala populations in recent decades. It should also be noted that a local conservation group strongly supported koalas being listed as an endangered population in the local area in response to a nomination under the *Threatened Species Conservation Act 1995*. The nomination was dismissed by the NSW Scientific Committee in 2007.

Management of koalas is the subject of ongoing research and review, with local communities closely involved in these processes. Forests NSW is working closely with the Department of Environment and Climate Change (DECC) on the Far South Coast Koala Management Framework including liaison on survey techniques on state forest. Forests NSW is exceeding its legal requirements under the IFOA on koala recommendations to Government regarding any necessary changes to the koala management prescriptions contained within the Integrated Forestry Operations Approval.

In relation to dieback, I am informed that locally it is attributed to either the current drought conditions or an over-abundance of psyllids and bell miners, all of which are evident in the area across all land tenures. Vegetation dieback attributed to psyllids

and bell miners has recently been listed as a threatening process across NSW under the *Threatened Species Conservation Act 1995*.

I am also aware that vegetation dieback as a result of both soil based and environmental factors seems to be evident across the broader landscape and is not specifically a local issue. Forests NSW advises that in the Eden area it is particularly associated with private property and national park at the interface of forest and agricultural land. It also occurs in healthy forests as a response to drought, with trees recovering after rain. It is also likely that a lack of low intensity fire induces secondary changes such as increased acidity and aluminium availability that are considered to be harmful to the roots of established trees.

Forests NSW and the Department of Environment and Climate Change are joint sponsors of the Bell Miner Associated Dieback (BMAD) Working Group that is working in a collaborative and coordinated way to address this forest health issue. Forests NSW has established several adaptive management trials under the auspices of the working group in an endeavour to develop a greater understanding of BMAD. The result of these trials will assist in bringing greater clarity and understanding on how to manage Bell Miner Associated Dieback.

The area of Crown land available for forestry operations under the Regional Forest Agreements for both Eden and the Southern Regions is publically available information and is within the respective Regional Forest Agreements. Access to these are available from the Department of Planning or via the following websites: www.daff.gov.au ; or www.planning.nsw.gov.au .

For further advice on these matters please contact Forests NSW Southern region manager, Mr Ian Barnes on 44751400.

I hope this information is of assistance to Mr Bertram.

Yours Sincerely

IAN MACDONALD MLC

Attachment 3

Media Release - Ref 99/18 - Jan 20 , 1999

Evidence Of Massive Landscape Change Unearthed

Australians may have had a far more catastrophic impact on their landscape than previously suspected, according to fresh scientific evidence now coming to light.

A team from CSIRO Land & Water and the CRC for Catchment Hydrology has found signs that European settlement unleashed an episode of erosion, sediment deposition and change in river systems orders of magnitude greater than we have assumed to date.

New ways to identify and date flood deposits in river catchments in Eastern Australia are building a picture of a landscape in dramatic transition over years or decades, rather than centuries, say Dr Jon Olley and Dr Peter Wallbrink.

Metres of mud and sand deposited on river floodplains, which the scientists at first guessed to be the result of hundreds or even thousands of years of erosion, are proving to have happened in as few as 30 or 40 years.

"There's little doubt modern Australians have underestimated the extent of change we have inflicted on our landscape," says Dr Wallbrink. "In some cases the rates are staggering."

His research in the catchment of the Murrumbidgee river in southern NSW, dominated by dairying and forestry, is throwing the issue under the spotlight.

"Deposits of silt and sediment on the lower floodplain of the Murrumbidgee appeared to us to be at least a couple of hundred years old - until we began to test their composition and age."

It was the atomic bomb that did the trick. Regular atmospheric testing of nuclear weapons, which began in the late 1950s, spread a telltale layer of radioactive Caesium 137 across the globe. That layer now provides a reliable benchmark for soil scientists wanting to date recent layers of sediment.

What looked like the accumulation of centuries in the Murrumbidgee floodplain turns out to have taken place since about 1960, Dr Wallbrink says. More dramatic still, nearly a third of the deposit appears to have been dumped by a single massive flood event, back in 1971.

Subsequent tests will reveal whether it was clearing for agriculture at the top of the catchment or forestry operations in the lower catchment which was mainly responsible for the sediment - and the relative contribution of the two.

This understanding will be vital in devising the best strategies for farmers,

foresters and land managers to combat future large scale erosion and deposition events and improve water quality and sustainability, says Dr Wallbrink.

"We're talking about changing the very face of Australia in comparatively few years, so dramatic is the scale of these events," he says. "The evidence is building that our landscape underwent radical change."

Dr Jon Olley is pioneering a technique called optically stimulated luminescence to date single grains of quartz sand in a sediment deposit. This technique is unfolding a new chapter in understanding of how we have reshaped the continent.

"Before European settlement, the picture is of a relatively stable landscape, well-vegetated, with lots of swampy meadows in the low lying areas to trap the sediment and nutrients and filter the waters slowly," he explains.

"The river systems at that time would have been largely clear-flowing, generally slow and dominated by organic material."

Enter European settlers and the landscape chemistry changes violently. Overclearing and heavy grazing combined with Australia's regular cycle of drought and flood to unleash a new pattern in the rivers: spates of silt sandblasting the system caused profound changes in the rivers themselves and the life they supported.

"We went, in effect, from slow rivers dominated by organic material to rivers dominated by rushes of abrasive inorganic sediment. This had huge consequences for native fish, animals, water plants and insects.

"Regrettably," says Dr Olley, "I don't think the original system is restorable. We can't put back the clock and have it the way it once was."

However both scientists consider it likely that a new landscape balance has formed, and that the rate of change is no longer as acute as it was shortly after clearing.

Nevertheless the combination of a cleared landscape with periodic episodes of natural droughts and floods has created a river regime that is now far more energetic and prone to violent flooding than previously existed.

"It's all about energy," says Dr Wallbrink. "In the original rivers the rainfall was held back by vegetation and swampy areas. Today it rushes downstream in defined channels far more quickly and in larger volumes.

"It is this new energy which underlies the dramatic rates of change we are starting to see and understand for the first time."

More information:

Dr Peter Wallbrink, CSIRO Land & Water 02 6246 5823
Dr Jon Olley, CSIRO Land & Water 02 6246 5826
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