

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:

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Date:

2 August 2009

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

(e.g. Chapter 11: Heritage)

Everything to do with biodiversity

Key points of submission

(please identify up to three main priorities or focal points of your submission):

These are clear in my submissions

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

Do you want this submission to be treated as confidential?

(please state 'yes' or 'no')

No

Comments on the EPBC Act Review

by

Professor Hugh Possingham FAA

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(much under-used “consultant” to the Review of the Act)

The biggest concern with the act as it currently stands for listed species and ecological communities hinges on the words that are central to the Act “likely to have a significant impact”. I warned the government about the ambiguous nature of these words when the Act was first being drafted. Unfortunately I was unable to provide any better set of words.

There are three big biodiversity issues that require a lot more work. The questions have to be asked and there is a great deal of thinking to be done. There is a danger many minor issues will be resolved in this review, but the big problems will remain unresolved.

1 “... likely to have a significant impact ...” and the guidelines

There are some guidelines for interpreting: “likely to have a significant impact”. I have looked at these in the context of a couple of cases involving birds. I have discovered that the guidelines are poor because they are not founded in good population ecology. I have asked who invented the guidelines and where they come from but received no answer. Extinction is caused by a variety of factors, some deterministic, some stochastic. The basic process of population dynamics are birth, death and movement. Various threats impact these processes. These are the fundamental concepts that must underpin the guidelines. I recommend that some serious work be put into the guidelines that uses expertise in population biology coupled with the expertise in the department regarding implementation.

2 Death by a thousand cuts, conservation planning and critical habitat

The department is well aware of the problem of death by a thousand cuts. Indeed this issue has been hotly debated for almost 15 years. There are two solutions. First develop conservation plans for areas. This requires expertise in spatial conservation planning and the department will have to increase its knowledge and expertise in this area very quickly or tighten their relationships with key experts. The global literature is huge – fortunately Australia is known to be the world leader in spatial conservation planning (e.g. see the recently published Oxford University Press book – Moilanen et al. 2009). The second solution is to define and map critical habitat for as many species as possible. Again, many Australian scientists are world experts on habitat modeling. However the best habitat models alone are not enough, they must be placed into the context of the intent and implementation of the Act and an understanding of the two sorts of error in a habitat model (omission and commission errors), plus the fact that unoccupied habitat may be important for species persistence.

3 Let's look at the cases that have, and have not, been pursued

Finally I note that the draft review does not seem to open the closet door. If you don't discuss the good and the bad events of the past one cannot hope to learn. We all know that the act has not been used when it should have been used in the past. Opportunities have been missed and there is not real evidence that the act has achieved what it set out to do – stop further human actions that increase the risk species that threatened species will go extinct. Furthermore, where the act has been brought to bear, there appear to be some intriguing offsetting deals that need close examination because they do not meet the original intent of the Act. While the greatest problems have been in not using the act when it should have been used, there is some good evidence that the Act has been used when it should not have been used. These examples and cases need to be openly discussed and reviewed. A review is about learning from the past but you can't learn much if you ignore the past.

Finally, it is clear that many people know little about the Act. For example, here in Queensland, the state and local governments generally have a poor understanding of the Act. For example the Traveston Dam would never have been pursued so far had the QLD State Government asked for, and received, good advice on the EPBC implications of that development. On my understanding of the proposal and the Act there was very little chance the Federal Government could have approved the dam. This breakdown in communication and understanding has proved very expensive.

Professor Hugh Possingham FAA
2009
The University of Queensland

Sunday,

August 02,