australian network of environmental defender's offices

Possible new matters of National Environmental Significance under the *EPBC Act 1999*

2nd May 2005

The Australian Network of Environmental Defender's Offices (ANEDO) consists of nine independently constituted and managed community environmental law centres located in each State and Territory of Australia.

Each EDO is dedicated to protecting the environment in the public interest. EDOs provide legal representation and advice, take an active role in environmental law reform and policy formulation, and offer a significant education program designed to facilitate public participation in environmental decision making.

This submission is on behalf of the Australian Network of Environmental Defender's Offices (ANEDO).

For further information on this submission, please contact Rachel Walmsley, Policy Officer EDO (NSW) on 02 9262 6989.

Submitted to:

The Secretary
Department of the Environment and Heritage
GPO Box 787
Canberra ACT 2601

Attention: Director, Legislation Policy Section

Fax: 02 6274 1878

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As required by s28A, for each new MNES, an examination of the following factors is included:

- The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters;
- The principles of ecologically sustainable development;
- Australia's international obligations; and
- The objects of the Act.

Executive Summary

The Federal Minister for the Environment and Heritage is seeking public comment on the possible addition of new matters of national environmental significance to Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (*EPBC Act*).

In accordance with the requirements of section 28A, this submission examines those matters that must be taken into account in preparing a report on amendments to Part 3, namely:

- environmental matters that are properly regarded as being of national or international significance ('MNES' or 'triggers');
- the adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters;
- the principles of ecologically sustainable development;
- Australia 's international obligations; and
- the objects of the Act.

Specifically, Part One sets the policy context and notes a range of problems with the current legislation.

Part Two discusses the current " environmental matters that are properly regarded as being of national or international significance". Amendments are suggested for ensuring that existing triggers operate more effectively, and more fully implement Australia 's international obligations.

Part Three recommends 6 new triggers to cover issues of: greenhouse gas emissions, land clearing, dioxins, sustainable water use, wild rivers, and wilderness.

As required by section 28A(2), for each proposed MNES, this Part examines:

- the adequacy of existing regulatory frameworks in relation to the proposed new triggers, and highlights policy gaps and regulatory inadequacies of current state and federal regimes;
- the principles of ecologically sustainable development ('ESD'). This includes a discussion of consideration of the precautionary principle in the operation of the Act;
- Australia 's international obligations to include new triggers. Particular attention is paid to areas where obligations are not being fully met, such as with regard to climate change; and
- to what degree the objects of the *EPBC Act* are being effectively implemented with regard to protecting and managing the impact on matters of national environmental significance.

This paper makes recommendations in three principle areas. First, that existing triggers be amended to ensure they more comprehensively meet international obligations and ensure optimal environmental outcomes. Second, that new triggers be created for the following issues: greenhouse gas emissions, land clearing; dioxins; water extraction; wild rivers; and wilderness. Third, that ancillary amendments be made to strengthen the Act in relation to these triggers. Specific recommendations are outlined in the text of the submission.

The EDO network would welcome the opportunity to discuss further the matters raised in this submission.

Part One: Introduction

Background

The Federal Government is currently undertaking a review of Part 3 of the *EPBC Act*, pursuant to section 28A. The Federal Minister for the Environment and Heritage is seeking public comments on the matters to be covered by the report on the possible addition of new matters of national environmental significance, as required by section 28A(3).

Section 28A provides:

> **Identifying extra matters to be protected by this Part**
>
> (1) Every 5 years after the commencement of this Act, the Minister must cause a report to be prepared on whether this Part should be amended (or regulations made for the purposes of section 25) to prohibit or regulate additional actions that have, will have or are likely to have a significant impact on environmental matters that may properly be regarded as being of national or international significance.
>
> (2) The following must be taken into account in preparing the report:
>
> (a) environmental matters that are properly regarded as being of national or international significance;
>
> (b) the adequacy of existing legislation and administrative measures of the Commonwealth, the States and the Territories to prevent significant impacts on those matters;
>
> (c) the principles of ecologically sustainable development;
>
> (d) Australia 's international obligations;
>
> (e) the objects of this Act;
>
> (f) the matters (if any) prescribed by the regulations for the purposes of this paragraph.
>
> (3) Before preparation of the report begins, the Minister must publish in accordance with the regulations (if any) an invitation for persons to comment, within a specified period, on the matters to be covered by the report.
>
> (4) Before preparation of the report is completed, the Minister must cause to be published in accordance with the regulations (if any):
>
> (a) a draft of the report; and
>
> (b) an invitation to comment on the draft within the period specified by the Minister.
>
> (5) The Minister must publish the report.
>
> (6) To avoid doubt, this section does not affect the operation of section 25.

Operation of the EPBC Act

It is worth briefly noting some of the broader problems with the *EPBC Act*, as a context for the operation of the triggers.

Overview

The latest statistics on the application of *EPBC Act* indicate that as at June 2004, a total number of 1232 referrals have been made under the *EPBC Act*, and 1182 decisions have been made in relation to those referrals.[1] Around 290 of those referrals were declared controlled actions. As at June 2004, around 87 decisions about referrals that were controlled actions were finalised. A total of 78 proposals had been approved, 70 with conditions, 8 without conditions and to date only two proposals have been refused.

With respect to the two refusals made to date, one of the refusals relates to the application to place an electrical grid on a property adjoining a World Heritage area that would destroy around 5,500 endangered flying foxes.[2] The referral had already been the subject of litigation in*Booth v Bosworth* (2001)[3]. The Court determined the action was likely to have a significant impact on world heritage values, because of the vulnerability of spectacled

flying foxes and their importance to the World heritage values; and the action was subsequently referred to the Minister. The Court allowed an injunction sought under the *EPBC Act* until a decision was made by the Minister. Any decision to allow the action would have been difficult to support given the strong findings of the Court of the significant effect of the proposal on World Heritages Values.

The other refusal related to an action to construct a residential building, garage, reservoir and garden which affected Commonwealth land on Norfolk Island.[4] The refusal in this situation was based on the failure to provide preliminary information documents rather than the substance of the application.

To date a range of approvals have been granted, including the building of a marina and subsequent clearing of coastal habitat adjoining the Great Barrier Reef World Heritage Area which affected migratory and threatened species in the area (Port Airlie), several mining operations, and two new dams (Paradise Dam in Queensland and Meander Dam in Tasmania). Environmental groups have criticised these approvals and the conditions placed upon many of the proposals, as not going far enough to protect the environment.

Analysis

There seems to be a reluctance to use the powers under the *EPBC Act* given to the Minister to refuse developments. Instead, all major developments have been approved, mostly with extensive conditions. Many of these conditions require the further provision of management plans before actions can commence. However, it is yet to be seen whether such management plans will actually prevent harm to the threatened and migratory species they are designed to protect, or appropriately safeguard against damage to World Heritage values. Similarly, there is no guarantee that attaching conditions will be sufficient to effectively protect the environment.

Key issues

Key operational issues that are limiting the effectiveness of the Act include the following:

Cumulative impacts

There is currently no assessment of the cumulative impacts of development. While amendments to the *EPBC Act* have enabled the EPBC Unit within the Department of Environment and Heritage (DEH) to consider a development as a whole rather than in stages (where approval may often be granted in stages through State laws), there is no assessment of the overall impact of a series of unrelated developments on critical habitat for certain species or World Heritage values. For example, if the effect of several developments on migratory birds are each assessed in isolation, it is difficult to prove that any one development will have a significant impact on a particular species. However, if considered cumulatively, there may be a clear significant impact.

This approach also affects assessment of impact on World Heritage values. For example, in the context of the Great Barrier Reef World Heritage Area, which extends over 2000 km, the proponent may argue that one development will not impact significantly on the values. This conclusion would be different if cumulative development impacts were properly assessed.

Access to information

Practice to date has shown that there are real issues concerning access to relevant information. Often, access has been effectively restricted due to exhibition of relevant documents in areas where they will not be viewed, and a failure to make information available electronically.

In the case of Radical Bay on Magnetic Island, preliminary documentation was lodged with the EPBC Unit and made available for comment in hard copy at the local Council in Townsville and the Queensland EPA office during business hours only. This technically was all that was required by the *EPBC Regulations*. Those organisations where the documents were to be viewed were instructed not to allow copies to be made of the report. This left interested parties from Magnetic Island with no choice but to travel to Townsville to view the report and also to view the hundreds of pages during office hours. The developer through their solicitor refused requests to provide the document directly to interested parties. The Minister's response was that the issue would be considered next time the Government proposed to amend the *EPBC Regulations*.[5]

All documents that are lodged, including preliminary documentation and Public Environment Reports, should be published on the web to ensure that all people who have an interest in commenting on a particular development have access to the information.

Timing for release of reports

Public exhibition periods do not cease during the Easter or Christmas holiday periods under the *EPBC Act*. Thirty days is provided for comment on Public Environment Reports (PER) that can be technical and lengthy (often running to over 300 pages). In the case of Reef Cove Resort at False Cape, a report was made public in early

December with comments due on the PER in the first week of January 2005. The net result was that there was a limited capacity for the public to lodge submissions, and hence the full benefits of community consultation were arguably not realised. It is submitted that the approach adopted in Queensland, under the Integrated Planning Act 1997 (Qld) Act should be followed, whereby consultation periods do not include Christmas holiday periods.[6]

Assessment reports

The DEH has a policy of not releasing assessment reports that are provided to the Minister until after a decision has been made on an approval. This means that parties are not able to comment on whether the Minister has adequate information before him to make a decision, until after the decision has been made. Again, this diminishes the role of the public in assisting the decision-making process, and may potentially lead to poor decisions being made.

Old approvals and planning issues

A key rationale behind the *EPBC Act* was to achieve uniform national assessment of areas affecting MNES. However, the Commonwealth has rarely used its powers to intervene and effectively attach conditions to some of these approvals. For instance, there is an apparent reluctance to utilise the section 134 powers to scale back developments and impose conditions (such as to restrict clearing and visual impact).[7]

Further general issues which ANEDO would be happy to provide further comment on (outside the scope of this review) include:[8]

- RFA Exemptions;
- Bilateral agreements;
- Clarification and extension of the definition of 'action';
- public involvement in the Referral process and Choice of Assessment;
- Considerations to be taken into account and the transparency of the Assessment process;
- Bioregional Plans being mandatory and binding;
- Access to biological resources, biodiscovery and benefit sharing;
- A full review of the wildlife trade regime under Part 13A, including exemptions; and
- Review of compliance and enforcement provisions.

We look forward to providing further comment on the draft report on new MNES as envisaged by section 28A (4)(a) and (b).

We now turn to the key issues for consideration in this submission, the matters of national environmental significance. Part Two examines the current triggers, and how effective they have been in ensuring good environmental outcomes.

Part Two: Environmental matters that are properly regarded as being of national or international significance: Current Matters of National Environmental Significance

Part Two examines the current MNES and recommends how they could be amended to ensure better environmental outcomes, and more effective implementation of Australia 's international obligations.

Division 1, Part 3 of the *EPBC Act* sets out the requirements relating to matters of national environmental significance in 7 subdivisions, namely:

- A World heritage properties;
- AA National Heritage;
- B Ramsar wetlands of international importance;
- C Listed threatened species and communities;
- D Listed migratory species;
- E Nuclear actions; and
- F Commonwealth marine environment.

As part of a thorough and comprehensive review of MNES under section 28A, it is necessary to examine the efficacy of the current triggers. ANEDO strongly supports retaining all of the current triggers, and strengthening them by appropriate amendments.

World Heritage[9]

Background

Currently under the *EPBC Act*, an action will require approval from the Environment Minister if the action has, will have, or is likely to have a significant impact on the World Heritage values of a declared World Heritage

property.[10] This includes one or more of the World Heritage values being lost, or one or more of the World Heritage values being degraded or damaged. A declared World Heritage property is an area that has been included in the World Heritage list or declared by the Minister for the Environment to be a World Heritage property in accordance with sections 14 and 15 of the Act. As noted by the DEH Administrative Guidelines on Significance,[11] a relevant action might take place outside the boundaries of a World Heritage property. (This is confirmed by the case law outlined below).

Analysis

The World Heritage trigger has been further defined by court cases since the inception of the *EPBC Act*[12].

The case of*Booth v Bosworth*[13] involved an application by a conservationist, Dr Booth, to restrain large scale culling of Spectacled Flying Foxes (*Pteropus conspicillatus*) by electrocution on a lychee farm operated by the Bosworths, near Cardwell in North Queensland. The property is adjacent to the Wet Tropics World Heritage Area and therefore triggered the World Heritage provisions in the *EPBC Act*.

On 17 October 2001, Justice Branson of the Federal Court of Australia found in favour of the applicant. In deciding to grant the injunction, Her Honour found that the operation of the electrical grids killed around 18,000 Spectacled Flying Foxes in the 2000-2001 lychee season from a total population not exceeding 100,000. The judge found that the Spectacled Flying Fox contributes to the world heritage values of the Wet Tropics World Heritage Area (WTWHA) as it is a part of the biological diversity for which the WTWHA is a most important significant natural habitat for *in-situ* conservation and by contributing to the genetic diversity and biological diversity of the WTWHA. It was held that the operation of the electrical grids in the 2000-2001 had a significant impact upon the world heritage values of the WTWHA.

The judge also found that unless restrained, the future operation of the electrical grid would continue to cause the death of comparable numbers of Spectacled Flying Foxes, and cause the species to become endangered within five years. An order was made restraining the Respondent from operation of the electrical grids unless the operation is the subject of an approval by the Minister of the kind mentioned in s.12(2)(a) and granted pursuant to Part 9 of the *EPBC Act*.

The decision clarified the meaning of 'significant impact' which is a crucial issue for the operation of the *EPBC Act*. The judge accepted that a "significant impact" was an "impact that was important, notable or of consequence having regard to its context or intensity".[14] 'Having regard to its context' is relevant where an action has significance in its cumulative impact, rather than if taken in isolation.[15]

The "Nathan Dam" decision[16] of the Full Federal Court on 30 July 2004 confirmed a major expansion of environmental powers for the federal Government.

In this case, the applicants[17] sought judicial review of decisions of the Minister in relation to the 880,000 megalitre Nathan Dam on the Dawson River in Central Queensland. The Dawson River flows via the Fitzroy River to the Great Barrier Reef World Heritage Area. The purpose of building the dam is to supply water for irrigation of 30,000 hectares of farmland, mostly cotton growing, in the Lower Dawson Valley. The case was primarily concerned with the impacts of this irrigated agriculture, and associated chemical application, on the Great Barrier Reef WHA and whether those impacts should be considered an impact of the dam for the purposes of federal environmental assessment.

The Minister's original decision that the *Environment Protection and Biodiversity Conservation Act 1999* did not require him to consider downstream pollution by irrigators when assessing the impact of the construction and operation of the dam was overturned by Justice Kiefel of the Federal Court on 19 December 2003. The decision of the Full Federal Court confirms this finding.

The case focused on the interpretation of section 75 of the *EPBC Act*, which requires the Minister to consider 'all adverse impacts' of an action. This step of the process is relevant for the Minister to then determine if those impacts were likely to be *significant* impacts on a matter of national environmental significance, hence determining controlling provisions and required environmental assessment.

The Full Court found that 'all adverse impacts' was not confined to direct physical impacts but included*indirect impacts* and effects 'which are sufficiently close to the action to allow it to be said, without straining the language, that they are, or would be, *the consequences of the action* on the protected matter'.

The Full Court further held that the width of enquiry 'in each case will depend on its facts and on what may be inferred from the description of the "action"', and agreed with Justice Kiefel that 'the Minister can exclude from further consideration only those potential impacts "which *lie in the realm of speculation*"'. The Court went on to clarify that consequences of the actions outside the control of the proponent, but reasonably imputed as within the proponent's contemplation (such as the impacts of actions of*third parties*), *are impacts of the proponent's proposed action*.

Because the referral document provided by the proponent described the potential for cotton ginning and expansion of the existing cotton growing industry, the Full Court held it was 'inescapable' that irrigation of cotton crops was within the contemplation of the proponent of the dam.

Both of these cases have positive implications for all environmental assessment under the *EPBC Act* in the future, with the Minister required to take a broad approach to adverse environmental impacts of proposed "actions". This means better, more thorough Commonwealth environmental impact assessment. However, it is important to note that cases are costly and time consuming, and the legislation can and should be strengthened without necessarily requiring recourse to judicial interpretation. The primary legislative amendment needed to strengthen the current trigger relates to the focus on world heritage values.

The fact that the current wording of the world heritage trigger focuses on the "values" rather than the land is contentious.By focusing on world heritage values only, the Act is falling well short of protecting the integrity of the area or the *outstanding universal value* for Australia 's world heritage properties. This is consistent with the World Heritage Committee's interpretation of the Convention. In March 2003 the World Heritage Committee agreed to have the text read "*outstanding universal value*" instead of values wherever it appears in the World Heritage Convention's Operational Guidelines and to add a reference to the integrity of the property so that these two points are read together. The World Heritage Committee's interpretation of the Convention rejected Australia 's values-based approach, confirming the more conservative property-based approach.[18]

Recommendations

In relation to World Heritage properties, the section should operate on both the*outstanding universal value*and preservation of the integrity of the properties listed under the Convention, rather than consideration of particular listed values as currently.

Furthermore, the Act should be amended to facilitate implementation of the World Heritage Convention's Operational Guidelines.

The Australian World Heritage management principles should be considered potential actions under the Act and should be rewritten as to operate on the *outstanding universal value*and preservation of the integrity of the World Heritage properties.

An additional mechanism to strengthen the trigger would be to include a schedule of designated developments which would require an environmental assessment. These could include mines, resorts and airports, adventure and joy flights in, around and over World Heritage properties if these actions impact upon the*outstanding universal value*and preservation of the integrity, rather than simply on a list of world heritage values mentioned in the listing statement for the area in question.

A definition of World Heritage property should be inserted in the dictionary to the Act, and Section 12 be amended to ensure protection arising from the Act is comprehensively property-based, rather than values-based.

National Heritage[19]

Background

The ANEDO supports the inclusion of national heritage as a MNES. At present however, the trigger is unsatisfactory and risks the legitimacy of the *EPBC Act* as well as the loss of national heritage.

Analysis

These provisions have been in operation since 23 September 2003, with the passage of the *Environment and Heritage Legislation Amendment Act (No 1) 2003, No 88 of 2003*. Currently there are 7 properties listed on the National Heritage List, and 335 on the Commonwealth Heritage List.[20] According to DEH, only places on the national list trigger referral and assessment provisions. Places on the Commonwealth list must be added to the National List if they are to become MNES, and attract the relevant assessment requirements. It is also important to note that that it only applies from 2004 onwards. Any matter declared a controlled action before 2004, even where a decision is yet to be taken by the Minister, cannot be re-assessed to take into account any national heritage listing.

Recommendation

We encourage the Government to actively list more national heritage places as a priority on the National Heritage List and Commonwealth Heritage List. Both Lists should trigger the MNES provisions. It is inadequate to rely solely on the National Heritage List, when many significant sites are on the Commonwealth Heritage List and do not currently attract the necessary assessment and protection. We submit all places listed on the current Register of the National Estate be listed so as to benefit from the 2004 provisions.

Wetlands of international importance[21]

Background

Unless exempted, an action will require approval from the Environment Minister if the action has, will have, or is likely to have a significant impact on the ecological character of a declared Ramsar wetland. A declared Ramsar wetland is an area that has been designated under Article 2 of the Ramsar Convention or declared by the Minister for the Environment to be a declared Ramsar wetland in accordance with section 16 the Act.[22] Similar to the World Heritage trigger discussed above, a relevant action might take place outside the boundaries of the wetland.

As stated in the DEH Administrative Guidelines on Significance, an action has, will have, or is likely to have a significant impact on the ecological character of a declared Ramsar wetland if it does, will, or is likely to result in:

- areas of the wetland being destroyed or substantially modified, or
- a substantial and measurable change in the hydrological regime of the wetland for example, a substantial change to the volume, timing, duration and frequency of ground and surface water flows to and within the wetland, or
- the habitat or lifecycle of native species dependant upon the wetland being seriously affected, or
- a substantial and measurable change in the physico-chemical status of the wetland for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland, or water temperature which may adversely impact on biodiversity, ecological integrity, social amenity or human health, or
- an invasive species that is harmful to the ecological character of the wetland being established in the wetland.

Analysis

This trigger has been considered in the case of *Minister for Environment and Heritage v Greentree* (No 3) [2004] FCA 1317[23] where the Federal Court found Mr Ronald Greentree and Auen Grains Pty Ltd guilty of breachingsection 16(1) of the *EPBC Act*. The Court found that clearing and ploughing (for seed bed preparation) was likely to have a significant impact on the ecological character of the Ramsar listed Gwydir wetlands.[24]

In the subsequent decision on orders and penalty[25], Justice Sackville made extensive orders preventing both respondents from any further destruction of the internationally significant Gwydir wetlands by prohibiting them from engaging in activities that would affect the soil or alter the flow regime of waters. This included: land clearing, ploughing, cultivating, herbicide or pesticide spraying, sowing, harvesting or grazing. This was also supplemented by a restoration order to plant certain tree species.

Mr Greentree and Auen Pty Ltd received penalties of $150,000 and $300,000 respectively. These penalties represent the highest ever awarded for land clearing in Australia.

This case, and the scale of penalties involved, sends a clear signal that wetlands are of significant ecological importance and as such are recognised by federal legislation and enforcement bodies. This case however, would not have been successful had the Gwydir wetlands not been RAMSAR listed. This is a limitation of the current trigger.

Recommendation

ANEDO submits that the current trigger should be expanded beyond wetlands of international importance, to include wetlands of*national* importance, for example, those listed in the *Directory of Important Wetlands in Australia*. It is essential that these wetlands, already recognised and listed as nationally important, receive commensurate protection as a matter of national environmental significance.

Listed threatened species and communities[26]

Background

Currently, an action will require approval from the Environment Minister if the action has, will have, or is likely to have a significant impact on a species listed as: extinct in the wild, critically endangered, endangered, or vulnerable; or an ecological community listed as critically endangered, or endangered.[27] The types of criteria vary for assessing the impact of an action for different categories. The DEH Administrative Guidelines on Significance set out criteria, and provide further guidance on what constitutes "habitat critical to the survival of a species or ecological community" (critical habitat).[28]

Analysis

It is inadequate to take a triage approach to the issue of protecting nationally important threatened species.

Extinction cannot be reversed, and unless appropriate legal safeguards are in place to address the rapid decline of certain species, it will be too late to tighten regulation.

Regarding critically endangered species, we note a policy discrepancy exists between the current trigger and section 196. It is disempowering for a local community to be unable to prevent critically endangered species from being taken because they do not have the expertise to show, in an injunction situation, that this is having a significant impact on the species as a whole. As the Administrative Guidelines are technical, it is necessary to be an ecologist to be able to persuade a court that the taking of one or a few individuals as a result of habitat disturbance will have an effect on, for example, species breeding patterns. Whilst on Commonwealth land, threatened species are protected and taking an individual is an offence. Such discrepancies in approach undermine the effectiveness of the trigger in comprehensively protecting listed species and are unjustifiable on policy grounds.

Recommendations

ANEDO submits that the current trigger be extended to include categories which are now dealt with by the Act. These include ecological communities that are in the categories 'vulnerable', 'near threatened' and 'conservation dependent'; and 'near threatened' species. Currently only communities in the categories of 'critically endangered' and 'endangered' are covered.[29]

More generally, we submit that the Act should be strengthened by providing more information about species and communities to allow for better decision-making. For example, that the Act require inventories for threatened species to not only identify and state the abundance of relevant species, but also to identify range, habitat, critical habitat, and corridors where known. Furthermore, a minimum timeframe should be included, for example, 2 years, within which the Minister must decide whether to list threatened ecological communities gazetted under s185.

With regard to plan making, provisions relating to wildlife conservation plans (ss285-300A) should be strengthened: first, to make the preparation of wildlife conservation plans compulsory, rather than at the Minister's discretion; second, to require Commonwealth agencies to act in a manner consistent with wildlife conservation plans, rather than just taking reasonable steps to act in accordance with wildlife conservation plans (s286); and third, to require Commonwealth agencies to implement wildlife conservation plans in Commonwealth areas (as required for recovery plans - see s269). Similarly, once a key threatening process is listed, the development of a threat abatement plan for that key threatening process should be compulsory, and not at the discretion of the Environment Minister.

With regard to critical habitat, a formal process for public nominations of 'critical habitat', including timeframes within which listing decisions must be made (as per the threatened species nomination process) should be established. The Act should also be amended to p rovide a mechanism for automatic consideration of critical habitat identified in Action Plans for listing in the register, analogous to the section 185 'bulk listing' provisions for ecological communities. A minimum timeframe of 2 years should be established, within which existing recovery plans (ie recovery plans that were made before 16 July 2000) must be revised to identify critical habitat (as required for new recovery plans under *EPBC Regulation* 7.11), which must in turn be considered for listing on the critical habitat register (under *EPBC Regulation* 7.09)

ANEDO also recommends that provision is made for emergency interim protection orders to be made in relation to critical habitat. An example of where such an order would be appropriate is Mission beach in North Queensland. Currently there are several proposed developments in cassowary habitat that are not being declared controlled actions (as the areas are not large). An interim protection order could allow the impacts to be more properly assessed before incremental loss significantly affects the cassowary population.[30]

Listed migratoryspecies[31]

Background

Ministerial approval is required if an action has, will have, or is likely to have a significant impact on a listed migratory species.[32] Some of these species may also be listed as threatened species.

The criteria relevant to migratory species that are not threatened include assessing whether an action has, will have, or is likely to have a significant impact on a migratory species if it does, will, or is likely to:

- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or
- result in invasive species that is harmful to the migratory species becoming established* in an area of important habitat of the migratory species, or
- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species.[33]

What constitutes an 'ecologically significant proportion of the population' varies with the species and this is assessed on a case by case basis, including considerations of life cycle stages.

Analysis

This trigger provides a good example of how the EPBC regime can benefit from local knowledge and data. This can be particularly crucial for assessing impacts on transient species. The importance of the public's role in providing comments is well illustrated by the referral of a proposed magnesium smelter in Port Pirie, South Australia, in September 2000. In the referral documents, the proponent stated "there have been no internationally protected migratory species detected in the vicinity of the site or in the immediate vicinity of the site". The Conservation Council of South Australia (CCSA) provided comments pointing to six listed migratory species using the area that could be impacted on by the proposed development. The Minister later decided that the proposal was an action requiring approval, as it was likely to have a significant impact on listed migratory species. By alerting the Minister to the presence of the migratory species, CCSA helped ensure that the project would undergo environmental assessment under the *EPBC Act*.

ANEDO strongly supports retention of this trigger. Even where a species is only intermittently present on a site, proposed development can have a significant impact on crucial phases of the life cycle of a species.

Recommendation

The trigger should be further strengthened by including the highly migratory species listed in Annex I of United Nations*Convention on the Law of the Sea* in the list of international agreements dealing with migratory species in Section 209 (3) of the *EPBC Act*. The species in Annex I should be considered Matters of National Environmental Significance, as is the case for all the other migratory species listed on international agreements to which Australia is a signatory.

Protection of the environment from nuclear actions[34]

Background

Unlike other triggers that focus on significant impact on values or habitats, the nuclear trigger requires a broad environment impact, ie, a nuclear action will require approval from the Environment Minister if it has, will have, or is likely to have a significant impact on the environment. The Act provides that all nuclear actions, as detailed in section 22, should be referred to the Environment Minister for a decision on whether approval is required.

Analysis

Whilst having a broader impact base than other triggers (ie, 'the environment' as opposed to a particular value), this trigger is limited by the current definition in section 22 of nuclear action and nuclear installation. Section 22(1)(g) provides that additional nuclear actions may be defined by the regulations. For example, Clause 2.01 provides that a nuclear action includes establishing, significantly modifying, decommissioning or rehabilitating a facility where radioactive materials are, were, or are proposed to be used or stored. Despite the additional detail provided by the *EPBC Regulation 2000,*the current scope is too narrow, and does not comprehensively cover all actions that may pose a threat to the environment and public safety.

Recommendation

ANEDO submits that section 22(1) should be extended. A revised list should include the following:[35]

- nuclear actions relating to military facilities, operations and exercises,
- mining or processing of Australian fertile and fissile materials including uranium and minerals sands,
- transportation of radioactive materials and products, including spent nuclear fuel, or radioactive products arising from reprocessing, and
- irradiation of foods and other products for human use or consumption.

Marine environment[36]

Background

The *EPBC Act* provides that Ministerial approval will be required if: the action is taken in a Commonwealth marine area and the action has, will have, or is likely to have a significant effect on the environment, or the action is taken outside a Commonwealth marine area and the action has, will have, or is likely to have a significant effect on the environment in a Commonwealth marine area.[37]

As stated in the DEH Administrative Guidelines on Significance, an action has, will have or is likely to have a significant impact on the environment in a Commonwealth marine area if it does, will, or is likely to:

- result in a known or potential pest species becoming established in the Commonwealth marine area, or
- modify, destroy, fragment, isolate or disturb an important or substantial area of habitat such that an adverse impact on marine ecosystem functioning or integrity in a Commonwealth marine area results, or
- have a substantial adverse effect on a population of a marine species or cetacean including its life cycle (for example, breeding, feeding, migration behaviour, and life expectancy) and spatial distribution, or
- result in a substantial change in air quality or water quality (including temperature) which may adversely impact on biodiversity, ecological integrity, social amenity or human health, or
- result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment such that biodiversity, ecological integrity, social amenity or human health may be adversely affected.

Analysis

Currently the trigger only relates to Commonwealth managed fisheries in Commonwealth marine areas, with state and territory managed fisheries being exempt.[38] We note that State and territory managed fisheries are still subject to provisions relating to migratory species and threatened species, and subject to state fisheries management legislation.

Recommendations

This trigger should be comprehensive in its coverage to ensure the best environmental outcomes for Commonwealth marine areas, and consequently the trigger should be extended to include State and territory managed fisheries operating in Commonwealth marine areas, unless those fisheries are appropriately accredited.

The provisions for the accreditation of fisheries management regimes (for example, bycatch action plans) need to be strengthened to include strict and comprehensive criteria to be met prior to accreditation; extensive public consultation prior to accreditation; and 2 yearly reviews and audits of accredited management regimes.

Furthermore, the list of marine species under s250 should be amended to include shark species such as basking, whale and blue sharks and others. This would help prevent recreational shark killing in Commonwealth waters.

Part Three: Environmental matters that are properly regarded as being of national or international significance: Proposed new Matters of National Environmental Significance

This part proposes New Matters of National Environmental Significance. These are regarding:

- Greenhouse gas emissions;
- Land clearing;
- Dioxins;
- Water extraction;
- Wild rivers; and
- Wilderness.

As required by s28A, for each new MNES, an examination of the following factors is included:

- The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on the matters;
- The principles of ecologically sustainable development;
- Australia 's international obligations; and
- The objects of the Act.

Greenhouse trigger

Background and rationale

The Intergovernmental Panel on Climate Change (IPCC) has found that: the global average surface temperature has increased over the 20th century by about 0.6°C; the 1990s was the warmest decade globally and 1998 the warmest year in the instrumental record; temperatures have risen during the past four decades in the lowest 8 kilometres of the atmosphere; snow cover and ice extent have decreased; and the global average sea level has risen and ocean heat content has increased.[39] There can no longer be any doubt that the global climate is changing, and that this will have a serious impact on our environment.

Climate change requires federal leadership and action, as acknowledged in the "Heads of Agreement on Commonwealth and State Roles and Responsibilities for the Environment, November 1997, which states:[40]

8. Reducing emissions of greenhouse gases and protecting and enhancing greenhouse sinks

The Commonwealth has a responsibility and an interest in relation to meeting the obligations under the United Nations Framework Convention on Climate Change, in co-operation with the States, through specific programmes and the development and implementation of national strategies to reduce emissions of greenhouse gases, and to protect and enhance greenhouse sinks.

We submit our strong support for the creation of an effective "climate change trigger" under the *EPBC Act*.[41] The omission of such a trigger from the original Act has been a serious defect in a law purporting to regulate matters of national environmental significance. The potential risks of climate change do not observe political boundaries within, or indeed, outside of Australia.

Accordingly, if Australia is to meet its international obligations under the*United Nations Framework Convention on Climate Change*, it is essential that regulation of all significant climate change actions be regulated at a Commonwealth level. Preferably, the new greenhouse trigger would be created by a direct amendment of the *EPBC Act*.[42]

In May 1999, the Prime Minister committed to a process of consultation on the issue of applying a Commonwealth greenhouse trigger under the *EPBC Act*. A consultation paper on the possible application of a trigger was released in December 1999, a model trigger design was released in May 2000, and a draft regulation released on 16 November 2000. State and Territory environment Ministers were invited to comment on the draft regulation.[43]

The draft regulation provided that the Act would be triggered by major new developments likely to result in greenhouse gas emissions of more than 0.5 million tonnes of carbon dioxide equivalent in any 12 month period. At the time, this equated to approximately 10% of the average annual increase in Australia 's total greenhouse emissions. The trigger as drafted, did not apply to actions authorised before the commencement of the triggering mechanism (except any enlargement, expansion or intensification of an existing action), or to land, sea or seabed use (for example, farming). The implementation of the trigger was strongly opposed by farming and industry groups, and by senior members of the Government.[44] In contrast it was strongly supported by environment groups and other stakeholders.[45]

According to the Government, under the draft regulation assessment by the Commonwealth (or State if accredited under a Bilateral Agreement) would "address greenhouse issues such as the extent of likely emissions and whether the project design represents 'best practice' from a greenhouse perspective."[46]

Analysis

ANEDO submitted that the trigger proposed in May 2000 was much too narrow to be effective. Our argument stands that if Australia, as a responsible actor on the international stage, is to meet its international obligations, the proposed trigger must comprehend all aspects of climate change, and not merely greenhouse gas emissions. A proposed trigger needs to include the regulation of not only greenhouse gas emissions, but also the preservation and development of greenhouse gas sinks.

The 2000 Consultation Paper indicated that the new trigger will only apply "in relation to ***new*** projects that would be major emitters or greenhouse gases". If the new trigger is to be effective, its coverage must be much more inclusive. At a minimum, the major modification or expansion of existing greenhouse gas emitting projects must be included within the ambit of the trigger. Failure to do so will result in an obviously incomplete regulatory framework. More importantly from an economic perspective, failure to include the major expansion of existing projects will result in an unfair competitive advantage for unlimited expansion of greenhouse gas emissions for existing industry.

It was deeply disturbing that significant climate change contributions caused by land use change and vegetation clearance were not even considered by the 2000 Consultation Paper. Indeed, Exhibits 1 and 2 of the Consultation Paper explicitly omitted the statistical climate change contributions of these activities from consideration. This is despite the acknowledgement that emissions resulting from land clearing in Australia are believed to contribute significantly to the amount of carbon in the atmosphere. Nor did the 2000 Consultation paper capture other diffuse emissions such as emissions created by a project such as a freeway.[47]

Clearly, effective regulation to combat climate change must include land use change and forestry, including land clearing, within the compass of the proposed trigger. It is no excuse that these emissions are currently difficult to quantify. To accept such an excuse offends the dictates of the precautionary principle, which not only forms part of the National Strategy for Ecologically Sustainable Development, but has also been enshrined in Commonwealth environmental law under the *EPBC Act*.[48]

As noted by ACF,[49] a trigger will only screen new greenhouse polluting activities, while other policy instruments such carbon taxes or emissions trading schemes will be necessary. Despite this fact, the 2000 Consultation

Paper was silent with respect to linkages that any prospective carbon-trading regime may have with the proposed trigger. We believe that any such linkages would be inappropriate. In particular, we strongly oppose the allowance of any carbon credits to be used in calculating the emissions threshold(s) to be used in activating the proposed trigger. For instance, it would be entirely contrary to the proposed regime to allow a "major emitter" to purchase or otherwise obtain carbon credits in pre-existing forests and plantations and then use those credits to reduce the emissions threshold in determining whether an approval under Part 9 of the Act is necessary.

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

Australia has ratified the Convention on Climate Change, but has failed to ratify the Kyoto Protocol. Various initiatives and regulatory actions have been undertaken to address the issue of greenhouse emissions in the absence of Kyoto ratification.

At a Commonwealth level, a draft regulation including a trigger has been circulated, and climate change has been listed as a key threatening process under the *EPBC Act.*[50]

At a state level, various states have introduced legislation, for example, NSW has established the Greenhouse Gas Abatement Scheme. The Scheme commenced on 1 January 2003 and remains in force until 2012 imposing mandatory greenhouse gas benchmarks on all NSW electricity retailers and certain other parties, including those who elect to manage their own benchmark, to abate the emission of greenhouse gases from the consumption of electricity in NSW.[51]

State governments have raised concerns about the coordination of efforts. For example, from the Victorian Government's perspective, important issues that require consideration with respect to a greenhouse trigger include the relationship between the proposed trigger and other existing or proposed greenhouse emissions reduction measures being pursued under the National Greenhouse Strategy; and how Commonwealth duplication of State environmental impact assessment (EIA) processes could be avoided in implementation of the trigger.[52]

A more integrated approach to EIA at a state and federal level has also been subject to judicial comment. In one of the first decisions of its kind, the Victorian Civil and Administrative Tribunal ('VCAT') ordered that the panel considering submissions in relation to the Hazelwood West Field Project could not exclude submissions about the greenhouse gas implications of using brown coal.[53] This decision is important because it sets the scene for a more integrated approach to environmental impact assessments at both State and Federal level, with judicial acknowledgement of environmental impact assessment approaches required under both the *EPBC Act* and the Victorian*Planning & Environment Act.*

As a result of this confusion and Federal inaction, earlier this year the states moved to establish a coordinated emissions trading scheme, and signed a joint National Emission Trading Scheme Communiqué.[54]

Despite these developments, there still needs to be Federal action by ratification of the Kyoto Protocol and by the inclusion of a trigger targeting greenhouse gas emissions.

The principles of ecologically sustainable development

The principles of ecologically sustainable development (ESD) are fundamental to the effective functioning of legislation if it is to achieve the best environmental, social and economic outcomes. This has been recognised internationally since 1992,[55] federally, for example in the *EPBC Act*, and at a state level.[56] However, it requires more than simply listing ESD as an object to a piece of legislation, or including an ESD definition in the text. The principles must be implemented and operationalised as a fundamental aspect of all decision-making under the instrument.

Section 28A requires that the principles of ecologically sustainable development (ESD) be considered as part of the review of matters of national environmental significance.

The principles, as set out in section 3A of the *EPBC Act* are set out below.

Principles of ecologically sustainable development

The following principles are *principles of ecologically sustainable development*:

> (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
>
> (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental

degradation;

(c) the principle of inter-generational equity-that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

(e) improved valuation, pricing and incentive mechanisms should be promoted.

Section 3A(a) refers to long term considerations. Generally, while the *EPBC Act* fails to take into account cumulative impacts, this object is not being fully implemented.

Specifically regarding climate change, it is the long term effects that must be given due consideration. As noted by Justice Morris in Hazlewood coal mine expansion matter discussed above:

"Many would accept that, in present circumstances, the use of energy that results in the generation of some greenhouse gases is in the present interests of Victorians; but at what cost to the future interest of Victorians? Further the generation of greenhouse gases from a brown coal power station clearly has the potential to give rise to "significant" environmental effects."

ANEDO submits that the precautionary principle, as part of ESD under the Act, is particularly relevant to the issue of climate change. It is insupportable to rely on scientific uncertainty to justify inaction. In fact, section 391 should be amended to ensure that the precautionary principle in section 3A(b), must be taken into account when making all relevant decisions under the *EPBC Act*.

Australia's international obligations

As noted above, the COAG Heads of Agreement acknowledges that the Commonwealth has a responsibility and an interest in relation to meeting the obligations under the United Nations Framework Convention on Climate Change, in co-operation with the States, through specific programmes and the development and implementation of national strategies to reduce emissions of greenhouse gases, and to protect and enhance greenhouse sinks.[57]

These obligations are not currently being fulfilled by the Federal Government. The two major steps to rectify this are: first to ratify the Kyoto Protocol, and second, to include a greenhouse gas emissions trigger in the *EPBC Act*.

The objects of the Act.

The objects of the EPBC Act are set out in section 3.

Objects of Act

(1) The objects of this Act are:

(a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and

(b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and

(c) to promote the conservation of biodiversity; and

(ca) to provide for the protection and conservation of heritage; and

(d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples; and

(e) to assist in the co-operative implementation of Australia 's international environmental responsibilities; and

(f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia 's biodiversity; and

(g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

Subsection (2) provides further detail on how the objects are to be achieved.

Generally, the failure to include climate change, land clearing, water extraction, proper protection for wild rivers and wilderness as MNES; combined with the deficiencies of some of the current triggers; leads to the inevitable conclusion that the *EPBC Act* is not being implemented in accordance with its objects. As noted, ecologically sustainable development cannot be promoted in a piecemeal and ad hoc fashion. Unless there is comprehensive coverage of the key environmental issues, the government is immediately failing on objects (1) (a) (b) (c) and (e).

Specifically, in relation to addressing the issue of greenhouse gas emissions and climate change, the *EPBC Act* is failing to implement its objects regarding implementation of international environmental responsibilities, and promotion of the principles of ecologically sustainable development, (as discussed above).

Recommendations

Add a greenhouse gas emission trigger that recognises any development that produces over 100,000 tonnes of CO2 equivalent per year as a matter of national environmental significance.

This could be supplemented by provision for all projects on a designated development list (including expansion of existing projects and significant land use change, including significant land clearing and motorway projects) to trigger the approval provisions. This would ensure the trigger was more comprehensive in capturing diffuse emissions.

Land clearing

Background and rationale

The Federal Government recognised the severe effects of land clearing in the 2001*State of the Environment Report*, which stated:[58]

> The impact of broad-scale vegetation clearance on natural heritage and biodiversity is profound and has been of concern for several decades in Australia. The immediate effect of clearance of terrestrial native vegetation on plant and animal species can be significant. For vertebrate animals, comparative estimates of the population density of woodland birds indicate that between 1000 and 2000 birds permanently lose their habitat for every 100 ha of woodland cleared, while it has been estimated that the clearing of mallee for wheat kills more than 85% of the resident reptiles on average, more than 200 individual reptiles per hectare. Longer-term effects of native vegetation clearance on species result from habitat loss and fragmentation combined with other threats. Extensive clearance of vegetation across a catchment or region may generate 'cascading effects' on the biophysical systems of the area and these changes may be irreversible or difficult to deal with other than through long-term (decade or century) mitigation and restoration strategies.

Currently in Australia more than 600,000 hectares of woodlands and forests are bulldozed to expand agricultural operations every year. Most of this vegetation is mature, previously uncleared bushland. Several million birds are killed and innumerable other native animals are threatened due to loss of habitat and food sources. In Queensland alone, around 500,000 hectares are destroyed each year. New South Wales and Tasmania still have extremely high rates of clearing, and clearing is increasingly affecting northern Australia in areas such as the Gulf Country in Queensland and the Top End in the Northern Territory.[59]

We note that the clearing of native vegetation has been a priority legislative issue for some state governments over the last 2 years (for example, in Queensland and NSW).

It has been argued by many commentators[60] that while the *EPBC Act*provides considerable opportunities to conserve native vegetation, particularly through protection for threatened species and endangered communities,[61] a land clearing trigger under the Act would be a more effective and direct method of regulating vegetation clearance. The trigger would need to be designed to capture clearing actions over a certain threshold at which point they are deemed nationally significant, and to ensure cumulative land clearing activities are captured. We note that before the last federal election, the Australian Labor Party made a commitment, if in Government, to add a vegetation clearing trigger for clearing over 1000 ha in any 2 year period.

The Act is failing to address this major environmental issue. Currently land clearing does not trigger the *EPBC Act* unless it is next to a World Heritage Area, is critical habitat for a threatened species, or is in a RAMSAR listed wetland (such as in the Greentree case noted above). Furthermore, certain clearing of native vegetation often falls through the regulatory gaps, such as clearing in urban areas, as this is often exempt from state legislation (for example, the*Vegetation Management Act 1999* (QLD) and the*Native Vegetation Act 2003* (NSW)).

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

State legislation regulating the clearing of native vegetation varies greatly across Australia. For example,

following Queensland, NSW is expecting a new regime to commence within the next few months, (involving a ban on broadscale clearing where it fails to maintain or improve environmental outcomes, new assessment technology and property vegetation planning supported by Catchment Management Authorities), while the Northern Territory for example is at a far earlier stage of permit reviews.

In the absence of robust and comprehensive state legislation, there is a clear role for an *EPBC Act* trigger relating to certain proposed clearing and the greenhouse implications of that clearing. As noted, much of the state vegetation management legislation does not apply to urban areas, and therefore for example, does not apply to significant clearing undertaken in North Queensland for resort development.

The principles of ecologically sustainable development

Under section 3A(d)of the *EPBC Act* the federal Government has an obligation to conserve biological diversity and ecosystem integrity. This involves addressing two of the most serious threats to biodiversity, land clearing and climate change. Without these issues being treated as MNES, the *EPBC Act* cannot meet this object.

The Commonwealth has already recognised that they have an implementation role. Clause 25 of the 1997 COAG Heads of Agreement[62] states:

> 25. Implementation of the National Strategy for Ecologically Sustainable Development
>
> The Commonwealth has an interest in relation to implementation of the National Strategy for Ecologically Sustainable Development.

However, the *EPBC Act* is failing to fully implement the principles of ecologically sustainable development due to its limited list of MNES. Achieving ESD involves a holistic approach, including assessment of the long term effects of several considerations; and therefore to regulate national environmental issues in the absence of clear triggers for some of the most significant environmental challenges facing Australia (for example, climate change and land clearing) is piecemeal, inadequate and inconsistent with the principles of ESD.

Australia's international obligations

The COAG Heads of Agreement states:

> "Consistent with section 3A(d) of the *EPBC Act*the federal Government has an obligation to mitigate the effects of land clearing to comply with provisions of the*Convention on Biological Diversity*, and also regarding greenhouse implications as noted in Part 2B."

The objects of the Act.

The objects of the *EPBC Act* are stated above. In section 3(1)(c) there is a clear object to conserve biodiversity, and yet perhaps the greatest threat to Australia 's biodiversity - land clearing - is currently not considered a matter of national environmental significance under the Act. Without an effective land clearing trigger, the Act is failing to achieve this object.

Recommendation

A comprehensive trigger would require three main alternative elements. First, a trigger for the clearing of native vegetation over 100 ha in any two year period; second, a trigger for the clearing of any area of native vegetation which provides habitat for listed threatened species or ecological communities, or listed critical habitat; and third, a schedule of activities that would trigger the Act regardless of the hectares proposed to be cleared (for example, major coastal resort developments).

Dioxins[63]

Background and rationale

Tens of thousands of chemicals have been released by humans into the environment with little or no knowledge about their environmental or human health impact. Hazardous substances are especially dangerous because they are not visible, and although they can cause acute damage, they usually cause chronic, slow, incremental destruction such that it is often too late by the time significant or irreversible damage is recognised.[64] The traditional, outdated policy and legislative approach, known as the 'assimilative capacity' or 'permissive' approach has contributed to this problem. There is a growing recognition and acceptance that hazardous substances need to be targeted for prevention and phase-out based on their inherent characteristics (for example, their persistent, toxic, bioaccumulative, and endocrine disrupting properties).

It is essential that an approach based on prevention and phase out of substances that are toxic, in particular dioxins, is adopted and federally driven. As part of an international effort to address this issue, Australia has obligations under the*Stockholm Convention on Persistent Organic Pollutants 2001.*This is discussed further

below.

Dioxin is created by a variety of industry activities. The question is therefore should a trigger be designed to simply apply to a set list of technologies, or a certain mass of dioxin emissions?

An effective trigger would clearly frame the requirements to prioritise dioxin elimination, use best available technology, and facilitate the integration of requirement into relevant planning laws. Current planning frameworks rely on a proponent putting forward a technology and then that technology is assessed. There is no method for a public authority to reject a technology if there is a better one available if the proposed technology meets certain benchmarks.

A trigger could be drafted to apply to an action involving an emission of a chemical or substance listed under the Stockholm Convention, in a similar manner to listed wetlands under the RAMSAR Convention apply to the *EPBC Act* wetlands trigger. The problem with this is that many everyday activities, such as driving a car or burning a fire, emit small amounts of dioxin and would therefore trigger the Act. The trigger would need to be designed with either a threshold so that it only captured actions involving large dioxin emissions; or targets specific industries.[65]

Instead of listing dioxins and furans under the trigger, there could be an Annex (similar to Annex C Part II Source Categories Stockholm Convention)[66] that lists actions such as incineration of hazardous waste, bleaching of pulp with chlorine and secondary metals processing as activities that would trigger the *EPBC Act*.

Stockholm Convention

Annex C: Part II Source categories

The following industrial source categories have the potential for comparatively high formation and release of these chemicals to the environment:

> (a) Waste incinerators, including co-incinerators of municipal, hazardous or medical waste or of sewage sludge;
>
> (b) Cement kilns firing hazardous waste;
>
> (c) Production of pulp using elemental chlorine or chemicals generating elemental chlorine for bleaching;
>
> (d) The following thermal processes in the metallurgical industry:
>
> > (i) Secondary copper production;
> >
> > (ii) Sinter plants in the iron and steel industry;
> >
> > (iii) Secondary aluminium production;
> >
> > (iv) Secondary zinc production.

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

As noted, the traditional, outdated policy and legislative approach to hazardous chemicals and substances, known as the 'assimilative capacity' or 'permissive' approach is inadequate. This approach is based on attempts to control "permissible" release levels of harmful substances under the erroneous assumption that the receiving environment could dilute and disperse them and thereby render them harmless. The failure of this approach is particularly of concern as it is increasingly being recognised that there is **no** safe level of dioxins.[67]

Each state has legislation regulating and licensing the storage, use, transport and associated emissions and waste issues of hazardous chemicals. However, some jurisdictions, such as the Northern territory, lack an Environment Protection Authority (or equivalent) to comprehensively enforce the legislation.

There have been some developments in Australia to address the situation, such as the National Pollutant Inventory (NPI). However, the NPI must be strengthened from its current limited model into a broad based tool that truly reflects the public right to know. Measurements for dioxins and furans should be given in toxic equivalents (TEQs) to enable assessment of the true level of dioxin emission. Any figures on the NPI should be based on real measurement rather than industry standard calculations that may or may not reflect reality. The scientific uncertainty (for example, it is estimated that there are around 40,000 chemicals in Australia that have not been subject to a full risk assessment)[68], makes this issue particularly amenable to *EPBC Act* jurisdiction and a national approach to the proper implementation of the precautionary principle.

The principles of ecologically sustainable development

In relation to the possible harm caused by dioxin emissions, the assimilative capacity approach has failed precisely because it failed to acknowledge and accommodate the limitations in scientific information. This is a key element of the precautionary principle, which in turn is a key element of the principles of ecologically sustainable development.

Australia's international obligations

Australia has an obligation under the Stockholm Convention on Persistent Organic Pollutants 2001 As part of discharging international obligations under the Stockholm Convention, consideration should be given to various elements needed to effectively implement the Convention in Australia, as well as the inclusion of an appropriate *EPBC Act* trigger. The key elements include:[69]

- A requirement to address all hazardous substances beyond Persistent Organic Pollutants (POPs). There is currently a lack of framework to deal with the elimination and substitution of other hazardous substances;
- Ban certain substances (for example Mirex);
- A requirement for chlorine-free pulp mills;
- Prohibition of all new chemicals that have POP properties;
- A goal of phase out and elimination of POPs, using the principles of elimination and substitution;
- A goal of avoiding phasing out incineration;
- Strong recognition of the polluter pays principle;
- Destruction of POP stockpiles and wastes using best alternative destruction technologies that do not yield POPs, rather than incineration. All POPs contaminated sites must be identified and the contamination destroyed; and
- Robust public register and right-to-know provisions.

It is interesting to note that the government already acknowledges a related obligation regarding transport and disposal of hazardous wastes.[70]

The objects of the Act.

As noted above, a key element of ESD is the precautionary principle, and the current assimilative approach to dioxin control offends this principle. Section 3(1)(b) provides that a clear object of the legislation is to promote ESD. Section 3(2)(d) provides further detail as to how objects are to be achieved, specifically, ensuring efficient and timely assessment processes for activities that are likely to have significant impacts on the environment. It is essential that dioxin emissions qualify for such assessment.

Recommendation

Amend Part of the *EPBC Act* to add a new matter of national environmental significance to capture: "Process identified under Annex C of Stockholm Convention, as set out in Schedule X".

Water extraction trigger

Background and rationale

With continued severe drought, sustainable water use is an issue that has aroused significant public concern in recent years. Some steps have been taken to address the issue, such as the June 2004 National Water Initiative (NWI)[71], and amendments to state water management legislation. However, these developments, the NWI in particular, have been politically contentious and fraught with disagreement and delay. There is therefore a strong argument for the Commonwealth to be more proactive on this transboundary issue.

Inclusion of a water extraction trigger would be consistent with the NWI objective to have better environmental impact assessment (EIA) for large water infrastructure.The focus of the trigger should be on major development projects in the Murray Darling Basin (using MDBC Agreement as the basis for power to Act). Such a trigger would enable assessment of significant impact upon the inland rivers of the Murray Darling Basin. Criteria for assessing impact should be based on interference with rivers caused by major works (such as dams over a certain size); the extraction or diversion of volumes of water over a certain amount of that are likely to impact upon compliance with the MDBC cap.

Environment groups have previously recommended:[72]

> 'unsustainable water use' - a trigger for abstraction of surface and ground water resources over 10,000 megalitres which is likely to have a significant impact on aquatic or groundwater-dependent ecosystems.

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

As noted, this is an issue of vital importance in Australia, and as a transboundary issue it is crucial that the Commonwealth Government have the power to become involved in significant water extraction projects. This is consistent with NWI objectives as noted above.

Each State and Territory has their own water management legislation, however in many cases these are failing to adequately ensure environmental water requirements are being met. For example, some of the Water Sharing Plans that have been produced under state legislation (for example in NSW) do not allocate enough environmental water to ensure ongoing health of groundwater dependent ecosystems.[73]

As noted, policy initiatives such as the NWI are underway, but have failed to comprehensively address the problem. As a matter of urgency, a new MNES should be included in the *EPBC Act* to rectify this, and at the very least ensure that developments involving significant water extraction or infrastructure are subject to appropriate assessment.

The principles of ecologically sustainable development

The principles of ESD as stated in the *EPBC Act*, require consideration of long term effects; an obligation on the present generation to ensure that the health, diversity and productivity of the environment is maintained for future generations; and conservation of biodiversity. Over extraction of water in systems that already stressed severely threatened the realisation of these principles.

Australia's international obligations

It is interesting to note that the 1997 COAG Agreement included many more matters for Commonwealth consideration than the 6 MNES that were originally included in the *EPBC Act* in 1999. Some matters, such as CITES requirements (point 17) are explicitly dealt with in the *EPBC Act*, and other issues are dealt with in other Commonwealth legislation (for example, regulation of gene technology by the*Gene Technology Act 2000*). This extended list indicates an intention for Commonwealth to play an active role in addressing a broader range of environmental issues than currently contemplated by the existing MNES.

Water management has traditionally been a matter for regulation by individual states, however, a COAG agreement or head of power[74] should be utilised to facilitate a strengthened role for the *EPBC Act*. The Heads of Agreement[75] for the *EPBC Act* states:

> 28. Prevention of land and water degradation
>
> Commonwealth interest is in the development of agreed strategies and programmes to prevent and ameliorate land and water degradation particularly in relation to transboundary problems.

Furthermore, a sustainable water use trigger could come under:

> 29. Matters that are from time to time agreed by the Commonwealth and the States as being matters of national environmental significance as envisaged by the Heads of Agreement.

We note that some aspects of water use and management are already captured by wetlands trigger (and obligations under the RAMSAR Convention). However this is not sufficient to address all major water extraction developments.

As noted elsewhere in this submission, Australia is a party to the*Convention on Biological Diversity*. As such there are clear obligations to take action to conserve biodiversity, including freshwater aquatic biodiversity. (This is discussed further in relation to wild rivers below).

The objects of the Act.

As noted above, the objects of the Act focus on matters of national environmental significance, and the promotion of ESD "through the conservation and ecologically sustainable use of natural resources" (section 3(1)(b)). As one of Australia 's most precious natural resources, water extraction falls clearly within the purview of the objects. Furthermore the objects state an intention to strengthen intergovernmental cooperation (section 3(2)(b)), and a clear water extraction trigger would help achieve this.

Recommendation

ANEDO recommends that a trigger be included in Part 3 for abstraction of surface and ground water resources over 10,000 megalitres which is likely to have a significant impact on aquatic or groundwater-dependent ecosystems.

As noted, the focus of the trigger should be on major development projects in the Murray Darling Basin (using MDBC Agreement as the basis for power to Act). Criteria for assessing impact should be based on interference with rivers caused by major works (such as dams over a certain size); the extraction or diversion of volumes of water over a certain amount of that are likely to impact upon compliance with the MDBC cap.

Wild rivers[76]

Background and rationale

Australia has a long history of recognising the values of natural and wilderness areas through the creation of national parks and protected areas. In the tradition of most western nations, the development of national parks initially began with the objectives of conserving scenic and recreational values in close proximity to urban centres. However, throughout the twentieth century, there has been an increasing awareness of the need to protect land and ecosystems for their biodiversity values and for their natural and cultural heritage values.

The introduction of the World Heritage Convention (WHC) and the*Convention on Biological Diversity* (CBD), both of which Australia is party to, has encouraged Australia to designate vast tracts of land as protected areas, either as world heritage sites or national parks. Almost all of the sites listed to date are terrestrial and any protection of associated freshwater ecosystems is arguably incidental. However, freshwater - in the form of rivers, streams, lakes, wetlands, estuaries and groundwater - is a fundamental part of all Australian ecosystems. Only recently, through avenues such as the 2003 and 2004 Conferences of the Parties for the CBD, have goals for the sustainable use and sharing of benefits arising from inland water biodiversity been articulated. Those goals include,

> "the development of protected area systems (aquatic reserves, Ramsar sites, heritage rivers etc) which can contribute in a systematic way to the conservation and sustainable use of biological diversity, and to maintain overall ecosystem function, productivity and health within each drainage system."[77]

The concept of a "wild river", has been defined by the Australian Federal government in its Wild Rivers Project is as:

> "a channel, channel network, or connected network of water bodies, or natural origin and exhibiting overland flow (which can be perennial or intermittent or episodic) in which:
>
> - the biological, hydrological and geomorphological processes associated with river flow; and
>
> - the biological, hydrological and geomorphological processes in the river catchment with which the river is intimately linked, have not been significantly altered since European settlement."

Further, the World Conservation Union (IUCN) defines an aquatic protected area as:

> "an area of water and all its natural components that has been reserved by law or other effective means to protect all or part of the enclosed ecosystem."

From both legal and practical perspectives the management regimes for rivers and for reserves will not always coincide. Of particular relevance is the distinction between public and private interests in the resource. All waters in Australia are formally vested in the Crown and are subject to regulation by the various State and Territory governments. However, most waters, either in rivers, streams or wetlands, will traverse private property at some point. As such, the land which forms the catchment for a water source, the adjoining riparian vegetation and in some instances the beds and banks of the water source itself, all of which are essential components of the overall freshwater ecosystem, may be in private ownership.

This issue is important, because a key component of reserving land (for national parks, conservation areas - even recreation areas) is to vest the land in the Crown, to be managed in the public interest. Therefore, when considering aquatic reserve systems, an underlying element will, in most instances, be that the land and water can be managed exclusively by the Crown.[78] Whereas, when designating wild or heritage rivers, a key component (where the river flows through private land) will be to place limitations on, and regulate the use of the land and water to ensure ecosystem protection.

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

Three of the MNES triggers, World Heritage Properties, National Heritage Places and Ramsar Wetlands are directly related to the future establishment of freshwater protected areas. The Commonwealth has, to date, taken a limited approach to its involvement in water management and river protection. Two policy instruments are having a broad impact on wild rivers and freshwater protected areas, namely, the Wild Rivers Project commenced in 1993 and the National Water Initiative 2003.[79] The *EPBC Act*has only had an ancillary impact on aquatic ecosystem management and protection to date.

Each State has its own legislative frameworks for water management and protected areas. The Australian States that have sought to enact legislation to protect wild or heritage rivers have done so in very different ways, ranging from stand-alone legislation in Victoria, in the form of the*Heritage Rivers Act 1992*, to various levels of protection in national parks and water management legislation in other States such as New South Wales and Tasmania. To date, whilst a number of heritage rivers have been listed pursuant to the Victorian legislation, and wild rivers are protected in Tasmania 's National Parks, no other jurisdiction has utilised its statutory powers to protect wild rivers. This is particularly significant in the tropical north of Australia, where a number of rivers are free flowing and largely undisturbed. A draft Bill has been circulated in Queensland which is designed to give protection to some of its most pristine rivers. However, this legislation may not protect all the free flowing rivers in that State, and has not yet been passed.

Similarly, those States and Territories that have existing provisions for freshwater protected areas derive the power to establish those areas from a wide array of statutes. New South Wales, Victoria, South Australia and Western Australia have fisheries or reserves legislation that provides for the declaration and management of aquatic reserves. Queensland, Tasmania, and the Territories have no legislation specifically providing for freshwater aquatic reserves, but freshwater areas can be protected within terrestrial national parks or nature reserves and in some cases there is limited protection in fisheries legislation.

Notwithstanding inherent powers to establish freshwater protected areas, the ACT is the only jurisdiction in Australia that has in fact done so. The lack of action in freshwater protected areas contrasts with numerous national marine protected areas, including the Great Barrier Reef Marine Park which is largest marine protected area in the world, as well as the 216 state marine protected areas.[80]

Some of the reasons why freshwater reserves have not been established relate to the complexities of land tenure mentioned above. However, other factors that detract from setting up such reserves, particularly pursuant to fisheries legislation, is the inability of the agency responsible for establishing the area (usually the Fisheries Department) to manage external impacts into the river or catchment.

There needs to be federal recognition of listed scenic, wild or heritage rivers to ensure they remain relatively pristine and undisturbed. In the absence of an appropriate legislative framework to ensure Australia adequately preserves the biological diversity of its freshwater ecosystems, in particular by protecting high conservation value rivers and reaches, the *EPBC Act* has an important role.

The principles of ecologically sustainable development

As noted above, ESD principles promote conservation of biodiversity and intergenerational equity. The comprehensive protection of wild rivers, whilst they are still relatively pristine, would contribute greatly to the achievement of those principles.

Australia's international obligations

International Conventions put a framework in place for member States to commit to protecting sites of natural and cultural significance, including important freshwater aquatic areas. Over the past 20-30 years, there has been a steady stream of listings of places under the*World Heritage Convention* and the*Ramsar Convention on Wetlands of International Significance*. This has ultimately resulted in international recognition for a number of key freshwater sites, including river reaches, lakes and wetlands. Furthermore, the*Convention on Biological Diversity* and the*Convention on Migratory Species* also impose obligations upon States to take positive steps to protect significant species and their habitats.

The various Conventions provide a clear mandate for protecting freshwater areas that meet the criteria under the Conventions. In other words, they give Governments such as Australia the ability (at a Federal level) to become involved in environmental and water protection issues that it would not otherwise have direct power to do.

The objects of the Act

The object of conserving biodiversity (section 3(1)(c) would also be met by inclusion of a wild rivers trigger. Similarly, the object of providing for the protection and conservation of heritage (section 3(10)(ca)) would be inadequately addressed in the absence of comprehensive protections for natural heritage such as wild river systems.

Recommendation

The *EPBC Act*should include a wild rivers trigger and list freshwater areas that meet relevant criteria. This would need to coordinate with world heritage sites and Ramsar wetlands listings.

Wild rivers to be listed and protected include:[81] Archer River system; Coleman River system; Ducie River system; Fraser Island streams; Gregory (Nicholson basin); Hinchinbrook-Island streams; Holroyd River system ;

Jacky Jacky Creek; Jardine River; Jeannie River; Lockhart River; Morning Inlet streams; Olive and Pascoe Rivers Settlement Creek system; Staaten River; Stewart River; Watson River; and Wenlock River.

Natural rivers include: Annan River; Black River; Bulloo River; Cooper Creek; Curtis Island streams; Daintree River system; Diamantina & Georgina Rivers; Elliott River; Embley River system; Flinders River system; Gilbert River system; Leichhardt River; Maranoa River; Mitchell River system (excluding upper Mitchell); Moreton Island streams; Nicholson River; Norman River; Normanby River system; O'Connell River; Paroo River; Sandy Creek; Shoalwater Creek; Stradbroke Island streams; Styx River; and Whitsunday Island streams.

Wilderness[82]

Background and rationale

The Federal Government has previously acknowledged wilderness protection as a matter of importance nationally. Wilderness protection was one of the key outcomes of the National Forest Policy Statement (NFPS).[83] The NFPS defined wilderness as:[84]

> 'land that, together with its plants and animal communities, is in a state that has not been substantially modified by, and is remote from, the influences of European settlement or is capable of being restored to such a state; is of sufficient size to make its maintenance in such a state feasible; and is capable of providing opportunities for solitude and self reliant recreation.'

The strategy achieved interim protection, value assessment, and protection through a comprehensive, adequate and representative reserve system. A consistent nationwide approach to identifying wilderness was adopted (the National Wilderness Inventory (NWI))[85] through a co-operative process agreed to by the Commonwealth, States and Territories. Under the RFAs 90 percent, or more wherever practicable, of the areas of high quality wilderness (NWI equal to or greater than 12) that meet the 8,000 ha minimum area requirement were protected. The Commonwealth's wilderness criteria make clear that non-forest vegetation types can be included in largely forested wilderness areas, as wilderness does not relate to forests only. Wilderness embraces measures of remoteness, naturalness and lack of disturbance, regardless of the composition of the vegetation.

The adequacy of existing legislation and administrative measures of the Commonwealth, the States, and the Territories to prevent significant impacts on those matters

As noted, the *EPBC Act* should require wilderness areas, defined as NWI 12+ lands that are within formal reserves, to be new matters of national environmental significance. With the possible exception of NSW, wilderness is not effectively protected under the NFPS process as reservation in national parks is inadequate. While the interim protection measures required protection of wilderness for the deferred forest areas during the Regional Forest Agreement process, the final reserves did not adequately protect wilderness.

The majority of wilderness within formal reserves can and is being degraded by development and access, including through the making of plans of management, without consideration of wilderness values for which the area may have been originally reserved. Most states do not formally protect wilderness within the formal reserve system by either statute or management plan. Outside of NSW and Victoria very little progress has been made in the formal protection of these areas. This deficiency could be addressed by a federal trigger.

The principles of ecologically sustainable development

In relation to the object of intergenerational equity in section **3A(c)**, the Director of the Colong Foundation for Wilderness stated:[86]

> "Future generations will be impoverished if steps are not taken to protect the wilderness within the formal reserve system. Opportunities for solitude and self-reliant recreation will be lost."

Australia's international obligations

As noted by COAG:

> 11. Protection and management of forests
>
> The Commonwealth has a responsibility and an interest in relation to the development and implementation of Regional Forest Agreements and the National Forest Policy Statement, and under relevant international instruments including the Rio Statement of Forest Principles, the International Tropical Timbers Agreement, the Report of the UN Intergovernmental Panel on Forests and Agenda 21.

The objects of the Act

As noted, the issue of intergenerational equity is an integral part of ecologically sustainable development. The

promotion of ESD is key object of the *EPBC Act* (section 3(1)(b)) and without proper comprehensive protection for the remaining wilderness areas, this object will not be effectively achieved. The Act provides further detail on the achievements of the objects, and specifically refers to the establishment and management of reserves (section 2(e)(iii)). Protection and enhancement of wilderness areas would contribute to this goal.

Recommendation

The *EPBC Act* should require wilderness areas, defined as NWI 12+ lands that are within formal reserves, to be new matters of national environmental significance.

References

1. See Quarterly Statistics-Referrals, Assessments and Approvals on Department of Environment and Heritage website at http://www.deh.gov.au/epbc/statistics/statistics.html.
2. See decision to refuse approval for the taking of action found at http://www.deh.gov.au/cgi-bin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=571.
3. (2001) 114 FCR 39.
4. Decision to refuse approval for taking of action- found at http://www.deh.gov.au/cgi-bin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=911.
5. Kirsty Ruddock, EDO North Queensland, Draft *Impact* article, 2005.
6. In particular s.3.4.5 states that the notification period under the Act cannot include any business day from 20 December in a particular year to 5 January in the following year.
7. This is an issue in areas of coastal development (including canal development) in Queensland approved in the 1980s without environmental assessment and conditions. There is no basis to amend the scope of the development through state legislation because the Planning Minister does not have powers to call in developments or override local approvals, once they have been approved. Reliance on the *EPBC Act* is critical in such circumstances (Source: EDO North Queensland).
8. Please refer to "*Further Strengthening of the EPBC Act 1999 and Regulations - A Proposed Set of Amendments*" February 2002; Submitted by: the ANU Australian Centre for Environmental Law; Australian Conservation Foundation; Birds Australia; Conservation Councils of South Australia, NSW and Western Australia; Environs Australia: Humane Society International; National Parks Associations of NSW and Queensland; National Parks Australia Council; Tasmanian Conservation Trust; The Wilderness Society; Whale and Dolphin Conservation Society; Wildlife Preservation Society of Queensland; and the Worldwide Fund for Nature. (The "Combined Groups' Submission 2002").
9. See ss 12-15A *EPBC Act* 1999.
10. DEH Administrative Guidelines on Significance, July 2000: http://www.deh.gov.au/epbc/assessmentsapprovals/guidelines/administrative/index.html#wh
11. *Ibid.*
12. For a summary of case law see also, Chris McGrath, "*Key concepts of the Environment Protection and Biodiversity Conservation Act 1999* (Cth)"*EPLJ*, Vol 22, February 2005, No.1.
13. *Booth v Bosworth* (2001) 114 FCR 39; 117 LGERA 168; [2001] FCA 1453 - "Flying Fox Case". See Elisa Nicholls, EDO Queensland Impact article December 2001. the judgment is available on the federal Court website at http://www.fedcourt.gov.au/gfx/j011453.pdf.
14. In doing so, Justice Branson followed a number of Australian authorities including*Oshlack v Richmond River Shire Council and Iron Gates Developments Pty*Ltd (1993) 82 LGERA 222 per Stein at 233;*McVeigh v Willara Pty*Ltd (1984) 5 FCR 587 per Toohey, Wilcox and Spender JJ at 596;*Tasmanian Conservation Trust Inc v Minister for Resources*(1995) 55 FCR 516 per Sackville J at 541.
15. In considering arguments by the respondents that it was necessary to weigh the impact of the action of the respondent as one component only of the overall threat to the Spectacled Flying Fox, the judge accepted that mortality rates are additive. Therefore, an action which may not appear significant in isolation may be significant when other impacts are taken into account and the effect of that action is added to the other impacts.
16. *Minister for the Environment and Heritage v Queensland Conservation Council Inc and WWF Australia* [2004] FCAFC 190 30 July 2004 - "Nathan Dam Case". See " EDO Queensland Wins Nathan Dam Appeal"Larissa Waters, Solicitor, EDO Queensland.*Impact*June 2004. The judgment is available online atwww.austlii.edu.au/au/cases/cth/FCAFC/2004/190.html.
17. The Queensland Conservation Council and WWF Australia represented by EDO Queensland and barristers Stephen Keim and Chris McGrath.
18. Source: K. Muir, Colong Foundation for Wilderness, NSW 2005.
19. See ss15B and 15C and Environment and heritage Legislation Amendment Bill (No. 1) 2002 (Cth).
20. Seehttp://www.deh.gov.au/heritage/national/index.html; and http://www.deh.gov.au/heritage/commonwealth
21. See ss 16-17B *EPBC Act 1999.*
22. DEH Administrative Guidelines on Significance*op cit.*
23. See*Impact* September 2004; See also Chris McGrath, "Key concepts of the*Environment Protection and Biodiversity Conservation Act 1999* (Cth)"*EPLJ*, Vol 22, February 2005, No.1.
24. The Gwydir wetlands cover an area of 823 ha, 60km west of Moree in NSW. The wetlands were listed under the Ramsar Convention on 14 June 1999. Approximately 100 ha of the wetlands are located on the Windella wheat farm. See Case note: (2003) 20 EPLJ 476.
25. *Minister for the Environment & Heritage v Greentree (No 3) [2004] FCA 1317.*
26. See ss18-19 *EPBC Act 1999.*
27. Threatened species and ecological communities are listed by the Minister for the Environment under Part 13,

Division 1, Subdivision A of the Act. The lists are available through the EPBC website athttp://www.deh.gov.au/epbc.

28. See Administrative Guidelines on Significance*op cit*. Examples of criteria include whether the proposed action does, will or is likely to: lead to a long-term decrease in the size of a population, or adversely effect an endangered ecological community; or reduce the area of occupancy of the species, or extent of community; or fragment an existing population or community; or adversely affect habitat critical to the survival of a species or ecological community; or disrupt the breeding cycle of a population; or modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or modify/destroy the abiotic factors necessary for the survival of an endangered ecological community; or result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat; or interfere with the recovery of the species or endangered ecological community.
29. Similarly, species in the categories of 'conservation dependent' and 'near threatened' should be included in the Part 13 offence provisions for taking and killing species.
30. This would be consistent with for example, the Victorian*Flora and Fauna Guarantee Act,*which provides for interim protection for threatened species and ecological communities between nomination and listing. The killing of the Grey-headed Flying Foxes in Melbourne 's Botanic Gardens while the species was being considered for *EPBC Act* listing, is an example of the need for such an amendment.
31. See ss 20 and 20A *EPBC Act 1999*.
32. Lists of migratory species are established by the Minister for the Environment under Part 13, Division 2, Subdivision A of the Act.
33. An area of important habitat is: habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, or habitat utilised by a migratory species which is at the limit of the species range, or habitat within an area where the species is declining.
34. See ss21 - 22A *EPBC Act 1999*.
35. See also the Combined Groups' submission 2002*op cit.*
36. See ss 23 - 24A *EPBC Act 1999*.
37. The Commonwealth marine area is defined in section 24 of the Act.
38. Section 23(5) *EPBC Act 1999*.
39. "Climate Change 2001: The Scientific Basis" The Third Assessment Report of Working Group I of the Intergovernmental Panel on Climate Change (IPCC).
40. Part II: Council of Australian Governments, " Heads of agreement on Commonwealth and State roles and responsibilities for the Environment", November 1997, See http://www.deh.gov.au/epbc/about/agreement.html.
41. See also, Donald K Anton, " Submission on the Consultation Paper for the possible Greenhouse Trigger under the *EPBC Act 1999"*On behalf of the EDO Network. 18 th February 2000.
42. Less ideal, would by the use of section 25 to make a regulation proscribing defined "greenhouse actions" without an approval under Part 9 of the Act.
43. In accordance with the consultative processes required bysection 25(3) of the *EPBC Act*.
44. "The*Environment Protection and Biodiversity Conservation Act 1999* (Cth): A Progress Report", Brendan Bateman Partner, Clayton Utz July 2001. An example of industry opposition to a trigger see the Australian Petroleum Production and Exploration Association (APPEA) "Submission to Environment Australia on Possible Application of a Greenhouse trigger under the *EPBC Act*". www.appea.com.au/Download.asp?Filename=EPBCTrigger.Sub.PDF&ID=88.
45. For example: see Submission by the Institute of Engineers, Australia, February 2000:http://www.ieaust.org.au; The Tasmanian Conservation Trust Submission, February 2000 (and related Hansard at http://www.democrats.org.au).
46. www.deh.gov.au.
47. See: ACF website: http://www.acfonline.org.au/asp/pages/document.asp?IdDoc=440.
48. Indeed, Australia argued in the Southern Bluefin Tuna cases before the International Tribunal for the Law of the Sea that the precautionary principle is binding on all countries as a norm of customary international law. See also, The Southern Bluefin Tuna Case: ITLOS Hears Its First Fishery Dispute.(International Tribunal for the Law of the Sea) Journal of International Wildlife Law & Policy; September 22, 1999; Schiffman, Howard S.
49. See: ACF website: http://www.acfonline.org.au/asp/pages/document.asp?IdDoc=440.
50. HSI - News release 6 April 2001 http://www.hsi.org.au/news_library_events/press_releases/N39.htm
51. See: *Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Act 2002*; *Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Regulation 2002*; and the *Greenhouse Gas Benchmark Rules* http://www.greenhousegas.nsw.gov.au/scheme_overview.htm.
52. Victorian Government: http://www.greenhouse.vic.gov.au/strategy/parta-4.htm.
53. International Power Hazelwood wants to use a new coal deposit to supply Hazelwood Power Station beyond 2009, when the current coal deposits will be exhausted. See: Media release: EDO Victoria. Access the full decision at:http://www.austlii.edu.au/au/cases/vic/VCAT/2004/2029.html.
54. See:http://www.premier.vic.gov.au/newsroom/news_item.asp?id=558; andhttp://www.theage.com.au/articles/2004/04/01/1080544628071.html.
55. United Nations Conference on Environment and Development "Earth Summit ", Rio Declaration, 1992.
56. See for example, McClelland J of the NSW Land & Environment Court listed over 20 separate NSW Acts requiring consideration of ESD: para 87 BGP Properties Pty Ltd v Lake Macquarie City Council [2004]NSWLEC 399.
57. Attachment 1, Part 1, Heads of Agreement on Commonwealth and State Roles and Responsibilities for the Environment, November 1997. Council of Australian Government. See www.deh.gov.au/epbc/about/agreement.html.
58. *Australia State of the Environment Report 2001 (Theme Report)*; Prepared by: Dr Jann Williams, RMIT University;Authors, CSIRO Publishing on behalf of the Department of the Environment and Heritage; © Commonwealth of Australia 2001, ISBN 0 643 067493 See:

http://www.deh.gov.au/soe/2001/biodiversity/biodiversity041b1.html
59. http://www.wilderness.org.au/campaigns/landclearing/lc_nat/.
60. For example, Sophie Chappell, " *EPBC Act*: One year later" WWF-HIS EPBC Unit, 11 September 2001. http://nccnsw.org.au/member/cbn/projects/LifeLines7.3/NatPol_EPB.html.
61. See further Glanznig, A. and M. Kennedy (2000) *Land degradation and native vegetation clearance in the 1990s: Addressing biodiversity loss in Australia - available via www.cbn.org.au.*
62. COAG 1997*op cit.*
63. Information relating to Stockholm Convention Implementation in Australia provided by Greenpeace Australia Pacific, and the National Toxics Network.
64. Source: Greenpeace.
65. The *Protection of the Environment Operations Act* NSW also provides a model for the latter.
66. http://www.pops.int/documents/convtext/convtext_en.pdf.
67. This information was provided by Greenpeace.
68. Source: Greenpeace.
69. Information relating to Stockholm Convention Implementation in Australia provided by Greenpeace Australia Pacific, the National Toxics Network.
70. COAG Heads of Agreement: 15. The Commonwealth has a responsibility in relation to meeting the obligations contained in the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) as implemented by the Hazardous Wastes (Regulation of Exports and Imports) Act 1989 concerning the regulation of activities or proposals involving the international transboundary movement and disposal (including storage) of hazardous wastes.
71. http://www.coag.gov.au/meetings/250604/#water_initiative.
72. Combined Groups' Submission 2002*op cit*.
73. The invalidity of this aspect of the WSP process was accepted in the Gwydir appeal:*Nature Conservation Council of NSW Inc v Minister Administering the Water Management Act 2000*: 9th February 2005.
74. Section 51(1) of the Constitution relates to trade and commerce between countries and across states. This power is relevant to water trading and allocation.
75. http://www.deh.gov.au/epbc/about/agreement.html.
76. Ilona Millar, Principle Solicitor, EDO NSW*Impact*(draft article 2005).
77. Decision VII/4, CBD CoP7, Malaysia 2004 - Action 1.2.4.
78. Note that there are a range of options for conservation on private land, such as voluntary conservation agreements.
79. Developed from the COAG Communiqué on Water 1994 - this has resulted in the Inter-Governmental Agreement on a National Water Initiative 2004.
80. Department of Environment and Heritage (2001), *AustraliaState of the Environment 2001: Independent Report to the Commonwealth Minister for the Environment and Heritage*, Canberra.
81. For further detail see Submission by the EDO, The Wilderness Society, and the Queensland Conservation Council 2004.
82. The following information has been provided by the Colong Foundation for Wilderness, NSW, Keith Muir 2005.
83. "National Forests Policy Statement. A New for Australia 's Forests", 2002 Department for Agriculture Forestry and Fisheries: http://www.affa.gov.au.
84. *Ibid*. p50.
85. Lesslie and Maslen 1995.
86. Keith Muir, Colong Foundation for Wilderness, 2005.