Detailed submission in response to the "Towards a Biodiversity Conservation Strategy for Western Australia" discussion paper

Conservation Council of WA

April 2005

In general, the Council strongly supports the idea of a Biodiversity Conservation Strategy ('BCS') for WA. The discussion paper includes some very positive arguments for biodiversity conservation, plus quite a number of sorely needed targets and actions suitable for WA's unique and threatened biodiversity.

However, many targets do not go far enough, or apply over painfully slow timeframes. Importantly, the document does not suggest successful engagement with departments other than CALM, nor effective integration with the current Natural Resource Management ('NRM') process.

Subject to those reservations, time is of the essence for this reform and the related proposal for a Biodiversity Conservation Act ('BC Act')! The Council notes that the Government is able to prioritise key reforms early in the electoral cycle (gay law reform in 2001 and electoral reform now), and we expect the same for biodiversity for the remainder of 2005 and 2006.

KEY POSITIVES AND NEGATIVES

Key aspects of the discussion paper worthy of support include:

1. It's great that one side of major party politics wants to think strategically;

2. The 100-year overall planning timeframe is a step in the direction of genuine, long-term biodiversity conservation;

3. Pages 1 through 6 of the discussion paper make a strong case for biodiversity conservation;

4. Pages 30 through 34 make a strong case for a better emphasis on biodiversity science;

5. The discussion paper includes lots of good actions for the next 25 years, such as:

    - various proposals to improve the scientific understanding of WA's biodiversity;

    - measurable off reserve conservation targets;

- a restated commitment to joint management of the conservation estate with Indigenous people, and a commitment to similar agreements with local, non-Indigenous communities (see further below about the latter aspect);

- a proposed State biodiversity strategy for climate change;

- a plan to have a framework in place for bioregional marine planning by 2006;

- the proposal to have a "[n]etwork of sanctuary zones in marine parks and reserves in place that reflect the full range of biodiversity";

- a goal of having at least 15% of the full range of terrestrial ecosystems in reserves by 2030;

- a plan to have an environmental weed action plan in place by 2006;

- a commitment to finalise and implement the long-awaited Swan Coastal Plain Wetlands Environmental Protection Policy; and

- a commitment to expand BushForever across the Swan Coastal Plain.

Key reservations about / criticisms of the discussion paper include:

1. We've been here a number of times before (National Conservation Strategy 1983; State Conservation Strategy 1987; draft Nature Conservation Strategy 1992);

2. The discussion paper has not been well received by NRM groups. The paper evidences a dismissive attitude toward the groups and their actual or proposed NRM plans (see pages 27 and 37 in particular);

3. The discussion paper proposes a lot of actions that seem to be more like a CALM budget submission than a whole of government environment plan. It must be made much clearer what other agencies will be doing, and how industry and community will be truly engaged;

4. The proposed actions don't have dollar amounts attached to them, which is very concerning given the painfully slow progress of other essentially unfunded State Government initiatives such as the State Sustainability Strategy and the State Greenhouse Strategy;

5. The document is overly technical at times, which will impede community accessibility;

6. The document and proposed actions lack an explicitly logical approach, such as that suggested by Associate Professor Trevor Ward (albeit in the context of marine biodiversity) at the Conservation Council's recent State Conference, where he said that WA needs:

   - a systematic process for capturing new biodiversity knowledge;
   - standards about what we want to achieve with the biodiversity we have;
   - an integrated system for managing biodiversity;
   - continual assessment and reporting of the condition trends of biodiversity;
   - a comprehensive, adequate and representative system of areas in which extractive activities are banned;

7. The document fails to explicitly deal with landscape-scale conservation issues, such as those set out by Dr Simon Judd at the Conservation Council's recent State Conference, such as:

   - broad-scale hydro-ecology and flows;
   - predation, pollination and competition;
   - long-distance biological movement in response to climate change and variability;
   - potential species range expansion;
   - the capacity to tolerate local and regional disturbance;

   Instead of the above, the discussion paper still reflects an overemphasis on threatened species and ecological communities rather than the maintenance of ecological processes. Indeed, it would be valuable for the next version of this document to have a flow chart expressing the appropriate hierarchy for conservation, from landscape to catchment scale in the case of terrestrial conservation and from ecosystem scale to specific tools (e.g. sanctuary zones) in the case of marine conservation;

8. The proposed actions for the next 25 years are disappointing in a number of ways, for example:

   - the discussion paper is largely based on existing actions;
   - there is no commitment to stop further clearing of native vegetation other than in exceptional circumstances, especially in heavily damaged areas like the Agricultural zone and in the bushland in and around Perth and other cities (Bunbury, Mandurah);

- there is no commitment to raise the measly amount currently spent by the State Government on the environment (approximately 2% of the 2004/2005 budget, which environment groups said recently should be increased to 3% within this term of government);

- there is no commitment to implement an urban growth boundary;

- there is no commitment to introduce legislation to ban mining in National Parks and Nature Reserves;

- many of the actions are proposed for painfully slow timeframes (for example, why not have a representative marine sanctuary zones network by 2010, instead of the 2030 timeframe contemplated?);

- although the discussion paper commits to implementing the National Objectives and Targets for Biodiversity Conservation ('NOTBC') 2001 – 2005 (see page 24), there is no explicit adoption of the important NOTBC target of retaining at least 30% of the pre-European extent of all of WA's vegetation types;

- offsets are accepted as having a role, but the concept of replacing "like with like" is nonsensical in a biodiversity context, especially in the internationally acclaimed south west of WA; and

- there are no actions that explicitly address population growth, over-consumption and some of the other, more controversial, "root causes" of biodiversity loss.

9. The discussion paper uses inappropriately soft language to hide harsh realities ('threat' when it should say 'assault', 'injure' or 'damage'; 'harvest' when it should say 'catch' for fish, 'log' for timber, 'pick' for wildflowers etc). The word 'harvest' should be used only for crops that are planted or livestock that is farmed. The discussion paper should "tell it like it is" and not engage in linguistic propaganda.

GOVERNANCE, AND WHERE TO FROM HERE?

For long-term good governance, and in order to maximise the chance that the BCS is seen as a whole of government and whole of community document, the Council strongly urges that the process be driven by the proposed Biodiversity Commission.

The Conservation Council has long been lobbying for a Biodiversity Commission to oversee the biodiversity impacts of all industries and agencies, including CALM. In many ways this idea is an extension of the Conservation Commission / Marine Parks and Reserves Authority ('MPRA') concept but this new body must be significantly better resourced. Like the Commission and the MPRA, the BC will be an independent, expertise-based, statutory body. In the most recent State election this model has been picked up, in name at least.

The key driver in this reform is that ecological baselines are needed and they must be science-driven. People and economies, whose needs can be met in a number of ways, can then fit around the environmental limitations. For more on our Biodiversity Commission concept, see pages 3 and 4 of our attached BC Act submission from March 2003.

As a matter of urgency, in the transition toward having a Commission, the Government should establish an expertise-based, independent Biodiversity Roundtable, with responsibility for advancing the progress of both the BCS and the BC Act.

DETAILED RESPONSE TO THE DISCUSSION PAPER

> "There are 190 taxa (species, subspecies and varieties) of fauna and 357 taxa of plants known to be threatened with extinction, as well as 66 ecological communities. Over the past 100 years, at least 18 species of fauna, 15 flora species and three ecological communities have been lost." (i)

It should be noted that in some places we can only guess (e.g. flora in drainage lines on Barrow, which were mined for gravel without being properly surveyed).

> "While it has taken over 100 years to reach this current critical point, and it will take the best part of 100 years to fully protect and recover the State's remaining biodiversity…" (i)

It is considered that this prognosis is too pessimistic – see more below.

> "Meeting these challenges will not be easy and will need the cooperation and long-term commitment of all stakeholders." (i)

Agreed, which is why subsequent versions of this document must not overemphasise the role of CALM and / or undervalue the role of NRM groups.

> "This discussion paper… will be followed by the development of a formal draft of a strategy through a structured, participative process involving key stakeholders." (iii)

While we obviously support consultative processes, time is of the essence for this reform.

> "The State contains Australia's only internationally recognised terrestrial biodiversity hotspot, and has one of the world's 18 tropical marine hotspots, as well as eight out of the 15 nationally recognised terrestrial hotspots." (iv)

It should be noted that the marine side of that equation is considerably less well-known…

> "[I]t is estimated that around 400 animal species, including aquatic invertebrates, and 450 plant species are at risk of extinction due to salinity…" (iv)

As mentioned above, it is imperative that clearing in the Agricultural zone is immediately halted.

> "The root causes… can be traced to previous practices and maintaining a lifestyle of an expanding population where economic and social development benefits often outweigh consideration for the State's natural heritage." (iv)

Modern practices are better, but it must be said that the State Government still supports an expanding human footprint and an under-emphasis on the environment as against economics. As noted above, we strongly urge that the next version of this document contain actions that explicitly address population and over-consumption, two of the more controversial "root causes" of biodiversity loss.

> "A primary challenge for decision-makers and conservation managers is striking the balance between tactical responses, such as recovering species near extinction, and more strategic responses focusing on the needs of maintaining whole ecosystems and bringing about a better understanding and appreciation of biodiversity." (1)

Yes – and there are some tricky issues here. If we "gave up" on the Gilbert's Potoroo, how many invertebrate species in Wheatbelt remnants would those resources assist? Should the BCS mandate a ratio for whole-of-landscape environment spending as compared to single species management?

> "However, beyond biodiversity's commodity and non-consumable values is the ethical notion that all living things have a 'right' to exist." (3)

Yes – congratulations on explicitly recognising this in the discussion paper.

> "All the elements of biodiversity collectively contribute equally to the resilience of the ecosystem in which they exist." (3)

We support this statement.

> "In short, it underpins ecosystem health, and therefore human health, and losses in biodiversity will mean less future social and economic opportunities." (3)

We support this statement.

> "instrumental or utilitarian, which relates to something that has a means to another's end…" (4)
>
> and
>
> "Intrinsic values (bio-centric and eco-centric values) also exist."

The Council notes that language such as this may make the document inaccessible to the general community. It should also be noted that none of the underlined phrases are defined in the Glossary.

> "Within 100 years
>
> All WA's biodiversity, including all existing species and ecological communities will be recovered and conserved, along with representative landscapes and ecosystems, and future generations will care for and be able to enjoy the same benefits from biodiversity that Western Australians currently enjoy." (9)

Why all WA's biodiversity? Presumably only indigenous biodiversity is meant (see further below, however).

In any event, this goal is too long term – if we can only aspire to have "recovered and conserved" WA's biodiversity within 100 years, what might we have lost in the mean time?

> "Within 25 years
>
> *Most Western Australians value and better understand biodiversity, and are aware of the social, economic and environmental benefits of biodiversity, and actively support the major requirements for biodiversity conservation.*" (9)

The Council supports this aim.

> "*Responsibility for biodiversity conservation is shared, and there is widespread stewardship for biodiversity.*" (9)

We support this statement, but are wary of the word "stewardship" – a word sometimes used by unrepresentative industry advocates some who oppose the existence of a conservation estate and / or who advance the notion that biodiversity is a public good that landholders should be paid to provide.

> "*Decline in biodiversity is halted and where possible reversed, with biodiversity conservation considerations being an integral part of Government and industry decision-making.*" (9)

We support this statement, subject to our suggested governance changes (Biodiversity Commission) above.

> "The marine waters of WA are divided into 18 of Australia's 60 meso-scale marine bioregions." (11)
>
> and
>
> "a transitional region of biotic overlap…" (11)

and

> "The total number of vascular plants includes 1,115 species of alien flora." (11)

The Council notes that language such as this may make the document inaccessible to the general community. It should also be noted that none of the underlined phrases are defined in the Glossary.

> [Box 4 on page 12]

It is interesting to note all of the 'unknown' items here. Some of the other numbers also look like such gross approximations, they should probably be considered 'unknown' – 80,000 insects and 30,000 crustaceans, for example.

> "The increase in the number of taxa listed generally reflects an enhanced knowledge base of the State's wildlife through taxonomic revision, curation of collections, databasing of information, and field investigation. It is important to recognise that it does not always represent a change in the conservation status of the State's wildlife." (15)

Agreed. It is strongly recommended that subsequent versions of this document use data that can show 'real' biodiversity decline, therefore – tracking the conservation status of well studied taxa over recent decades, for example, and excluding new additions from such analyses.

> "Due to higher ambient water temperatures, coral reefs off the Kimberley and Pilbara coastline are more susceptible to the influence of global warming than the coral reefs south of North West Cape…" (19)

We strongly support this statement and what it implies for those areas – more sanctuary zones! See further below.

> [Principles of conservation:
>
> - Investment;
> - Shared responsibility;
> - Ethics;
> - Biodiversity is best conserved *in situ*;
> - Outcome-focused;
> - Prevention is better than cure;
> - Anticipation;
> - Precautionary;

- Achieving a balance; and

- Gaining understanding.] (21)

We support these principles. Regarding the paragraph under 'Ethics', how are we defining 'indigenous' – to include dingoes? Note that the question of 'balance' is discussed above in response to a quote from page 1 of the discussion paper.

> "The National Strategy for the Conservation of Australia's Biological Diversity was endorsed by the Commonwealth and all State and Territory governments. The preparation of a biodiversity conservation strategy for WA will implement action 7.3.1…" (24)

It must be said that it's a shame WA is unlikely to deliver on action 7.3.1 within 10 years of the national strategy.

> "The proposed targets under the WA biodiversity strategy are consistent with [the National Objectives and Targets for Biodiversity Conservation 2001 – 2005]." (24)

In most respects this is true, but as mentioned above, there is no explicit adoption of the important NOTBC target of retaining at least 30% of the pre-European extent of all of WA's vegetation types. The next version of this document should list all of the NOTBC targets that apply to WA and what is proposed to implement each one.

We note that for such targets as the above the scale of what is meant by 'ecosystem' or "vegetation type" needs to be clarified. Further, WA needs a consistent methodology for native vegetation mapping, and a system for regularly updating that information.

> "A Biodiversity Conservation Act for WA is currently in development to replace the Wildlife Conservation Act…" (24)

We urge that this reform be progressed as fast as possible.

> "It is clear, however, that at a State level there is an absence of a guiding strategy… The proposed biodiversity conservation strategy will fill this gap by complementing existing strategies, while at the same time providing an overarching framework for the conservation of WA's unique biota." (25)

In being dismissive of the NRM process, it is arguable that the BCS contemplated by the discussion paper does not "complement existing strategies."

> "The proposed State biodiversity conservation strategy will provide an overarching framework for the implementation of these documents in respect of their biodiversity conservation components." (25)

How? What about if the priorities are inconsistent? The Council's position is that the BCS should take (legally binding) precedence over all existing strategies and planning

instruments, and that the overall biodiversity perspective be supplied by the proposed Biodiversity Commission. Obviously, such a structure would require the mandate of the proposed BC Act.

> [Diagram on pages 26 and 27 – Regional NRM strategies of "Partial Relevance"]

We are aware that a number of NRM-related people find this derogatory – it's unproductive and inaccurate to consider NRM plans and groups anything other than of core relevance. If the plans they come up with don't make the grade, the State Government should simply oppose their accreditation. In any event, as we understand it, Figure 3 is supposed to show relevance to WA's proposed BCS, not whether the document in question deals only with biodiversity.

We would similarly question why the National Local Government Biodiversity Strategy, the Town Planning and Development Act, the Fish Resources Management Act and the Environmental Protection Act are only considered of partial relevance.

> "WA is in the enviable position of having a relatively wealthy and strong economy, and social institutions. This allows for long-term investment in biodiversity conservation, and opportunities for innovation." (29)

We support this statement.

> "Supporting partnership arrangements, such as joint management of the State's conservation reserve system between the Government and Indigenous people…" (34)

We continue to support joint management in this context, but see our comments below about the potential for greater non-Indigenous involvement.

> "The Fish Resources Management Act 1994 contains provisions that contribute towards achieving ecological (sic) sustainable development principles in fisheries management." (36)

As distinct from marine biodiversity conservation! The BC Act should amend the FRMA to remove Fisheries' supposed responsibility for marine biodiversity, and there should be a single agency responsible for the conservation and management of the marine environment – see further below.

> "While there are measures in place to promote sustainable development, there is a need to expand on the existing processes for fisheries management to ensure that they specifically address, and take into account, the conservation of marine and aquatic biodiversity." (36)

We strongly agree.

> "Pastoral enterprises will need guidance and advice to move towards sustainability and consideration of biodiversity conservation in their planning and practices." (36)

We strongly agree, but we are concerned that the discussion paper makes no mention of tried and tested programs to achieve such guidance, such as EMU plus. Does CALM support that program?

> "The commercial use of biological resources contributes towards the State's economy, for example through the sustainable flora, kangaroo and crocodile industries…" (37)

To this extent this refers to wildflower picking on Crown land, we continue to argue that this is not sustainable – we can supply more information on this issue if requested.

> "Regional community-based natural resource management structures have been developing for some time, but require support to continue evolving and become more accountable and effective. Issues such as group representativeness, technical capacity and recognition of stakeholders need to be addressed." (37)

As above, while there is no doubt the NRM process can be improved, it is something that has heavily involved regional communities and it should be built upon, not dismissed so readily. Monitoring of biodiversity condition, for example, is happening as part of the NRM process, so clearly monitoring as part of the BCS should use a consistent methodology.

> "There is an urgent need for reserve creation in much of the rangeland areas of the State, in order to reach the target of at least 15 per cent of ecosystems under legislative protection." (37)

Note that it is questionable whether national parks and Class A nature reserves have such legislative protection – it is only Labor policy that protects them, and even then not consistently (e.g. the Gorgon on Barrow Island in-principle decision).

> [Wilson Report, Jurien etc] (37)

The conservation sector has been heavily critical of the New Horizons process, and it remains so. See the attached paper on Bioregional Marine Planning ('BMP') for further information on the current problems with marine conservation in WA and our suggested solutions.

> "Threatened taxa and ecological communities are biodiversity assets on the edge of extinction." (42)

No doubt the profile of threatened ecological communities and, consequently, the interest in their protection, will improve when they have the capacity to be listed as threatened under the proposed Biodiversity Conservation Act.

[Proposed WA Terrestrial Biodiversity Science Centre of excellence] (50)

We are concerned that such a significant proposal is mentioned so briefly as to appear inconsequential. The above action is, at present, solely a CALM proposal which will further isolate the WA Herbarium from the broader community rather than bringing it together with BGPA and other players to celebrate scientific investigation of the State's flora. As a proposal which will have major ramifications for decades as to how biodiversity science is practised in Western Australia, this action should be the subject of broad community consultation in itself, rather than be buried as a one liner in a complex document like this.

[Prioritised systematic biological survey] (50)

Subsequent versions of this document should explicitly refer to the relatively less well-known aspects of biodiversity – fungi, invertebrates and lower order plants.

[Key strategic direction 4] (55)

Many of the industries that this strategic direction apply to do not neatly come under the term "extractive industry", so a different descriptor is needed. In any event, another industry with significant impact on the health and viability of the environment is the nursery and garden industry. EWAN is actively requesting legislation to control the sale of weedy plants through this industry as it has shown a persistent inability to self-regulate.

[Ecologically sustainable pastoral land management practices] (56)

We strongly support this action.

[Proclaim the BC Act by 2006] (57)

We urge that this reform be progressed as fast as possible.

"Develop and implement local government biodiversity action plans." (58)

Such plans should instead be called *Local Biodiversity Strategies*, consistently with the Perth Biodiversity Project's Local Government Biodiversity Planning Guidelines.

In any event, while we support the above action, it must be noted that the references to local government in the discussion paper are surprisingly limited. Subsequent versions of this document must make a much greater effort at utilising current thinking on engaging local governments in biodiversity conservation, such as that set out in "Beyond Roads, Rates and Rubbish" by Binning et al (1999).

"Develop and implement a conservation offsets policy and management guidelines for resource development and land use projects." (58)

Offsets should very rarely have a role in the context of biodiversity – their only potentially useful function is in the context of chemical emissions. See further our attached submission in response to the EPA's preliminary position statement no.9.

> "Continue to support interagency fora, such as the Wetlands Coordinating Group, to coordinate natural resource management across agencies." (58)

This suggested action is supported because it helps ensure that all agencies understand their obligations with respect to wetlands.

> "Finalise and implement the Swan Coastal Plain Wetlands Environmental Protection Policy." (58)

This proposed action is strongly supported and overdue, as it represents the 'key plank' in conserving the internationally significant heritage of the wetlands and associated biodiversity of the Swan Coastal Plain.

As such it is imperative that the November 2004 draft of the Swan Coastal Plain Wetlands Environmental Protection Policy (EPP) is gazetted as a matter of urgency. Furthermore, the Government needs to provide adequate resources and budget allocations to achieve full implementation of the EPP. This policy needs to be carefully adopted for the whole of Government, including but not limited to the provision of infrastructure, transport, health and education services.

Given that the emphasis of the draft EPP is to protect 'Conservation Category' wetlands, it is also critical that further measures are adopted in order to protect the 'Multiple Use' and 'Resource Enhancement' categories of coastal plain wetlands.

The vision and goals of a Biodiversity Conservation Strategy cannot be realised without policy of this type being in place and adequately implemented on an ongoing basis.

Wetlands and rivers in other parts of the State are not well covered by the discussion paper, so we also suggest the following actions (see page 9 of the attached CCWA / TWS "Environmental Challenge" document for more information):

- a meaningful State Wetlands Policy needs to be developed urgently, that provides a sound framework for best-practice conservation and management of wetlands;

- the draft policy on Wetland Buffers needs to be finalised and implemented, based on sound scientific principles;

- ESD indicators are needed for the assessment of all land use activities which may affect wetlands – so that healthy wetlands are an indicator of sustainable land use;

- the Government should immediately adopt a "no net wetland loss" policy for WA to ensure that all of our remaining conservation category wetlands are retained, and if any losses occur for essential public works then offsets are provided in the form of artificial wetlands or restored wetlands;

- wild and scenic rivers need legislative recognition, and management plans, in partnership with Indigenous peoples; and

- the State's groundwater supplies need legislative protection.

"Comprehensive biological survey of the State is completed." (60)

This 25 year target clashes with the 25 year output target under key strategic direction 1, '70% coverage of systematic biological survey of the State'. There is a need for consistency of targets.

> "Network of sanctuary zones in marine parks and reserves in place that reflect the full range in biodiversity. [within 25 years]" (60)

As set out above, we strongly support this as a goal, but it is a goal that is highly unlikely to ever be attained with current governance arrangements and marine park policy. We would further urge that the Government aspire to achieve it in a shorter timeframe!

> "Establish marine parks and reserves in the Montebello/Barrow islands, Dampier Archipelago, Leeuwin-Naturaliste/Geographe Bay and Walpole-Nornalup Inlets." (60)

While the Montebello component of that recently proclaimed reserve is basically acceptable, Barrow Island fares very badly out of the arrangement, with only a fraction of the island's habitat types in sanctuary zones. The Indicative Management Plan ('IMP') for Dampier is grossly inadequate, and the last version of the draft IMP we saw for the Capes area was not much better – in neither case had representative, sizeable sanctuary zones been achieved.

> "Expand BushForever across the Swan Coastal Plain, including the Bunbury-Busselton area." (60)

This proposed action is strongly supported. We would further submit that Bush Forever be extended into the Perth Hills.

It is suggested that:

- the above actions are expedited;

- linkages including but not limited to corridors and stepping stones are identified and where possible protected through the statutory land use planning system;

- greater certainty is provided regarding the role of the key agencies involved in Bush Forever; and

- a true whole-of-government approach is adopted so that all departments and agencie understand and practice their obligations with respect to Bush Forever and can access the technical expertise required to do this.

Given that a sound methodology has been developed during the first phase of Bush Forever, it is expected that the expansion can proceed rapidly. Adequate resources and budget allocations need to be provided for this initiative.

> "Acquire appropriate lands under BushForever across the Perth Metropolitan area." (60)

This proposed action is strongly supported. It is understood that a significant budget has been allocated for its implementation.

It is acknowledged that negotiations for individual land acquisitions may be sensitive matters and that vendors have rights to an appropriate degree of confidentiality in these dealings. However, it is also very important that there is regular and transparent reporting on the progress of acquisition of Bush Forever lands, as well as associated measures such as land tenure being changed to Reserve purpose.

> [Control all introduced animals by 2030] (64)

Is this realistic?

> "Continue the work of the Roadside Conservation Committee to promote and provide guidance for the management of roadside native vegetation." (65)

We strongly support this action.

OTHER MATTERS THAT MUST BE INCLUDED / DEALT WITH / ADDRESSED IN PROPER DETAIL IN A FINAL BCS (in no particular order)

1. GMOs;
2. more photos of urban bushland or other natural areas known to more people than many of the places in the discussion paper;
3. more photos of marine biodiversity;
4. more explanations / science on the connections between biodiversity, ecosystem health and human health;
5. more on the role of Indigenous cultural heritage in biodiversity conservation (note our suggestion for an Indigenous Issues Biodiversity Committee on page 22 of our attached BC Act submission from March 2003);
6. a section on maintaining the genetic resources of Australia's current inventory of introduced species (as per the NZ biodiversity strategy);
7. a clear picture of what the handful of major strategic initiatives are, and how they will be funded and implemented;

8. the concept of "wilderness areas";

9. a suggested new action relating to recovery plans – the production of a publicly available, six monthly report on the status of all current recovery plans; and

10. a suggested new action relating to weeds – the creation of a state wide network of trained "weed spotters" (a successful system operates in Victoria).

ACTIONS ABOUT WHICH MORE DETAIL IS REQUIRED BEFORE THE COUNCIL CAN MEANINGFULLY RESPOND

> "It is intended that the proposed Biodiversity Conservation Act will provide for the accreditation of bioregional plans, prepared by any individual or organisation, for integrated biodiversity conservation works." (36)

When the consultation paper on the proposed BC Act was released, it was unclear quite how bioregional planning "fitted in", and especially how it related to NRM. That is still the case.

Please see page 17 of our attached BC Act submission from March 2003 for our previously expressed views on this issue.

> [Market-based instruments should be considered – subsidies, levies, taxes, capping use, trading, competitive tendering] (47)

Whether or not we would support such an action would depend on the detail of the reform. We do strongly support Bushland Benefits (page 65) however.

> "WA Marine Biodiversity Audit completed." (49)

Is this a new program? If so, what will it cover? If not, why have we never heard of it?

> "Coordinated WA research capability to support marine biodiversity conservation programs established [by 2010]" (49)

The target is a little ambiguous. Is it referring to the need to coordinate marine research activities (if so, then this can occur immediately), or is it referring to increasing access to marine research to support marine biodiversity projects (which can also happen immediately)?

> "Statewide biodiversity monitoring program is developed and commenced in priority areas [by 2010]" (49)

What are the priority areas? These need to be identified. What will be the methodology for the biodiversity monitoring program?

Similar questions could be asked about the final 2010 action on page 49 and action 4 on page 50 as well.

> [primary, secondary and tertiary education materials] (53)

We want a role in developing these materials to ensure they are not full of CALM propaganda!

> [Statewide Biodiversity Stewardship Network] (54)

Whether or not we would support such an action would depend on the detail of the reform. Note our reservations about the word "stewardship" above.

> "Pursue opportunities for cooperative / joint conservation management agreements between public lands managed for biodiversity and Aboriginal and local communities where appropriate." (54)

Does this mean that formal co-management with local conservation groups is contemplated? With formal joint vesting as well? If not, why not? Would joint management with non-Indigenous groups include National Parks and Nature Reserves?

Obviously in all cases we would only support co-management subject to management plans developed with the oversight of the Biodiversity Commission and audited by the same body.

> "Develop and implement appropriate protocols and practices to ensure that industries operating on Crown land and waters (for example apiculture, wildflower and seed harvesting and aquaculture) are consistent with principles of ecologically sustainable development." (56)

Whether or not we would support such an action would depend on the detail of the reform.

> [Bioprospecting] (56)

Whether or not we would support such an action would depend on the detail of the reform.

> [User pays etc] (56)

Whether or not we would support such an action would depend on the detail of the reform.

> [Wildlife for sustle use] (56)

Whether or not we would support such an action would depend on the detail of the reform.

> "Develop and implement a State biodiversity strategy for climate change." (58)

Whether or not we would support such an action would depend on the detail of the reform. In any event, such a strategy must include the actual and potential consequences of climate change on marine biodiversity.

> "Clarify property rights and duty of care in relation to biodiversity." (58)

Whether or not we would support such an action would depend on the detail of the reform.

> "Management protocols and practices for protected areas to ensure adaptive management for biodiversity conservation, social benefits and sustainable use in place" (61)

What does this mean?

> "Extend the *Western Shield* program into rangeland areas and to include other introduced animals such as feral pigs." (63)

Whether or not we would support such an action would depend on the detail of the reform. Where is the science to show the program would not be too risky to native fauna outside the south west?

> [Bioregional fire management plans] (65)

Whether or not we would support such an action would depend on the detail of the reform. We have major concerns about CALM's current approach to fire.

CONSERVATION COUNCIL
OF WESTERN AUSTRALIA INC.

City West Lotteries House
2 Delhi St West Perth WA 6005
Phone: (08) 9420 7266 Fax: (08) 9420 7273
Email: conswa@conservationwa.asn.au

Rod Anderson
Chair
LWBC Task Group on the Management
of Climate Change Impacts on Biodiversity

Dear Rod

Development of a National Biodiversity and Climate Change Action Plan

Thank you for the opportunity to contribute to the development of a National Biodiversity and Climate Change Action Plan (NBCCAP).

The Conservation Council strongly supports the move to develop a NBCCAP and makes the following specific comments.

The Council strongly supports the following statements and conclusions from the consultation paper in particular:

> "a number of international obligations and national State / Territory frameworks have outlined the need to undertake action on addressing the impacts of climate change on biodiversity. In particular the *National Objectives and Targets for Biodiversity Conservation 2001 – 2005* specified developing a National Biodiversity and Climate Change Action Plan." (page ii)
>
> "Biodiversity is arguably the single most important resource on Earth." (page 1)
>
> "For the next century at the very least, we are locked into an inescapable rise in global temperature…" (page 1)
>
> "The *United Nations Framework Convention on Climate Change* (UNFCCC) and the *Convention on Biological Diversity* (CBD) have identified climate change impacts on biodiversity as a significant issue." (page 2)
>
> "In addition to the direct impacts of climate change resulting from altered rainfall and temperature patterns, climate change can influence the intensity and magnitude of existing stresses on biodiversity and ecosystem structure, function and processes." (page 2)

"The many and varied affects of climate change on species and ecosystems may include… increased frequency of extreme events: this may lead to sudden extinctions as species' physiological threshold are exceeded. These events may occur within short time frames." (page 2)

"Key policies for progressing national action on addressing the impacts of climate change on biodiversity are the:

- *National Strategy for the Conservation of Australia's Biological Diversity* (1996): this strategy includes the objective of planning "*to minimise the potential impacts of human-induced climate change on biological diversity"*; and
- *National Greenhouse Strategy* (1998): this strategy has been developed and endorsed by Commonwealth, State and Territory governments." (page 3)

"The impacts of climate change on biodiversity are identified as a high priority for action in a number of key recent biodiversity publications including:

- *Sustaining Our Natural Ecosystems and Biodiversity* (2002), Prime Minister's Science, Engineering and Innovation Council (PMSEIC); and
- *State of the Environment* (2002), State of the Environment Committee." (page 3)

AND ALL SUGGESTED SPECIFIC ACTIONS FOR ALL OF THE SUGGESTED THEMES (although note the additional suggestion below)

Comments on statements and conclusions from the consultation paper:

"initiatives addressing climate change impacts on biodiversity should be integrated with existing natural resource management and planning processes where practicable;" (page ii)

and

"Consider climate change impacts on biodiversity as part of regional and local integrated NRM planning and implementation processes." (page 7)

We very much support the above two statements. It is unfortunate that the NBCCAP will not be ready in time for the regional NRM strategies currently being developed around the country as part of the NHT 2 process. We submit that after the finalization of the NBCCAP, further NHT funding should be contingent upon regional NRM groups revising their regional strategies to incorporate the NBCCAP's recommendations.

"Increasing the level of adoption of adaptation principles and initiatives within [existing biodiversity conservation policies and programs] will significantly improve the capacity of many species and ecosystems for survival. For some species and ecosystems however, more direct action may be required, and for others, there may be little opportunity for maintaining viable wild populations." (page 4)

One of our only criticisms of the consultation paper is the over-reliance on adaptation rather than mitigation / abatement. Obviously there is a need to take action, including the 'direct action' referred to above, to minimize the damage that has and will be caused by human-induced climate change even if global emissions were immediately and significantly reduced. But the greater need has got to be avoiding the potential for future catastrophic biodiversity outcomes that will inevitably come from maintaining or increasing the world's CO2 output into the foreseeable future.

We have made similar criticisms of the Indian Ocean Climate Initiative – see CC Attachment 1.

The Council has been disappointed by the State Government's apparent unwillingness to reduce emissions, and we look for strong Federal leadership in the direction of making those cuts – see CC Attachment 2.

> "**Strategy 1. Incorporate adaptation to climate change as a key component of core business for all natural resource planning and management.**" (page 7)

As above, it is a major concern for the Council that the first strategy proffered by the consultation paper relates to adaptation rather than mitigation / abatement.

> "**Question 4.** What current natural resource planning and management processes could consideration of climate change impact on biodiversity easily fit into?" (page 8)

See the comments about NRM strategies above. It is essential that NRM regional strategies and biodiversity strategies around Australia address climate change.

> "**Question 10.** Is it practical to establish reserves in anticipation of future climates (i.e. in areas that do not currently meet biodiversity conservation objectives)?" (page 10)

We would ask, rhetorically, the logical corollary to the above question – is it practical <u>not</u> to establish reserves on the basis of anticipated future climates? Predicted future climates should guide CAR reserve policy and strategic corridor decisions – see further below.

In addition revegetation strategies must address climate change, both in terms of species and location.

> "**Question 11.** Will market based mechanisms such as taxation incentives be a useful tool for establishing future habitat? (page 10)

We contend that the answer is a resounding 'yes'. The Council's position is that market-based mechanisms should be an important part of the biodiversity conservation 'toolbox'. Unfortunately, few Australian jurisdictions have properly availed themselves of such tools.

It is important to note at this point that central to governments' effective use of financial incentives for biodiversity conservation is the removal of financial disincentives from the same or other levels of government. In WA, the rate relief offered by a particular local government for remnant bush is more than offset by increased State taxes for the same land, on the basis that it is not being 'productively' used.

> "Identify and protect a national system of corridors linking refugia and reserves to assist migration and dispersal." (page 11)

We strongly agree, and want in particular to applaud the work done on this issue as part of the Wilderness Society's WildCountry programme, and by Keith Bradby and others on the Gondwana Link project.

> "**Question 19.** Are the actions presented above the right measures to address climate change impacts on biodiversity? If not, what additional actions would you suggest?

One area not addressed by the consultation paper is the need for all States to have best practice biodiversity law. WA, for example, relies on the extremely out-of-date *Wildlife Conservation Act 1950* as the first line of defence for threatened species.

Fortunately, there is a move to replace and expand that Act into a Biodiversity Conservation Act. The proposed new Act will enhance the ability of the State Government to address climate change by creating the capacity to recognize it as a key threatening process.

The Council strongly supports the following statements and conclusions from Climate change impacts on biodiversity in Australia*, June 2003, in particular:*

> "Climate change is happening – the extensive and critically accepted reports of the Intergovernmental Panel on Climate Change (IPCC) have removed any remaining doubt." (page iii)

> "[Human modification, introduced species and diseases] are likely to be even more damaging to native biodiversity under the influence of changing climates." (page iii)

> "The Biological Diversity Advisory Committee (BDAC) is concerned that investment in ameliorating known threats and repairing current damage will be inadequate if climate change is not taken into consideration in future policies and management actions." (page iii)

> "The eight warmest years measured globally have occurred in the 1990s and 2000s. Last year (2002) was the second warmest on record." (page 1)

> "Current projections predict an increase in global average temperatures of between 1.5C and 6C by the end of the present century…" (page 1)

> "Evidence suggests that with even mild warming (+2C), tropical near-shore communities will change from coral-dominance to algal-dominance… It is possible that plankton productivity could become significantly more variable in near coastal marine systems, and that change could have flow-on effects to system ecology and productivity." (page 2)

> "There is likely to be a decrease in rangeland productivity, an increasing risk of degradation, increasing sensitivity to disturbance, a change in ecosystem function, and alteration to plant and animal community composition." (page 2)

"As well as changes in vegetation composition in temperate forests, it is likely that changes in structure, productivity and foliage quality will have flow-on effects to other components of biodiversity." (page 2)

"The more we incorporate climate information into management tools now, the better we are likely to manage future climate change." (page 3)

"Two key components [of facilitating long-term adaptation] will be:

- appropriate management of both on- and off-reserve areas with high conservation value;
- a system of comprehensive, adequate and representative (CAR) reserves that takes effects of climate change into consideration." (page 3)

"A large number of information gaps were identified…

- analyses of present and future social and economic costs of climate change impacts on biodiversity with or without adaptations;" (pages 4-5)"

Comments on statements and conclusions from Climate change impacts on biodiversity in Australia*, June 2003:*

"[Where existing programs are unable to enhance species' resilience to climate change,] we should assess the possibilities for translocating species, or identify the characteristics of sites that can act as 'refugia' (refuges) from climate change: perhaps specific sites, linked sites across regions, or more intensively managed areas." (page 3)

Translocations are often unsuccessful for a variety of reasons. Of the options listed above, therefore, the Council strongly supports linking sites across regions – see further our comments about corridors above.

Yours sincerely

Rachel Siewert
Co-ordinator

17 October 2003

Submission on the draft Industry Policy Statement

Conservation Council of WA
September 2003

In general the draft IP fails to incorporate the principles of sustainability. This is a serious shortfall and one which needs to be addressed. The comments below expand on this theme and provide additional feedback on the draft.

A Message from the Minister for State Development

The introductory message fails to deliver the leadership required to steer industry in WA in a sustainable direction.

While some of the State's mining and energy projects are "significant on a global scale", some of the State's globally significant environmental assets have been compromised or even permanently lost as a result of those projects – mining in Karijini National Park and the jarrah forests of the South West, plus the flooding of the Ord River spring to mind. To pick a current example, if the Gorgon project is eventually given access to Barrow Island, yet more of those globally significant environmental assets will be threatened with massive or irreversible damage.

The Minister implies in his opening message that exploiting the State's resources in the manner that has become customary in the last 40 years in particular holds the key to, among other things, "lifestyle choice". Yet the only approach to development that truly guarantees lifestyle choice in perpetuity is the notion of development that does not compromise environmental integrity – the concept of sustainability.

It is incredibly disappointing that in the year 2003 a Labor Minister cannot bring himself to use the words 'sustainability' or even 'sustainable development' in the introduction to such an important draft policy. Indeed, Minister Brown's failure to engage with the sustainability agenda seems to be borne out by the rest of the draft Industry Policy (IP), and has since been well illustrated by his comments in the lead up to Cabinet's in-principle decision on the Gorgon project.

If the Minister is serious in his stated commitment to building "a consensus and partnership that will improve the prosperity and quality of life for all West Australians," the final IP must be modelled on the principles of sustainability. It is the only option for the prosperity of our future and of future generations of West Australians.

THE NEED FOR AN INDUSTRY POLICY

The paramount goal which demonstrates the need for an industry policy is not included in this draft. That goal is to ensure the sustainability of Western Australian industry. Another need is to provide a framework for industry to engage with the State's broader sustainability objectives, and this is also lacking.

Industry has a key role to play in moving toward a sustainable society, and no doubt the government approach to help facilitate that move should be a "strategic, whole-of-government" one. There is no question that the absence of a "strategic, whole-of-government approach" is problematic in the context of sustainability policy and we are broadly supportive of the State Sustainability Strategy's attempts to provide such an approach.

It would be reasonable to expect in this context that the draft IP and draft SSS would be strongly interconnected. The draft SSS makes mention of the process of developing an IP (pages 203 and 212). But the draft IP makes just two explicit references to the draft SSS and makes very few references to sustainability in general. Indeed, although the word 'sustainable' is used a number of times, it is more often in quite different ways – "sustainable industry development", "sustainable prosperity" and "sustainable lower electricity prices" being just three examples.

OUR GOALS

Sustainability policy should be all about points 3 and 4, whereas points 1 and 2 (seen by some stakeholders as ends in themselves), are but <u>some</u> of the tools for achieving those goals. It should be further acknowledged that points 1 and 2 sometimes run counter to the achievement of points 3 and 4, and until this tension is properly dealt with it will be very difficult to achieve sustainability.

OUR APPROACH

This section commences with the following sentence:

> *The Gallop Government's approach to industry development is not about picking winners or subsidising business.*

Suffice it to say that the in-principle decision about Barrow Island makes a mockery of the above statement. If you believe the Gorgon JV's figures, that particular in-principle decision amounts to a 'subsidy' of more than $1 billion – how is that not "picking winners"?

In order to promote "better understanding and consensus across the whole community regarding sustainable industry development," this IP, being the key communication on

the future of industrial development, ought to make the issue of sustainability not only highly visible (which it currently isn't) but the central issue.

NEED FOR PARTNERSHIPS

The draft IP describes the involvement of, among others, the community in the development of industry policy as "essential". We agree, but note that there was no attempt by DoIR to contact the Conservation Council regarding the development of this draft at all; we were not even mailed a copy. It is regretful that this essential partnership has not been developed.

A PROFILE OF THE WESTERN AUSTRALIAN ECONOMY

This section is notable for its failure to contextualise the change in WA's economy with the change in WA's natural environment over the same time period.

A related problem is the implication that WA's standard of living has improved in the last forty years, with the only evidence proffered being the economic growth in that time period. Why is it not acknowledged, even in passing, that economic growth is an extremely poor approximation of quality of life? Economic growth can, of course, coincide with decreases in the quality of life (during war, for example) – this proposition is entry level sustainability policy and its omission from the draft IP makes this document largely out-of-step with the draft SSS.

The Council is concerned that the draft IP does not acknowledge the exciting potential that WA has in industries that do not involve the mining, petroleum and primary industries.

Why has their been no integration with reports from the Western Australian Technology and Industry Advisory Council? Reports such as 'Directions for Industry Policy in Western Australia within the Global Knowledge Economy: Sustainable Prosperity through Global Integration' [http://www.wa.gov.au/tiac/directions/direct-01.html#P112_5710] highlight future directions for the WA economy.

Part of the global economy…

This section commences with the following sentence:

> *The high quality of life in Western Australia and its economic success have, in large part, arisen from the success in moving the State's economy into the international arena.*

This proposition would be heavily contested by anti-globalisation academics. Similarly, the idea that economic globalisation will be the key to quality of life in WA in the future is highly debateable. While the draft IP should not be expected to engage with that debate in detail, the widely divergent views in this area should at least be acknowledged.

New export markets are emerging…

It should be noted here that these new opportunities may only be available for a relatively short time. World oil supplies are expected to peak by 2020 at the latest, and the resultant massive increases in oil prices are expected to make the international exporting of many commodities totally uneconomic.

This impending oil shortage has also been inadequately considered in decisions such as the in-principle approval of the Gorgon project – why have these massive resources been primarily earmarked for export markets before the State's own long-term energy needs have been ascertained?

Population growth and demographic changes will develop industries…

This section is notable for the following sentence:

> *This steady population increase will stimulate further investment and development.*

It is extremely disappointing that the massive potential downsides of this population growth on both the environment and human quality of life have not even been noted. The idea that population growth is simply a handy economic driver is old-fashioned and simplistic. It should be noted, however, that even the treatment given to population growth in the SSS sidesteps the fundamental questions.

Looking ahead…

The failure of this section to even mention some of the matters outlined above makes for a grossly deficient draft IP.

CHALLENGES AND OPPORTUNITIES

It is unbelievable that sustainability does not even rate a mention in this section!

Environmental issues

Given the tenor of the draft IP up to this point, it is perhaps not surprising that this section fails to identify environmental issues as a major opportunity for industry. The SSS is considerably more embracing of these opportunities – indeed, that theme is one of the major strengths of the SSS.

Population growth

See the comments above.

OUR INDUSTRY PRIORITIES

Although this summary eventually uses the phrase "sustainability", it is de-emphasised; almost an afterthought. Why was 'sustainability' not recognised here as the new touchstone for Government and the context within which IP is supposed to operate?

Why was 'sustainability' not at least mentioned in point 8? Why has the draft IP out of step with the SSS in referring to "sustainable development" instead?

Competitive and open business environment

Energy costs

We very much support paragraph two of this section – increasing energy efficiency to benefit both industry and the environment is a great example of a move in the direction of sustainability. It should be noted that energy costs in WA are currently among the lowest in the OECD, however.

But we do not necessarily agree with paragraph one. WA should not aspire to low energy costs per se – but to energy that is as cheap as possible while still priced so as to reflect the impact on the environment from that particular energy source. The Gallop Government cannot simply provide energy without regard to the international environmental commitments (including the Kyoto protocol) that their Federal political colleagues have already agreed to.

What Government is going to do:

Why are none of these actions explicitly linked and / or compared with those proposed in the draft SSS? How, in particular, do they relate to the proposed actions on page 203 of the draft SSS?

How is the creation of the Economic Regulation Authority supposed to relate to the sustainability agenda? The move to an ERA has the potential to remove public interest factors from key public utility pricing decisions, or at very least de-prioritise the public interest.

How are the recommendations of the Electricity Reform Task Force supposed to relate to the sustainability agenda? Our position on this issue is outlined in Attachment 1.

How is the continued implementation of National Competition Policy supposed to relate to the sustainability agenda? As with the ERA, institutionalising economic rationalism as the cornerstone of Government is a best a poor approximation of the public interest, and at worst runs counter to sustainability.

Continued development of natural resources and endowments

This section starts thus:

> *The mining and energy industries have been the main drivers of economic growth and prosperity in Western Australia since the 1960s and will continue to provide the foundation of the economy in the foreseeable future.*

How do we know this will be the case? Even if it is true, why is it assumed that this will necessarily be a good thing? Why is it assumed that we have no choice in the matter?

Many different organisations and governments around the world already acknowledge the need for reducing global greenhouse emissions by 60 to 80% in the next few decades in order to stop human-induced climate change. Why then would the State pin its hopes for the "foreseeable future" on such high-emission industries? What timeframe is contemplated when the phrase "foreseeable future" is used?

What Government has done

We have significant concerns with the signing of the $25B North-West Shelf LNG contract with China – this major resource has been sold for a relatively low price before WA's long-term energy needs have been ascertained.

We are also very disappointed with the massive public subsidies given to developments that put at risk the Burrup Peninsula's internationally significant indigenous rock art. The Maitland Industrial Estate could well have been promoted as the location for these and other projects in the region, including the processing plant for the Gorgon gas field.

More strategic and responsive approach to Government

The purpose of Government is not to 'champion' industry, or at least not industry per se. The purpose of Government in the 21st Century is to champion sustainability, which unquestionably will require more support for industries that reflect where WA should be headed and the removal of support for industries that reflect where WA has been.

We strongly support "diversifying the regional economic base and lessening traditional reliance on primary production", but mainly because of the massive energy usage and other broad-scale environmental damage that has resulted from some primary industries in particular.

We would further argue that it is important for regions to have a diverse energy infrastructure – a network of relatively small scale wind, solar and (genuine) tidal projects – which increase independence and result in massively reduced greenhouse emissions because of the smaller transmission network required.

What Government is going to do:

We strongly agree that direct financial assistance to industry is useful to either remedy "a significant market failure or where the provision of support is consistent with the public interest." Assistance that will drive the move to a sustainable society falls squarely within both categories – sustainability is arguably the highest form of public interest and the examples of when the market fails to encourage sustainability, or indeed encourages unsustainable practices, are manifold.

Supportive infrastructure

The draft IP lists "road, rail and sea transport" as key infrastructure without even mentioning the relative sustainability of each of these options. In our view sustainability in the context of regional transport for industry would see a return to the dominance of rail networks.

This view was also reflected in Freight Network Review in 2002. Consequently, the Minister for Planning and Infrastructure has made a commitment to shift 30% of freight transport to rail to alleviate the serious negative impacts of road freight, both in the metropolitan area and in the regions. The draft IP ought to acknowledge this shift and outline the advantages for industry of an efficient rail network in preference to road networks.

What Government is going to do:

The central focus of the State Infrastructure Study should be sustainability – not simply "whether the mix of infrastructure throughout the State is complete, competitive and timely". State expenditure on infrastructure should be prioritised according to the sustainability of the industries concerned. Where choices exist for the provision of that infrastructure, the most sustainable options should be chosen.

Export capacity and investment promotion

See our comments above about export markets.

Innovation and Enterprise

There is no question that innovation and enterprise will play a major role in WA's future – but not simply as "key drivers of economic growth and industry development". The environmental problems that WA faces are massive, and will only be addressed with new and innovative approaches to meeting human needs.

Government will have an important role in the move to a sustainable society, working with the community to provide the vision for the State – one might call this policy

innovation. Private enterprise will then be a key engine for change – using commercial innovation to make the move to sustainability more 'marketable' and more profitable.

Investment in quality lifestyle

Although we are disappointed that such a point is not central to the draft IP, it is still quite a relief that this section acknowledges:

> *However, industry development is not an end in itself. The drive for industry development must contribute to the ultimate goal of delivering a better quality of life to all Western Australians.*

In the main, this section of the draft IP is supported by the Council.

Indeed, this section should be the essential foundation for the draft IP and ought to appear at the beginning. Quality of life is a key aspect of sustainability and merely including it as an afterthought diminishes the sincerity of the Government's commitment to such a prioritisation.

What Government has done:

Carbon rights legislation

It is claimed that this is ground breaking legislation, when in fact it is very similar to legislation that was introduced into the New South Wales Parliament several years ago.

The issue of carbon rights, and the potential for carbon sequestration should be kept in context.

The Forest Products Commission predicts that by the year 2020, there will be 800,000 hectares of tree crops established on Western Australian farms: http://www.fpc.wa.gov.au/plantations_in_wa.html - history

In WA carbon sequestration capability varies depending on rainfall zone. On average it could be said that in WA carbon can be sequestered at the rate of 4 tonnes per hectare per annum "Forests as CO2 Sinks - an opportunity for Forest Growers" Borough, C, Bourke, M and Bennett, D; Australian Forest Grower, Autumn 1998, Vol 21,(1))

This means that 3.2 million tonnes of carbon could be sequestered each year on WA farms. In view of this low level of carbon sequestration capacity it should be recognised that carbon rights legislation will only play a small role in abating WA's greenhouse gas pollution.

What Government is going to do:

State Greenhouse Strategy

The Council has learnt of Government estimates that show WA's greenhouse gas emissions are projected to grow from 49.3million tonnes of CO2 –e in 1996 to 86million tonnes CO2 –e by 2010. To respect the terms of the Kyoto Protocol Western Australia should limit its greenhouse gas emissions to 45 million tonnes of CO2-e by 2012.

By 2010 each Western Australian will be responsible for the emission of a shocking 40.39 tonnes of CO_2 –e per year. No other region in the world is anticipated to have this level of *per capita* greenhouse gas emission. Western Australian industry must be held accountable for this level of greenhouse gas pollution. Why has the draft IP not discussed how, say, a carbon tax can be incorporated into WA's industry planning?

The WA Government is failing to grasp the likelihood of future international greenhouse gas pollution agreements (beyond the Kyoto Protocol) accounting for greenhouse gas emissions in a more equitable manner. One such model, known as the Brazil proposal, is based on the assumption that emissions in a particular year do not reflect the true contribution of a country to global climate change, which is related to cumulative emissions of greenhouse gases. It is proposed that the historic responsibility of all countries is calculated through the use of a simple equation that relates temperature increase to the accumulation of greenhouse gases in the atmosphere. A global climate change mitigation goal could then be established in terms of temperature increase, and this could then be translated into emission targets for individual countries (see http://www.mct.gov.br/clima). More equitable formulations of international greenhouse gas mitigation strategies are likely to focus on *per capita* emissions.

Australian analysis of the Brazil proposal has been considered by CSIRO in *CSIRO Atmospheric Research Technical Paper no. 41.*

The State Government should make Western Australia meet its proportional target contribution to Australia meeting its Kyoto Protocol targets for greenhouse gas emissions. This should include completing, funding and implementing a State Greenhouse Strategy. The State Government should also urge the Australian Commonwealth Government to ratify the Kyoto Protocol. It is understood that the WA Government may have recently received advice recommending that it is now in WA's economic interest to see the Kyoto Protocol ratified by the Federal Government.

It is our moral obligation to take responsibility for contributing to reducing greenhouse gas emissions, it is also in our self interest to do so. This will be easier to achieve if Western Australia can trade carbon rights within Australia, and if Australia can trade carbon rights with countries, the latter will not be possible unless Australia ratifies the Kyoto Protocol. Kyoto will provide the essential legally binding framework for the trading mechanisms that will be critical to reducing global greenhouse gas emissions.

Development of the WA economy should not be skewed to energy intense industries. Equal policy priority should be given to less greenhouse intense sectors of the WA economy, such as the Services sector.

Attachment 1

The Final Report of the Electricity Reform Task Force – a conservation perspective

In its report 'National Greenhouse Gas Inventory – Analysis of Trends and Greenhouse Indicators 1990 – 2000' the Australian Greenhouse Office has shown that stationary electricity generation accounts for 68.7% of our carbon dioxide emissions and 49.3% of our carbon dioxide equivalent emissions. Most disturbingly, Australians on a *per capita* basis are the world's highest greenhouse gas emitters. Given our present emissions levels we have a responsibility to proceed very carefully when we are considering restructuring our electricity generation, distribution and marketing networks. Decisions on these matters will have a direct impact on the speed with which we move away from fossil fuel based electricity generation.

Renewables

The ERTF report offers some hope to renewables as it contains a recommendation to place a requirement on retailers (or large users) licensed in WA to source a certain portion of their electricity requirements from WA based renewable energy sources.

While the Council supports this recommendation, we feel that it is not sufficient to achieve the required scale of greenhouse gas emission reductions.

It must never be forgotten that Australia has an abundance of natural and renewable resources. It is outrageous that renewables account for less than 1% of our energy supply at the moment.

Even with small industry assistance, renewables, such as wind technology, are quickly gaining ground on fossil fuels, positioning themselves to be economically and environmentally superior.

In simple economic terms, renewables are fast closing in on fossil fuels: a recent Western Power document clearly indicated that Wind is at 7-9 cents per kilowatt compared to 4-7 cents per kilowatt for gas and coal.

Demand management initiatives

It is pleasing to see the ERTF report contains a recommendation that a greenhouse reduction requirement be placed on electricity retailers licensed in WA.

It is also pleasing to see recommendations that will require the proposed Economic Regulation Authority evaluate demand management options before approving capital expenditure by Network Service Providers.

The Council's Cool Communities project works on demand management options at a household level. Cool Communities projects are also receiving SEDO assistance. In a short time Cool Communities has revealed a strong enthusiasm amongst householders for energy consumption reduction initiatives.

ERTF Shortcomings

The report has been based on sound economic modelling and it appears to provide a series of recommendations that will enable market restructuring to occur, in a way that will achieve economic objectives.

But the report is flawed in so far as it assumes social and environmental outcomes can be achieved through market restructuring.

Policy vacuum

Of particular concern to the Council is the ERTF report's apparent failure to link with the forthcoming State Greenhouse Strategy**.** It is also disappointing that the report's recommendations are being made without reference to an overarching State Energy Policy.

In resolving the present policy vacuum annual environmental reporting requirements should be included in the governance of the electricity market. This should include reporting against targets that will need to be outlined in the Greenhouse Strategy.

Example of desalination plant

The urgent need for a State Energy Policy is highlighted by a proposal that is presently going through the environmental approvals process, namely the proposed desalination plant. The plant is being proposed as a response to our water supply crisis, a crisis most likely caused by greenhouse gas emissions. Authorities should require that the very energy intensive process of desalinating water be powered by the existing Western Power Natural Power program, yet no such initiative is presently being put in place. This is an example of the sort of lack of policy coordination that occurs without an overarching State Energy Policy.

Externalities

It has previously been mentioned that the cost gap between renewables and fossil fuels is being closed – and this is without factoring in the externalities! One of the Conservation Council's main concerns with the Task Force Report is that it fails to use economic mechanisms to factor in externalities.

We note that in the recently released State Water Conservation Strategy it was recommended that prices for water and waste water treatment be adjusted to include

externalities associated with water supply and wastewater treatment. Why should the same principles not apply to electricity generation?

Carbon tax

Good economic forecasting suggests that a carbon tax is highly likely. Does it not then make good economic sense to start factoring this in?

Integrated resource planning

Integrated resource planning is a further initiative that needs to be implemented to bring about true electricity reform. Integrated resource planning will lead to WA having energy intensive activities located near to sources of energy. It would also ensure the strategic and diffuse location of electric generation capability – to ensure consistency of energy supply.

Conclusion

The Council is not motivated by lower prices or larger profits for industry. Rather, we can see the potential for genuine environmental benefits in a more competitive market where renewables and demand management have the opportunity to compete fairly with other options for power supply.

The transitional phase of the journey towards a renewable energy future should see WA leading the way with a policy of having 30% of our electricity coming from renewables, 30% coming from gas, 30% coming from coal and the remaining 10% removed through demand management measures.

The Council remains concerned that vertical disaggregation of Western Power may not, of itself, be sufficient to ensure the uptake of energy efficiency measures and demand management.

It is to be hoped that market reforms will open up opportunities for a more sustainable electricity industry. The Council will continue to press for the full implementation of sustainable energy solutions, which will lead to the energy sector meeting the social, environmental and economic requirements essential for a sustainable WA.

CONSERVATION COUNCIL
OF WESTERN AUSTRALIA INC.

28 February 2006

State Infrastructure Strategy
Department of Treasury and Finance
Level 10
Governor Stirling Tower
197 St Georges Terrace
PERTH WA 6000

By email: stateinfrastructurestrategy@dtf.wa.gov.au

Dear Sir or Madam

Proposed State Infrastructure Strategy

The Council makes the following brief submission about the Terms of Reference for the above.

Page 1; Background

The ToR are currently focused on the timeliness and appropriateness of the State Government infrastructure program. We submit that, alternatively, this process should be primarily about advancing the sustainability agenda, as defined by the Government's own State Sustainability Strategy (which, interestingly, none of the documents relating to this SIS process even mention). We attach our submission in response to the draft Industry Policy, which made a similar point.

To the extent that the SIS process contemplates the creation of economic infrastructure designed to benefit industry, the first objective should be to consider whether the industry in question is (relatively) sustainable. In other words, does the industry in question deserve taxpayer funded assistance having regard to both the broader social costs and benefits, and the environmental costs, associated with that industry? Sustainability Assessment and the use of Sustainability Indicators will assist in making such judgments.

In situations where State funds are limited (i.e. always), infrastructure for (relatively) sustainable industries should be State funded in proportion to just how sustainable the industry is. In other words, the Council submits that relatively sustainable industries should receive fully taxpayer subsidized infrastructure in priorities to relatively less sustainable industries, and the latter should then receive either partly taxpayer funded infrastructure or no State assistance at all, having regard to competing priorities and the total capital budget available.

Page 2; Considerations

Item (e) should be reconceptualised; native title and environmental considerations, to pick two examples of "land access" issues, are not 'hurdles'. Such matters are simply part of the broader sustainability equation that the SIS process should be primarily concerned with!

Page 3; Item (g)

Demand management should be preferred where it is a more sustainable option, not simply where it is more cost effective.

The Council strongly supports shared and multiple use of both existing and proposed infrastructure assets. We are greatly concerned by BHP Billiton's continued failure to permit access to its Newman / Port Hedland rail line; the current potential for up to four train lines between those two destinations is simply ludicrous!

Suggested additional considerations

- infrastructure should not be placed in and / or through proposed terrestrial and marine conservation reserves;

- terrestrial conservation reserve requirements should be met, and bioregional marine planning should be conducted, as a matter of priority in key locations where significant new infrastructure is contemplated, to ensure environmental planning advances at the same pace as economic planning for those locations (please note our attached November 2004 submission in response to the Pilbara water quality process, which made a similar point);

- similarly to the above, the State Biodiversity Strategy process should also be advanced so that off-reserve targets can be clarified and prioritized;

- regional site selection for infrastructure should utilize processes like those used by BHP Billiton in connection with the Scarborough LNG field (the proposal is now known as Pilbara LNG). Processes like this will avoid the potential for further industrial developments in key environmental (e.g. Barrow Island) and cultural (e.g. Burrup) locations. Note that the BHP B process compares extremely favourably with the one done by Chevron for their Gorgon proposal, which was subsequently considered by the EPA to have been 'retrofitted' to their decision to target Barrow Island for further pressure;

- coastal infrastructure must be designed with climate change and tsunami risks in mind;

- island infrastructure should be avoided, as islands are often last refuges for native biodiversity, and may yet be utilized as destinations for more translocated populations of native fauna as the mainland becomes increasingly impacted by pests and (inappropriate) fire management (to pick but two examples);

- energy infrastructure must be designed to meet, as a minimum, its share of Australia's Kyoto targets;

- decommissioning and rehabilitation requirements should be fully provided for before the construction of infrastructure, and appropriate bonds should be used to ensure those requirements are ultimately met; and

- in all cases, careful community consultation should be conducted where developments are near sensitive environmental areas e.g. BHP Billiton and Woodside have performed quite well with their Exmouth sub-basin oil and gas development consultations.

Process from here

Given the above deficiencies in the ToR, it is perhaps not surprising that the Reference Group does not include any community conservation groups. Suffice it to say that environmental considerations will continue to be underemphasized throughout this SIS process unless this unbalanced representation is quickly addressed.

* * * * *

If you have any queries about this submission, please contact Cameron Poustie on 9420 7272.

Yours sincerely

Chris Tallentire
DIRECTOR

CONSERVATION COUNCIL OF W.A.

Submission to the Environment, Communications, Information Technology and the Arts References Committee

INVASIVE SPECIES

Introduction

Invasive species have irreparably impacted on Australia's biodiversity and have the potential to be the most difficult biodiversity management issue of the century. Weeds and pests also cost Australia's agricultural sector over $3.3 billion a year.[1]

Not only are existing invasive species causing havoc on our land and in our oceans, but a wave of new invasive species is appearing in Australia as well – Siam Weed, foxes in Tasmania and Asian green mussels to name but a few.

Invasive species are those that occur beyond their accepted normal distribution as a result of human activities, and that threaten other human activities or the environment.

There is a strong cost / benefit rationale for additional investment in eradicating or controlling invasive species. In 2002, the Prime Minister's Science, Engineering and Innovation Council (PMSEIC) identified invasive species as one of four areas in which addressing the decline of Australia's natural systems and biodiversity provided the greatest return on investment.

The current framework to deal with the invasive species that cause the most serious environmental impacts is inadequate. The 2001 national State of the Environment (SoE) Report warned that much more work was required to attack 'sleeper weeds' (exotic species that have established but are yet to become a widespread problem). Although this current Senate inquiry is considering issues such as 'early eradication', it focuses specifically on six Weeds of National Significance (WONS) – species that are already widespread on the Australian continent.

The most effective policy response to invasive species is to prevent them from entering Australia or being introduced into States in which they are not native, a policy which should be supported by rapid detection and eradication of any newly introduced or naturalised harmful weed or animal pest.

---

[1] Agriculture and Resource Management Council of Australia and New Zealand, Australian and New Zealand Environment and Conservation Council and Forestry Ministers, 1999, *The National Weeds Strategy: A strategic approach to weed problems of national significance,* revised edition.

The Commonwealth has made laudable efforts to strengthen border controls, but more can and must be done.

The national strategic action now required is to:

- **improve early warning and rapid response processes** to the levels already in place for production pests and disease outbreaks, especially given that in many cases invasive species affect both production and the environment;

- **ensure Natural Heritage Trust II funding is used strategically** by, for example, using the existing network of Natural Resource Management facilitators (eg. Landcare and Greening Australia facilitators) to implement a national community-based (early warning) Weed Alert Network, and strategically focusing efforts on biodiversity hotspot regions and sites of national environmental significance; and

- **provide more funding for the integrated biocontrol of current WONS**.

- **provide funding to enable the WONS program to be expanded**.

- **develop a national list of non-native species.**

- **as a sub-set of the above list, develop a national list of invasive species.**

In this submission the Council outlines the growing problem of invasive species, including the gaps and weaknesses in the current national and State regimes, and supports WWF's four point plan, which is designed to ensure a strong national approach to stemming the flow of weeds and pests invading Australia.

Invasive species – an overview

Invasive species were identified as a major threat in both the 1996 and 2001 national SoE reports. Weeds have been responsible for the extinction of at least four plant species[2], and pest animals such as the cat, fox, rabbit and black rat, have contributed to the demise of many of Australia's now extinct mammal and bird species.

There are an estimated 2,100 species of environmental weeds in Australia[3], with increasing numbers of new weed incursions every year.[4] 'Sleeper weeds' were recognised

[2] Groves, RH and Willis, AJ, 1999, Environmental weeds and loss of native plant biodiversity: some Australian examples, *Australian Journal of Environmental Management* 6: 164-171.
[3] Randall, RP, 2002, Plant Database, WA Department of Agriculture.
[4] Groves, R, 1998, *Recent incursions of weeds to Australia 1971-1995*, Technical Series No.3, CRC for Weed Management Systems.

as a major concern in the 2001 SoE report,[5] although of the 295 plant species and sub-species known to have become naturalised between 1971 and 1995, most of them still have small ranges.[6]

At least 73 introduced vertebrate pests have established wild populations on the mainland, with an additional seven bird pests having established on offshore islands.[7] It is also estimated that 500 species of introduced invertebrate have successfully colonized the country.

More than 250 introduced marine species are estimated to exist in Australia's oceans, with one in six considered an actual or potential pest.[8]

Sources of land and inland water weeds

The majority of environmental weeds (65%) were intentionally introduced into Australia as ornamental species, with only 7% for intentionally introduced for agricultural use, and 2% through seed contamination.[9] The vast majority of the remaining 26% are of unknown origin, meaning they may have been either smuggled, or brought in via 'natural' avenues such as wind or migratory birds.[10]

More detail on these sources follows:

- **Garden escapes**. Many weedy species are still being sold by nurseries. While over 860 species were recently identified as being an invasive risk, the industry only voluntarily withdrew 52 "Garden Thugs" from sale.[11]

- **Introduced pasture species**. Of the 463 exotic grass and legume species introduced into Northern Australia between 1947 and 1985, 13% ended up being listed as weeds, while a mere 4 (less than 1%) were found to be useful without causing weed problems.[12]

---

[5] Williams, J, Read, C, Norton, A, Dovers, S, Burgman, M, Proctor, W and Anderson, H, 2001, *Biodiversity*, Australian State of the Environment Report 2001 (Theme Report), p 106.
[6] Groves – see note 4.
[7] Hart, Q, 2002, Managing Pest Animals in Australia, Science for Decision Makers Series, Bureau of Rural Sciences, pp 2-3.
[8] Joint Standing Committee on Conservation (SCC) / Standing Committee on Fisheries and Aquaculture (SCFA), 1999, Report of the National Taskforce on the Prevention and Management of Marine Pest Incursions, p 16.
[9] Groves – see note 4.
[10] Groves – see note 4.
[11] CRC for Weed Management Systems and the Nursery Industry Association of Australia, 1999, *Garden Plants Under the Spotlight: an Australian strategy for invasive garden plants (draft)*.
[12] Lonsdale, M, 1994, Inviting trouble: Introduced pasture species in northern Australia, *Australian Journal of Ecology*, 19: 345-354.

Sources of land and inland water pest animals

The large majority of exotic pest animal species entered Australia accidentally via international trade and travel. Invertebrates form the majority of such species. The most current vertebrate animal pest problem was the deliberate introduction of foxes into Tasmania some time between 1998 and 2001.

Sources of marine pests

Ballast water released in near shore Australian waters and hull fouling represent the two major sources of introduced marine pests. Most introductions are accidental. In one study, hull fouling accounted for nearly 60% of historical introductions, mariculture about 22%, semi-dry ballast less than 5%, ballast water about 15% and intentional introductions around 1%.[13]

Cost of invasive species

Weeds have major environmental, social and economic costs. The direct financial cost to agriculture alone is estimated at $3.3 billion a year.[14] The cost of weeds to the environment and biodiversity is incalculable.

Pest animals also have significant economic impacts – at least $420 million a year.[15] Attempts to control rabbits alone are estimated to cost at least $90 million a year.[16]

The potential economic impact of introduced marine pests is high – they physically displace, compete with, and consume native marine species, and threaten the tourism, recreation, fisheries, aquaculture and shipping industries.

Weaknesses and gaps in current responses

A number of recent reviews[17,18,19] have been satisfied that the national approach to invasive species is moving in the right direction, and that new measures such as the

---

[13] Hewitt, CL, Campbell, ML, Thresher, RE and Martin, RB (eds), 1999, *Marine Biological Invasions of Port Phillip Bay, Victoria*, Centre for Research on Introduced Marine Pests Technical Report Number 20.
[14] ARMCANZ and ANZECC – see note 1.
[15] Hart, Q, 2002, Managing Pest Animals in Australia, Science for Decision Makers Series, Bureau of Rural Sciences.
[16] Joint Standing Committee on Conservation (SCC) / Standing Committee on Fisheries and Aquaculture (SCFA), 1999, Report of the National Taskforce on the Prevention and Management of Marine Pest Incursions.
[17] ANZECC, 2001, *Review of the National Strategy for the Conservation of Australia's Biological Diversity*, p 52.
[18] Williams, J, Read, C, Norton, A, Dovers, S, Burgman, M, Proctor, W and Anderson, H, 2001, *Biodiversity*, Australian State of the Environment Report 2001 (Theme Report), p 3.
[19] Plant Health Australia, 2002, *Proceedings of the National Weeds Workshop*.

strengthening of border controls are laudable. Those reviews have gone on to say that funding for environmental weeds and pests is inadequate, however, and that much more nationally coordinated action is required for 'sleeper' and newly emerging invasive species.

The above reviews highlighted that the major problem with the current national response is how weeds and pests that get through border controls, but which are yet to become widespread, are dealt with. The Commonwealth / State document, *National Objectives and Targets for Biodiversity Conservation 2001-2005*, for example, makes no national commitment with respect to early warning and rapid response systems for introduced weeds and pests.

Similarly, the National Weeds Strategy has focused most of it efforts and resources to date on WONS, six of which are the emphasis of this inquiry, and is only now beginning to address the important 'sleeper' and emerging weeds.

Underlying these needs are effective information systems and national statutory controls. Such national statutory controls should:

- provide consistency across the country;
- enable the rapid implementation of measures to control the spread of invasive species; and
- underpin the *National System for the Prevention and Management of Introduced Marine Pests* and other national systems.

It should be noted that although environmental weeds are not, as such, regulated in WA, the State Government has undertaken to address them with the proposed Biodiversity Conservation Act: http://www.naturebase.net/biocon_act_consultation.html. The relevant section of the consultation paper on the proposed Act reads as follows:

> "Special controls for biological threats
>
> It is proposed that environmental weeds and pests will be dealt with directly by the Act, rather than being dealt with under the regulations relating to threatening processes.
>
> The Act will empower the Minister to determine that a biological entity is, or is likely to become, a threat to biodiversity conservation or a biodiversity component.
>
> Certain acts, such as bringing the entity into the State or transporting it within the State, will then be prohibited unless they are authorised under licence.
>
> In addition, the Minister may make orders for the eradication, reduction or containment of environmental weeds and pests. In doing so, the Minister must have regard to whether resources are available for that task, and whether it is practicable to eradicate, reduce or contain the species.

> The new Act will also impose an obligation on the Chief Executive Officer of DCLM to reduce, contain or eradicate environmental weeds or pests on land the Department manages, subject to the practicability of doing so and the availability of resources.
>
> It is acknowledged that environmental weeds and pests are already dealt with to a limited extent by existing laws. It is proposed that the new Act will not impose further controls in areas that are already adequately regulated."

It is expected that the proposed Biodiversity Conservation Act will be introduced by the end of 2004. It is hoped that the above powers will then be used to regulate nurseries in particular, and deal with the fact that the majority of plants sold in WA are freighted in from the eastern states. If current nursery plants that are actual or potential environmental weeds in WA cannot be banned under the above Act, the Council will at least be insisting that such plants be labelled so that customers get the appropriate warnings about their 'weed potential'. We note that Queensland recently banned a number of species from sale in nurseries, including *lantana camara*, one of the 20 WONS.

A further hope for the above Act is the prospect of either banning or properly labelling bulbs such as Chincherinchee – toxic plants which are currently being used for school fundraisers and which are still being promoted in publications such as *Gardening Australia* (March 2003, for example).

Finally, it will be important for the above Act to, as far as practicable, regulate weeds in a manner that is consistent with any national regulatory frameworks.

The *Environment Protection and Biodiversity Conservation Amendment (Invasive Species) Bill 2002*

The Council strongly supports the measures proposed by the Australian Democrats in the above Bill. In particular, we support:

- the requirement for risk assessment before granting import permits;
- the strict banning of further imports of pasture grasses, ornamental plants and aquarium fish; and
- the creation of an Invasive Species Advisory Committee.

Summary of Four Point Plan

The following is an extract from WWF's "Weeds and Pests: eradicating the invasive threat" (January 2003).

"1. **Develop a *National Invasive Species Information System*** to provide an integrated and comprehensive on-line one-stop-shop information resource to support early warning, rapid response and control efforts, and support implementation of the

NRM framework (which include 'ecologically significant invasive species' as a minimum target for regional plans). An important part of the Information System should be a national list of all introduced non-native species classified into broad-based threat and management response categories.

[Commonwealth, in consultation with State and Territory governments]

2. **Develop invasive species regulations provided for under the *Environment Protection and Biodiversity Conservation Act*** to ensure a consistent approach is taken across Australia, measures are developed to limit the geographic spread of invasive species, and a national statutory foundation is provided for the *National System for the Prevention and Management of Introduced Marine Pests* and other proposed national systems. Marine pests should be a priority.

[Commonwealth, in consultation with State and Territory governments]

3. **Fully fund and implement the *National System for the Prevention and Management of Introduced Marine Pests*** now being developed jointly by the Commonwealth, States and the Northern Territory. The National System puts early warning and rapid response systems in place and defines clear roles and responsibilities for the Commonwealth, States and the Northern Territory. Together this ensures that new introduced marine pests will be quickly found and destroyed.

[Commonwealth, State and the Northern Territory governments]

4. **As a matter of urgency, develop a *National System for the Prevention and Management of Introduced Land and Inland Water Weeds*.** Key elements of the System should include a Weed Alert Network (coordinated nationally and implemented regionally through the NRM and other regional planning frameworks), and a national action plan to locate and eradicate priority new and emerging weeds. The action plan should aim to eradicate at least 50 high priority weeds, and provide for nationally coordinated State/Territory pest plant distribution prevention strategies and rapid response action plans.

[Commonwealth, State and Territory governments]"

It is acknowledged that some progress has been made on point 3 since the above list was made, but we still await the full implementation and appropriate funding of the system.

Conclusion

The best response to invasive species is to prevent them from entering the country, but such an approach must be combined with rapid detection and elimination of priority emerging weeds or animal pests. Tomorrow's weeds and animal pests are already here!

SUBMISSION TO THE EPA REVIEW OF CALM'S FIRE POLICIES AND PRACTICES

August 2004

Background Information

One of the challenges the EPA review faces is that individuals and groups often have very different and sometimes opposing opinions about certain aspects of fire management. This is exacerbated by the emotional side of the "debate". Unfortunately, this emotional "debate" is, in our view, inhibiting the development of well-informed solutions for sustainable wildfire risk management that integrate community safety and biodiversity conservation.

In our view, the underlying issues in relation to sustainable wildfire risk management are the systems and structures which provide for accountability, meaningful and measurable key performance indicators and audits, as well as continuous learning and staff development. Unfortunately, in lieu of such a system, the State Government still uses simplistic burn targets which have more to do with resource protection for native forest logging than with biodiversity conservation.

The substance of the following submission is heavily based on the work of Klaus Braun, risk management consultant. After our comments about the EPA's 20 Burning Questions, we also include some key recommendations from various eminent scientists who, like Klaus, spoke at our recent public workshop on fire management.

EPA – 20 Burning Questions

The EPA Discussion Paper lists "20 Burning Questions" (pp5-8) which the EPA suggests should be considered in preparing a submission. These questions reflect, according to the EPA, the "fire-related issues for consideration". We have significant concerns about many of these questions, as they may pre-empt open discussion on fire management and hinder the development of well-informed, contemporary solutions. Some questions appear to be centred on outdated fire management practices, while making assumptions which are incorrect.

QUESTION (i)

– The question implies that a decision must be made between the protection of human life and the protection of biodiversity – one versus the other. A much better approach would have been to ask whether every effort should be made to develop a fire management approach which provides for life and property protection and biodiversity conservation.

– There is a danger that the question implies that, because the protection of human life is the top priority, existing fire management practices and prescribed burning must continue, at least at the existing levels (extent and practices), as it is the "only accepted form of wildfire risk management". This assumption is incorrect and outdated.

QUESTION (ii)

– As above, this question appears to imply that a decision must be made in favour of either the protection of private property or public assets such as, for example, national parks – one versus the other. Again, a much better approach would have been to ask whether a fire management approach should provide for the protection of life and property and biodiversity conservation.

– An alternative question, which would better reflect the comment from the EPA associated with this question, would be whether, to a large extent, wildfire risk management strategies for private assets should be undertaken on private property, to minimise the need for the current damaging fire management programs on CALM managed lands.

– The question and comment prepared by the EPA appears to refer to frequent or regular pre-emptive burning on CALM managed lands in order to protect private assets. This assumes a direct link between hazard reduction burning and the reduction in wildfire risk. However, prescribed burning is a management tool and on its own does not significantly reduce wildfire risk (see further below), especially in relation to community safety on severe fire danger days, when most losses occur. Alternative risk management strategies are much more effective in reducing wildfire risk.

Note: We challenge the use of the term 'hazard reduction' burning because burning may not reduce the hazard and may in fact increase it. Further, deliberate burning is in itself a hazard, as demonstrated by the number of burns that escape and threaten and destroy communities and biodiversity. We prefer the term 'pre-emptive' burning.

QUESTION (iii)

– This question again implies that a decision must be made to protect either one or the other. It does not provide for an approach which achieves both. Furthermore, it appears to imply that pre-emptive burning is the only or main wildfire management tool to protect property. In the context of these questions it is important to differentiate between decision making during a wildfire, where resources would have to be deployed to protect houses in preference to biodiversity, and wildfire risk management planning, where strategies other than pre-emptive burning should be applied to provide adequate protection to property (i.e. houses), reducing the need to burn native bush at frequencies that may have an adverse impact on biodiversity.

QUESTION (iv)

– In many cases the risks of letting fires burn in the CALM Swan, South West and Warren Regions during summer would be unacceptable. Fires may start under moderate fire weather conditions, when they can readily be extinguished, but may develop into major conflagrations when fire weather conditions become more severe. This can occur even in those areas where flammable vegetation is regularly reduced by prescribed burning or wildfires. Once a fire reaches a certain intensity and size it is not possible to contain or extinguish it. Such fires may have significant adverse impacts on community and fire fighter safety as well as on biodiversity. As such it would generally not be advisable to let fires burn freely, although this option should not be excluded where conditions and objectives allow it.

Under certain conditions it is possible to let fires burn freely. Some of CALM's own pre-emptive burns, for example, are active over summer. These are, generally, surrounded by areas which have been burned and which should contain fire runs that may develop from the active fire. Many fires in remote areas, outside the current EPA review, are also left to burn. These fires are monitored by satellite and/or aircraft and action is only taken when they impact on private property values. Access to these fires may not always be possible or practical.

– The EPA suggests in its comments "that bushfires, as opposed to prescribed burns should be allowed to reduce fuel loads". This may imply that, in cases where fires are actively fought, prescribed burning should be undertaken to reduce fuel loads that would have been reduced if the wildfires had been allowed to burn freely.

This is a critical issue in the "debate" about fire management, but it is not specifically highlighted in the EPA questions. It is a key underlying issue for how we manage fire – in accordance with fire regimes which are believed to have been in place some 200 years ago, or in accordance with objectives which capture contemporary community safety and biodiversity values and objectives in today's drastically modified landscape.

– The question does not specifically mention the issue of back-burning as a fire fighting strategy. A reply to this question may, for example, suggest that fires should be "put out" as the risks of letting fires burn freely during summer are unacceptable.

"Putting a fire out" may be interpreted as extinguishing the perimeter of the fire (i.e. keeping the fire area to the smallest size possible, where terrain, fire behaviour and resources permit). This would involve the construction of fire access tracks or fire breaks, where fires burn some distance from existing access tracks or roads. However, putting a fire out may also mean that a back burn is lit from existing access tracks, significantly increasing the size of the area burned.

We acknowledge that in some cases back-burning is the only practical solution to contain a fire. Back-burning with the wind may also be appropriate in some cases (eg heath).

The key issue is that the team in charge of a fire applies the strategies that are appropriate to manage the wildfire, while meeting community and fire fighter safety as well as biodiversity objectives wherever possible. A review and audit is required to ascertain that fire managers meet these objectives. Learning programs and training would most likely be required to assist fire management teams with developing a better understanding of community safety and biodiversity conservation aspects of fire management.

QUESTION (v)

– This question may imply that the objective of prescribed burning is "to achieve a relatively uniform period since last burn/fire". The objective, however, should be to achieve the greatest possible reductions in wildfire risk while also maintaining biodiversity. As discussed above, the blunt tool of a mosaic of fuel ages is not considered sufficient to meet biodiversity conservation objectives.

– "Resourcing to undertake prescribed burns" cannot be solely addressed in relation to this question. This issue should be addressed after wildfire risk management and biodiversity conservation requirements have been determined. It is, however, acknowledged that resources will always be limited and that solutions must be developed within available budgets.

– It should also be noted that this question is very ambiguous. A relatively uniform period since last fire could refer to very frequent fires (eg 4-6 year intervals) or to less frequent fires (eg 50-100 year intervals). However, it is assumed that the question is referring to the frequent interval which CALM currently applies to most areas subject to the review (eg 6-12 year intervals).

QUESTION (vi)

– This question is essentially the reverse of question (v). It is interesting to note that the comment suggests that a "complex and well planned research programme" is required to achieve a positive outcome on biological grounds. This comment may even imply (but we hope it does not) that in the absence of a "complex and well planned research programme" prescribed burning should be undertaken at regular intervals.

– It should be possible to develop a fire management strategy for CALM managed land, based on current knowledge and in the absence of a complex research program, that meets biodiversity conservation objectives, provided there is a paradigm shift from the current approach to fire management to a contemporary one which provides for community safety and biodiversity conservation. An extensive and transparent research program into fire management and biodiversity conservation would be a bonus and will assist with continuous learning and improvement.

– The question uses "compromise" as a possible solution. This term may have a highly negative connotation attached to it and allows for a wide range of outcomes. It is

expected that some compromises will have to be made in land and fire management decisions, as not all objectives can always be met. This does not, however, mean that compromises will have to be made between burning at a regular timetable and a fire regime which meets conservation and community safety objectives.

QUESTION (vii)

It is acknowledged that fire is part of the landscape and that high biodiversity value habitat can potentially be destroyed in a single large fire event, on a scale that prevents re-colonisation from adjoining areas, if a mosaic of vegetation ages is not maintained.

As discussed above, however, the simplistic approach of using a mosaic of fuel ages does not always meet biodiversity objectives either, even if a single large fire event is prevented.

In short, the precautionary approach should, of course, be adopted as a part of good environmental management, but that approach supports neither the proposition that all areas should be prescribed burned nor the proposition that prescribed burning should never be used.

QUESTION (viii)

– This question becomes less important where prescribed burns are conducted to maintain fire regimes which meet biodiversity objectives. By planning to meet these objectives, fire managers will determine which season will be more suitable for any prescribed burns that should be conducted.

– Is there actually any authority for the proposition that autumn burning will increase the likelihood of smoke impacting on urban communities?

– The comment that autumn burning in preference of spring burning is "likely to lead to reduced areas of CALM-managed land being burnt annually" may imply that the current level of burning is desirable and should not be inhibited. This is of concern as the review should look at the fire management that is required rather than using current fire management practices as a benchmark.

QUESTION (ix)

– As discussed above, burn targets do not meet community and fire fighter safety objectives, nor do they meet biodiversity conservation objectives. Burn targets for prescribed burning have no role in contemporary fire management. They also fail to take the area burned in wildfires into consideration.

– Currently an important, or even the most important, performance indicator used by CALM in relation to wildfire risk appears to be the total area that is prescribed-burned in the southwest each year. A burn target of 200,000ha has been set by CALM Fire

Management Services. It is argued that when this target has not been reached wildfire risk in WA is unacceptably high. Furthermore, when this target has not been reached for a number of years it is argued that the annual burn target must be increased. These assumptions are wrong as wildfire risk in Western Australia is not significantly reduced in districts where frequent broad scale pre-emptive burning has been undertaken.

The above assumes a direct relationship between wildfire risk and the total area burned. This is, however, not the case. Hazard reduction burning forms only one part of wildfire risk management. It does not significantly reduce wildfire risk, especially in relation to community safety on severe fire danger days, when most losses occur. Alternative risk management strategies are required to significantly reduce wildfire risk.

The Auditor General of Victoria has identified in his audit on fire prevention and preparedness, that "the relationship between hazard reduction burning and the overall wildfire risk is currently limited". At the same time, agency reporting was based on hazard reduction burning targets which had to be achieved to reduce wildfire risk. To overcome this deficiency, the Auditor General recommended that reporting should incorporate "measures that more accurately reflect the level of risk reduction being sought and achieved".[1]

It is of major concern that Western Australia continues to use burn targets as the key performance indicator in assessing wildfire risk. Fundamental change is required in the way wildfire risk, and in turn CALM's performance, is assessed. A contemporary wildfire risk assessment and management framework must be developed to minimise wildfire risk in Western Australia. In this regard it will also be helpful to consider the findings of the report of the *National Inquiry on Bushfire Mitigation and Management* undertaken by the Council of Australian Governments (COAG, 2004). This report is currently embargoed by the Australian Government, reportedly because three State Governments, including the WA Government, oppose its release. It is hoped that it will be released shortly.

[1] Auditor General Victoria, 2003. Fire prevention and preparedness – May 2003. Government Printer for the State of Victoria.

QUESTION (x)

– It is questionable to what extent mosaic burning that leaves a portion (eg. 10-30%) of a prescribed burn unburned will "enhance the conservation of biodiversity". It may, for example, be found that a certain ecosystem or habitat is burned out as part of the prescribed burn, and that the 10-30% which remain unburned do not provide a suitable refuge area for a particular fauna or flora species. It is therefore possible that the objective of maintaining a mosaic within the burn area has been achieved while at the same time a species or its habitat may have been eliminated from the burn area.

Although it is acknowledged that having a mosaic of burned and unburned areas within a prescribed burn is desirable, on its own it is insufficient to provide for biodiversity conservation. A more appropriate approach would be to undertake prescribed burning

based on clearly defined objectives which will ensure that sustainable areas of ecosystems, communities and habitat remain unburned within a prescribed burn and/or within a general area. Furthermore, the spatial distribution of such areas must allow for recolonisation and re-establishment of a species within the fire regime that is being applied.

Although it is not our preferred approach, one option is to set an area target which must remain unburned for a period. These targets would apply to districts as well as regions. This approach has the same deficiencies as retaining targets for areas which should remain unburned within a prescribed burn, in that it does not achieve specific conservation objectives and may not significantly enhance biodiversity conservation. Nevertheless, it would be a step towards maintaining a wider range of vegetation ages since the last burn or fire. Such a simple system could be easily audited and may provide a first step in the paradigm shift required to improve fire management practices.

QUESTION (xi)

– The answer to this question should, in theory, be straight forward. However, the comments make a number of assumptions which raise considerable concern.

– Where targets to retain areas unburned within a prescribed burn are set as part of fire management objectives, these targets should be "pursued though fire planning and the burn". Where these targets cannot be met, the burn does not meet its objectives and should not be undertaken until environmental conditions are suitable, or until sufficient resources are available.

– There will be occasions where the targets are not met even though every effort was made to achieve the objectives of a burn. It is therefore important that overall fire management planning has provided for alternative areas which can be used to meet these objectives on adjacent land until the area which was accidentally burned has sufficiently recovered. In such a case the overall impact of a burn which did not achieve its target(s) will be minimised. The same issue may also arise when the areas left deliberately unburned are subsequently burned in a wildfire.

It is therefore paramount that fire management practices are comprehensive enough to provide for a wide range of areas which remain unburned for some time to meet specific biodiversity conservation objectives. These areas must have suitable characteristics in relation to habitats and ecosystems, as well as have a spatial distribution which allows for re-colonisation within the applied fire regime.

QUESTION (xii)

– The protection of "harvestable trees" may be one of the objectives of wildfire risk management. Wildfire risk assessment and management should take this objective into consideration, together with community safety and biodiversity objectives.

This objective could be argued to be playing too big a role in fire policy, however, especially in the light of this State Government's considerable reduction in native forest (and particularly old-growth) logging.

In any event, unless good and unbiased information is used in the planning process to ensure that well informed decisions are made, there is a great risk of inappropriate wildfire risk assessments, which in turn result in significant wildfire risks to communities and biodiversity, as well as the timber resource itself.

QUESTION (xiii)

– As with question (xii) above, objectives for these uses must be incorporated into the wildfire risk management process. Again, it is important that good and unbiased information is used to provide for well-informed decision making.

QUESTION (xiv)

– This question does not clearly define the term "areas around townsites", which allows for a wide range of interpretations. Some may imply it refers to the immediate interface between townsites and native vegetation (eg a buffer of 20-100m), while others may imply that this covers a much wider area, possibly many kilometres away (eg 2-30km). Submissions would, therefore, have to be specific to provide a meaningful response to this question.

– The EPA is correct in identifying that frequent pre-emptive burning may not eliminate risk. However, it appears that this comment referred specifically to grass and weed invasion. The EPA did not highlight the fact that alternative wildfire risk management strategies are required to significantly reduce wildfire risk in a community or townsite, especially under severe fire weather conditions. This highlights a serious deficiency in the EPA review.

– Fuel management around townsites and other economic assets forms one part of wildfire risk management. The focus must, however, remain on community based wildfire risk management strategies, as wildfire risk is often still significant in cases where fuel loads around townsites are maintained at low or moderate levels. Pre-emptive burning can be used to supplement community based risk management strategies.

Vegetation should be managed to avoid excessive fuel loads within and adjacent to townsites. This does not necessarily imply that frequent burns are required. Where it is impractical to maintain low fuel loads adjacent to townsites, wildfire risk can be maintained at an acceptable level by further increasing wildfire risk management within the townsite.

– Landscaping and slashing are alternative methods to maintain a narrow buffer of low fuel immediately adjacent to assets. Such buffers will assist in reducing fire intensity adjacent to assets, as well as the likelihood of flame contact with buildings. As with pre-

emptive burning, these methods form part of an overall wildfire risk management approach and can assist in minimising wildfire risk.

– It should be noted that the EPA comment highlights that frequent burns may lead to a long-term reduction in biodiversity values, and that it "promote[s] non-native grasses which thrive on fires". Although this comment was made in relation to the buffer area around townsites, it may be implied that similar issues apply to areas outside these buffers.

QUESTION (xv)

– Emergency management arrangements in Western Australia are contained in a Cabinet Minute and within a number of policy statements. Specific emergency management legislation does currently not exist. However, Policy Statement No 7 outlines the responsibilities of CALM in relation to fire management. The policy designates CALM as the Hazard Management Authority for "rural fires" (i.e. bushfires or wildfires) on CALM managed lands. CALM is therefore responsible for prevention, preparedness, response and recovery in these areas. This is identical to the responsibilities of the other Hazard Management Authorities.

(Please note that "Hazard Management Authority" is used as part of emergency management terminology. The term does not imply that the authority must undertake frequent pre-emptive burning.)

There is an exception in relation to CALM managed land within Gazetted Fire Districts. In these areas the Fire and Rescue Service is the Hazard Management Authority. This generally only applies to urban areas. Additional arrangements are contained in local, district and State management plans as well as Memoranda of Understanding between different agencies. Furthermore, the *Bush Fires Act* provides designated CALM officers with certain powers and responsibilities.

– Although it may be appropriate to review legislative arrangements for fire management on CALM managed land, the primary focus of the EPA review should be to determine the desired outcomes in relation to fire management, biodiversity conservation and community safety. Once these have been determined, a review of current emergency management arrangements and legislation may be undertaken to evaluate whether the current framework achieves the desired outcomes, and whether it meets contemporary legal and accountability requirements.

However, great care must be exercised in this area to ensure that fire legislation does not undermine biodiversity conservation legislation. Solutions should centre on fire specific policy or legislation which is based on a wildfire risk management framework that facilitates biodiversity conservation as well as community safety.

– A review of fire legislation in relation to CALM managed land must not be undertaken in isolation. A review must take into account all Western Australian fire legislation as

well as the current emergency management arrangements and policies. It should be noted that the primary function of CALM is as a conservation and land management department and not a fire authority.

A number of different models are in place in Australia in relation to fire specific legislation and land management agencies. It may be worth noting that in South Australia, for example, all fire fighting personnel and resources of the land management agencies, including those of ForestrySA, are an integrated part of the Country Fire Service rather than part of an independent fire authority.

Introducing an additional fire authority may provide new difficulties rather than resolve any shortcomings, especially along agency boundaries. Interestingly enough, the different fire authorities often draw up a memorandum of understanding in these interface areas to provide the framework for an integrated approach to fire planning and fire suppression.

– It is of great concern that the EPA comment included the suggestion "that the relationship between the Commission and CALM may need to change if CALM's fire responsibilities and obligations are defined in the Act". This could imply that it is not possible to retain the relationship as well as introduce fire specific legislation into the Act. The relationship between CALM and the Commission should be retained under the current legislation, or further strengthened, regardless of whether fire management becomes a specific part of CALM's legislation. Furthermore, the Commission should be adequately resourced to enable it to develop appropriate policies and to undertake independent audits of CALM's fire management practices.

QUESTION (xvi)

– As mentioned under (xv) above, fire management responsibilities, including those for wildfire, are clearly defined in the Emergency Management Arrangements and Policy Statements that are currently in place in Western Australia.

– The EPA comment also refers to fire practices. It can only be assumed that reference is made to pre-emptive burning. 'Hazard reduction' burning is only one of the wildfire risk management strategies, but it may also be used as a land management tool.

The *Bush Fires Act* provides specific legislation to facilitate and control burning in Western Australia. It would therefore be highly inappropriate to specifically legislate in relation to pre-emptive burning in other legislation, such as the CALM Act. The *Bush Fires Act* applies to all land in Western Australia (again, an exception is Gazetted Fire Districts where some of the powers of Fire Control Officers are restricted, especially in relation to fire suppression when a Fire and Rescue officer is in attendance).

– Significant inadequacies currently exist in Western Australia in relation to wildfire risk assessment and management planning. A comprehensive and integrated approach across all land is required to significantly reduce wildfire risk. FESA, CALM and Local

Governments currently do not undertake wildfire risk assessments and wildfire risk planning. Efforts are being made in some areas, but most deal with fire suppression and response, or hazard management rather than risk management.

In this regard specific legislation that requires an integrated approach to wildfire risk assessment and management may be needed in Western Australia. Such legislation is in place in a number of other States. However, current Emergency Management Policy already requires that wildfire risk assessment and management is undertaken in Western Australia. Nevertheless, suitable wildfire risk management plans are not in place. It is therefore questionable whether the introduction of legislation alone will significantly improve the situation. A longer term approach may have to be undertaken which includes training and learning programs in wildfire risk management, and a framework which facilitates the development as well as audit of meaningful wildfire risk assessments and management plans.

It must be noted that CALM's Wildfire Threat Analysis is not a wildfire risk assessment and management tool, and has significant deficiencies. It therefore does not provide an indication of the level of wildfire risk in an area, especially in relation to community safety and property assets, but also in relation to biodiversity conservation. FESA has recently received funding to develop a wildfire risk model, but it needs to be seen whether this new model is risk based.

It should also be noted that the West Australian Government has adopted the Australian Standard for Risk Management (AS/NZS 4360). Neither FESA nor CALM is currently applying this standard to wildfire management. The EPA Discussion Paper and the Consultant Reports also fail to highlight that this standard has not been applied. This is a serious shortcoming of the EPA review.

QUESTION (xvii)

– Wildfire risk management must primarily be undertaken within communities (e.g. townships, subdivisions, private property owners, and observatories for that matter). Hazard management on adjacent CALM land may supplement this. However, it must be realised that severe wildfire behaviour may still occur within native vegetation which has recently been burned or in areas which are subject to frequent pre-emptive burning.

It would be futile to suggest that a regular pre-emptive burning program on land adjacent to a subdivision, whether it is CALM managed or not, will significantly reduce wildfire risk in the subdivision. This is clearly not the case and wildfire risk management for a subdivision must be undertaken within the subdivision.

– Where new subdivisions are proposed it is paramount that developers, as well as relevant government departments which comment on or endorse a subdivision, ensure that the subdivision meets minimum fire safety requirements and that wildfire risk can be maintained at an acceptable level within the subdivision. Where this is not the case a development should not be allowed to proceed.

QUESTION (xviii)

– Smoke pollution and potential health impacts must be a consideration with the other wildfire risk management objectives. However, it is important that good and unbiased information is available to allow for well-informed decision making.

– I am concerned that the EPA comment flags that it would be impossible to achieve this goal without introducing "a no-burn policy in some areas". Again, it appears that we have a situation where a decision must be made between one or the other (i.e. pre-emptive burning or impacting on health through smoke and smog).

As mentioned before, it is possible to develop a practical fire management approach that provides for community safety, which includes health objectives in relation to smoke, as well as biodiversity conservation. A more appropriate question may therefore have been whether fire management should include objectives to minimise adverse health effects from smoke.

QUESTION (xix)

– It is our view that CALM is not very open in relation to fire management. This applies to prescribe burning as well as fire suppression. A major change in this area is required to achieve a more transparent, open and consultative approach, especially with those who appear to hold opposing views to the perceived "CALM view" on fire management. Such an approach will help to break down some of the criticism and many of the barriers that currently exist. At the same time an open and transparent approach will provide for better accountability, which in turn will result in better management practices.

QUESTION (xx)

– Urgent work is required in the areas of wildfire risk assessment and management planning. This includes community safety as well as people behaviour aspects. The Wildfire Threat Analysis currently used by CALM as a "threat model" predominantly focuses on hazard management. Furthermore, this model has severe deficiencies which can result in inappropriate, ineffective and inefficient decision making.

– Work is required to collate and summarise the existing knowledge in fire ecology and wildfire risk management planning. In addition, post-fire impact assessments (wildfire and prescribed burn) must be undertaken to supplement this work. These can be used to develop the foundation for contemporary fire management. It can also be used to develop and prioritise future research requirements.

– Current fuel and fire behaviour models appear to fail under severe fire weather conditions and / or when large fires burn. Furthermore, limited knowledge is available in relation to smoke plume interaction with a fire. Initial research should review, document and collate information from previous severe fire events, from within and outside

Western Australia, to improve knowledge in this area. This will not only assist with wildfire suppression planning, but also with wildfire risk management planing and community safety.

– The above research must, to a large extent, be undertaken independent of CALM, and by a multidisciplinary group of experts in their fields. Alternatively, where the bulk of the work will be undertaken by CALM, an independent multidisciplinary group must oversee this work.

Independence and transparency are required to achieve a new start and to break down many of the barriers that exist as a result of the often biased and emotional debates on fire management which have occurred over many years.

Additional key recommendations from our recent public workshop

Pierre Horwitz – Associate Professor, Consortium for Health and Ecology, Edith Cowan University

Five key recommendations (as one socio-ecological package really)

That fire management take greater account of the relationships between current and future fire behaviour and soil moisture, biodiversity and climate change.
I. Prescribed burns should also seek to avoid loss of soil carbon.

That fire managers look to diversify mechanisms of fire suppression that do not erode or over-ride edaphic controls where they exist, and that are capable of reinstating edaphic controls where they have been over-ridden.
II. Greater scrutiny should be applied to the issue of setting mosaic targets.
III. Urgent research required to test alternative mechanisms.

That organisational and institutional approaches for fire management be redesigned in order to better match the requirement for local knowledge and local response.
IV. Somehow the command and control approach of CALM needs to give ground…

That an ecological understanding of fire, including its use by people, be seen as a societal requirement.
V. Seek cross-sectoral involvement in a quest for the careful reintegration of knowledge of fire into people's lived experiences.

Don Bradshaw – Professor, School of Animal Biology, University of Western Australia

Key recommendations:

1. Serious consideration should be given to abandoning current prescribed burning in favour of managing and limiting the impact of wildfires.

2. Burning on less than 15-20 year cycles seriously depresses populations of species such as the Honey possum and probably also affects nectarivorous birds.

3. The complete absence of burning in some areas is essential for the survival of some threatened species such as the Noisy scrub bird, Gilbert's Potoroo and the Western swamp tortoise.

4. Assumptions that Australian plants are adapted to fire, rather than just being fire tolerant, need to be tested scientifically.

5. Caution needs to be exercised in concluding that burn marks on Balga trees accurately reflect widespread burning practices in the past.

Dr Barbara York Main, School of Animal Biology, University of Western Australia

1. More documentation of invertebrate fauna occurring in fire prone ecosystems, and known responses of particular invertebrates to fire and occurrence of local endemics, is needed prior to imposition of controlled burning programmes.

2. In forest areas, particular attention should be given to the invertebrate fauna at the base of trees when removing litter to protect such trees – rather than removing litter right to butts of trees a fire break zone should be about a metre distance from the butt.

3. Microhabitat occurrences of fire sensitive species (e.g. trapdoor spiders) need to be considered and the safe guarding of such sites undertaken in controlled burning programs.

4. Because different species of invertebrates often respond differently to fire, an assessment of the broader distribution of known vulnerable species within an area planned to be burnt needs to be made in order to understand the possible risks of local extinction impacts on the species if burning proceeds.

5. While recognising the risks of natural fire in remnant bush in the Wheatbelt, controlled burning would appear to be hazardous both (a) in possibly exterminating local endemics and (b) upsetting the hydrology and increasing salinity risks.

Comments on "Fire in the Kimberley and Inland Regions of WA – Issues Paper"

Conservation Council of WA, 2 Delhi Street, West Perth 6005 - 19th December 2005

The Conservation Council welcomes the Issues Paper (the Paper) and appreciates being given the opportunity to comment on it.

It is curious and of concern that the Paper makes no reference to the report to the Council of Australian Governments of the National Inquiry on Bushfire Mitigation and Management (the COAG report), even though the WA State Government, along with all other governments in COAG, supports all of its 29 recommendations.

The recommendations in the COAG report are very relevant to the EPA Review of Fire in the Kimberley and Interior Regions and should be individually addressed. We draw attention to those of particular interest to the Conservation Council.

> **Recommendation 4.1**
>
> The Inquiry recommends that a structured risk-management process based on the Australian Standard for Risk Management be further developed and applied in all aspects of bushfire mitigation and management, informed by a thorough understanding of the full range of assets.

> **Recommendation 6.3**
>
> All states and territories should have a zoning approach to the classification of fuel management areas, with clear objectives for each zone. The process should be applied at the landscape scale, and all land managers and the community should be involved.

Other recommendations relevant to the EPA's review are:

> **Recommendation 3.1**
>
> The Inquiry recommends that state and territory governments and the Australian Government jointly develop and implement national and regionally relevant education programs about bushfire, to be delivered to all Australian children as a basic life skill. These programs should emphasise individual and household preparedness and survival as well as the role of fire in the Australian landscape. Program effectiveness should be audited by each state and territory after five years, with a national report to be provided to the Council of Australian Governments.

There should also be a program targeting adults, especially those who live and work in very fire-prone environments, and include information about the legal obligations, rights and responsibilities in relation to fire of land managers of all tenures, and about the adverse impacts of smoke on human health (see below).

> **Recommendation 5.1**
>
> The Inquiry recommends the provision of additional resources jointly by the Australian Government and the state and territory governments for the following purposes:

 to accelerate the research necessary for the characterisation of fuel loads and dynamics for Australian ecosystems (both natural and exotic), the characterisation of fire behaviour and ecological responses, the development of 'burning guides' from this information, and the compilation of this information and knowledge in nationally accessible databases
 the establishment of a national network of long-term ecological research sites to provide a basis for long-term monitoring of the impacts of fire regimes and fire events.

Recommendation 5.2

The Inquiry recommends that the Australian Government and the state and territory governments jointly provide additional resources and work in partnership to establish and refine a national program of fire regime mapping.

Recommendation 5.4

The Inquiry recommends that the Australian Government, in partnership with the states and territories and relevant research organisations, develop a strategy for sustaining bushfire research and capacity building, in the context of a risk management approach to bushfire mitigation and management.

Recommendation 6.1

The Inquiry endorses the recommendations in the *Natural Disasters in Australia* report relating to disaster mitigation through land use planning and development controls and recommends that the states and territories continue to make their advisory and statutory measures more effective.

Recommendation 6.2

The Inquiry recommends that the review of the Building Code of Australia, with particular reference to the Construction of Buildings in Bushfire Prone Areas Standard—to deal with resistance to natural hazards, including bushfires—be completed by the Australian Building Codes Board as a matter of priority.

We also draw attention to the following important findings:

Finding 6.5

There is a need to develop ways of assessing the effectiveness of fuel-reduction programs in terms of the resultant degree of reduction in risk.

Finding 6.6

Comparing the gross area treated annually in fuel-reduction burning—that is, for a whole agency, region or state—with a published target is not a good basis for assessing performance and is likely to be counterproductive.

Comments on the Issues Paper

Introduction

> ***the season of burning has changed – for example, most Aboriginal burning in the Kimberley occurred through the dry season, whereas today, most fires occur at the end of the dry season***

Where is the evidence for this statement about Aboriginal burning? The Paper concedes on page 2 that:

> Documentation of traditional Aboriginal burning practices, including from the associated historical record, is very poor for the regions in question.

- ***Is it possible to do more preventative burning earlier in the dry season, like old people used to do?***

Are we sure "the old people" burnt earlier in the dry season? Where is the evidence?

- ***Is aerial burning a useful tool?***

How can aerial burning achieve a fine mosaic? It may be possible using helicopters but that is very expensive, especially over large areas. Furthermore, once a fire is lit, whether from a plane or a helicopter, there is no control over where it spreads.

- ***Should we do a lot more ground burning?***

As the COAG report makes clear, it is not the amount but the location of burns that is important.

- ***Should we undertake aerial burning plus a lot of follow-up burning on the ground?***

Surely the objective of this exercise is to reduce the amount of burning. Any suggestion that there should be "a lot" of burning runs counter to this objective.

Page 1

> The Western Australia Minister for the Environment has recently asked the Environmental Protection Authority (EPA) to advise on the environmental impacts of the frequency of fire in the Interior and Northern regions of WA, with an emphasis on the Kimberley Region, in particular with respect to:
>
> - biodiversity conservation and protection; and
> - protection of environmental health (especially air quality impacts),
>
> in the context of the importance of protection of human life, property, assets and infrastructure.

The review must also consider fire extent, seasonality, intensity and patchiness as they all interact with frequency and all impacts on biodiversity conservation and protection

Page 1

> As any experienced land (and fire) manager knows, preventative fire management is really about managing fuels, and the growing risk these pose with time.

Preventative fire management, which would better be called 'wildfire mitigation,' is not "really about managing fuels". Since humans are the main cause of wildfires, it is also about controlling the sources of ignition, whether illegal or legal. Certainly, legal fires (prescribed burning) can be controlled, and there should be a greatly increased effort to control illegal fires through prosecution of those who light them and education about the likely environmental damage and adverse health impacts of fires. Furthermore, there is not a direct correlation between the time since fire and growing risk of fire. Some ecosystems may be less, rather than more, flammable with time since fire.

Page 3

> the development over time of vast mosaics of unburnt and burnt patches of different ages;

The question is how to create these mosaics today.

> ***fire regimes have changed markedly since Aboriginal occupancy, particularly the replacement of fine-grained fire mosaics with more simple mosaics combining extensive wildfires and unburnt patches***

This should surely read "combining extensive burnt and unburnt patches".

Page 4

> The increase in tourism and access to remote areas by the general public as well as the public's lack of awareness of the correct use of fire is impacting on biodiversity and pastoral assets and placing significant demands on local resources for fire management.

There is considerable argument about "the correct use of fire". The public needs to be educated about fire, its role in the natural environment and the damage that frequent fires, with the information provided by independent and reliable scientists.

Page 4

> ***Biodiversity***—Contemporary fire regimes are inflicting severe impacts not only on fire-sensitive vegetation types in the Kimberley (e.g. rainforest patches, sandstone heaths), but also on savanna woodland habitats in general **(Table 1)**. The best documented example is the marked impact of late dry season fires on the relatively fire-sensitive Cypress Pine, *Callitris intratropica*—a species which does not resprout following intense fires, and can only regenerate from seed. A recent extensive survey found 50% of mature *Callitris* individuals were dead and only 6% of stands were in a healthy state with a full range of size classes (Graham 2002). The study showed that there has been a significant reduction in the distribution of *Callitris* as a component of the savanna landscape since the mid-1960s, and predicted that this trend would continue under current regional fire patterns.

There are almost certainly other causes for these declines (pastoralism, feral herbivores, changing climatic conditions). The loss of native herbivores, which reduced the 'fuel load' by eating and burying it, needs to be fully researched. The impacts of these phenomena and their interactions with fire need urgent research.

Pages 4 -5

> However, it stands to reason, and as understood by Pintupi fire managers (see above), that obliterating or simplifying the fine-grain fire-induced mosaic through widespread fire (or, conversely, no fire) will have significant deleterious consequences for the availability of food resources, at least for relatively small, sedentary fauna.

This is merely a statement of opinion. Where is the evidence that no fire "will have significant deleterious consequences for the availability of food resources".

Page 5

> While experimental tests of the 'medium-sized mammals and the fire-mosaic hypothesis' have proven equivocal to date mostly as a result of methodological issues (Short & Turner 1994; Allan & Southgate 2002), an instructive example is provided by a preliminary study of the home range requirements of the Partridge Pigeon (a species undergoing significant range decline, including in the Kimberley) in Kakadu National Park (Fraser *et al*. 2003). The study found that Partridge Pigeons, with dry season home ranges of around 8 ha, were observed to occur mostly in areas of high habitat suitability—where between 40-60% of the home range had been patchily burnt. This provided easy on-ground foraging access, but still left abundant annual *Sorghum* seed sources.

This looks like the Issues Paper choosing the research that suits its hypotheses. No conclusions should be drawn until enough research has been carried out.

Page 5

> ***there is insufficient knowledge of the impacts of fire on biodiversity***

Given this admission, all categorical statements about the impacts of fire (its presence or absence) are open to question.

Page 5

> ***it follows that (a) ecological surveys focusing on the distributions of identified vulnerable taxa need to be undertaken as a matter of priority, especially given the imminent arrival of cane toads (NLWRA 2002; Palmer 2004b), and (b) greater effort is required to understand the fire ecology of tropical savannas and spinifex-dominated habitats in inland regions of WA.***

The calls for urgent surveys and research must be taken up and a recommendation for adequate funding made as a top priority.

Page 6

> ***very significant soil loss (and thereby loss of nutrient- and organic-rich top soil) is associated with late dry season fires, by comparison with no burning or early dry season fires***

Has the soil loss after early dry season fires been compared with that after no burning?

Page 6

> ***more knowledge of the implications of fire on soil structure and water quality in the Kimberley and inland areas of WA is needed***

Here is yet another call for more research. The EPA must recommend that adequate funding be made available.

Page 6

> Carbon dioxide is not an accountable gas since it is assumed that emissions from burning in one season are taken up in new growth following rain.

This assumption should not be made. If old woody material, which has been sequestering carbon over decades or centuries, is burnt, the carbon released will not "be taken up in new growth following rain," but will take many years, decades or centuries to be re-sequestered.

Page 6

> The 2004 Western Australian Greenhouse Strategy indicates that 44.8 % of the Western Australian agricultural sources of greenhouse gas emissions are derived from burning of savannas.

This is an alarming statistic and is one further reason why burning in the Kimberley and interior regions must be brought under control.

Page 6

> Smoke from savanna fires has also been demonstrated to affect human health.

It is important for the community to be educated about the serious impacts on human health of smoke from burning not just savanna but all types of vegetation. These are minimised or ignored by those keen on carrying out more burning for whatever reason.

Page 7

> Pastoral leasehold participation in the program has been declining significantly in recent years. The reasons for this are various (Palmer 2004a). It is recognised however, that, in the contemporary era, ACB provides the only realistic means for implementing strategic fire management over vast areas and often in very rugged terrain. While costs associated with implementing strategic, preventative fire management are often difficult to assess, it is apparent that many pastoral landholders (as well as responsible agencies) expend considerably more resources responding to wildfires….

There needs to be a well-targeted campaign to educate pastoral leaseholders about the harmful impacts of too much burning on their natural resource and their health as well as on biodiversity. They should contribute financially to the cost of wildfire mitigation and management.

If people cannot get into these areas, perhaps it wasn't burnt by humans in the past and should not be burnt by aerial ignition now.

Page 7

> It is apparent that many Kimberley landholders and community members are confused by the respective roles and responsibilities of Local Government and FESA, and, given the extent of late dry season wildfire, presumably are unaware of, or simply ignore, permit requirements (Elderton 2004; Palmer 2004a).

It is clear that education about wildfire mitigation and management needs to include education about the legal obligations, right and responsibilities of land managers of all land tenures. Pastoralists do not have the right to burn native vegetation at will and without the proper permits and approvals.

Page 8

> To assist the effectiveness of ACB operations, and strategic fire management in general, a number of information products are required or need further development, especially:
>
> - enhanced vegetation mapping—currently the best available vegetation mapping for the Kimberley is at 1:1 000 000 scale (Beard 1979), and this does not identify small but very significant biodiversity assets (e.g. rainforest patches)

The lack of mapping at an appropriate scale, which can identify small rainforest patches, is a serious concern that must be addressed as a matter of urgency. These remnants are all biologically different and they are being rapidly degraded and lost through damage by stock followed by fire.

Page 9

> A key issue is how to engage the skills and enthusiasm of younger Indigenous people, especially those on remote communities and pastoral stations, in local and regionally focused fire management.

It seems that traditional knowledge is being overlooked and lost. Today, just because a fire is lit by an Indigenous person does not mean that the burning is good ecological management.

Page 14

> Granivorous birds Changes in habitat conditions, including woody thickening due to lack of burning, and over- or selective grazing of grass resources,

Given the excessive amount of burning of which the Paper complains, it is difficult to envisage any area where lack of burning could be a problem.

Submission in response to the consultation paper on joint management of the conservation estate

Conservation Council of WA

January 2004

Summary

The Conservation Council has been broadly supportive of joint management of the conservation estate since the release of its formal policy on the issue in 1993. Specifically, since that time, the Council has taken the view that "Aboriginal people should have control over developments on those lands and in particular the right of veto over mining and tourism projects" (see the full current policy below).

This position must be understood in the context of one qualification, however. Regardless of legal structure, the relevant land must be managed as if it was a national park or nature reserve. This fundamental principle must constrain the vesting, any management plans, and any decisions made under any management plans.

We are also keen to emphasise that although the creation and operation of Boards of Management (BoMs) will be funded via CALM, joint management is a new and important initiative that should be the subject of 'new money' and which should not reduce the funding allocated to other CALM or environment portfolio activities.

Subject to the above, and the detailed comments below, we support the Government progressing the implementation of joint management.

True joint management

The consultation paper is supposed to address joint management of the conservation estate, but two of the three alternative management arrangements proposed in the paper offer much less than actual joint management. If the CALM Act is amended to provide these three options for Government, it is likely that Government will fairly consistently push for the alternatives that do the least to empower Indigenous groups and access Indigenous knowledge on conservation matters.

We broadly support that the CALM Act be amended to allow for the joint management of Aboriginal freehold lands, but we only support introducing the concepts of consultative management and / or cooperative management into the Act if those options can only be chosen by the relevant Indigenous community, and not the Government. Additionally, we would support the CALM Act being amended to allow for consultative management

and / or cooperative management if those structures were put in place while full joint management was being negotiated, and if the movement to full joint management was subject to a reasonable statutory timeframe.

Powers of Boards of Management

The consultation paper suggests that BoMs should consist of CALM staff and Traditional Owners, with the latter in the majority. That structure is only partially supported – we agree with an Indigenous majority but we strongly submit that the minority membership of the BoMs be non-Indigenous, non-representative, community members with relevant expertise. CALM, as the government department, would simply provide advice to, and implement the management decisions of, the Board of Management (BoM). Any structure where CALM actually had members on the BoM would be inconsistent with current structures for terrestrial and marine reserves (namely with the independent CC and MPRA as the decision-makers, CALM implementing the decisions).

We further recommend that BoMs have Indigenous and non-Indigenous co-chairs.

Subject to the relevant land still being managed as a national park or nature reserve (as the case may be), we submit that BoMs should have the power to:

(1) draft new or amended management plans for the Minister for her or his consideration and 'sign off';

(2) authorise the employment of persons within the relevant park or reserve;

(3) authorise tender documentation and invite tenders for works within those parks or reserves, and grant contracts to the selected tenderer;

(4) authorise works and developments;

(5) authorise fire management programs;

(6) subject to Government policies arising from the proposed Biodiversity Conservation Act and the draft Aboriginal Fishing Strategy, set the conditions for traditional Indigenous access and use (including hunting, fishing, the use of natural resources, cultural activities, spiritual activities and living areas);

(7) set conditions and approve the conduct of matters arising from the State and Federal Aboriginal Heritage Acts, including the documentation of sites and funding for site surveys;

(8) enter into agreements with CALM for the provision of services including staffing; and

(9) delegate any of the above powers and / or engage people to assist with exercising those powers.

It is considered that the purpose of having an Indigenous majority on the Board of Management will be defeated if that body may only make consensus decisions and the Minister is used to resolve disputes. While consideration should be given to a dispute resolution process, we strongly submit that the Board of Management should vote rather than be subject to 'over-ruling' by the Minister.

Management plans

Management plans will need to be binding on CALM, all other land managers (including indigenous land managers) and all users of land subject to joint management. They should be audited by the Conservation Commission (CC) or the Marine Parks and Reserves Authority (MPRA), as the case may be, and be enforceable by either the Minister or the community (via third party access to the courts). Enforcement mechanisms should include both criminal and civil penalties.

Management plans will also need to incorporate key ecological baselines, which would be binding both on Indigenous groups and the Minister. The baselines would be set by the CC or MPRA, as the case may be, and in future will reflect the proposed Biodiversity Conservation Act and State Biodiversity Strategy. Consideration should be given to putting such baselines (or at least the major ones) in documents vesting land tenure with Indigenous groups as well.

The Council's position is that all new and amended management plans should be assessed by the EPA, and we would still seek such assessment for those plans prepared or amended by BoMs. We also support the continued advisory role of the CC or MPRA, as the case may be, in preparing or amending management plans.

Additional matters

- Assuming appropriate state wide standards can be agreed upon, the CALM Act should be amended to allow for a State system of Indigenous Protected Areas. We note that such a commitment has already been made in the State Sustainability Strategy (see page 72).

- The State Government should also take this opportunity to amend the CALM Act to implement their policy of banning mining and exploration in national parks and nature reserves. Indeed, the Government should go further and ban mining and exploration in all IUCN category I to IV protected areas – see 2003 World Parks Congress (WPC) Recommendation 5.28.

- Currently only a very small proportion of the marine environment is protected, and there is a need for a significantly increased network of marine and coastal protected areas, amounting to at least 20-30% of each habitat type (WPC Recommendation 5.22). Marine protected areas are particularly relevant to WA because of its long coastline, and also strongly relevant to Indigenous peoples who have a long history of customary tenure-based management of the marine environment. We recommend that the proposed reforms be broadened to specifically include joint management of marine protected areas.

- Consequential amendments to the *Forest Products Act* will be required.

Conservation Council's Policy 47 – Aboriginal People and the Conservation Estate (adopted March 1993; revised January 2004)

BACKGROUND

For many thousands of years before European occupation the Aboriginal peoples of Australia existed in a carefully managed balance with their natural environment. They depended on it (as we do) for their physical sustenance and, over time, an intricate spiritual relationship with the land developed.

The entire biological landscape of Australia - what we call "natural Australia" - has been shaped by the management practices of Aboriginal peoples.

Since European occupation, Aboriginal people have been systematically, often forcibly, removed from their traditional lands as those lands were demanded for European uses. Prior to 1992, this physical dispossession was effected in two main ways: the doctrine of `terra nullius', i.e. the belief that Australia was legally unoccupied at the time of European possession and therefore that the Crown, not Aboriginals, owned all land; and the fact that when Aboriginal people were granted some title to land it was only a relatively weak title.

In June of 1992 the historic `Mabo' decision of the High Court of Australia rejected the doctrine of terra nullius and acknowledged the continuing existence of a form of Aboriginal title to land known as `native title'. This form of title survived the assertion of British sovereignty. It applies to traditional lands with which Aboriginal people maintained some form of continuous association since colonisation. However, since that decision, the Native Title Act 1995 (Cth) and other High Court decisions mean that native title on the conservation estate in WA is extinguished.

Despite this, in Western Australia there has still been some progress with regard to Aboriginal involvement in existing or proposed national parks and nature reserves (NPNRs), mainly in the desert, Pilbara and Kimberley regions. Some agreement has been reached over the formation of a Park Council, involving Aboriginal custodians, for the Purnululu National Park. In other parts of Australia, there have been attempts to redress some instances of injustice, for example, the granting of freehold title to the Pitjantjatjara people of South

Australia, and to the traditional custodians of the Kakadu and Uluru / Kata Tjuta National Parks.

The Conservation Council believes that traditional Aboriginal owners should be acknowledged as the custodians of land in WA, and that traditional Aboriginal owners should be joint land managers of land in the conservation estate.

The Conservation Council of WA believes that conservation groups should acknowledge traditional Aboriginal custodianship and ownership and complement efforts by Aboriginal people to regain rights to their lands.

POLICY

The Conservation Council of WA supports:

1. The acknowledgment of traditional Aboriginal ownership over land, including on existing and proposed conservation estate;

2. Negotiations should take place over the joint management of existing and proposed reserves in the conservation estate. Where traditional Aboriginal ownership is recognised in the conservation estate, Aboriginal people should have control over developments on those lands and in particular the right of veto over mining and tourism projects;

3. Negotiations should take place with traditional Aboriginal owners to ensure that their land and cultural aspirations are met on all existing and proposed conservation estate;

4. Detailed and ongoing consultation and negotiation between conservation groups and Aboriginal people through the formation of area-specific councils dealing with ecosystem, biodiversity and wilderness maintenance;

5. Continued co-operation between Aboriginal organisations and non-Aboriginal conservation organisations over the protection and management of all areas on the conservation estate.

Traditional Aboriginal owners should be represented on management bodies for the conservation estate.

Aboriginal people should be given an opportunity to re-establish traditional links on the conservation estate.

Traditional Aboriginal owners should be responsible for cultural heritage matters on the conservation estate.

CONSERVATION COUNCIL
OF WESTERN AUSTRALIA INC.

24 February 2006

File No. B029-1

National Reserve System Programme Evaluation
Department of the Environment and Heritage
GPO Box 787
Canberra ACT

Email: ***nrs@deh.gov.au***

Team Leader

NRS Programme Evaluation Project

Thank you for the opportunity to provide some input into the evaluation process. I have attached our comments for consideration.

The very limited time that has been allowed for comment has regrettably limited our capacity to participate, bearing in mind a Senate committee inquiry also relating to the conservation estate (but with a bit more generous timing) overlaps with your own.

We look forward to seeing a draft report coming out of this evaluation process and would welcome a more generous allocation of time to examine and respond to it.

Yours sincerely

Chris Tallentire
DIRECTOR

CITY WEST LOTTERIES HOUSE, 2 DELHI STREET, WEST PERTH, WA 6005 PHONE (08) 9420 7266 FAX (08) 9420 7273
WEBSITE www.conservationwa.asn.au E-MAIL: conswa@conservationwa.asn.au
ABN 35 982 476 107

Evaluation of the National Reserve System Programme

Submission by the

Conservation Council of Western Australia

February 2006

The Department of the Environment and Heritage has sought submissions to assist in the evaluation of the National Reserve System Programme. The aim is to assess:

- *the extent to which the Programme is achieving its objectives;*
- *the appropriateness, effectiveness and efficiency of the Programme; and*
- *the extent to which the Programme links with the delivery of conservation, economic (including tourism), cultural and social benefits.*

The Conservation Council of Western Australia has had little experience with the across the board delivery of NRS Programme products. It is felt that the principal focus of the NRS Programme should be in achieving CAR reserve system goals through additions to the formal conservation estate.

Accordingly, we have confined our comments to the following question raised in the DEH evaluation of the NRS Programme:

Is the NRS Achieving its Objectives in Western Australia?

There are positive outcomes from the NRS Programme in Western Australia, particularly where funds have been made available for land acquisition for the conservation estate. We are mindful, however, that terrestrially Western Australia comprises a third of the country involved in the goal of achieving a national comprehensive, adequate and representative (CAR) conservation reserve system.

While achieving a satisfactory CAR reserve system isn't strictly a numbers game, it has been estimated that something like 15% of Western Australia's area would be required to achieve a satisfactory national CAR goal. This is a figure that the Conservation Council is using for assessing how State and Australian programmes are travelling. In the State, the 17.5 million ha secure conservation estate currently comprises about 7% of its area, with another approx. 5 million ha (a further 2%) of purchased rangelands areas in the process of conversion to secure conservation reserves.

On aggregate, therefore, these figures suggest that the Western Australian CAR goal is only a little more than halfway achieved. There are still significant additions required in order to meet national goals, yet Australian Government funds for land acquisition in Western Australia seem to have dried up since 2000.

While the establishment of conservation reserves is a State Government responsibility, it is also of considerable concern to the Conservation Council and its affiliated groups that the 5 million ha *(2% of the State)* of former pastoral leases purchased in Western Australia's rangelands remain unreserved. Legally, the land sits as insecure unallocated Crown land, largely with minimal management. The acquisitions of this "limbo land"

CITY WEST LOTTERIES HOUSE, 2 DELHI STREET, WEST PERTH, WA 6005 PHONE (08) 9420 7266 FAX (08) 9420 7273
WEBSITE www.conservationwa.asn.au E-MAIL: conswa@conservationwa.asn.au
ABN 35 982 476 107

were mostly made about six years ago, but some perhaps a decade earlier and generally with a significant funding contribution from the Australian Government's NRS Programme.

The Conservation Council holds the view that private protected areas and Indigenous Protected Areas (IPA) perform a valuable but complementary function to the national system of CAR conservation reserves. However, it also is of some concern to the Conservation Council that, through the Department of Environment and Heritage, the Australian Government is statistically treating IPAs as part of Australia's **formal** conservation reserve system, albeit under IUCN protected area category VI , viz *Managed Resource Protected Area*. In fact, due to the low level of their legislative security, IPAs are unlikely to even qualify for IUCN protected area categorization! *This compares unfavourably with the (appropriate) exclusion of RFA production forests from the CAR system, even though such areas arguably qualify as IUCN category VI areas.*

Conclusion

Through conventions and government agreements, it has been accepted at both the international and national levels that the core requirement for underpinning biological diversity conservation in Australia *is a national system of formal conservation reserves*. It has also been accepted that the statistical categorization for uniformly measuring achievement across jurisdictions is to be based on IUCN protected area categories. In Australia, the NRS emphasis has been correctly focused on the primary protected area categories of national parks and nature reserves rather than multiple purpose resource reserves like State forest.

In Western Australia, due to the combination of its size, the extent of its uncleared rangelands regions, and the amount of land in this zone coming under Indigenous controlled tenures, there is a danger:

- in regarding IPAs as a component of the formal conservation reserve system;
- in regarding IPAs as a secure component of the NRS, fulfilling CAR objectives, and
- in further pursuing that process to achieve NRS goals.

The Conservation Council strongly urges that IPAs be treated by the Australian Government for what they are: a very worthwhile component of the informal conservation system that complements but does not contribute to the secure CAR conservation estate. The pursuit of NRS goals needs to focus on establishing formal reserves meeting proper IUCN protected area criteria, especially for nature reserves and national parks.

Western Australia contribution to full achievement of Australia's CAR conservation reserve goals is currently about half way there. The position would be improved if:

1. **the Western Australian Government acted to quickly complete the conversion of the long-outstanding pastoral land acquisitions to formal conservation reserves; and**
2. **the Australian Government re-instituted past funding levels for purchasing key areas to complement National and State priorities for completing CAR reserve requirements.**