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Dear Committee members,

Thank you for the opportunity to submit to the inquiry into Water Management in the Coorong and Lower Lakes – Implications for the long-term sustainable management of the Murray Darling Basin system.

This submission addresses the second set of Terms of Reference on the implications for the long-term sustainable management of the Murray Darling System which were due for inquiry and report by 4th December 2008.

We offer the following summary of our submission:

- The Australian Government needs to develop a more systematic approach to the management and conservation of wetlands in the Murray-Darling Basin and beyond. They should adopt the ACF and IRNs 'National Wetlands Initiative', and systematically identify and create a comprehensive, adequate and representative network of freshwater protected areas in the Basin.
- Water policy needs to properly integrate wetland conservation and ensure that environmental water allocations are committed to specific high conservation value wetlands.
- There should be mandatory indigenous and environment NGO representation on the Murray Darling Basin Authority Board.
- The National Water Initiative framework should be amended to include provision for cultural water to be allocated to Traditional Owners.
- There needs to be much improved natural resource management regimes throughout the Murray-Darling Basin – through strengthening of landclearing laws, much improved compliance, monitoring and enforcement of environmental laws, investment in environmental data collection, and systematic conservation planning.

- Dramatic increases are needed in the scale of the reserve system in the Murray Darling Basin – major investment needs to be made on improving the reserve system, particularly in the context of climate change predictions for the Basin.
- Major improvements need to be made in recognising the important role of complementary management of floodplains and wetlands in delivering water reform – this is particularly the case with River Red Gum State Forests where the creation of new National Parks will contribute significantly to the overall health of the river system.
- There needs to be a major commitment to much improved outcomes for Traditional Owners throughout the Basin, in the form of increased resource ownership and much greater input into decision-making on natural resource management and protected area management.
- Water reform and rescue of the Murray Darling Basin must be complemented by swift and decisive climate change mitigation and by significant investment in climate change adaptation for natural systems. The committee should recommend that greenhouse gas emissions begin to fall in Australia within this term of Government – from 2010 onwards – to begin tackling the problem.
- The recommendations of the Wentworth Group of Scientists with regard to urgently delivering more water for the environment and, if necessary, capping water diversions, must be implemented.

Long-term prospects for the management of Ramsar wetlands

The failure to properly protect Ramsar wetlands from damaging uses or to deliver adequate environmental water allocations is illustrated well by the plight of the NSW Central Murray State Forests Ramsar site.

The NSW Central Murray State Forests Ramsar site is located in south-western NSW, Australia, along the Murray River and its anabranch the Edwards River. It was designated as a Ramsar site in 2003 and covers an area of 84,084 hectares. The site is managed by Forests NSW.

There is strong evidence to indicate that river regulation, over-allocation of water for irrigation, and industrial logging and associated activities, are causing a substantial and severely detrimental alteration in the ecological character of the NSW Central Murray State Forests Ramsar site.

The ecological condition of the region in which the site occurs has been classified as Very Poor by a recent systematic audit, with fish and macroinvertebrate communities both considered to be in very poor condition. The hydrological changes to the site have been substantial, with major changes in the frequency, size and duration of flood events, and much reduced breeding of colonially nesting bird species.

The health of River Red Gum forests has declined markedly, with all recent studies indicating that 70-80% of River Red Gum trees are either stressed or dying. Terrestrial species dependent on the site are also in decline, with iconic threatened species such as the Superb Parrot and Barking Owl still decreasing, and reporting rates reduced for many important woodland bird species.

This decline in the ecological character of the site is continuing despite water reforms such as the Living Murray initiative and other measures that have been put in place by

various Governments. Those measures have been inadequate to arrest the decline, with both the NSW and Victorian governments failing to address over-allocation of water for irrigation or purchase adequate water allocations for environmental use. The Millewa forest is the only section of the Ramsar site that has a dedicated environmental water allocation and has received substantial environmental water to date – the other two sections (Koondrook-Perricoota and Werai) are without allocations. Serious new threats to the health of the site are still being proposed and investigated – such as the Murray-Goulburn Interconnector.

Logging and associated activities, particularly patch-clearfelling and extensive salvage logging of stressed and dying River Red Gum stands within the Ramsar site, is also having a major impact on the ecological health of the site – causing substantial environmental damage and jeopardising future opportunities for recovery.

The primary activities undertaken in the NSW Central Murray State Forests Ramsar site include commercial logging (and associated activities such as roading), commercial firewood harvesting, grazing, domestic firewood collection, apiculture, and dispersive (and largely unregulated) recreation. Appendix 2 provides a copy of an NPA report completed earlier this year which provides a detailed analysis of the impacts of logging and associated activities on the NSW Central Murray Ramsar site.

The impact of logging and associated activities affects a very large area of the site each year. An average of 3,965 hectares of the Ramsar site is approved for logging each year, which equates to 4.8% of the entire site. Therefore, almost 50% of the site will be logged in a 10 year period. Some 1,353 ha of the site is approved for patch-clearfelling each year, which entails total vegetation removal (or gapping). Currently, logging and commercial residue harvesting is occurring, or planned to occur, in a total of 22 forest compartments within the Ramsar site, covering 7,202 hectares. A further 35 forest compartments within the site are also planned for commercial residue harvesting.

Logging is having a significant environmental impact on the Ramsar site. Neither the timber volumes obtained, the area affected, nor the logging practices used, are sustainable. Despite the drastic decline in River Red Gum health over the last decade, there has been no review of the estimated timber yields for more than 20 years, and the total volumes of timber removed from the site have actually increased over that period, rather than decreased. Regeneration after patch-clearfelling is very poor, and although no quantitative assessments have been undertaken, it is apparent that seedling recruitment in patch-clearfell gaps is virtually non-existent. Patch-clearfelling represents a new and very destructive logging practice that was only introduced into River Red Gum forests around the turn of the millennium.

The intensity, magnitude and frequency of logging operations, the extreme sensitivity and high conservation value of the environment in which they occur, the large geographic area affected annually and over time, the high cumulative impact in the context of other sources of impact (climate change, drought, invasive species, previous logging, land-clearing and fragmentation), the low level of confidence with which the impacts are understood, and the context in which they occur of a heavily cleared and highly fragmented landscape with very low levels of reservation, all indicate that the result will be a substantial degradation in the ecological character of the NSW Central Murray State Foersts Ramsar site.

Furthermore, the measures put in place by Forests NSW to avoid or mitigate impacts are inadequate to prevent such impacts, and their effectiveness is uncertain and not scientifically established. Most notably, habitat retention requirements, riparian habitat protection, and threatened species prescriptions are all inferior to those used in other parts of NSW or in River Red Gum habitats in Victoria, and are demonstrably inadequate to prevent irreversible environmental impacts.

River Red Gum logging and associated activities are resulting in the adverse alteration of a number of ecosystem components and processes, as defined by Annex A to Resolution IX.1. Notably, scientific literature and expert advice indicates that FNSW activities are impacting adversely on the following ecosystem components:

- hollow-bearing trees, their future replacements, and species which depend on them particularly threatened and common bat species, and higher order predators such as the Barking Owl and their prey
- volumes of coarse woody debris and species which depend on them including fish and invertebrate species that utilise this habitat during inundation and terrestrial species that utilise debris for shelter and foraging in dry times

River Red Gum logging and associated activities are having a significant impact on the specific matters identified by FNSW as constituting the 'ecological character' of the site. Notably, and as referenced extensively throughout Appendix 2, the activities are having a significant impact on habitat for threatened species, arboreal habitats, refugia habitats, and habitats in high ecological condition. The activities are contributing to invasive species being established and spread throughout the site.

In addition to the impacts of the general logging regime, FNSW are now frequently targeting stressed, dead or dying stands for so-called 'salvage' logging in the form of patch-clearfelling (which they refer to as 'Australian Group Selection'). This involves patches of up to 0.8 hectares being cleared of all vegetation.

In their recent book on the ecological impacts of salvage logging, Lindenmeyer et al (2008) conclude that salvage logging operations "*may reduce or eliminate biological legacies, modify rare post-disturbance habitats, influence populations, alter community composition, impair natural vegetation recovery, facilitate the colonization of invasive species, alter soil properties and nutrient levels, increase erosion, modify hydrological regimes and aquatic ecosystems, and alter patterns of landscape heterogeneity*".

It is apparent that salvage logging is likely to have a substantial, negative impact on the potential for recovery from the current severe decline experienced by River Red Gum. Lindenmeyer et al (2008) identify biological legacies, such as trees with large-cavities, which remain following disturbances as being crucial to patterns of ecosystems recovery and to recovery of specific elements of the biota. They note that salvage logging frequently leads to the accelerated loss of large trees.

In contrast, Victorian and South Australian governments have applied limited quantities of water to stressed and dying River red Gum wetland ecosystems and observed rapid recovery of stressed vegetation (ie Lindsay- Walpolla/Chowilla Floodplain)

Investigation of logging operations in the NSW Central Murray Ramsar site indicates that salvage logging of stressed River Red Gum stands is markedly reducing the biological legacies referred to above. Notably, in other stands subject to salvage logging in Australia, it has been speculated that the loss of large-cavity tress will take at least two hundred years to reverse (Lindenmeyer and Ough 2006, quoted in Lindenmeyer et al 2008).

Other negative impacts from salvage logging that were identified by Lindenmeyer et al (2008), that are likely to apply to salvage logging in River Red Gum include:

- Changes to post-disturbance plant recovery leading to low levels of plant recruitment and altered plant species composition and abundance of species and life-forms
- Magnified and compounded impacts on biodiversity as a result of two successive disturbance events to which species are likely to be poorly adapted
- Reduction in the rates of natural recovery for both ecological processes and individual species

Any potential negative impacts on River Red Gum recruitment from salvage logging is likely to be particularly severe, because successful germination and recruitment is dependent on natural flooding regimes which have already been severely disrupted as a result of river regulation.

Lindenmeyer et al (2008), recognize the very serious fact that "*the risk of cumulative effects arising from salvage logging and natural disturbance include major changes of ecosystem state*". Given the widespread and very severe decline of River Red Gum as a result of water stress, and the very intensive and widespread nature of the salvage logging operations, it must be considered that there is a very substantial risk of changes in ecosystem state to the Ramsar site as a result.

Grazing is also likely to be causing a decline in the ecological character of the Ramsar site. As noted by VEAC (2006) grazing can, "*potentially lead to pugging, selective plant removal, weed invasion, soil compaction, erosion and increased sediment in rivers and streams*" and that "the selective nature of grazing has the potential to significantly change the biodiversity of an area". VEAC refer to other studies which have found that increased grazing, "*reduces the ecological condition of riparian habitat and results in the loss of bird, frog and plant diversity in river red gum habit*ats". Continuous and intensive grazing is expected to cause "*significant loss of habitat value through species selectivity, changes to vegetation structure and impacts on habitat values*". Grazing occurs over large areas of the Ramsar site, and although specific information is not currently available to quantify the magnitude of the impact, the known general impacts of grazing indicate that it is likely to be significant, particularly in the absence of a thorough environmental impact assessment.

Predictions indicate that human induced climate change will have a major negative impact on the health of the site – with substantial reductions in rainfall and streamflow, and subsequent adverse effects on aquatic biodiversity and wetland ecosystems. However, the resilience of the site to negative impacts as a result of this changing climate is being severely impeded by on-going degradation from river regulation and industrial logging.

Therefore, it is apparent that the NSW Central Murray State Forests Ramsar site is already experiencing, and likely to experience further, irreversible changes in

ecological character as a result of the threats posed by river regulation and industrial logging, in the context of human-induced climate change. The manager, Forests NSW, has failed to protect the site from these activities.

Indigenous engagement in the Central Murray State Forests Ramsar site has, to date, been inadequate, and does not accord with the Guidelines that were adopted as an annex to Resolution VII.8 in 1999. This affects three Indigenous Traditional Owner groups – the Yorta Yorta, Barapa Barapa and Wamba Wamba nations. Indigenous Traditional Owners are still not involved in making substantive decisions affecting the wetland resource use and management, there is no long-term source of funds provided to facilitate the involvement of Traditional Owners in the Ramsar site and there is no economic return to Traditional Owners from use of the wetlands.

The processes in place by the Australian Government to assess and notify of changes in ecological character of Ramsar sites are inadequate. Major improvements are needed to establish baseline information sets and put in place adequate monitoring regimes. Damaging uses, such as industrial logging, should not be allowed in Government owned Ramsar wetlands and steps should be taken to upgrade such wetlands to full protected area status as National Parks.

Due to the fact that the nomination and listing process for Ramsar wetlands is ad hoc, and not a systematic assessment of conservation status, and that Ramsar does not deliver at present an adequate level of protection or conservation management – the Australian Government should urgently identify a comprehensive, adequate and representative network of wetland protected areas in the Murray Darling Basin.

Adequacy of NRM legislation and enforcement

NRM legislation in NSW is inadequate to prevent further clearing and degradation of the Murray Darling Basin, across both private and public land. NRM actions in the Murray Darling Basin are frequently worse than in other parts of the State. This is particularly the case when it comes to compliance with forestry legislation and standards of environmental assessment and planning.

For example, the logging of River Red Gum State Forests in NSW is currently unlawful on at least two counts. The proponents of the activity, Forests NSW, have not obtained an approval under the NSW Environmental Planning and Assessment Act 1979, despite agreeing in October 2007 (after settling court proceedings brought by the National Parks Association of NSW) that such an approval is required for the activity. Furthermore, they are also operating without an approval under the Federal Environment Protection and Biodiversity Conservation Act 1999, despite again recognising the legal requirement to obtain such an approval prior to logging. There has to date been no environmental impact assessment of logging and associated activities in the Ramsar site, although after court action initiated by the National Parks Association, Forests NSW have now commenced an assessment process (albeit a markedly inadequate one).

The community should not be responsible for forcing Government agencies to abide by environmental laws. The NSW Government should be at the forefront of environmental protection measures of its own accord, and should be fully compliant with all relevant State and Federal environment laws with protections above and beyond those as required. Instead, in many areas of the Murray Darling Basin they

are in breach of the laws (as described above) or lagging behind. For example, the Riverina region of NSW is the only major forested region that has not been subject to a regional assessment under the Forestry and National Parks Estate Act 1998.

Constraints on landclearing in the Murray Darling Basin in NSW are markedly inadequate. Extensive land-clearing is still occurring throughout the Basin through approved clearing, and through loopholes such as 'invasive native species', 'change of regrowth date' and 'routine agricultural management activities'. These last three all allow clearing of the highest conservation value vegetation without any consideration of threatened species or communities. Since the Native Vegetation Regulation came into force in 2005, the extent of approved landclearing in NSW has been as follows – 5349 hectares of native vegetation approved clearing, plus 14,221 paddock trees approved for clearing, plus 1,233,425 hectares approved for clearing as 'invasive native species'. The distribution of approved clearing across the State from 2006-2008 is shown in the attached map. As this map demonstrates, the great bulk of clearing across the State has taken place in the Murray-Darling Basin. Notably, almost all paddock tree clearing approvals have occurred in the southern Murray Darling – one of the most heavily cleared and fragmented landscapes on the continent. The extent of approvals for so-called 'invasive native species' is extraordinary – over 1.2 million hectares have been approved in just three years. This is particularly disturbing because the list of invasive native species includes numerous species which are not invasive at all, in the strict sense of the term, and are simply widespread native species in the region. The invasive native species approvals are a loophole to allow extensive clearing of native vegetation in NSW.

Illegal land-clearing is also expected to be substantial – however, due to the Department of Environment and Climate Change shelving the 'hotspots' monitoring program for illegal clearing, the actual extent of landclearing each year in NSW is still unknown. Instead, DECC are now relying on measuring the extent of landclearing using the SLATS methodology - which only assesses communities with greater than 20% canopy cover. However, as noted by the State of the Environment Report (DEC 2006), these figures tend to under-estimate the overall rate of clearing because they exclude changes in open woodlands and grasslands with less than <20% crown cover, which are heavily affected by clearing. Previous fine-scale aerial photograph interpretation to encompass vegetation types down to 5% cover has shown that actual clearing rates can be substantially higher than estimated by Landsat when these types are assessed (up to 8-10 times higher) (Bedward et al 2001; Cox, Sivertsen & Bedward 2001). The impact of this effect on actual clearing detection will vary widely across the State, but can be expected to have a considerable effect on detecting clearing in large areas of the Murray-Darling Basin. In short, current estimates of landclearing by DECC are likely to be dramatically underestimated.

As far as Natural Resource Management goes, current levels of baseline terrestrial environmental data and planning in the region are totally inadequate, and far worse than information available in other parts of the state. It is particularly problematic that such a highly threatened region should be lacking basic environmental information. A recent review by the National Parks Association of NSW of the Murray, Murrumbidgee and Lachlan Catchment Management Areas concluded that:

"*There has never been sufficient funding to undertake fauna and flora surveys or conduct fine-scale vegetation mapping on a region-wide basis. As a result, most of the survey and mapping projects that have occurred in the region have either been conducted over limited geographic areas or conducted for a restricted and quite specific purpose. This often involves widely disparate data collection methods and is generally not targeted towards filling gaps in the region. As a result, the datasets produced are often not consistent with other datasets in the region, have limited utility for use in broader conservation assessments, and/or do not deliver products that improve systematic knowledge in the most poorly sampled areas.*

The inadequacies of the data for conservation planning are so profound, that it can only be fixed by a major injection of funds and a focused and concentrated effort of several years duration to collect systematic environmental data in the region.

Previous systematic conservation planning in the region has been very sparse, and the one major project that has been conducted in the Riverina bioregion is still considered a 'draft' and does not seem to have been utilized in natural resource management in the region. Previous attempts at systematic planning have been severely hampered by the inadequacies of baseline conservation data, including severe constraints in the adequacy of vegetation mapping, abiotic variables, systematic flora and fauna data and spatial distribution of threatening processes

It is apparent that the lack of systematic spatial planning in the region is severely compromising the ability to meet, or indeed measure progress towards, state-wide natural resource management targets for biodiversity and drastically undermining the efficacy of investment programs in delivering conservation outcomes. It also has major implications for the development of a Comprehensive Adequate and Representative reserve system in the region – in such a poorly reserved and heavily cleared region it is crucial that reserve acquisition explicitly targets the highest priority areas".

The review conducted by NPA also included a critique of NSW Catchment Action Plans for the Murray, Murrumbidgee and Lachlan Catchments. The review concluded that Catchment Action Plans in the region are not spatially based and do not direct conservation planning in a systematic manner, with the exception of the Lachlan CAP which is heading in that direction. The lack of spatial planning means that:

- Funds for on-ground actions are not being allocated in the most effective way and not delivering the best conservation outcomes
- Opportunities for maximizing investment by knowing where multiple targets can be met are being missed
- Appropriate measures are not in place to maximize the opportunities for species to adapt to human-induced climate change
- Natural resource targets are missing a spatial dimension, and the ability to meet targets or indeed even measure progress towards them is therefore severely compromised.

- Efforts to secure core areas for permanent conservation in the reservation system are often ad hoc or opportunistic.

The report also identified drawbacks with the interpretation of state-wide natural resource management targets into regional targets. State-wide targets are direct targets to achieve a certain status for a biodiversity asset, but the CAPs frequently turn those direct targets into a set of actions to be implemented rather than an environmental threshold to be achieved. The actions in many cases seem to be arbitrarily chosen and are not based on any environmental analysis of what is required to truly achieve the direct target in the catchment. As a result, even if the regional targets were met, they are likely to be markedly insufficient to meet the state-wide targets. Similarly, most of the performance indicators and monitoring approaches do not directly measure the state of the biodiversity asset, but instead measure how many actions have been taken as part of the regional target. Therefore, they do not provide a direct measure of the progress towards the state-wide target, or indeed even whether actions taken were actually successful in delivering on-ground biodiversity outcomes.

The CAPs are largely focused on management of endangered, vulnerable or over-cleared communities. Such an approach has long since been recognized as an inadequate and ineffective path, on its own, to prevent biodiversity loss. Apart from 20,000 ha identified in the Lachlan CAP, there is no requirement for management agreements to provide protection in perpetuity or for any other defined timeframe. There is no requirement in any of the CAPs for investment to be prioritized to permanent management agreements, which raises grave concerns that substantial public funds are being allocated for short-term gains that are not secure.

Most of the key strategies from the National Biodiversity and Climate Change Action Plan have not been addressed, and nor do the CAPs meet the requirements of the recently released NSW Biodiversity and Climate Change Adaptation Framework. The Lachlan CAP is the only one that aims to identify habitat linkages between priority habitats that have the potential to enable species to adapt to climate change. None of the CAPs have any explicit requirement for the identification and protection of natural refugia (apart from riparian areas) or habitat buffers, nor do they include measures to strengthen the capacity of the reserve system to allow movement across bioclimatic gradients, to conduct regional predictions of the impacts of climate change on species, to identify species that are not yet listed that may be threatened by climate change, or to work with adjacent catchments to develop a network of landscape scale north-south connectivity. Notably, the projects on corridors and threatening processes commenced by the Lachlan CAP may well fulfil some of these other actions from the National Plan. Notably, the Murrumbidgee CAP broadly refers to the threats posed by climate change, noting the importance of protecting existing vegetation and maintaining connectivity to mitigate impacts on native species, but does not identify any specific measures to be implemented by the CAP in relation to identifying, researching or implementing vegetation connectivity to mitigate against climate change.

In summary - current natural resource management processes within the Murray-Darling Basin in NSW are not meeting the urgent challenges of maintaining biodiversity at a landscape scale nor taking advantage of new directions in conservation planning in Australia. Progress is being severely hampered by grossly inadequate funding, a lack of commitment to systematic planning, and inadequate structures to undertake the nature and scale of work required. Climate change makes these issues more urgent then ever before, and a new direction is urgently needed. Instead, legal and illegal clearing continues apace, environmental standards are lower and compliance with environmental laws poorer than in coastal regions, and monitoring, compliance and enforcement of environmental laws are demonstrably inadequate.

Indigenous involvement in asset ownership and NRM

Indigenous Traditional Owner groups within the region are the original owners of all lands and waters along the Murray, Murrumbidgee and Lachlan rivers and have never relinquished their custodial right to protect and preserve their country. The rivers and forests of the region are rich in relics, artifacts and places of cultural significance, and are also of outstanding importance for contemporary cultural economies. NPA acknowledges the unique knowledge and skills that Traditional Owners bring to natural resource issues in the region, and their rights and interests in land in the region.

To this end, NPA supports proposals from the Murray Lower Darling Rivers Indigenous Nations with regard to indigenous water rights and cultural flows.

There are social, cultural economic and environmental reasons why indigenous nations in the Murray Darling Basin should be given access to and control of water entitlements both as indigenous water rights (which can provide economic outcomes) and as cultural flows for the maintenance of important cultural sites, landscapes for cultural practice and feeding plants and animals of cultural significance. These allocations would differ significantly from environmental water allocations because they would be controlled by indigenous people, and would be used according to cultural priorities.

Within the Murray Darling Basin, indigenous peoples currently hold less than 0.2% of land, despite compromising approximately 4% of the Basin's population, and despite land reforms such as the *NSW Aboriginal Land Rights Act 1983* and *Native Title Act 1993*.

According to MLDRIN, "cultural Flows" are water entitlements that are legally and beneficially owned by the Indigenous Nations of a sufficient and adequate quantity and quality to improve the spiritual, cultural, environmental, social and economic conditions of those Indigenous Nations.

It is crucial that such water be owned and controlled by Traditional Owner nations and it is a major of the current framework that it does not provide for cultural water of this kind.

In addition, we support the proposal by the Australian Network of Environmental Defenders Offices that "the definition of "Critical Human Water Needs" should be

amended to make reference to long term environmental outcomes and water for Indigenous cultural purposes."

And that the Water Bill "should clarify that membership of the various governing bodies involved in the development of the Basin Plan must contain an even distribution of individuals with expertise in environmental, social, Indigenous and economic fields."

Major improvements in the roles available for Traditional Owners in natural resource management and protected area management are also required throughout the Basin, as well as increased opportunity for ownership of land and water.

Impacts of climate change on the likely future availability of water

CSIRO (2007) provide a moderate climate change scenario for the Murray region, in which the Ramsar site is located, which predicts a warming of 1.5°C and an 8% decrease in rainfall by 2030.

It is predicted that climate change will have a substantial impact on rainfall and streamflow in the Murray Darling Basin by 2030, which will place substantial strain on the catchment's water resources. CSIRO (2008) predict that under a dry extreme climate scenario, average surface water availability would fall by 41% in the Murray region. They also predict that under the 'best estimate' of 2030 climate, average annual flood volumes would be in the range of 8 to 12 percent of the natural (pre-European) volumes.

Climate mitigation in Australia is happening too cautiously and too slowly, and must been accelerated if the Murray-Darling rescue is to work. The Senate Committee should include in their recommendations, a requirement that emissions begin to fall in Australia within this term of Government – from 2010 onwards – to begin tackling the problem.

Australia must also go to the Poznan and Copenhagen climate talks advocating the deepest possible cuts to greenhouse emissions. At the very least, that all Annex 1 countries adopt a 40% 2020 target -- the upper end of the range suggested in Bonn.

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