

Submission Number: NND.001.01120

Submission Of: Alison Russell-French OAM

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What is your submission based on? I am making this submission based on my professional knowledge, qualifications or experience or on behalf of a group or organisation

What is your area of professional expertise?

If you are lodging your submission on behalf of a group or organisation, what is the name of the group or organisation?

Your Submission

In your experience, what areas of the bushfire emergency response worked well?

Note - The comments that I have provide in this Submission relate overall to environmental and natural resource aspects that are commensurate with my background and experience. However where appropriate I have provided comments of a more general nature, particularly in this first question.

(a) Communication with the Public

The management of communications by NSW, Victoria and the ACT Territory with the public throughout the bush fire emergency was very effective. The Premiers, Chief Minister of the ACT and the Emergency Services Chiefs and Fire Chiefs provided excellent regular information, situation status reports and updates to the public. The information presented was factual, clear and well informed.

The State Premiers with the State Emergency Services Chiefs and Fire Chiefs were clearly seen to be in control and at the forefront of keeping the public informed about the emergency bush fire situation and providing directions about action that communities needed to take.

Local mayors were also very visible in providing information and guidance to their local constituents where evacuation and designated evacuation centres were located plus assistance that could be called upon by those affected by the fires.

The provision of accurate and well-informed information to the public was particularly important in the ACT where there are strong memories of the devastation caused by the bush fire that ripped through Canberra in 2003 with major loss of infrastructure, buildings and 6 deaths. The unprepared state of planning to deal with such a major crisis and the difficulties in communicating to the public at the time provided a very important lesson in proper planning for managing a future crisis. Keeping the public well-informed and up to date with events as they unfold as well as providing clear instructions about when to evacuate and where appropriate evacuation shelters were located were lessons well learnt and reflected in the approach to the 2019-20 .bush fire response in the ACT.

Given the unprecedented situation that faced all the authorities in 2019-20 the management of the crises that unfolded was as good as it could have been.

(b) Coordination of On Ground Fire Fighting Efforts

It was clear that with the extent and severity of the fires that unfolded down the eastern seaboard, in South Australia and in Western Australia, prior preparation ahead of the season and on-ground fire-fighting at the height of the fires were going to be severely challenged. Given the early warnings from mid-2019 onwards about the potentially catastrophic fire season predicted for the summer months ahead, the Rural Fire Service and community fire-fighting efforts were as well prepared as they could be, noting that additional resources that had been sought were not forthcoming. The best use of existing resources appeared to occur although the unprecedented scope, scale and extent of the fires put considerable strain on those resources which in hindsight should have been considerably strengthened.

In the ACT, preparations to both alert the public and deploy resources for fire-fighting in potentially impacted areas of southern ACT suburbs and southern ACT rural areas were thorough with the public warned well in advance to be prepared for fire incursion and to evacuate in the event of the Namadgi fire spreading into Tharwa, the southern suburbs and areas of NSW near the ACT border. Clear directions were provided to the public about the likely time to evacuate and the location of the nearest evacuation centres.

It should also be recognized that the contribution by community on-ground engagement in providing support for the firefighting effort, through assistance with evacuation of people directly affected by fires, the provision of food and other necessities demonstrated the great community spirit that emergencies bring out in people. This is an important element that needs to be better included in future planning responses.

(c) Role of the Media

The role of the ABC (both radio and TV) was critical in providing up to date information, situation reports and warnings to the public in fire affected areas. Information on fire activity, the need to evacuate and where to go, appropriate shelter or safety areas were all clearly communicated to the public.

Throughout the bush fire crisis. the ABC was recognized as the most trusted means for providing information to the public. The ABC TV and radio sessions held by Premiers, the Chief Minister ACT and Emergency Services Chiefs and Fire Chiefs provided essential information and directions to the public and engendered a strong feeling of confidence in the accuracy of the messaging. It should be noted that the ABC has received many accolades for the role it played in keeping the public informed and conveying the essential messaging from authorities about unfolding situations and directions to the public.

Reporting in newsprint and through social media also provided valuable information sources for the public.

(d) Protection of Significant Environmental Assets

In view of its global significance, resources were allocated to save the Wollomi pines in the Wollomi National Park.

In your experience, what areas of the bushfire emergency response didn't work well?

(a) Failure to recognize the Impacts of climate change in SE Australia

It must be stated up front that failure to accept expert advice on and react to the increasingly dire growing climate change impacts across Australia and the potentially catastrophic fire season predicted for 2020 was and continues to be a major problem.

Forecast by experts back in 2013 that climate change impacts through hotter and longer summers (produced from changes to the Indian Ocean Dipole effects on Australia) with stronger NW winds across the Australian continental landscape, longer and hotter periods and substantially less rain would result in a drying out of SE Australia and lead to potentially dangerous, possibly catastrophic, fire conditions.

The 2019-20 bush fires were an unprecedented event resulting from an extended dry period in SE Australia (drought and the drying trend from climate change impacts) that led to tinder-box conditions ripe for a major bush fire event. Even so the extent, scope and scale of the 2019-20 bush fires exceeded predictions.

Forested areas right up and down the eastern part of the Australian continent dried out including traditionally wet forest areas that have not previously dried out.

Much of the fire activity was started naturally (dry storms and lightning) although some was human induced – some reports of arson and in the case of the Namadgi National Park 80,000-hectare fire in the ACT the unfortunate incident of a Department of Defense helicopter starting the fire.

(b) Failure to Include landscape level planning and management as part of bush fire preparations

Prior planning for the management of the bush fires was not done at a landscape level. This resulted in the focus for fire-fighting to be in response to breakout of fires in areas as they occurred without a full assessment and consideration of the range of social, environmental and economic values of assets requiring protection.

Planning for bush fire mitigation and management does not give adequate consideration to the importance of landscape level planning and management to include the protection of high-level environmental assets.

With the extent of the bush fires and the areas that they were burning, especially down the eastern Australian seaboard, identification of the areas of significant environmental values could have highlighted where fire-fighting efforts could have been directed to conserve some of these important areas and assets.

(i) Recognised high level environmental assets

The areas that stretch from SE Qld to northern Victoria along the Great Dividing Range (GDR) contain unprecedented vegetation areas including Gondwana Rainforests of Australia, wet and dry sclerophyll forests, grassy woodlands. Many of these areas that have not been previously been burnt were burnt in the 2019-20 bush fires.

The UNESCO World Heritage Gondwana Rainforests are a serial property comprising the major remaining areas of ancient rainforests straddling the SE Qld and northeast NSW borders and are 180 million years old. They provide habitat for many species of plants and animals of outstanding universal value including more than 270 threatened species as well as relict and primitive taxa.

For example, the Nightcap Oak (*Eidothea hardeniana*), a Gondwana relict, dates back 100 million years and there are only 120 mature species left in the Nightcap National Park was burnt including a number of the Nightcap Oaks. Loss of these trees is likely to impact adversely on their recovery.

Further down the GDR are important wet sclerophyll areas that are also home to a range of species of plants and animals – many of these wet areas have not been burnt in past bush fires but due to the exceptional conditions prevailing in 2019-20 a number now have been burnt and may take generations to recover if they do.

Over 1 billion animals are estimated to have perished in the 2019-20 bush fires (Professor Chris Dickman, ecology expert from University of Sydney). Professor Dickman stated that the figures are confined to NSW and Victoria and the overall national losses are likely to be much higher than 1 billion animals.

As has been extensively reported, much of the burnt habitat included koala habitat and in NSW over 8,000 koalas died as a result of the bush fires which is nearly one third of the NSW's koala population.

More than 100 threatened species have been adversely impacted by the bush fires pushing many towards extinction with nearly 50 nationally threatened animal and plant species with at least 80% of the area in which they live affected by the bush fires. Another 65 have had more than half of their area in the fire zone.

Species believed to have had at least 80% of their habitat affected include the Long-footed Potoroo in NSW and Victoria and the Kangaroo Island Dunnart, endemic to Kangaroo Island, is believed to be the worst affected mammal in the bush fire that burnt most of its habitat Professor John Woinarski, professor of conservation biology at Charles Darwin University, has stated that the impact of the bush fires "gives us grave concern about the conservation of many threatened species in Australia. "It is all the more reason that we need urgent and sustained action to recover these species."

Bush fires have devastated parts of NSW, Victoria, SA, WA, Qld and Tasmania and all these fires have had impacts on wildlife and their habitats.

(ii) Threats to Wildlife and Habitats from Land clearing

Land clearing reduces the resilience of threatened species populations to survive future perturbations such as bush fires and climate change. It can destroy entire ecosystems leading to loss of biodiversity, declines in soil fertility and potential extinction in indigenous flora and fauna.

Australia has lost almost 44% of its forests and woodlands since European settlement and some of those remaining areas are fragmented. Added to this impact on the landscape from land clearing is the loss in the 2019-20 bush fire season of over 1.7 million hectares in QLD, NSW, Victoria and ACT and over 1 billion native animals lost.

A 2007 research paper commissioned by the World Wildlife Fund and co-authored by Professor Chris Dickman, Dr Hal Cogger, Professor Hugh Ford and Professor Chris Johnson concluded that "104 million native animals birds and reptiles have died or will die as a result of the clearing of native vegetation approved by the NSW government between 1998 and 2005".

Predictions are that koalas are heading towards extinction in NSW and southeast Qld by 2050. Estimates by Sydney University of about 8,000 koalas died as a result of the bush fires which is nearly one third of the NSW's koala population and 25,000 killed on Kangaroo Island (nearly half of the island's population). Since koalas were declared vulnerable in 2012, koala habitat has been destroyed for livestock pasture and urban development at a faster rate in NSW and Queensland.

Approved logging of unburnt areas that provide habitat for already heavily impacted species like the koala makes their long-term survival even more difficult. Already since the bush fires, the NSW government has approved commercial logging in known koala habitat.

Focusing fire-fighting planning through a broad landscape perspective that included the range of environmental, social and economic values would have provided a better base and information to direct efforts towards protecting important natural assets and reducing the enormous loss of species and habitats.

(c) Lack of Clarity regarding the Role of the Commonwealth

The Commonwealth's role in the 2019-20 bush fire season was not understood or clearly conveyed to the public. The clear deficiencies in the Prime Minister's response to and engagement in the process are already well documented.

Unedifying buck-passing by the Commonwealth towards the States particularly NSW over who would do what did little to engender confidence in the Commonwealth, whereas the State Premiers were clearly seen to be in control and at the forefront of keeping the public informed and engaged.

Bringing in the Defence Department did not come across as a well thought through initiative but a last-minute decision not made in consultation with the States. This placed the Defence Department in a difficult position with lack of clarity about the role that Defence reservists and personnel should engage in to assist on-ground efforts.

(d) Inadequate Resourcing of infrastructure needs

Recognising that 2020 would be a potentially dangerous fire season, requests by senior fire chiefs for additional resources for bush fire fighting were not heeded.

Existing resources were stretched to the limits in combating the 2019-20 bush fire impacts on infrastructure and buildings. Some significant biodiversity and natural assets could not be attended to at the levels required. For example, part of the Nightcap National Park that includes the Nightcap Oak was saved due very much to the efforts of local community interests fighting the fires there as insufficient resources could be made available from agencies.

In your experience, what needs to change to improve arrangements for preparation, mitigation, response and recovery coordination for national natural disaster arrangements in Australia?

(a) Landscape management and planning

Future planning responses to emergencies such as bush fires would benefit from a landscape level planning and management approach, particularly to take into account the protection and conservation of significant high value environmental assets.

Tools such as integrated vegetation maps that highlight major environmental assets are essential to inform planning processes about high natural value areas that need protection such as the Gondwanan Rainforests of SE Queensland and Northern NSW.

From a biological perspective, post bush fire assessment and recovery needs to assess the whole of areas burnt and species lost, not just by way of assessments on an area only basis. Without looking at the whole picture, high value natural areas and species recovery will be potentially compromised and reduced in resilience. Ensuring ecological integrity and connectivity of natural systems is integral to maintaining healthy ecosystems and their essential components. Ecological integrity refers to the ability of an ecosystem to support and maintain ecological processes and a diverse community of organisms.

To maintain and build on connectivity throughout landscapes is essential so that species can move in and between natural habitats to re-establish and avoid being limited to and isolated in small "island" components.

(b) Wildlife Recovery

Planning for wildlife recovery needs to take into account the importance of not removing critical habitats through further land clearing for urban, agricultural, and logging operations (for example, the current NSW government approval of commercial logging in known koala habitat when the species is already deemed to be heading for critical survival rates).

Approved logging of unburnt areas that provide habitat for already heavily impacted species like the koala makes their long-term survival even more difficult.

In developing fire management responses that include wildlife recovery maintaining ecological integrity of ecosystems is essential. The ability to maintain natural ecological values means that ecosystems can naturally maintain their species, communities and other important characteristics without management interventions by humans. In plain language ecosystems have integrity when they have their native components intact.

To restore ecosystems and rebuild ecological integrity requires decision-making that recognizes the need to protect the areas both burnt and unburnt to allow natural recovery processes to occur. Investment of government funding to restore wildlife and their habitats needs to be considered in the context of maximizing potential best outcomes for recovery of species, especially threatened species, and habitats.

An example of disrupting ecological integrity in a natural recovery process for an impacted ecosystem would be harvesting of burnt timber for commercial timber operations when that burnt timber is often an essential component of the restoration of the impacted system (eg. the gradual breakdown of burnt timber for microbiological and fungal activities is essential for recovery).

Logging of burnt timber results in damage to forest floors and re-appearing flora as well as destroying more wildlife habitat and often leaving the forest more fire-prone.

The inter-relatedness of ecosystems and the importance of avoiding decisions in some that will have broader adverse implications in others needs careful consideration. Better and more effective ways of balancing economic imperatives with environmental integrity needs to be given greater consideration.

(c) Better resourcing for dealing with natural disaster response and mitigation

In view of predictions for longer, hotter and windier summer seasons, bush fire fighting will require significant increases in resourcing to mitigate and manage impacts on the built and natural environment. Future planning for dealing with bush fires needs to recognize the changed environment that has evolved and is evolving through climate change impacts. This scenario is likely to produce more severe bush fires and more extreme after effects.

Planning for managing and mitigating future bush fires needs to recognize that significant resources will be required to meet the range of demands that changed environmental conditions are creating. Planning for bush fire mitigation must include protection of significant and important natural assets that are included in overall fire-fighting efforts.

Infrastructure resourcing including additional and often expensive fire-fighting equipment should be identified as early as possible by those who are expert in the field and requests for resources be accepted by governments to allow deployment to designated areas as quickly as possible.

(d) Hazard Reduction/Traditional fire management practices

Hazard reduction burning is one of the tools that can assist in mitigating bush fire impacts, but it is not a silver bullet or an all-answer to bush fire management as argued by some.

It is already in the bush fire management planning done by State agencies with targets set for areas to have hazard reduction carried out and it is generally determined in relation to optimum conditions to achieve the best possible outcomes.

RFC Commissioner Shane Fitzsimmons has stated that "hazard reduction burns are important and a valuable tool but not the panacea". He also stated that while it has a place in a normal season it has little effect on fire spread in severe fire conditions. He also stated that NSW had met its hazard reduction targets but the 2019-20 season was so unprecedented that it would not have been possible to reduce the ferocity of the fires using this tool.

This land management mechanism is very heavily dependent on prevailing weather conditions at the time. It should be noted that the Director of NSW National Parks made the observation in 2003 that the Parks were trying to achieve hazard reduction burns in the Snowy mountains the week before the 2003 bush fires hit Canberra. However, they could not get the burns going as the vegetation and ground cover were too wet. Yet the following week, with a howling westerly and 40+ degree temperatures, the areas dried out completely feeding the fuel load driving the ferocity of that fire.

As well as reducing fuel loads, hazard reduction burns are also intended to allow the local ecology to recover by leaving trees intact.

Research has shown however that as weather conditions get hotter, drier and windier fuel reduction becomes less effective. In catastrophic conditions the wind becomes the driving factor and fuel reduction is less effective. There are also strong arguments that overuse of hazard reduction burning can increase the potential for more severe fire impacts in later fires.

It is also important that there is better coordination between authorities and private landowners who want to undertake hazard reduction burns given that there have been numerous instances of such hazard reduction burns being done out of season and in non-favourable weather conditions and then causing fire destruction in other areas.

More use is being made of traditional fire management practices based on knowledge and management practices of Indigenous land managers. They are working with government agencies to achieve better vegetation management in appropriate areas. However traditional burning was not generally practiced in the heavily forested areas of the Australian eastern seaboard, especially in the wet forested areas. The 2019-20 season saw these wet forest areas dried out to levels not previously seen or known and therefore made them highly vulnerable to the severe bush fire impacts that resulted.

Traditional fire management practices are very much a tool for woodland, savanna and grassland areas but it is less clear that they would be effective in heavily forested areas.

(e) Coordination of the On-ground Firefighting Effort

The planning process for dealing with emergency responses to bush fires could look to include, clarify and maximise opportunities for drawing on the community support and engagement in arrangements for preparation, mitigation and response to crisis situations. With the broad range of community support that is available, coordination of community effort should become an integral element in assisting with emergency responses to crises.

(f) Improved consultation between Commonwealth and State agencies, academia and community in planning and preparation periods for bush fire mitigation.

As at 9 March 2020, the 2019-20 bush fires burnt an estimated 18.6 million hectares across the continent. If we are to have bush fires of this extent and severity into the future, planning responses must also include protection and conservation of essential high value natural assets to maintain biological integrity and the best options for recovery of such areas when significantly burnt.

This will require a new way of considering management of important natural assets as essential components in planning processes.

Appropriate vegetation mapping of important areas and species identification to assist in preparation for and on-ground firefighting activity in

these areas is a tool that needs to be developed more comprehensively.

Better consultation between the parties that have major stakes in emergency management and mitigation is essential to achieve the optimum outcomes for environmental, economic and social needs.

Is there anything else you would like to tell the Royal Commission?

I have provided comments in this Submission that reflect my background in environmental and natural resource management. I have included a current CV that outlines my experience for reference.

ALISON RUSSELL-FRENCH OAM
CURRICULUM VITAE

Contact Details Mobile: [REDACTED] Email: [REDACTED]
Professional Qualifications Bachelor of Arts (Honours), part Law Degree (ANU)
Countries of Experience Australia, China, Malaysia, Indonesia, Japan, South Korea, USA, Netherlands, UK, New Zealand.

Awards

Awarded an Order of Australia Medal in the June 2018 Queen's Birthday Honours for services to the environment and conservation.

Summary of Professional Experience

1. Non-government Experience (2006-present)

Recently a part time consultant working in the area of environment, conservation and natural resource management. Ms Russell-French worked on a variety of selected project work and has had a long association with several non-government organisations.

Current responsibilities include

- Chair of the Australasian Wader Studies Group (AWSG),
- AWSG representative on the Finance Committee of the East Asian Australasian Flyway Partnership (EAAFP) and representative of AWSG (one of the founding EAAFP Partners),
- President and Chair of the Woodlands and Wetlands Trust in Canberra from 2014 to present,
- Vocational Services Director on the Board of the Rotary Club of Canberra

Previously:

- President of the Canberra Ornithologists Group from 2012-16,
- President of Birds Australia from 2004-10, and
- President of the Alliance Francaise of Canberra from 2013-17.

Experience in working as a Consultant (2006 to 2014)

As a part-time consultant, selected project work undertaken included

- Australia China Environment and Development Partnership Project – As part of a small team, comprising Kiri-ganai Research and Wetlands International, working on an AusAID-funded project in China to develop with a team of Chinese wetland experts guidelines for the management, monitoring and administration of Ramsar sites in China.
- Wetlands International/Shell – (2007-08) As co-producer of the book "Invisible Connections" (funded by Shell International in partnership with Wetlands International) on migratory shorebirds in the East Asian-Australasian Flyway, working with authors and contacts in the Netherlands, China, Alaska, South Korea, New Zealand and Australia. The book was launched at Ramsar CoP 10 in 2008.
- Coaching – From 2006 -09, working as a communication coach in the Water Group of the Commonwealth Department of Environment Water, Heritage and Arts,
- Communications – In 2013, leading a team in the Office of the Environmental Water Holder to establish a Communications and Reporting Section.
- Development of a Framework for a Rolling Review of Australia's Ramsar sites – (2008) As part of a contractual project, working with Wetlands International in consultation with state government and Ramsar site managers to develop a Rolling Review Framework for Australia's Ramsar Wetlands for the Department of Environment Water Heritage and the Arts that also included guidelines for assessment of Ecological Character of Ramsar sites.
- Reconnecting with the Bush – (2007-2010) Working through a policy framework with Birds Australia to develop and secure a stronger policy framework for decision makers that works at a landscape level in decision-making for habitat conservation.

2. Australian Government Experience (1974 -2006)

Summary

A career Public Servant in the Australian Public Service (APS) for 32 years, joining in 1974 and retiring in 2006. A member of the Senior Executive Service of the Australian Public Service for 10 years from 1996 – 2006. Her APS career spanned a wide range of policy development and program implementation, delivery and administration across environment and conservation, heritage, coastal, natural resource and fisheries management areas.

From 1974 - 1984 Ms Russell-French worked in Fisheries in the Department of Primary Industry. Her roles in this area spanned Commonwealth fisheries policy, management and administration and involved extensive liaison and networking with the Australian States and the Northern Territory and the fishing industry in pursuit of Commonwealth fisheries management objectives.

In 1990 she joined the Commonwealth Department of Environment and worked across the marine, coastal, wetlands, water, reserves system conservation, Indigenous cultural and natural resource management policy, and National and World Heritage areas of the Department of Environment and Heritage until 2006. She has wide ranging experience in negotiation and engagement with state and local governments, the Indigenous sector and the non-government sector on environmental and conservation issues.

As a senior Australian Government representative and delegation member to a number of international forums, Ms Russell-French had extensive experience in negotiation and representation of Australian interests including at the Ramsar Convention on Wetlands, in APEC as

Lead Shepherd of the Marine Resources Conservation Working Group, and as a senior delegate to the Commission on Sustainable Development (CSD), the Global Environment Facility (GEF), Wetlands International and Wetlands International – Asia Pacific, and the Convention on Biological Diversity (CBD).

She was Head of the Australian delegations at meetings of the China-Australia Migratory Bird Agreement and the Japan-Australia Migratory Bird Agreement in China (1999) and Australia (2002).

From 2004-06, Ms Russell-French was one of four Commonwealth Senior Executives managing delivery of the Commonwealth Government's Natural Heritage Trust (NHT) funding through NRM regional bodies and to individual grantees. She worked closely with Australian State and Territory governments and a broad range of community interests in delivery of the NHT funding program.

(a). Senior Executive Level International Experience working in the Australian Government (1996-2004)

From 1996 to 2006 specific international responsibilities in the Commonwealth Department of Environment and Heritage included:

- Migratory Waterbird Conservation – (1996-2002) Developing policy initiatives and then managing and taking the lead on national and international negotiations on migratory waterbird conservation in Australia and the East Asian-Australasian Flyway, with a particular emphasis on China, South Korea, Japan, Indonesia, Malaysia, Cambodia, Thailand and the Philippines.
- Formal Bilateral Agreements – (1999-2002) Developing cooperative policy and program initiatives under the Australian Government Bilateral Agreements on Migratory Birds with China, Japan and more recently South Korea, to protect shared migratory birds and their habitat across all four countries.
- APEC Marine Resources Working Group – (2000-02) Lead Shepherd of the APEC Marine Resources Working Group, to develop with member APEC countries coastal zone management measures to manage marine resources sustainably in the APEC Region
- Global NGO Wetlands International – (1996-2004) As an Australian Government Board Member, working with government and non-government regional country representatives including China in pursuit of more effective sustainable wetland management.
- Global Environment Facility (GEF) – (1992-94) As part of the Australian delegation (deputy delegate) working with countries in the development of initiatives for funding under the GEF, the funding mechanism for the Biodiversity Convention and Climate Change Convention.
- Ramsar Convention on Wetlands– (1996 – 2002) As Deputy Delegation Head, leading the Australian Government representation and negotiation on Australia's policy interests at the Ramsar Conference of the Parties (CoP) at Brisbane Australia (1996) and Valencia Spain (2002)

(b). Senior Executive Level National Experience working in the Australian Government (1996-2006)

Working with Australian State and Territory governments on policy development and delivery including:

- Delivery of the Australian Government's NRM Regional Initiative – (2004-06) Managing and delivering policy and program requirements in NSW, NT, QLD and Tasmania through working with State and local governments and a wide range of NGO stakeholders.
- National Coastal Policy – (2002-04) Working with State and Territory officials in Stage 1 of the development of a National Coastal Policy; and managing and delivering the Coasts and Clean Seas Program in conjunction with State and Territory Governments.
- National Reserve System – (1998-2000) Developing and reviewing with State and Territory officials the comprehensiveness of the National Reserve System of Protected Areas and agreeing measures and requirements to include and enhance protection of under-represented areas in the NRS.
- Management of Australia's World Heritage sites – (2002-04) Working with the Queensland Government and the Wet Tropics Management Authority for the World Heritage Wet Tropics in north Queensland, with NSW for the Blue Mountains and Willandra Lakes World Heritage sites, with the Norfolk Island Administration for the Kingston and Arthurs Vale World Heritage site, and with Tasmania for the Tasmanian World Heritage site to implement effective management initiatives and with State and local government and non-government stakeholders to develop and refine National Heritage and World Heritage policy and management measures,
- Commonwealth Wetlands Program – (1996-97) Oversighting the development of a Commonwealth Wetlands Policy and guidelines for its implementation by relevant Commonwealth agencies and subsequently working with State Governments to develop a complementary National Wetlands Program.
- Development of a Framework for a Rolling Review of Australia's Ramsar sites – (2008) As part of a contractual project, working with Wetlands International in consultation with state government and Ramsar site managers to develop a Rolling Review Framework for Australia's Ramsar Wetlands for the Department of Environment Water Heritage and the Arts that also included guidelines for assessment of Ecological Character of Ramsar sites.

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