



Program and Abstracts

Innovation for 21st Century Conservation

20-21 March 2012

National Wine Centre, Adelaide

Supported by



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Government of South Australia
Department of Environment
and Natural Resources

Program

Innovation for 21st Century Conservation

Day 1 – 20 March 2012

8.30am – 9:00am Coffee

Welcome

9.00am – 9.10am **Greg Leaman**, *Executive Director Policy and Director National Parks and Wildlife, DENR SA*
Welcome and Introductory Comments

Session 1

Keynotes: Innovation for conservation – the drivers and directions

Session Chair: Andrew Maclean, *Chair, ACIUCN*

9.10am – 9.30am **Penelope Figgis**, *Director ACIUCN, Vice Chair Oceania, IUCN World Commission on Protected Areas*
A Decade of Innovation: challenges ahead

9.30am – 10.00am **Peter Cochrane**, *Director of National Parks, DSEWPaC*
Opportunities for innovation – the CBD and the Nagoya Protocol

10.00am – 10.30am **Doug Humann**, *Director Doug Humann and Associates, Member SA National Parks and Wildlife Council*
A personal journey to Innovation

10.30am – 11.00am Morning Tea

11.00am – 11.20am **Carina Wyborn**, *PhD Student, Australian National University*
A researcher's perspective on the future of land conservation

11.20am – 11.40am **Peter Taylor**, *Senior Policy Advisor, Government Relations, The Nature Conservancy*
Daunting problems – exciting prospects

11.40am – 12.30pm **Discussion with all keynotes as panel**

12.30pm – 1.30pm Lunch



Session 2

Innovation in establishing new protected areas and landscape initiatives

Session Chair: Greg Leaman, *Executive Director Policy and Director of National Parks and Wildlife, DENR SA*

1.30pm – 2.30pm

Short presentations then panel:

Andrew Bridges, *Director, Territory Eco-link, NRETAS NT*

Territory Eco-link – large framework – small budget

Jason Irving, *Manager Protected Area Policy and Planning, DENR SA*

Arkaroola – Protecting through special legislation

Keith Bradby, *Gondwana Link, WA*

Gondwana Link: Process or Plan, Movement or Organisation?

Rob Dunn, *CEO, Great Eastern Ranges Initiative*

Mobilising the community and sustaining the momentum for continental-scale conservation

Discussion

Session 3

Innovation in Management Models

Session Chair: Karen Alexander, *Director, Victoria Naturally*

2.30pm – 3.40pm

Short presentations then panel:

Gerard O'Neill, *CEO, Bush Heritage Australia*

Heather Moorcroft, *Conservation Planning and Management Consultant*

Wunambal Gaambera Healthy Country Plan – a conservation partnership

Dr Atticus Fleming, *Chief Executive, Australian Wildlife Conservancy*

Fire management in the Central Kimberley (EcoFire): delivering measurable results by integrating science and land management in a cost-effective model

Dr George Wilson, *Fenner School of Environment and Society, Australian National University*

Conservation for culture and livelihoods – Angas Downs, NT

Ian Walker, *General Manager for Environment and Heritage, Parks Victoria*

Managing parks in the landscape

Discussion

3.40pm – 4.00pm

Afternoon Tea



Session 4 Innovation in Financing Conservation

Session Chair: Dr James Fitzsimons, *Director of Conservation (Australia Program), The Nature Conservancy*

4.00pm – 5.00pm

Short presentations then panel:

Cullen Gunn, *Executive Director, Kilter Pty Ltd*

Investing in ecosystems, conservation and sustainability

Rebecca Pearse, *R.M.Williams Agricultural Holdings*

'Henbury Station' – Financing conservation for carbon and biodiversity markets – an industry perspective

Nathan Males, *Director of Strategic Projects, Tasmanian Land Conservancy*

Private company with investment fund – Midlandscapes, Tasmania

Discussion

5.30pm – 7.00pm

Evening Drinks



Innovation for 21st Century Conservation

Day 2 – 21 March 2012

8.30am – 9:00am	Coffee
9.00am – 9.05am	Jason Irving , <i>Manager Protected Area Policy and Planning, DENR SA</i> Introduction to the day and logistics

Session 1

Keynotes: Perspectives on change

Session Chair: Dr Charlie Zammit, *Ass. Sec, Biodiversity Conservation, DSEWPaC*

9.05am – 9.30am	Dr Martin Wardrop , <i>Director, Conservation Policy Section, DSEWPaC</i> Innovation in public policy for conservation of biodiversity
9.30am – 10.00am	Andrea Leverington , <i>Ass. Director General, Queensland Parks and Wildlife Service, DERM</i> Buzz Symonds , <i>Director, Cape York Tenure Resolution</i> Achieving conservation outcomes in changing native title and economic and social contexts
10.00am – 10.30am	Dr Martin Taylor , <i>Protected Areas and Conservation Science Manager, WWF Australia</i> Getting results in conservation
10.30am – 11.00am	Morning Tea
11.00am – 11.30am	Discussion with all keynotes as panel



Session 2 Innovation in Governance

Session Chair: Dr Lea Scherl, *Vice Chair Oceania, IUCN CEESP*

11.30am – 1.00pm

Short presentations then panel:

A/Prof Daryle Rigney, *Dean Indigenous Strategy and Engagement, Flinders University*
Steve Hemming, *Co-Director, NRA Research, Policy and Planning Unit, Flinders University*
Ngarrindjeri Yarluwar-Ruwe (Sea Country) Strategy

Dr James Fitzsimons, *Director of Conservation (Australia Program), The Nature Conservancy*
The one that almost got away: opportunities and challenges in the conservation of Fish River Station

Greg Leaman, *Executive Director Policy and Director National Parks and Wildlife, DENR SA*
Developing a policy framework for establishment of protected areas on private land in South Australia

Gerry Morvell, *Chairman, Conservation Volunteers*
Brookfield – a new approach to management of public land

Discussion

1.00pm – 2.00pm

Lunch

Session 3 Key opportunities and challenges for innovation

Session Chair: Penelope Figgis, *Director, ACIUCN*

2.00pm – 3.00pm

Short presentations then panel:

Paul Donatiu, *Executive Coordinator, National Parks Association of Queensland*
Will landscape corridors facilitate adaption to climate impact

Rupert Quinlan, *Manager Channel Country Program, Pew Environment Group – Australia*
Barry Traill, *Director, Pew Environment Group – Australia*
Protecting Queensland's Channel Country and the flows to Lake Eyre

Dr Rob Lesslie, *Principal Scientist, Land Use and Management, ABARES*
Mapping priorities to target multiple objectives

Discussion

(tea and coffee will be available during this session)



Session 4

Key opportunities and challenges for innovation (continued)

Session Chair: Denise Boyd, *Campaigns Director, Australian Conservation Foundation*

3.00pm – 4.00pm

Short presentations then panel:

Max Bourke AM, *Executive Director, The Thomas Foundation*

Why we need Rick Farley now more than ever

Dr Julia Bowett, *Senior Policy Advisor, Environmental Impact Management, Department of Defence*

Shoalwater Bay Training Area – capability, conservation and collaboration

Discussion

4.00pm – 4.15pm

Symposium Wrap Up

Penelope Figgis, *Director ACIUCN*

Jason Irving, *Manager Protected Area Policy and Planning, DENR SA*



Abstracts

Innovation for 21st Century Conservation

20-21 March 2012

National Wine Centre, Adelaide



Day 1, Session 1

A Decade of Innovation: challenges ahead

Penelope Figgis, Director ACIUCN, Vice Chair Oceania, IUCN World Commission on Protected Areas

The last decade has seen a very substantial shift in the complexity of how we achieve conservation. We remain committed to protected areas, legally declared by governments and run by professional parks services. They are the core of our national reserve system and still remain our most cost effective mechanism for achieving biodiversity outcomes. However, ecological and social realities and increasing threats have led to a great proliferation of new models, new partners and new financial mechanisms. The dynamic for this increasing flexibility and creativity is driven by both positive forces, such as increased recognition of the economic importance of ecosystems, and negative forces such as attempts to build resilience in the face of climate change. The paper will give a brief overview as an introduction to the theme of Innovation for 21st Century Conservation.

Opportunities for innovation – the CBD and the Nagoya Protocol

Peter Cochrane, Director of National Parks, DSEWPaC

The Convention on Biological Diversity and the Nagoya Protocol provide a valuable framework for developing innovative approaches to conservation. Australia has been active in exploring and adopting new ways of conserving our unique biodiversity, and this experience has helped shape important elements of these international instruments.

The escalating pressures on biodiversity will require greater effort, new ideas and partnerships, and greater awareness of the consequences of biodiversity loss if we are to successfully conserve our natural heritage for future generations.

A personal journey to Innovation

Doug Humann, Director Doug Humann and Associates, Member SA National Parks and Wildlife Council

Doug has been asked to speak about his personal journey in conservation and innovations along the way.

Using his experiences in advocacy for – and management of – protected areas and areas of cultural and natural heritage over the last 30 years, Doug will address important influencers and influences through his career, the motivation for the passions seen in the protected areas sector, the evolution of the sector, and current trends and developments.

Doug will discuss recent developments in community partnerships and draw particularly on his experiences at Bush Heritage Australia. He will examine the attraction of various business models for investors, and especially strategic decisions made at Bush Heritage to maximise its capacity and position its future in light of its ambitious goals for management of land for conservation. These decisions include a strategy of engagement with Indigenous Australians to care for country, efforts to engage with primary industries and support of landscape-scale connectivity projects (highlighted recently by the release of the draft National Wildlife Corridors Plan by Federal Environment Minister Tony Burke as a critical new public policy direction).

Doug will examine some issues – old and new – which require our attention if we are to adequately protect biodiversity in Australia.



A researcher's perspective on the future of land conservation

Carina Wyborn, PhD Student, Australian National University

If we could look at a crystal ball to see the future of land conservation, I believe we would see cause for both pessimism and optimism. Climate change, population growth, invasive species, the ever-growing IUCN Red List of endangered species – the statistics can be quite confronting. On the flipside, conservation practice is extending beyond the traditional model of State sponsored protected areas through new collaborations of diverse interests, emerging markets for biodiversity and ecosystem services, ecotourism ventures and private sector conservation. As we venture into this new era of conservation practice it is useful to take stock, determine the major trends and identify lessons from prior conservation endeavours. This presentation will explore these trends and lessons through emerging connectivity conservation initiatives in Australia and North America.

Protecting and enhancing landscape-scale ecological connectivity has been proposed as a key climate change adaptation strategy for biodiversity conservation. Motivated by the science of conservation biology, connectivity initiatives use innovative models of collaborative governance to connect landscape-scale science with local-scale action. These arrangements intend to be flexible and responsive to local context while maintaining coherence and alignment across vertical (jurisdictions) and horizontal (land tenures) scales. In Australia, we have seen countless attempts to manage environments and landscapes across spatial and intellectual borders, however none as grand in scope and scale as connectivity conservation. Despite the promise of integrated conservation management across multiple tenures, connectivity initiatives face significant challenges of collaboration and communication across diverse landscapes, communities and agendas.

Connectivity conservation provides a unique and powerful lens through which to explore the future challenges for land conservation. The collaborative and cross-scale approach is common to many areas of environmental management; some aspects of this approach require innovation yet this must be grounded in well-established notions of good governance. Multi-stakeholder collaborations are complex beasts that require careful negotiation, good communication and willingness to compromise. Moreover, it must be recognised that developing collaborative capacity requires significant input of time and resources. There are, however, many lessons that can be drawn on from existing theory and practice and it is possible to imagine a collaborative future for conservation. This will depend on building strong relationships between science, policy and practice based on open communication and genuine engagement with the socio-cultural context of our conservation practice.

Daunting problems – exciting prospects

Peter Taylor, Senior Policy Advisor, Government Relations, The Nature Conservancy

With an increasing awareness of the impact that climate change, water, droughts and floods have on our ability to sustain our way of life, it is no wonder we are seeing significant transformations in the way Australians are thinking about conservation. In particular, the last 3 decades have seen the rapid expansion of Australia's National Reserve System (NRS), both terrestrially and in the marine environment. This extraordinary and globally significant collaboration by all Australian governments and scientific communities has seen a great deal of innovation and adaption by state and territory governments in the way obligations have been pursued. The NRS has laid the cornerstone for biodiversity conservation in Australia and is recorded in a national database making it quantifiable and publicly accountable.



This national framework has also enabled high wealth individuals, corporations, private NGO's, Indigenous communities and Local Government to also make contributions the NRS on the basis that it:

- delivers cost effective in-perpetuity outcomes
- is backed by a commitment by the Council of Australian Government
- is based on collaboration and partnership

With the urgency to build Australia's NRS, in the last two decades, anxiety has inevitably grown concerning the sustainability of resourcing and the management effectiveness of the system. Meanwhile the last decade has also seen the rise and expansion of local regional and state based organisations and groups responding to local and landscape scale conservation priorities – largely on private land. The Australian Government's Natural Heritage Trust and Caring for our Country Programs have helped to build capacity and leadership for some of this work. More recently, the Biodiversity Fund, carbon related initiatives have evolved to support and promote landscape scale solutions to conservation priorities. Much of this work is recognising the need for complex, integrated and collaborative approaches to landscape scale conservation.

An unfortunate debate however has emerged where some policy makers across Australia will argue that the NRS should only be seen as a minor part of the toolkit for biodiversity conservation across landscapes while others will argue that the NRS remains the cornerstone for conservation, capable of delivering whole of landscape conservation – if an integrated-on-property approach to covenanting, to include both sustainable production and protection zones, were developed.

This presentation is a personal reflection of this evolution since the early 1980s that poses some daunting questions about this journey. Innovation, private sector leadership and accountability will be central to addressing these questions. Some include:

- Government capacity to lead conservation policy will continue to diminish as resourcing and capacity gets tighter over time – in the spirit of shared responsibility should the private sector engage in a strategic leadership role that complements or partners with the work of government?
- The collaborative networks for leading policy and overseeing the implementation of Australia's NRS across Australia have ceased or at best are fading quickly. Does this network need re-casting and reinvigorating? Does it need a new private/public leadership model?
- Have we really seriously debated the most cost-effective and enduring policy and program options for landscape scale conservation?
- How are the multitude of landscape-scale conservation efforts aligned and integrated? How do we account for these and how do we measure the effectiveness of landscape scale conservation?
- Indigenous Protected Areas are cost effective and build on a co-production model where expertise, knowledge and capacity are valued. Could we get more from private landholders if we systematically recognised and valued expertise and social capital?



Day 1, Session 2

Territory Eco-link – large framework – small budget

**Andrew Bridges, Director, Territory Eco-link,
Parks and Wildlife Service, NRETAS NT**

Territory Eco-link is one of Australia's most important conservation projects. It is delivering more than 2,000 kilometres of linked conservation areas from the Arafura Sea, down the western side of the Northern Territory and reaching the South Australian border at the Simpson Desert.

Through a Memorandum of Understanding with South Australian Government, it connects with the South Australia's NatureLinks program to create the Trans-Australian Eco-link, the world's first transcontinental wildlife corridor of over 3,500 kilometres.

Since the commencement of the initiative on 1 July 2009 Territory Eco-link has been engaging with land owners across a variety of tenures to help create a larger, interconnected, more effective and more sustainable conservation land system than Government can achieve alone.

Territory Eco-link is a large framework that allows all Territorians the opportunity to contribute to a collective effort to protect and conserve the Territory's unique biodiversity.

In working to achieve this target Territory Eco-link works at a number of levels.

At one level the initiative focuses on sites with high biodiversity values, underrepresented bioregions, endangered species habitats and looking for opportunities to have these areas included in the National Reserve System.

At another level Territory Eco-link is working to engage with the broader community, improve community understanding of biodiversity values, the threats to these values and provide individuals a variety of options to assist in a collective effort to conserve the Territory's biodiversity.

Territory Eco-link might have a small budget, but its large framework is designed to encourage and facilitate whole of community effort to achieve this ambitious goal.

Arkaroola – Protecting through special legislation

**Jason Irving, Manager Protected Area Policy
and Planning, SA DENR**

The Arkaroola Pastoral Lease in the Northern Flinders Ranges has long been recognised as having high landscape, geological, biodiversity and cultural value, while also displaying significant mining potential.

In the last five years there has been considerable debate in the community about mining in Arkaroola. This debate culminated in 2011 when the South Australian Government announced that it intended to protect Arkaroola from mining through special purpose legislation.

The *Arkaroola Protection Act 2012* was recently enacted to give a defined area – the Arkaroola Protection Area – the highest level of protection that can be afforded by the Parliament of South Australia. This legislation is not only about protecting the area from mining; it has established a clear vision for the future conservation management of Arkaroola.

This case study discusses how a new type of protected area was created at Arkaroola, which remains in private ownership while having the same legal status as a National Park.



Gondwana Link: Process or Plan, Movement or Organisation?

Keith Bradby, Gondwana Link, WA

Getting big doesn't necessarily mean just doing more of the same. Complexity can increase exponentially with size, so the tools and techniques necessary to achieve meaningful ecological change over large areas are likely to be very different to what we have used in the past. Gondwana Link is 10 year old program proud of the on-ground change and support it has engendered. We originally pursued a very informal 'organic growth' model that gave us the freedom to adapt and innovate with speed, and to muster the support and resources people would rather start with. We are now carefully establishing the more formal structures and processes considered necessary to bring our work to completion. It's been a hell of a ride, with lots of mistakes made and lessons learnt.

Of course the GER corridor is the backyard to thousands of Australians, who are both enthused by the GER vision and want to get involved. But how do you harness and direct this enthusiasm with a small central team? The answer is to work with the many NGOs, NRM groups and alliances who are already doing just that. We are currently building partnerships with national and state NGOs groups and existing regional alliances, who see benefits in an association with the GER brand. With the dual approach of investing in priority regional focus areas and building relationships with those working at the national and state level, we believe we can both mobilise more Australians and sustain momentum for continental-scale conservation along the length and breadth of the Great Eastern Ranges corridor.

Mobilising the community and sustaining the momentum for continental-scale conservation

Rob Dunn, CEO, Great Eastern Ranges Initiative

Since 2007 the Great Eastern Ranges Initiative has successfully established five regional partnerships in priority connectivity conservation management areas in the NSW section of the GER corridor. The Initiative's inclusive approach has brought together a diverse range of players, many of whom had not previously met, to deliver collaborative cross-tenure efforts in targeted focus areas. However to build a lifeline for species over 3,600 kms from the Grampians to far north Queensland, we will need to look beyond the regional partnership model, if we are to 'join up the dots' on a truly continental scale.



Day 1, Session 3

Wunambal Gaambera Healthy Country Plan – a conservation partnership

Gerard O'Neill, CEO, Bush Heritage Australia
Heather Moorecroft, Conservation Planning and Management Consultant

With Australian Government and donor support, Bush Heritage Australia (BHA), a national environmental NGO established in 1990, has acquired around one million hectares of land which it manages as conservation reserves. Reflecting urgent conservation needs across bioregions, the organisation's 34 reserves are complemented by progressively diversified strategies including building and maintaining partnerships with land owners, particularly Indigenous land owners. This approach is critical to achieving the organisation's conservation objectives.

Since 2005 BHA has formed four key partnerships with Indigenous land owners in northern Australia. The combined area of land under such partnership agreements is around three million hectares. The first of these partnerships was with Balkanu, followed by partnerships with Warddeken, Kaanju and Wunambal Gaambera. Of these the Warddeken and the Wunambal Gaambera partnerships have a direct focus on involvement in planning and management. The partnership with the Wunambal Gaambera traditional owners and the development and implementation of the Wunambal Gaambera Healthy Country Plan is unique.

Wunambal Gaambera Country is a biologically and culturally significant area of approximately 2.5 million hectares in the North Kimberley. It is also very important for regional tourism. With native title determination imminent, in 2006, the Wunambal Gaambera traditional owners invited BHA to work with them to develop and implement

a healthy country plan, to protect, conserve and manage their country.

With support from other partners, the Kimberley Land Council and the Australian Government's Indigenous Protected Area (IPA) Program, BHA worked with traditional owners to develop the plan over 2 years. Support included workshop facilitation, technical writing, ecological monitoring and provision of funds. The Conservation Action Planning tool was utilised and adapted to incorporate tangible and intangible cultural heritage. Key components of the plan relating to governance, capacity building, respect for different knowledge systems and traditional owners' control, will be elaborated on in the presentation.

Implementation of the Wunambal Gaambera Healthy Country Plan includes routine conservation and caring for country activities; feral animal control, fire management, weed control, threatened species conservation, and the recording and maintenance of cultural sites and knowledge. Monitoring and evaluation is also underway. Stage 1 of an IPA has been declared with stages 2 and 3 (including marine areas) to follow. A visitor permit system is being developed to manage tourism in the area and bring benefits to traditional owners.

The partnership, and the Healthy Country Plan, has provided leverage for traditional owners to secure other partners. The planning approach is a catalyst for other regional traditional owner groups to undertake similar processes as well as being used as a model by the IPA Program and The Nature Conservancy across other areas of northern Australia.

There are many challenges for the partnership and for the success of the Wunambal Gaambera Healthy Country Plan. Work in remote areas is expensive and logistically difficult. Building and maintaining strong partnerships is resource intensive. However, the Wunambal Gaambera Healthy Country Plan has shown that a collaborative conservation partnership based on open communication between Indigenous traditional owners and an environmental NGO is achievable.



Fire management in the Central Kimberley (EcoFire): delivering measurable results by integrating science and land management in a cost-effective model

**Dr Atticus Fleming, Chief Executive,
Australian Wildlife Conservancy**

EcoFire is a regional fire management program delivered by Australian Wildlife Conservancy in partnership with pastoralists, indigenous communities and government agencies in the central Kimberley. Covering over 4 million hectares and 13 properties, EcoFire has delivered a measurable change in fire patterns on a large scale, addressing one of the key threats to biodiversity in the central Kimberley in a remarkably cost-effective manner. In addition to demonstrating how science and land management can be integrated successfully across a range of different tenures, EcoFire highlights the value of private-public partnerships in which the traditional role of participants (government, non-government) is re-assessed.

Conservation for culture and livelihoods – Angas Downs, NT

**Dr George Wilson, Fenner School of Environment
and Society, Australian National University**

Angas Downs is an Indigenous Protected Area halfway between Alice Springs and Uluru National Park. It is in the Finke bioregion and lies directly on the North South chain of the NT Eco-link. It has high biodiversity value and is important to Anangu. It has Tjukurpa places significant to Indigenous law and customary knowledge, and sacred sites where ceremonies continue to occur.

The Angas Downs pastoral lease is held by a company owned by the Imanpa Development Association. Previous land management practices and other anthropogenic pressures damaged Angas Downs and many native species disappeared. Preferred game and important animals are less common and feral animals and weeds pose a major challenge.

The key feature of the IPA plan of management is promotion of *kuka kanyini* – looking after game animals. The goal addresses an Anangu want for subsistence food consumption off their lands, more wildlife on the property for cultural reasons and as the basis of proposed tourism developments. There is also limited livestock grazing in one part of the property in accordance with its IUCN category VI aspiration for balance between human need and conservation and sustainable use of natural resources.

Anangu Board Members responsible for the property are still coming to grips with the complexities of financial governance and strategic management, nevertheless significant progress is being made on the ground. Annual meetings are held with stakeholders and the Central Land Council. The property has a strong, committed manager who grew up with Anangu. Scientific support and advice is provided by Australian Wildlife Services. Western technology and science is enabling more efficient application of traditional land management and therefore maintenance of culture. Anangu Rangers employed under the Working on Country Program are assisting monitoring and conservation management. They are enrolled in certificate courses with Charles Darwin University. The Rangers have also received support from philanthropic organisations including Rotary and Mutitjulu Foundation for items not covered by government funding.

To encourage more *kuka* species and healthier landscapes, watering points are being restored and feral animal exclusion fences erected, feral animals are being removed, weeds controlled and native plant species restored. Patch burning is being implemented; bush tucker and medicine plants documented and cultural places and rock art recorded.



Breeding and holding facilities for emus have been established as part of species introduction program. We have also begun soil carbon monitoring and Landscape Functional Analysis under different land uses. There are many more activities for scientists and researchers to work side by side with Anangu Rangers.

Angas Down has substantial tourism potential and there are opportunities for private sector investment and collaboration with Government Tourism programs such as the Red Centre Way and National Icons. Unfortunately government programs such as Indigenous Enterprise Development Program have been reluctant to fund the potential which we believe Angas Downs has.

Good science blended with traditional knowledge is a great way to innovate and grow conservation at the landscape scale. Potential initiatives are numerous particularly in carbon, biodiversity and tourism markets.

Managing parks in the landscape to increase resilience

Ian Walker, General Manager for Environment and Heritage, Parks Victoria

Globally we have much to be proud of with respect to the establishment of protected areas, with a continued escalation in the area "protected". We also recognise the continuum in management from valuing, effective management, community governance to landscape approaches. However we do need to ask ourselves are these parks effective in the conservation of biodiversity?

This presentation explores the management transition of Victoria's parks from reservation to adaptive management to assessing management effectiveness, with this transition occurring in a period of landscape change resulting from fires and floods over the past decade and how resilience thinking is being applied to the management of the Victorian park system.



Day 1, Session 4

Investing in ecosystems, conservation and sustainability

Cullen Gunn, Executive Director, Kilter Pty Ltd

Kilter's vision is to deliver investors long-term, non-correlated, inflation protected returns through reconfiguration of rural land and water systems to facilitate precision agriculture, water use solutions and ecosystem services. Kilter has a focus on asset enhancement at scale for long-term improved yields and growth. This philosophy pursues large scale intervention in both underpinning ecological systems and overarching market based systems. The core investment offering in rural land and water assets is underpinned by the Kilter view of the environment as an operating envelope containing, provisioning and sustaining production off land and water assets rather than a minor factor of production or an externality.

Kilter has been and remains an advocate for a broader range of initiatives to support conservation and rehabilitation of biological assets on private land. A range of grant programs have been tried in the past (Aust Landcare Program, Natural Heritage Trust, National Action Plan for Salinity) and will probably continue to be rolled out in future. However the Kilter experience is that the scale of activity required to protect biodiversity may be beyond incentive programs alone. In Victoria over 60 per cent of the landscape is privately owned, probably similar to private ownership across the other states. Kilter as a private land manager has a part of its implementation program dedicated to sourcing other long term strategies that ensure a return from investing in ecosystem protection and rehabilitation.

'Henbury Station' – Financing conservation for carbon and biodiversity markets – an industry perspective

Rebecca Pearse, R.M.Williams Agricultural Holdings

In July 2011 R.M.Williams Agricultural Holdings (RMWAH) completed the purchase of the 500,000 hectares – 5,000 square kilometres Henbury Station under the Australian Federal Government's Caring for our Country programme. This purchase will see Henbury placed in Australia's National Reserve System (NRS). In doing so, RMWAH will cease all cattle grazing and actively manage the former pastoral property to control fire, water, weeds and feral animals to support the regeneration of native vegetation. This will in turn see RMWAH generate carbon credits with income from the sale of the resulting bio-diverse carbon credits being used to fund Henbury's long-term conservation. Finally, it will also allow re-engagement with the traditional owners of the land who will play a key role in the long term conservation of Henbury.

The significance of Henbury is best described by National Parks of Australia in their Henbury fact sheet:

At more than 500,000 hectares – 5,000 square kilometres – Henbury is the largest property ever purchased for the National Reserve System with Australian Government support. Before work began on this project, less than one per cent of this region's arid environment was protected for conservation.

Some 130 kilometres south of Alice Springs, Henbury extends from the spectacular MacDonnell Ranges across the vast, open red plains of the diverse Finke bioregion. To the north, stunning gorges cradling permanent waterholes where remnant plant species survive through long periods without rain. Two of central Australia's largest rivers, the Palmer and Finke, meander through the property – raging torrents during rare flood events that dry to a series of permanent waterholes, providing critical refuges for animals and plants in this arid environment.



The ancient Finke – reputedly the world's oldest river – runs for 100 kilometres across Henbury and is home to three fish that are found nowhere else in the world, including the tiny Finke River goby. Running Waters, a beautiful two kilometre stretch of permanent water, is home to the ancient and threatened red cabbage palm and to endemic fish, providing a refuge for these species as the climate in central Australia has become drier.

The bustard, southern marsupial mole and the black-footed wallaby are just some of the threatened animals that make their home here. Red gum, desert oak and mulga woodlands, shrublands and hummock grasslands provide habitat for other threatened species including the Peter Latz wattle and the thick-billed grasswren.

The Henbury Conservation Project encloses the Illamurta Springs and Henbury Meteorite reserves and provides important habitat links to Finke Gorge National Park and Owen Springs Conservation Reserve. It forms a vital building block in the Territory Eco-Link conservation corridor from South Australia to the Arafura Sea, boosting the resilience of the landscape, so that native species have room to adapt to a changing climate and to move in response to fire and drought.

This paper describes the rationale behind the Henbury project and its 18 month journey from inception to purchase and the start of a Carbon Farming Initiative project. The project is multifaceted with developments within National legislation, the CFI, field work, the community and legal challenges all having equal importance. The key components and hurdles under the CFI are outlined, the challenges of measuring, monitoring and marketing biodiversity in a carbon driven market mechanism discussed and the importance of indigenous engagement explored along with the legal mechanics and financial modelling needed to ensure permanence both under the NRS and as a CFI project.

Private company with investment fund – Midlandscapes, Tasmania

Nathan Males, Director of Strategic Projects, Tasmanian Land Conservancy

Midlandscapes is focused on the Tasmanian Midlands Biodiversity Hotspot, one of 15 biodiversity hotspots in Australia, which encompasses the lowland plains and foothills of the Midlands.

The total area of the Midlandscapes project is 640,900 ha with a total of 120,000 ha of conservation assets identified to date. The target area for protection and management is 64,050 ha.

The landscape of the Midlands is a mosaic of farm land, forests, grassy woodlands, wetlands and native grasslands. Each of these is recognised as an important contributor to the long term functioning ecology of the region. The Midlands contain at least 12 endemic species, 32 nationally threatened species and more than 180 plants and animals listed as threatened at the State level. In the Midlands these native grasslands principally occur on valley floors and have been reduced to less than 5% of their original extent.

The Tasmanian Midlands is also an important cultural landscape. Aboriginal peoples managed the landscape with fire. Early colonists saw the Midlands as ideal for pastoral and agricultural pursuits leading to extensive private ownership by 1820. Land rarely changes hands outside of the families that originally settled the area and a strong sense of place and stewardship has developed over the last 200 years.

Established in 2008, the Midlandscapes project was developed to bring together a number of conservation actors in the midlands landscape to work toward a coordinated approach.



Midlandscapes is intended to:

- facilitate the creation of a conservation vision for the Midlands including a landscape scale conservation plan;
- develop an income stream for conservation management including an investment fund and market based tools; and,
- raise awareness of biodiversity values in the region.

The vision for Midlandscapes is:

"Healthy natural ecosystems within the working landscapes of the Tasmanian Midlands".

The project objective for Midlandscapes is:

"10% of the Tasmanian Midlands Biodiversity Hotspot managed primarily for biodiversity conservation by 2020, comprising 64,000 ha of six ecological communities and one fauna habitat which have been identified as the Key Conservation (CAP) Assets".

Midlandscapes is led by a partnership of the Tasmanian Land Conservancy (TLC), Bush Heritage Australia (BHA) and the Tasmanian Department of Primary Industry, Parks, Water and Environment (DPIPWE). There is a formalised MOU between TLC and BHA with DPIPWE.

A coordinator is employed by TLC and jointly funded by TLC and BHA to oversee implementation and operations under direction from a Steering Committee.

Operational activities are devolved to the project partners – including fund raising, delivery of interim projects and establishing conservation contracts and covenants with private landholders in the Midlands. Project monitoring reports are presented to the Steering Committee, program partners and funding bodies.

The Midlands Conservation Fund (MCF) has been jointly established by TLC and BHA as a company limited by guarantee with Deductible Gift Recipient status to provide a reliable secure source of funds to support long term protection and management of the Midlands' most important conservation values. The Fund is managed as perpetual fund providing an annual income stream to support payments for ecosystem services. MCF is controlled by a board of directors appointed by both TLC and BHA.



Day 2, Session 1

Innovation in public policy for conservation of biodiversity

Martin Wardrop, Biodiversity Conservation Branch, DSEWPaC

This paper looks at possible areas of innovation in public policy for biodiversity conservation over the next ten years. Innovation in public policy is strongly determined by the political and community climate in which the policy operates. It also draws on the generation of new knowledge through research and initial testing in the community. Experience over the past decades shows the influence of ideas first generated from research in ecology and other sciences, including the social sciences, which are then integrated into public policy. Many of the new ideas and approaches which shape public policy are generated outside of government. Change in public policy is often slow, since it usually requires the existence (or construction) of broad agreement in the community. New approaches to public policy over the coming decade are therefore likely to be based on ideas which are already being debated or experimented with in the community. Possible areas of innovation include more use of ideas based in systems theory (non-linear interactions, resilience), greater recognition of the need for policy and management actions to operate simultaneously at multiple scales (ecosystem and landscape scale management), increased use of experimental approaches to policy and management (adaptive management, monitoring, acceptance of risk and recognition of failure), better integration of new knowledge into policy development (science-policy linkages, monitoring) and increased partnerships with the community (experiments in governance and structure). Tools to assist policy innovation are likely to include scenario-building, modelling, foresighting techniques and interactive planning using scenarios and modelling. All of these depend on having improved monitoring across a range of biophysical and social indicators.

Achieving conservation outcomes in changing native title and economic and social contexts

Andrea Leverington, Ass. Director General, Queensland Parks and Wildlife Service, DERM
Buzz Symonds, Director, Cape York Tenure Resolution

Traditional means of protecting lands with significant conservation values are being challenged in Queensland by factors such as the increasingly recognised rights and expectations of indigenous people and by stronger scrutiny of the economic and social implications of park expansion.

We have been working to develop different approaches to these challenges and have recently implemented new models that attempt to take a more inclusive view, particularly of indigenous interests. This has demanded some significant legislative reform and identification of additional resources, as well as re-orientation of the way we do business.

We will present three initiatives showcasing this work:

- On Cape York Peninsula negotiated **land tenure resolution in a native title environment has succeeded in achieve a significant increase in the national park estate**, whilst also contributing social, cultural and economic outcomes for indigenous people. This has utilised ILUAs but has often mitigated the need for and expense of a native title determination.
- On North Stradbroke Island near Brisbane **a similar outcome has been achieved in a peri-urban situation**, but with a native title determination and a parallel process for phasing out a contentious land use (sand mining) and responding to the economic implications of doing so. Both the Cape York and North Stradbroke Island initiatives provide for statutory indigenous joint management of national parks.



- QPWS has also responded to a proposal from the Mandingalbay Yidinji Aboriginal people to progress an Indigenous Protected Area over a range of land tenures including national park east of Cairns. **This partnership has led to much improved acceptance and support for national parks in the area** by the Traditional Owners, who are actively engaged in decision-making and management for those lands.

These are first steps for models that offer conservation certainty in a more competitive social, political and economic landscape and ensure the Queensland Parks and Wildlife Service continues to meet its strategic objectives.

Getting results in conservation

Dr Martin Taylor, Protected Areas and Conservation Science Manager, WWF Australia

I examine and compare five options to ensure "Conservation-oriented land or sea management arrangements are put in place in perpetuity over critical habitats for biodiversity"

- Direct regulation
- Government reserves and parks
- Non-government protected areas
- Conservation contracts
- Certified sustainable resource use

I review evidence of what really works for threatened species recovery. I also present new evidence showing that even national parks are not necessarily more expensive than conservation contracts.

Key conclusions:

- Highly protected areas and regulation really work to save biodiversity

- Little evidence that much else works as yet
- Urgent need to fill that knowledge gap and acquire appropriate data to do so
- Better value for money than short term/ project based approaches
- Covenants can deliver all elements of whole of landscape conservation at property level, dividing working properties into
 - sustainable production zones and
 - protected zones.
- Not whole property has to be "protected" by shoe-horning production areas into IUCN VI in covenants
- Need a transparent process to delineate sustainable commercial production zones within covenants as well.
- They don't have to have an IUCN number or sit in NRS.
- Need clear standards and umpire for what is a protected area and what IUCN category it is in
- Need legislative changes to "sterilize" IUCN I-II private protected areas to resource use
- Tourism industry a huge beneficiary of biodiversity conservation
- Best way to add value is to invest in acquisition of private ecotourism reserves
- To ensure enduring outcomes at low risk of reversal, conservation contracts and project funding should primarily go toward
 - supporting existing or new covenants or
 - driving uptake of certified sustainable resource use standards
- Needs to be rigorous analysis of value for money comparing alternative approaches using same metrics,
- Renewed emphasis on genuinely enduring change in land/sea management toward biodiversity conservation



Day 2, Session 2

Ngarrindjeri Yarluwar-Ruwe (Sea Country) Strategy

A/Prof Daryle Rigney, *Dean Indigenous Strategy and Engagement, Flinders University*
Steve Hemming, *Co-Director, NRA Research, Policy and Planning Unit, Flinders University*

The Ngarrindjeri nation are the original Indigenous inhabitants of the lands and waters of the Murray River, Lower lakes and Coorong. This presentation will outline the Ngarrindjeri strategy for building community capacity to take control of caring and managing Ngarrindjeri lands and waters. Ngarrindjeri have rights and responsibilities to care for their lands and waters as passed down by their creator Ngurunderi. The challenge for Ngarrindjeri today is to ensure those rights and responsibilities are translated into contemporary natural and cultural resource management process and practice.

The one that almost got away: opportunities and challenges in the conservation of Fish River Station

James Fitzsimons, *Director of Conservation (Australia Program), The Nature Conservancy*

Australia's national reserve system has been growing rapidly since the mid 1990s through a combination of strategic acquisitions of significant properties, regional public land use investigations, conservation covenanting and the development of the Indigenous Protected Area program. However, as opportunities to utilize these approaches become more limited in many regions, new and innovative partnership and funding arrangements will be required to secure land and to sustainably manage it in the long term. Here we document the innovative approach taken in the recent acquisition of Fish River Station for conservation – an ecologically-significant, 180,000 ha property in the Daly Basin of the Northern Territory. For the first time, conservation NGOs have partnered with the Australian Government's NRS and the Indigenous Land Corporation to acquire land that will be handed back to Traditional Owners. We discuss the potential application of this model in other parts of Australia, and some of the challenges with land acquisition involving numerous partners. Innovative management activities occurring on Fish River (including fire management and feral herbivore removal) and the mechanisms to finance these are also outlined.



Developing a policy framework for establishment of protected areas on private land in South Australia

Greg Leaman, Executive Director Policy and Director of National Parks and Wildlife, DENR SA

Terrestrial protected areas cover approximately 26% of South Australia and include public, private and Aboriginal-owned lands. However further additions will be required to ensure a fully comprehensive, adequate and representative reserve system.

A range of mechanisms are currently being explored to facilitate and encourage further establishment of protected areas on private lands. These aim to ensure that protected areas on private lands meet agreed National Reserve System criteria, including protection in perpetuity and management of the lands for conservation outcomes.

Greg Leaman will discuss the current initiatives in South Australia to develop a legislative framework for the establishment of protected areas on private lands.

Now in its 30th year, Conservation Volunteers Australia has established itself as an important partner of land managers in meeting these challenges. To enhance its volunteer experience and to assist in ongoing fundraising, CVA has become a land owner and manager in its own right. The presentation will outline the role of CVA in its special lease arrangement for Brookfield Conservation Park as a model for community management of public land.

Brookfield – a new approach to management of public land

Gerry Morvell, Chairman, Conservation Volunteers

Over recent decades Australia has witnessed the significant growth of the public and private conservation estate and the establishment of indigenous protected areas. This estate now provides a sound basis for protection of and our uniquely Australian biodiversity, landscapes and cultural assets. Yet this growth has brought with it major challenges for managers, not least of which are the need for more management resources and effective engagement with communities.



Day 2 Session 3

Will landscape corridors facilitate adaptation to climate impact

Paul Donatiu, Executive Coordinator, National Parks Association of Queensland

There remains significant opportunity to add to the protected area estate in Queensland. National Parks remain less than 5% of land area in this state, yet the national average is almost double this (Taylor et al 2011). Competition for the allocation of acquisition resources is intense, varying from commitments made within the recently released Queensland Biodiversity Strategy to the location specific demands of senior conservation groups.

Many of these groups and indeed governments are also promoting the establishment of landscape scale corridors as mechanisms to conserve biodiversity and maintain ecosystem function. Corridor projects such as the Great Eastern Ranges and Gondwana Link are valuable when they promote collective conservation effort amongst land managers, reduce fragmentation, increase habitat area or provide altitudinal pathways for plants and animals where this is possible. But will landscape-scale corridors enable Australian species to adapt to changes in climate?

Or more specifically:

- Does the current range of a species indicate its climatic limit?
- What evidence exists of past migrations in response to past climatic oscillations?
- How will the Australian biota cope with the velocity of climate change?

There is growing opinion that suggests that corridors will not enable most Australian plants and animals to adapt to changes in climate that are occurring now and have been forecast for the future. That is, there is evidence that some Australian plants and animals may be responding in less predictive ways to climate change than those served by the creation of migratory pathways. While some contiguous connection between remnant patches of vegetation will always be useful for wildlife, such as altitudinal corridors that capture representative populations of species with habitat niches that vary with elevation, this evidence is challenging the emphasis placed on large scale corridor conservation projects in Australia.

A combination of:

- Little evidence to support widespread species migration in Australia in response to past climate oscillations (Markgraf and McGlone 2005)
- That Australia is a relatively flat continent and any latitudinal migration would had to have occurred over vast distances (Byrne 2009)
- That Australia does not have large iconic migratory fauna like North America or Europe

Suggest that corridors will not promote adaptation to changes in climate in Australia.

The sheer speed of changes in climate that are occurring now may prohibit adaptation. Berkeley scientists have studied the velocity of climate change in Nevada and California and estimated that plants and animals must travel up to 5km/yr in flatter regions and 60m/yr vertically in mountainous areas to keep pace with the changes in temperature already being observed (Ackerly et al 2010).



There is no doubt that corridors are a politically attractive means of garnering and directing conservation investment. But the pool of funding for new National Park acquisitions is small, and justifiably the public expect that decisions made in regard to the purchase of new protected areas are based on the best available science.

Ackerly DD, Loarie SR, Cornwell WK, Weiss SB, Hamilton H, Branciforte R and Kraff NJB 2010. The geography of climate change: Implications for conservation biology. *Diversity and Distributions* 16, 476-487.

Byrne M 2009. Did Australian species stay or move when climate changed in the past? In *Australia's Biodiversity and Climate Change*. Eds W Steffen et al. Melbourne, CSIRO.

Markgraf V and McGlone M 2005. Southern temperate ecosystem responses. In *Climate Change and Biodiversity*. Eds T Lovejoy and L Hannah. New Haven, Yale University.

Taylor MFJ, Sattler PS, Fitzsimons J, Curnow C, Beaver D, Gibson L and Llewellyn G 2011. *Building Nature's Safety Net. The state of protected areas for Australia's ecosystems and wildlife*. WWF-Australia, Sydney

The Act protects hydrolic and vegetative connectivity ensuring that ecosystems have the best chance of meeting the challenge of historic and new threats, including climate change.

Vitally important in delivering this outcome was the initiative taken by western Queensland's local government peak body. The Remote Area Planning and Development Boar led an almost three year round table negotiation process that saw unprecedented consensus reached on a diverse range of river and land management policy issues within a wide range of stakeholders. Of particular importance was the support from Traditional Owners, with almost 100 leaders and elders from across the Lake Eyre Basin unanimously endorsed the protection of these rivers under the Wild Rivers Act.

Background: Pew Environment Group-Australia played a major role in developing changes to the legislation and policies and also in brokering consensus to make the Wild Rivers Act fit for purpose in western Queensland.

Protecting Queensland's Channel Country and the flows to Lake Eyre

Rupert Quinlan, Manager Channel Country Program,

Pew Environment Group – Australia

Barry Traill, Director, Pew Environment Group – Australia

Effective and permanent protection of rivers and associated wetlands are difficult as protected areas established over wetland areas will usually not protect vital incoming water flows, especially in larger catchments. In a powerful example of how effective aquatic protection can work well, the Queensland Government declared the Copper Creek, Georgina and Diamantina rivers under the Queensland Wild Rivers Act in December 2011. The declarations directly protect 4.5 million hectares from destructive mining and gas extraction and ensure that the vital water-flows remain unfettered. An additional 5 million hectares of wetlands downstream in South Australia, including the Coongie Lakes and Lake Eyre, also now have guaranteed inflows of water. In doing so, it has protected ecosystem resilience at a massive scale using what is probably the most powerful and effective river and river basin protection legislation globally.



Mapping priorities to target multiple objectives

**Dr Rob Lesslie, Principal Scientist,
Land Use and Management, ABARES**

Modern strategies for conservation – for example promoting connectivity in landscapes – are rarely simple to implement. Questions such as 'Where should we invest in re-vegetation?' raise complex issues involving multiple objectives, science, value judgement and cost. Usually, there is no 'right' answer. Justifiable conclusions require transparent analysis using diverse environmental, social and economic information coupled with expert knowledge and opinion. Informed participatory engagement by stakeholders is also needed.

Sophisticated spatial multi-criteria analysis (MCA) tools are now becoming available to support this kind of multi-objective participatory analysis and decision-making. The best of these are simple to use and promote:

- effective use of existing data and the technical expertise of stakeholders
- integration of knowledge and options in a transparent way
- incremental improvement over time, bringing together new information to help decision-making
- the development and exploration of many alternative scenarios – usually in participatory processes

The Multi-Criteria Analysis Shell for Spatial Decision Support (MCAS-S) is a software tool developed by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) to assist managers, policy makers and land management researchers involved in land resource evaluation and decision-making at national, state and local levels. It brings the spatial multi-criteria analysis process into the decision-makers' realm.

It's free, powerful, easy-to-use and complementary to proprietary spatial analysis systems. It has 'live-update' functionality designed to help stakeholders visualise and combine mapped information in an intuitive, interactive way. Its increasingly being taken up by conservation and natural resources planning practitioners in Australia.

MCAS-S can assist in participatory processes and workshop situations where a clear understanding of varying approaches to combining spatial data and other information is necessary – critical to many aspects of modern conservation and natural resources planning. Stakeholders can see the potential impacts that their decisions may make and examine alternative options. The key features of MCAS-S will be introduced, drawing on recent examples of re-vegetation planning for multiple benefits.



Day 2, Session 4

Why we need Rick Farley more than ever

**Max Bourke AM, Executive Director,
The Thomas Foundation**

"The thesis of the symposium is that the future of conservation in a changing world will require innovative thinking and inclusive approaches". Thinking outside the square seems to me to be about thinking outside the reserves.

I really did not know Rick Farley at all well. But I read a lot about what he did and we had many mutual friends. It seemed to me that he was forging and had forged something that was truly outside the square. Not every farmer in Australia believed or followed what he did, but boy was he on the right track. I hope I have suggested to you that we need more focus on the 75+% of Australia that is in private hands to truly make big leaps of significance in biodiversity conservation.

SWBTA is approximately 453,700 hectares and consists of a multitude of distinct and complex terrestrial, freshwater and marine ecosystems. The training area is surrounded by a variety of land uses including local government roads, State Forests, Nationals Parks (both marine and terrestrial) and pastoral properties.

As such, to ensure that SWBTA is successfully managed from an environmental perspective, it is an imperative for Defence to ensure that a highly collaborative agenda with all relevant stakeholders is maintained.

Dr. Bowett's presentation will discuss the various different collaborative management initiatives that Defence is engaged in with other Commonwealth and State government agencies to ensure that SWBTA continues to have the best environmental management regime possible whilst balancing the military training needs of the Australian Defence Force.

Shoalwater Bay Training Area – capability, conservation and collaboration

Dr Julia Bowett, Senior Policy Advisor, Environmental Impact Management, Department of Defence

Shoalwater Bay Training Area (SWBTA) is one of the largest military training areas in Australia and a significant asset to Defence and the three military Services. It is also regarded as an 'environmental icon' in the eyes of many Australians. This is reflected by its listing on World Heritage as well as the Commonwealth Heritage register.



