



National Farmers' Federation

Submission to the

House of Representatives
Standing Committee on Climate Change,
Environment and the Arts Inquiry into

Australia's Biodiversity in a Changing Climate

29 July 2011



Member Organisations



Contents

1. The National Farmers' Federation.....	4
2. Introduction	4
3. Nationally Important Ecosystems.....	6
4. Climate Change Impacts.....	7
5. Agriculture and Biodiversity	10
6. Government's response to biodiversity decline	11
7. Market Based Approaches to Environmental Management	13
8. Conclusion.....	15
NFF Contact.....	16
Bibliography.....	17

1. The National Farmers' Federation

The National Farmers' Federation (NFF) is the peak national body representing farmers and, more broadly, agriculture across Australia. It is one of Australia's foremost and respected lobbying and advocacy organisations.

Since its inception in 1979, the NFF has earned a formidable reputation as a leader in the identification, development and achievement of policy outcomes - championing issues affecting farmers and dedicated to the advancement of agriculture.

The NFF is dedicated to proactively generating greater understanding and better-informed awareness of farming's modern role, contribution and value to the entire community.

One of the keys to the NFF's success has been its commitment to presenting innovative and forward-looking solutions to the issues affecting agriculture, striving to meet current and emerging challenges, and advancing Australia's vital agricultural production base.

The NFF's membership comprises of all Australia's major agricultural commodities. Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. These organisations collectively form the NFF.

The 2009 re-structure of the NFF has enabled a broader cross section of the agricultural sector, including the breadth and the length of the supply chain, to become members through an associate member category.

Each state farm organisation and commodity council deals with state-based 'grass roots' issues or commodity specific issues, respectively, while the NFF represents the agreed imperatives of all at the national and international level.

2. Executive Summary

NFF notes that the focus of this Inquiry is on nationally important ecosystems in relation to climate change. It would be worthwhile ascertaining what a “important ecosystem” is at the national scale – it certainly should not be used as a way to protect what individuals may see as important but these may not be important at a national level.

Over recent years, governments, in response to the increasing threats on our biodiversity, have implemented various protection measures, such as banning the clearing of native vegetation and a host of legislation to protect threatened species. Moreover, work undertaken to ascertain predominant threats, density of threatened species and biodiversity hot spots could be used to underpin future investment. Moreover, the identification of highly valued ecosystems under threat of climate change shows that all but one (i.e. southwest of Western Australia) are located within protected areas.

A number of funding programs have been focussed on protecting biodiversity through land acquisition and covenants¹ and to enhance its resilience into the future. A cursory look at land use in Australia shows that around 40% of land is currently managed for conservation outcomes. A large amount of Government funds are allocated to try to significantly increase the protected lands component (largely at the expense of agriculture) with a focus on those bioregions that have less than 10% in the National Reserve System. Yet there may be unmet opportunities to deliver better outcomes using all existing land managed for conservation outcomes along with private land incentives.

Agriculture should not be dismissed in its importance in delivering environmental outcomes. Intrinsically, private land managers own and manage around 60% of the landscape and have a strong stewardship ethic to leave their land in a better condition. Farmers invest significant funds in managing both biodiversity and some of the threats such as pests and weeds.

The use of market based measures such as the Environmental Stewardship Program to deliver real environmental outcomes on the ground by private land managers should not be overlooked as an essential component into the future. Such a cooperative partnership approach is likely to be cost effective and deliver outcomes by those with an intrinsic understanding of their own backyard.

¹ Otherwise known as protected areas

3. Nationally Important Ecosystems

NFF notes that the Inquiry is to consider biodiversity and climate change in the context of “nationally important ecosystems”. Under the Commonwealth’s environmental law, the *Environment Protection and Biodiversity Conservation Act 1999* (“EPBC Act”), there is no existing category for “nationally important ecosystems”. Protection at this scale is only possible where protection is afforded through such measures as Ramsar Wetlands or World, National or Commonwealth Heritage Listing (Hawke, 2009, p. 101).

According to the Hawke Review (Hawke, 2009) recent studies conclude that Australian species are likely to become increasingly threatened through climate change. However, it is currently unclear how species will cope but that the structure of ecological communities will change as species adapt. Significant issues include the rate of adaptation to the rate of change, and the way in which the environment is managed spatially.

Moreover, strategies to assist include building resilience, proactive interventions and flexible policy and management approaches. There were seen to be several components to resilience: maintain well-functioning ecosystems; protecting a representative array of ecosystems; removing or minimising existing stressors; building appropriate connectivity and identify and protecting refugia (Hawke, 2009, p. 102).

The Hawke Review concluded that there is merit in considering a shift from species management to landscape management and proposed a new category of “ecosystems of national significance”. However, the Review noted that while it may be easy to define ecosystems, it would be much harder to define “nationally important” ecosystems. The Review proposed a methodology similar to National Heritage List nominations, i.e. based on characteristics. The Review suggested that such ecosystems might meet one or more of the following criteria:

- High comparative biodiversity within its ecosystem type;
- Critically nationally important ecosystem functions;
- High value remnants of particular habitat types;
- High value areas that create connectivity between other ecosystems;
- Significant in building comprehensive, adequate and representative system of habitat types;
- Provides critical habitat to the long term survival of listed threatened species;
- Climate change refuge of national significance; and/or
- Under severe and imminent threat.

The Review recommended that currently under-represented ecosystems should be prioritised for listing under this new category.

The above list is likely to leave very little of Australia unable to be listed, particularly if an ecosystem only needs to meet one of these criteria.

While the Australian Government is yet to formally respond to the Hawke Review, NFF notes that the Australian Government is proposing to table legislative changes to the EPBC Act in 2012. It may be useful for this Inquiry to determine what is nationally significant and moreover, what criterion (and NFF suggests there ought to be several) are essential to identify what is nationally significant.

The NFF suggests that Australia's agricultural systems ought to be considered as being nationally important ecosystems in the context of co-use within landscapes considered as mosaics rather than their biodiversity value alone.

4. Climate Change and Other Impacts

An issue that is important to consider is the positive environmental changes (e.g. higher carbon levels may lead to increased plant growth) and where these may be of significance to biodiversity. There is currently some good information on how climate may affect agriculture (e.g. Tasmania is expected to have slightly warmer temperatures, higher rainfall in the main farming areas, slightly drier in the central highlands²) but little data on the likely impacts on biodiversity.

If Governments are targeting a 20 year policy scenario, attention should perhaps go to those areas most likely to be of concern. Importantly, it may be useful to see where predicted climate impacts may intersect with other biodiversity threats and the frequency of threatened species. Evans et al (2011) have attempted to map the spatial distribution of the major threats to biodiversity across Australia using models of species distribution (Figure 1). The focus of species were those listed under the EPBC Act and this shows that a large area of Australia has either no or very little predominant threat³. The researchers acknowledge that improvements could be made by separating past, present and future threats to aid decision making. It is the future threats that may be very useful to determining where future Government investment may be strategically targeted. Interestingly, this research did not consider climate change.

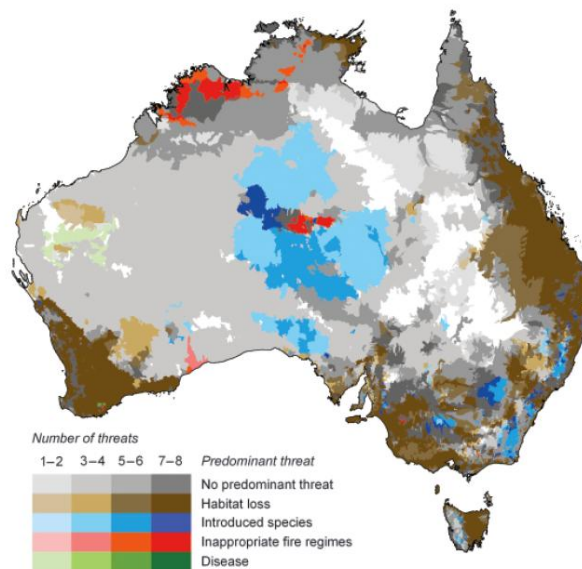


FIGURE 1: The distribution of prominent threats to biodiversity across Australia⁴

Figure 2 shows that the highest numbers of threatened species occurs in the highest population areas, i.e. the eastern seaboard. While agriculture has been much maligned as the cause of

² http://www.dpac.tas.gov.au/_data/assets/pdf_file/0004/140197/CFT_-_Impacts_on_Ag_Summary.pdf.

³ The "predominant threat" is a threat affecting the greatest number of species in each sub catchment. Where are two or more threats affect an equivalent number of species, there is no predominant threat occurring in these sub catchments, displayed in shades of gray. Darker colours indicate a larger overall number of threats occurring in the sub catchment. White indicates areas where no threatened species occur.

⁴ Source: Evans, et al., 2011

environmental degradation in Australia, this map clearly links the highest numbers of threatened species largely to Australia's high population density areas.

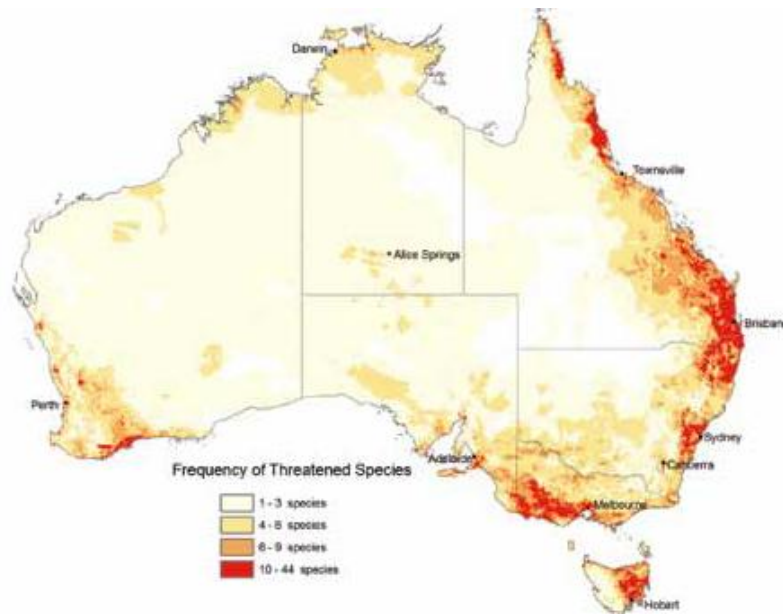


FIGURE 2: Geographical distribution of EPBC Act threatened species⁵

Another useful method might be to look at the biodiversity hotspots assessments. Globally, the south west of Western Australia (Figure 3) was the only Australia region identified and listed as a Global Biodiversity Hot Spots⁶. Current threats listed include bauxite mining, jarrah dieback and alien species (foxes and cats)⁷.



FIGURE 3: Conservation International Australian Biodiversity Hot Spots⁸

The Australian Government has also undertaken an Australian Biodiversity Hot Spots Assessment (Figure 4). Nearly half of the hot spots occur in Western Australia, three in Queensland and the very north eastern part of NSW, one in Tasmania and a further three in western Victoria and south eastern South Australia. Some of these correlate strongly to the highest number of threatened species, notably Hot Spots numbers 2, 3, 4, 5, 6, 7 and 8.

⁵ Source: Natural Resource Management Ministerial Council, 2010, p.26

⁶ See <http://www.biodiversityhotspots.org/xp/hotspots/australia/Pages/default.aspx>.

⁷ Ibid

⁸ Source: <http://www.biodiversityhotspots.org/xp/hotspots/australia/Pages/default.aspx>

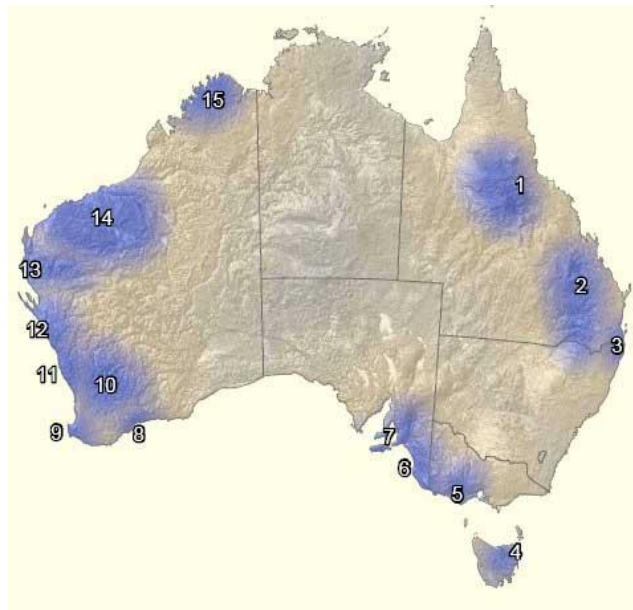


FIGURE 4: Australian Biodiversity Hot Spots⁹

Steffen, et al. (2009 p. 89) provide some insight into species characteristics that are likely to result in higher or lower risk. The characteristics of species that may have less resilience to climate change are:

- Narrow range of physiological tolerance to factors such as temperature, water availability and fire;
- Low genetic variability;
- Long generation times and long time to sexual maturity;
- Specialised requirements for other species (e.g. for disperser, prey species, pollinator or photosynthetic symbiont) or for a particular habitat that may itself be restricted (e.g. a particular soil type);
- Poor dispersers; and
- Narrow geographic ranges.

Further analysis by Steffen et al (2009 p.92-99) using vulnerable ecosystem classifications have identified locations where climate change may have a disproportionately large impact on all aspects of biodiversity and especially on extinctions of endemics found within narrow ranges (this does not mean that other stressors are not a risk). The key areas are the Great Barrier Reef, North Queensland Wet Tropics, South-west Western Australia, Kakadu World Heritage Area and the Australian Alps. However, on the positive side, Steffen et al (2009) notes that with the exception of south-west Western Australia, these areas are largely protected in reserves.

In relation to ecosystems, there remain knowledge gaps and two associated research questions: the role of fire management in mitigating threats and to what extent can species be lost and/or substituted in an ecosystem without affecting ecosystem functioning (Steffen, et al., 2009 p. 117).

⁹ Source: <http://www.environment.gov.au/biodiversity/hotspots/national-hotspots.html>

Forestry

The passive management, 'lock and leave' approach often used in forest reserves and national parks, results in the excessive build-up of fuel leading to more intense and destructive wildfires and greater carbon emissions. In time, it also results in decreased biodiversity as forests senesce and as a result, biodiversity is impacted.

The international scientists on the Intergovernmental Panel on Climate Change 2007 stated that the long-term sustainable management of forests for timber, fibre and energy production produces the largest carbon sequestration benefit from forests.

This active management mimics the natural state of the forest and helps to protect the forest against bush-fires, which can have a devastating effect on wildlife as well as emitting millions of tonnes of carbon into the atmosphere.

The purpose of this demonstrates that 'ecosystems' are important, but managing that system is just as important to its long term sustainability.

5. Agriculture and Biodiversity

Australia's Biodiversity Conservation Strategy notes the importance of the management of natural resources on agricultural land to biodiversity conservation and that partnerships with farmers and land managers will be important in meeting this challenge as this sector is responsible for managing over 60% of the Australian landscape (Natural Resource Management Ministerial Council, 2010).

This is not a new concept for farmers as a high percentage already undertake natural resource management ("NRM") activities for increased productivity (88.6%), farm sustainability (88.4%) and environmental protection (74.5%) (Australian Bureau of Statistics, 2008). At the heart of every farmer is a practising environmentalist.

In 2009-10, 65% of all agricultural businesses reported having native vegetation on their holding and 55% of these protected their native vegetation for conservation purposes. Similarly, half of all agricultural businesses reported rivers or creeks on their holding with 55% of these protecting their river or creek banks. Wetlands were reported by 12% of all agricultural businesses with 57% of these businesses reporting that they had protected these wetlands (Australian Bureau of Statistics, 2011).

Moreover, of the 417.3 million ha of land managed by agricultural businesses, 9.2 million ha have been set aside specifically for conservation and protection measures by 36% of land managers (Australian Bureau of Statistics, 2010). The most recently released land management statistics notes that around 14.8 million ha is not used for agricultural production and of that, 7.6 million hectares is specifically protected for conservation (Australian Bureau of Statistics, 2011).

Seventy one percent of Australia farmers reported barriers to increased NRM, such as a lack of financial resources (78.6%), time (63.1%), government incentives (40%) and age and ill health (22.2%) (Australian Bureau of Statistics, 2008). The recent significant drought has undoubtedly had a major influence on the state of Australia's environment but also the ability for land managers to deliver improved NRM outcomes.

Many see agriculture as the "fiend" in the decline in biodiversity. Biodiversity is often seen as separate from agriculture. Yet a healthy environment is intrinsic to farm viability and profitability. Moreover, internationally, agriculture is seen as an important part of biodiversity

and valued as part of the agric-ecological system. There appears to be significant disconnect between the way agriculture is treated domestically and internationally in relation to biodiversity.

In Australia meanwhile, there is a tension between agriculture and calls for increased protection of land. While Australia does not have a food security issue, Australia's contribution to world food security is increasingly important, particularly as the world's population increases over the next decades.

6. Government's response to biodiversity decline

Over the years, a number of policy responses in response to biodiversity decline have been implemented. This includes from State Governments/Territories banning the clearing of native vegetation to Government incentives to protect and/or enhance biodiversity. Importantly, significant resources have been directed towards permanent protected areas such as the National Reserve System.

The National Land Use data from 1996-07 to 2005-06 (Bureau of Rural Sciences, 2007) indicates that there are a number of categories of land uses that fit into conservation uses with an increase in this area from 36% to 38% of the land mass (or an increase from 275,986,800 ha to 295,517,500 ha). The categories include land for nature conservation, managed resource protection, water bodies or other minimal use. In 2008, around 31% of land under some type of conservation management was under formal protection measures, up from 22% in 1997¹⁰ (Figure 5).

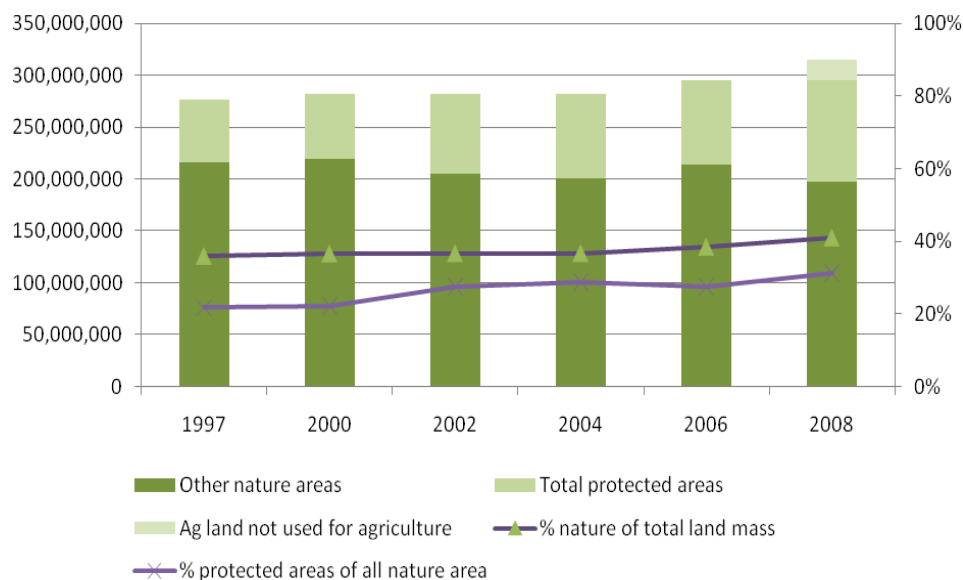


FIGURE 5: Land managed for nature conservation in Australia

However, it should be noted that the figures for total nature conservation are constrained by a lack of ability to access the more current national land use for formal protected areas. NFF presumes that these figures will only have increased due to the inherent acquisition of land by various Governments and private entities especially under Caring for Our Country and other programs.

¹⁰ Data sourced from <http://www.environment.gov.au/parks/nrs/science/capad.html>.

Importantly, land managed privately, i.e. by farmers, for conservation are excluded from this database, particularly where farmers do not chose to participate in any program or where Governments have funded protection but the farmer has chosen not to protect this via a covenanting arrangement. If these lands were to be included, the area managed for nature conservation would be further increased. Figure 5 includes an area of land in 2008 that was designated as managed by farmers for conservation or non-agricultural uses amounting to some 19.5 million ha or 2.5% of the total land mass or around 3.7% of all agricultural land.

However, most Governments and environmental non-government organisations (ENGOS) appear to only place significance on those lands held in formal protected land tenure – generally known as protected areas, such as the National Reserve System and Indigenous Protected Areas (IPA). Although IPAs are not a formally held land title or covenant but are agreed via contract agreements with Indigenous people. This is a smaller subset of the area of Australia under nature conservation measures of some sort.

The underrepresented Bioregions in the National Reserve System is often used as justification for this increased pressure (Figure 6). A target of 10% is used as a measure of a satisfactory level of protection. However, what is not shown is whether the bioregion has this amount of vegetation to protect or whether other land management regimes deliver the level of protection required. NFF sees this as a major limitation in this focus on formal protection measures.

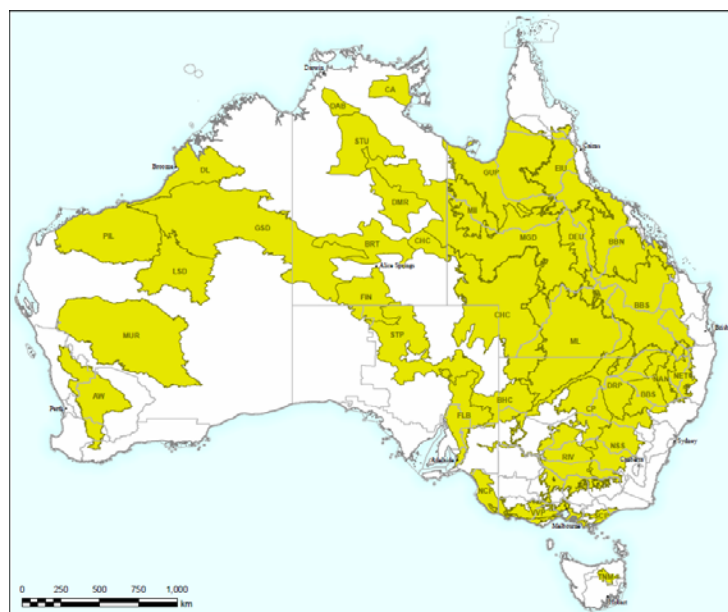


FIGURE 6: Bioregions underrepresented in the National Reserve System

More recently, the Commonwealth Government has initiated a National Wildlife Corridors Plan, which is “*designed to prepare our native plants and animals, as well as our agricultural landscapes for climate change*”. There will be a focus on climate change impacts and adaptation through identifying critical linkages in the landscape for species migration as well as sequestering carbon (Department of Sustainability, Environment, Water, Population & Communities, 2011).

A number of existing Wildlife Corridors are underway (or proposed) covering many of the biodiversity hot spots. It may be useful for current and future endeavours to initially look at where there is existing conservation managed lands (i.e. all lands under this category of land use, not just the protected lands). It would then be NFF’s preference to take a strategic approach and look to marry this information with private land managed for conservation.

Gaps should then be targeted using market based measures such as the Environmental Stewardship Program to deliver real on-ground outcomes. Moreover, the proper management of public lands for pests, weeds, disease and fire will go a long way towards improving the resilience of our biodiversity.

While land and habitat loss has been a past threat, much of this has been abated by State legislation banning clearing of native vegetation. Further improvements are likely with proposals such as the Biodiversity Fund announced as part of the Federal Government's land sector measures for the Carbon Tax proposal.

The latter will provide funding for replanting of native vegetation on private land, manage invasive species and manage existing biodiversity. This opens the opportunity under Wildlife Corridors to deliver multiple outcomes without converting huge amounts of agricultural land into formal protected lands.

7. Market Based Approaches to Environmental Management

The NFF has been a long-term advocate for voluntary and incentive based approaches toward achieving sustainable outcomes in natural resource and environmental management. Such approaches encourage participation, reward those who invest and foster community ownership and commitment to the resolution of issues within regions. Market based instruments (MBI's) are more likely to provide appropriate incentives for responding to environmental problems compared to regulatory approaches, but unless they are well designed, can also be costly and have significant redistributive effects (PriceWaterhouseCoopers, 2009 p.3).

The potential advantages of MBI's include flexibility, least-cost abatement, information generation, and better alignment of incentives for conservation or investment in the resource; however, costs can include information and input requirements in defining, allocating, measuring and enforcing property rights (Productivity Commission, 2001 p.4).

MBI's are being used increasingly for environmental management (including in Australia), but it must be ensured that these instruments are well directed, appropriately designed and effectively implemented, so as to avoid leading to limited environmental gains and high regulatory costs.

Public sector stewardship initiatives

The NFF supports the use of publically funded Stewardship or Conservation Agreements, entered into voluntarily as a positive means for enhanced conservation of native vegetation and biodiversity. Such payments recognise the value of the conservation effort and recompenses landholders for the costs incurred. Payments through such agreements should not only recognise the financial costs to the landholder of conservation, but should also act to increase wider community understanding of the costs associated with conservation of environmental assets.

Perhaps two of the most recent examples of MBI's being implemented in public policy design are in the Caring for Our Country (Environmental Stewardship Program) and the Queensland Nature Refuges Program.

The NFF believes markets should play a larger role in meeting natural resources and environmental needs in the future. Yet it should also be remembered that there are also potential

economic solutions to deliver many environmental initiatives that are demanded by the public that may not require government funding.

Private sector stewardship initiatives

The NFF believes that there is also an enormous opportunity to constructively participate in the environmental debate and engage all stakeholders towards achieving sustainable and resilient outcomes, by improving the understanding of private sector/consumer funded stewardship initiatives broadly based around carbon, water and biodiversity. Already we are seeing that many consumers are prepared to pay premiums for green energy, organic food and fair trade products.

The NFF believes that this can and will expand into other, broad based environmental services as well. On the domestic front, there are real opportunities for the private sector to provide incentives through the development of voluntary industry/community driven initiatives such as commodity specific Best Management Practice (BMP) programs, the Environmental Champions Program, and Landcare. Internationally, we are already starting to see signs that the paradigms are changing, and consumers are voluntarily paying for intrinsic product values in the delivery of environmental services beyond farmers' accepted duty of care (Archer, 2009).

Box 1 outlines some of these private sector/consumer funded stewardship initiatives.

Box 1 International private sector stewardship initiatives¹¹

Water

Initiative: Watershed Agricultural Council.

Target: Water quality – nutrients.

Funding: User pays - New York City water utilities pass on costs to water ratepayers.

Key points: Voluntary, whole of landscape, flexible, farmer initiated, incorporating funding for capital expenditure including machinery and infrastructure.

Location: Catskill Mountains, New York State, USA.

Overview: Under the Clean Water Act New York City's nine million residents were faced with building a US\$8.0bn water treatment plant with daily operating costs of US\$1.0m. Instead the city's residents pay farmers in its two catchments a total of US\$7.0m/year to mitigate nutrient and pathogen runoff from their farms. The farmer initiated, science based, voluntary programme, receives technical support from the USDA (United States Department of Agriculture) and Cornell University. Non-traditional funding is available in the form of Nutrient Trading Credits, which can be allocated toward the capital cost of farm machinery and infrastructure that further mitigates nutrient and pathogen runoff. Farmers have also developed a "Pure Catskills" eco-brand to market the benefits of their fresh and environmentally grown local produce.

Habitat

Initiative: Operation Bumblebee.

Target: Bumblebee habitat.

¹¹ Source: Archer, 2009

Funding: Mixed R&D - industry, incentives – government

Key points: Voluntary, industry led R&D, implemented on marginal farmland, significant multiplier effect.

Location: UK arable farmland (with pilot sites now in Portugal, Spain, France, Italy, Germany and Hungary)

Overview: Bumblebees are an important pollinator species and their decline poses a significant threat to UK ecosystems and food production. Research undertaken by agribusiness company Syngenta led to the development of a pollen and nectar seed mix enabling the re-establishment of the bumblebee's food source. Farmers plant the mix on their marginal land including field boundaries and corners. They are paid UK£450/ha per annum through the government's stewardship programme and derive marketing benefits from food retailer Sainsburys. The initiative has succeeded in planting 1,000ha of habitat, which with a multiplier effect of every 1ha planted delivering 1,000ha of pollination services, has resulted in sufficient new habitat to provide pollination services to 25% of the UK's arable land.

Renewable energy

Initiative: Samsø Renewable Energy Island

Target: Renewable energy, carbon emissions

Funding: 93% private, 7% government

Key points: Community initiated; self sufficient in renewable energy, selling green energy and carbon credits.

Location: Samsø Island, Denmark

Overview: In 1997, the Danish Government called for expressions of interest from communities willing to demonstrate a 100% transition to complete self-sufficiency with renewable energy within ten years. Samsø, a 144 sq km island, known largely for its agriculture and tourism was awarded the project. Using a combination of windmills, central heating plants, biomass and solar generation, it successfully converted to 100% renewable energy. The islands' 4,100 inhabitants predominantly funded the project. It cost €14,000 per person (93%), with the government contributing €1,000 per person (7%). A small-scale biodiesel plant has been developed using canola seed, with the high protein "cake" bi-product fed to livestock. Samsø's per capita carbon footprint has reduced 15.1 tonnes, from 11.1 tonnes to -4.0 tonnes per person, enabling the sale of carbon credits.

To facilitate private sector/consumer funded stewardship initiatives, the NFF believes that government should provide enabling legislation. This should allow a lightly regulated non-government organisation to administer the scheme and the private sector/consumers to develop and foster a marketplace for consumers to pay land managers who deliver environmental benefits above their duty of care (Archer, 2009).

8. Conclusion

Climate change and its impacts on biodiversity is a complex issue. Importantly, the focus of the Federal Government is on nationally important ecosystems; however, a better definition is needed to ensure that this remains a category for truly national, iconic and important ecosystems.

Importantly, climate change and other biodiversity threats show different areas of Australia at risk. An important policy issue is that nearly 40% of Australia is managed for conservation outcomes yet there is clearly a continued pressure to put more and more land under formal protection. The notion of active management of conservation, such as for forestry and intrinsic to other Federal Government initiatives (Environmental Stewardship), ought to form part of the mix of tools to enhance outcomes.

While the National Wildlife Corridors Plan might be a useful tool, NFF notes that there remain opportunities to marry existing conservation land with private land management efforts to deliver wins for biodiversity and agriculture. NFF remains supportive of market-based instruments such as Environmental Stewardship Program and the newly announced Biodiversity Fund.

NFF Contact

Deborah Kerr
NRM Manager
Ph: 02 6269 5669
Email: dkerr@nff.org.au

Bibliography

- Archer, S. (2009). *Market Based Ecosystem Services: A proposed National Stewardship Initiative*. Canberra: Nuffield Australian Farm Scholars.
- Australian Bureau of Statistics. (2011). *Land Management and Farming In Australia 2009-10*. Canberra: Australian Government, Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2008). *Natural Resource Management on Australian Farms 2006-07*. Canberra: Australian Government, Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2010). *Year Book Australia 2009-10*. Canberra: Australian Government, Australian Bureau of Statistics.
- Bureau of Rural Sciences. (2007). *Data Download*. Retrieved July 22, 2011, from Australian Collaborative Land Use Mapping Program:
<http://adl.brs.gov.au/mapserv/landuse/index.cfm?fa=app.loaddata&tab=loaddata>
- Department of Sustainability, Environment, Water, Population & Communities. (2011). *National Wildlife Corridors Plan*. Retrieved July 22, 2011, from Environment:
<http://www.environment.gov.au/biodiversity/wildlife-corridors/index.html>
- Evans, M. C., Watson, J. E., Fuller, R. A., Venter, O., Bennett, S. C., Marsack, P. R., et al. (2011). The Spatial Distribution of Threats to Species in Australia. *BioScience*, 61 (4), 281-289.
- Hawke, A. (2009). *The Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*. Canberra: Australian Government Department of the Environment, Water, Heritage and the Arts.
- Natural Resource Management Ministerial Council. (2010). *Australia's Biodiversity Conservation Strategy 2010-2030*. Canberra: Australian Government, Department of Sustainability, Environment, Water, Population and Communities.
- PriceWaterhouseCoopers. (2009). *Carbon Taxes vs. Carbon Trading - Pros, cons and the case for a hybrid approach*. London: PriceWaterhouseCoopers LLP.
- Productivity Commission. (2001). *Cost Sharing for Biodiversity Conservation: A Conceptual Framework*. Canberra: Productivity Commission.
- Steffen, W., Burbidge, A. A., Hughes, L., Kitching, R., Lindenmayer, D., Musgrave, W., et al. (2009). *Australia's Biodiversity and Climate Change*. Collingwood, Victoria, Australia: CSIRO Publishing.