

**National Conservation Incentives Forum 2005**

**5-8 July 2005**

**‘Valuing our Environment – Using Economics to Strengthen Protection’**

**Keynote address by**

**Mr David Borthwick**

**Secretary**

**Australian Government  
Department of the Environment and Heritage**

**La Trobe University (Bundoora Campus)  
Melbourne**

**Thursday, 7 July 2005**

Good morning and welcome to the conference session of the National Conservation Incentives Forum. It is a pleasure to be a co-sponsor and speak at this event.

I would like to thank our distinguished guests.

We are fortunate to have Mr John Landy, Governor of Victoria and Trust for Nature Patron.

A particular welcome also to this morning's keynote speakers; we also have representatives from every state and territory.

My proposition today is that economic analysis should be used to provide insights into how best to tackle environmental problems.

As both an economist and the Secretary of the Australian Government Department of the Environment and Heritage, I believe that economics is fundamental to the way we value, use and protect our environment.

Today I want to address the role of economics in the environment from 3 perspectives:

- Firstly, the role of economic signals in conservation policy;
- Secondly, the importance of access rights; and
- Thirdly, the importance of information.

First and foremost, we need to make sure that we do the research and evaluate the evidence, so that we can have a good understanding of the particular environmental problem. Only then can we work – in a cross disciplinary way – to make sure that measures employed to protect the environment are targeted to the nub of the problem.

Economic instruments are not utilised anywhere near their potential in targeting environmental problems. This may reflect, as the Economist magazine put it so aptly: “mandate, regulate, litigate. That has been the green mantra.”

Despite the Economist magazine's characterisation, in some instances regulatory approaches may be the best way to go, where:

- Protection of particularly valuable areas is required (eg by the creation of national parks);  
or
- Where emissions are sufficiently noxious that a specific level of discharge should not be exceeded and this otherwise cannot be guaranteed.

Indeed, market based and regulatory responses are usually not mutually exclusive.

Markets generally need to be buttressed by a regulatory framework if they are to work effectively. Let me tease out that thought a little further.

### **Economic signals and conservation policy**

Up until relatively recent times, conservation policy focused on the management of public lands for forestry, water supply, biodiversity and recreation purposes.

Wildlife and native vegetation on public land was the property of the state. Access for private or commercial purposes was prevented or controlled through permits and licences.

Over recent years—particularly in the 1990s—it was recognised that Australia’s conservation objectives could not be achieved through the purchase and reservation of land alone for reserves and parks.

More than 70 per cent of Australia’s land area is managed by private landholders.

Many of the unprotected priority habitats and ecological communities occur only in relatively small pockets on private land. As a result, governments began to focus on various kinds of regulation to limit or control development (such as, limitations on the clearing of native vegetation). Because habitat is so critical this was seen as a concrete way of protecting threatened species (of which we have about 1600 in Australia).

In the last decade, regulatory approaches have been complemented by:

- investment in education, capacity building, supporting community action through the Natural Heritage Trust (NHT) and the National Action Plan for Salinity and Water Quality (NAPSWQ); and
- the use of tax incentives to support environmental philanthropy.

I am pleased to say that now thinking is evolving further. There is a great deal of interest among landholders, environmental organisations and policymakers in exploring the potential to use incentive mechanisms and market-based instruments to achieve environmental objectives.

The Economist magazine picked up this shift and characterised it as: “Yesterday’s failed hopes, today’s heavy costs and tomorrow’s demanding ambitions have been driving public policy quietly towards market-based approaches.”

New markets are being developed for services that support regional and national sustainability objectives like salinity mitigation, carbon sequestration, water and fisheries management.

The National Market Based Instruments Pilots Program under the National Action Plan for Salinity and Water Quality is trialling a range of projects that extend our understanding of how economic instruments can be applied effectively.

What are some overarching lessons?

### Value of biodiversity and the absence of economic signals

If markets are to develop in the environmental arena, it will not be spontaneous. Markets need to be created and supported. Usually a regulatory framework needs to be put in place in order to allow the market to flourish.

Property owners are running businesses. They must focus on options that are viable for them, even if that may not be in the best interests of other resource users or of society overall.

Understandably, private property owners propose that if society wants to impose environmental objectives over and above what might reasonably be expected of them, then they should be recompensed in one way or another.

This might seem to be a reasonable proposition at first instance. Yet decisions by an individual property owner can have beneficial, or sometimes bad, effects on their neighbours or, more broadly on, say, the valley in which they operate. For example, decisions of individual farmers can affect the spread of pests, erosion and salinity - all factors affecting overall farming productivity in a region.

Nevertheless, good environmental measures in these areas, taken by an individual property holder, may not generate a sufficient direct return for them. However, the sum of good environmental practice will often be very beneficial for property owners overall. In other words, there may be a mutual dependence for each property owner in the valley to pull their weight in pursuing environmental objectives.

In such instances, a case can be reasonably made for the need to take collective – valley wide – action, with this being more akin to a private benefit in which the property owner should wisely invest.

What though, if we extend this example beyond the valley to, say, the whole catchment, or to the State as a whole. What should society's expectation be of the property owner? Should the property owner be expected to take decisions to, say, protect wetlands, or preserve habitat for threatened species, when that limits their potential to develop their holdings? Should society expect them to pay for, or absorb the cost - through the imposition of regulations – for the broader “public good”?

This is much more of a stretch. Yet governments do it all the time. Governments regulate what you might build in urban areas, they impose heritage restrictions and limit your capacity to cut down trees in your backyard – all actions which might adversely affect the economic value of your property, in the name of the broader “public good”.

Similarly, we limit industrial development, or impose development conditions on proposals that may affect matters of national environment significance.

In all such instances, we are imposing costs on the private sector – usually with no recompense – in order to pursue public environmental objectives.

My message is that drawing the line between how governments treat “private” and “public goods” essentially depends on the political process – on value judgements as to what is held to be fair and reasonable.

### Principles for ensuring effectiveness of payments

Although there are difficult choices to be made, direct payments to landholders to protect biodiversity values on behalf of the broader community can complement suasive and regulatory approaches. We can build on the experience garnered from biodiversity contract and tender programs such as the Victorian Bush tender and the Tasmanian Private Forest Programme.

Biodiversity stewardship payments may be particularly suited to managing threats to biodiversity that require active and ongoing monitoring and management effort from landholders. Such payments provide landholders with resources for undertaking conservation activity and motivate them when the private benefits from undertaking a conservation activity are small or even negative.

Examples include controlling environmental weeds, restoring and managing habitat of specific species, and implementing burning and grazing regimes.

The overall effectiveness of public funding for improved conservation and natural resource management outcomes can be enhanced by incorporating the following features into the design of funding programmes:

- biodiversity payments should be allocated on the best value for money, assessed in terms of the contribution towards the achievement of public good biodiversity objectives;
- payments should, wherever possible, be allocated on a competitive basis, with all landholders that can contribute to the desired outcomes eligible to participate; and
- payment should be avoided for action considered likely to be of net benefit to landholders, either individually or in a group, or that are already legal obligations of the landowner.

In these ways, these arrangements have been, or should be designed to protect environmental and economic values. But, as I have tried to draw out, the balance between private and public rights has to be worked out. A balance has to be struck (even though that balance might be hotly contested).

## **The importance of Access Rights**

The second major issue I wish to address today, the importance of access rights. Environmental resources – water, ecosystems, fisheries and clean air – are often characterised by the absence of access rights. As a result, the pricing of environmental services is inadequate.

The granting of access rights can be both beneficial for the environment and for investment certainty. The key lies in allocating access rights over “common” resources, such as water or fisheries. Resources such as these can be over exploited, because the “commons” belong at once to everyone and to no-one. This can be rectified by granting access quotas or licences (preferably on a competitive basis), consistent with sustainability principles, while making those licences tradeable instruments.

Let me illustrate the possibilities by one example - water. An important component of the COAG National Water Initiative (NWI) was the creation of certainty of access entitlements to water, separate from the title to land.

Under the NWI arrangements the rights of water users and the environment are treated equally. Water – like fishing licences – needs to be allocated to users on a sustainable basis, to avoid the tragedy of the “commons”. And that allocation - the initial distribution of shares to users and the environment - needs to be determined on a transparent basis, informed by science and socioeconomic analysis.

The aim of the NWI is to protect environmental values, while giving the certainty that farmers and other users need for long-term investment.

The expectation is that water will be traded from low to higher value uses benefiting overall agricultural productivity. But if water markets are to work efficiently, there needs to be:

- a liquid market where opportunities to trade can be discovered and promulgated;
- proper water accounting and audit of water use; and
- a whole of system or catchment approach so that there is not free access to water through practices that intercept or divert water (eg into private storages, or the harvesting of underground water before it enters a regulated system).

In essence, water markets – like other nascent markets for environmental services – need to be buttressed by a robust regulatory framework. The NWI sets out a 10 year implementation timetable for this to happen.

## **Information on the economic benefits of biodiversity**

The third major issue on the role of economics and the environment that I wish to address today is the need for good information. Markets do not work properly where there is incomplete knowledge and information. Information gaps in the past have contributed to what are now seen as flawed or inadequate policies.

If the benefits of biodiversity conservation for land managers are unknown or the information is difficult to access or use, landholders and regional natural resource management bodies are unlikely to incorporate values of biodiversity conservation in their land management choices.

Government has an important role in facilitating or directly providing the supply of basic information – including on land use practices and ecosystem management.

Access to information is central to achieving sustainable land use and wider public benefit, and the absence of good information is a major impediment to sustainability.

And that information needs to be accessible to landholders and regional natural resource managers. We have a good way to go before our scientific knowledge can be readily translated into on the ground action at the property or regional level.

Even at a more aggregate level than the individual property owner, we have a way to go to collect and analyse information. The key information needs at the catchment level fall into three categories:

- regional and local scale data on resource condition for the development and implementation of local and regional strategies.
- information to support the introduction of more sustainable systems; and
- the social aspects and impacts of natural resource management.

During the course of this Forum we will hear more about the importance of information in dealing with the inevitable urbanisation of our regional centres and coastal areas.

## **Conclusions**

The application of economic solutions to environmental problems requires considerable thought.

Clear economic signals, properly established access rights and good information are all essential ingredients.

Above all, I believe that we need to use cross-disciplinary teams to chart the best way forward:

- economists and scientists need to work together; and
- solutions have to be practicable, so there is a need for input from industry and other landholders as well.

Please, take this opportunity to get to know each other, form cooperative relationships, listen and learn from the many valuable presentations given at this Forum.

Thank you all for your attendance and involvement.

This is an important initiative.