# PARLIAMENT OF AUSTRALIA – HOUSE OF REPRESENATATIVES STANDING COMMITTEE ON ENVIRONMENT AND HERITAGE

# INQUIRY INTO PUBLIC GOOD CONSERVATION – IMPACT OF ENVIRONMENTAL MEASURES IMPOSED ON LANDHOLDERS

# SOUTH AUSTRALIAN GOVERNMENT SUBMISSION

# **1 INTRODUCTION**

The Government of South Australia welcomes the opportunity to provide a submission to this inquiry. This submission provides advice regarding impacts on landholders of environmental measures which have been imposed in South Australia for public benefit reasons, mechanisms used in this State to identify private and public good components of these measures and offers a number of recommendations to enhance equitable sharing of the cost of these measures.

However, before discussing specific conservation measures that have been imposed on landholders in SA, a number of comments on the 'duty of care' principle are appropriate.

# 2 THE PRINCIPLE OF DUTY OF CARE

The Government of South Australia notes that it is increasingly being recognised in the community and embodied in legislation, that citizens have a duty of care for the environment, regardless of specific conservation measures which can be imposed for the reasons of public benefit. Examples of South Australian legislation which incorporate this principle include the *Environment Protection Act 1993*, the *Water Resources Act 1997* and the *Soil and Conservation Land Care Act 1989*.

However, in order to encourage observance of the duty of care provisions, these statutes also prescribe remedies that may be imposed on persons who contravene their duty of care responsibilities.

In this regard, it is noted that the Productivity Commission also recognised the importance of the application of the duty of care principle for conservation purposes. In its 1999 report 'A Full Repairing Lease: An Inquiry into Ecologically Sustainable Land Management', the Commission recognised the concept of statutory duty of care as a key principle underpinning sound natural resource management.

The South Australian Government does recognise however, that consistent application of the duty of care principle is not a simple matter. The Government also recognises that while it is reasonable that landholders should undertake their duty of care responsibilities at their own expense, where they are expected to exceed a reasonable duty of care, the issue of compensation arises.

Given the emergence of the duty of care principle as a conservation measure imposed by statute, the South Australian Government considers that a consistent national approach to the application of this principle is required. The Government also considers that this principle can be given greater clarity when expressed in the form of behavioural standards that apply to individuals. This is the subject of a recommendation in section 5 of this Submission.

The South Australian Government also notes that duty of care requirements also need to keep pace with evolving community attitudes and technical capabilities of addressing conservation and resource management issues.

## 3 IMPACT ON LANDHOLDERS AND FARMERS OF PUBLIC GOOD CONSERVATION MEASURES IMPOSED BY THE SOUTH AUSTRALIAN GOVERNMENT

A number of South Australian statutes that impose measures on landholders for the benefit of both private parties and the broader public is discussed as follows:

# 3.1 Native Vegetation Act 1991

An understanding of current legislation for the protection of native vegetation in South Australia requires a brief overview of the history of land clearance and the evolution of the use of protective measures in relation to this matter.

By the late 1970s, nearly 80% of land within the State's agricultural regions (in excess of 12 million hectares) had been cleared of its original native vegetation, in several areas less than 5% remained. Such levels of land clearance resulted in the emergence of concerns regarding matters such as the conservation of native fauna and flora, impacts on salinity (both dryland and stream) and soil erosion.

In recognition of the need to address the loss of biodiversity, a voluntary scheme was introduced in 1980, to encourage farmers to enter into a 'heritage agreement' to retain and manage significant areas of native vegetation on their land via the provision of financial incentives. These incentives included reimbursement of the cost of local government rates applying to heritage agreement areas and the provision of stock-proof fencing. However, this scheme proved to be quite ineffective in encouraging the protection of the State's remnant native vegetation. By 1983, it was found that few farmers were prepared to amend land clearance practices in order to retain conservation areas and only about 0.75% of the remnant native vegetation in the State's agricultural zone had been protected via a heritage agreement.

This gave way to a dramatic shift in policy in 1983 with the introduction of clearance controls under the SA *Planning Act 1983*. Under associated regulations, vegetation clearance was defined as a change in land use that required planning approval and this requirement was applied to the entire agricultural zone. These regulations were introduced without prior consultation in order to avoid the problem of panic clearing. Many farmers were incensed by this decision and sought compensation, particularly for those farmers whose clearance applications were refused.

The resolution of this matter required an extensive consultation and negotiation process. This resulted in the former Department of Environment and Planning and the

United Farmers and Stockowners of SA, agreeing that controls on clearance of native vegetation were necessary. It was also agreed that compensation for disallowed clearance applications should be conditional on farmers entering into a heritage agreement to manage the retained area for conservation purposes.

These agreements resulted in the *Native Vegetation Management Act 1985*. The application of this Act extended across the State (except urban areas) and provided for enhanced financial assistance for farmers who entered heritage agreements. This involved compensatory payments from the South Australian Government, which were equivalent to any reduction in the market value of land resulting from a clearance application being refused and the landholder agreeing to enter into a heritage agreement on the affected land. In effect, landholders were compensated for foregoing a stream of potential income into the future for the sake of a public benefit. It is recognised however, that the conservation of these areas of native vegetation also provides private benefits via factors such as the control of salinisation and erosion.

This Act also established the Native Vegetation Authority (NVA), which replaced the former SA Planning Commission as the decision making body regarding clearance applications. This latter move allowed for representatives from the community with both relevant biological and rural expertise to become involved in the determination of clearance applications.

The introduction of this legislation dramatically reduced broad acre clearance in South Australia, with a substantial reduction in clearance approvals and a significant increase in the number of farmers entering into heritage agreements, as a result of the enhanced assistance arrangements.

The *Native Vegetation Management Act 1985* was replaced by the *Native Vegetation Act 1991*. A major difference between these Acts is that, under the 1991 legislation there is no automatic provision for payment of compensation for loss of market value of properties as a result of clearance applications being refused and heritage agreements being established. Any payment for reductions in the market value of land is now a discretionary payment as recommended by the Native Vegetation Council, to the Minister for Environment and Heritage.

This restriction in compensation was justified on the grounds that landholders in the agricultural zone had been provided with sufficient time to seek payment for any loss in the market value of their properties due to clearance refusals. The validity of the decision to reduce the level of assistance offered was also supported by the fact that some landholders had started to apply for clearance on areas that they would not normally have cleared in order to receive payments offered upon entering into a heritage agreement.

Other assistance available through this Act includes the continuation of the provision of stock-proof fencing and the waiving of rates and taxes applying to heritage areas. It also provides for a stronger focus on management of conserved areas via the provision of grants under the Heritage Agreement Grants Scheme. These grants are provided for the management of issues that threaten the integrity of native vegetation, the re-establishment of native vegetation and also for conducting research into management issues. As an indicator of the level of the Government's commitment to the protection of remnant native vegetation in South Australia, it is noted that the program has cost about \$80 million since its introduction in 1980. Of this total, about \$70 million has been provided as financial assistance, the bulk of which has been in the form of payments for the loss of market value of properties under the now repealed *Native Vegetation Management Act 1985*. About \$1.4 million pa of public funds continues to be spent assisting holders of properties which are covered by heritage agreements with the management of these areas in the manner described above.

The success of these initiatives in protecting native vegetation in the State's agricultural region is measured by the fact that there are now more than 1,100 heritage agreements in place, protecting approximately 550,000 hectares of native vegetation (almost exclusively in agricultural areas). This represents about 20% of remnant vegetation in the agricultural region and about 3.7% of the agricultural region itself. Through this scheme, South Australia has the largest area of private land under long term conservation of any State in Australia.

Notwithstanding the success of the State's native vegetation program, the South Australian Government does recognise however, that there is a need for more support to be given to landholders to manage areas covered by heritage agreements beyond the requirements normally expected of other land managers. The South Australian Government also considers that the use of heritage agreements either on a voluntary basis, or as a compensatory mechanism where environmental measures are imposed on landholders, may be extended to apply to other initiatives where biodiversity or natural resources are to be protected.

In relation to this matter, the South Australian Government also notes that the Productivity Commission, in its above mentioned report on ecologically sustainable land management, also identified the use of heritage agreements between landowners and Governments as an important principle of ecologically sustainable land management.

The Commission argued that Australia's national parks and reserves and the application of the duty of care principle will not be sufficient to achieve comprehensive, adequate and representative protection of the nation's biological diversity. In view of this, it proposed that each State and Territory should extend its use of voluntary conservation agreements with selected landholders. It also proposed that such agreements should be 'under-pinned' by publicly funded financial assistance payments to landholders including payments for the financial costs of conservation management and for forgone economic opportunities where necessary to secure the landholder's agreement.

While the South Australian Government welcomes the Productivity Commission's support for the use of heritage agreements, it notes that experience in South Australia indicates that significant levels of assistance needs to be offered in order to encourage participation in such programs. In view of the value of extended use of heritage agreements as a conservation mechanism, the South Australian Government is of the view that there is a case for the provision of Commonwealth assistance in encouraging

broad based participation in such programs. This matter is the subject of a recommendation to the inquiry as outlined in section 5 of the submission.

# **3.2** The Pastoral Land Management and Conservation Act 1989

The primary purpose of this Act is to allow the grazing of properties, while also ensuring the conservation of biodiversity. It is administered by a Pastoral Board which comprises of pastoralists and other community members. This Act also includes requirements for the assessment of the condition of pastoral lands, the undertaking of remedial measures where degradation occurs and regulation of stocking rates. The holders of pastoral leases generally accept the need for the environmental safeguards embedded in this Act.

However, there is an emerging view that if lessees are to be required to hold land as part of their lease for conservation purposes rather than use it productively, there may be a case for a compensatory mechanism to be put in place. Suggestions that have been put forward include rental adjustment, heritage agreements and taxation reform. As already indicated, the issues of heritage agreements and taxation reform are the subject of recommendations in this Submission.

# 3.3 The Soil Conservation and Land Care Act 1989

The *Soil Conservation and Land Care Act 1989* establishes a Soil Conservation Council to advise the Minister for Primary Industries and Resources regarding administration of the Act. Responsibilities of the Council include:

- monitoring and evaluating land condition across SA;
- advising the Minister regarding land degradation issues and associated economic and environmental implications;
- development of conservation and rehabilitation strategies; and
- dissemination of information and development of community awareness on relevant issues.

The Act also establishes Soil Conservation Districts, each with an appointed Soil Conservation Board. Currently there are 27 District Soil Conservation Boards, each consisting of community members representing local government and the diversity of major land uses in these districts.

The Boards are required to prepare Soil Conservation District Plans and associated work programs that are approved by the Soil Conservation Council. Extensive community consultation occurs during the process of developing these plans. Initial plans focussed exclusively on soil conservation, and identified land use, areas of degradation, the capability and preferred use of land, and appropriate conservation and rehabilitation measures. Over time, as plans have been reviewed, their focus has broadened to include integrated natural resources management issues including water resource management and revegetation.

The Boards also have responsibility for promoting local community awareness of sound land management and in particular, the principle that land must be used within its capability. The Boards have been active in promoting the concept of property management planning, particularly as it relates to the Soil Conservation Board District Plans. They have supported property management planning workshops and have also developed or supported other programs for implementing natural resources management, for example community landcare activities funded by the Natural Heritage Trust.

The Chairpersons of the District Soil Conservation Boards meet annually to discuss policy and operational issues, and also to interact with members of the Soil Conservation Council.

Where Boards identify land degradation or practices that may lead to land degradation, they have the power to issue Soil Conservation Orders. A Soil Conservation Order may require a landholder to cease a practice that is causing degradation or to repair damage to land affected by degradation. Experience indicates that most landholders voluntarily correct land management problems and so only the most serious offences where landholders have failed to observe their duty of care for land generally receive Soil Conservation Orders. In these circumstances, while such an order may involve public good conservation, it is considered reasonable for the landholder to bear the full cost of meeting the requirements of the order. Provision is made in the Act for an appeal process against the serving of a Soil Conservation Order.

# 3.4 The Animal & Plant Control (Agricultural Protection and Other Purposes) Act 1986

The risks posed by pest animals and pest plants to natural environments is extremely high, particularly in relation to the conservation of native fauna and flora. For example, foxes pose a significant risk to the survival of many native animals, whilst rabbits and feral goats pose major threats to the survival of a range of native plants. Rabbits can even threaten the survival of entire ecosystems. In the rangelands, they are a significant threat to soil conservation and native vegetation. The economic value of these risks cannot be quantified easily. The purpose of the Act is the control of animals and plants for the protection of agriculture, the environment and for the safety of the public. It is administered by the Animal and Plant Control Commission.

This Act provides for an integrated system of animal and plant control across South Australia. The Animal and Plant Control Commission sets appropriate policy and financial directions for a network of Local Animal and Plant Control Boards. These boards implement the Commission's policies in a manner that is relevant to local needs and conditions. Policies for specific pest species are based on scientific risk assessment principles.

The Act also provides a means to integrate the protection of both agricultural production and environmental quality. Such protection is an integral component of land and resource management and in doing so, provides a sustainable economic benefit to the community that is fundamental to South Australia's welfare and which is attracting increasing community interest and support.

The Animal and Plant Control Boards are supported by authorised officers who have the power to issue Notices. These Notices are generally for the purpose of controlling a declared pest plant or animals such as rabbits.

As is the case with the soil conservation orders, notices that are issued are generally site specific and directly impact on the landholder with the problem. Their use is also generally restricted to circumstances where landholders have failed to observe their duty of care for the land. In these circumstances, while such a notice may involve public good conservation, it is considered reasonable for the landholder to bear the full cost of meeting the requirements of the notice.

# 3.5 The Water Resources Act 1997

A key feature of the *Water Resources Act 1997* from a 'public good' perspective is its ability to control and restrict access to water in prescribed areas via licensing arrangements as specified in water allocation plans. Areas are prescribed for the purposes of water resources use and management when the sustainability of the resource is threatened.

As a means of ensuring sustainable use of water resources, this Act also requires the development and implementation of catchment water management plans in areas where Catchment Water Management Boards have been established. These matters are discussed as follows.

# 3.5.1 Licensing

The Act enables tradeable water licences to be issued in prescribed water resource management areas. The licences can contain a variety of conditions, which restrict the amount of water that can be extracted, the time at which it is available, the location from which it can be taken and the rate at which it can be extracted.

In the past, whilst many licences to extract water were not limited in volume, the application of water was restricted to fixed areas of a particular type of crop. The

impact of more extensive use of volumetric allocations has been to improve the management of stressed resources and freed farmers from crop area limits. These changes have provided an incentive to use water more efficiently. More efficient water use has enabled irrigators to plant additional areas of crops using conserved water, or to sell or lease water that is not needed.

While licensees benefit from some certainty of their water property rights, it is noted that licences issued under this Act do not provide absolute certainty to their holders. The Act enables licences to be amended (eg reduced water allocations) without compensation being provided to licensees, when necessary in order to ensure sustainable use of water resources. Entitlement holders and other members of the public also benefit from sustainable resource management, the protection of ecosystems, recreational opportunities and aesthetic and existence values.

Additionally, as indicated, licensees receive a tradeable water asset. Tradeability of licensed water allocations has resulted in dramatic increases in the price paid for water indicating the value of this resource. In general, the price paid for the transfer of water property rights in prescribed areas rose by about 200%-300% during the period 1995 to 2000. For example, in the McLaren Vale Prescribed Wells Area, the average price paid for a water allocation in 1995 was about \$7 000 per megalitre (ML). By 2000, the price had risen to \$16 000 per ML.

However, it is noted that limitations can be placed on water trading. Water trading is constrained by policies that are designed to ensure that sustainable levels of water use are achieved and maintained. Water trading policies vary according to the circumstances associated with a particular resource and are specified in water allocation plans.

# 3.5.2 Development and Implementation of Catchment Water Management Plans and Water Allocation Plans

The Act allows for the establishment of institutional structures, ie Catchment Water Management Boards (CWMBs) that recognise local community responsibility for catchment management via the development of catchment water management plans and also water allocation plans if there are prescribed areas within a Board's region of responsibility. If a prescribed area is located outside of a CWMB area, a Water Allocation Planning Committee that includes community representatives is established to prepare a water allocation plan for the area. Allocation plans specify policies that are designed to control and limit access to water in order to ensure sustainable resource use. The Act also enables a levy to be imposed on communities within a catchment to fund the development and implementation of these plans.

Currently, there are 7 CWMBs in SA. In 1999/2000, a total of \$14.6 million was raised using land based (ie based on capital value) and water based (ie based on water allocation and/or use) levies. The average levy payments to CWMBs located in and around Adelaide ranged from about \$14 to \$27 per household in 1999/2000.

The longer established CWMBs (eg Patawalonga and Torrens) are using their levy revenue to implement catchment water management plans, predominantly through financing works and community education programs.

In the more recently formed CWMBs (eg, South East), revenue raised from levies is being used to develop catchment water management and water allocation plans, and to implement actions identified in initial management plans.

# 3.5.3 The 'Cap' on Diversions from the River Murray

The use of water from the River Murray for irrigation purposes has been 'capped' in South Australia since 1968, when licences specifying the area of crop that could be irrigated were first issued under the *Control of Waters Act 1919-1925*. Volumetric allocations from the River Murray were subsequently issued from 1974/75 onwards. However, upstream States did not implement similar measures until quite recently. The effect of imposing the cap on upstream states has been to increase the surety of water flows to South Australia.

The cap was established in an attempt to halt expansion of water extractions, whilst an agreement is negotiated between the Murray-Darling Basin States about long-term strategies required for sustainable use of the Basin's resources.

The net private benefit of the cap includes having an agreed set of water allocation rules that take account of climatic variability and provide a known risk regime, which can be taken into account in business planning.

The median annual flow of River Murray water to South Australia is 4,100 gigalitres (GL). If there had been no capping, this could conceivably have been reduced as a result of continued expansion of upstream water extraction, until water flows via the Murray to South Australia declined to its annual entitlement of 1,850 GL as required under the Murray-Darling Basin Agreement 1992.

The outcome of the Murray–Darling Basin States agreeing to the cap is that diversions will now not exceed those consistent with supply of water to 1993/94 levels of development. South Australia will therefore receive a median annual flow of 4,100 GL. Whilst South Australia uses up to 700 GL of water from the River Murray each year, the remaining water contributes to environmental flows, evaporation from the Lower Lakes and flows to help keep the Murray Mouth open.

# 4 MECHANISMS FOR ESTABLISHING PRIVATE AND PUBLIC GOOD COMPONENTS OF GOVERNMENT CONSERVATION MEASURES

The South Australian Government recognises that the distinction between private and public good components of government imposed conservation measures and the valuation of these components is not a straightforward matter. However, it also recognises that assessment of this matter is necessary in order to equitably assign the cost of these measures between private individuals and the public at large.

This is a particularly important issue in South Australia's efforts to promote integrated natural resource management in which regional communities are encouraged to take responsibility for resource management decisions. This process involves engaging communities in the research necessary to understand biophysical processes 'driving' issues which require attention and local action or catchment planning to develop remediation and management strategies.

The valuation of public and private costs and benefits is a necessary element of this process to enable and facilitate decisions by stakeholders regarding resource management planning. This process has enabled the implementation of over a dozen catchment projects in South Australia, with negotiated cost-sharing based on the beneficiary pays principle.

These financial arrangements are 'under-pinned' by cost-benefit analysis and beneficiary analysis. This analysis must take account of a wide range of issues that are listed and briefly discussed as follows.

- Temporal factors is inter-generational equity and time scale of implementation. Many current resource management problems arise from past land use decisions, while action taken to address problems will usually benefit future generations.
- Spatial ie 'downstream' impacts of 'upstream' land use. It is common in the case of many resource management issues (eg dryland salinity and declining water quality), for the cause of problems to be remotely located from areas of impact.
- Socio-economic factors (eg willingness to pay, capacity to pay and equity). Experience from management planning programs is that generally a land holder's first priority and motivator is short term financial gain. Additionally, landholders often do not have the funds to spend on land management practices that are not guaranteed to increase their immediate financial returns.
- Regulatory issues including duty of care.
- Valuation of non-market benefits. Because of the costliness of undertaking contingent value analysis to assign values to these factors, a commonly used method in South Australia is the application of 'threshold values'. This approach provides an estimate of the community's minimum willingness to pay to achieve environmental improvements.

The process of negotiating cost-sharing arrangements and providing incentives to landholders in order encourage participation in resource management initiatives is discussed in more detail overleaf. It provides a formal process for identifying and quantifying public and private benefits.

### The Process for Negotiating Cost Sharing Arrangements

**Step 1** Completion of a regional scoping study which identifies the major resource and degradation issues and appropriate works and other approaches for managing the issues.

**Step 2** Cost-Benefit analysis conducted to evaluate the economic worth of the identified activities. The cost-benefit analysis approach applied in South Australia is consistent with Commonwealth and State Treasury guidelines.

**Step 3** Undertake beneficiary analysis in order to assign the benefits of a project to relevant stakeholders based on the level benefit they are expected to receive. Three levels of stakeholder are generally identified in South Australia ie, private or on farm, local community (benefits accruing to the public in a local area) and wider community which is commonly divided between the State and Commonwealth Governments.

**Step 4** Utilisation of the results of cost-benefit analysis and beneficiary analysis to develop a cost-sharing framework with landholders regarding the project being contemplated.

**Step 5** Once a cost-sharing framework has been negotiated with landholders, expressions of interest are sought from landholders and incentives are provided to encourage landholders to undertake resource management activities. Finally, contracts of works are awarded.

This approach has been used successfully by a variety of community groups as part of catchment planning processes and as they prepare to implement on-ground works.

Table 1 overleaf, summarises the results of analysis undertaken for three land management options across a number of natural resource management projects in South Australia using the methodology described above. The results show that the amount and ratio of public and private benefit varies within any given catchment depending on the management option selected. They also indicate that the same management option applied across different catchments may have quite different levels of public and private benefits depending on the type of resource management problems and off-site impacts associated with these problems.

The results of this analysis provided the starting point for negotiations with landholders over the incentives necessary to secure participation in on-ground works.

### Table 1

# **Beneficiary Outcomes for Different Land Management Programs**

Project	Present Value	On Farm	Local	Wider
	of Benefits	%	%	%
Willunga Hills Face	\$2,370,195	6	20	74
Upper River Torrens	\$61,750	0	7	93
Salt to Success	\$1,880,617	50	29	21
Yorke Peninsula	\$590,058	72	18	10

#### **Native Vegetation Establishment**

#### **Protection of Remnant Vegetation**

Project	Present Value of	On Farm	Local	Wider
	Benefits	%	%	%
Salt to Success	\$298,420	5	16	79
Yorke Peninsula	\$167,517	33	0	67

#### **Establishment of Windbreaks**

Project	Present Value of	On Farm	Local	Wider
	Benefits	%	%	%
Yorke Peninsula	\$1,712,903	66	32	2

Noting the rigorous analysis of resource management projects which is undertaken in South Australia in order to ensure equitable cost-sharing arrangements, the SA Government considers that such an approach also provides a sound method of ensuring the equitable allocation of Commonwealth assistance for resource management purposes.

It is also clear however, that this approach to identifying appropriate cost-sharing arrangements is a rigorous process that is heavily reliant on the availability of information and data regarding ecological processes and the state of the environment.

In view of these needs, it is therefore important that the Commonwealth Government provides all possible support to research and monitoring of ecological processes and the state of the environment, as such information may be of great assistance in identifying the beneficiaries of conservation measures and valuing these benefits.

In this regard, the SA Government also recognises recent initiatives being developed by the Council of Australian Government's High Level Group of Officials on Natural Resource Management to facilitate the development of regional strategic natural resource management plans. The SA Government notes that these plans could also assist with the determination of cost-sharing arrangements.

# 5 RECOMMENDATIONS - ENSURING EQUITABLE SHARING OF COSTS ASSOCIATED WITH PUBLIC GOOD CONSERVATION MEASURES

There is a greater community awareness of environmental issues facing Australia than ever previously existed. Associated with this awareness, is a growing recognition that the entire community has a duty of care in relation to these matters. The following recommendations are based on this recognition and are considered by the South Australian Government to provide mechanisms for ensuring a more equitable allocation of the costs associated with public good conservation measures.

### **Recommendation 1 - Duty of Care**

The Commonwealth Government actively supports the development of a consistent national approach to applying the duty of care principle that incorporates the use of measurable behavioural standards, as a means of more accurately determining the appropriate level of effort required by landholders to observe their duty of care requirements.

### **Recommendation 2 - Heritage Agreements and Taxation Reform**

In recognition of the fact that States and Territories can provide fewer incentives to landholders as their 'tax' regimes have less impact on land owners, the Commonwealth Government should investigate how it may use tax reduction incentives in order to encourage greater use of heritage agreements as a conservation mechanism.

#### **Recommendation 3 – Delivery of Direct Commonwealth Financial Assistance**

It is recommended that the delivery of Commonwealth financial assistance for resource management purposes be directed towards projects that are based on partnerships between community groups and government that have been subjected to rigorous cost-benefit and beneficiary analysis and for which cost-sharing frameworks have been negotiated.

#### **Recommendation 4 – Knowledge Enhancement**

It is recommended that the Commonwealth Government provide all possible support to research and monitoring of ecological processes and the state of the environment. This would build on the work currently being undertaken by the National Land and Water Resources Audit and would be of great assistance in identifying the beneficiaries of conservation measures and valuing these benefits.