

**Agriculture Fisheries and Forestry Australia**

**CATCHMENT MANAGEMENT**

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## **Executive Summary**

### ***Introduction***

*Managing natural resources – land, water and vegetation – in an integrated way makes good sense because of the interrelationships between the three elements.*

*Integrated management can be undertaken at any geographic scale or in any geographic region, however defined. Using catchments as a basis for management, however, adds considerable value from a biophysical as well as a social and economic point of view.*

*A catchment provides important links between the land and its drainage system: the so-called water cycle is important because of its close association with healthy systems. However, it is the disruption to the natural flow patterns of water that are associated with a range of forms of degradation in the Australian land systems. Water is the transport medium for sediments, salts and nutrients that are associated with erosion, dryland salinity and acidification. More than this, catchments, with their streams and rivers, are important to regional communities in a social and cultural sense and can provide a focus for communities developing strategic plans aimed at managing their resources more sustainably.*

*This submission explores some of the important biophysical, social and economic relationships that exist in catchments, outlines the characteristics of catchments that are associated with effective planning and management, and reports on some of the things the Commonwealth has been doing to support the catchment approach to sustainable resource management.*

### ***Key Observations***

*Key observation 1: History has taught us that improved natural resource management depends on the integration of biophysical factors with social and economic factors that affect decision making. The catchment management approach enables this integration to occur.*

*Key observation 2: Catchment approaches work best for those natural resource management issues based on the water cycle.*

- *Policy or programs that target salinity, acidity or water erosion separately are unlikely to be as successful or efficient as more integrated catchment approaches.*
- *The very nature of the interaction between different users within a single catchment implies that effective resource management will involve shared responsibility between user groups.*
- *Managing natural resources in an integrated and sustainable way is a complex matter, even at the farm scale.*

*Key observation 3: Best practice approaches to catchment management include six key elements: shared vision, community empowerment, support, best knowledge, research and development, and feedback mechanisms.*

*Key observation 4:*

- *Public and private resource managers, owners and local communities are responsible for the sustainable management of catchments. Governments can foster community self-reliance and facilitate catchment sustainability.*
- *Governments can promote the development of institutional frameworks in which regional organisations can provide strategic direction, coordination and support to catchment level management. This will assist in addressing conflicts between ‘bottom up’ and ‘top down’ approaches.*
- *Establishment of robust institutional arrangements will enable effective administration of activities within catchments. The approach of the Catchment Management Authority in Victoria to institutional coordination has strengths that may be useful elsewhere.*
- *As individuals are principal agents of change, policy instruments targeting individuals will be an important component of enhancing catchment-wide solutions, complementing instruments encouraging small and large scale group activity.*

*Key observation 5: Catchment planning is neither a one-off activity nor a means to secure government funding; it is a part of an ongoing process of improvement in managing natural resources.*

*Key observation 6: Governments have a role in natural resource management to provide institutional arrangements that return the highest net benefit to society over time.*

- *These may be economic instruments, regulatory instruments or the fostering of suasive measures.*

*Key observation 7: Governments can assist to enhance the capacity of regions by providing data and information relevant to the needs of catchment managers. This could include:*

- *Regional based information on trends in natural resource condition, industry outlook and social factors;*

### **Conclusions**

*The Commonwealth has invested significant resources, particularly through the Decade of Landcare, the National Landcare Program and the various Murray Darling Basin Commission programs, in raising community awareness, identifying the causes of land and water degradation, encouraging the development of plans at appropriate scales, and encouraging and empowering individuals and communities to change management practices.*

*Currently, under the Natural Heritage Trust, there is a significant impetus for implementing natural resource management at the catchment scale and this has focussed attention on the need to integrate economic, social and biophysical elements. In some areas communities and states are at a level of understanding and preparedness to move forward to larger integrated scale regional approaches, although this is not uniform.*

*Catchment management will continue to be an important component of total efforts to achieve sustainable natural resource management. It should be viewed as having a part to play and not be loaded with unrealistic demands and expectations.*

*There is scope for the further development of the catchment (and indeed the regional) model to improve the targeting of public and private investment in natural resource management through more effective regional organisations taking greater responsibility for planning and delivery of natural resource management outcomes.*