603/2006

Murray
Catchment Management Board
Sustaining our natural resources

10 July 2003

The Committee Manager
Standing Committee on Natural Resource Management
Parliament House
MacQuarie Street
SYDNEY NSW 2000

ATTENTION: Mr Mervyn Sheather

Dear Mr Sheather

Please find attached a submission on behalf of the Murray Catchment Management Board in relation to the Legislative Assembly's Standing Committee Inquiry into the sustainable management of natural resources in NSW.

My submission addresses the 6 criteria outlined in the Committee's Terms of Reference.

The Murray Catchment ranges from Mount Kosciusko in the east to the confluence of the Murray and Murrumbidgee Rivers to the west and is bounded to the north by the watershed with the Murrumbidgee.

Our Catchment is a priority Catchment under the National Action Plan for water quality and salinity management and my Board has a strong commitment to achieving targets for large scale landscape improvement across our region.

Our primary target areas are salinity, water quality (sediment transport), acid soils and biodiversity enhancement.

I would be happy to attend a public inquiry of the Standing Committee to expand on or clarify any issues raised in the submission.

Yours sincerely

D L McGregor
INDEPENDENT CHAIR
MURRAY CATCHMENT MANAGEMENT BOARD

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Submission to the Natural Resource Management Legislative Assembly Committee
Inquiry into Natural Resource Management Issues

From: Daryl McGregor, Independent Chair
Murray Catchment Management Board

1. Introduction:

This submission is from Daryl McGregor, Chairman of the Murray Catchment Management Board (CMB). The Board is one of 21 CMBs set up as advisory boards to the Minister for Land and Water Conservation in NSW.

The Murray Board spans a geographic area from Mount Kosciuszko in the east to the confluence of the Murray and Murrumbidgee Rivers in the West. The Catchment includes the headwaters and the major NSW tributary systems of the Murray River, arguably Australia's premier river system.

The Murray Catchment covers an area of approximately 4 million hectares, including substantial areas of National Park and State Forest, areas of grazing and dryland cropping and significant areas of irrigated agriculture and has a population of 101,000.

The Board has recently completed a Catchment Management Plan or Catchment Blueprint for Natural Resource Management in the catchment, which deals with issues such as salinity, loss of biodiversity, water quality decline, soil acidity and erosion and sedimentation.

The Murray Catchment Blueprint is underpinned by an investment strategy, which identifies the priority actions required to meet a series of catchment targets and distributes the cost across sectors of government and private beneficiaries. The investment strategy contains actions aimed at individual properties, public lands and a program of capital works primarily aimed at improving the aquatic environment of the catchment. The strategy also identifies areas in which investment in capacity building is required to assist landholders and the community generally, to better understand the natural resource issues within the catchment and equip them with the knowledge to manage the issues more effectively.

The Catchment Management Plan is yet to be funded by either the state or federal governments, despite nearly three years of work on the part of the Boards and the catchment community.

2. Specific Information Relating to the Terms of Reference of the Inquiry:

a. Current Disincentives to Sustainable Land and Water Use:

- Investment in sustainable practices, in some cases, is a lower priority when margins and profitability are low. The cost of investment in sustainable land and water practices is most often not reflected in the commodity price achieved by the farmer. Consumers are rarely prepared to pay the true environmental cost of producing food and fibre.

- The costs and benefits of sustainable land and water management are not always expressed on the property where these practices are implemented. For example, the benefits of practices such as protection and management of remnant vegetation are felt at a regional or catchment scale, but rarely at a property scale. A farmer may also be contributing inadvertently to a salinity problem

further down the catchment but as there is no impact on his/her own production then there is often no incentive to adopt new improved practices.

- Farming families lack the financial resources to invest in new practices, which do not return an immediate financial benefit. Social research conducted in the Murray Catchment in December 2001 showed that average on-farm profit before tax was only $37,000.

- The lack of perceived security and property rights in water mean that farmers are reluctant to invest in long term strategies for sustainable management.

- There is a lack of landholder and community understanding of sustainable land, water and vegetation use and a lack of accessible data, information and independent extension staff on which landholders can rely.

- There is a community perception that statutory initiatives such as water, land use and vegetation planning are too prescriptive and contain too many regulations constraining farm management practices. As a result many farmers are not prepared to better manage their native vegetation, threatened species or wetlands for fear that these regulations will pick up these parcels of land and restrict farm operations.

- The introduction of new statutory requirements such as the GST and OH&S regulations means that farming families have less time to devote to researching and trialing new sustainable farming systems.

b. Options for the Removal of Disincentives:

- Provision of financial incentives in the short term to allow farmers to take up sustainable farming practices. These should be geared to providing the "public benefit" component of sustainable land, water and vegetation management. These should be payed at the conclusion of the works (or through a periodical payment system where this is necessary), and tied to an ongoing management agreement with the farmer. Ideally, property based incentives should be delivered as part of a simple property plan. If this process is made too onerous, it will act as a further barrier to landholder participation. A program of on-farm incentives has been developed and costed as part of the Murray Catchment Management Plan. These incentives are negotiated and enabled as part of a simple property "project plan", the development of which is supported by the Blueprint frontline staff and specialists.

- In the longer term an environmental services (or sustainability services) market must be developed, ensuring that the relevant environmental and social costs of production are borne by either consumers or future developers. In NSW, the pilot Environmental Services Scheme has been set up to investigate and benchmark some of these costs.

- Provide access to locally based extension and locally relevant information resources. The Murray Catchment Blueprint has designed within it, a team of people based within either local government, Landcare Groups or Land and Water Management Plan groups and whose jobs are to provide natural resource management information, referral services to specialists as well as the distribution of on-farm incentives. These positions are supported by a network of government agency and private sector technical staff.

  There is a significant amount of general information on natural resource issues and their management available through government agencies and private providers. To be most effective this information needs to be tailored to suit local conditions, be credible and reliable at the local

scale and be delivered in conjunction with landholder based training (either one-on-one or through groups).

- Educate private providers of farm business support services in the importance of sustainable farming practices. Many farmers now access production and farm business advice from private providers such as business planners, agronomists and stock advisers and see this information as core to their enterprise. Advice on sustainability issues and environmental improvement is often seen as an add-on to be done when a farming family has the time and money available. There is a need to deliver compatible sustainability and production messages together within the framework of a farming business. For example water use efficiency in either a dryland or irrigation enterprise will deliver both production and environmental improvement.

- Provide effective community education and awareness programs tailored to suit the catchment conditions and issues, and delivered through trusted and credible local providers.

- There is a need to keep the community informed of the possible impacts of the various acts and legislation relating to native vegetation and threatened species. In many cases miss-information and fear within the community is having a negative impact on sustainable land management.

c. Approaches to Farm Management which Reduce Salinity and the Effects of Drought

- Improve water use efficiency of dryland and irrigation enterprises.

  Salinity is the result of inappropriate water use within primarily our agricultural systems. The change from native perennial bushland and grassland to annual crops and pastures, together with excessive application of irrigation water has resulted in too much water reaching the watertable through leakage. In a country as dry as Australia, this wastage reduces our capacity to management drought events.

  The management of healthy growing crops and pastures, the introduction of perennial pastures, the management and expansion of native vegetation and the introduction of more efficient irrigation practices will result in less leakage, greater productivity and more income at the farm gate.

- Consider the option of solar powered desalinisation to draw down watertable and provide reclaimed water available for agricultural use.

  This technology is available and utilised at an economic scale in countries such as Israel.

d. Ways of Increasing Uptake of Appropriate Land Use Management:

Social research undertaken in the Murray Catchment in 2000 (Crase and Mayberry 2001) shows that the values and objectives of farmers are important considerations in the uptake of improved land management. Values can be either conservation, economic or lifestyle approaches to management of landholdings.(or a mix of these).

Landholders with a strong economic value/objective are unlikely to adopt conservation practices such as native vegetation enhancement without accompanying credible incentives.

The survey also found that landholders that had taken up improved/sustainable management on one enterprise were more likely to adopt sustainable practices on other enterprises. Therefore if the right mix of incentives and information/ technical advise is available trigger sustainable practices in one enterprise then chances are that this behaviour will be applied over time, to other enterprises.

e. The Effectiveness of Management Systems:

- Implementation of the Murray Catchment Blueprint will provide a comprehensive set of on-farm, public land and capacity building actions to support land use management change in priority areas of the Murray Catchment.

  The Blueprint has been designed to provide locally relevant information, education and financial incentives:

  - delivered by a team of credible and trusted front line staff, employed within the community;
  - supported by a network of technical specialists;
  - negotiated through a simple, integrated property project planning system.
  - tested through substantial community consultation and feedback.
  - accounted for through a regional database and spatial system;
  - evaluated against a set of agreed catchment targets.

  The Blueprint process, which requires $24M of government funding a year, is as yet unfunded.

f. The Impact of Water Management Arrangements on the Management Of Salinity:

Water reforms currently being implemented in NSW under COAG guidelines and the MDBC cap will see water management arrangements having a significant impact on the management of salinity.

- The freeing up of water markets and water trading should see water moving from low value/high water use crops to high value/low water use crops. This improvement in water management will see less irrigation water accessions to groundwater systems.

- The MDBC Cap on water use has also seen less consumptive use producing reduced level of irrigation accessions to the water table.

- The provision of environmental flows has meant that increased flows have been available to dilute and carry salinity slugs through the river system.

- Groundwater Management plans for the Murray will endeavour to balance the level of extraction so as to maintain sustainable yields while at the same time ensuring that extraction and the control/maintenance of water tables will keep saline groundwater at depths greater than two metres below the surface.

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References:

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