

RIVER MURRAY CATCHMENT WATER MANAGEMENT BOARD

submission to the

SENATE ENVIRONMENT, COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS REFERENCES COMMITTEE

Inquiry into the long-term success of federal programs that seek to reduce the extent of and economic impact of salinity in the Australian environment.

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1. Whether goals of national programs to address salinity have been attained, including those stated in the National Action Plan (NAP) for Salinity and Water Quality, National Heritage Trust and National Landcare programs;

The bilateral agreement between the Commonwealth and South Australia has committed the partners to establish *an action plan to motivate and enable regional communities to use coordinated and targeted action to:*

a) prevent, stabilise and reverse trends in salinity, particularly dryland salinity, affecting the sustainability of production, the conservation of biological diversity and the viability of infrastructure

(b) improve water quality and secure reliable allocations for human uses, industry and the environment.

(THE COMMONWEALTH OF AUSTRALIA AND THE STATE OF SOUTH AUSTRALIA, June 2001)

In the SA Murray-Darling Basin, the key goals of motivating and enabling regional communities to use coordinated and targeted action to address the problems of salinity and water quality have been attained. However, this is not a *fait accompli*. This situation needs to be maintained otherwise communities will not continue to donate their time. Ensuring the community remains motivated and is able to be part of the solution to this long term problem requires long term or, more appropriately, indefinite support. NAP has built community capacity over a number of years and is now resulting in some significant steps towards sustainable practice being taken. The majority of growers have taken advantage of training programs, soil moisture monitoring trials, and soil survey subsidies and are now beginning to see the benefits of improving practices. District committees of irrigators have been formed under the Land and Water Management Planning banner that are now beginning to understand salinity processes in more depth and are coming up with practical solutions that are workable in their district. This process does not happen overnight as it relies upon building trust with communities who are generally skeptical of government intentions where change in management practices are required and subsequently proposed.

The challenges faced in building the trust of the community in establishing effective working arrangements to tackle salinity and water quality problems can be attributed to 2 main factors:

- Perceived poor consultation or engagement in previous initiatives between Government and the community.
- Perceived lack of continuity in funding streams which results in winding back of programs, transition of staff and disconnection with community groups. When new

funding streams become available and community groups are re-engaged, there is potential for community members to feel that their previous efforts have not been recognized. They can be easily frustrated by a process that may be asking them to, in a sense, re-invent the wheel and may be reluctant to donate their time again.

- Taking an active role in salinity and water quality management projects is not core business for many land-holders and they struggle to devote time to these activities. When growers do commit to being part of a project they can be easily overwhelmed by the amount of input that is requested from them subsequently. This needs to be carefully managed to ensure that effort and meaningful results are in balance and they don't become jaded by the process.

In the SA Murray-Darling Basin, the establishment of the Integrated Natural Resource Management (INRM) Group and the subsequent development of investment strategies have established a coordinated and targeted delivery mechanism. This system requires some refinement to ensure efficient delivery without unnecessary administrative costs and the establishment of a properly resourced Natural Resource Management Board in the region will go a long way towards achieving this.

Priorities for implementing the National Action Plan in South Australia are:

(a) timely investment and on-ground action to reduce the impact of salinity and declining water quality on communities, industry and the environment, in particular in improving the health and productivity of the River Murray;

(b) preventative action, including appropriate changes in land use, to reduce the prospect of future salinity and water quality problems; and

(c) building effective partnerships between community, landholders and government through sound planning and shared investment to address complex natural resource management issues.

(THE COMMONWEALTH OF AUSTRALIA AND THE STATE OF SOUTH AUSTRALIA, June 2001)

Priority A, and to a certain extent Priority B, have been tackled through the establishment of the INRM Group and subsequent development of investment strategies. Close links between the INRM Group, relevant state agencies and the River Murray Catchment Water Management Board (RMCWMB) have seen the development and implementation of effective investment strategies that rely on a cooperative approach which includes significant community input through membership on reference groups. High priority actions such as the establishment of salt interception schemes and the rehabilitation of Lower Murray reclaimed irrigation areas have been dealt with directly through the bilateral agreement. The investment strategies have enabled a majority of growers to take advantage of training programs, soil moisture monitoring trials, and soil survey subsidies. Monitoring strategies implemented with NAP support are beginning to show a trend towards improved irrigation practices. District committees of irrigators have been formed under the Land and Water Management Planning banner that are now beginning to understand salinity processes in more depth and are coming up with practical solutions that are workable in their district.

Local scale plans, such as Land and Water Management Plans and Floodplain Management Plans are currently being developed and/or updated as a direct result of NAP investment being combined with other funding sources such as the catchment levy or SA River Murray Improvement Program. Coupled with the existing regional scale plans and state/basin strategies,

these will provide an excellent platform for managing salinity and water quality issues, providing adequate funding is available for their implementation.

Priority C is addressed fully under the next ToR item however, aside from the RMCWMB, the relevant State agencies have engaged the community as required, particularly in the areas of salinity policy formulation and implementation.

2. The role that regional catchment management authorities are required to play in management of salinity-affected areas, and the legislative and financial support available to assist them in achieving national goals;

The role of regional Catchment Water Management Boards (CWMBs) in the management of salinity-affected areas varies from one region to the next. However there are two fundamental areas where the Boards must take action.

These include:

- Water Allocation Plan development and implementation, formerly under the Water Resources Act, 1997, and now under the Natural Resource Management Act, 2004.
- Development and implementation of the Catchment Water Management Plan under the above mentioned Acts.

In the SA MDB, the RMCWMB, through its CWM Plan has prioritised a set of actions to occur between 2003-2008 which address a broad range of issues affecting the Catchment, salinity and water quality issues ranking among the highest. The plan is backed by funding collected via a water based levy which, in isolation, is not adequate to implement the plan. Hence, it is supplemented by other funding streams such as NAP, NHT and NLP. The Board, through its staff delivers many of the core projects. However, a significant proportion of the total budget is allocated to community grants. These grants range from small amounts of around \$20,000 to significant grants of over \$500,000 to regional community organisations and committees to undertake activities such as improving efficiency of irrigation water use and Land and Water Management Plan investigations, development and implementation.

Over the years, the Board has built strong relationships with the vast array of community groups active in NRM in the region. Hence, it is well placed to provide a link between the community and state and federal agencies, a role which it expects to continue to fulfill effectively. Once NRM reform is complete, this role will transfer to the NRM Board for the SA MDB.

Board staff coordinate many projects that require practical on-farm action to manage salinity and water quality issues. The Board's connection with the community has meant that practicality is emphasised in project development and implementation. This consideration results in more effective projects that the community are willing to readily participate in. This fact has led to the Board becoming key delivery partners in NAP, having a lead role in investment strategy development and allocation of project funding.

3. What action has been taken as a result of recommendations made by the House of Representatives' Science and Innovation Committee's inquiry 'Science overcoming salinity: Coordinating and extending the science to address the nation's salinity problem', and how those recommendations may be furthered to assist land-holders, regional managers and affected communities to address and reduce problems presented by salinity.

Geophysical data (airborne and ground-collected) has provided valuable information for the management of salinity in the SA MDB. Flights to map the extent of sub-surface salt stores in the Riverland have also yielded valuable information about the extent of Blanchetown Clay in the region, the aquatard responsible for localised salinity hot-spots. Blanchetown Clay also governs the length of time irrigation drainage and recharge to the hyper-saline regional aquifers takes to impact adversely on the River Murray and floodplain. Defining its extent and the salinity of the aquifer below it has meant more accurate models can inform more relevant planning decisions. This information has become one of the fundamental datasets required to assess SA's salinity accountability at the MDBC level in relation to trade of irrigation water and has been used in models to formulate a Salinity Impact Zoning policy that provides the ground rules for new development in the SA MDB.

National Land Use mapping undertaken by the Bureau of Rural Sciences (BRS) has not been adopted to the same degree because the catchment has benefited significantly from sustained investment in establishing and updating a data set known as Irrigation Baseline Information. This dataset is standardised catchment wide and provides a finer resolution of information, captured at a more accurate scale than that available from BRS and is updated annually. It has been driven by the community and provides information that is good for practical on-farm use in a database infrastructure that can be scaled up to the district, catchment or region.

REFERENCES

THE COMMONWEALTH OF AUSTRALIA AND THE STATE OF SOUTH AUSTRALIA, June 2001.
AN AGREEMENT BETWEEN THE COMMONWEALTH OF AUSTRALIA AND THE STATE OF SOUTH AUSTRALIA FOR THE IMPLEMENTATION OF THE INTERGOVERNMENTAL AGREEMENT ON A NATIONAL ACTION PLAN FOR SALINITY AND WATER QUALITY.