

The Committee Secretary
House of Representatives Standing Committee on Science and Innovation
Suite R1 – 116
Parliament House
CANBERRA ACT 2600

**RE: ENQUIRY INTO THE COORDINATION OF THE SCIENCE TO COMBAT THE
NATIONS SALINITY PROBLEM**

Introduction

The Murray Catchment Management Board has produced a natural resource management plan "The Murray Catchment Blueprint" that will guide investment in NRM over the next ten years.

One of the key NRM issues in the Murray Region is salinity both through dryland and irrigation processes. In developing our Blueprint we became aware of the difficulties in setting targets and prescribing amelioration works to address salinity due to the lack of certainty about the causes, effects, timeframes and linkages.

We would therefore, welcome a nationwide approach in the coordination and sharing of ideas, research and information. Our responses to the issues raised in the Terms of Reference are as follows: -

a) use of the salinity science base and research data (including the development of new scientific, technical and engineering knowledge) in the management, coordination and implementation of salinity programs.

From the Board's perspective there appears to be a number of messages about the science, technologies and techniques in dealing with salinity. The task of deciding what is genuine or what is being promoted for self-interest, the quality of the science, how to deal with conflicting messages and the risks of ignoring this information are all issues the Board has had to contend with and would welcome a coordinated nationwide, advisory source.

Another issue that remains is often the lack of data upon which to make informed decisions. This is often through the government's lack of commitment to fund research and data collecting programs that need to be run and resourced over a longer time frame than the current 1-3 year funding cycles.

Recommendation

The Commonwealth should have a lead role in distilling the best science for addressing salinity. This may mean the formation of a peak scientific panel to review and compare the latest research findings. This may include recommendations to further coordinate and fund new technologies and approaches.

A greater commitment is required by government to fund longer-term research projects to ensure that the required data to make informed decisions is available.

b) linkages between those conducting research and those implementing salinity solutions, including the coordination and dissemination of research and data across jurisdictions and agencies, and to relevant decision makers (including catchment bodies and landholders)

The Main challenge is how do we deliver salinity knowledge across jurisdictions and agencies and to all relevant decision-makers?

Too often the linkages between researchers and implementation/planning authorities are not well established and many opportunities are lost in both applying the latest research to the ground and focusing research to address particular issues. No doubt there is duplication of research, experiences, successes and failures across the states and commonwealth.

Salinity processes are often very complex and often require understanding and solutions in a local context. Research aimed at broadscale application may have little application in explaining and treating local problems. Projects like the Billabong Heartlands Project are good examples of where multi-disciplinary scientists have worked together to better understand the landscape and develop local solutions. This approach also lends itself to adaptive management where actions are monitored and modified on the basis of local impacts.

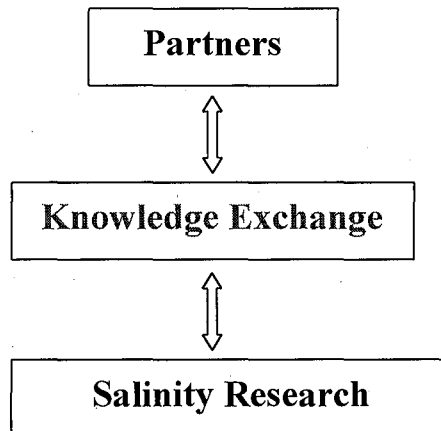
A further challenge is to take research work and make it easily understood by the layman. Resource Managers prefer concise plain English documents that synthesise up to date knowledge of particular issues (recharge, discharge, living with salinity, GW flow systems etc.)

A process needs to be built where there is a free flowing exchange of data, research and findings across jurisdictions and agencies and to all relevant decision-makers.

Recommendation

- A Knowledge Exchange Program needs to be established involving all researchers and partners. This program will require a professional approach and will need intermediaries to broker the interface between research and practitioners.
- A balance needs to be struck between broadscale research and the need to research sub-regional and sub-catchment systems to develop local understanding and solutions.
- A central repository for data and research be established.
- A web site is established that enables access to validated and easily understood documents that synthesise research and knowledge.

Science / Innovation / Knowledge



c) adequacy of technical and scientific support in applying salinity management options.

Within the Murray Region there appears to be sufficient technical and scientific support to apply the salinity management options that the Board has developed. The only gap could be in having a process that evaluates and possibly applies new technology that has been developed outside of the region or state.

To fill this gap the creation of Salinity Knowledge Brokers to link nationwide and validated research and application to the regions should be explored.

These Salinity Knowledge Brokers could be located in strategic locations across the States and have a lead role in sharing the latest technology and research. They could

- be located in offices of CMB's or other industry agency partners
- be readily accessible to all and build trust
- develop awareness of industry / community needs and constraints
- be familiar with all relevant research activities and capabilities
- provide advice from repository of materials
- help formulate problem solving techniques
- run professional training workshops
- develop materials that synthesise the latest information
- organise joint problem solving workshops
- manage consultancies
- develop knowledge exchange plans with research staff at project and program level
- help facilitate internal communication across projects, programs and sites
- help integrate knowledge in selected areas

We trust that this submission will assist you with your inquiry and look forward to reviewing the findings.

Yours sincerely,

D L McGregor
INDEPENDENT CHAIR