

## Know-how to tackle salinity for:

- CATCHMENTS
- POLICY
- PRODUCTION

## Tools to Investigate and Plan for Improved Management of Dryland Salinity in the Murray–Darling Basin

*Project Team: Darrel Brewin, Darrel Brewin and Associates; Stephanie Bolt, Parsons Brinckerhoff (formerly PPK) and Phil Dyson, Phil Dyson and Associates*

### BACKGROUND—WHAT WE WANTED TO KNOW

'Tools' aimed to use a methodology that caters to regional needs, and tailor knowledge accordingly. The critical elements are the identification, engagement and relationship building processes with regional leaders and designing and delivering the 'Tools' program with the leaders.

'Tools' Phase One analysed the needs of regional salinity extension providers and reported:

- difficulties in accessing information (particularly from national R&D programs);
- lack of skills, knowledge development and networking opportunities; and
- need for provision of improved community-based strategic planning (regional planning).

'Tools' Phase Two had the goal of building skills, knowledge and information networks amongst extension providers, and providing easier access to information for improving capacity in regional communities to manage salinity. In particular, working collaboratively with national research and development institutions to facilitate the transfer of the latest concepts and information.

### OUTCOMES—WHAT WE NOW KNOW

A strength of 'Tools' is that it is close to the most recent salinity research in the Murray–Darling Basin. Groundwater Flow Systems (GFS) and salinity provinces provide the most powerful contemporary approach to planning salinity management strategies at regional and catchment scales. 'Tools' fits extremely well within this framework.

The combined effort between Catchment Classification and 'Tools' projects provides the regions with the GFS framework for understanding how to respond to salinity. The great advance made is to provide the linkage between physical attributes and performance of GFS and landscapes in response to various forms of land management and a rationale for predicting this performance. Catchment communities are now able to map their salinity provinces and consider how each of their GFS might respond to range of interventions.

The Salinity Information Package brings together, within a planning framework, all the introductory knowledge for managing salinity in the Murray–Darling Basin. References direct the user to current sources of more detailed information.

The 'Tools' project observed several continuing weaknesses in regional capacity to tackle salinity:

- Professional salinity communicators/extension providers, both government and private, are relatively few, young, inexperienced and poorly networked with continuing difficulties accessing sound scientific information.
- There are few experienced professional mentors.
- Many key regional stakeholders being asked to invest in salinity management at a significant scale do not see it as a personal priority and are ill informed about specific management measures.
- There is a basic community need for assistance with learning, sound planning and site specific technical advice to effectively manage salinity.
- Flexibility and the ability to adjust to the rapidly changing policy environment impacting in different ways on the regions are of fundamental importance. Provision of information of current regional utility in an adult learning setting and ensuring credibility of the source and provider of information are critical to regional audience's acceptance of new information.

## WANT TO KNOW MORE?

'Tools' Phase Two developed a regional communication strategy supporting the flow of technical information in regional knowledge networks and a suite of products such as regional workshops, the Basin Salinity Network (a regional network of providers and a database of dryland salinity management experts), Regional Information Packages and a Salinity Information Package. This information is available on-line from the NDSP web-site.

Further information, also available on-line, includes:

- An interpretive poster and two fact sheets.
- Update articles in *Focus on Salt* (Issues 14, 19, 23) and profile article in *Australian Landcare* (Dec 2002).

Go to:

- National Dryland Salinity Program: [www.ndsp.gov.au](http://www.ndsp.gov.au)
- Murray–Darling Basin Commission: [www.mdbc.gov.au](http://www.mdbc.gov.au)

The National Dryland Salinity Program is jointly supported by the following organisations



Australian Government  
Department of Agriculture,  
Fisheries and Forestry  
Land & Water Australia  
Rural and Industries  
Research and Development  
Corporation



National Land & Water Resources Audit  
*An Initiative of the Natural Heritage Trust*



State Governments of South Australia, New South Wales, Queensland, Western Australia, Victoria and Tasmania.