Section 3

Where to now?

3.1 Vision

Our vision is to see us all living in a State that has:

- **Healthy ecosystems**, where environmental values are maintained and, where possible, restored, and biodiversity assets are protected. There will be a reduction in the rate and spread of salinity, and water quality and quantity will support natural processes.

- **Sustainable, productive land and water uses.** Our rural industries will continue to be profitable, we will be able to promote agriculture in NSW as ‘clean and green’, and our homes, roads, bridges and other infrastructure will be protected from salinity.

- **Secure, sustainable and prosperous communities.** There will be equitable access to landscape amenity, and opportunities for individuals and communities to participate in decision-making to shape solutions to salinity.

This can be summarised as the ‘triple bottom line’ of environmental, economic and social outcomes.

To deliver on the triple bottom line requires actions that build on the strengths of our responses thus far, but we need to take those actions a step further to overcome the barriers outlined previously.

We need to decide what level of salinity we are prepared to, and can afford to, live with, so we will develop targets as a focus for our actions. We need to address the causes of market failure, so that innovative market mechanisms can be harnessed to bring about land use change that reduces recharge. Markets will provide incentives for land managers to incorporate trees into their land use practices, to use water more efficiently, and to adopt agricultural systems that reduce recharge. Markets for the products of salinised land or water also represent opportunities for businesses. Where markets are not effective or appropriate, investment in land use change will be targeted strategically.

To provide the framework for markets, we need smarter regulation. Improved planning will help guide our actions so that we plant trees, change agricultural practices, or implement engineering solutions in the most effective places.

All our actions must be based on the best scientific information available, so we will work to enhance our knowledge base through targeted research and information-gathering. We will ensure that the information then gets to land managers, either directly or through extension services, and builds their capacity to undertake actions that manage salinity.

Appendix 4 presents a case study that shows how all these mechanisms could make a difference to a hypothetical salinity-affected landscape.
3.2 A shared responsibility

Salinity does not respect geographic or political borders. It is a national problem. The NSW Government will provide leadership within NSW and within the Murray-Darling Basin, but we need coordinated and effective involvement from the Commonwealth Government, supported by an appropriate level of funding.

The Commonwealth Government needs to take a more strategic approach to its investments in natural resources. The Natural Heritage Trust is coming to an end, and it should be replaced by a funding system that allocates blocks of funds according to regional priorities, rather than on a project by project basis. In NSW, these funds could be allocated according to priorities developed by Catchment Management Boards and approved by the Government. As discussed in Section 4.2, Market-based solutions and strategic investment, NSW is developing a special-purpose investment fund to help finance the management actions necessary to manage salinity. We invite the Commonwealth Government to channel its natural resources investments through this fund to leverage both our contributions and to produce more cost-effective and targeted actions.

There are mechanisms for dealing with salinity that are within the Commonwealth Government’s jurisdiction, including taxation and corporate legal arrangements. Only the Commonwealth Government could implement a general environmental levy as a source of funds for salinity management, as called for by the Community Salinity Summit in Wagga Wagga. The Strategy identifies where we will be seeking Commonwealth commitments to address issues in its jurisdiction to achieve strategic salinity benefits.

The NSW Government’s activities in salinity management are delivered by a number of agencies with differing but complementary roles. The Government’s responsibility, through those agencies, is chiefly to provide a regulatory and planning framework, facilitate the development of markets, provide information and advice, undertake and facilitate research, and provide funding for on-ground actions that benefit the wider community. The NSW Government will also facilitate involvement of the financial sector and other industry in solutions to salinity.

Local councils are key players in managing salinity in urban and rural areas. They will help set targets for their catchments that will guide actions in the urban and rural environments. They can manage salinity by planning, regulation and advice, as well as management of their water businesses and their infrastructure. Like other land managers, local councils need specific information about the causes and symptoms of salinity, as well as accurate and ongoing salinity assessments. They will also need prediction and modelling systems to help decide which management options are best. To achieve this, we will develop a stronger partnership between the NSW Government and local councils.

Last year, the NSW Government announced the establishment of new Catchment Management Boards. The Boards are made up of members from local councils, Aboriginal communities, land management, environmental and conservation groups, NSW Government and the community as a whole. Catchment Management Boards will have an important role in planning for salinity management, and advising on community goals and priorities for action. Other Government/community partnership mechanisms such as Water Management Committees and Regional Vegetation Committees will have to consider salinity in their activities too.

Landcare groups will continue to play a major part in salinity management through their planning and on-ground works.

Individual land and water managers will continue to be the main on-ground managers of salinity, supported by the three levels of government and the community. Through this Strategy, they will have access to a wider range of options for salinity management.
Great results can be achieved when councils, communities, scientists and government work together. Wagga Wagga is in the Murrumbidgee catchment. It is a regional centre for the Riverina with a population of 60,000.

Salinity was noticed in isolated rural locations within the local government area around 30 years ago, but it was not until 1993 that urban salinity was recognised as a problem. At that time, Wagga Wagga’s showground, located in the middle of the urban area, was undergoing redevelopment. When the project was completed, it proved impossible to re-establish the showground’s grassed arena. It turned out that the redevelopment had intercepted the saline watertable underlying the area.

Other problems, including roads failing due to saturated pavements, houses with continuous under-floor damp and dying trees and lawns, previously ascribed to other causes, were subsequently recognised as due to salinity.

Wagga Wagga Council’s urban Landcare group established a multidisciplinary working group to tackle urban salinity, with representatives from the Department of Land and Water Conservation, Environment Protection Authority, Riverina Water, Charles Sturt University, an engineering consultant and Council. This group developed a three-year action plan, which covered investigation, monitoring, raising of awareness, education and demonstration, and a program to develop and implement change in a pilot area. The Department of Land and Water Conservation made a hydrogeologist available on a full time basis, for the three years of this investigation phase.

During the first stage, measuring bores called piezometers were installed to ascertain the extent of the problem. Awareness was raised through media coverage and a public meeting called by the Mayor. Education on the issue was assisted by ensuring that each school in the investigation area had a piezometer and their students carried out the monitoring. Demonstration sites were developed including a ‘waterwise’ garden in the Botanic Gardens. Subsoil drainage and an evaporation basin were constructed to resolve the showground problem. An Urban Landcare group was formed, which assisted Council with community consultation and sought grants from suitable sources to fund measures in the action plan.

A group of interested and respected citizens were recruited as Docents (a German word meaning unpaid teachers, respected by their peers) to talk to service clubs and community groups. Seminars were held for teachers to assist them in preparing material for classes on salinity.

Many houses in Wagga Wagga had rubble pits in their yards, a drainage technique used in the past for blocks of land without easy access to stormwater drains. Unfortunately, rubble pits can be big contributors to recharge. A trial removal of rubble pits, and their replacement with more appropriate drainage, was also carried out.

An economic study was completed that indicated that if nothing were done, the community would incur costs of $183 million over the next 30 years.

The culmination of the first phase of the action plan was the release of a map showing the depth of the groundwater under the city.

Programs planned for the second phase include:

- an ongoing education program;
- a revegetation program;
- a rubble pit removal program;
- construction of an urban borefield;
- research into the losses from the reticulated water system; and
- an ongoing monitoring program.

Council has committed over $3 million to salinity management strategies, with some financial assistance from the NSW Government and the Natural Heritage Trust.